

Department of Administrative Services

2022 Connecticut State Building Code

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INTRODUCTION

Adopted and Referenced Publications

Pursuant to section 29-252 of the Connecticut General Statutes the following national model codes, as amended herein, are adopted and shall be known as the 2022 Connecticut State Building Code:

- 2021 International Building Code
- 2017 ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities
- 2021 International Existing Building Code
- 2021 International Plumbing Code
- 2021 International Mechanical Code
- 2021 International Energy Conservation Code
- 2020 NFPA 70, National Electrical Code, of the National Fire Protection Association Inc.
- 2021 International Swimming Pool and Spa Code
- 2021 International Residential Code

Copies of the International Codes may be obtained from the International Code Council, Inc., 4051 West Flossmoor Road., Country Club Hills, IL 60478-5795 (website: www.iccsafe.org).

Copies of the 2020 NFPA 70, National Electrical Code, may be obtained from the National Fire Protection Association Inc., 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02169-7471 (website: www.nfpa.org).

Copies of the 2022 Connecticut State Building Code document may be downloaded from the website: www.portal.ct.gov/DAS.

The requirements of the 2022 Connecticut State Building Code shall apply to all work for which a *permit* application was made on or after the date of adoption.

As used in this document, these annotations have the following meaning:

Add: A section or subsection preceded by (Add) indicates the addition of this section or subsection to the adopted referenced standard.

Amd: A section or subsection preceded by (Amd) indicates the substitution of this section or subsection in the adopted referenced standard.

Del: A section or subsection preceded by (Del) indicates the deletion of this section or subsection from the adopted referenced standard.

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AMENDMENTS TO THE 2021 INTERNATIONAL BUILDING CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **101.1 Title.** The 2021 International Building Code as amended in this section shall be known as the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Add) **101.1.1 Statutes.** Pursuant to sections 29-252a and 29-253 of the Connecticut General Statutes, respectively, this code shall be the building code for all towns, cities and boroughs and all state agencies.

(Amd) **101.2 Scope.** The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair*, equipment, use and occupancy, location, maintenance, removal and demolition of every *building* or structure or any appurtenances connected or attached to such *buildings* or structures.

Exception: 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 not more than three stories above grade plane in height, shall comply with the 2021 International Residential Code portion of the 2022 Connecticut State Building Code.

(Amd) **101.2.2 Appendices.** The provisions of Appendices C, H, I and P shall be incorporated into the requirements of this code.

(Amd) **101.4.1 Gas.** The International Fuel Gas Code is not adopted by the State of Connecticut. Any references to the International Fuel Gas Code within the body of this code shall be considered references to requirements of NFPA 2, Hydrogen Technologies Code, NFPA 54, National Fuel Gas Code and NFPA 58, Liquefied Petroleum Gas Code, as adopted in the 2022 Connecticut State Fire Safety Code and the 2022 Connecticut State Fire Prevention Code. These requirements apply to liquid petroleum storage systems, 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) **101.4.3 Plumbing.** The provisions of the International Plumbing Code shall apply to the installation, *alterations*, *repairs* and replacement of plumbing systems (including equipment, appliances, fixtures, fittings and appurtenances) where such systems are connected to a water or sewage system and to all aspects of a medical gas system. The International Private Sewage Disposal Code is not adopted by the State of Connecticut. Any reference to the International Private Sewage Disposal Code within the body of this code shall be deemed a reference to the regulations adopted pursuant to section 19a-36 of the Connecticut General Statutes, known as the Public Health Code.

(Amd) **101.4.4 Property maintenance.** The International Property Maintenance Code is not adopted by the State of Connecticut. Property maintenance shall be in accordance with the requirements of this code and the applicable provisions of the 2022 Connecticut State Fire Safety Code and the 2022 Connecticut State Fire Prevention Code. All references to the International Property Maintenance Code found within the body of the model document shall be considered null and void.

(Add) **101.4.5.1 Connecticut State Fire Safety Code.** References to the International Fire Code within the body of the model documents shall be considered to be references to the 2022 Connecticut State Fire Safety Code.

(Add) **101.4.8 Electrical.** The provisions of the 2020 NFPA 70, *National Electrical Code*, shall apply to the installation of electrical systems, including *alterations*, *repairs*, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

(Add) **101.4.9 Oil-burning equipment, piping and storage.** In addition to the requirements of this code, the installation of oil burners, equipment, and appliances used in conjunction therewith, including tanks, piping, pumps, control devices and accessories shall comply with NFPA 31 as adopted in the 2022 Connecticut State Fire Safety Code and the 2022 Connecticut State Fire Prevention Code.

(Amd) **102.6 Existing structures.** The legal use and occupancy of any *building* or structure existing on the date of adoption of this code shall be permitted to continue without change, except as otherwise specifically provided in this code, the 2021 International Existing Building Code portion of the 2022 Connecticut State Building Code or the 2022 Connecticut State Fire Safety Code.

(Amd) **102.6.1 Buildings not previously occupied.** A *building* or portion of a *building* that has not been previously occupied or used for its intended purpose in accordance with the laws in existence at the time of its completion shall be permitted to comply with the provisions of the laws in existence at the time of its original *permit* unless such *permit* has expired. Subsequent *permits* shall comply with the International Building Code or International Residential Code, as applicable, for new construction.

(Amd) **102.6.2 Buildings previously occupied.** The legal use and occupancy of any *building* existing on the date of adoption of this code shall be permitted to continue without change, except as specifically provided in this code or the 2022 Connecticut State Fire Safety Code.

(Add) **102.6.3 Demolition of Structures.** The demolition of structures shall be regulated in accordance with the provisions of Section 3303 of this code.

(Del) **SECTION 103 – CODE COMPLIANCE AGENCY.** Delete Section 103 in its entirety and replace with the following:

(Add) **SECTION 103 – ENFORCEMENT AGENCY**

(Add) **103.1 Creation of enforcement agency.** Each town, city and borough shall create an agency whose function is to enforce the provisions of this code. The official in charge thereof shall be known as the *building official*.

(Add) **103.2 Appointment.** Pursuant to section 29-260 of the Connecticut General Statutes, the chief executive officer of any town, city or borough shall appoint an officer to administer this code, and this officer shall be known as the *building official* and referred to herein as the *building official*, *local building official* or code official.

(Amd) **103.3 Employees.** In accordance with the prescribed procedures and regulations of the town, city or borough, and with the concurrence of the appointing authority, the *building official* shall have the authority to appoint an assistant *building official*, related technical officers, inspectors, plan examiners and other employees. Such employees shall have the powers as regulated by the town, city or borough, and by the State of Connecticut.

(Add) **103.4 Restriction of employees.** An official or employee connected with the agency created to enforce the provisions of this code pursuant to Section 103.1, except one whose only connection with it is that of a member of the board of appeals established under the provisions of Section 113, shall not be engaged in or directly or indirectly connected with the furnishing of labor, materials or appliances for the construction, *addition*, *alteration*, *repair* or maintenance of a *building* located in the town, city or borough in which such official or employee is employed, or the preparation of *construction documents* therefor, unless that person is the *owner* of the *building*. Such officer or employee shall not engage in any work that conflicts with official duties or with the interests of the agency.

(Amd) **104.1 General.** The *building official* is hereby authorized and directed to enforce the provisions of this code. The *building official* shall have the authority to adopt policies and procedures to clarify the application of its provisions. Such policies and procedures shall comply with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code, nor shall they have the effect of establishing requirements in excess of those set forth in this code.

(Add) **104.1.1 Rule-making authority.** Pursuant to subsection (a) of section 29-252 of the Connecticut General Statutes, the State Building Inspector and the Codes and Standards Committee shall, jointly, with the approval of the Commissioner of Administrative Services, adopt and administer a State Building Code for the purpose of regulating the design, construction and use of *buildings* or structures to be erected and the *alteration* of *buildings* or structures already erected and make such amendments thereto as they, from time to time, deem necessary or desirable.

(Amd) **104.6 Right of entry.** Pursuant to subsection (d) of section 29-261 of the Connecticut General Statutes, the *building official* or his assistant shall have the right of entry to such *buildings* or structures, except single-family residences, for the proper performance of his duties between the hours of nine a.m. and five p.m., except that in the case of an emergency, he shall have the right of entry at any time, if such entry is necessary in the interest of public safety. Pursuant to section 29-393 of the Connecticut General Statutes, on receipt of information from the local fire marshal or from any other authentic source that any *building* in his *jurisdiction*, due to lack of *exit* facilities, fire, deterioration, catastrophe or other cause, is in such condition as to be a hazard to any person or persons, the *building official* or his assistant shall immediately make an inspection.

(Del) **104.10 Modifications.** Delete section and subsection and replace with the following:

(Add) **104.10 Modifications.** Modifications, variations, or exemptions from and approval of equivalent or alternative compliance with the requirements of this code shall be in accordance with the provisions of Sections 104.10.1 to 104.10.6, inclusive.

(Add) **104.10.1 State Building Code.** Pursuant to subsection (b) of section 29-254 of the Connecticut General Statutes, the State Building Inspector may grant modifications, variations or exemptions from, or approve equivalent or alternative compliance with, the Connecticut State Building Code where strict compliance with the Connecticut State Building Code would entail practical difficulty or unnecessary hardship, or is otherwise adjudged unwarranted, provided the intent of the law shall be observed and public welfare and safety be assured. Any person aggrieved by any decision of the State Building Inspector may appeal to the Codes and Standards Committee not later than 30 days after mailing of the decision.

(Add) **104.10.1.1 Action on application.** The application for modification, variation, exemption from or approval of equivalent or alternative compliance with the requirements of the Connecticut State Building Code shall be made on a form supplied by the State Building Inspector, which shall be submitted by the applicant to the *building official*. Pursuant to subsection (b) of section 29-254 of the Connecticut General Statutes, any such application received by a *building official* shall be forwarded to the State Building Inspector within 15 business days of receipt by such *building official*. The application shall include the *building official's* comments on the merits of the application and shall be signed by the *building official*.

(Add) **104.10.1.2 Records.** The application for modification, variation, exemption or approval of equivalent or alternative compliance and the decision of the State Building Inspector shall be in writing and shall be officially recorded with the application for a building *permit* in the permanent records of the building department.

(Add) **104.10.2 Accessibility exemption.** Pursuant to subsection (b) of section 29-269 of the Connecticut General Statutes, any variation of or exemption from any provisions relating to accessibility to, use of and egress from, *buildings* and structures as required herein shall be permitted only when approved by the State Building Inspector. Pursuant to subsection (b) of section 29-269 of the Connecticut General Statutes, any person aggrieved by the decision of the State Building Inspector may appeal to the Codes and Standards Committee within 30 days after such decision has been rendered.

(Add) **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.

(Add) **104.10.4 Urban homesteading property exemption.** Pursuant to section 29-259 of the Connecticut General Statutes, exemptions may be granted to the provisions of this code for property acquired by an urban homesteading agency, pursuant to section 8-169r of the Connecticut General Statutes and transferred to a qualified applicant pursuant to section 8-169s of the Connecticut General Statutes, provided such exemptions shall not affect the safe design, use or construction of such property. Exemptions shall be granted in accordance with Section 104.10.1 of this code.

(Add) **104.10.5 Elevators and escalators.** Pursuant to section 29-192 of the Connecticut General Statutes, the State Building Inspector may approve variations or exemptions from, or equivalent or alternate compliance with, regulations governing elevators and escalators where strict compliance with such provisions would cause practical difficulty or unnecessary hardship. Any person aggrieved by the decision of the State Building Inspector may appeal to the Commissioner of Administrative Services or such commissioner's designee not later than 30 days after notice of such decision has been rendered.

(Add) **104.10.6 Lift and limited use/limited application elevator approval.** Lifts and limited use, limited access elevators shall not be part of a required *accessible* path unless approved in accordance with the provisions of Section 1109.8 of this code.

(Amd) **105.1 Required.** Any *owner* or *owner's* authorized agent who intends to construct, enlarge, alter, *repair*, move, demolish or change the occupancy of a *building* or structure, or to move a *lot line* that will affect any existing *building* or structure, or to erect, install, enlarge, alter, *repair*, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the *building official* and obtain the required *permit*.

(Add) **105.1.3 Connecticut State Fire Safety Code abatement.** Where conflicts exist between the requirements of this code and the requirements of a Connecticut State Fire Safety Code abatement order issued in writing by the local fire marshal with respect to an existing *building*, the requirements of that portion of the Connecticut State Fire Safety Code that regulates existing *buildings* shall take precedence.

Exceptions:

1. New *fire protection systems* shall meet the requirements of Chapter 9 of this code.
2. Electrical work shall meet the requirements of NFPA 70, *National Electrical Code*.
3. Structural, plumbing, and mechanical work shall conform to the requirements of this code.

(Amd) **105.2 Work exempt from permit.** Exemption from the *permit* requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws, statutes, regulations or ordinances of the *jurisdiction*. *Permits* shall not be required for the following:

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area is not greater than 200 square feet (18.58 m²).
2. Fences, other than *swimming pool* barriers, not over 7 feet (2134 mm) high.
3. Oil derricks.
4. Retaining walls that are not higher than 3 feet (914 mm) measured from finished grade at the bottom of the wall to finished grade at the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids.
5. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
6. Sidewalks, driveways and on-grade *concrete* or *masonry* patios not more than 30 inches (762 mm) above adjacent grade, not requiring guards, and not over any basement or *story* below and which are not part of an *accessible route*.
7. Painting, papering, tiling, carpeting, cabinets, countertops and similar finish work not involving new construction, structural changes or *alterations*.
8. Temporary motion picture, television and theater *stage* sets and scenery.
9. Prefabricated *swimming pools* accessory to a Use Group R-3 occupancy, as applicable in Section 101.2, which are equal to or less than 24 inches (610 mm) deep, do not exceed 5,000 gallons (18 927 L) capacity and are installed entirely above ground.
10. Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.
11. Swings and other playground equipment.
12. Window awnings in Group R-3 and U occupancies, supported by an *exterior wall* that do not project more than 54 inches (1372 mm) from the *exterior wall* and do not require additional support.
13. Nonfixed and movable fixtures, cases, racks, counters and partitions not higher than 5 feet 9 inches (1753 mm) and not containing any electrical, plumbing or mechanical equipment.
14. Portable *grandstands* or bleachers providing seating for fewer than 100 persons when located outside of a *building*.

Electrical:

1. Minor *repairs* and maintenance work, including replacement of lamps and fuses or the connection of *approved* portable electrical equipment to *approved* permanently installed receptacles.
2. Electrical equipment used solely for radio and television transmissions, but a *permit* is required for equipment and wiring for power supply and for the installation of towers and antennas.
3. Temporary testing systems required for the testing or servicing of electrical equipment or apparatus.

Gas:

1. Portable heating or cooking appliances with a self-contained fuel supply.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
3. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Mechanical:

1. Portable heating appliances with a self-contained fuel supply.
2. Portable ventilation appliances.
3. Portable cooling units.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

6. Portable evaporative coolers.
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
8. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered new work and a *permit* shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such *repairs* do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

(Del) **105.2.2 Public service agencies.** Delete Section 105.2.2 and replace with Section 105.2.3.

(Add) **105.2.2 Repairs.** Application or notice to the *building official* is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such *repairs* shall not include the cutting away of any wall, partition of portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required *means of egress*, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

(Add) **105.2.3 Public service agencies.** Pursuant to section 29-282 of the Connecticut General Statutes, a *permit* shall not be required for the installation, *alteration* or repair of generation, transmission, distribution, metering or other related equipment that is under the ownership and control of public service agencies by established right.

(Add) **105.2.4 State agency exemptions.** Pursuant to section 29-252a of the Connecticut General Statutes, a state agency shall not be required to obtain a building *permit* from a local *building official*. A state agency shall obtain a building *permit* for construction work, as defined in section 29-252a of the Connecticut General Statutes, from the State Building Inspector.

Exception: Pursuant to sections 29-401 to 29-415, inclusive, of the Connecticut General Statutes, state agencies shall obtain demolition *permits* from the local *building official*.

(Add) **105.2.5 Federal agency exemptions.** A federal agency performing construction on federally owned land or on leased land totally under the control of the federal government shall not be required to obtain a building *permit* or a demolition *permit* from the local *building official*.

(Amd) **105.3 Application for Permit.** To obtain a *permit*, the applicant shall first file an application therefor in writing on a form furnished by the department of building safety for that purpose. Such application shall:

1. Identify and describe the work to be covered by the *permit* for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Indicate the use and occupancy for which the proposed work is intended.
4. Be accompanied by *construction documents* and other information as required in Section 107.

5. State the valuation of the proposed work.
6. Be signed by the applicant, or the applicant's authorized agent.
7. Give such other data and information as required by the *building official*.
8. Be accompanied by a statement of special inspections as required by Section 1704.3.
9. Identify if the structure or addition exceeds the threshold limits cited in Section 107.7.
10. Identify a *registered design professional in responsible charge* as required by Section 107.3.4.
11. Identify *deferred submittals*, including deferred submittal schedule, as required by Section 107.3.4.1.

(Amd) **105.3.1 Action on application.** Pursuant to section 29-263 of the Connecticut General Statutes, the *building official* shall examine or cause to be examined applications for *permits* and amendments thereto within 30 days after filing and either issue or deny a *permit* within such 30-day period. If the application or *construction documents* do not conform to the requirements of this code and pertinent laws, the *building official* shall reject such application in writing, stating the reasons therefor. If the *building official* is satisfied that the proposed work conforms to the requirements of this code and applicable laws, the *building official* shall issue a *permit* therefor as soon as practicable. In order to meet the 30-day requirement set forth herein, *construction documents* shall be submitted by the applicant to both the *building official* and the local fire marshal, concurrently.

(Add) **105.3.1.1 Zoning approval.** Pursuant to subsection (f) of section 8-3 of the Connecticut General Statutes, no building *permit* shall be issued, in whole or in part, for a *building*, structure or use subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that such *building*, structure or use is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Add) **105.3.1.2 Fire marshal approval.** Pursuant to section 29-263 of the Connecticut General Statutes, no building *permit* for a *building*, structure or use subject to the requirements of the Connecticut State Fire Safety Code shall be issued in whole or in part without certification in writing from the local fire marshal that the *construction documents* for such *building*, structure or use are in substantial compliance with the requirements of the Connecticut State Fire Safety Code.

(Add) **105.3.1.3 Historic certificate of appropriateness.** Pursuant to section 7-147s (b) of the Connecticut General Statutes, no building permit for erection of a building or structure or for alteration of an exterior architectural feature within the boundaries of an historic property and no demolition permit for demolition or removal of a building or structure within the boundaries of an historic property shall be issued by a municipality or any department, agency or official thereof until a certificate of appropriateness has been issued.

(Add) **105.3.1.4 Notice to Public Water Authority.** Pursuant to section 19a-37d of the Connecticut General Statutes, when a permit application is filed with the *building official* concerning any project that includes a change of use or installation of fixtures or facilities in a *building* that may affect the performance of, or require the installation of, a reduced pressure principle backflow preventer, a double check valve assembly or a pressure vacuum breaker, the *building official* shall provide written notice of the application to the water company serving the *building* not later than seven days after the date the application is filed. Upon receipt of such written notice, the water company shall cause to be performed an evaluation of cross-connection protection by a person who has met the requirements prescribed in the regulations of Connecticut state agencies and such water company shall notify the *building official* regarding its determination. The *building official* shall not issue a *permit* or *certificate of occupancy* until any cross-connection issue has been corrected.

(Add) **105.3.3 By whom application is made.** Pursuant to section 29-263 of the Connecticut General Statutes, application for a *permit* shall be made by the *owner* or by an authorized agent. If the authorized agent is a licensed contractor, the provisions of section 20-338b of the Connecticut General Statutes shall be followed. The full names and addresses of the *owner*, agent and the responsible officers, if the *owner* or agent is a corporate body, shall be stated in the application.

(Add) **105.3.4 Permit issuance to a home improvement contractor.** No *permit* shall be issued to a contractor who is required to be registered pursuant to chapter 400 of the Connecticut General Statutes, for work to be performed by such contractor, unless the name, business address and Department of Consumer Protection registration number of such contractor is clearly marked on the *permit* application, and the contractor has presented such contractor's certificate of registration as a home improvement contractor.

(Amd) **105.5 Expiration of permit.** Every *permit* issued shall become invalid unless the work on the *site* authorized by such *permit* is commenced within 180 days after its issuance, or if the work authorized by such *permit* is suspended or abandoned for a period of 180 days after the time the work is commenced. The *building official* is authorized to grant, in writing, one or more extensions of time, for periods of not more than 180 days each. The extensions shall be requested in writing and justifiable cause shall be demonstrated.

Exception: The *building official* may specify an expiration date of not less than 30 days, nor more than 180 days, for commencement of work under *permits* issued to abate unsafe conditions pursuant to Section 116 of this code. Work performed under such *permits* shall be completed as expeditiously as possible.

(Add) **105.5.1 Nine-year closure.** Pursuant to subsection (c) of section 29-265 of the Connecticut General Statutes, nine years from the date of issuance of a building *permit* issued pursuant to section 29-263 for construction or alteration of a one-family dwelling, two-family dwelling or structure located on the same parcel as a one-family dwelling or two-family dwelling, for which construction or alteration a *certificate of occupancy*, as defined in the regulations adopted pursuant to section 29-252, has not been issued by the *building official*, such building *permit* shall be deemed closed.

(Amd) **107.2.1 Information on construction documents.** *Construction documents* shall be dimensioned and drawn on 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*. When the quality or arrangement of materials is essential for conformity to this code, specific information shall be given to establish such quality or arrangement, and this code shall not be cited, or terms such as "legal," "per code," or their equivalent used as a substitute for specific information.

(Amd) **107.2.2 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 9. 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 section 20-304a of the Connecticut General Statutes or a professional engineer licensed in accordance with chapter 391 of the Connecticut General Statutes.

(Add) **107.2.6.2 Private sewage disposal system.** The *site* plan shall indicate the location of a private sewage disposal system where a public sewer is not available. Private sewage disposal systems shall be designed and installed in accordance with the requirements of the Public Health Code adopted under authority of section 19a-36 of the Connecticut General Statutes. All technical and soil data required by the Public Health Code shall be submitted with the *site* plan. Approval of such systems shall be by the local authority having *jurisdiction*. When such approval is required by the local authority having *jurisdiction*, written proof of such approval shall be submitted to the *building official* prior to issuance of a building permit.

(Amd) **107.3.4.1 Deferred submittals.** Deferral of any submittal items shall have the prior approval of the *building official*. The *registered design professional in responsible charge* shall list the *deferred submittals* on the *construction documents* for review by the *building official*.

Documents for *deferred submittal* items shall be submitted to the *registered design professional in responsible charge* who shall review them and forward them to the *building official* with a notation indicating that the *deferred submittal* documents have been reviewed and found to be in general conformance to the design of the *building*. The *deferred submittal* items shall not be installed until the *deferred submittal* documents have been approved by the *building official*.

Documents for *deferred submittals* that relate to the primary structural support systems of *buildings* or structures that exceed the threshold limit set forth in Section 107.7 of this code shall also be submitted to the independent structural engineering consultant by the *registered design professional in responsible charge*. Such *deferred submittal* items shall not be installed until the *deferred submittal* documents have been reviewed and found to be in general conformance to the design of the *building* by the independent structural engineering consultant and *approved* by the *building official*.

(Amd) **107.5 Retention of construction documents.** The *building official* shall retain one set of *approved construction documents* for a period as set forth in the records/disposition schedule adopted pursuant to chapter 188 of the Connecticut General Statutes.

Exception: Pursuant to subsection (e) of section 29-261 of the Connecticut General Statutes, upon receipt of a written request signed by the *owner* of *plans and specifications* on file for a single-family *dwelling* or *out-building*, the *building official* shall immediately return the original *plans and specifications* to the *owner* after a *certificate of occupancy* is issued with respect to the *plans and specifications*.

(Add) **107.6 Additional requirements.** Pursuant to section 29-276c of the Connecticut General Statutes, the *plans and specifications* for any proposed structure or *addition* classified as (1) assembly, educational, institutional, high-hazard, *transient* residential, which includes *hotels*, motels, rooming or boarding houses, dormitories or similar *buildings*, other than residential *buildings* designed to be occupied by one or more families, without limitation as to size or number of stories; (2) business, factory and industrial, mercantile, moderate and low-hazard storage, having three stories or more or exceeding 30,000 square feet total gross area; and (3) nontransient residential *dwellings* having more than 16 units or 24,000 square feet total gross area per *building*, shall be sealed by a licensed architect or professional engineer as defined by the statutory requirements of the professional registration laws of the State of Connecticut, and acting within the scope of their practice. Such architect or engineer shall be responsible for the review of shop drawings and the observation of construction. In the event such architect or engineer is unable to fulfill his or her review responsibilities, an additional architect or engineer shall be retained and the local *building official* shall be informed, in writing, of such retainer. If fabricated structural load-bearing members or assemblies are used in such construction, the licensed professional engineer responsible for the design of such members or assemblies shall be responsible for the implementation of the design by reviewing the fabrication process to ensure conformance with the design specifications and parameters. The additional requirements set forth in this subsection shall not apply to *alterations*, *repairs*, relocation or *change of occupancy* to any existing *building*.

(Add) **107.7 Threshold limits.** Pursuant to section 29-276b of the Connecticut General Statutes, this section shall apply to any proposed structure or *addition* thereto that exceeds one or more of the following threshold limits:

1. Having four stories;
2. 60 feet in height;
3. With a clear span of 150 feet in width;
4. Containing 150,000 square feet of total *gross floor area*;
Exception: For Group S (Storage) the limit shall be 250,000 total gross square feet.
5. With an occupancy of 1,000 persons;
6. Group I (Institutional) use with 150 beds or persons;
7. Group R-1 (Residential) *hotels* or motels with 200 rooms in a single structure;
8. Group R-2 (Residential) multiple-family with 100 *dwelling units* in a single structure;
9. Group S (Storage) parking structures with 1,000 cars.

Threshold limits shall not apply to *alterations, repairs* or *change of occupancy* to any existing *building*.

(Add) **107.7.1 Requirements for proposed structures or additions that exceed the threshold limits.** Pursuant to section 29-276b of the Connecticut General Statutes, if a proposed structure or *addition* to an *existing structure* will exceed any threshold limit set forth in Section 107.7 of this code, the *building official* of the municipality in which the structure or *addition* will be located shall require that an independent structural engineering consultant review the structural plans and design specifications of the structure or *addition* to be constructed to determine compliance with the requirements of this code to the extent necessary to assure the stability and integrity of the primary structural support systems of such structure or *addition*. Any modifications of *approved* structural plans or design specifications shall require revised structural plans, revised design specifications, supplementary structural sketches and/or shop drawings to the extent necessary to determine compliance with the requirements of this code and shall be reviewed by such consultant. Any *deferred submittals* that relate to the primary structural support systems shall be reviewed by such consultant. Any fees relative to such review requirements shall be paid by the *owner* of the proposed building project.

If a structure or *addition* exceeds the threshold limit, the architect of record, professional engineer of record responsible for the design of the structure or *addition* and the general contractor shall sign a statement of professional opinion affirming that the completed construction is in substantial compliance with the *approved* plans and design specifications. If fabricated structural load-bearing members or assemblies are used in the construction, the professional engineer responsible for the design of such members or assemblies shall sign a statement of professional opinion affirming that the completed fabrication is in substantial compliance with the *approved* design specifications.

The *building official* of the municipality in which the structure or *addition* will be located shall satisfy himself that each architect, professional engineer, including each professional engineer responsible for the design of fabricated structural load-bearing members or assemblies, general contractor and major subcontractor involved in the project holds a license to engage in the work or occupation for which the appropriate building *permit* has been issued.

(Add) **107.8 Lift-slab construction.** Pursuant to subsection (b) of section 29-276a of the Connecticut General Statutes, any *building* designed to be constructed utilizing the lift-slab method of construction shall be classified as exceeding the “threshold limit” and shall be subject to the provisions of Sections 107.7.1 of this code and construction thereof shall comply with the provisions of 29 CFR 1926 and section 31-372-107-1926 of the Regulations of Connecticut State Agencies.

(Amd) **108.1 General.** The *building official* may issue a *permit* for temporary structures and temporary uses. Such *permits* shall be limited as to time of service but shall not be permitted for more than 180 days. The *building official* may grant a single 180-day extension for demonstrated cause.

Exception: *Tents*, canopies and other membrane structures erected for a period of fewer than 180 days shall comply with Section 3103 of this code.

(Amd) **108.3 Temporary power.** The *building official* is authorized to give permission to temporarily supply utilities before an installation has been fully completed and the final certificate of approval has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in this code and in NFPA 70, National Electrical Code.

(Amd) **109.2 Schedule of permit fees.** Each municipality shall establish a schedule of fees for each construction document review, building *permit*, *certificate of approval* and *certificate of occupancy*. A schedule of adopted fees shall be posted in the building department for public view.

(Del) **109.4 Work commencing before permit issuance.** Delete without substitution.

(Add) **110.1.1 Posting of required inspections.** A schedule of required inspections shall be compiled by the *building official*. The schedule shall be posted in the building department for public view.

(Add) **110.3.13 Electrical inspections.** Required electrical inspections shall include installations of temporary services prior to activation; installation of underground piping and conductors after trenches are excavated and bedded and before backfill is put in place; rough inspections of installed wiring and components after the roof, framing, *fireblocking* and bracing are complete and prior to concealment; and final inspection after all work required by the *permit* is complete.

(Add) **110.6.1 Notification of inspection results.** Notification as to passage or failure, in whole or in part, of any required inspection shall be made in writing by the *building official* or his duly authorized representative and shall be left at the job *site* or delivered to the *permit* holder. It shall be the duty of the *permit* holder to ascertain the results of required inspections. Notifications may be delivered electronically.

(Amd) **111.1 Use and occupancy.** Pursuant to subsection (a) of section 29-265 of the Connecticut General Statutes, no *building* or structure erected or altered in any municipality after October 1, 1970, shall be occupied or used, in whole or in part, until a certificate of occupancy has been issued by the *building official*, certifying that such *building* or structure or work performed pursuant to the building *permit* substantially complies with the provisions of this code. Nothing in the code shall require the removal, *alteration* or abandonment of, or prevent the continuance of the use and occupancy of, any single-family *dwelling* but within six years of the date of occupancy of such *dwelling* after substantial completion of construction of, *alteration* to or *addition* to such *dwelling*, or of a *building* lawfully existing on October 1, 1945, except as may be necessary for the safety of life or property. The use of a *building* or premises shall not be deemed to have changed because of a temporary vacancy or change of ownership or tenancy.

Exceptions:

1. Work for which a certificate of approval is issued in accordance with Section 111.6.
2. A certificate of occupancy is not required for work exempt from *permit* requirements under Section 105.2.

(Add) **111.1.1 State agency.** Pursuant to section 29-252a of the Connecticut General Statutes, state agencies shall not be required to obtain a *certificate of occupancy* from a local *building official*. State agencies shall obtain a *certificate of occupancy* for construction work as described in section 29-252a of the Connecticut General Statutes from the State Building Inspector.

(Add) **111.1.2 Zoning approval.** Pursuant to subsection (f) of section 8-3 of the Connecticut General Statutes, no *certificate of occupancy* shall be issued for a *building*, use or structure subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that such *building*, use or structure is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Add) **111.1.3 Fire marshal approval.** No certificate of occupancy, *temporary certificate of occupancy*, *partial certificate of occupancy* or *certificate of approval* for a *building*, structure or use subject to the requirements of the Connecticut State Fire Safety Code shall be issued without certification in writing from the local fire marshal that the *building*, structure or use is in substantial compliance with the requirements of the Connecticut State Fire Safety Code.

(Add) **111.1.4 Statement of professional opinion.** Pursuant to section 29-276c of the Connecticut General Statutes, no certificate of occupancy shall be issued for a proposed structure or *addition* to *buildings* classified as (1) assembly, educational, institutional, high-hazard, *transient* residential, which includes *hotels*, motels, rooming or boarding houses, dormitories or similar *buildings*, other than residential *buildings* designed to be occupied by one or more families, without limitation as to size or number of stories; (2) business, factory and industrial, mercantile, moderate and low-hazard storage, having three stories or more or exceeding 30,000 square feet total gross area; and (3) nontransient residential *dwelling*s having more than 16 units or 24,000 square feet total gross area per *building*, until the *building official* has been provided with a statement signed by the architect or professional engineer and the general contractor stating that the completed structure or *addition* is in substantial compliance with the *approved* plans on file.

(Add) **111.1.4.1 Threshold Structures.** No *certificate of occupancy* shall be issued for a proposed structure or *addition* that exceeds the threshold limits cited in Section 107.7 until the *building official* has been provided with statements of professional opinion signed by the architect of record, professional engineer of record responsible for the design of the structure or *addition* and the general contractor, affirming that the completed construction is in substantial compliance with the approved plans and design specifications. If fabricated structural load-bearing members or assemblies are used in the construction, the *building official* shall be provided with statement(s) of professional opinion signed by the professional engineer(s) responsible for the design of such members or assemblies, affirming that the completed fabrication is in substantial compliance with the approved design specifications.

(Add) **111.1.5 Special Inspections.** No *certificate of occupancy* shall be issued for a proposed structure or *addition* until the *building official* has been provided with final report of inspections documenting completion of special inspections required per Section 1704.2 and correction of any discrepancies noted in the inspections.

(Add) **111.1.6 Concrete documentation.** Pursuant to section 29-265c of the Connecticut General Statutes, prior to the issuance of a *certificate of occupancy* for a new residential or commercial building for which a concrete foundation was installed on or after October 1, 2016, the applicant shall provide the *building official* with written documentation of the name of the individual or entity that supplied the concrete and the name of the individual or entity that installed the concrete. Copies of such documentation shall be maintained in the records of the office of the *building official* for not less than fifty years.

(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. Any occupancy permitted to continue during completion of the work shall be discontinued within 30 days after completion of the work unless a certificate of occupancy is issued by the *building official*. No *temporary certificate of occupancy* shall be issued for work subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that the work is in conformity with such regulations or is a valid nonconforming use under such regulations.

(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, 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. No *partial certificate of occupancy* shall be issued for work subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that the work is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Add) **111.6 Certificate of approval.** The *building official* shall issue a certificate of approval indicating substantial compliance with the requirements of this code for all completed work that requires a building *permit* but does not require a *certificate of occupancy*. Such work shall include, but not be limited to: fences greater than 7 feet (2134 mm) in height; retaining walls greater than 3 feet (914 mm) in height; decks; garages; *swimming pools*; basements and attics converted to *habitable space*; electrical, plumbing, and mechanical *repairs* or *alterations*. No *certificate of approval* shall be issued for work subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that the work is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Add) **111.7 Prefabricated assemblies.** A certificate of approval by an *approved agency* shall be furnished with every prefabricated assembly, including modular housing, except where all elements of the assembly are readily accessible for inspection at the *site*. Placement of prefabricated assemblies and the connections to public utilities and private water and septic systems at the building *site*, as well as any *site*-built or installed components or equipment, shall be inspected by the *building official* to determine compliance with this code. A final inspection shall be provided in accordance with Section 110.3.10.

(Del) **SECTION 113 - BOARD OF APPEALS.** Delete this section in its entirety and replace with the following:

(Add) **SECTION 113 – MEANS OF APPEAL.**

(Add) **113.1 Appeal from decision of building official.** Pursuant to subsection (b) of section 29-266 of the Connecticut General Statutes, when the *building official* rejects or refuses to approve the mode or manner of construction proposed to be followed or the materials to be used in the erection or *alteration* of a *building* or structure, or when it is claimed that the provisions of the code do not apply or that an equally good or more desirable form of construction can be employed in a specific case, or when it is claimed that the true intent and meaning of the code has been misconstrued or wrongly interpreted or when the *building official* issues a written order under subsection (c) of section 29-261 of the Connecticut General Statutes, the *owner* of such *building* or structure, whether already erected or to be erected, or his authorized agent may appeal in writing from the decision of the *building official* to the municipal board of appeals. A person, other than such *owner*, who claims to be aggrieved by any decision of the *building official* may, by himself or his authorized agent, appeal in writing from the decision of the *building official* to the municipal board of appeals as provided by subsection (b) of section 29-266 of the Connecticut General Statutes.

(Add) **113.1.1 Absence of municipal board of appeals.** In the absence of a municipal board of appeals, the provisions of subsection (c) of section 29-266 of the Connecticut General Statutes shall be followed.

(Add) **113.1.2 State Building Inspector review.** Pursuant to subsection (d) of section 29-252 of the Connecticut General Statutes, the State Building Inspector or his designee shall review a decision by a local *building official* or municipal board of appeals, when he has reason to believe that such official or board has misconstrued or misinterpreted any provision of the State Building Code.

(Add) **113.2 Appointment of municipal board of appeals.** Pursuant to subsection (a) of section 29-266 of the Connecticut General Statutes, a municipal board of appeals consisting of five members shall be appointed.

(Add) **113.2.1 Qualifications.** One member of the municipal board of appeals shall be appointed from the general public. The other four members shall each have at least five years of experience in *building* design, *building* construction or supervision of *building* construction.

(Add) **113.2.2 Chairperson.** The board shall annually select one of its members to serve as chairperson.

(Add) **113.3 Notice of meeting.** Each appeal under this subsection shall be heard in the municipality for which the *building official* serves within five days, exclusive of Saturdays, Sundays and legal holidays, after the date of receipt of the appeal.

(Add) **113.4 Determination of aggrievement.** Upon receipt of an appeal from a person other than the *owner* or his agent, the board of appeals shall first determine whether such person has a right to appeal.

(Add) **113.5 Appointment of a panel.** Upon receipt of an appeal from an *owner* or his agent, or approval of an appeal by a person other than the *owner* or his agent, the chairperson of the municipal board of appeals shall appoint a panel of not less than three members of such board to hear such appeal.

(Add) **113.6 Rendering of decisions.** The panel shall, upon majority vote of its members, affirm, modify or reverse the decision of the *building official* in a written decision upon the appeal and file such decision with the *building official* from whom such appeal has been taken not later than five days, exclusive of Saturdays, Sundays and legal holidays, following the day of the hearing thereon. A copy of the decision shall be mailed, prior to such filing, to the party taking the appeal.

(Add) **113.7 Appeal to the Codes and Standards Committee.** Any person aggrieved by the decision of a municipal board of appeals may appeal to the Codes and Standards Committee within 14 days after the filing of the decision with the *building official* in accordance with the provisions of section 29-266 of the Connecticut General Statutes.

(Add) **113.8 Court review.** Any person aggrieved by any ruling of the Codes and Standards Committee may appeal to the Superior Court for the judicial district where such *building* or structure has been or is being erected.

(Add) **114.2.1 Written notice.** The notice of violation shall be in writing and shall be given to the *owner* of the property involved, or to the *owner's* agent or to the person doing the work.

(Amd) **114.4 Violation penalties.** Pursuant to section 29-254a of the Connecticut General Statutes, any person who violates any provision of this code shall be fined not less than two hundred nor more than one thousand dollars or imprisoned not more than six months or both.

(Amd) **115.4 Failure to comply.** Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe conditions, shall be liable for penalties in accordance with Section 114.4.

(Add) **116.6 Unsafe equipment.** Equipment deemed unsafe by the *building official* or his authorized representative shall not be operated after the date stated in the notice unless the required *repairs* or changes have been made and the equipment has been *approved*, or unless an extension of time has been secured from the *building official* or his authorized representative in writing.

(Add) **116.6.1 Authority to seal equipment.** In the case of emergency, the *building official* or his authorized representative may seal out of service immediately any unsafe device or equipment regulated by this code.

(Add) **116.6.2 Unlawful to remove seal.** Any device or equipment sealed out of service by the *building official* or his authorized representative shall be plainly identified as out of service by such official and shall indicate the reason for such sealing. The identification shall not be tampered with, defaced or removed except by the *building official* or his authorized representative.

(Add) **116.7 Hazardous conditions.** Pursuant to the provisions of section 29-393 of the Connecticut General Statutes, on receipt of information from the local fire marshal or from any other authentic source that any *building* in his *jurisdiction*, due to lack of *exit* facilities, fire, deterioration, catastrophe or other cause, is in such condition as to be a hazard to any person or persons, the *building official* shall immediately make an inspection by himself or by his assistant, and may make orders for additional *exit* facilities or the *repair* or *alteration* of the *building* if the same is susceptible to *repair* or both or for the removal of such *building* or any portion thereof if any such order is necessary in the interests of public safety. Any *building official* shall have the right of entry into all *buildings* for the performance of his duties between the hours of nine o'clock a.m. and five o'clock p.m., in the interests of public safety.

(Add) **116.7.1 Penalty.** Pursuant to the provisions of section 29-394 of the Connecticut General Statutes, any person who, by himself or his agent, fails to comply with the written order of a building inspector for the provision of additional *exit* facilities in a *building*, the *repair* or *alteration* of a *building* or the removal of a *building* or any portion thereof, shall be fined not less than two hundred nor more than one thousand dollars or imprisoned not more than six months, or both.

(Add) SECTION 117 – EMERGENCY MEASURES

(Add) **117.1 Imminent danger.** When, in the opinion of the *building official*, there is imminent danger of failure or collapse of a *building* or structure or any part thereof which endangers human life, or when any *building* or structure or part thereof has fallen and human life is endangered by the occupation of the *building* or structure, the *building official* is hereby authorized and empowered to order and require the occupants to vacate the same forthwith. The *building official* shall post, or cause to be posted, at each entrance to such *building* or structure a notice reading as follows: “This structure is unsafe and its occupancy has been prohibited by the building official.” It shall be unlawful for any person to enter such premises except upon permission granted by the *building official* for the purposes of making the required *repairs* or of demolishing the premises. The posted identification shall not be defaced or removed except by the *building official* or his authorized representative.

(Add) **117.2 Temporary safeguards.** When, in the opinion of the *building official*, there is imminent danger to human life due to an unsafe condition, the *building official* shall cause the necessary work to be done to render such *building* or structure temporarily safe, whether or not the legal procedure described in Section 116 has been instituted.

(Add) **117.3 Temporary closings.** When necessary for public safety, the *building official* shall temporarily close *buildings* and structures and close, or order the authority having *jurisdiction* to close, sidewalks, streets, *public ways* and places adjacent to unsafe structures, and prohibit the same from being used.

(Add) **117.4 Emergency work.** When imminent danger or an unsafe condition requiring immediate action exists and the *owner* of the *building* or structure cannot be located, or refuses or is unable to expeditiously render the premises safe, the *building official* shall order the employment of the necessary labor and materials to perform the required work as expeditiously as possible. Such work shall include that required, in the *building official's* sole opinion, to make the premises temporarily safe, up to and including demolition.

(Add) **117.5 Costs of emergency work.** Costs incurred in the performance of emergency *repairs* or demolition under the order of the *building official* shall be paid from the treasury of the town, city or borough in which the *building* or structure is located on approval of the *building official*. The legal counsel of the town, city or borough shall institute appropriate action against the *owner* of the premises where the unsafe *building* or structure is or was located.

(Add) SECTION 118 – VACANT BUILDINGS

(Add) **118.1 General.** Temporarily unoccupied *buildings*, structures, premises or portions thereof, including tenant spaces, shall be safeguarded and maintained in accordance with this section.

(Add) **118.1.1 Abandoned premises.** *Buildings*, structures and premises for which an *owner* cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured; which have been occupied by unauthorized persons or for illegal purposes; or which present a danger of structural collapse or fire spread to adjacent properties shall be considered abandoned, declared unsafe and abated or demolished in accordance with this code.

(Add) **118.2 Safeguarding vacant premises.** Temporarily unoccupied *buildings*, structures, premises or portions thereof shall be secured and protected in accordance with this section.

(Add) **118.2.1 Security.** Exterior openings and interior openings accessible to other tenants or unauthorized persons shall be boarded, locked, blocked or otherwise protected to prevent entry by unauthorized individuals.

(Add) **118.2.2 Fire protection.** Fire alarm, sprinkler and standpipe systems shall be maintained in an operable condition at all times.

Exceptions:

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

(Add) **118.2.3 Fire separation.** Fire-resistance-rated partitions, *fire barriers* and *fire walls* separating vacant tenant spaces from the remainder of the *building* shall be maintained.

(Add) **118.3 Removal of combustibles.** Persons owning, or in charge or control of, a vacant *building* or portion thereof, shall remove all accumulations of combustible materials and flammable or combustible waste or rubbish from such space. The premises shall be maintained clear of waste or *hazardous materials*.

Exceptions:

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

(Add) **118.4 Removal of hazardous materials.** Persons owning, or in charge or control of, a vacant *building* or portion thereof, shall remove all accumulations of *hazardous materials* as defined by this code.

CHAPTER 2 – DEFINITIONS

(Amd) **201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in other codes adopted as portions of the Connecticut State Building Code, such terms shall have the meanings ascribed to them as in those codes.

(Add) **202.1 Definitions.** Add or amend the following definitions:

(Add) **ACCESSORY STRUCTURE.** A structure that is accessory to and incidental to that of a Group R-3 *dwelling* and that is located on the same *lot*.

(Amd) **APPROVED AGENCY.** An established and recognized agency that is regularly engaged in conducting tests, furnishing inspection services or furnishing product certification, where such agency has been *approved* by the *building official*. Officials certified in accordance with the provisions of section 29-298 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 Fire Safety Code. Pursuant to subsection (d)(1) of section 29-276b of the Connecticut General Statutes, an *approved agency* conducting tests or furnishing inspection services of soils or concrete must be certified under the National Voluntary Laboratory Accreditation Program of the National Institute of Standards and Technology.

(Add) **BABY CHANGING FACILITIES.** A table or other device suitable for changing the diaper of a child aged 3 or under.

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

(Add) **COMPLEX.** For application of accessibility requirements, this term means any group of *buildings* located on a single parcel of land or on contiguous parcels of land or any *building* or group of *buildings* that are subdivided into separate occupancies and planned, financed, constructed or promoted by common management for the purpose of sale or lease of the entire *complex* or any subdivision thereof, except any single-family detached *dwelling*.

(Amd) **EXISTING BUILDING.** A *building* or structure, or portion thereof, erected in whole or in part, for which a legal building *permit* and a certificate of occupancy has been issued. *Buildings* or structures or portions thereof erected prior to October 1, 1970 shall be deemed *existing buildings* regardless of the existence of a legal *permit* or a certificate of occupancy.

(Del) **EXISTING STRUCTURE.** Delete without substitution.

(Amd) **FABRICATED ITEM.** Structural, load-bearing or lateral load-resisting members or assemblies consisting of materials assembled prior to installation in a *building* or structure, or subjected to operations such as heat treatment, thermal cutting, cold working or reforming after manufacture and prior to installation in a *building* or structure. Materials produced in accordance with standards referenced by this code, such as rolled structural steel shapes, steel-reinforcing bars, *masonry units*, *wood structural panels* and structural composite lumber, or in accordance with a referenced standard that provides requirements for quality control done under the supervision of a third-party quality control agency, shall not be considered “*fabricated items*.”

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

(Add) **GROUP R-1 BED AND BREAKFAST ESTABLISHMENT.** A *building* that does not qualify as a one- or two-family *dwelling unit* in accordance with Section 101.2 and:

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

(Amd) **HURRICANE-PRONE REGIONS.** Areas within municipalities as tabulated in Appendix P.

(Amd) **LODGING HOUSE.** A building that does not qualify as a one- or two-family dwelling unit in accordance with Section 101.2 or an *R-1 Bed and Breakfast Establishment*, and that contains only the owner’s dwelling unit and guest rooms without permanent provisions for cooking, with a total building occupant load of not more than 16 persons.

(Add) **METAL BUILDING SYSTEM.** An integrated set of components and assemblies, including but not limited to frames that are built-up structural steel members, secondary members that are cold-formed steel or steel joists, and cladding components, specifically designed to support and transfer loads and provide a complete or partial building shell.

(Add) **PLANS AND SPECIFICATIONS.** See *construction documents*.

(Amd) **REGISTERED DESIGN PROFESSIONAL.** An individual who is registered or licensed by the Department of Consumer Protection pursuant to chapters 390, 391, 396 or 396a of Connecticut General Statutes to practice their respective design profession and acting within the scope of his or her license and practice discipline.

(Add) **SPA, EXERCISE (Also known as a swim spa).** Variants of a spa in which the design and construction includes specific features and equipment to produce a water flow intended to allow recreational physical activity including, but not limited to, swimming in place. *Exercise spas* can include peripheral jetted seats intended for water therapy, heater, circulation and filtration system, or can be a separate distinct portion of a combination *spa/exercise spa* and can have separate controls. These spas are of a design and size such that they have an unobstructed volume of water large enough to allow the 99th Percentile Man as specified in APSP 16 to swim or exercise in place.

(Amd) **SPECIAL AMUSEMENT AREA.** A special amusement area is any temporary or permanent building or portion thereof that is occupied for amusement, entertainment or educational purposes and is arranged in a manner that:

1. Makes the means of egress path not readily apparent due to visual or audio distractions.
2. Intentionally confounds identification of the means of egress path.
3. Otherwise makes the means of egress path 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.

(Amd) **SPRAY-APPLIED FOAM PLASTIC.** Single- and multiple-component, spray-applied foam plastic insulation used in nonstructural applications that are installed at locations wherein the material is applied in a liquid or frothed state, permitted to free rise and cure in situ and certified pursuant to section 29-277 of the Connecticut General Statutes.

(Add) **STREET FLOOR.** For application of accessibility requirements, this term means the floor nearest the *level of exit discharge*.

(Add) **TECHNICALLY INFEASIBLE.** An *alteration* of a *building* or a *facility* that has little likelihood of being accomplished because the existing structural conditions require the removal or *alteration* of a load-bearing member that is an essential part of the structural frame, or because other physical or *site* constraints prohibit modification or addition of elements, spaces or features that are in full and strict compliance with the minimum requirements for new construction and that are necessary to provide accessibility. Pursuant to subsection (b) of section 29-269 of the Connecticut General Statutes, the determination of technical infeasibility shall be made by the State Building Inspector.

(Amd) **TYPE B UNIT.** A *dwelling unit* or *sleeping unit* designed and constructed for accessibility in accordance with this code and the provisions for *Type B units* in ICC/ANSI A117.1, as amended.

(Amd) **WIND-BORNE DEBRIS REGION.** Areas within *municipalities* or *portions thereof* as tabulated in *Appendix P*.

1. Within 1 mile (1.61 km) of the mean high-water line where an Exposure D condition exists upwind at the waterline and the basic design wind speed, *V*, is 130 mph (58 m/s) or greater; or
2. In areas where the basic design wind speed is 140 mph (63 m/s) or greater.

CHAPTER 3 – USE AND OCCUPANCY CLASSIFICATION

(Amd) **305.2 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.

(Amd) **305.2.2 Six or fewer children.** A *facility* having six or fewer children receiving such day care shall be classified as part of the primary occupancy.

(Amd) **305.2.3 Family child care home.** As defined in subsection (a)(3) of section 19a-77 of the Connecticut General Statutes, a *family child care home* that operates in accordance with the licensing requirements of the Office of Early Childhood shall be classified as Group R-3 or shall comply with the International Residential Code.

(Add) **307.5.1 Consumer fireworks, Class 1.4G.** Sparklers and fountain display items permitted to be sold in Connecticut shall be exempt from the requirements of an H-3 occupancy under the following circumstances:

1. The total amount on display and in storage in any single *control area* complies with the maximum allowable quantities as listed in Table 307.1(1) of this code, or;
2. The new or existing retail store or retail sales *facility* complies with the provisions of NFPA 1124 for new stores and facilities as herein amended.

(Add) **307.5.2 Storage Rooms.** The provisions of NFPA 1124 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, including packaging. Such storage shall be segregated into areas of 1,200 cubic feet or less, separated by a minimum of 4 feet of clear space.

(Amd) 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, including packaging. Such storage shall be segregated into areas of 1,200 cubic feet or less, separated by a minimum of 4 feet of clear space.

(Amd) **308.2.3 Four to 16 persons receiving custodial care.** A *facility* housing not fewer than four and not more than 16 persons receiving *custodial care* shall be classified as R-4.

(Amd) **308.2.4 Three or fewer persons receiving custodial care.** A *facility* with three or fewer persons receiving *custodial care* shall be classified as Group R-3 or shall comply with the International Residential Code.

(Amd) **308.3 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

(Amd) **308.3.2 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 International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code.

(Add) **308.3.3 Alternative compliance for small I-2 homes.** See Section 407.14 for alternative compliance provisions for Group I-2 homes serving four to six persons who are *incapable of self-preservation*.

(Amd) **308.4 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 occupancy conditions indicated in Sections 308.4.1 to 308.4.5, inclusive and shall comply with Section 408.

(Amd) **308.5 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, 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) **308.5.1 Classification as Group E.** A child day care *facility* that provides care for more than six but not 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.

(Amd) **308.5.3 Six or fewer persons receiving care in other than a dwelling unit.** A *facility* having six or fewer persons receiving *custodial care* in other than a *dwelling unit* shall be classified as part of the primary occupancy.

(Amd) **308.5.4 Family child care home.** As defined in section 19a-77 of the Connecticut General Statutes, a family child care home that operates in accordance with the licensing requirements of the Office of Early Childhood shall be classified as Group R-3 or shall comply with the International Residential Code.

(Amd) **310.2 Residential Group R-1.** Residential Group R-1 occupancies containing *sleeping units* where the occupants are primarily *transient* in nature, including:

- Bed and breakfast establishments
- Boarding houses (transient)* with more than 10 occupants
- Congregate living facilities (transient)* with more than 10 occupants
- Hotels (transient)*
- Motels (transient)*

(Add) **310.2.1 Group R-1 bed and breakfast establishments.** A *building* that does not qualify as a one- or two-family *dwelling unit* in accordance with Section 101.2 and:

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) **310.2.1.1 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. Fire separation assemblies shall not be required when the kitchen is protected by a limited-area sprinkler system.
2. Fire separation assemblies shall not be required 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.

(Amd) **310.3 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

Congregate living facilities (nontransient) with more than six occupants

Boarding houses (nontransient)

Convents

Dormitories

Fraternities and sororities

Monasteries

Hotels (nontransient)

Live/work units

Motels (nontransient)

Vacation timeshare properties

(Amd) **310.4 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 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 (non transient)

Convents

Dormitories

Fraternities and sororities

Monasteries

Congregate living facilities (transient) with six 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

(Del) **310.4.1 Care facilities within a dwelling unit.** Delete section.

(Del) **310.4.2 Lodging houses.** Delete section.

(Amd) **310.5 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 310.5.1 or 310.5.2. 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 this code.

CHAPTER 4 – SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

(Amd) **403.3.3 Secondary water supply.** An automatic secondary on-site water supply having a capacity not less than the hydraulically calculated sprinkler demand, including the hose stream requirement, shall be provided for *high-rise buildings* assigned to *Seismic Design Category* D, E or F as determined by Section 1613. An additional fire pump shall not be required for the secondary water supply unless needed to provide the minimum design intake pressure at the suction side of the fire pump supplying the *automatic sprinkler system*. The secondary water supply shall have a duration of not less than 30 minutes as determined by the occupancy hazard classification in accordance with NFPA 13..

(Amd) **404.1 General.** The provisions of Sections 404.1 through 404.11 shall apply to buildings containing atriums. Atriums are not permitted in buildings or structures classified as Group H.

Exceptions:

1. Vertical openings that comply with Sections 712.1.1 through 712.1.3, and Sections 712.1.9 through 712.1.14.
2. The provisions of Section 404 shall not apply to vertical openings in Group R-1 bed and breakfast establishments.

(Amd) **406.3.2.1 Dwelling unit separation.** The *private garage* shall be separated from the *dwelling unit* and its *attic* area by means of Type X *gypsum board*, not less than 5/8-inch (15.9 mm) in thickness, applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a 5/8-inch (15.9 mm) Type X *gypsum board* or equivalent and 5/8-inch (15.9 mm) Type X *gypsum board* applied to structures supporting the separation from habitable rooms above the garage. Door openings between a *private garage* and the *dwelling unit* shall be equipped with either solid wood doors or solid or honeycomb core steel doors not less than 1³/₈ inches (34.9 mm) in thickness, or doors in compliance with Section 716.5.3 with a *fire protection rating* of not less than 20 minutes. Doors shall be *self-closing* and self-latching.

(Add) **407.12 Laboratories.** In addition to other requirements of this code, laboratories employing quantities of flammable, combustible or *hazardous materials* that exceed exempt amounts shall be protected in accordance with NFPA 99.

(Add) **407.13 Medical gas systems.** Medical gas systems shall comply with Chapter 12 of the International Plumbing Code and Section 5306 of the International Fire Code.

(Add) **407.14 Small I-2 homes.** Group I-2 homes that serve four to six persons who are *incapable of self-preservation* and comply with the specific requirements of Section 407.14.1 shall be permitted to utilize the alternate compliance for the required items listed in Section 407.14.2. Other applicable provisions of the code not addressed in Section 407.14.2 shall also apply.

(Add) **407.14.1 Specific requirements.** Small Group I-2 homes shall comply with Sections 407.14.1.1 through 407.14.1.11.

(Add) **407.14.1.1 Separation of sleeping area.** The sleeping area and its hallway shall be separated from other *habitable spaces* such as living areas and kitchens by a smoke partition in accordance with Section 710 and the doorway to the sleeping area hallway from such spaces shall have a minimum 20-minute *fire resistance* rating and be *self-closing* or automatic-closing.

(Add) **407.14.1.2 Sleeping room walls.** All client sleeping room walls separating the sleeping rooms from the hallways and other habitable or *occupiable spaces* of the *building* shall be constructed as smoke partitions in accordance with Section 710.

(Add) **407.14.1.3 Means of escape.** In addition to the *means of egress* requirements of Chapter 10, the following two requirements shall also be met:

1. All client sleeping rooms shall have an *emergency escape and rescue opening* in accordance with Section 1030.
2. One door shall open directly to the exterior at the *level of exit discharge* from the sleeping area hallway or a client sleeping room.

(Add) **407.14.1.4 Size of doors.** The minimum width of all door openings shall provide a clear width of 34 inches (863 mm). Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad).

(Add) **407.14.1.5 Door latches.** Every door latch to closets, storage areas, and other similar spaces or such areas shall be such that the clients can open the door from inside the space or area.

(Add) **407.14.1.6 Client sleeping room and bathroom doors.** Client sleeping room and bathroom door locks shall be designed to allow the opening of the locked door from the outside by an opening device *readily accessible* by staff in an emergency.

(Add) **407.14.1.7 Fire alarm and detection systems.** Fire alarm and detection systems shall be installed in accordance with Section 907.2.6.

(Add) **407.14.1.8 Detection.** Smoke detection shall be provided in all sleeping rooms, sleeping room hallways and common spaces except kitchens and bathrooms.

(Add) **407.14.1.9 Carbon monoxide detectors.** Carbon monoxide detectors shall be provided in accordance with Section 915.

(Add) **407.14.1.10 Attic space access.** An opening not less than 36 inches by 36 inches (914 mm by 914 mm) shall be provided to any *attic* area having a clear height of over 30 inches (762 mm). Clear headroom of not less than 30 inches (762 mm) shall be provided at the *attic* space at or above the opening.

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

(Add) **407.14.1.11 Standby power.** Standby power shall be provided for small I-2 homes in accordance with Section 2702.

(Add) **407.14.2 Alternative compliance.** Where the requirements of Section 407.14.1 are satisfied, small Group I-2 homes shall be permitted to comply with 407.14.2.1 through 407.14.2.3.

(Add) **407.14.2.1 Height, area and construction type.** Height and area shall comply with Chapter 5 and the requirements of Chapter 6, except as provided in Section 407.14.2.1.1.

(Add) **407.14.2.1.1 Type VB construction.** Type VB construction is permitted for a one-story *building* not more than 4,500 square feet (418 m²) in area where the unoccupied *attic* space is protected by automatic sprinklers or provided with heat detection in the *attic* connected to the *building* fire alarm system.

(Add) **407.14.2.2 Automatic fire sprinkler system.** *Buildings* shall be equipped with a NFPA 13R sprinkler system or an NFPA 13D sprinkler system with a 30-minute water supply. All storage, habitable and occupiable rooms, as well as kitchens and closets, shall be sprinklered. Sprinkler valves shall be electrically supervised and connected to the *building* fire alarm system.

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

(Add) **407.14.2.3 Exterior ramps.** Exterior *ramps* in accordance with Section 1027 shall be permitted for small I-2 homes.

(Del) **410.2.6 Scenery.** Delete section.

(Add) **422.8 Laboratories.** In addition to other requirements of this code, laboratories employing quantities of flammable, combustible or *hazardous materials* that exceed exempt amounts shall be protected in accordance with NFPA 99.

(Add) **422.9 Medical gas systems.** Medical gas systems shall comply with Chapter 12 of the International Plumbing Code and Section 5306 of the International Fire Code.

(Amd) **424.5 Area limits.** Children's play structures greater than 600 square feet (28 m²) in area shall comply with Section 411.

(Add) SECTION 429 – GROUP E

(Add) **429.1 Proximity to the level of exit discharge.** Proximity to the *level of exit discharge* shall be provided in accordance with Sections 429.1.1 and 429.1.2. For the purpose of this section, normally occupied includes such spaces as libraries, cafeterias, gymnasiums and multipurpose rooms. This does not include administrative offices, healthcare rooms nor special one-on-one rooms.

(Add) **429.1.1 Preschool, kindergarten and first grade.** Rooms normally occupied by preschool, kindergarten or first-grade students shall be located on a *level of exit discharge*.

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

(Add) **429.1.2 Second grade.** Rooms normally occupied by second-grade students shall be located not more than one *story* above a *level of exit discharge*.

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

(Add) **429.2 Subdivision of building spaces.** Group E occupancies shall be subdivided into compartments by *smoke barriers* complying with Section 709 where one or both of the following conditions exist:

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

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

Exceptions:

1. Where all spaces normally subject to student occupancy have not less than one door opening directly to the outside or to an exterior or *exit access* balcony or *corridor* in accordance with Section 1021.
2. *Buildings* protected throughout by an *approved*, supervised automatic fire sprinkler in accordance with Section 903.3.1.1.

(Add) **429.2.1 Area of smoke compartments.** The area of any *smoke compartment* required by Section 427.2 shall not exceed 30,000 square feet (2787 m²) with no dimension exceeding 300 feet (91 m).

(Add) **429.3 Carbon monoxide detectors.** Pursuant to section 29-292 of the Connecticut General Statutes, carbon monoxide detection shall be provided as required by Section 915.

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS

(Add) **504.5 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 *dwelling*s to *Group R-1 bed and breakfast establishments* shall be increased by 5 feet (1524 mm) from the value in Table 504.3 and one *story* from the value in Table 504.4 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.

CHAPTER 7 – FIRE AND SMOKE PROTECTION FEATURES

(Add) **704.6.2 Connections.** Where non-fire-resistance-rated members attach to fire-resistance-rated members, the non-rated member shall be protected in the same manner as the rated member for a distance of not less than 12 inches (305 mm) from the point of connection.

(Amd) **708.1 General.** The following wall assemblies shall comply with this section.

1. Separation walls as required by Section 420.2 for Group I-1 and Group R occupancies.

Exception: *Group R-1 bed and breakfast establishments.*

2. Walls separating tenant spaces in covered and *open mall buildings* as required by Section 402.4.2.1.
3. *Corridor* walls as required by Section 1020.1.
4. Enclosed elevator lobby separation as required by Section 3006.2.
5. Egress balconies as required by Section 1019.2.

(Amd) **712.1.3 Escalator and stairway openings.** Where a building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, vertical openings for escalators or stairways which are not a portion of the means of egress shall be permitted where protected in accordance with Section 712.1.3.1 or 712.1.3.2.

(Amd) **712.1.3.1 Opening Size.** Protection by a draft curtain and closely spaced sprinklers in accordance with NFPA 13 shall be permitted where the area of the vertical opening between stories does not exceed twice the horizontal projected area of the escalator or stairway. In other than Groups B and M, this application is limited to openings that do not connect more than four stories.

CHAPTER 9 – FIRE PROTECTION SYSTEMS

(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 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 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 Connecticut State Building Code that undergo *addition, alteration or change of occupancy* that results in an increase in the restaurant's *fire area* providing 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.** Pursuant to Section 29-315 of the Connecticut General Statutes an automatic sprinkler system shall be installed in Group E occupancies.

(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 (1115 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 (2230 m²).
4. Throughout stories below the *level of exit discharge* where such stories have an area exceeding 2,500 square feet (232 m²) and are used for the sale, storage or handling of combustible goods or merchandise.

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

Exceptions:

1. *Group R-1 bed and breakfast establishments*.
2. Existing *buildings* four stories or less in height undergoing a *change of occupancy* from a one- or two-family *building* or Group R-3 to Group R-2 containing not more than four *dwelling units* that does not involve an increase in height or area and where each *dwelling unit* has either:
 - 2.1 An *exit door* directly to the exterior at a *level of exit discharge*,
 - 2.2 Direct access to an exterior *stair* serving a maximum of two *dwelling units* on the same *story*,or
 - 2.3 Direct access to an interior *stair* serving only that *dwelling unit* and separated from all other portions of the *building* with 1-hour fire-resistance-rated *fire barriers*.
3. Existing *buildings* converted prior to June 15, 1994, from a one- or two-family *building* or Group R-3 to Group R-2 containing not more than four *dwelling units*.

4. Horizontal *additions* containing a newly introduced Group R occupancy that are added to existing *buildings* shall be required to have an automatic sprinkler system installed in the *addition* only if the *addition* is completely separated from the existing *building* by *fire barriers* with a minimum 1-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 units* are separated from any nonresidential occupancy by a minimum 1-hour fire-resistance-rated separation.
 - 5.3 The nonresidential 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 in accordance with Section 903.3.1.3 shall be permitted in a Group R-4 care *facility* 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 *dwelling*s 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 through 903.2.11.7.

(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 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.

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

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

(Del) **903.5 Testing and maintenance.** Delete section.

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

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

(Del) **905.3.4.1 Hose and cabinet.** Delete section.

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

(Add) **SECTION 906 - PORTABLE FIRE EXTINGUISHERS.**

(Add) **906.1 Where required.** Portable fire extinguishers shall be provided in occupancies and locations as required by the 2022 Connecticut State Fire Prevention Code.

(Add) **906.2 Maintenance.** Portable fire extinguishers shall be maintained in accordance with the 2022 Connecticut State Fire Prevention Code.

(Amd) **907.1.1 Construction documents.** *Construction documents* for fire alarm systems shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and the 2022 Connecticut State Fire Safety Code, as determined by the code official.

(Del) **907.2.7.1 Occupant notification.** Delete section.

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

Exceptions:

1. An automatic fire detection system is not required 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 access* that leads directly to an *exit*.
2. An automatic fire detection system is not required 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. A fire alarm system is not required in *buildings* not more than 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*, *egress exit*, *court* or *yard*.
2. *Manual fire alarm boxes* are not required where the *building* is 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. A fire alarm system is not required 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 that *dwelling units* or *sleeping units* either have a *means of egress* door opening directly to an exterior *exit access* that leads directly to the *exits* or are served by open-ended *corridors* designed in accordance with Section 1026.6, Exception 4.

(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 an alteration of *addition* is made to a *building* or structure of a Group I-4 and E day care facilities, Group I-1 or R occupancy or when one or more sleeping rooms are added or created in existing *dwelling units*, the entire *dwelling unit* or *building* shall be provided with smoke detectors located as required for new *buildings*. 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. On each *story* in front of doors to the *stairways*;
2. In the *corridors* of all floors occupied by the day care facilities; and
3. In lounges, recreation areas and sleeping rooms in the day care facilities.

Exception: Day care facilities housed in one room.

(Del) **907.6.6.3 Termination of monitoring service.** Delete section.

(Add) **907.6.6.3 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) **907.8 Inspection, testing and maintenance.** Delete section.

(Add) **913.6 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 NFPA 70, 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.

(Amd) **915.1 General.** Carbon monoxide detectors shall be installed in new *buildings* and occupancies in accordance with Sections 915.1.1 through 915.6. When *alterations* or *additions* requiring a *permit* occur in existing *buildings*, carbon monoxide detection shall be provided in accordance with Section 915.7.

(Amd) **915.1.1 Where required.** Carbon monoxide detection shall be provided in 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 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 shall be provided in *dwelling units* and *sleeping units* served by a fuel-burning, forced-air furnace.

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

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

Exceptions:

1. Carbon monoxide detection shall not be required in *dwelling units* and *sleeping units* without communicating openings between the fuel-burning appliance or fuel-burning *fireplace* and the *dwelling unit* or *sleeping unit*.
2. Carbon monoxide detection shall not be required in *dwelling units* and *sleeping units* where a carbon monoxide detector is provided in one of the following locations:
 - 2.1. In an *approved* location between the fuel-burning appliance or fuel-burning *fireplace* and the *dwelling unit* or *sleeping unit*.
 - 2.2. On the ceiling of the room containing the fuel-burning appliance or fuel-burning *fireplace*.

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

Exceptions:

1. Where there are no communicating openings between the *private garage* and the *dwelling unit* or *sleeping unit*.
2. In *dwelling units* and *sleeping units* located more than one *story* above or below a *private garage*.
3. Where the *private garage* connects to the *building* through an open-ended *corridor*.
4. Where a carbon monoxide detector is provided in an *approved* location between openings to a *private garage* and *dwelling units* or *sleeping units*.

(Amd) **915.2.3 Group E occupancies.** Carbon monoxide detection system shall be provided in the locations specified in Section 915.2.3.1 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 9.6.4 of NFPA 720.

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

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

(Add) **915.7 Alterations and additions.** When *alterations* or *additions* requiring a *permit* occur to *buildings* with Group R-3 and R-4 occupancies and to *Group R-1 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, re-roofing, 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 907.2.11.2.3 and this section.

(Del) **SECTION 918 - EMERGENCY RESPONDER RADIO COVERAGE.** Delete section.

CHAPTER 10 – MEANS OF EGRESS

(Add) **1001.3 Means of egress.** In addition to the requirements of this code, means of egress in existing buildings undergoing additions, alterations or repairs shall meet the requirements of the 2022 Connecticut State Fire Safety and Fire Prevention Codes for the proposed occupancy.

(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 be not 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 *building 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, of means of egress *stairways* shall be calculated by multiplying the *occupant load* served by such *stairways* 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, 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 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 and 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 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 openable from inside the bathroom and shall be capable of being unlocked from the ingress side.

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

Exceptions:

1. Alternating tread devices in accordance with Section 1011.14.

2. Ship ladders in accordance with Section 1011.15.
3. Spiral *stairways* in accordance with Section 1011.10.
4. Aisle *stairs* in assembly seating areas where the *stair* pitch or slope is set, for sightline reasons, by the slope of the adjacent seating area in accordance with Section 1029.13.
5. In *Group R-1 bed and breakfast establishments*; in 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 ¼ 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 ¾ inch (19.1 mm) but not more than 1 ¼ 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 (9.5 mm) 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.** *Winder* treads are not permitted in *means of egress stairways* except within a *dwelling unit* and within existing detached one- and two-family *dwelling*s 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 comply with Section 2407.

Exceptions:

1. *Flights of stairways* within *dwelling units, Group R-1 bed and breakfast establishments* and *flights of 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 does not require *handrails*.
4. Changes in room floor elevations of three or fewer risers within *dwelling units* and *sleeping units* in *Group R-1 bed and breakfast establishments* and Groups R-2 and R-3 occupancies do not require *handrails*.
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 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 (1905 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 be not less than 42 inches (1067 mm) high, measured vertically as follows:

1. From the adjacent walking surfaces.
2. On *stairways* and stepped aisles, from the line connecting the leading edges of the tread *nosings*.
3. On *ramps* and 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 be not less than 36 inches (914 mm) in height measured vertically above the adjacent walking surfaces.
2. For occupancies in Group R-3, and 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 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.
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 comply 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 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 *nosings*.

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.

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 *Group R-1 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 ½ hour with 20-minute fire-resistance-

rated door assemblies. Fire-resistance assemblies at *stairways* in *Group R-1 bed and breakfast establishments* shall not be required to be supported by fire-resistance-rated construction.

5. *Exit access stairways* and *ramps* within an atrium complying with the provisions of Section 404.
6. *Exit access stairways* and *ramps* in *open parking garages* that serve only the open parking garage.
7. *Exit access stairways* and *ramps* serving smoke-protected or open-air assembly seating complying with the *exit access* travel distance requirements of Section 1030.7.
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.

(Add) **1020.2.2 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) **Table 1020.2 Corridor Fire-Resistance Rating**

Amend final row as follows:

I-4	All	1 ^e	0
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Add new footnote as follows:

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 (3048 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 in the event of 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 (3048 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 that 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).
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*.
3. Group E occupancies. In Group E occupancies, emergency escape and rescue openings shall be provided in every room or space greater than 250 square feet used for classroom or educational purposes or normally subject to student occupancy.

Exceptions:

1. *Buildings* protected throughout by an *approved* automatic sprinkler system in accordance with Section 903.3.1.1.
2. Rooms or spaces that have a door leading directly to the outside of the *building*.
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 square feet normally subject to client occupancy.

Exceptions:

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

(Amd) **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 that 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 (1118 mm) measured from the floor.

Exception: In an existing *building* undergoing a change of use, the 44-inch (1118 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.

CHAPTER 11 – ACCESSIBILITY

(Amd) **1103.2.11 Group R-1 bed and breakfast establishments.** *Group R-1 bed and breakfast establishments* are not required to be *accessible*.

(Add) **1103.2.15 Statutory requirements.** Pursuant to section 29-274 of the Connecticut General Statutes the following are additional exceptions to requirements for accessibility:

1. Accessibility shall not be required in renovations, *additions* or *alterations* to stories in existing *buildings* above the *street floor* being converted to Group B provided each *story* above the *street floor* contains less than 3,000 square feet (278.7 m²) of total gross area per floor and the *street floor* is renovated or altered to provide accessibility to persons with disabilities. This provision shall not apply to stories above the *street floor* that include the offices of health care providers, municipal or state agencies or passenger transportation facilities or offices located in airport terminals.

2. *Buildings* and structures of any occupancy consisting of three stories or less not otherwise exempted from the requirements of this chapter shall be exempt if each *story* above and below the *street floor* contains less than 3,000 square feet (278.7 m²) of total gross area and the *street floor* is designed, renovated or altered to provide accessibility to persons with disabilities. This provision shall not apply to stories above or below the *street floor* that include the offices of health care providers, municipal or state agencies or passenger transportation facilities or offices located in airport terminals or mercantile facilities having five or more tenant spaces.

(Add) **1103.2.16 Mezzanines.** *Mezzanines* having fewer than 3,000 square feet (278.7 m²) of *gross floor area*, either singly or in the aggregate for multiple *mezzanines* on any floor, are not required to be accessible and are not required to be located on an *accessible route*, provided that the goods and services available on any *mezzanine* shall be available in accessible areas.

(Amd) **1104.1 Site arrival points.** At least one *accessible route* within the *site* shall be provided from public transportation stops, *accessible* parking and *accessible* passenger loading zones, and public streets or sidewalks to the *accessible building* entrance served. Where an *accessible route* must cross speed bumps or vehicle wheel stops, there shall be a minimum clear passage width of not less than 32 inches (815 mm).

Exception: Other than in *buildings* or facilities containing or serving *Type B units*, an *accessible route* shall not be required between *site* arrival points and the *building* or *facility* entrance if the only means of access between them is a vehicular way not providing for pedestrian access.

(Amd) **1104.4 Multilevel buildings and facilities.** At least one *accessible route* shall connect each *accessible story*, *mezzanine* and occupied roofs in multilevel *buildings* and facilities.

Exceptions:

1. An *accessible route* is not required to stories, *mezzanines* and *occupied roofs* that comply with Sections 1103.2.15 and 1103.2.16, respectively.
2. Stories, *mezzanines* or *occupied roofs* that do not contain *accessible* elements or other spaces as determined by Section 1108 or 1109 are not required to be served by an *accessible route* from an *accessible* level.
3. In air traffic control towers, an *accessible route* is not required to serve the cab and the floor immediately below the cab.
4. Where a two-story *building* or *facility* has one *story* or *mezzanine* with an *occupant load* of five or fewer persons that does not contain public use space, that *story* or *mezzanine* shall not be required to be connected by an *accessible route* to the *story* above or below.

(Add) **1105.1.1.1 Automatic entrances.** Where controls for automatic doors are provided they shall be in an *accessible* location within 10 feet of the entrance.

(Add) **1105.1.1.2 Primary entrances.** Pursuant to section 29-270a of the Connecticut General Statutes, at least one primary entrance to any *covered mall building*, anchor store or retail business (Group M) with more than 50,000 square feet of floor space shall be equipped with an automatically operating door or doors in sequence, installed in accordance with applicable provisions of this code.

Exception: Nothing in this section shall require the installation of an automatically operating door in a primary entrance which is open and unobstructed by any door during the hours that the retail business is open to the public.

(Add) **1106.2.1 Automobile accessible parking spaces.** Pursuant to subsection (h) of section 14-253a of the Connecticut General Statutes, parking spaces for passenger motor vehicles designated for persons who are blind and persons with disabilities shall be as near as possible to a *building* entrance or walkway and shall be 15 feet wide including 5 feet of cross hatch.

(Amd) **1106.3 Groups I-1, R-1, R-2, R-3 and R-4.** *Accessible* parking spaces shall be provided in Group I-1, R-1, R-2, R-3 and R-4 occupancies in accordance with Items 1 through 4, as applicable.

1. In Group R-2, R-3 and R-4 occupancies that are required to have *Accessible*, Type A or Type B *dwelling units* or *sleeping units*, at least two percent, but not less than one, of each type of parking space provided shall be *accessible*.
2. In Group I-1 and R-1 occupancies, *accessible* parking shall be provided in accordance with Table 1106.2.
3. Where at least one parking space is provided for each *dwelling unit* or *sleeping unit*, at least one *accessible* parking space shall be provided for each *Accessible* and *Type A unit*.
Exception: The number of accessible parking spaces for Type A units shall be permitted to be calculated on the basis of the minimum number of Type A units being two percent of the total number of dwelling units.
4. Where parking is provided within or beneath a *building*, *accessible* parking spaces shall also be provided within or beneath the *building*.
Exception: Private parking garages within or beneath the *building* that contain no more than two parking spaces, that are reserved for the exclusive use of a specific *dwelling unit* and are directly accessed from that *dwelling unit* are not required to be *accessible*.

(Amd) **1106.6 Van spaces.** For every six or fraction of six *accessible* parking spaces, at least one shall be a van-accessible parking space. Each public parking garage or terminal shall have a minimum of two van-accessible parking spaces complying with this section.

Exception: In Group U *private garages* that serve R-2 and R-3 occupancies, van-accessible spaces shall be permitted to have vehicular routes, entrances, parking spaces and access aisles with a minimum vertical clearance of 7 feet (2134 mm).

(Add) **1106.6.1 Van accessible parking spaces.** Pursuant to subsection (h) of section 14-253a of the Connecticut General Statutes, parking spaces for passenger vans designated for persons who are blind and persons with disabilities shall be as near as possible to a *building* entrance or walkway and shall be 16 feet wide including 8 feet of cross hatch.

(Add) **1106.6.1.1 Van access clearance.** Pursuant to subsection (i) of section 14-253a of the Connecticut General Statutes, each public parking garage or terminal shall have 8 feet 2 inches vertical clearance at a primary entrance and along the route to at least two parking spaces for passenger vans that conform to Section 1106.5.1 and that have 8 feet 2 inches of vertical clearance.

(Amd) **1108.6.2.2.1 Type A units.** In Group R-2 occupancies containing more than 20 *dwelling units* or *sleeping units*, at least 10 percent of the units shall be a *Type A unit* in accordance with ICC/ANSI A117.1. All R-2 units on the *site*, within the *building* or within the *complex*, shall be considered to determine the total number of units and the required number of *Type A units*. *Type A units* shall be dispersed among the various classes of units.

Exceptions:

1. The number of *Type A units* is permitted to be reduced in accordance with Section 1108.7.
2. Existing Group R-2 *buildings* or structures on a *site* or within a *complex* shall not contribute to the total number of units on a *site*.

(Amd) **1108.7.2 Multistory units.** A multistory *dwelling unit* or *sleeping unit* that is not provided with elevator service is not required to be a *Type B unit*. Where a *multistory unit* is provided with external elevator service to only one floor, the floor provided with elevator service shall be the primary entry to the unit, shall comply with the requirements for a *Type B unit*, and, where provided within the unit, provisions for living, sleeping, eating, cooking and a complete toilet and bathing *facility* shall be on that floor. Where a *multistory unit* is provided with external elevator service to more than one floor of the unit, one floor shall be the primary entry to the unit and shall comply with the requirements for a *Type B unit*, providing provisions for living, sleeping, eating, cooking and a complete toilet and bathing *facility* on that floor.

(Amd) 1110.2 Toilet and bathing facilities. Each toilet room and bathing room shall be *accessible*. Where a floor level is not required to be connected by an *accessible route*, the only toilet rooms or bathing rooms provided within the facility shall not be located on the inaccessible floor. Except as provided for in Sections 1110.2.4 and 1110.2.5, at least one of each type of fixture, element, control or dispenser in each accessible toilet room and bathing room shall be *accessible*.

Exceptions:

1. Toilet rooms or bathing rooms accessed only through a private office, not for *common* or *public use* and intended for use by a single occupant, shall be permitted to comply with the specific exceptions in ICC A117.1.
2. This section is not applicable to toilet and bathing rooms that serve *dwelling units* or *sleeping units* that are not required to be *accessible* by Section 1108.
3. Where multiple single-user toilet rooms or bathing rooms are clustered at a single location, at least 25 percent but not less than one room for each use at each cluster shall be *accessible*.
4. Where no more than one urinal is provided in a toilet room or bathing room, the urinal is not required to be *accessible*.
5. Toilet rooms or bathing rooms that are part of critical care or intensive care patient sleeping rooms serving *Accessible units* are not required to be *accessible*.
6. Toilet rooms or bathing rooms designed for bariatrics patients are not required to comply with the toilet room and bathing room requirement in ICC A117.1. The *sleeping units* served by bariatrics toilet or bathing rooms shall not count toward the required number of *Accessible sleeping units*.
7. Where permitted in Section 1108, in toilet rooms or bathrooms serving *Accessible units*, water closets designed for assisted toileting shall comply with Section 1110.2.2.
8. Where permitted in Section 1108, in bathrooms serving *Accessible units*, showers designed for assisted bathing shall comply with Section 1110.2.3.
9. Where toilet facilities are primarily for children's use, required *accessible* water closets, toilet compartments and lavatories shall be permitted to comply with children's provision of ICC A117.1.

(Amd) 1110.2.1.2 Family or assisted-use toilet rooms. Family or assisted-use toilet rooms shall include only one water closet and only one lavatory and baby changing facilities. A family or assisted-use bathing room in accordance with Section 1109.2.1.3 shall be considered to be a family or assisted-use toilet room.

Exception: The following additional fixtures shall be permitted in a family or assisted-use toilet room:

1. A urinal.
2. A child-height water closet.
3. A child-height lavatory.

(Add) 1110.2.4.1 Pull handle. Where *accessible* water closet compartments or single occupancy toilet rooms are provided, the compartment or room doors shall have a pull handle mounted 6 inches from the hinge side on the compartment or room side of the door. This handle shall meet the requirements of Section 404.2.6 of ICC/ANSI A117.1.

Exceptions:

1. Compartments or rooms with *self-closing*, self-latching doors.
2. Doors that swing into the compartment or room.

(Add) 1110.2.4.2 Single occupancy toilet. Required *accessible* toilet rooms designed for single occupancy in other than Group R shall meet the requirements of ICC/ANSI A117.1. Each such room shall contain both toilet and lavatory, shall have a lever handle privacy lockset and shall have an emergency call system that actuates a visible and audible alarm in a normally occupied area. An alarm pull switch, identified with emergency instruction, shall be provided within 3 feet of the water closet with a pull cord extending to within 12 inches of the floor.

(Add) **1110.9.1 Limited-use/limited-application elevators.** Limited-use/limited-application elevators shall be permitted to be installed in new construction in the same locations specified in Section 1110.9. Limited-use/limited-application elevators shall be installed in accordance with the Connecticut Safety Code for Elevators and Escalators, adopted under authority of section 29-192 of the Connecticut General Statutes and with provisions of this code adopted under authority of section 29-200 of the Connecticut General Statutes.

(Add) **1110.17 Automated teller machines.** Where automated teller machines are provided for pedestrian use at any site, at least one location and one automated teller machine shall be *accessible*.

(Amd) **1112.1 Signs.** Required *accessible* elements shall be identified by the International Symbol of Accessibility at the following locations:

1. *Accessible* parking spaces as required by Section 1106. Pursuant to subsection (h) of section 14-253a of the Connecticut General Statutes, such spaces shall be designated by above-grade signs with white lettering against a blue background and shall bear the words “RESERVED Parking Permit Required” and “Violators will be fined” in addition to the International Symbol of Accessibility. When such a sign is replaced, repaired or erected, it shall indicate the minimum fine for a violation of subsection (l) of section 14-253a of the Connecticut General Statutes. Such indicator may be in the form of a notice affixed to such sign. Newly installed signs shall be 60 inches (1525 mm) minimum above the floor or ground of the parking space, measured to the bottom of the sign.
2. *Accessible* passenger loading zones.
3. *Accessible* toilet or bathing rooms where not all toilet or bathing rooms are accessible..
4. *Accessible* entrances where not all entrances are *accessible*.
5. *Accessible* check-out aisles where not all aisles are *accessible*. The sign, where provided, shall be above the check-out aisle in the same location as the check-out aisle number or type of check-out identification.
6. Family or assisted-use toilet and bathing rooms and single occupancy toilet rooms.
7. *Accessible* dressing, fitting and locker rooms where not all such rooms are *accessible*.
8. *Accessible* areas of refuge required by Section 1009.9.
9. Exterior areas for assisted rescue in accordance with Section 1009.9.
10. In recreational facilities, lockers that are required to be *accessible* in accordance with Section 1109.9.
11. *Accessible* portable toilet and bathing units.
12. *Accessible means of egress stairways*.
13. *Accessible* grade level *exits* required by Section 1013.1.1.

(Add) **1112.6 Interior signage.** Interior signs, when provided, that designate permanent rooms and spaces shall be raised text characters and braille, designed and located in accordance with ICC/ANSI A117.1. Mounting location for signage shall be such that any person approaching the signage will not encounter protruding objects, or stand within the swing of any door.

CHAPTER 15 – ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

(Amd) **1507.11.1 Slope.** Modified bitumen roofing shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-per cent slope) for drainage.

Exception: A minimum design slope of one-eighth unit vertical in 12 units horizontal shall be permitted when the following two conditions are met:

1. The roofing material is warranted/guaranteed by both the roofing material manufacturer and the roofing installer for the proposed slope.
2. The *registered design professional* responsible for the design of the roof structure certifies that the roof structure is designed to support all *loads*, including any additional *loads* resultant to the reduced slope.

(Amd) **1507.12.1 Slope.** Thermoset single-ply membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-per cent slope) for drainage.

Exception: A minimum design slope of one-eighth unit vertical in 12 units horizontal shall be permitted when the following two conditions are met:

1. The roofing material is warranted/guaranteed by both the roofing material manufacturer and the roofing installer for the proposed slope.
2. The *registered design professional* responsible for the design of the roof structure certifies that the roof structure is designed to support all *loads*, including any additional *loads* resultant to the reduced slope.

(Amd) **1507.13.1 Slope.** Thermoplastic single-ply membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-per cent slope) for drainage.

Exception: A minimum design slope of one-eighth unit vertical in 12 units horizontal shall be permitted when the following two conditions are met:

1. The roofing material is warranted/guaranteed by both the roofing material manufacturer and the roofing installer for the proposed slope.
2. The *registered design professional* responsible for the design of the roof structure certifies that the roof structure is designed to support all *loads*, including any additional *loads* resultant to the reduced slope.

CHAPTER 16 – STRUCTURAL DESIGN

(Amd) **1602.1 Notations.** Amend following item only:

V = Basic design wind speed, miles per hour (mph) (km/hr), determined from Appendix P.

(Amd) **1603.1.3 Roof snow load data.** The ground snow *load*, P_g , shall be indicated. In areas where the ground snow *load*, P_g , exceeds 10 pounds per square foot (psf) (0.479 kN/m²), the following additional information shall also be provided, regardless of whether snow *loads* govern the design of the roof:

1. Flat-roof snow *load*, p_f .
2. Snow exposure factor, C_e .
3. Snow *load* importance factor, I_s .
4. Thermal factor, C_t .
5. Slope factor(s), C_s .
6. Drift surcharge *load*(s), p_d .
7. Width of snow drift(s), w .
8. Existing roofs. Confirmation that existing adjacent lower roofs within 20 feet of the proposed structure or addition comply with Section 1608.4.

(Amd) **1603.1.6 Geotechnical information.** The following geotechnical information, as applicable, shall be shown on the construction documents.:

1. Design load-bearing values of soils and required bearing layer.
2. Design capacities (axial, including uplift, and lateral) and required bearing layer for deep foundations.

(Add) **1607.3.1 Group R-1 bed and breakfast establishments.** *Live loads* shall comply with the requirements of Table 1607.1 for one- and two-family *dwelling*s.

(Add) **1608.1.1 Flat roof snow loads.** The flat roof snow *load*, p_f , shall be calculated in accordance with Section 7.3 of ASCE-7. The calculated value of p_f shall not be less than 30 pounds per square foot and shall be used in the calculation of sloped roof snow loads in accordance with Section 7.4 of ASCE 7. The provisions of Section 7.3.4 of ASCE 7 shall not be used.

(Add) **1608.1.2 Sloped roof snow loads.** The sloped roof snow *load*, p_s , shall be calculated in accordance with Section 7.4 of ASCE-7. The value of p_f used in such calculation shall not be less than 30 pounds per square foot, except where permitted in Section 1608.1.3. Values for “unobstructed slippery roofs” in Figure 7.4-1 of ASCE-7 shall not be utilized, unless *approved by the building official*.

(Add) **1608.1.3 Partial loading, unbalanced roof snow loads, drifts on lower roofs, roof projections and parapets, and snow sliding.** Calculations for partial loading, unbalanced roof snow loads, drifts on lower roofs, roof projections and parapets, and snow sliding, shall be in accordance with Sections 7.5, 7.6, 7.7, 7.8 and 7.9, of ASCE 7, without the 30 pounds per square foot minimum requirement of p_f stipulated in Sections 1608.1.1 and 1608.1.2. The minimum snow load outside snow drift regions shall not be less than the balanced flat roof or sloped roof snow load with the 30 pounds per square foot minimum requirement of p_f stipulated in Sections 1608.1.1 and 1608.1.2.

(Amd) **1608.2 Ground snow loads.** Ground snow *loads* to be used in determining the design snow *loads* for roofs shall be as listed in Appendix P.

(Add) **1608.4 Snow loads on adjacent buildings.** If a new structure or addition is located within 20 feet (6.1 m) of an adjacent existing building, and the new structure or addition exceeds the height of the adjacent existing building, a statement from a professional engineer confirming compliance with one or more of the following shall be provided:

1. No additional snow drift loads will be induced on the roof of the adjacent existing building.
2. Any additional snow drift loads induced on the roof of the adjacent existing building are less than the magnitude of the snow drift loads that would have already existed on the roof of the adjacent existing building.
3. The load-carrying capacity of the roof of the adjacent existing building is capable of supporting the additional snow drift loads.

Snow drift loads shall be derived in accordance with Section 7.7 of ASCE 7.

(Del) **Table 1608.2.** Delete table.

(Del) **Figures 1608.2 (1) and (2).** Delete figure.

(Amd) **1609.3 Basic design wind speed.** The basic design wind speed, V , in mph, for the determination of the wind *loads* shall be determined by Appendix P. When required, the allowable stress design wind speed, V_{asds} shall be determined by Appendix P.

(Del) **Figures 1609.3(1) through 1609.3(12).** Delete figures.

(Del) **Table 1609.3.1.** Delete table.

(Add) **1610.1.1 Seismic Lateral Earth Pressure.** Seismic lateral earth pressure loads on basement walls and retaining walls for structures in Seismic Design Categories D through F shall be in accordance with ASCE 7. Seismic lateral earth pressure loads on basement and retaining walls in Seismic Design Categories A through C need not be considered.

(Amd) **1611.1 Design rain loads.** Each portion of a roof shall be designed to sustain the load of rainwater as per the requirements of Chapter 8 of ASCE 7 except the design rainfall shall be based on twice the 100-year hourly rainfall rate and shall be 6.0 inches.

$$R = 5.2(d_s + d_h)$$

(Equation 16-19)

For SI: $R = 0.0098(d_s + d_h)$

where:

d_h = Additional depth of water on the undeflected roof above the inlet of secondary drainage system at its design flow (in other words, the hydraulic head), in inches (mm).

d_s = Depth of water on the undeflected roof up to the inlet of secondary drainage system when the primary drainage system is blocked (in other words, the static head), in inches (mm).

R = Rain load on the undeflected roof, in psf (kN/m²). Where the phrase “undeflected roof” is used, deflections from loads (including dead loads) shall not be considered when determining the amount of rain on the roof.

(Del) **FIGURE 1611.1(1) through (5) 100-YEAR, 1-HOUR RAINFALL (INCHES).** Delete all figures.

(Amd) **1612.3 Establishment of flood hazard areas.** *Flood hazard areas* shall be established locally by methods lawfully adopted by the town, city or borough.

(Amd) **1613.2.1 Mapped acceleration parameters.** The parameters S_s and S_I shall be determined from the MCE spectral response accelerations shown in Appendix P.

(Del) **Figures 1613.2.1(1) through 1613.2.1(10).** Delete figures.

CHAPTER 17 - SPECIAL INSPECTIONS AND TESTS

(Amd) **1704.2 Special inspections and tests.** Where application is made to the *building official* for construction as specified in Section 105, the *owner* or the *owner's* authorized agent, other than the contractor, shall employ one or more *approved agencies* to provide *special inspections* and tests during construction on the types of work specified in Section 1705 and identify the *approved agencies* to the *building official*. These *special inspections* and tests are in addition to the inspections by the *building official* that are identified in Section 110.

Exceptions:

1. *Special inspections* and tests are not required for construction of a minor nature or as warranted by conditions in the *jurisdiction* as *approved* by the *building official*.
2. Unless otherwise required by the *building official*, *special inspections* and tests are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
3. The contractor is permitted to employ the *approved agencies* where the contractor is also the *owner*.
4. The contractor is permitted to employ the *approved agencies* for the verification of the temporary installation restraint/bracing required for cold-formed steel trusses in Section 1705.2.4 and metal-plate connected wood trusses in Section 1705.5.2.

(Amd) **1704.2.4 Report requirement.** *Approved agencies* shall keep records of special inspections and tests. The *approved agency* shall submit reports of special inspections and tests to the *building official* and to the *registered design professional in responsible charge*. Reports shall indicate that work inspected or tested was or was not completed in conformance to *approved construction documents*. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the *building official* and to the *registered design professional in responsible charge* prior to the completion of that phase of the work. A final report of inspections documenting completion of all required *special inspections and tests* and correction of any discrepancies noted in the inspections or tests shall be submitted prior to the issuance of the certificate of occupancy. Interim reports shall be submitted periodically at the frequency agreed upon by the *permit applicant* and the *building official* prior to the start of work.

(Amd) **1704.2.5.1 Fabricator approval.** *Special inspections* during fabrication shall be permitted to be reduced or eliminated when approved by the *registered design professional in responsible charge* where the work is done on the premises of a fabricator registered and *approved* to perform such work without *special inspection*. Approval shall be based upon review of the fabricator's written procedures and quality control manuals that provide a basis for control of materials and workmanship, with periodic auditing of fabrication and quality control practices by an *approved special inspection agency*. *Approved* fabricators shall include:

1. A fabricator of structural steel certified by the American Institute of Steel Construction Inc.'s Certification Program for Structural Steel Fabricators, Standard for Steel Building Structures.
2. A manufacturer of metal building systems accredited by the ICC International Accreditation Service (IAS) in accordance with accreditation criteria IAC-AC-472.
3. A fabricator of precast *concrete* certified by the Precast/Prestressed Concrete Institute's Plant Certification Program, Groups C and CA.
4. A fabricator of cold-formed steel trusses certified by the Structural Building Components Research Institute (SBCRI) TPI Third Party Quality Assurance Program.
5. A fabricator of wood trusses certified by the SBCRI TPI Third Party Quality Assurance Program.
6. A fabricator of structural timber components and assemblies certified by the American Institute of Timber Construction's Certified Fabricator Program.

At the completion of fabrication, the *approved* fabricator shall submit a *certificate of compliance* to the owner or the owner's authorized agent for submittal to the *building official* as specified in Section 1704.5 stating that the work was performed in accordance with the *approved construction documents*.

(Amd) **1705.2.4. Cold-formed steel trusses.** Where a cold-formed steel truss has an overall height of 60 inches (1,524 mm) or greater, the *special inspector* shall verify that the permanent individual truss member restraint/bracing is installed in accordance with the *approved* truss submittal package. Where a cold-formed steel truss clear span is 60 feet (18 288 mm) or greater, the *special inspector* shall verify that the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing are installed in accordance with the *approved* truss submittal package.

(Add) **1705.2.5 Cold-formed steel light-frame construction.** *Special inspections* of prefabricated cold-formed steel light-frame structural elements and assemblies shall be in accordance with Section 1704.2.5. *Special inspections* of site-built cold-formed steel light-frame structural elements and assemblies shall be in accordance with this section and Table 1705.2.5.

Exceptions: *Special inspections*, other than Items 5(a) and 5(b) of Table 1705.2.5, of site-built cold-formed steel light-frame structural elements and assemblies shall not be required in the following cases:

1. *Buildings* and structures in *Risk Category I*, in accordance with Table 1604.5.
2. *Buildings* and structures in *Risk Category II* in accordance with Table 1604.5, which are in wind exposure categories B or C in accordance with Section 1609.4.3, are in Seismic Design Category A or B, and are not more than three stories high.

(Add) **TABLE 1705.2.5 REQUIRED SPECIAL INSPECTIONS OF COLD-FORMED STEEL LIGHT-FRAME CONSTRUCTION**

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	IBC REFERENCE
1. Inspect Material <i>Grade</i> and Thickness		X	
2. Inspect Framing and Details <ul style="list-style-type: none"> a. Framing layout, member sizes and bearing lengths b. Blocking, bridging and web stiffeners c. Holes^a 		X X X	
3. Inspect Connections <ul style="list-style-type: none"> a. Bolted and screwed connections, including diameter, length, spacing and edge distance b. Welded connections c. Proprietary hangers and framing anchors, including fastener sizes and quantities d. Tie-down anchors, including anchor rod sizes and fastener sizes and quantities 		X X X X	
4. Inspect Shear Walls and <i>Diaphragms</i> <ul style="list-style-type: none"> a. Panel <i>grade</i> and thickness^b b. Steel strapping size, <i>grade</i> and thickness c. Fastener size, length and spacing d. Framing member sizes at panel edges e. Blocking at panel edges 		X X X X X	
5. Inspect Cold-Formed Steel Trusses <ul style="list-style-type: none"> a. Temporary installation restraint/bracing for truss spanning 60 feet or more b. Permanent individual truss member restraint/ bracing for trusses with an overall height of 60 inches or greater 		X X	<i>1705.2.4</i> <i>1705.2.4</i>

- a. *Inspections of holes to be performed after electrical, mechanical and plumbing rough-in inspections.*
- b. *Includes wood structural panels, steel sheet panels and gypsum board panels.*

(Add) **1705.2.6 Metal building systems.** *Special inspections of metal building systems shall be performed in accordance with Sections 1705.2.1, 1705.2.2, 1705.2.3 and 1705.2.5, and in accordance with Table 1705.2.6. The approved agency shall perform an inspection of the erected metal building system to verify compliance with the approved metal building system construction documents.*

(Add) **TABLE 1705.2.6 REQUIRED SPECIAL INSPECTIONS OF METAL BUILDING SYSTEMS**

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. Installation of rafter/beam flange braces and column flange braces.	---	X
2. Installation of purlins and girts including specified lapping.	---	X
3. Purlin and girt bridging/bracing.	---	X
4. Installation of X-bracing, including proper tightening of X-bracing.	---	X

(Amd) **1705.5 Wood construction.** *Special inspections* of prefabricated wood structural elements and assemblies shall be in accordance with Section 1704.2.5. *Special inspections* of site-built wood structural elements and assemblies shall be in accordance with this section and Table 1705.5.

Exceptions: *Special inspections*, other than items 5(a) and 5(b) of table 1705.5, of site-built wood structural assemblies shall not be required in the following cases:

1. *Buildings* and structures in *risk category* I, in accordance with Table 1604.5
2. *Buildings* and structures in *risk category* II in accordance with Table 1604.5, which are in wind exposure categories B or C in accordance with Section 1609.4.3, are in Seismic Design Category A or B, and are not more than three stories high.

(Add) **TABLE 1705.5 REQUIRED SPECIAL INSPECTIONS OF WOOD CONSTRUCTION**

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	IBC REFERENCE
1. Inspect Grading of Wood Materials: <ol style="list-style-type: none"> a. Sawn lumber framing b. Structural composite lumber c. Wood structural panels 		X X X	
2. Inspect Framing and Details <ol style="list-style-type: none"> a. Framing layout, member sizes and bearing lengths b. Blocking and bridging c. Holes and notches^a 		X X X	
3. Inspect Connections <ol style="list-style-type: none"> a. Bolted and screwed connections, including diameter, length, spacing and edge distance b. Nailed connections, including diameter, length, type and spacing of nails c. Proprietary hangers and framing anchors, including fastener sizes and quantities d. Tie-down anchors, including anchor rod size and fastener sizes and quantities 		X X X X	
4. Inspect Shear Walls and <i>Diaphragms</i> <ol style="list-style-type: none"> a. Panel <i>grade</i> and thickness^b b. Fastener size, length and spacing. c. Framing member sizes at panel edges d. Blocking at panel edges e. Field gluing f. High-load <i>diaphragms</i> 	X	X X X X X	1705.5.1
5. Inspect Metal-Plate Connected Wood Trusses <ol style="list-style-type: none"> a. Temporary installation restraint/bracing for truss spanning 60 feet or more b. Permanent individual truss member restraint/bracing for trusses with an overall height of 60 inches or greater c. Multi-ply truss connections. 		X X X	1705.5.2 1705.5.2

a. *Inspections of holes and notches to be performed after electrical, mechanical and plumbing rough-in inspections.*

b. *Applies to wood structural panels and gypsum board panels.*

(Amd) **1705.5.2. Metal-plate-connected wood trusses.** Where a truss has an overall height of 60 inches (1,524 mm) or greater, the *special inspector* shall verify that the permanent individual truss member restraint/bracing is installed in accordance with the *approved* truss submittal package. Where a truss clear span is 60 feet (18 288 mm) or greater, the *special inspector* shall verify that the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing are installed in accordance with the *approved* truss submittal package.

(Amd) **1705.12 Special inspections for wind-resisting components.** Periodic Special Inspection is required for fastening of roof covering and wall covering in wind Exposure Category C or D, where V is 140 mph (62.6 m/sec) or greater.

(Del) **1705.12.1 Structural Wood.** Delete section.

(Del) **1705.12.2 Cold-formed steel light-framed construction.** Delete section.

(Del) **1705.12.3 Wind-resisting components.** Delete section.

CHAPTER 18 – SOILS AND FOUNDATIONS

(Amd) **Table 1806.2 PRESUMPTIVE LOAD-BEARING VALUES**

CLASS OF MATERIALS	VERTICAL FOUNDATION PRESSURE (psf)	LATERAL BEARING PRESSURE (psf/ft below natural grade)	LATERAL SLIDING RESISTANCE	
			Coefficient of friction ^a	Cohesion (psf) ^b
1. Crystalline bedrock	100,000	1,200	0.6	----
2. Sedimentary and foliated rock	20,000	400	0.35	----
3. Cemented sand, gravel, silt, clay (hard pan)	8,000	300	0.35	----
4. Sandy gravel and/or gravel (GW and GP)	6,000	200	0.35	----
5. Sand, silty sand, clayey sand, silty gravel and clayey gravel (SW, SP, SM, SC, GM, and GC)	4,000	150	0.25	----
6. Clay, sandy clay, silty clay, clayey silt, silt and sandy silt (CL, ML, MH, and CH)	1,500	100	----	130

For SI: 1 pound per square foot = 0.0479 kPa, 1 pound per square foot per foot = 0.157 kPa/m

a. Coefficient to be multiplied by the *dead load*.

b. Cohesion value to be multiplied by the contact area, as limited by Section 1806.3.2

(Add) **1807.2.1.1 Guards.** Retaining walls with a difference in height between the finished grade at the top of the wall and the finished grade at the bottom of the wall that is greater than 4 feet (1219 mm) shall be provided with *guards* complying with Sections 1015.3, 1015.4 and 1607.8 when there is a walking surface, parking lot or driveway on the high side located closer than 2 feet (610 mm) to the nearest side of the retaining wall. For the purpose of this section, grass, planting beds or landscaped areas shall not be considered a walking surface.

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

1. Extending a minimum of 42 inches (1067 mm) below finished grade;
2. Constructing in accordance with ASCE 32; or
3. Erecting on solid rock.

Exception: Free-standing *buildings* or structures meeting all of the following conditions shall not be required to be protected:

1. Assigned to *Risk Category I*, in accordance with Section 1604.5;
2. Area of 600 square feet (56 m²) or less for light frame construction or 400 square feet (37 m²) or less for other than light-frame construction; and
3. Eave height of 10 feet (3048 mm) or less.

Shallow foundations shall not bear or be installed on frozen soil.

CHAPTER 22 – STEEL

(Amd) **2211.1.3.2 Trusses spanning 60 feet or greater.** The owner, the owner's authorized agent or the contractor shall contract with a qualified *registered design professional* for the design of the temporary installation restraint/bracing and the permanent *individual truss member* restraint/bracing for trusses with clear spans 60 feet (18 288 mm) or greater. *Special inspection* of trusses over 60 feet (18 288 mm) in length shall be in accordance with Section 1705.2.

CHAPTER 23 – WOOD

(Add) **2303.1.1.3 Ungraded lumber.** Pursuant to section 29-256b of the Connecticut General Statutes, the use of ungraded lumber shall be allowed in Group U Utility and Miscellaneous structures in accordance with Section 312.

(Amd) **2303.4.1.3 Trusses spanning 60 feet or greater.** The owner, the owner's authorized agent or the contractor shall contract with a qualified *registered design professional* for the design of the temporary installation restraint and diagonal bracing and the *PITMR* and *PITMDB* for all trusses with clear spans 60 feet (18 288 mm) or greater.

CHAPTER 26 - FOAM PLASTIC INSULATION

(Add) **2603.1.1.1 Foamed-in-place insulating material.** Pursuant to section 29-277 of the Connecticut General Statutes, foamed-in-place insulating material, except urethane foam insulation or styrene foam insulation, shall not be sold or installed in this state on or after May 28, 2013, unless the manufacturer or supplier has certified to the State Building Inspector that the material complies with the provisions of that section.

CHAPTER 27 – ELECTRICAL

(Add) **2702.2.20 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 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.

(Amd) **2702.4 Maintenance.** Emergency and *standby power systems* shall be maintained and tested in accordance with the Connecticut State Fire Prevention Code.

(Add) SECTION 2703 LIGHT POLLUTION CONTROLS

(Add) 2703.1 **Light pollution controls.** When the power for exterior lighting is supplied through the energy service to the *building*, luminaires used for exterior lighting shall be *full cutoff luminaires*.

Exceptions:

1. Luminaires with an output of 2,600 lumens or less.
2. Luminaires intended to illuminate the façade of *buildings* or to illuminate other objects including, but not limited to, flagpoles, landscape and water features, statuary and works of art.
3. Luminaires for historic lighting on the premises of an *historic building* as defined in the 2021 International Existing Building Code or within a designated historic district.
4. Outdoor sports *facility* lighting of the participant sport area.
5. Emergency *exit discharge* lighting.
6. Low voltage landscape lighting.
7. Sign illumination.
8. Festoon lighting as defined in the NFPA 70 National Electrical Code.
9. Temporary lighting for emergency, *repair*, construction, special events or similar activities.

CHAPTER 28 - MECHANICAL SYSTEMS

(Amd) **2801.1 Scope.** The provisions of this chapter, the *International Mechanical Code* and the *International Fuel Gas Code* shall govern the design, construction, erection and installation of mechanical appliances, equipment and systems used in buildings and structures covered by this code. Masonry chimneys, fireplaces and barbecues shall comply with the *International Mechanical Code* and Chapter 21 of this code. The *International Existing Building Code*, the *International Mechanical Code* and the *International Fuel Gas Code* shall govern the alteration, repair, relocation, replacement and addition of mechanical components, appliances, equipment and systems.

(Add) **2801.2 Space heaters.** Space heaters shall comply with the requirements of sections 29-318, 29-318a, 29-318b and 29-318c of the Connecticut General Statutes, and the regulations adopted by the Commissioner of Consumer Protection under authority of section 29-318c of the Connecticut General Statutes.

CHAPTER 29 – PLUMBING SYSTEMS

(Amd) **2901.1 Scope.** The provisions of this chapter and the *International Plumbing Code* shall govern the design, construction, erection and installation of plumbing components, appliances, equipment and systems used in *buildings* and structures covered by this code. Toilet and bathing rooms shall be constructed in accordance with Section 1210. The *International Plumbing Code* shall govern the use and maintenance of plumbing components, appliances, equipment and systems. The *International Existing Building Code* and the *International Plumbing Code* shall govern the alteration, *repair*, relocation, replacement and *addition* of plumbing components, *appliances*, *equipment* and systems.

[Add] **2901.2 Private sewage disposal systems.** Private sewage disposal systems shall be designed and installed in accordance with the Public Health Code adopted under authority of section 19a-36 of the Connecticut General Statutes. Approval of such systems shall be by the local authority having *jurisdiction*. When such approval is required by the local authority having *jurisdiction*, written proof of such approval shall be submitted to the *building official* prior to issuance of a building *permit*.

(Amd) **2902.1 Minimum number of fixtures.** Plumbing fixtures shall be provided in the minimum number shown in Table 2902.1 based on the actual use of the building or space. Uses not shown in Table 2902.1 shall be considered individually by the *building official*. The number of occupants shall be determined by this code.

Exceptions:

1. The following minimum fixtures shall be provided in *Group R-1 bed and breakfast establishments*: Water closets – one per two *guest rooms*; lavatories – one per two *guest rooms*; bathtubs/showers – one per two *guest rooms*. Plumbing fixtures in *Group R-1 bed and breakfast establishments* shall be permitted to be accessed from hallways and *corridors* and to be shared by guests.
2. Child washing and diaper changing facilities shall be permitted in lieu of bathtubs or showers in Group I-4 child care occupancies.

(Add) **2902.1.2.1 Baby changing facilities.** Where multiple single-user toilet rooms or bathing rooms are clustered at a single location, at least one room at each cluster shall contain baby changing facilities and shall be identified as containing such facilities.

CHAPTER 30 - ELEVATORS AND CONVEYING SYSTEMS

(Add) **3001.1.1 Equipment regulated by statute.** 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 regulations adopted by the Commissioner of Administrative Services pursuant to chapter 538 of the Connecticut General Statutes. Where the provisions of this chapter conflict with other statutory or regulatory provisions, such other requirements shall prevail.

CHAPTER 31 - SPECIAL CONSTRUCTION

(Amd) **3102.1 General.** The provisions of this section shall apply to air-supported, air-inflated, membrane-covered-cable, membrane-covered-frame structures and tensile membrane structures, collectively known as membrane structures, erected for a period of 180 days or longer. Those erected for a shorter time shall comply with Section 3103.5. 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 Sections 3102.3.1 and 3102.7. Membrane structures erected on a *building*, balcony, deck or other structure shall comply with this section.

(Add) **3102.3.1.2 Flame propagation performance testing and certification.** Before a permit is granted, the *owner* or agent shall file with the *fire code official* a certificate provided by the product manufacturer to verify that the materials have been tested and certified by an *approved* testing laboratory. The certificate shall indicate that the floor coverings, *tents*, *membrane structures* and their appurtenances, which include sidewalls, drops and tarpaulins, are composed of materials meeting the flame propagation performance of Test Method 2 of NFPA 701. Additionally, it shall indicate that the bunting and combustible decorative materials and effects are composed of material meeting the flame propagation performance criteria of Test Method 1 or Test Method 2 of NFPA 701, as applicable. Alternatively, the materials shall be treated with a flame retardant in an *approved* manner and meet the flame propagation performance criteria of the applicable test method of NFPA 701. The certificate shall indicate compliance with the testing requirements of NFPA 701, Chapter 16. The flame propagation performance criteria shall be effective for the period specified by the permit.

(Add) **3102.3.1.3 Label.** *Membrane structures* or *tents* shall have a permanently affixed label bearing the following information:

1. 1.The identification of size and fabric or material.
2. 2.The names and addresses of the manufacturers of the *tent* or air-supported structure.
3. 3.A statement that the fabric or material meets the requirements of Section 3102.3.1.2.

4. 4.If treated, the date the fabric or material was last treated with flame-retardant solution, the trade name or kind of chemical used in treatment, name of person or firm treating the fabric or material, and name of testing agency and test standard by which the fabric or material was tested.
5. 5.If untreated, a statement that no treatment was applied when the fabric or material met the requirements of Section 3102.3.1.2.

(Add) **3102.3.1.4 Affidavit.** The affidavit required by Section 3102.3.1.2 shall contain all of the information specified in Section 3102.3.1.3.

(Add) **3102.9 Spot lighting.** Spot or effect lighting shall only be by electricity, and all combustible construction located within 6 feet (1829 mm) of such equipment shall be protected with *approved* noncombustible insulation not less than 9¼ inches (235 mm) thick.

(Add) **3102.10 Heating and cooking equipment.** Heating and cooking equipment shall be in accordance with Section 3104.15 of the Connecticut State Fire Safety Code.

(Add) **3102.11 LP-gas.** The storage, handling and use of LP-gas and LP-gas equipment shall be in accordance with Section 3104.16 of the Connecticut State Fire Safety Code.

(Add) **3102.12 Flammable and combustible liquids.** The use of flammable-fuel-fired equipment shall be in accordance with Section 3104.17 of the Connecticut State Fire Safety Code.

(Add) **3102.13 Separation of generators.** Generators and other internal combustion power sources shall be separated from *tents* or membrane structures by a minimum of 20 feet (6096 mm) and shall be isolated from contact with the public by fencing, enclosure or other *approved* means.

(Amd) **3103.1 General.** The provisions of Sections 3103.1 through 3103.4 shall apply to structures erected for a period of less than 180 days. Special event structures, *tents*, umbrella structures and other membrane structures erected for a period of less than 180 days shall comply with Section 3103.5. Those erected for a longer period of time shall comply with the applicable sections of this code.

(Amd) **3103.1.2 Permit required.** Temporary structures that cover an area greater than 400 square feet (11.16 m²), including connecting areas or spaces with a common *means of egress* or entrance that are used or intended to be used for the gathering together of 25 or more persons, shall not be erected, operated or maintained for any purpose without obtaining a *permit* from the *building official*.

(Add) **3103.1.3 Outdoor assembly event.** For the purposes of this section, an outdoor assembly event shall include a circus, carnival, *tent* show, theater, skating rink, dance hall or other place of assembly in or under which persons gather for any purpose.

(Add) **3103.5 Tents and other membrane structures.** All temporary *tents* and membrane structures shall comply with this section.

(Add) **3103.5.1 Permit 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 a *permit* from the *building 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 Multiple *tents* placed side by side without a fire break clearance of 12 feet (3658 mm), with an aggregate area not exceeding 700 square feet (65 m²) total.
 - 2.3 A minimum clearance of 12 feet (3658 mm) to all other structures and *tents*.

3. *Tents* 900 square feet and smaller in total area when occupied by fewer than 50 persons, which have no heating appliances, no installed electrical service and are erected for fewer than 72 hours.

(Add) **3103.5.2 Use Period.** Temporary tents, air-supported, air-inflated or tensioned membrane structures shall not be erected for a period of more than 180 days within a 12-month period on a single premises.

(Add) **3103.5.3 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 permit application. 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. The *construction documents* shall include an analysis of structural stability. Tents and membrane structures erected in accordance with section 3103.5.5.4 shall comply with structural stability requirements of that section.

(Add) **3103.5.4 Location.** *Tents* or membrane structures shall not be located within 20 feet (6096 mm) of *lot lines*, *buildings*, other *tents* or membrane structures, parked vehicles or internal combustion engines. For the purpose of determining required distances, support ropes and guy wires shall be considered as part of the temporary membrane structure or *tent*.

Exceptions:

1. Separation distance between membrane structures and *tents* not used for cooking is not required when the aggregate floor area does not exceed 15,000 square feet (1394 m²).
2. Membrane structures or *tents* need not be separated from *buildings* when all of the following conditions are met:
 - 2.1. The aggregate floor area of the membrane structure or *tent* shall not exceed 10,000 square feet (929 m²).
 - 2.2. The aggregate floor area of the *building* and membrane structure or *tent* shall not exceed the allowable floor area including increases as indicated in this code.
 - 2.3. Required *means of egress* are provided for both the *building* and membrane structure or *tent* including travel distances.

(Add) **3103.5.4.1 Location of structures in excess of 15,000 square feet in area.** Membrane structures having an area of 15,000 square feet (1394 m²) or more shall be located not less than 50 feet (15 240 mm) from any other *tent* or structure as measured from the sidewall of the *tent* or membrane structure unless joined together by a *corridor*.

(Add) **3103.5.4.2 Membrane structures on buildings.** Membrane structures that are erected on buildings, balconies, decks or other structures shall be regulated as permanent membrane structures in accordance with Section 3102.

(Add) **3103.5.4.3 Connecting corridors.** *Tents* or membrane structures are allowed to be joined together by means of *corridors*. *Exit* doors shall be provided at each end of such *corridor*. On each side of such *corridor* and approximately opposite each other, there shall be provided openings not less than 12 feet (3658 mm) wide.

(Add) **3103.5.4.4 Fire break.** An unobstructed fire break passageway or fire road not less than 12 feet (3658 mm) wide and free from guy ropes or other obstructions shall be maintained on all sides of all *tents* and membrane structures unless otherwise *approved* by the *building official*.

(Add) **3103.5.5 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 in accordance with the manufacturer's instructions or this code. Documentation of structural stability shall be furnished to the *building official*.

(Add) **3103.5.5.1 Tents and Membrane Structures with a Risk Category IV Occupancy:** *Tents and membrane structures* with a *Risk Category IV* occupancy shall be designed and constructed to comply with Sections 1606 through 1609.

(Add) **3103.5.5.2 Tents and membrane structures greater than one story.** Tents and membrane structures exceeding one story shall be designed and constructed to comply with Sections 1606 through 1609.

(Add) **3103.5.5.3 Tents and membrane structures greater than 7,500 square feet.** Tents and membrane structures greater than 7,500 square feet (697 m²) shall be designed and constructed to comply with sections 1606 through 1609.

(Add) **3103.5.5.4 Tents and membrane structures with an occupant load greater than 1,000.** Tents and membrane structures with an occupant capacity greater than 1,000 persons shall be designed and constructed to comply with Sections 1606 through 1609.

(Add) **3103.5.5.5 Other tents and membrane structures.** Other tents and membrane structures that are erected for a period not exceeding 60 consecutive days shall be designed to resist an allowable design wind speed (V_{asd}) of not less than 45 mph (20.1 m/s). Tents and membrane structures that will be in service between November 15 and April 15 shall be capable of supporting snow loads complying with Section 1609 in addition to the applicable dead loads. The provisions for “unobstructed slippery roofs” in Figure 7.4-1 of ASCE 7 may be utilized when obstructions that would prevent sliding of snow from the roof are not present.

(Add) **3103.5.5.5.1 Ballast anchoring systems for tents supported only by perimeter poles.** Ballast anchoring systems for *tents* complying with Section 3103.5.5.4 that are supported only by perimeter poles and do not require X-bracing within the plane of the side walls shall be deemed to comply with the applicable wind requirements providing the conditions are met:

1. The tent is of a hip roof configuration with an eave height of not more than 8 feet.
2. The Enclosure Classification for the tent shall be Enclosed, Partially Open or Open as defined in Section 26.2 of ASCE 7.
3. The angle between guys and the horizon shall conform to the tent manufacturer’s requirements and shall not be less than 45° nor more than 68°.
4. The tent shall not be used when winds are in excess of 35 MPH.
5. An anemometer shall be installed on the tent and the tent shall be provided with signage stating that the tent should be evacuated if winds exceed 35 MPH.
6. An evacuation plan certified by the operator of the tent shall be submitted to the building official as part the permit application.
7. A plan indicating the location of all ballast and weights shall be submitted to the building official as part of the permit application. Ballast shall be calculated by one of the following:
 - a. For ballast systems where the tent poles and ballast are connected using a common base plate or similar means, the weight of the ballast provided at each tent pole shall be not less than the following:

For each pole perpendicular to the ridge: $P_{ball} = 5wsx$ (pounds)

For each pole on a hip end: $P_{ball} = 2.5wsx$ (pounds)

where:

w = width of tent perpendicular to the ridge line (feet)

s = tent post spacing parallel to the ridge (feet)

x = tent exposure factor (1.00 if tent is located in wind Exposure B or Exposure C as defined in Section 1609.4.3; 1.20 if tent is located in wind Exposure D)

- b. For ballast systems where the tent poles and ballast are not connected using a common base plate, the weight of the ballast provided at each tent pole shall be not less than the following

For each pole perpendicular to the ridge: $P_{ball} = 6.5wsx$ (pounds)

For each pole on a hip end: $P_{ball} = 3.25wsx$ (pounds)

(Add) **3103.5.6 Means of egress.** Means of egress for temporary tents and membrane structures shall be in accordance with Section 3103.12 of the International Fire Code.

(Add) **3103.5.6.1 Means of egress illumination.** Means of egress shall be illuminated with light having an intensity of not less than 1 foot-candle (11 lux) at floor level while the structure is occupied. Fixtures required for means of egress illumination shall be supplied from a separate circuit or source of power.

(Add) **3103.5.6.2 Maintenance of means of egress.** The required width of exits, aisles and passageways shall be maintained at all times to a public way. Guy wires, guy ropes and other support members shall not cross a means of egress at a height of less than 8 feet (2438 mm). The surface of means of egress shall be maintained in an approved manner.

(Add) **3103.5.7 Flame propagation performance testing and certification.** Before a permit is granted, the *owner* or agent shall file with the *code official* a certificate provided by the product manufacturer to verify that the materials have been tested and certified by an *approved* testing laboratory. The certificate shall indicate that the floor coverings, *tents*, *membrane structures* and their appurtenances, which include sidewalls, drops and tarpaulins, are composed of materials meeting the flame propagation performance of Test Method 2 of NFPA 701. Additionally, it shall indicate that the bunting and combustible decorative materials and effects are composed of material meeting the flame propagation performance criteria of Test Method 1 or Test Method 2 of NFPA 701, as applicable. Alternatively, the materials shall be treated with a flame retardant in an *approved* manner and meet the flame propagation performance criteria of the applicable test method of NFPA 701. The certificate shall indicate compliance with the testing requirements of NFPA 701, Chapter 16. The flame propagation performance criteria shall be effective for the period specified by the permit.

(Add) **3103.5.7.1 Label.** *Membrane structures* or *tents* shall have a permanently affixed label bearing the following information:

1. The identification of size and fabric or material.
2. The names and addresses of the manufacturers of the *tent* or air-supported structure.
3. A statement that the fabric or material meets the requirements of Section 3103.5.7.2.
4. If treated, the date the fabric or material was last treated with flame-retardant solution, the trade name or kind of chemical used in treatment, name of person or firm treating the fabric or material, and name of testing agency and test standard by which the fabric or material was tested.
5. If untreated, a statement that no treatment was applied when the fabric or material met the requirements of Section 3103.5.7.2.

(Add) **3103.5.7.2 Affidavit.** The affidavit required by Section 3103.5.7.2 shall contain all of the information specified in Section 3103.5.7.3.

(Add) **3103.5.8 Temporary air-supported and air-inflated membrane structures.** In addition to other applicable requirements of Section 3103.5, temporary air-supported and air-inflated membrane structures shall be in accordance with Sections 3103.10.1 to 3103.10.4, inclusive.

(Add) **3103.5.8.1 Door operation.** In high winds greater than 50 miles per hour (22 m/s) or in snow conditions, the use of doors in air-supported structures shall be controlled to avoid excessive air loss. Doors shall not be left open under any condition.

(Add) **3103.5.8.2 Fabric envelope design and construction.** Air-supported and air-inflated structures shall have the design and construction of the fabric envelope and the method of anchoring in accordance with Architecture Fabric Institute ASI 77.

(Add) **3103.5.8.2.1 Inflation pressure.** Operating pressure in air-supported and air-inflated structures shall be maintained at the design pressure specified by the manufacturer to assure stability and to avoid excessive distortion during high wind or snow *loads*.

(Add) **3103.5.8.3 Blowers.** An air-supported structure used as a place of assembly shall be furnished with not less than two blowers, each of which has adequate capacity to maintain full inflation pressure with normal leakage. The design of the blower shall be so as to provide integral limiting pressure at the design pressure specified by the manufacturer.

(Add) **3103.5.8.4 Auxiliary power.** Places of assembly for more than 200 occupants shall be furnished with either a fully automatic auxiliary engine-generator set capable of powering one blower continuously for 4 hours, or a supplementary blower powered by an internal combustion engine that shall be automatic in operation.

(Add) **3103.5.9 Operational requirements.** Temporary and permanent tents and membrane structures shall comply with 3103.5.9.1 through 3103.9.5.

(Add) **3103.5.9.1 Spot lighting.** Spot or effect lighting shall only be by electricity, and all combustible construction located within 6 feet (1829 mm) of such equipment shall be protected with *approved* noncombustible insulation not less than 9¼ inches (235 mm) thick.

(Add) **3103.5.9.2 Heating and cooking equipment.** Heating and cooking equipment shall be in accordance with Section 3104.15 of the Connecticut State Fire Safety Code.

(Add) **3103.5.9.3 LP-gas.** The storage, handling and use of LP-gas and LP-gas equipment shall be in accordance with Section 3104.16 of the Connecticut State Fire Safety Code.

(Add) **3103.5.9.4 Flammable and combustible liquids.** The use of flammable-fuel-fired equipment shall be in accordance with Section 3104.17 of the Connecticut State Fire Safety Code.

(Add) **3103.5.9.5 Separation of generators.** Generators and other internal combustion power sources shall be separated from *tents* or membrane structures by a minimum of 20 feet (6096 mm) and shall be isolated from contact with the public by fencing, enclosure or other *approved* means.

(Amd) **3105.2 Design and construction.** *Awnings* and *canopies* shall be designed and constructed to withstand wind or other lateral *loads* and *live loads* as required by Chapter 16 with due allowance for shape, open construction and similar features that relieve the pressures or loads. Structural members shall be protected to prevent deterioration. *Awnings* shall have frames of noncombustible material, *fire-retardant-treated wood*, heavy timber complying with Section 2304.11, or 1-hour construction with combustible or noncombustible covers and shall be either fixed, retractable, folding or collapsible.

Exceptions:

1. Fixed awnings shall not be required to be designed to resist nominal (V_{asd}) wind *loads* in excess of 90 mph.
2. Retractable awnings shall not be required to be designed to resist wind or snow *loads*.

(Amd) **3107.1 General.** Signs shall be designed, constructed and maintained in accordance with Appendix H of this code.

(Add) **3109.1.1 Health Department regulations.** No person shall construct, substantially alter or reconstruct a *swimming pool* until the *construction documents* and water discharge provisions have been approved by the Department of Public Health, in accordance with the regulations adopted pursuant to section 19a-36 of the Connecticut General Statutes.

Exception: *Swimming pools* accessory to *owner*-occupied, detached one-, two- or three-family residences and *swimming pools* accessory to a single one-family *townhouse* where the pool is intended to be used exclusively by the *owner* and invited guests.

(Add) **3109.3 Public swimming pools.** Public *swimming pools* shall be completely enclosed by a barrier meeting the requirements of 2021 International Swimming Pool and Spa Code portion of the 2022 Connecticut State Building Code..

(Add) **3109.4 Swimming pool barriers.** Residential and public *swimming pool* barriers shall comply with the requirements of 2021 International Swimming Pool and Spa Code portion of the 2022 Connecticut State Building Code .

(Del) **SECTION 3114 PUBLIC USE RESTROOM BUILDINGS IN FLOOD HAZARD AREAS.**
Delete section in its entirety

CHAPTER 33 – SAFEGUARDS DURING CONSTRUCTION

(Add) **3303.8 Demolition of structures.** The demolition of structures shall be conducted in accordance with the State Demolition Code as found in part IV of chapter 541 of the Connecticut General Statutes and with this chapter.

CHAPTER 35 – REFERENCED STANDARDS

(Amd) National Fire Protection Association
NFPA 1 Batterymarch Park
 Quincy, MA 02169-7471

Standard reference number—year of publication	Title	Referenced in code section number
(Add) 02-19	Hydrogen Technologies Code	101.4.1
(Add) 54-21	National Fuel Gas Code	101.4.1

(Add) APPENDIX P MUNICIPALITY – SPECIFIC STRUCTURAL DESIGN PARAMETERS

Municipality	Basic Design Wind Speeds, V (mph)				Allowable Stress Design Wind Speeds, V_{asd} (mph)				Ground Snow Load p_g (psf)	MCE Ground Accelerations		Wind-Borne Debris Region ¹		Hurricane- Prone Region
	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV		S_S (g)	S_I (g)	Risk Cat. III Occup. 1-2	Risk Cat. IV	
Andover	110	120	130	135	85	93	101	105	30	0.193	0.055			Yes
Ansonia	110	120	130	135	85	93	101	105	30	0.202	0.054			Yes
Ashford	110	120	130	135	85	93	101	105	35	0.181	0.055			Yes
Avon	110	120	125	130	85	93	97	101	35	0.180	0.054			Yes
Barkamsted	110	115	125	130	85	89	97	101	35	0.170	0.054			
Beacon Falls	110	120	130	135	85	93	101	105	30	0.199	0.054			Yes
Berlin	110	120	130	135	85	93	101	105	30	0.201	0.055			Yes
Bethany	110	120	130	135	85	93	101	105	30	0.199	0.054			Yes
Bethel	110	120	125	130	85	93	97	101	30	0.223	0.056			Yes
Bethlehem	110	120	125	130	85	93	97	101	35	0.186	0.054			Yes
Bloomfield	110	120	130	135	85	93	101	105	30	0.182	0.055			Yes
Bolton	110	120	130	135	85	93	101	105	30	0.191	0.055			Yes
Bozrah	115	125	135	140	89	97	105	108	30	0.197	0.054			Yes
Branford	115	125	135	135	89	97	105	105	30	0.201	0.053	Type B	Type B	Yes
Bridgeport	110	120	130	135	85	93	101	105	30	0.211	0.054		Type B	Yes
Bridgewater	110	120	125	130	85	93	97	101	35	0.201	0.055			
Bristol	110	120	130	130	85	93	101	101	35	0.188	0.054			Yes
Brookfield	110	120	125	130	85	93	97	101	30	0.210	0.055			Yes
Brooklyn	115	125	135	135	89	97	105	105	35	0.184	0.054			Yes
Burlington	110	120	125	130	85	93	97	101	35	0.180	0.054			Yes
Canaan	105	115	125	130	81	89	97	101	40	0.166	0.054			
Canterbury	115	125	135	140	89	97	105	108	30	0.187	0.054			Yes
Canton	110	120	125	130	85	93	97	101	35	0.177	0.054			Yes
Chaplin	115	125	130	135	89	97	101	105	35	0.184	0.055			Yes
Cheshire	110	120	130	135	85	93	101	105	30	0.200	0.055			Yes
Chester	115	125	135	140	89	97	105	108	30	0.213	0.055			Yes
Clinton	115	125	135	140	89	97	105	108	30	0.205	0.054	Type B	Type B	Yes
Colchester	115	125	135	135	89	97	105	105	30	0.205	0.055			Yes
Colebrook	105	115	125	130	81	89	97	101	40	0.165	0.054			
Columbia	115	125	130	135	89	97	101	105	30	0.195	0.055			Yes

Municipality	Basic Design Wind Speeds, V (mph)				Allowable Stress Design Wind Speeds, V_{asd} (mph)				Ground Snow Load p_g (psf)	MCE Ground Accelerations		Wind-Borne Debris Region ¹		Hurricane- Prone Region
	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV		S_s (g)	S_I (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	
Cornwall	105	115	125	130	81	89	97	101	40	0.172	0.054			
Coventry	110	120	130	135	85	93	101	105	30	0.188	0.055			Yes
Cromwell	110	120	130	135	85	93	101	105	30	0.207	0.056			Yes
Danbury	110	120	125	130	85	93	97	101	30	0.225	0.056			Yes
Darien	110	120	130	135	85	93	101	105	30	0.250	0.057		Type B	Yes
Deep River	115	125	135	140	89	97	105	108	30	0.210	0.054			Yes
Derby	110	120	130	135	85	93	101	105	30	0.202	0.054			Yes
Durham	110	120	130	135	85	93	101	105	30	0.211	0.055			Yes
East Granby	110	120	125	130	85	93	97	101	35	0.173	0.054			Yes
East Haddam	115	125	135	135	89	97	105	105	30	0.214	0.056			Yes
East Hampton	110	125	130	135	85	97	101	105	30	0.210	0.056			Yes
East Hartford	110	120	130	135	85	93	101	105	30	0.191	0.055			Yes
East Haven	110	125	135	135	85	97	105	105	30	0.200	0.053	Type B	Type B	Yes
East Lyme	120	130	135	140	93	101	105	108	30	0.198	0.053	Type B	Type B	Yes
East Windsor	110	120	130	135	85	93	101	105	30	0.177	0.055			Yes
Eastford	110	120	130	135	85	93	101	105	40	0.180	0.055			Yes
Easton	110	120	130	135	85	93	101	105	30	0.218	0.055			Yes
Ellington	110	120	130	135	85	93	101	105	35	0.178	0.055			Yes
Enfield	110	120	125	130	85	93	97	101	35	0.172	0.055			Yes
Essex	115	125	135	140	89	97	105	108	30	0.207	0.054			Yes
Fairfield	110	120	130	135	85	93	101	105	30	0.219	0.055		Type B	Yes
Farmington	110	120	130	135	85	93	101	105	35	0.188	0.055			Yes
Franklin	115	125	135	140	89	97	105	108	30	0.195	0.054			Yes
Glastonbury	110	120	130	135	85	93	101	105	30	0.200	0.055			Yes
Goshen	110	115	125	130	85	89	97	101	40	0.172	0.054			
Granby	110	120	125	130	85	93	97	101	35	0.171	0.054			Yes
Greenwich	110	120	130	135	85	93	101	105	30	0.274	0.059		Type B	Yes
Griswold	120	125	135	140	93	97	105	108	30	0.189	0.054			Yes
Groton	120	130	140	140	93	101	108	108	30	0.190	0.052	Type B	Type A	Yes
Guilford	115	125	135	140	89	97	105	108	30	0.204	0.054	Type B	Type B	Yes
Haddam	115	125	135	135	89	97	105	105	30	0.214	0.055			Yes
Hamden	110	120	130	135	85	93	101	105	30	0.202	0.054			Yes

Municipality	Basic Design Wind Speeds, V (mph)				Allowable Stress Design Wind Speeds, V_{asd} (mph)				Ground Snow Load p_g (psf)	MCE Ground Accelerations		Wind-Borne Debris Region ¹		Hurricane- Prone Region
	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV		S_s (g)	S_I (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	
Hampton	115	125	130	135	89	97	101	105	35	0.184	0.054			Yes
Hartford	110	120	130	135	85	93	101	105	30	0.189	0.055			Yes
Hartland	110	115	125	130	85	89	97	101	35	0.167	0.054			
Harwinton	110	120	125	130	85	93	97	101	35	0.177	0.054			Yes
Hebron	115	125	130	135	89	97	101	105	30	0.200	0.055			Yes
Kent	105	115	125	130	81	89	97	101	40	0.184	0.054			
Killingly	115	125	135	140	89	97	105	108	35	0.186	0.055			Yes
Killingworth	115	125	135	140	89	97	105	108	30	0.210	0.055			Yes
Lebanon	115	125	135	135	89	97	105	105	30	0.196	0.055			Yes
Ledyard	120	130	140	140	93	101	108	108	30	0.190	0.053			Yes
Lisbon	115	125	135	140	89	97	105	108	30	0.190	0.054			Yes
Litchfield	110	115	125	130	85	89	97	101	35	0.178	0.054			
Lyme	115	125	135	140	89	97	105	108	30	0.207	0.054			Yes
Madison	115	125	135	140	89	97	105	108	30	0.206	0.054	Type B	Type B	Yes
Manchester	110	120	130	135	85	93	101	105	30	0.190	0.055			Yes
Mansfield	110	120	130	135	85	93	101	105	35	0.186	0.055			Yes
Marlborough	110	125	130	135	85	97	101	105	30	0.205	0.056			Yes
Meriden	110	120	130	135	85	93	101	105	30	0.203	0.055			Yes
Middlebury	110	120	130	130	85	93	101	101	35	0.194	0.054			Yes
Middlefield	110	120	130	135	85	93	101	105	30	0.209	0.055			Yes
Middletown	110	120	130	135	85	93	101	105	30	0.209	0.056			Yes
Milford	110	120	130	135	85	93	101	105	30	0.202	0.053	Type B	Type B	Yes
Monroe	110	120	130	135	85	93	101	105	30	0.208	0.055			Yes
Montville	120	125	135	140	93	97	105	108	30	0.198	0.054			Yes
Morris	110	115	125	130	85	89	97	101	35	0.182	0.054			
Naugatuck	110	120	130	135	85	93	101	105	30	0.197	0.054			Yes
New Britain	110	120	130	135	85	93	101	105	30	0.195	0.055			Yes
New Canaan	110	120	130	135	85	93	101	105	30	0.252	0.058			Yes
New Fairfield	110	115	125	130	85	89	97	101	30	0.219	0.056			
New Hartford	110	115	125	130	85	89	97	101	35	0.172	0.054			
New Haven	110	125	130	135	85	97	101	105	30	0.201	0.054	Type B	Type B	Yes
New London	120	130	140	140	93	101	108	108	30	0.191	0.053	Type B	Type A	Yes

Municipality	Basic Design Wind Speeds, V (mph)				Allowable Stress Design Wind Speeds, V_{asd} (mph)				Ground Snow Load p_g (psf)	MCE Ground Accelerations		Wind-Borne Debris Region ¹		Hurricane- Prone Region
	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV		S_s (g)	S_I (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	
New Milford	110	115	125	130	85	89	97	101	35	0.198	0.055			
Newington	110	120	130	135	85	93	101	105	30	0.195	0.055			Yes
Newtown	110	120	130	130	85	93	101	101	30	0.209	0.055			Yes
Norfolk	105	115	125	130	81	89	97	101	40	0.165	0.054			
North Branford	115	125	135	135	89	97	105	105	30	0.204	0.054			Yes
North Canaan	105	115	125	130	81	89	97	101	40	0.164	0.054			
North Haven	110	120	130	135	85	93	101	105	30	0.204	0.054			Yes
North Stonington	120	130	140	140	93	101	108	108	30	0.186	0.052			Yes
Norwalk	110	120	130	135	85	93	101	105	30	0.240	0.056		Type B	Yes
Norwich	115	125	135	140	89	97	105	108	30	0.194	0.054			Yes
Old Lyme	120	130	135	140	93	101	105	108	30	0.201	0.053	Type B	Type B	Yes
Old Saybrook	120	130	135	140	93	101	105	108	30	0.202	0.053	Type B	Type B	Yes
Orange	110	120	130	135	85	93	101	105	30	0.201	0.054			Yes
Oxford	110	120	130	135	85	93	101	105	30	0.199	0.054			Yes
Plainfield	115	125	135	140	89	97	105	108	30	0.187	0.054			Yes
Plainville	110	120	130	135	85	93	101	105	35	0.191	0.055			Yes
Plymouth	110	120	125	130	85	93	97	101	35	0.185	0.054			Yes
Pomfret	115	125	130	135	89	97	101	105	40	0.182	0.055			Yes
Portland	110	120	130	135	85	93	101	105	30	0.208	0.056			Yes
Preston	120	125	135	140	93	97	105	108	30	0.191	0.053			Yes
Prospect	110	120	130	135	85	93	101	105	30	0.197	0.054			Yes
Putnam	115	125	130	135	89	97	101	105	40	0.184	0.055			Yes
Redding	110	120	125	130	85	93	97	101	30	0.228	0.056			Yes
Ridgefield	110	120	125	130	85	93	97	101	30	0.243	0.057			Yes
Rocky Hill	110	120	130	135	85	93	101	105	30	0.200	0.055			Yes
Roxbury	110	120	125	130	85	93	97	101	35	0.196	0.054			Yes
Salem	115	125	135	140	89	97	105	108	30	0.205	0.055			Yes
Salisbury	105	115	125	130	81	89	97	101	40	0.116	0.054			
Scotland	115	125	135	135	89	97	105	105	30	0.188	0.054			Yes
Seymour	110	120	130	135	85	93	101	105	30	0.200	0.054			Yes
Sharon	105	115	125	130	81	89	97	101	40	0.171	0.054			
Shelton	110	120	130	135	85	93	101	105	30	0.203	0.054			Yes

Municipality	Basic Design Wind Speeds, V (mph)				Allowable Stress Design Wind Speeds, V_{asd} (mph)				Ground Snow Load p_g (psf)	MCE Ground Accelerations		Wind-Borne Debris Region ¹		Hurricane- Prone Region
	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV		S_s (g)	S_I (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	
Sherman	110	115	125	130	85	89	97	101	35	0.203	0.055			
Simsbury	110	120	125	130	85	93	97	101	35	0.177	0.054			Yes
Somers	110	120	130	135	85	93	101	105	35	0.174	0.055			Yes
South Windsor	110	120	130	135	85	93	101	105	30	0.183	0.055			Yes
Southbury	110	120	130	130	85	93	101	101	35	0.199	0.054			Yes
Southington	110	120	130	135	85	93	101	105	30	0.196	0.055			Yes
Sprague	115	125	135	140	89	97	105	108	30	0.191	0.054			Yes
Stafford	110	120	130	135	85	93	101	105	35	0.176	0.055			Yes
Stamford	110	120	130	135	85	93	101	105	30	0.261	0.058		Type B	Yes
Sterling	115	125	135	140	89	97	105	108	35	0.187	0.054			Yes
Stonington	120	130	140	145	93	101	108	112	30	0.182	0.051	Type B	Type A	Yes
Stratford	110	120	130	135	85	93	101	105	30	0.206	0.054		Type B	Yes
Suffield	110	120	125	130	85	93	97	101	35	0.170	0.054			Yes
Thomaston	110	120	125	130	85	93	97	101	35	0.184	0.054			Yes
Thompson	110	120	130	135	85	93	101	105	40	0.185	0.056			Yes
Tolland	110	120	130	135	85	93	101	105	35	0.182	0.055			Yes
Torrington	110	115	125	130	85	89	97	101	40	0.175	0.054			
Trumbull	110	120	130	135	85	93	101	105	30	0.210	0.054			Yes
Union	110	120	130	135	85	93	101	105	40	0.178	0.055			Yes
Vernon	110	120	130	135	85	93	101	105	30	0.186	0.055			Yes
Voluntown	120	130	135	140	93	101	105	108	30	0.188	0.053			Yes
Wallingford	110	120	130	135	85	93	101	105	30	0.205	0.055			Yes
Warren	110	115	125	130	85	89	97	101	40	0.179	0.054			
Washington	110	115	125	130	85	89	97	101	35	0.189	0.054			
Waterbury	110	120	130	135	85	93	101	105	35	0.193	0.054			Yes
Waterford	120	130	140	140	93	101	108	108	30	0.194	0.053	Type B	Type B	Yes
Watertown	110	120	130	130	85	93	101	101	35	0.189	0.054			Yes
West Hartford	110	120	130	135	85	93	101	105	30	0.187	0.055			Yes
West Haven	110	125	130	135	85	97	101	105	30	0.200	0.053	Type B	Type B	Yes
Westbrook	115	125	135	140	89	97	105	108	30	0.204	0.054	Type B	Type B	Yes
Weston	110	120	130	135	85	93	101	105	30	0.233	0.056			Yes
Westport	110	120	130	135	85	93	101	105	30	0.232	0.056		Type B	Yes

Municipality	Basic Design Wind Speeds, V (mph)				Allowable Stress Design Wind Speeds, V_{asd} (mph)				Ground Snow Load p_g (psf)	MCE Ground Accelerations		Wind-Borne Debris Region ¹		Hurricane- Prone Region
	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV		S_s (g)	S_I (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	
Wethersfield	110	120	130	135	85	93	101	105	30	0.196	0.055			Yes
Willington	110	120	130	135	85	93	101	105	35	0.181	0.055			Yes
Wilton	110	120	130	135	85	93	101	105	30	0.241	0.057			Yes
Winchester	110	115	125	130	85	89	97	101	40	0.167	0.054			
Windham	115	125	135	135	89	97	105	105	30	0.190	0.055			Yes
Windsor	110	120	130	135	85	93	101	105	30	0.181	0.055			Yes
Windsor Locks	110	120	125	130	85	93	97	101	35	0.175	0.055			Yes
Wolcott	110	120	130	135	85	93	101	105	35	0.191	0.054			Yes
Woodbridge	110	120	130	135	85	93	101	105	30	0.200	0.054			Yes
Woodbury	110	120	125	130	85	93	97	101	35	0.194	0.054			Yes
Woodstock	110	120	130	135	85	93	101	105	40	0.182	0.055			Yes

1. Wind-Borne Debris Regions

Type A: Full municipality

Type B: Areas within one mile (1.61 km) of the mean high-water line where an Exposure D condition exists upwind at the waterline.

AMENDMENTS TO ICC/ANSI A117.1 - 2017

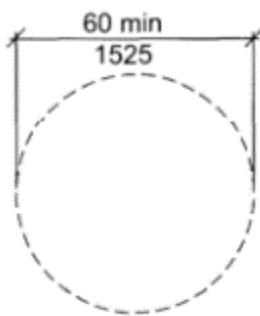
(Amd) **106.2.8 Safety Code for Elevators and Escalators:** ASME A17.1-2013 (American Society of Mechanical Engineers International, Two Park Avenue, New York, NY 10016-5990).

(Amd) **106.2.9 Safety Standard for Platform Lifts and Stairway Chairlifts:** ASME A18.1-2008 (American Society of Mechanical Engineers International, Two Park Avenue, New York, NY 10016-5990).

(Del) **304.3.1 Circular Space.** Delete section, subsections, and figures and replace with the following.

(Add) **304.3.1 Circular Space.** The turning space shall be a circular space with a 60-inch (1525 mm) minimum diameter. The turning space shall be permitted to include knee and toe clearance complying with Section 306.

(Add) **FIGURE 304.3.1 Circular Turning Space**

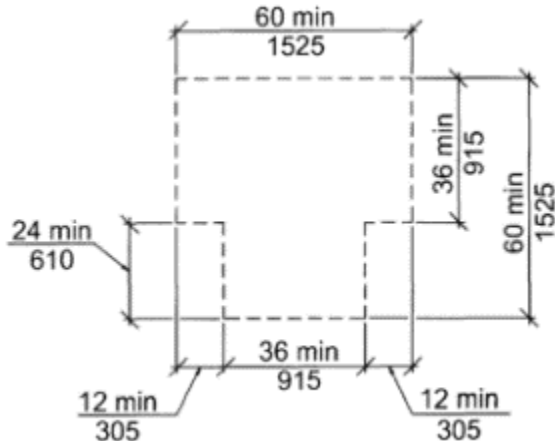


(a) Circular

(Del) **304.3.2 T-Shaped Space.** Delete section, subsections, and figures and replace with the following.

(Add) **304.3.2 T-Shaped Space.** The turning space shall be a T-shaped space within a 60-inch (1525 mm) minimum square, with arms and base 36 inches (915 mm) minimum in width. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction, and the base shall be clear of obstructions 24 inches (610 mm) minimum. The turning space shall be permitted to include knee and toe clearance complying with Section 306 only at the end of either the base or one arm.

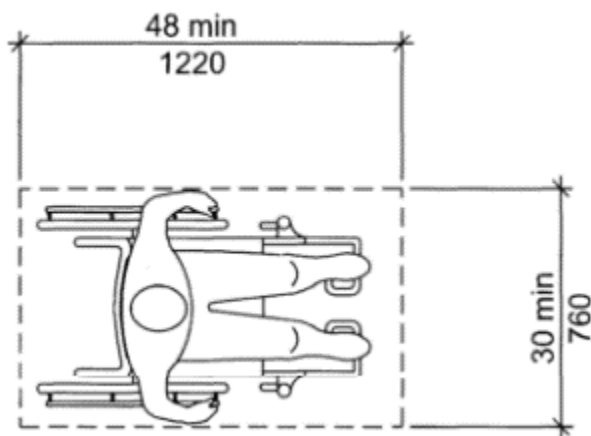
(Add) **Figure 304.3.2 T-Shaped Space.**



(Del) **305.3 Size.** Delete section, subsections and figures.

(Add) **305.3 Size.** The clear floor space shall be 48 inches (1220 mm) minimum in length and 30 inches (760 mm) minimum in width.

(Add) **Figure 305.3 Size of Clear Floor Space**



(Amd) **502.2 Vehicle space size.** Pursuant to section 14-253a of the Connecticut General Statutes, car parking spaces shall be 15 feet in width including 5 feet of cross hatch. Van parking spaces shall be 16 feet in width including 8 feet of cross hatch.

(Del) **Fig. 502.2(A) Vehicle parking space size.** Delete figure without substitution.

(Del) **Fig. 502.2(B) Vehicle parking space size.** Delete figure without substitution.

(Del) **Fig. 502.4 Parking space access aisle.** Delete figure without substitution.

(Amd) **502.4.1 Location.** Access aisles (cross hatch) shall adjoin an *accessible* route. Two parking spaces shall be permitted to share a common access aisle. If a car and a van space share a common access aisle, that aisle shall be 96 inches minimum in width. Access aisles shall not overlap with the *vehicular way*. Parking spaces shall be permitted to have access aisles placed on either side of the car or van parking space. Van parking spaces that are angled shall have access aisles located on the passenger side of the parking space.

(Amd) **502.4.2 Width.** Access aisles (cross hatch) serving car parking spaces shall be 60 inches (1525 mm) minimum in width. Access aisles serving van parking spaces shall be 96 inches (2440 mm) minimum in width.

(Amd) **502.6 Vertical clearance.** Vertical clearance for *accessible* van parking spaces shall be in accordance with Section 1106.6 and 1106.6.1.1 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Amd) **502.7 Identification.** *Accessible* parking spaces shall be identified by above grade *signs* in accordance with Section 1112.1 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Del) **504 Stairways.** Delete section in its entirety.

(Del) **505 Handrails.** Delete section in its entirety and replace with the following:

(Add) **505 Handrails.**

(Add) **505.1 General.** Handrails shall be provided in accordance with Section 1014 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Amd) **607.5 Controls.** Controls, other than drain stoppers, shall be provided on an end wall, located between the bathtub rim and grab bar, and between the open side of the bathtub and the centerline of the width of the bathtub. Controls shall comply with Section 309.4.

Exception: Controls in Group I-2 long-term health care that provide supervised, assisted bathing may be located outside of the bathtub compartment.

(Amd) **608.4 Controls and hand showers.** Controls and hand held showers shall comply with Sections 608.4 and 309.4.

Exception: Controls in Group I-2 long-term health care facilities that provide supervised, assisted bathing shall be permitted to be located outside of the shower compartment.

(Amd) **703.6.3.1 International Symbol of Accessibility.** Pursuant to section 29-269c of the Connecticut General Statutes, references in this code to the International Symbol of Accessibility shall be deemed to mean Connecticut's symbol of access and shall comply with Figure 703.6.3.1.



(Amd) **FIG. 703.6.3.1**

(Amd) **1104.3 Accessible Route.** *Accessible* routes within Type B *dwelling units* shall comply with Section 1104.3.

Exception: Exterior spaces less than 60 inches in depth.

(Amd) **1104.3.1 Location.** At least one *accessible* route shall connect all spaces and elements that are a part of the unit. *Accessible* routes shall coincide with or be located in the same area as the general *circulation path*.

Exception: An *accessible* route is not required to unfinished attics and unfinished basements that are part of the unit.

AMENDMENTS TO THE 2021 INTERNATIONAL EXISTING BUILDING CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **101.1 Title.** The 2021 International Existing Building Code shall be known as the 2021 International Existing Building Code portion of the 2022 Connecticut State Building Code, hereinafter referred to as “the code” or “this code”.

(Amd) **101.4.2 Buildings previously occupied.** The legal use and occupancy of any *building* existing on the date of adoption of this code shall be permitted to continue without change, except as specifically provided in this code or in the 2022 Connecticut State Fire Safety Code.

(Add) **101.4.3 Property maintenance.** The International Property Maintenance Code is not adopted by the State of Connecticut. Property maintenance shall be in accordance with the requirements of this code and the applicable provisions of the 2022 Connecticut State Fire Safety Code and 2022 Connecticut State Fire Prevention Code. References to the International Property Maintenance Code found within the body of the model document shall be considered null and void.

(Amd) **101.6 Appendices.** The provisions of Appendix A shall be incorporated into the requirements of this code.

(Del) **101.7 Corrections of violations of other codes.** Delete in its entirety and replace with the following:

(Add) **101.7 Connecticut State Fire Safety Code abatement.** Where conflicts exist between the requirements of this code and the requirements of a 2022 Connecticut State Fire Safety Code abatement order issued in writing by the local fire marshal with respect to an *existing building*, the requirements of that portion of the 2022 Connecticut State Fire Safety Code that regulates *existing buildings* shall take precedence.

Exceptions:

1. New *fire protection systems* shall meet the requirements of Chapter 9 of this code.
2. Electrical work shall meet the requirements of NFPA 70, National Electrical Code.
3. Structural, plumbing and mechanical work shall conform to the requirements of this code.

(Add) **101.8 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 2, Hydrogen Technologies Code, NFPA 54, National Fuel Gas Code and NFPA 58, Liquefied Petroleum Gas Code, as adopted in the 2022 Connecticut State Fire Safety Code and the 2022 Connecticut State Fire Prevention Code. These requirements apply to liquid petroleum storage systems, gas piping systems extending from the point of delivery to the inlet connections of appliances, the installation and operation of residential and commercial gas appliances and related accessories as covered by this code.

(Add) **101.9 Connecticut State Fire Safety Code.** References to the International Fire Code within the body of the model document shall be considered to be references to the 2022 Connecticut State Fire Safety Code.

(Add) **101.10 Means of egress.** In addition to the requirements of this code, *means of egress* in *existing buildings* shall meet the requirements of the 2022 Connecticut State Fire Prevention Code for the proposed occupancy.

(Add) **101.10.1 Construction documents.** The *construction documents* for *Alterations – Level 2, Alterations – Level 3, additions* and *changes of occupancy* shall show in sufficient detail the location, construction, size and character of all portions of the *means of egress* in compliance with the provisions of this code. The *construction documents* shall designate the number of occupants to be accommodated in every *work area* of every floor and in all affected rooms and spaces.

(Del) **SECTION 103 CODE COMPLIANCE AGENCY.** Delete in its entirety and refer to Section 103 of the 2021 International Building Code portion or Section R103 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Code Compliance Agency.

(Del) **SECTION 104 DUTIES AND POWERS OF CODE OFFICIAL.** Delete in its entirety and refer to Section 104 of the 2021 International Building Code portion or Section R104 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Duties and Powers of the Building Official.

(Del) **SECTION 105 PERMITS.** Delete in its entirety and refer to Section 105 of the 2021 International Building Code portion or Section R105 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Permits.

(Del) **SECTION 106 CONSTRUCTION DOCUMENTS.** Delete in its entirety and refer to Section 107 of the 2021 International Building Code portion or Section R106 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Construction Documents.

(Del) **SECTION 107 TEMPORARY STRUCTURES AND USES.** Delete in its entirety and refer to Section 108 of the 2021 International Building Code portion or Section R107 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Temporary Structures and Uses.

(Del) **SECTION 108 FEES.** Delete in its entirety and refer to Section 109 of the 2021 International Building Code portion or Section R108 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Fees.

(Del) **SECTION 109 INSPECTIONS.** Delete in its entirety and refer to Section 110 of the 2021 International Building Code portion or Section R109 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Inspections.

(Del) **SECTION 110 CERTIFICATE OF OCCUPANCY.** Delete in its entirety and refer to Section 111 of the 2021 International Building Code portion or Section R110 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Certificate of Occupancy.

(Del) **SECTION 111 SERVICE UTILITIES.** Delete in its entirety and refer to Section 112 of the 2021 International Building Code portion or Section R111 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Certificate of Occupancy.

(Del) **SECTION 112 – MEANS OF APPEALS.** Delete in its entirety and refer to Section 113 of the 2021 International Building Code portion or Section R112 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Means of Appeal.

(Del) **SECTION 113 - VIOLATIONS.** Delete in its entirety and refer to Section 114 of the 2021 International Building Code portion or Section R113 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Violations.

(Del) **SECTION 114 – STOP WORK ORDER.** Delete in its entirety and refer to Section 115 of the 2021 International Building Code portion or Section R114 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Stop Work Order.

(Del) **SECTION 115 – UNSAFE BUILDINGS AND EQUIPMENT.** Delete in its entirety and refer to Section 116 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Unsafe Buildings and Equipment.

(Del) **SECTION 116 – EMERGENCY MEASURES.** Delete in its entirety and refer to Section 117 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Emergency Measures.

(Del) **SECTION 117 – DEMOLITION.** Delete in its entirety and refer to Section 102.6.3 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Demolition of Structures.

CHAPTER 2 – DEFINITIONS

(Amd) **201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in other codes adopted as portions of the State Building Code, such terms shall have the meanings ascribed to them as in those codes.

(Add) **202.1 Definitions.** Amend or add the following definitions:

(Add) **BUILDING OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. Also known as the local *building official* or the code official.

(Amd) **CODE OFFICIAL.** See *Building official*.

(Amd) **EXISTING BUILDING.** A *building* or structure, or portion thereof, erected in whole or in part, for which a legal building *permit* and a certificate of occupancy has been issued. *Buildings* or structures or portions thereof erected prior to October 1, 1970 shall be deemed *existing buildings* regardless of the existence of a legal *permit* or a certificate of occupancy.

(Amd) **TECHNICALLY INFEASIBLE.** An *alteration* of a *building* or a *facility* that has little likelihood of being accomplished because the existing structural conditions require the removal or *alteration* of a load-bearing member that is an essential part of the structural frame, or because other physical or *site* constraints prohibit modification or addition of elements, spaces or features that are in full and strict compliance with the minimum requirements for new construction and that are necessary to provide accessibility. Pursuant to subsection (b) of section 29-269 of the Connecticut General Statutes, the determination of technical infeasibility shall be made by the State Building Inspector.

CHAPTER 3 – PROVISIONS FOR ALL COMPLIANCE METHODS

(Amd) **302.2 Additional codes.** *Alterations, repairs, additions and changes of occupancy* to, or relocation of, *existing buildings* and structures shall comply with the provisions for *alterations, repairs, additions and changes of occupancy* or relocation, respectively, in this code and the *International Energy Conservation Code, International Mechanical Code, International Plumbing Code, International Residential Code* and NFPA 70. Where provisions of the other codes conflict with provisions of this code, the provisions of this code shall take precedence.

(Add) **304.1.1 Snow loads.** Where the intended alteration requires a permit for reroofing, any existing structural elements supporting snow loads shall be replaced or altered as needed to carry the design snow loads, including snow drift effects, as required by the International Building Code for new structures.

Exceptions:

1. Buildings or structures where there will be no net increase to the roof insulation R-value.
2. Buildings or structures designed under the 1978, 1987, 1994 or latter editions of the Connecticut State Building Code.
3. Portions of buildings or structures designed under the 1971 edition of the Connecticut State Building Code that are not subjected to snow drifting effects.
4. Buildings or structures that are capable of supporting the design snow loads, including snow drift effects, as required by the International Building Code for new structures. A statement from a professional engineer shall be provided as confirmation of this exception.

(Amd) **304.2 Snow loads on adjacent buildings.** If an alteration or addition is located within 20 feet (6.1 m) of an adjacent existing building, and the alteration or addition exceeds the height of the adjacent existing building, a statement from a professional engineer confirming compliance with one or more of the following shall be provided:

1. No additional snow drift loads will be induced on the roof of the adjacent existing building.
2. Any additional snow drift loads induced on the roof of the adjacent existing building are less than the magnitude of the snow drift loads that would have already existed on the roof of the adjacent existing building.
3. The load-carrying capacity of the roof of the adjacent existing building is capable of supporting the additional snow drift loads.

Snow drift loads shall be derived in accordance with Section 7.7 of ASCE 7.

(Add) **306.5.1 Complete change of occupancy.** Where an entire *building* undergoes a *change of occupancy*, it shall comply with Section 306.5 and shall have all of the following *accessible* features:

1. At least one *accessible building* entrance.
2. At least one *accessible route* from an *accessible building* entrance to *primary function* areas.
3. Signage complying with Section 1111 of the International Building Code.
4. *Accessible* parking complying with Section 1106 of the International Building Code, where parking is being provided.
5. At least one *accessible* passenger loading zone, when loading zones are provided.
6. At least one *accessible route* connecting *accessible* parking and *accessible* passenger loading zones to an *accessible* entrance.
7. At least one *accessible* toilet room or toilet and bathing facility complying with Section 1109.2.4 of the International Building Code.

Where it is *technically infeasible* to comply with the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent technically feasible.

Exception: The *accessible* features listed in Items 1 through 7 are not required for an *accessible route* to *Type B units*.

(Amd) **306.7.8 Lifts and limited-use/limited-application elevators in existing buildings.** Vertical or incline platform lifts, inclined stairway chairlifts and limited-use/limited-application elevators shall not be a part of an *accessible route* in *existing buildings* undergoing *alteration* or *repair* except that vertical platform lifts and limited-use/limited-application elevators shall be permitted in *existing buildings* where permitted in the locations set forth in Section 1109.8 of the International Building Code. Pursuant to section 29-200 of the Connecticut General Statutes, the following exceptions are allowed:

Exceptions:

1. In *existing buildings* principally used for meeting, gathering or assembling by any civic, religious, fraternal or charitable organization.

2. In residential *buildings* designed to be occupied by one or two families.
3. In new *buildings* for which a building *permit* application has been filed on or after October 1, 2004, in accordance with the 2020 Connecticut State Building Code.
4. In other *existing buildings* and structures only if the State Building Inspector approves such installation.

Lifts shall comply with ICC A117.1 and shall be installed in accordance with ASME A18.1. Limited use/limited application elevators shall comply with ICC A117.1 and shall be installed in accordance with the Connecticut Safety Code for Elevators and Escalators adopted under authority of section 29-192 of the Connecticut General Statutes.

(Amd) **306.7.10.1 Accessible dwelling or sleeping units.** Where Group I-1, I-2, I-3, R-1, R-2 or R-4 *dwelling or sleeping units* are being altered or added, the requirements of Section 1108 for *Accessible units* and Chapter 9 for visible alarms of the International Building Code apply only to the quantity of spaces being altered or added.

(Amd) **306.7.10.2 Type A dwelling or sleeping units.** Where more than 20 Group R-2 *dwelling or sleeping units* are being altered or added, the requirements of Section 1108 for *Type A units* and Chapter 9 for visible alarms of the International Building Code apply only to the quantity of spaces being added or altered.

(Amd) **306.7.10.3 Type B dwelling or sleeping units.** Where four or more Group I-1, I-2, R-2, R-3, or R-4 *dwelling or sleeping units* are being added, the requirements of Section 1108 for *Type B units* and Chapter 9 for visible alarms of the International Building Code apply only to the quantity of the spaces being added. Where Group I-1, I-2, R-1, R-2, R-3, or R-4 *dwelling or sleeping units* are being altered and where the *work area* is greater than 50 percent of the aggregate area of the *building*, the requirements of Section 1108 for *Type B units* and Chapter 9 for visible alarms of the International Building Code apply only to the quantity of the spaces being altered.

(Amd) **306.7.16.4 Toilet facilities.** Where toilet rooms are provided, not fewer than one *accessible* single-user toilet room or one accessible family or assisted-use toilet room complying with Section 1110.2.1 of the International Building Code shall be provided. At the inaccessible toilet rooms, directional signs indicating the location of the nearest *accessible* toilet room shall be provided. These directional signs shall include the International Symbol of Accessibility and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

(Amd) **306.7.16.5 Bathing facilities.** Where bathing rooms are provided, not fewer than one *accessible* single-user bathing room or one accessible family or assisted-use bathing room complying with Section 1110.2.1 of the International Building Code shall be provided. At the inaccessible bathing rooms, directional signs indicating the location of the nearest *accessible* bathing room shall be provided. These directional signs shall include the International Symbol of Accessibility and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

(Add) **306.7.17 Assembly seating.** Where it is *technically infeasible* to disperse *accessible* seating throughout an altered assembly area, *accessible* seating areas may be clustered. Each *accessible* wheelchair space shall have provisions for companion seating and shall be located on an *accessible route* that also serves as an *accessible means of egress*.

(Amd) **307.1 Smoke alarms in existing portions of a building.** Where an *addition* or alteration is made to a *building* or structure of a Group I-4 and E day care facilities, Group I-1 or R occupancy or when one or more sleeping rooms are added or created in existing *dwelling units*, the entire *dwelling unit* or *building* shall be provided with smoke detectors located as required for new *buildings*. 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) **308.1 Carbon monoxide alarms in existing portions of a building.** Where an *addition or alteration* is made to a *building* or structure of Group I-1, I-2, I-4, R, and E occupancy, the *existing building* shall be provided with carbon monoxide alarms in accordance with Section 915.7 of the 2021 International Building Code portion of the 2022 State Building Code.

CHAPTER 5 – PRESCRIPTIVE COMPLIANCE METHOD

(Amd) **503.1 General.** *Alterations* to any building or structure shall comply with the requirements of the *International Building Code* for new construction. *Alterations* shall be such that the *existing building* or structure is not less complying with the provisions of the *International Building Code* than the *existing building* or structure was prior to the *alteration*.

Exceptions:

1. Existing stairway in existing structures shall be required to comply with the requirements of Section 1011.5 of the *International Building Code*.
2. Handrails otherwise required to comply with Section 1011.11 of the *International Building Code* shall not be required to comply with the requirements of Section 1014.6 of the *International Building Code* regarding full extension of the handrails where such extensions would be hazardous because of plan configuration.
3. Where provided in below-grade transportation stations, existing and new escalators shall be permitted to have a clear width of less than 32 inches (815 mm).

(Amd) **503.12 Roof diaphragms resisting wind loads in high-wind regions.** Where the intended *alteration* requires a permit for reroofing and involves removal of roofing materials from more than 50 percent of the roof diaphragm of a building or section of a building located where the Basic Design Wind Speed, *V*, is greater than 130 mph (58 m/s) in accordance with Appendix P of the *International Building Code*, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in Section 1609 of the *International Building Code*, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in Section 1609 of the *International Building Code*.

Exception: Buildings that have been demonstrated to comply with the wind load provisions in ASCE 7—88 or later editions.

CHAPTER 7– ALTERATIONS – LEVEL 1

(Amd) **702.7.1 International Fuel Gas Code.** 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 2, Hydrogen Technologies Code, NFPA 54, National Fuel Gas Code and NFPA 58, Liquefied Petroleum Gas Code, as incorporated in the 2020 Connecticut State Fire Safety and the Connecticut State Fire Prevention Codes. These requirements apply to liquid petroleum storage systems, gas piping systems extending from the point of delivery to the inlet connections of appliances, the installation and operation of residential and commercial gas appliances and related accessories as covered by this code.

(Add) **704.4 Minimum standards.** In addition to the requirements of this code, *means of egress* in *existing buildings* shall meet the requirements of the 2022 Connecticut State Fire Prevention Code for the proposed occupancy.

(Amd) **706.3.2 Roof diaphragms resisting wind loads in high-wind regions.** Where the intended alteration requires a permit for reroofing and involves removal of roofing materials from more than 50 percent of the roof diaphragm of a building or section of a building located where the Basic Design Wind Speed, *V*, is greater than 130 mph (58m/s) in accordance with Appendix P of the International Building Code or in a special wind region as defined in Section 1609 of the International Building Code, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in Section 1609 of the International Building Code, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in Section 1609 of the International Building Code.

Exceptions:

1. Buildings or structures assigned to Risk Categories I or II.
2. Risk Category III buildings and structures, except health care facilities.
3. Buildings or structures permitted under the 1999 or latter editions of the Connecticut State Building Code.

CHAPTER 8 – ALTERATIONS – LEVEL 2

(Amd) **804.2 General.** The *means of egress* shall comply with the requirements of this section.

Exception: Where the *work area* and the *means of egress* serving it complies with the Connecticut State Fire Prevention Code.

(Amd) **804.4.3 Main Entrance – Group A.** In Group A occupancies renovated or altered to increase capacity that have a single main entrance, such main entrance shall also be the main *exit*. The main entrance/*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*. The remaining *exits* shall be capable of providing at least one-half of the total required *exit* capacity.

Exception: In assembly occupancies where there is no well-defined main entrance and main *exit* or where multiple main entrances and main *exits* are provided, *exits* shall be permitted to be distributed around the perimeter of the *building* or space containing the assembly occupancy, provided the total width of egress is not less than 100 per cent of the required width.

CHAPTER 10 – CHANGE OF OCCUPANCY

(Add) **1005.2 Main Entrance – Group A.** In Group A occupancies created by *change of occupancy* that have a single main entrance, such main entrance shall also be the main *exit*. The main entrance/*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*. The remaining *exits* shall be capable of providing at least one-half of the total required *exit* capacity.

Exception: In assembly occupancies where there is no well-defined main entrance and main *exit* or where multiple main entrances and main *exits* are provided, *exits* shall be permitted to be distributed around the perimeter of the *building* or space containing the assembly occupancy, provided the total width of egress is not less than 100 per cent of the required width.

(Amd) **1011.2.1 Fire sprinkler system.** Where a change in occupancy classification occurs or where there is a *change of occupancy* within a space where there is a different fire protection system threshold requirement in Chapter 9 of the *International Building Code* that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Chapter 9 of the *International Building Code*. The installation of the automatic sprinkler system shall be required throughout the building or within the area of the *change of occupancy* and areas of the building not separated horizontally and vertically from the change of occupancy by one of the following:

1. Nonrated permanent partition and horizontal assemblies.
2. Fire partition.
3. Smoke partition.

4. Smoke barrier.
5. Fire barrier.
6. Fire wall.

Exceptions:

1. An automatic sprinkler system shall not be required in a one- or two-family dwelling constructed in accordance with the *International Residential Code*.
2. Automatic sprinkler system shall not be required in a townhouse constructed in accordance with the *International Residential Code*.
3. The townhouse shall be separated from adjoining units in accordance with Section R302.2 of the *International Residential Code*.

(Amd) **1011.2.2 Fire alarm and detection system.** Where a change in occupancy classification occurs or where there is a *change of occupancy* within a space where there is a different fire protection system threshold requirement in Chapter 9 of the *International Building Code* that requires a fire alarm and detection system to be provided based on the new occupancy in accordance with Chapter 9 of the *International Building Code*, such system shall be provided throughout the building or the area where the *change of occupancy* occurs. Existing alarm notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm notification appliances shall be provided throughout the area where the *change of occupancy* occurs in accordance with Section 907 of the *International Building Code* as required for new construction.

CHAPTER 12 – HISTORIC BUILDINGS

(Add) **1201.1.1 Exemptions.** Pursuant to section 29-259 of the Connecticut General Statutes, exemptions may be granted to the provisions of this code for historic structures.

CHAPTER 13 – PERFORMANCE COMPLIANCE METHODS

(Amd) **1301.2 Applicability.** *Existing buildings or structures* in which there is work involving *additions, alterations or changes of occupancy* shall be made to conform to the requirements of this chapter or the provisions of Chapters 6 through 12. The provisions of Sections 1301.2.1 through 1301.2.6 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, I-2, M, R and S. These provisions shall also apply to Group U occupancies where such occupancies are undergoing a *change of occupancy* or a partial change in occupancy with separations in accordance with Section 1301.2.2. These provisions shall not apply to buildings with occupancies in Group H, I-1, I-3 or I-4.

CHAPTER 16 – REFERENCED STANDARDS

(Amd) **NFPA** National Fire Protection Association
 1 Batterymarch Park
 Quincy, MA 02269-9101

Standard reference number—year of publication	Title	Referenced in code section number
(Add) 02-19	Hydrogen Technologies Code101.8, 702.7.1
(Add) 54-21	National Fuel Gas Code101.8, 702.7.1

AMENDMENTS TO THE 2021 INTERNATIONAL PLUMBING CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **101.1 Title.** The 2021 International Plumbing Code and this Section shall be known as the 2021 International Plumbing Code portion of the 2022 Connecticut State Building Code, hereinafter referred to as “the code” or “this code”.

(Amd) **101.2 Scope.** The provisions of this code shall apply to the erection, installation, alteration, *repairs*, relocation, replacement, *addition* to, use or maintenance of *plumbing* systems within the State of Connecticut. This code shall also regulate nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems. The installation of fuel gas distribution piping and equipment, fuel gas-fired *water heaters* and *water heater* venting systems shall be regulated in accordance with Section 101.2.1. The provisions of appendices B, C, D and E shall be considered part of this code.

Exception: Detached one- and two-family *dwelling*s and multiple single-family *dwelling*s (*townhouses*) not more than three stories high with separate *means of egress* and their accessory structures shall comply with the 2021 International Residential Code portion of the 2022 Connecticut State Building Code.

(Add) **101.2.1 Gas.** The International Fuel Gas Code is not adopted by the State of Connecticut. Any references to the International Fuel Gas Code within the body of this code shall be considered references to requirements of NFPA 2, Hydrogen Technologies Code, NFPA 54, National Fuel Gas Code and NFPA 58, Liquefied Petroleum Gas Code, as adopted in the 2022 Connecticut State Fire Safety and the Connecticut State Fire Prevention Codes. These requirements apply to liquid petroleum storage systems, gas piping systems extending from the point of delivery to the inlet connections of appliances, the installation and operation of residential and commercial gas appliances and related accessories as covered by this code.

(Add) **101.2.2 Electrical.** The provisions of the 2020 NFPA 70, National Electrical Code, shall apply to the installation of electrical systems, including alterations, *repairs*, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

(Amd) **102.6 Historic buildings.** 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 such exemptions shall not affect the safe design, use or construction of such property.

(Del) **SECTION 103 – CODE COMPLIANCE AGENCY.** Delete in its entirety and refer to Section 103 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Enforcement Agency.

(Del) **SECTION 104 – DUTIES AND POWERS OF CODE OFFICIAL.** Delete in its entirety and refer to Section 104 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Duties and Powers of Building Official.

(Amd) **105.1 General.** The following requirements apply to the approval of materials, methods and equipment as satisfying the requirements of this code. Modifications, variations or exemptions from or approval of alternative compliance with the 2022 Connecticut State Building Code requirements may be requested in accordance with section 104.10 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Amd) **106.1 When required.** Any *owner* or *owner's* authorized agent who intends to construct, enlarge, alter, *repair*, move, demolish or change the occupancy of a *building* or structure, or to move a *lot line* that will affect any existing *building* or structure, or to erect, install, enlarge, alter, *repair*, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the *building official* and obtain the required *permit*.

(Add) **106.2.1 State agency exemptions.** Pursuant to section 29-252a of the Connecticut General Statutes, a state agency shall not be required to obtain a building *permit* from a local *building official*. A state agency shall obtain a building *permit* for construction work as described in section 29-252a of the Connecticut General Statutes from the State Building Inspector.

(Amd) **106.4 By whom application is made.** Pursuant to section 29-263 of the Connecticut General Statutes, application for a *permit* shall be made by the *owner* or by an authorized agent. If the authorized agent is a licensed contractor, the provisions of section 20-338b of the Connecticut General Statutes shall be followed. The full names and addresses of the *owner*, agent and the responsible officers, if the *owner* or agent is a corporate body, shall be stated in the application.

(Add) **106.4.1 Permit issuance to a home improvement contractor.** No *permit* shall be issued to a contractor who is required to be registered pursuant to chapter 400 of the Connecticut General Statutes, for work to be performed by such contractor, unless the name, business address and Department of Consumer Protection registration number of such contractor is clearly marked on the *permit* application, and the contractor has presented such contractor's certificate of registration as a home improvement contractor.

(Amd) **106.5 Permit issuance.** Pursuant to section 29-263 of the Connecticut General Statutes, the *building official* shall examine or cause to be examined applications for *permits* and amendments thereto within 30 days after filing and either issue or deny a *permit* within such 30-day period. If the application or *construction documents* do not conform to the requirements of this code and pertinent laws, the *building official* shall reject such application in writing, stating the reasons therefor. If the *building official* is satisfied that the proposed work conforms to the requirements of this code and applicable laws, statutes, regulations and ordinances, the *building official* shall issue a *permit* therefor as soon as practicable.

(Add) **108.2.6 Posting of required inspections.** A schedule of required inspections shall be compiled by the code official. The schedule shall be posted in the building department for public view.

(Add) **108.5 Notification of inspection and testing results.** Notification as to passage or failure, in whole or in part, of any required inspection or test shall be made in writing by the *building official* or his duly authorized representative and shall be left at the job *site* or delivered to the *permit* holder. It shall be the duty of the *permit* holder to ascertain the results of required inspections.

(Amd) **109.2 Schedule of permit fees.** Each municipality shall establish a schedule of fees for each construction document review, building *permit*, certificate of approval and certificate of occupancy. A schedule of adopted fees shall be posted in the building department for public view.

(Del) **109.3 Work commencing before permit issuance.** Delete section.

(Amd) **110.2 Retention of construction documents.** The *building official* shall retain one set of *approved construction documents* for a period as set forth in the records/disposition schedule adopted pursuant to chapter 188 of the Connecticut General Statutes.

Exception: Pursuant to subsection I of section 29-261 of the Connecticut General Statutes, upon receipt of a written request signed by the *owner* of *plans and specifications* on file for a single-family *dwelling* or *out-building*, the *building official* shall immediately return the original *plans and specifications* to the *owner* after a certificate of occupancy is issued with respect to the *plans and specifications*.

(Amd) **113.4 Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for penalties in accordance with Section 115.4.

(Del) **SECTION 114 MEANS OF APPEALS** Delete this section in its entirety and refer to Section 113 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Means of Appeal.

(Add) **115.2.1 Written notice.** The notice of violation shall be in writing and shall be given to the *owner* of the property involved, or to the *owner's* agent or to the person doing the work.

(Amd) **115.4 Violation penalties.** Pursuant to section 29-254a of the Connecticut General Statutes, any person who violates any provision of this code shall be fined not less than two hundred nor more than one thousand dollars or imprisoned not more than six months or both.

CHAPTER 2 – DEFINITIONS

(Amd) **201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in other portions of the 2022 Connecticut State Building Code, such terms shall have the meanings ascribed to them as in those codes.

(Add) **202.1 Definitions.** Add or amend the following definitions:

(Add) **BUILDING OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. Also known as the local *building official* or the code official.

(Amd) **CLEANOUT.** An access opening in the *drainage system* utilized for the removal of obstructions. Types of *cleanouts* include a removable plug or cap, and a removable fixture or fixture *trap*. Floor drains, floor sinks, mop sinks and roof drains are not acceptable *cleanouts*.

(Amd) **CODE OFFICIAL.** See *Building Official*.

(Amd) **PUBLIC SWIMMING POOL.** A pool, other than a residential pool, as defined in section 19-13-B33b(a)(1) of the Regulations of Connecticut State Agencies.

(Amd) **REGISTERED DESIGN PROFESSIONAL.** An individual who is registered or licensed by the Department of Consumer Protection pursuant to chapters 390, 391, 396 or 396a of Connecticut General Statutes to practice their respective design profession and acting within the scope of his or her license and practice discipline.

CHAPTER-3 - GENERAL REGULATIONS

(Amd) **305.4 Freezing.** A water, soil or waste pipe shall not be installed outside of a building, or concealed in outside walls or in any place subjected to freezing temperature, unless adequate provision is made to protect such pipe from freezing by insulation or heat or both. Water service pipe shall be installed not less than 48 inches deep.

(Del) **305.4.1 Sewer depth.** Delete section.

(AMD) TABLE 308.5 HANGER SPACING

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
Acrylonitrile butadiene styrene (ABS) pipe	4	10 ^b
Aluminum tubing	10	15
Brass pipe	10	10
Cast-iron pipe	5 ^a	15
Chlorinated polyvinyl chloride (CPVC) pipe and tubing, 1 inch and smaller	3	10 ^b
Chlorinated polyvinyl chloride (CPVC) pipe and tubing, 1 ¹ / ₄ inches and larger	4	10 ^b
Copper or copper-alloy pipe	12	10
Copper or copper-alloy tubing, 1 ¹ / ₄ -inch diameter and smaller	6	10
Copper or copper-alloy tubing, 1 ¹ / ₂ -inch diameter and larger	10	10
Cross-linked polyethylene (PEX) pipe, 1 inch and smaller	2.67 (32 inches)	10 ^b
Cross-linked polyethylene (PEX) pipe, 1 ¹ / ₄ inches and larger	4	10 ^b
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe smaller than 1 inch	2.67 (32 inches) ^c	10 ^b
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe 1 inch and larger	4 ^c	10 ^b
Lead pipe	Continuous	4
Polyethylene/aluminum/polyethylene (PE-AL-PE) pipe	2.67 (32 inches)	4
Polyethylene of raised temperature (PE-RT) pipe, 1 inch and smaller	2.67 (32 inches)	10 ^b
Polyethylene of raised temperature (PE-RT) pipe, 1 ¹ / ₄ inches and larger	4	10 ^b
Polypropylene (PP) pipe or tubing, 1 inch and smaller	2.67 (32 inches)	10 ^b
Polypropylene (PP) pipe or tubing, 1 ¹ / ₄ inches and larger	4 ^c	10 ^b
Polyvinyl chloride (PVC) pipe	4	10 ^b
Stainless steel drainage systems	10	10 ^b
Steel pipe	12	15

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

- a. The maximum horizontal spacing of cast-iron pipe hangers shall be increased to 10 feet where 10-foot lengths of pipe are installed.
- b. For sizes 2 inches and smaller, a guide shall be installed midway between required vertical supports. Such guides shall prevent pipe movement in a direction perpendicular to the axis of the pipe.
- c. The maximum horizontal spacing of PP or PP-RCT pipe hangers shall be increased to manufacturer's installation requirements based on maximum operating temperatures design.

(Amd) **312.5 Water supply system test.** Upon completion of a section of or the entire water supply system, the system, or portion completed, shall be tested and proved tight under a water pressure not less than the working pressure of the system; or, for piping systems other than plastic, by an air test of not less than 50 psi (344 kPa). This pressure shall be held for not less than 15 minutes. The water utilized for tests shall be obtained from a potable source of supply. The required tests shall be performed in accordance with this section and Section 108.

Exception: For PEX piping systems, testing with a compressed gas shall be an alternative to hydrostatic testing where compressed air or other gas pressure testing is specifically authorized by the manufacturer's instructions for the PEX pipe and fittings products installed at the time the system is being tested, and compressed air or other gas testing is not otherwise prohibited by applicable codes, laws or regulations outside of this code.

(Del) **312.10.1 Inspections.** Delete section.

(Amd) **312.10.2 Testing.** Required reduced pressure principle, double check, pressure vacuum breaker, reduced pressure detector fire protection, double check detector fire protection, and spill-proof vacuum breaker backflow preventer assemblies and hose connection backflow preventers shall be tested at the time of installation by individuals or agencies qualified to perform such inspections. It shall be the responsibility of the *owner* to have such tests performed and copies of test reports shall be given to the local *building official*. The testing procedure shall be performed in accordance with one of the following standards: ASSE 5013, ASSE 5015, ASSE 5020, ASSE 5047, ASSE 5048, ASSE 5052, ASSE 5056, CSA B64.10 or CSA B64.10.1.

(Add) **312.10.2.1 Testing devices.** Testing of devices shall be in accordance with section 19-13-B38a of the Regulations of Connecticut State Agencies.

(Add) **314.1.2 Neutralization.** Liquid combustion by-products of condensing appliances shall be neutralized prior to being discharged.

CHAPTER 4 – FIXTURES, FAUCETS AND FIXTURE FITTINGS

(Amd) **403.1 Minimum number of fixtures.** Plumbing fixtures shall be provided in the minimum number shown in Table 403.1, based on the actual use of the building or space. Uses not shown in Table 403.1 shall be considered individually by the *building official*. The number of occupants shall be determined in accordance with the International Building Code.

Exceptions:

1. The following minimum fixtures shall be provided in *Group R-1 bed and breakfast establishments*: Water closets – one per two *guest rooms*; lavatories – one per two *guest rooms*; bathtubs/showers – one per two *guest rooms*. Plumbing fixtures in *Group R-1 bed and breakfast establishments* shall be permitted to be accessed from hallways and *corridors* and to be shared by guests.
2. Child washing and diaper changing facilities shall be permitted in lieu of bathtubs or showers in Group I-4 child care occupancies.

(Amd) **Table 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES.** Remove reference to footnote f. from row for Assembly, Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities.

(Del) **Footnote f., Table 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES.** Delete footnote.

(Add) **403.1.2.1 Baby changing facilities.** Where multiple single-user toilet rooms or bathing rooms are clustered at a single location, at least one room at each cluster shall contain baby changing facilities and shall be identified as containing such facilities.

(Del) **403.2.1 Family or assisted-use toilet facilities serving as separate facilities.** Delete without substitution.

(Amd) **410.4 Substitution.** Where restaurants provide drinking water in a container free of charge, drinking fountains shall not be required in those restaurants. In other occupancies permanently installed *bottle filling stations* may be substituted for up to 2/3rds of the required *drinking fountains*. The *bottle filling station* shall be installed in accordance with *ICC/ANSI A117.1*.

(Add) **413.5 Connection required.** Floor drains shall connect to the *sanitary sewer* system or to an on-site holding tank(s) when the discharge contains petroleum-based oil, grease, sand or other harmful or hazardous substances. Interceptors and separators shall be provided in accordance with Section 1003 when floor drains connect to the *sanitary sewer* system, and shall be installed in accordance with regulations promulgated by the Department of Energy and Environmental Protection. Floor drains shall not be connected to a *storm sewer*, a *storm drainage system* or a *storm building drain*. Floor drains shall have *trap seals* in accordance with Section 1002.4.

CHAPTER 5 – WATER HEATERS

(Amd) **504.6 Requirements for discharge piping.** Amend item 10. as follows:

10. Terminate not more than 6 inches (152 mm) above and not less than two times the discharge pipe diameter above the floor or flood level rim of the waste receptor and cut at a 45 degree angle.

CHAPTER 6 - WATER SUPPLY AND DISTRIBUTION

(Add) **608.1.1. Connection to a public water supply system.** Connections to a public water supply system shall be in accordance with the in accordance with the Public Health Code of the State of Connecticut adopted pursuant to section 19a-36 of the Connecticut General Statutes and the requirements of the water system operator.

(Add) **608.1.2 Required Notification to water company and building official.** Pursuant to section 19a-37d of the Connecticut General Statutes:

- (a) Any person engaged in the installation of an irrigation system or other physical connection between the distribution system of a public water supply system and any other water system shall notify the water company servicing the property or building of such installation and shall be subject to all applicable rules and regulations of such water company. For purposes of this section, "water company" has the same meaning as provided in section 25-32a.
- (b) When a permit application is filed with the local building inspector of any municipality concerning any project that includes a change of use or installation of fixtures or facilities in a building that may affect the performance of, or require the installation of, a reduced pressure principle backflow preventer, a double check valve assembly or a pressure vacuum breaker, the local building inspector shall provide written notice of the application to the water company serving the building not later than seven days after the date the application is filed. Upon receipt of such written notice, the water company shall cause to be performed an evaluation of cross-connection protection by a person who has met the requirements prescribed in the regulations of Connecticut state agencies and such water company shall notify the local building inspector regarding its determination. The local building inspector shall not issue a permit or certificate of occupancy until any cross-connection issue has been corrected.

- (c) Upon a determination by a local director of health that an automatic fire extinguishing system, irrigation system, change of use, installation of fixtures or facilities in a building or other physical connection between the distribution system of a public water supply system and any other water system creates an unreasonable risk of injury to the health or safety of persons using the water, to the general public, or to any public water supply, the local director of public health may issue an order requiring the immediate implementation of mitigation measures, that include, but are not limited to, the disconnection of the system. In the event that a cross connection with the public water system is found, the owner of such system may terminate services to the premises.

(Amd) **608.17 Connections to the potable water system.** Connections to the potable water system shall conform to Sections 608.17.1 through 608.17.10 and in accordance with the Public Health Code of the State of Connecticut adopted pursuant to section 19a-36 of the Connecticut General Statutes.

(Amd) **608.18 Protection of individual water supplies.** An individual water supply shall be located and constructed so as to be safeguarded against contamination in accordance with the Public Health Code of the State of Connecticut adopted pursuant to section 19a-36 of the Connecticut General Statutes.

(Del) **608.18.1 through 608.18.8.** Delete subsections and referenced table.

CHAPTER 7 – SANITARY DRAINAGE

(Amd) **708.1.1 Horizontal drains and building drains.** Horizontal drainage pipes, including *horizontal branch drains* consisting of one or more fixtures, in *buildings* shall have *cleanouts* located at intervals of not more than 100 feet (30,480 mm). *Building drains* shall have *cleanouts* located at intervals of not more than 100 feet (30,480 mm) except where manholes are used instead of *cleanouts*, the manholes shall be located at intervals of not more than 400 feet (122 m). The interval length shall be measured from the *cleanout* or manhole opening, along the *developed length* of the piping to the next *drainage fitting* providing access for cleaning, the end of the horizontal drain or the end of the *building drain*.

Exception: Horizontal *fixture drain* piping serving a non-removable *trap* shall not be required to have a *cleanout* for the section of piping between the *trap* and the connection to a horizontal or vertical drain if located within 4 feet (1219 mm) of *developed length* of such connection. The 4 feet (1219 mm) shall be measured from the fixture *trap* weir to the connection at the horizontal or vertical piping.

CHAPTER 9 – VENTS

(Amd) **903.1.1 Roof extension unprotected.** Open vent pipes that extend through a roof shall be terminated not less than 12 inches above the roof.

(Del) **903.2 Frost closure.** Delete section.

CHAPTER 10 - TRAPS, INTERCEPTORS AND SEPARATORS

(Amd) **1003.3 Grease interceptors.** Grease interceptors that serve plumbing systems connected to private, on-site septic systems shall comply with the requirements of Sections 1003.3.1 to 1003.3.5, inclusive and in accordance with the Public Health Code adopted pursuant to section 19a-36 of the Connecticut General Statutes. Grease interceptors that serve plumbing systems connected via a *sanitary sewer* to a publicly owned treatment works shall comply with the Department of Energy and Environmental Protection's General Permit for the Discharge of Wastewater Associated with Food Preparation Establishments.

CHAPTER 11 – STORM DRAINAGE

(Amd) **1106.1 General.** The size of the components of the primary drainage system, including vertical conductors and leaders, building storm drains, building storm sewers and any horizontal branches of such drains or sewers shall be based on the 100-year/1-hour duration rainfall rate and shall be 3.0 inches. The size of the components for the secondary (emergency overflow) roof drainage system and scuppers shall be based on twice the 100-year/1-hour duration rainfall rate and shall be 6.0 inches.

(Del) **FIGURES 1106.1(1) through (5) 100-YEAR, 1-HOUR RAINFALL (INCHES).** Delete figures.

(Amd) **1108.3 Sizing of secondary drains.** Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall have an opening dimension of not less than 4 inches (102 mm) in height and have an opening width equal to the circumference of the roof drain required for the area served. The flow through the primary system shall not be considered when sizing the secondary roof drain system.

CHAPTER 12 – SPECIAL PIPING AND STORAGE SYSTEMS

(Amd) **1201.1 Scope.** The provisions of this chapter shall govern the design and installation of piping and storage systems for non-flammable medical gas systems and non-medical oxygen systems. All maintenance and operation of such systems shall be in accordance with the Connecticut State Fire Prevention Code.

CHAPTER 14 – SUBSURFACE LANDSCAPE IRRIGATION SYSTEMS

(Del) **Sections 1401 through 1403.** Delete sections, subsections and tables and replace with the following:

(Add) **1401.1 General.** Subsurface landscape irrigation systems shall comply with the Public Health Code adopted pursuant to section 19a-36 of the Connecticut General Statutes.

CHAPTER 15 – REFERENCED STANDARDS

(Amd) **NFPA** National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269-9101

Standard reference number—year of publication	Title	Referenced in code section number
(Add) 02-19	Hydrogen Technologies Code	101.2.1
(Add) 54-21	National Fuel Gas Code101.2.1

(Del) **APPENDIX A – PLUMBING PERMIT FEE SCHEDULE.** Delete appendix.

(Del) **APPENDIX F – BOARD OF APPEALS.** Delete appendix.

AMENDMENTS TO THE 2021 INTERNATIONAL MECHANICAL CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **101.1 Title.** The 2021 International Mechanical Code and this Section shall be known as the 2021 International Mechanical Code portion of the 2022 Connecticut State Building Code, hereinafter referred to as “the code” or “this code”.

(Amd) **101.2 Scope.** This code shall regulate the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within *buildings*. This code shall also regulate those mechanical systems, system components, equipment and *appliances* specifically addressed herein. The installation of *fuel gas* distribution piping and equipment, fuel-gas-fired *appliances* and fuel-gas-fired *appliance venting systems* shall be in accordance with Section 101.2.2.

Exception: Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height shall comply with this code or the *International Residential Code*.

(Amd) **101.2.1 Appendices.** The provisions of Appendix A shall be considered applicable to the utilization of this code.

(Add) **101.2.2 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 2, Hydrogen Technologies Code, NFPA 54, National Fuel Gas Code and NFPA 58, Liquefied Petroleum Gas Code, as incorporated in the 2022 Connecticut State Fire Safety and the Connecticut State Fire Prevention Codes. These requirements apply to liquid petroleum storage systems, gas piping systems extending from the point of delivery to the inlet connections of *appliances*, the installation and operation of residential and commercial gas *appliances* and related accessories as covered by this code.

(Add) **101.2.3 Oil-burning equipment, piping and storage.** In addition to the requirements of this code, the installation of oil burners, equipment, and *appliances* used in connection therewith, including tanks, piping, pumps, control devices and accessories shall comply with NFPA 31, as incorporated in the 2022 Connecticut State Fire Safety and the 2022 Connecticut State Fire Prevention Code.

(Add) **101.2.4 Electrical.** The provisions of NFPA 70, National Electrical Code, shall apply to the installation of electrical systems, including alterations, *repairs*, replacement, equipment, *appliances*, fixtures, fittings and appurtenances thereto.

(Add) **101.2.5 Fire prevention.** References to the International Fire Code within the body of the model document shall be considered to be references to the 2022 Connecticut State Fire Safety Code.

(Amd) **102.6 Historic buildings.** 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.

(Del) **SECTION 103 – CODE COMPLIANCE AGENCY.** Delete Section 103 in its entirety and refer to Section 103 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Code Compliance Agency.

(Del) **SECTION 104 – DUTIES AND POWERS OF CODE OFFICIAL.** Delete in its entirety and refer to Section 104 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Duties and Powers of Building Official.

(Amd) **105.1 General.** The following requirements apply to the approval of materials, methods and equipment as satisfying the requirements of this code. Modifications, variations or exemptions from or approval of alternative compliance with the 2022 Connecticut State Building Code requirements may be requested in accordance with section 104.10 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Amd) **106.1 When required.** Any *owner* or *owner's* authorized agent who intends to construct, enlarge, alter, *repair*, move, demolish or change the occupancy of a *building* or structure, or to move a *lot line* that will affect any existing *building* or structure, or to erect, install, enlarge, alter, *repair*, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the *building official* and obtain the required *permit*.

(Add) **106.1.3 By whom application is made.** Pursuant to section 29-263 of the Connecticut General Statutes, application for a *permit* shall be made by the *owner* or by an authorized agent. If the authorized agent is a licensed contractor, the provisions of section 20-338b of the Connecticut General Statutes shall be followed. The full names and addresses of the *owner*, agent and the responsible officers, if the *owner* or agent is a corporate body, shall be stated in the application.

(Add) **106.1.4 Permit issuance to a home improvement contractor.** No *permit* shall be issued to a contractor who is required to be registered pursuant to chapter 400 of the Connecticut General Statutes, for work to be performed by such contractor, unless the name, business address and Department of Consumer Protection registration number of such contractor is clearly marked on the application for *permit*, and the contractor has presented such contractor's certificate of registration as a home improvement contractor.

(Add) **106.2.1 State agency exemptions.** Pursuant to section 29-252a of the Connecticut General Statutes, a state agency shall not be required to obtain a building *permit* from a local *building official*. A state agency shall obtain a building *permit* for construction work as described in section 29-252a of the Connecticut General Statutes from the State Building Inspector.

(Amd) **106.4 Permit issuance.** Pursuant to section 29-263 of the Connecticut General Statutes, the *building official* shall examine or cause to be examined applications for *permits* and amendments thereto within 30 days after filing and either issue or deny a *permit* within such 30-day period. If the application or *construction documents* do not conform to the requirements of this code and pertinent laws, the *building official* shall reject such application in writing, stating the reasons therefor. If the *building official* is satisfied that the proposed work conforms to the requirements of this code and applicable laws, statutes, regulations and ordinances, the *building official* shall issue a *permit* therefor as soon as practicable.

(Add) **106.4.8 Retention of construction documents.** The *building official* shall retain one set of *approved construction documents* for a period as set forth in the records/disposition schedule adopted pursuant to chapter 188 of the Connecticut General Statutes.

Exception: Pursuant to subsection (e) of section 29-261 of the Connecticut General Statutes, upon receipt of a written request signed by the *owner* of *plans and specifications* on file for a single-family *dwelling* or *out-building*, the *building official* shall immediately return the original *plans and specifications* to the *owner* after a certificate of occupancy is issued with respect to the *plans and specifications*.

(Add) **108.2.6 Posting of required inspections.** A schedule of required inspections shall be compiled by the code official. The schedule shall be posted in the building department for public view.

(Add) **108.2.7 Notification of inspection and testing results.** Notification as to passage or failure, in whole or in part, of any required inspection or test shall be made in writing by the *building official* or his duly authorized representative and shall be left at the job *site* or delivered to the *permit* holder. It shall be the duty of the *permit* holder to ascertain the results of required inspections.

(Amd) **109.2 Schedule of permit fees.** Each municipality shall establish a schedule of fees for each construction document review, building *permit*, certificate of approval and certificate of occupancy. A schedule of adopted fees shall be posted in the building department for public view.

(Del) **109.4 Work commencing before permit issuance.** Delete without substitution.

(Amd) **113.4 Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for penalties in accordance with Section 115.4.

(Del) **SECTION 114 - MEANS OF APPEALS.** Delete this section in its entirety and refer to Section 113 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Means of Appeal.

(Add) **115.2.1 Written notice.** The notice of violation shall be in writing and shall be given to the *owner* of the property involved, or to the *owner's* agent or to the person doing the work.

(Amd) **115.4 Violation penalties.** Pursuant to section 29-254a of the Connecticut General Statutes, any person who violates any provision of this code shall be fined not less than two hundred nor more than one thousand dollars or imprisoned not more than six months or both.

CHAPTER 2 – DEFINITIONS

(Amd) **201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in other portions of the 2022 Connecticut State Building Code, such terms shall have the meanings ascribed to them as in those codes.

(Add) **202.1 Definitions.** Add or amend the following definitions:

(Add) **BUILDING OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. Also known as the local *building official* or code official.

(Amd) **CODE OFFICIAL.** See *Building Official*.

(Add) **LIMITED-COMBUSTIBLE MATERIAL.** A material shall be considered a limited-combustible material where both of the conditions 1 and 2 below and conditions 3 or 4 below are met.

Conditions:

1. The material does not comply with the requirements for a *noncombustible material*.
2. The material, in the form in which it is used, exhibits a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg), when tested in accordance with NFPA 259, Standard Test Method for Potential Heat of Building Materials.
3. The material shall have a structural base of a *noncombustible material* with a surfacing not exceeding a thickness of 1/8 inch (3.2mm) where the surfacing exhibits a *flame spread* index not greater than 50 when tested in accordance with ASTM E 84, Standard Test Method for Surface

Burning Characteristics of Building Materials, or ANSI/UL 723, Standard for Test for Surface Burning Characteristics of Building Materials.

4. The material shall be composed of materials that, in the form and thickness used, neither exhibit a *flame spread* index greater than 25 nor evidence of continued progressive combustion when tested in accordance with ASTM E 84 or ANSI/UL 723 and are of such composition that all surfaces that would be exposed by cutting through the material on any plane would neither exhibit a *flame spread* index greater than 25 nor exhibit evidence of continued progressive combustion when tested in accordance with ASTM E 84 or ANSI/UL 723.

(Amd) **REGISTERED DESIGN PROFESSIONAL.** An individual who is registered or licensed by the Department of Consumer Protection pursuant to chapters 390, 391, 396 or 396a of Connecticut General Statutes to practice their respective design profession and acting within the scope of his or her license and practice discipline.

CHAPTER 3 - GENERAL REGULATIONS

(Amd) **301.1 Scope.** Except as may be otherwise regulated by Chapters 540 and 541 of the Connecticut General Statutes, or regulations of other state agencies, this chapter shall govern the approval and installation of all equipment and *appliances* that comprise parts of the *building* mechanical systems regulated by this code in accordance with Section 101.2.

(Amd) **301.6 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 2, Hydrogen Technologies Code, NFPA 54, National Fuel Gas Code and NFPA 58, Liquefied Petroleum Gas Code, as incorporated in the 2020 Connecticut State Fire Safety and the Connecticut State Fire Prevention Codes. These requirements apply to liquid petroleum storage systems, 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) **TABLE 305.4 PIPING SUPPORT SPACING^a**

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
ABS pipe	4	10 ^c
Aluminum pipe and tubing	10	15
Cast-iron pipe ^b	5	15
Copper or copper-alloy pipe	12	10
Copper or copper-alloy tubing	8	10
CPVC pipe or tubing, 1 inch and smaller	3	10 ^c
CPVC pipe or tubing, 1 1/4-inches and larger	4	10 ^c
Lead pipe	Continuous	4
PB pipe or tubing	2 ² / ₃ (32 inches)	4
PE-RT 1 inch and smaller	2 ² / ₃ (32 inches)	10 ^c
PE-RT 1 1/4 inches and larger	4	10 ^c
PEX tubing 1 inch and smaller	2 ² / ₃ (32 inches)	10 ^c
PEX tubing 1 1/4 inches and larger	4	10 ^c

Cross-linked polyethylene/aluminum/crosslinked polyethylene (PEX-AL-PEX) pipe smaller than 1 inch	2 ² / ₃ (32 inches) ^d	10 ^c
Cross-linked polyethylene/aluminum/crosslinked polyethylene (PEX-AL-PEX) pipe 1 inch and larger	4 ^d	10 ^c
Polypropylene (PP) pipe or tubing, 1 inch and smaller	2 ² / ₃ (32 inches) ^d	10 ^c
Polypropylene (PP) pipe or tubing, 1 ¹ / ₄ inches and larger	4 ^d	10 ^c
PVC pipe	4	10 ^c
Steel pipe	12	15
Steel tubing	8	10

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

- a. See Section 301.18.
- b. The maximum horizontal spacing of cast-iron pipe hangers shall be increased to 10 feet where 10-foot lengths of pipe are installed.
- c. Mid-story guide.
- d. The maximum horizontal spacing of PP or PP-RCT pipe hangers shall be increased to manufacturer's installation requirements based on maximum operating temperature design.

(Add) 307.1.2 Neutralization. Liquid combustion by-products of condensing appliances shall be neutralized prior to being discharged.

CHAPTER 5 – EXHAUST SYSTEMS

(Amd) 505.4 Makeup air required. Where one or more gas, liquid or solid fuel-burning *appliance* that is neither direct-vent nor uses a mechanical draft venting system is located within a dwelling unit's air barrier, each exhaust system capable of exhausting in excess of 400 cubic feet per minute (0.19 m³/s) shall be mechanically or passively provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with not fewer than one damper complying with Section 505.4.2.

Exceptions:

1. Makeup air is not required for exhaust systems installed for the exclusive purpose of space cooling and intended to be operated only when windows or other air inlets are open.
2. Where all *appliances* in the house are of sealed combustion, power-vent, unvented, or electric, the exhaust hood system shall be permitted to exhaust up to 600 cubic feet per minute (0.28 m³/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m³/s) shall be provided with a makeup air at a rate approximately equal to the difference between the exhaust air rate and 600 feet per minute. Such makeup air systems shall be equipped with a means of closure.

(Add) 505.4.1 Location. Kitchen exhaust makeup air shall be discharged into the same room in which the exhaust system is located or into rooms or *duct systems* that communicate through one or more permanent openings with the room in which such exhaust system is located. Such permanent openings shall have a net cross-sectional area not less than the required area of the makeup air supply openings.

(Add) 505.4.2 Makeup air dampers. Where makeup air is required by Section 505.4, makeup air dampers shall comply with this section. Each damper shall be a gravity damper or an electrically operated damper that automatically opens when the exhaust system operates. Dampers shall be located to allow access for inspection, service, repair and replacement without removing permanent construction or any other ducts not connected to the damper being inspected, serviced, repaired or replaced. Gravity or barometric dampers shall not be used in passive makeup air systems except where the dampers are rated to provide the design makeup airflow at a pressure differential of 0.01 in. w.c. (3 Pa) or less.

(Amd) **506.3.2.5 Grease duct test.** Prior to the use or concealment of any portion of a grease *duct* system, a leakage test shall be performed. *Ducts* shall be considered to be concealed where installed in *shafts* or covered by coatings or wraps that prevent the ductwork from being visually inspected on all sides. The test shall be performed for the entire *duct* system, including the hood-to-*duct* connection. All connections, seams and welds shall be visible during the test. The ductwork shall be permitted to be tested in sections, provided that every joint is tested. For *listed* factory-built grease *ducts*, this test shall be limited to *duct* joints assembled in the field and shall exclude factory welds. The *permit* holder shall be responsible to provide the necessary equipment and perform the grease *duct* leakage test. The leakage test shall consist of one of the following tests, or an *approved* equivalent test:

(Add) **506.3.2.5.1 Positive pressure smoke test.** The positive pressure smoke test shall be performed by sealing the entire *duct* system from the hood exhaust opening(s) to the *duct* termination. Visible smoke shall be introduced to the *duct* system. The sealed *duct* shall then be pressurized to a minimum pressure of 1.0 inch water column, but shall not exceed the positive pressure capability of the system and components under test. No smoke shall emit from any exterior surface of the *duct*.

(Add) **506.3.2.5.2 Air test.** The air test shall be performed by sealing the entire *duct* system from the hood exhaust opening(s) to the *duct* termination. The sealed *duct* system shall then be pressurized to a minimum pressure of 1.0 inch (249 Pa) water column and shall be required to hold the initial set pressure for a minimum of 20 minutes.

(Add) **506.3.2.5.3 Water test.** The water test shall be performed by use of a pressure washer operating at a minimum of 1500 psi (10.34 kPa), simulating cleaning operations. The water shall be applied directly to all areas to be tested. No water applied to the *duct* interior shall be visible on any exterior surface in any volume during the test.

(Amd) **506.3.6 Grease duct clearances.** Where enclosures are not required, grease *duct* systems and exhaust equipment serving a Type I hood shall have a clearance to combustible construction of at least 18 inches (457 mm), 3 inches (76 mm) to *limited-combustible material*, and 0 inches (0 mm) to *noncombustible material*.

Exceptions:

1. Factory-built commercial kitchen grease *ducts listed* and *labeled* in accordance with UL 1978.
2. Grease *duct* systems or exhaust equipment *listed* for clearances less than those required in Section 506.3.6, shall be installed with the clearances specified by such listings.
3. Where commercial kitchen grease *ducts* are continuously covered on all sides with a *listed* and *labeled* field-applied grease *duct* enclosure material, system, product or method of construction specifically evaluated for such purpose in accordance with ASTM E2336, the required clearance shall be in accordance with the listing of such material, system, product or method.

(Add) **506.3.6.1 Clearance reduction.** The clearances required by Section 506.3.6 shall be permitted to be reduced in accordance with Section 308.

(Amd) **507.2.6 Clearances for Type I hood.** A Type I hood shall be installed with a clearance to combustibles of not less than 18 inches (457 mm), 3 inches (76 mm) to *limited-combustible material*, and 0 inches (0 mm) to *noncombustible material*.

Exceptions:

1. Clearance shall not be required from gypsum wallboard or 1/2-inch (12.7 mm) or thicker cementitious wallboard attached to noncombustible structures provided that a smooth, cleanable, nonabsorbent and *noncombustible material* is installed between the hood and the gypsum or cementitious wallboard over an area extending not less than 18 inches (457 mm) in all directions from the hood.
2. Type 1 hoods *listed* and *labeled* for clearances less than those required in Section 507.2.6 in accordance with UL 710 shall be installed with the clearances specified by such listings.

(Add) **507.2.6.1 Clearance reduction.** The clearances required by Section 506.3.6 shall be permitted to be reduced in accordance with Section 308.

CHAPTER 6 – DUCT SYSTEMS

(Amd) **606.2 Where required.** Smoke detectors shall be installed where indicated in Sections 606.2.1 to 606.2.3, inclusive.

Exception: Smoke detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floors and ceilings of the room or space in which the smoke is generated, or where the sole purpose of the air distribution system is to remove air from the inside of the *building* to the outside of the *building*.

CHAPTER 10 - BOILERS, WATER HEATERS AND PRESSURE VESSELS

(Add) **1001.1.1 Boilers and water heaters.** *Boilers* and *water heaters* shall also be governed by the regulations adopted under authority of chapter 540 of the Connecticut General Statutes.

CHAPTER 13 - FUEL OIL PIPING AND STORAGE

(Amd) **1301.1 Scope.** This chapter and the 2022 Connecticut Fire Safety and Fire Prevention Codes shall govern the design, installation, construction and repair of fuel oil storage and piping systems. The storage of fuel oil and flammable and combustible liquids shall be in accordance with the 2022 Connecticut Fire Safety and Fire Prevention Codes.

CHAPTER 15 – REFERENCED STANDARDS

(Amd) CSA		CSA Group 8501 East Pleasant Valley Road Cleveland, OH 44131-5516
Standard reference number—year of publication	Title	Referenced in code section number
(Add) C22.2 No. 60335-2-40-2019	Safety of Household and Similar Electric Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers	908.1, 916.1, 918.1, 918.2, 1101

(Amd) NFPA		National Fire Protection Association 1 Battery Park Quincy, MA 02169-7471
Standard reference number—year of publication	Title	Referenced in code section number
(Add) 54-21	National Fuel Gas Code101.2.2

(Amd) UL		UL LLC 333Pfungsten Road Northbrook, IL 60062
Standard reference number— year of publication	Title	Referenced in code section number
(Add) 60335-2-40-2019	Safety of Household and Similar Electric Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers	908.1, 916.1, 918.1, 918.2, 1101

(Del) **APPENDIX B – RECOMMENDED PERMIT FEE SCHEDULE.** Delete appendix.

(Del) **APPENDIX C – BOARD OF APPEALS.** Delete appendix.

AMENDMENTS TO THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE

IECC – COMMERCIAL PROVISIONS

CHAPTER 1 [CE] – SCOPE AND ADMINISTRATION

(Amd) **C101.1 Title.** The 2021 International Energy Conservation Code and this Section shall be known as the 2021 International Energy Conservation Code portion of the 2022 State Building Code, hereinafter referred to as “the code” or “this code”.

(Amd) **C101.5 Compliance.** *Residential buildings* shall meet the provisions of IECC – Residential Provisions. *Commercial buildings* shall meet the provisions of IECC – Commercial Provisions.

Exception: Temporary structures are exempt from the requirements of this code.

(Amd) **C101.5.1 Compliance materials.** The code official shall be permitted to approve specific computer software, worksheets, compliance manuals and other similar materials that meet the intent of this code.

(Add) **C101.5.2 Energy efficiency standards for products.** In addition to the requirements of this code, the testing, certification and enforcement of efficiency standards for new products sold, offered for sale or installed in the State of Connecticut shall comply with regulations adopted pursuant to section 16a-48 of the Connecticut General Statutes.

(Add) **C101.6 Administrative matters not provided for.** Administrative matters not covered by this code shall be in accordance with the provisions of Chapter 1 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Amd) **C102.1.1 Above code programs.** The State Building Inspector and the Codes and Standards Committee may deem a national, state or local energy efficiency program to exceed the energy efficiency program required by this code. Such energy efficiency program may include, but not be limited to, the Leadership in Energy and Environmental Design rating system, the Green Globes USA design program, as established by the Green Building Initiative, the National Green Building Standard, as established by the National Association of Home Builders, or an equivalent rating system approved in accordance with section 29-256a of the Connecticut General Statutes.

Buildings approved in writing by such an energy efficiency program shall be considered in compliance with this code. The requirements identified as “mandatory” in Table C407.2 shall be met.

(Amd) **C103.1 General.** Construction documents and other supporting data shall be submitted in one or more sets, or in a digital format where allowed by the building official, with each application for a permit. The construction documents shall be prepared by a registered design professional when required by the provisions of chapters 390 or 391 of the Connecticut General Statutes.

Exception: The *building official* may to waive the submission of construction documents or other supporting data if the *building official* determines they are not necessary to confirm compliance with this code.

(Amd) **C103.5 Retention of construction documents.** The *building official* shall retain one set of *approved construction documents* for a period as set forth in the records/disposition schedule adopted pursuant to chapter 188 of the Connecticut General Statutes.

(Del) **SECTION C104 – FEES.** Delete in its entirety and refer to Section 109 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Fees.

(Add) **C105.7 Posting of required inspections.** A schedule of required inspections shall be compiled by the code official. The schedule shall be posted in the building department for public view.

(Add) **C105.8 Notification of inspection and testing results.** Notification as to passage or failure, in whole or in part, of any required inspection or test shall be made in writing by the *building official* or his duly authorized representative and shall be left at the job *site* or delivered to the *permit* holder. It shall be the duty of the *permit* holder to ascertain the results of required inspections.

(Del) **SECTION C106 NOTICE OF APPROVAL.** Delete in its entirety and refer to Section 111.6 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Amd) **C108.1 Referenced codes and standards.** The codes and standards referenced in this code shall be those listed in Chapter 6, and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections C108.1.1 and C108.1.2. Any reference to an ICC code adopted as part of the 2022 Connecticut State Building Code or the 2022 Connecticut State Fire Safety Code shall mean a reference to such ICC code as amended by the State of Connecticut.

(Del) **SECTION C109 – STOP WORK ORDER.** Delete in its entirety and refer to Section 115 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Stop Work Order.

(Del) **SECTION C110 – BOARD OF APPEALS.** Delete in its entirety and refer to Section 113 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Means of Appeal.

CHAPTER 2 [CE] – DEFINITIONS

(Amd) **C201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in other codes adopted as portions of the 2022 Connecticut State Building Code, such terms shall have the meanings ascribed to them as in those codes.

(Add) **C202.1 Definitions.** Add or amend the following definitions:

(Add) **BUILDING OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. Also known as the local *building official* or code official.

(Amd) **CODE OFFICIAL.** See *building official*.

CHAPTER 4 [CE] – COMMERCIAL ENERGY EFFICIENCY

(Amd) **C402.1.1 Low energy buildings.** The following *buildings*, or portions thereof, separated from the remainder of the *building* by building thermal envelope assemblies complying with this code shall be exempt from the building thermal envelope provisions of Section C402:

1. Those with a peak design rate of energy usage less than 3.4 British thermal units per hour per square foot (Btu/h.ft²) or 1.0 watts per square foot (watt/ft²) of floor area for space conditioning purposes.
2. Those that do not contain *conditioned space*.
3. *Buildings* and structures for which heating and cooling is supplied solely by utilization of non-purchased renewable energy sources including, but not limited to, on-site wind, on-site water or on-site solar power, or wood-burning heating appliances that do not rely on backup heat from other purchased, non-renewable sources.

(Amd) **C402.5 Air leakage – thermal envelope.** New construction building thermal envelope shall be tested in accordance with Section C402.5.2 or C402.5.3. Additions, alterations, and repairs to existing building thermal envelope shall comply with Sections C402.5.1 through Section C402.5.11.1 or the building shall be tested in accordance with Section C402.5.2 or C402.5.3. Where compliance is based on such testing, the building shall also comply with Sections C402.5.7, C402.5.8 and C402.5.9.

IECC – RESIDENTIAL PROVISIONS

CHAPTER 1 [RE] – SCOPE AND ADMINISTRATION

(Amd) **R101.1 Title.** The 2021 International Energy Conservation Code and this Section shall be known as the 2021 International Energy Conservation Code portion of the 2022 Connecticut State Building Code, hereinafter referred to as “the code” or “this code”.

(Amd) **R101.5 Compliance.** *Residential buildings* shall meet the provisions of IECC – Residential Provisions. *Commercial buildings* shall meet the provisions of IECC – Commercial Provisions.

Exception: Temporary structures are exempt from the requirements of this code.

(Amd) **R101.5.1 Compliance materials.** The code official shall be permitted to approve specific computer software, worksheets, compliance manuals and other similar materials that meet the intent of this code.

(Add) **R101.5.2 Energy efficiency standards for products.** In addition to the requirements of this code, the testing, certification and enforcement of efficiency standards for new products sold, offered for sale or installed in Connecticut shall comply with regulations adopted pursuant to section 16a-48 of the Connecticut General Statutes.

(Add) **R101.6 Administrative matters not provided for.** Administrative matters not covered by this code shall be in accordance with the provisions of Chapter 1 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Amd) **R102.1.1 Above code programs.** The State Building Inspector and the Codes and Standards Committee may deem a national, state or local energy efficiency program to exceed the energy efficiency required by this code. Such energy efficiency program may include, but not be limited to, the Leadership in Energy and Environmental Design Rating System, the Green Globes USA design program, as established by the Green Building Initiative, the National Green Building Standard, as established by the National Association of Home Builders, or an equivalent rating system approved in accordance with section 29-256a of the Connecticut General Statutes.

Buildings approved in writing by such an energy efficiency program shall be considered in compliance with this code. The requirements identified as “mandatory” in Chapter 4 of this code, as applicable, shall be met.

(Amd) **R103.1 General.** Construction documents and other supporting data shall be submitted in one or more sets, or in a digital format where allowed by the building official, with each application for a permit. The construction documents shall be prepared by a registered design professional when required by the provisions of chapters 390 or 391 of the Connecticut General Statutes.

Exception: The *building official* may to waive the submission of construction documents or other supporting data if the *building official* determines they are not necessary to confirm compliance with this code.

(Amd) **R103.5 Retention of construction documents.** The *building official* shall retain one set of *approved construction documents* for a period as set forth in the records/disposition schedule adopted pursuant to chapter 188 of the Connecticut General Statutes.

(Del) **SECTION R104 – FEES.** Delete in its entirety and refer to Section 109 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Fees.

(Add) **R105.7 Posting of required inspections.** A schedule of required inspections shall be compiled by the code official. The schedule shall be posted in the building department for public view.

(Add) **R105.8 Notification of inspection and testing results.** Notification as to passage or failure, in whole or in part, of any required inspection or test shall be made in writing by the *building official* or his duly authorized representative and shall be left at the job *site* or delivered to the *permit* holder. It shall be the duty of the *permit* holder to ascertain the results of required inspections.

(Del) **SECTION R106 NOTICE OF APPROVAL.** Delete in its entirety and refer to Section 111.6 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Amd) **R108.1 Referenced codes and standards.** The codes and standards referenced in this code shall be those listed in Chapter 6, and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections C108.1.1 and C108.1.2. Any reference to an ICC code adopted as part of the 2022 Connecticut State Building Code or the 2022 Connecticut State Fire Safety Code shall mean a reference to such ICC code as amended by the State of Connecticut.

(Del) **SECTION R109 – STOP WORK ORDER.** Delete in its entirety and refer to Section 115 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Stop Work Order.

(Del) **SECTION R110 – BOARD OF APPEALS.** Delete in its entirety and refer to Section 113 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Means of Appeal.

CHAPTER 2 [RE] – DEFINITIONS

(Amd) **R201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in other codes adopted as portions of the 2022 Connecticut State Building Code, such terms shall have the meanings ascribed to them as in those codes.

(Add) **R202.1 Definitions.** Add or amend the following definitions:

(Add) **Attached Dwelling Unit.** A dwelling unit sharing demising walls, floors, ceilings or common corridors with another dwelling unit or occupied space.

(Add) **BUILDING OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. Also known as the local *building official* or code official.

(Amd) **CODE OFFICIAL.** See *building official*.

CHAPTER 4 [RE] – RESIDENTIAL ENERGY EFFICIENCY

(Amd) **R401.2.5 Additional energy efficiency.** This section establishes additional requirements applicable to all compliance approaches to achieve additional energy efficiency.

1. For buildings complying with Section R401.2.1, one of the additional efficiency package options shall be installed according to Section R408.2.
2. For buildings complying under with Section R401.2.2, the building shall meet one of the following:

- 2.1 One of the additional efficiency package Options in Section R408.2 shall be installed without including such measures in the proposed design under Section R405; or
- 2.2 The proposed design of the building under Section R405.3 shall have an annual energy cost that is less than or equal to 95 percent of the annual energy cost of the standard reference design.

The option selected for compliance shall be identified in the certificate required by Section R401.3.

(Amd) **R402.1 General (Prescriptive).** The *building thermal envelope* shall meet the requirements of Sections R402.1.1 through R402.1.5.

Exceptions:

1. The following low-energy *buildings*, or portions thereof, separated from the remainder of the *building* by building thermal envelope assemblies complying with this section shall be exempt from the building thermal envelope provisions of Section R402:
 - 1.1. Those with a peak design rate of energy usage less than 3.4 Btu/h•ft² or 1.0 watts per square foot (watt/ft²) of floor area for space conditioning purposes.
 - 1.2. Those that do not contain *conditioned space*.
 - 1.3. *Buildings* and structures for which heating and cooling is supplied solely by utilization of non-purchased renewable energy sources including, but not limited to, on-site wind, on-site water or on-site solar power, or wood-burning heating appliances that do not rely on backup heat from other purchased, non-renewable sources.
2. Log homes designed in accordance with ICC 400.

(Add) **R402.2.13 Foamed-in-place insulating material.** Pursuant to section 29-277 of the Connecticut General Statutes, foamed-in-place insulating material, except urethane foam insulation or styrene foam insulation, shall not be sold or installed in this state on or after May 28, 2013, unless the manufacturer or supplier has certified to the State Building Inspector that the material complies with the provisions of that section.

(Amd) **R402.4.1.2 Testing.** The building or dwelling unit shall be tested for air leakage. The maximum air leakage rate for any building or dwelling unit under any compliance path shall not exceed 5.0 air changes per hour or 0.28 cubic feet per minute (CFM) per square foot [0.0079 m³/(s × m²)] of dwelling unit enclosure area. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope have been sealed.

Exception: For heated, attached private garages and heated, detached private garages accessory to one- and two-family dwellings and townhouses not more than three stories above grade plane in height, building envelope tightness and insulation installation shall be considered acceptable where the items in Table R402.4.1.1, applicable to the method of construction, are field verified. Where required by the code official, an approved third party independent from the installer shall inspect both air barrier and insulation installation criteria. Heated, attached private garage space and heated, detached private garage space shall be thermally isolated from all other habitable, conditioned spaces in accordance with Sections R402.2.12 and R402.3.5, as applicable.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, where installed at the time of the test, shall be open.

4. Exterior or interior terminations for continuous ventilation systems shall be closed or sealed.
5. Heating and cooling systems, where installed at the time of the test, shall be turned off.
6. Supply and return registers, where installed at the time of the test, shall be fully open.

Exceptions:

1. When testing individual dwelling units, an air leakage rate not exceeding 0.30 cubic feet per minute per square foot [0.008 m³/(s × m²)] of the dwelling unit enclosure area, tested in accordance with ANSI/RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at a pressure of 0.2 inch w.g. (50 Pa), shall be an accepted alternative permitted in all climate zones for:
 1. Attached dwelling units.
 2. Dwelling units that are 1,500 ft² (139.4 m²) or smaller.
2. For buildings with more than seven units, a sampling protocol is allowed by an approved third party. The sampling protocol requires the first seven units to be tested without any failures. Upon successful testing of those initial seven units, remaining units can be sampled at a rate of 1 in 7. If any sampled units fails compliance with the maximum allowed air leakage rate, two additional units in the same sample set must be tested. If additional failures occur, all units in the sample set must be tested. In addition, all units in the next sample set must be tested for compliance before sampling of further units can be continued.

This exception is not allowed for multi-zone buildings that are treated as single-zone buildings by opening interior doors or by inducing equal pressures in adjacent zones.

Mechanical ventilation shall be provided in accordance with Section M1505.4 of the International Residential Code or Section 403.3.2 of the International Mechanical Code, as applicable, or with other approved means of ventilation.

(Amd) **R402.4.1.3 Leakage rate.** When complying with Section R401.2.1, the building or dwelling unit shall have an air leakage rate not exceeding 3.0 air changes per hour, when tested in accordance with Section R402.4.1.2.

(Add) **R403.3.1.1 Duct insulation values.** Minimum *duct* insulation values stated in Section 403.2.1 shall be installed R-values.

(Amd) **R403.6 Mechanical ventilation.** The buildings complying with Section R402.4.1 shall be provided with ventilation that complies with the requirements of Section M1505.4 of the International Residential Code or International Mechanical Code, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

(Amd) **R406.2 ERI compliance.** Compliance based on the Energy Rating Index (ERI) requires that the rated design meet all of the following:

1. The requirements of the sections indicated within Table 406.2.
2. Maximum value indicated in section 406.5.

(Amd) **R406.5 ERI-based compliance.** Compliance based on an ERI analysis requires that the rated proposed design and confirmed built dwelling unit be shown to have an ERI or a Home Energy Rating System (HERS) value less than or equal to 55. Compliance shall be demonstrated without the use of on-site renewable energy.

(Del) **Table R406.5 MAXIMUM ENERGY RATING INDEX.** Delete without substitution.

CHAPTER 5 – EXISTING BUILDINGS

(Amd) **R502.3.1 Building envelope.** New *building* envelope assemblies that are part of the *addition shall* comply with Sections R402.1, R402.2, R402.3.1 through R402.3.5, and R402.4.

Exceptions:

1. New envelope assemblies are exempt from the requirements of Section R402.4.1.2.
2. A visual inspection of the *building* envelope tightness and insulation *shall* be considered acceptable when the items listed in Table R402.4.1.1, applicable to the method of construction, are field verified. Where required by the code official, an *approved* party independent from the installer of the insulation *shall* inspect the air barrier and insulation.

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AMENDMENTS TO THE 2020 NFPA 70, NATIONAL ELECTRICAL CODE

ARTICLE 90 – INTRODUCTION

(Amd) 90.2 Scope.

(A) Covered. This code covers the installation of electrical conductors, equipment and raceways; signaling and communications conductors, equipment and raceways; and optical fiber cables and raceways for the following:

(1) Public and private premises, including:

- a. *buildings* and structures;
- b. utility connections, *additions* and alterations to mobile homes;
- c. utility connections to recreational vehicles; and
- d. floating *buildings*.

(2) Yards, lots, parking lots, carnivals and industrial substations.

(3) Installations of conductors and equipment that connect to the supply of electricity.

(4) Installations used by the electric utility, such as office *buildings*, warehouses, garages, machine shops and recreational *buildings* that are not an integral part of a generating plant, substation or control center.

(5) Installations supplying shore power to ships and watercraft in marinas and boatyards, including monitoring of leakage current

(6) Installations used to export electric power from vehicles to premises wiring or for bidirectional current flow

(B) Not covered. This code does not cover the following:

(1) Installations in ships, watercraft other than floating *buildings*, railway rolling stock, aircraft or automotive vehicles other than mobile homes and recreational vehicles.

(2) Installations underground in mines and self-propelled mobile surface mining machinery and its attendant electrical trailing cable.

(3) Installations of railways for generation, transformation, transmission or distribution of power used exclusively for operation of rolling stock or installations used exclusively for signaling and communications purposes.

(4) Installations of communications equipment under the exclusive control of communications utilities located outdoors or in *building* spaces used exclusively for such installations.

(5) Installations under the exclusive control of an electric utility where such installations:

- a. Consist of service drops or service laterals, and associated metering; or
- b. Are located in legally established easements, rights-of-way or by other agreements either designated by or recognized by public service commissions, utility commissions or other regulatory agencies having *jurisdiction* for such installations; or
- c. Are on property owned or leased by the electric utility for the purpose of communications, metering, generation, control, transformation, transmission or distribution of electric energy; or

- d. Are located by other written agreements either designated by or recognized by public service commissions, utility commissions, or other regulatory agencies having *jurisdiction* for such installations. These written agreements shall be limited to installations for the purpose of communications, metering, generation, control, transformation, transmission, or distribution of electric energy where legally established easements or rights-of-way cannot be obtained. These installations shall be limited to federal lands, Native American reservations through the U.S. Department of the Interior Bureau of Indian Affairs, military bases, lands controlled by port authorities and state agencies and departments, and lands owned by railroads.

(C) Special permission. The State Building Inspector may grant an exception for the installation of conductors and equipment that are not under the exclusive control of the electric utilities and are used to connect the electric utility supply system to the service-entrance conductors of the premises served, provided such installations are outside a *building* or terminate immediately inside a *building* wall.

(Amd) **90.4 Enforcement.** Administration of this code shall be in accordance with the provisions of Chapter 1 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code. For the purposes of this code, the authority having *jurisdiction* for interpreting the rules and for granting the special permission contemplated in a number of rules is the State Building Inspector. Interpretations shall be requested verbally or in writing from the Office of the State Building Inspector. Special permission shall be requested in writing using the Request for Modification of the State Building Code form available from local building departments or from the Office of the State Building Inspector, 450 Columbus Boulevard, Suite 1303, Hartford CT 06103. www.portal.ct.gov/DAS.

Where this *Code* contains requirements for a new product, construction, or material that has an effective date after the adoption date of the 2022 Connecticut State Building Code, those requirements are not part of this Code.

CHAPTER 1 – GENERAL

ARTICLE 100 – Definitions.

(Amd) **Authority having jurisdiction.** The organization, office or individual responsible for approving equipment, material, an installation, or a procedure. The local *building official* has the responsibility for approving *construction documents*, issuing *permits*, approving materials and procedures and for making inspections from time to time as the construction process requires. The State Building Inspector has the responsibility for administering the Connecticut State Building Code, interpreting the Connecticut State Building Code and for granting exceptions from specific rules of the Connecticut State Building Code. See the definition of “Special Permission,” and Article 90.4.

(Amd) **Special Permission.** For the purposes of this code, the authority having *jurisdiction* for granting the special permission contemplated in a number of rules is the State Building Inspector. Special permission shall be requested in writing using the Request for Modification of the State Building Code form available from local building departments or from the Office of the State Building Inspector, 450 Columbus Boulevard, Suite 1303, Hartford CT 06103. www.portal.ct.gov/DAS.

CHAPTER 2 – WIRING AND PROTECTION

(Amd) **210.8 Ground-Fault Circuit-Interrupter Protection for Personnel.**

(F) Outdoor Outlets. All outdoor outlets for dwellings, other than those covered in 210.8 (A)(3), Exception to (3), that are supplied by single-phase branch circuits rated 150 volts to ground or less, 50 amperes or less, shall have ground-fault circuit-interrupter protection for personnel.

Exception No. 1: Ground-fault circuit-interrupter protection shall not be required on lighting outlets other than those covered in 210.8(C).

Exception No. 2: Ground-fault circuit-interrupter protection shall not be required for mini-split-type heating/ventilating/air-conditioning (HVAC) equipment and other HVAC units employing power conversion equipment as a means to control compressor speed.

(Amd) 230.46 Spliced and Tapped Conductors. Service-entrance conductors shall be permitted to be spliced or tapped in accordance with 110.14, 300.5(E), 300.13, and 300.15. Power distribution blocks, pressure connectors, and devices for splices and taps shall be listed.

(Amd) 230.85 Emergency Disconnects. For new one- and two-family dwelling units, all service conductors shall terminate in disconnecting means having a short-circuit current rating equal to or greater than the available fault current, installed in a readily accessible outdoor location. If more than one disconnect is provided, they shall be grouped. Each disconnect shall be one of the following:

(1) Service disconnects marked as follows:

EMERGENCY DISCONNECT,
SERVICE DISCONNECT

(2) Meter disconnects installed per 230.82(3) and marked as follows:

EMERGENCY DISCONNECT,
METER DISCONNECT,
NOT SERVICE EQUIPMENT

(3) Other listed disconnect switches or circuit breakers on the supply side of each service disconnect that are suitable for use as service equipment and marked as follows:

EMERGENCY DISCONNECT,
NOT SERVICE EQUIPMENT

Markings shall comply with 110.21(B).

(Amd) 250.50 Grounding Electrode System. All grounding electrodes as described in 250.52(A)(1) through (A)(7) that are available at each building or structure served shall be bonded together to form the grounding electrode system. Where none of these grounding electrodes exist, one or more of the grounding electrodes specified in 250.52(A)(4) through (A)(8) shall be installed and used.

Exception: Concrete-encased electrodes of existing buildings or structures shall not be required to be part of the grounding electrode system where the steel reinforcing bars or rods are not accessible for use without disturbing the concrete.

(Amd) **250.68(C) Grounding Electrode Conductor Connections.** Grounding electrode conductors and bonding jumpers shall be permitted to be connected at the following locations and used to extend the connection to an electrode(s):

(1) Interior metal water piping that is electrically continuous with a metal underground water pipe electrode and is located not more than 1.52 m (5 ft) from the point of entrance to the building shall be permitted to extend the connection to an electrode(s). Interior metal water piping located more than 1.52 m (5 ft) from the point of entrance to the building shall not be used as a conductor to interconnect electrodes of the grounding electrode system.

Exception: In industrial, commercial, and institutional buildings or structures, if conditions of maintenance and supervision ensure that only qualified persons service the installation, interior metal water piping located more than 1.52 m (5 ft) from the point of entrance to the building shall be permitted as a bonding conductor to interconnect electrodes that are part of the grounding electrode system, or as a grounding electrode conductor, if the entire length, other than short sections passing perpendicularly through walls, floors, or ceilings, of the interior metal water pipe that is being used for the conductor is exposed.

(2) The metal structural frame of a building shall be permitted to be used as a conductor to interconnect electrodes that are part of the grounding electrode system, or as a grounding electrode conductor. Hold-down bolts securing the structural steel column that are connected to a concrete-encased electrode complying with 250.52(A)(3) and located in the support footing shall be permitted to connect the metal structural frame of a building or structure to the concrete encased grounding electrode. The hold-down bolts shall be connected to the concrete-encased electrode by welding, exothermic welding, the usual steel tie wires, or other approved means.

(3) A rebar-type concrete-encased electrode installed in accordance with 250.52(A)(3) with an additional rebar section extended from its location within the concrete footing to an accessible location that is not subject to corrosion shall be permitted for connection of grounding electrode conductors and bonding jumpers in accordance with the following:

- a. The additional rebar section shall be continuous with the grounding electrode rebar or shall be connected to the grounding electrode rebar and connected together by the usual steel tie wires, exothermic welding, welding, or other effective means.
- b. The rebar extension shall not be exposed to contact with the earth without corrosion protection.
- c. Rebar shall not be used as a conductor to interconnect the electrodes of grounding electrode systems.

CHAPTER 3 – WIRING METHODS AND MATERIALS

(Add) **300.4.1 Drilling and notching.**

(A) Structural floor, wall, ceiling and roof members.

(1) Solid sawn lumber. Notches in solid lumber joists, rafters and beams shall not exceed one-sixth of the depth of the member, shall not be longer than one-third of the depth of the member and shall not be located in the middle one-third of the span. Notches at the ends of the member shall not exceed one-fourth the depth of the member. The tension side of members 4 inches or greater in nominal thickness shall not be notched except at the ends of the members. The diameter of holes bored or cut into members shall not exceed one-third the depth of the member. Holes shall not be closer than 2 inches to the top or bottom of the member, or to any other hole located in the member. Where the member is also notched, the hole shall not be closer than 2 inches to the notch.

Exception: Notches on cantilevered portions of rafters are permitted provided the dimension of the remaining portion of the rafter is not less than 4-inch nominal and the length of the cantilever does not exceed 24 inches.

(2) Engineered wood products. Cuts, notches and holes bored in trusses, structural composite lumber, structural glue-laminated members or I-joists are prohibited except where permitted by the manufacturer's recommendations or where the effects of such alterations are specifically considered in the design of the member by a *registered design professional*.

(3) Studs. Any stud in an *exterior wall* or interior bearing partition may be cut or notched to a depth not exceeding 25 percent of its width. Studs in nonbearing interior partitions may be notched to a depth not exceed 40 percent of a single stud width. Any stud may be bored or drilled, provided that the diameter of the resulting hole is no greater than 40 percent of the stud width, the edge of the hole is no closer than 5/8 inch to the edge of the stud and the hole is not located in the same section as a cut or notch.

Exception No. 1: A stud may be bored or drilled to a diameter not exceeding 60 per cent of its width, provided that such studs located in exterior walls or interior bearing partitions are doubled and not more than two successive studs are bored.

Exception No. 2: Approved stud shoes may be used when installed in accordance with the manufacturer's recommendations.

(4) Top plates. When wiring, conduit, piping or ductwork is placed in or partly in an *exterior wall* or interior bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 per cent of its width, a galvanized metal tie of not less than 0.054 inch thick (1.37 mm) (16 ga) and 1 ½ inches (38 mm) wide shall be fastened across and to the plate at each side of the opening with not less than eight 10d (0.148 inch diameter) nails at each side or equivalent. The metal tie must extend a minimum of 6 inches past the opening.

Exception: When the entire side of the wall with the notch or cut is covered by wood structural panel sheathing.

CHAPTER 4 – EQUIPMENT FOR GENERAL USE

(Amd) **440.14 Location** – Add exception No. 3.

(Add) **Exception No. 3:** Where the interior section of a factory packaged split system is fed solely from the exterior section of the system and the disconnecting means for the exterior section is capable of being locked in the open position, a separate disconnecting means for the interior section shall not be required within sight from that section. The provisions for locking or adding a lock to the disconnecting means shall remain in place with or without the lock installed.

CHAPTER 5 - SPECIAL OCCUPANCIES

(Amd) **517.13 Equipment Grounding Conductor for Receptacles and Fixed Electrical Equipment in Patient Care Spaces.** Wiring in patient care spaces shall comply with 517.13(A) and (B).

Exception No. 1: Luminaires more than 2.3 m (7½ ft) above the floor and switches located outside of the patient care vicinity shall be permitted to be connected to an equipment grounding return path complying with 517.13(A) or (B).

517.13(A) Wiring Methods. All branch circuits serving patient care spaces shall be provided with an effective ground-fault current path by installation in a metal raceway system or a cable having a metallic armor or sheath assembly. The metal raceway system, metallic cable armor, or sheath assembly shall itself qualify as an equipment grounding conductor in accordance with 250.118.

517.13(B) Insulated Equipment Grounding Conductors and Insulated Equipment Bonding Jumpers.

517.13(B)(1) General. The following shall be directly connected to an insulated copper equipment grounding conductor that is clearly identified along its entire length by green insulation and installed with the branch circuit conductors in the wiring methods as provided in 517.13(A):

- (1) The grounding terminals of all receptacles other than isolated ground receptacles
- (2) Metal outlet boxes, metal device boxes, or metal enclosures
- (3) All non-current-carrying conductive surfaces of fixed electrical equipment likely to become energized that are subject to personal contact, operating at over 100 volts
- (4) Metal faceplates, by means of a metal mounting screw(s) securing the faceplate to a metal yoke or strap of a receptacle or to a metal outlet box

Exception No. 1: For other than isolated ground receptacles, an insulated equipment bonding jumper that directly connects to the equipment grounding conductor is permitted to connect the box and receptacle(s) to the equipment grounding conductor. Isolated ground receptacles shall be connected in accordance with 517.16.

517.13(B)(2) Sizing. Equipment grounding conductors and equipment bonding jumpers shall be sized in accordance with 250.122.

(Amd) **525.5 Overhead Conductor Clearances**

(B) Clearances to Portable Structures

(2) Over 600 Volts.

(Add) **Exception:** Tents erected and dismantled under the supervision of a licensed electrician or other person approved by the authority having *jurisdiction* may be placed within the 15 feet (4.5 m) space provided the finished height of the tent is a minimum of 10 feet (3.0 m) below the conductors.

CHAPTER 6 – SPECIAL EQUIPMENT

(Del) **680.4 Inspections After Installation.** Delete in its entirety without substitution.

CHAPTER 7 - SPECIAL CONDITIONS

700.3 Tests and Maintenance

(Del) **(F) Temporary Source of Power for Maintenance or Repair of the Alternate Source of Power.** Delete in its entirety without substitution.

700.7 Signs.

(Amd) **(A) Emergency sources.** A sign shall be placed at the service-entrance equipment, at the meter location, and on any equipment up to the service entrance-equipment indicating type and location of on-site emergency power sources.

Exception: A sign shall not be required for individual unit equipment as specified in 700.12(I).

701.7 Signs.

(Amd) **(A) Mandated standby.** A sign shall be placed at the service entrance, at the meter location, and on any equipment up to the service entrance-equipment indicating type and location of on-site legally required standby power sources.

Exception: A sign shall not be required for individual unit equipment as specified in 701.12(J).

702.7 Signs.

(Amd) **(A) Standby.** A sign shall be placed at the service-entrance equipment, at the meter location, and on any equipment up to the service-entrance equipment for all installations that indicates the type and location of on-site optional standby power sources. For one- and two-family dwelling units, a sign shall be placed at the disconnecting means required in 230.85 that indicates the location of each permanently installed on-site optional standby power source disconnect or means to shut down the prime mover as required in 445.18(D).

(Amd) **725.121(C) Marking.** The power sources for limited power circuits in 725.121(A)(3), limited power circuits for listed audio/video equipment, listed information technology equipment, listed communications equipment, and listed industrial equipment in 725.121(A)(4) shall have a label indicating the maximum voltage and rated current output per conductor for each connection point on the power source. Where multiple connection points have the same rating, a single label shall be permitted to be used. The labeling requirement shall apply to equipment with a rated current per conductor 0.3 amperes or greater.

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AMENDMENTS TO THE 2021 INTERNATIONAL SWIMMING POOL AND SPA CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **101.1 Title.** The 2021 International Swimming Pool and Spa Code shall be known as the 2021 International Swimming Pool and Spa Code portion of the 2022 Connecticut State Building Code, hereinafter referred to as “the code” or “this code”.

(Amd) **102.5 Historic buildings.** 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.

(Add) **102.9.1 Health Department regulations.** Pursuant to section 19a-36 of the Connecticut General Statutes no person shall construct, substantially alter or reconstruct a *public swimming pool* until the construction documents and water discharge provisions have been approved by the Department of Public Health, in accordance with the regulations adopted pursuant to section 19a-36 of the Connecticut General Statutes.

Exception: Swimming pools accessory to owner-occupied, detached one-, or two- family residences and swimming pools accessory to a single one-family townhouse where the pool is intended to be used exclusively by the owner and invited guests.

(Del) **SECTION 103 CODE COMPLIANCE AGENCY.** Delete in its entirety and refer to Section 103 of the 2021 International Building Code portion or Section R103 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Code Compliance Agency.

(Del) **SECTION 104 DUTIES AND POWERS OF CODE OFFICIAL.** Delete in its entirety and refer to Section 104 of the 2021 International Building Code portion or Section R104 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Duties and Powers of the Building Official.

(Del) **SECTION 105 PERMITS.** Delete in its entirety and refer to Section 105 of the 2021 International Building Code portion or Section R105 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Permits.

(Del) **SECTION 106 CONSTRUCTION DOCUMENTS.** Delete in its entirety and refer to Section 107 of the 2021 International Building Code portion or Section R106 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Construction Documents.

(Del) **SECTION 107 NOTICE OF APPROVAL** in its entirety and refer to Section 111.6 of the 2021 International Building Code portion or Section R110.6 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code.

(Del) **SECTION 108 FEES.** Delete in its entirety and refer to Section 109 of the 2021 International Building Code portion or Section R107 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Fees.

(Del) **SECTION 109 SERVICE UTILITIES.** Delete in its entirety and refer to Section 112 of the 2021 International Building Code portion or Section R110 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Certificate of Occupancy.

(Del) **SECTION 110 INSPECTIONS.** Delete in its entirety and refer to Section 110 of the 2021 International Building Code portion or Section R109 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Inspections.

(Del) **SECTION 111 – MEANS OF APPEALS.** Delete in its entirety and refer to Section 113 of the 2021 International Building Code portion or Section R112 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Means of Appeal.

(Del) **SECTION 112 – BOARD OF APPEALS.** Delete in its entirety.

(Del) **SECTION 113 - VIOLATIONS.** Delete in its entirety and refer to Section 114 of the 2021 International Building Code portion or Section R113 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Violations.

(Del) **SECTION 114 – STOP WORK ORDERS.** Delete in its entirety and refer to Section 115 of the 2021 International Building Code portion or Section R114 of the 2021 International Residential Code portion, as applicable, of the 2022 Connecticut State Building Code – Violations.

CHAPTER 2 – DEFINITIONS

(Amd) **201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in other codes adopted as portions of the State Building Code, such terms shall have the meanings ascribed to them as in those codes.

(Add) **202.1 Definitions.** Amend or add the following definitions:

(Add) **BUILDING OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. Also known as the local *building official* or the code official.

(Amd) **CODE OFFICIAL.** See *Building official*.

(Amd) **DESIGN PROFESSIONAL.** An individual who is registered or licensed by the Department of Consumer Protection pursuant to chapters 390, 391, 396 or 396a of Connecticut General Statutes to practice their respective design profession and acting within the scope of his or her license and practice discipline.

(Amd) **PUBLIC SWIMMING POOL (Public Pool).** An artificial basin constructed of concrete, steel, fiberglass or other impervious material and equipped with a controlled water supply that is intended for recreational bathing, swimming, diving or therapeutic purposes and includes, but is not limited to, any related equipment, structure, area or enclosure intended for the use of any person using or staffing such pool. “Public pool” does not include an artificial basin provided with a controlled water supply that is intended for use as a *residential pool*, except when such basin is used for commercial or business purposes at such residence. The following subclasses of public pools:

(A) Public swimming pool, which is a pool used or intended to be used for recreational bathing, swimming or water recreation activities.

(B) Public wading pool, which is a pool principally used or intended to be used for wading and recreational bathing by small children.

(C) Public spa, which is a pool used for recreational bathing in conjunction with a high-velocity air system, a high-velocity water recirculation system, hot water, cold water, a mineral bath or any combination thereof.

(D) Public diving pool, which is a pool used solely for diving or the instruction and practicing of diving techniques.

(E) Special purpose public pool, which is a pool used for a specialized purpose, including, but not limited to, a splash pad or spray park where the water is recirculated, water flume, pool used for scuba diving instruction, therapeutic pool, hydrotherapy pool or a pool used in an aquatics program for persons with disabilities. Special purpose public pool does not include a flotation vessel, which shall not be subject to review by the Department of Public Health. For purposes of this subparagraph, “flotation vessel” means a tank devoid of light and sound and containing salt water in which a person floats for purposes including, but not limited to, meditation, relaxation and alternative medicine.

RESIDENTIAL SWIMMING POOL (Residential Pool). A pool intended for use that is accessory to a residential setting and available only to the household and its guests that is capable of containing water more than 24” deep. Other pools shall be considered to be public pools for purposes of this code.

Type O. A nondiving residential pool.

Types I–V. Residential pools suitable for the installation of diving equipment by type.

SPA. A product intended for the immersion of persons in temperature-controlled water circulated in a closed system, and not intended to be drained and filled with each use. A spa usually includes a filter, an electric, solar or gas heater, a pump or pumps, and a control, and can include other equipment, such as lights, blowers, and water-sanitizing equipment.

Nonselved-contained spa. A factory-built *spa* in which the water heating and circulating equipment is not an integral part of the product. Nonselved-contained spas may employ separate components such as an individual filter, pump, heater and controls, or they can employ assembled combinations of various components.

Permanent residential spa. A spa, intended for use that is accessory to a *residential* setting and available to the household and its guests and where the water heating and water-circulating equipment is not an integral part of the product. The spa is intended as a permanent plumbing fixture and not intended to be moved.

Portable residential spa. A spa intended for use that is accessory to a *residential* setting and available to the household and its guests and where it is either self-contained oronselved-contained.

Public spa. See “*public swimming pool*”.

Self-contained spa. A factory-built spa in which all control, water heating and water-circulating equipment is an integral part of the product. Self-contained spas may be permanently wired or cord connected.

CHAPTER 3 – PROVISIONS FOR ALL COMPLIANCE METHODS

(Amd) **302.1 Electrical.** Electrical requirements for aquatic facilities shall be in accordance with the 2020 NFPA 70 portion of the 2022 Connecticut State Building Code.

Exception: Internal wiring for portable *residential* spas and portable *residential* exercise spas.

(Amd) **304.2 Determination of impacts based on location.** Pools and spas that are located in flood hazard areas established by the International Building Code or the International Residential Code including above-ground pools, on-ground pools and in-ground pools that involve placement of fill, shall comply with Section 304.2.1 or 304.2.2.

Exception: Pools located in riverine flood hazard areas which are outside of designated floodways.

(Amd) **305.1.1 Construction fencing required.** A temporary enclosure shall be installed for in ground *swimming pools* and *spas* from the time that construction occurs up to the time that the permanent barrier is completed. The temporary enclosure shall be a minimum of 4 feet (1219) in height, shall have no openings that will allow passage of a 4-inch (102 mm) sphere and shall be equipped with a positive latching device on any openings.

(Amd) **305.6 Natural barriers.** In the case where the pool or spa area abuts the edge of a lake or other natural body of water, public access is not permitted or allowed along the shoreline, and required barriers extend to and beyond the water's edge not less than 18 inches (457 mm), a barrier is not required between the natural body of water shoreline and the pool or spa when approved by the State Building Inspector.

(Amd) **305.7 Natural topography.** Natural topography that prevents direct access to the pool or spa area shall include but not be limited to mountains and natural rock formations. A natural barrier *approved* by the State Building Inspector shall be acceptable provided that the degree of protection is not less than the protection afforded by the requirements of Sections 305.2 through 305.5.

(Del) **Section 306 DECKS.** Delete section in its entirety.

(Del) 307.1.2 Colors and finishes. Delete section and subsections in its entirety.

(Del) 307.2.4 Surface conditions. Delete section in its entirety.

(Del) **Section 308 DIMENSIONAL DESIGN.** Delete section in its entirety.

(Amd) **311.3 Water velocity.** The water velocity in suction and return piping For *residential* pools and spas shall not exceed 8 fps (2.4 mps). All water velocity calculations shall be based on the design flow rate specified for each recirculation system.

(Del) **311.6 Pressure or vacuum gauge.** Delete section in its entirety.

(Del) **311.7 Flow measurement.** Delete section in its entirety.

(Del) **313.7 Emergency shutoff switch.** Delete section in its entirety.

(Del) **Section 318 WATER SUPPLY.** Delete section in its entirety.

(Del) **Section 319 SANITIZING EQUIPMENT.** Delete section in its entirety.

(Del) **321.2 Artificial lighting required.** Delete section and subsections in its entirety.

(Del) **321.3 Emergency illumination.** Delete section in its entirety.

(Add) **323.4 Pool alarm.** Pursuant to section 29-265a of the Connecticut General Statutes, no building permit shall be issued for the construction or substantial alteration of a swimming pool at a residence occupied by, or being built for, one or more families unless a pool alarm is installed with the swimming pool. As used in this section, "pool alarm" means a device that emits a sound of at least 50 decibels when a person or an object weighing 15 pounds (6.8 kg) or more enters the water in a swimming pool.

Exception: Hot tubs and portable spas shall be exempt from this requirement.

(Del) **Section 324 EQUIPMENT ROOMS.** Delete section in its entirety.

(Del) **Section 325 INDOOR AIR QUALITY.** Delete section in its entirety.

(Del) **CHAPTER 4 – PUBLIC SWIMMING POOLS.** Delete chapter in its entirety.

(Del) **CHAPTER 5 – PUBLIC SPAS AND PUBLIC EXERCISE SPAS.** Delete chapter in its entirety.

(Del) **CHAPTER 6 – AQUATIC RECREATIONAL FACILITIES.** Delete chapter in its entirety.

(Del) **APPENDIX A – BOARD OF APPEALS.** Delete appendix in its entirety.

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AMENDMENTS TO THE 2021 INTERNATIONAL RESIDENTIAL CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **R101.1 Title.** The 2021 *International Residential Code* and this section *shall* be known as the 2021 International Residential Code portion of the 2022 Connecticut State Building Code, hereinafter referred to as “the code” or “this code.”

(Amd) **R101.2 Scope.** The provisions of this code *shall* apply to the construction, *alteration*, movement, enlargement, replacement, *repair, equipment*, use and occupancy, location, removal and demolition of detached *one- and two-family dwellings* and *townhouses* not more than three stories above grade plane in height with a separate *means of egress* and their *accessory structures* not more than three stories above grade plane in height.

Exceptions:

1. Live/work units in one- and two-family dwellings, 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 permitted to comply with the requirements of the 2021 International Residential Code portion of the 2022 Connecticut State Building Code.
2. A care facility for three or fewer persons receiving custodial care within a dwelling unit shall be permitted to be constructed in accordance with this code.
3. The following shall be permitted to be constructed in accordance with this code where provided with a residential fire sprinkler system complying with Section P2904:
 - 3.1. Live/work units located in townhouses and complying with the requirements of Section 419 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.
 - 3.2. Owner-occupied lodging houses with five or fewer guestrooms.
 - 3.3. A care facility with three or fewer persons receiving medical care within a dwelling unit.

(Add) **R101.4 Referenced codes and regulations.**

(Add) **101.4.1 Gas.** The *International Fuel Gas Code* is not adopted by the State of Connecticut. Any references to the *International Fuel Gas Code* within the body of this code *shall* be considered references to requirements of NFPA 2, *Hydrogen Technologies Code*, NFPA 54, *National Fuel Gas Code* and NFPA 58, *Liquefied Petroleum Gas Code*.

(Add) **R101.4.2 Private sewage disposal.** The *International Private Sewage Disposal Code* is not adopted by the State of Connecticut. Private sewage disposal systems *shall* be designed and installed in accordance with the Public Health Code adopted under authority of section 19a-36 of the Connecticut General Statutes. Any reference to the *International Private Sewage Disposal Code* within the body of this code *shall* be deemed a reference to the regulations adopted pursuant to section 19a-36 of the Connecticut General Statutes, known as the Public Health Code.

(Add) **R101.4.3 Property maintenance.** The *International Property Maintenance Code* is not adopted by the State of Connecticut. Property maintenance *shall* be in accordance with the requirements of this code or the requirements of local property maintenance codes when such codes are adopted by the town, city or borough. References to the *International Property Maintenance Code* found within the body of the model document *shall* be considered null and void.

(Add) **R101.4.4 Connecticut State Fire Safety Code.** References to the *International Fire Code* within the body of the model document *shall* be considered to be references to the 2022 Connecticut State Fire Safety Code.

(Add) **R101.4.5 Applicable electrical code.** The applicable electrical code for *buildings* constructed under this code is the 2020 NFPA 70 *National Electrical Code* portion of the 2022 Connecticut State Building Code.

(Add) **R101.4.6 Demolition of structures.** The demolition of structures *shall* be conducted in accordance with the State Demolition Code as found in chapter 541 of the Connecticut General Statutes.

(Amd) **R102.4 Referenced codes and standards.** The codes and standards referenced in this code *shall* be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2. Any reference to the ICC codes *shall* mean the 2022 Connecticut State Building Code adopted pursuant to section 29-252 of the Connecticut General Statutes.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the *equipment* or appliance, the conditions of the listing and manufacturer's instructions *shall* apply.

(Amd) **R102.5 Appendices.** The following appendices of the 2021 *International Residential Code* are hereby specifically adopted and included in this code: E; F; G; H; K; O; P; Q and U.

(Amd) **R102.7 Existing structures.** The legal occupancy of any *building* or structure existing on the date of adoption of this code *shall* be permitted to continue without change, except as specifically covered in this code.

(Del) **SECTION R103 – DEPARTMENT OF BUILDING SAFETY.** Delete Section R103 in its entirety and replace with the following:

(Add) **SECTION R103 – ENFORCEMENT AGENCY**

(Add) **R103.1 Creation of enforcement agency.** Each town, city and borough *shall* create an agency whose function is to enforce the provisions of this code. The official in charge thereof *shall* be known as the *building official*.

(Add) **R103.2 Appointment.** Pursuant to section 29-260 of the Connecticut General Statutes, the chief executive officer of any town, city or borough *shall* appoint an officer to administer this code, and this officer *shall* be known as the "*building official*" and referred to herein as the *building official*, *local building official* or code official.

(Add) **R103.3 Employees.** In accordance with the prescribed procedures and regulations of the town, city or borough, and with the concurrence of the appointing authority, the *building official shall* have the authority to appoint an assistant *building official*, related technical officers, inspectors, plan examiners and other employees. Such employees *shall* have the powers as regulated by the town, city or borough, and by the State of Connecticut.

(Add) **R103.4 Restriction of employees.** An official or employee connected with the agency created to enforce the provisions of this code pursuant to Section R103.1, except one whose only connection with it is that of a member of the board of appeals established under the provisions of Section R112, *shall* not be engaged in, or directly or indirectly connected with, the furnishing of labor, materials or appliances for the construction, *addition, alteration, repair* or maintenance of a *building* located in the town, city or borough in which such official or employee is employed, or the preparation of *construction documents* therefore, unless that person is the *owner* of the *building*. Such officer or employee *shall* not engage in any work that conflicts with official duties or with the interests of the agency.

(Amd) **R104.1 General.** The *building official* is hereby authorized and directed to enforce the provisions of this code. The *building official shall* have the authority to adopt policies and procedures in order to clarify the application of its provisions. Such policies and procedures *shall* be in compliance with the intent and purpose of this code. Such policies and procedures *shall* not have the effect of waiving requirements specifically provided for in this code, nor *shall* they have the effect of establishing requirements in excess of those set forth in this code.

(Add) **R104.1.1 Rule-making authority.** Pursuant to subsection (a) of section 29-252 of the Connecticut General Statutes, the State Building Inspector and the Codes and Standards Committee *shall*, jointly, with the approval of the Commissioner of Administrative Services, adopt and administer the Connecticut State Building Code for the purpose of regulating the design, construction and use of *buildings* or structures to be erected and the *alteration of buildings* or structures already erected and make such amendments thereto as they, from time to time, deem necessary or desirable.

(Amd) **R104.6 Right of entry.** Pursuant to subsection (d) of section 29-261 of the Connecticut General Statutes, the *building official* or his assistant *shall* have the right of entry to such *buildings* or structures, except single-family residences, for the proper performance of his duties between the hours of nine a.m. and five p.m., except that in the case of an emergency he *shall* have the right of entry at any time, if such entry is necessary in the interest of public safety. Pursuant to section 29-393 of the Connecticut General Statutes, on receipt of information from the local fire marshal or from any other authentic source that any *building* in his *jurisdiction*, due to lack of *exit* facilities, fire, deterioration, catastrophe or other cause, is in such condition as to be a hazard to any person or persons, the *building official* or his assistant *shall* immediately make inspection.

(Amd) **R104.10 Modifications.** Modifications, variations, or exemptions from and approval of equivalent or alternative compliance with the requirements of this code *shall* be in accordance with the provisions of Sections 104.10.1 to 104.10.4, inclusive.

(Del) **R104.10.1 Flood hazard areas.** Delete and substitute the following:

(Add) **R104.10.1 Connecticut State Building Code.** Pursuant to subsection (b) of section 29-254 of the Connecticut General Statutes, the State Building Inspector may grant modifications, variations or exemptions from, or approve equivalent or alternative compliance with, the Connecticut State Building Code where strict compliance with the Connecticut State Building Code would entail practical difficulty or unnecessary hardship, or is otherwise adjudged unwarranted, provided the intent of the law *shall* be observed and public welfare and safety be assured. Any person aggrieved by any decision of the State Building Inspector may appeal to the Codes and Standards Committee not later than 30 days after mailing of the decision.

(Add) **R104.10.1.1 Action on application.** The application for modification, variation, exemption from or approval of equivalent or alternative compliance with the requirements of the Connecticut State Building Code *shall* be made on a form supplied by the State Building Inspector, which *shall* be submitted by the applicant to the *building official*. Pursuant to subsection (b) of section 29-254 of the Connecticut General Statutes, any such application received by a *building official shall* be forwarded to the State Building Inspector within 15 business days of receipt by such *building official*. The application *shall* include the *building official's* comments on the merits of the application, and *shall* be signed by the *building official*.

(Add) **R104.10.1.2 Records.** The application for modification, variation, exemption or approval of equivalent or alternative compliance and the decision of the State Building Inspector *shall* be in writing and *shall* be officially recorded with the application for a building *permit* in the permanent records of the building department.

(Add) **R104.10.2 Accessibility exemption.** Pursuant to subsection (b) of section 29-269 of the Connecticut General Statutes, any variation of or exemption from any provisions relating to accessibility to, use of and egress from, *buildings* and structures as required herein *shall* be permitted only when approved by the State Building Inspector. Any person aggrieved by the decision of the State Building Inspector may appeal to the Codes and Standards Committee within 30 days after such decision has been rendered.

(Add) **R104.10.3 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. Exemptions *shall* be granted in accordance with Section R104.10.1 of this code.

(Add) **R104.10.4 Urban homesteading property exemption.** Pursuant to section 29-259 of the Connecticut General Statutes, exemptions may be granted to the provisions of this code for property acquired by an urban homesteading agency, pursuant to section 8-169r of the Connecticut General Statutes, and transferred to a qualified applicant pursuant to section 8-169s of the Connecticut General Statutes; provided such exemptions *shall* not affect the safe design, use or construction of such property. Exemptions *shall* be granted in accordance with Section R104.10.1 of this code.

(Add) **R104.11.2 Research reports.** Submission to the local *building official* of a valid research report prepared by an *approved* evaluation service that supports the efficacy of use of any material, appliance, *equipment* or method of construction not specifically provided for in this code, or that demonstrates compliance with this code, may be deemed evidence of compliance with this code.

(Amd) **R105.1 Required.** Any *owner* or *owner's* authorized agent who intends to construct, enlarge, alter, *repair*, move, demolish or change the occupancy of a *building* or structure, or to move a *lot line* that will affect any existing *building* or structure, or to erect, install, enlarge, alter, *repair*, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, *shall* first make application to the *building official* and obtain the required *permit*.

(Add) **R105.1.1 By whom application is made.** Pursuant to section 29-263 of the Connecticut General Statutes, application for a *permit shall* be made by the *owner* or by an authorized agent. If the authorized agent is a contractor, such contractor *shall* follow the provisions of section 20-338b of the Connecticut General Statutes. The applicant *shall* include the full names and addresses of the *owner*, agent and the responsible officers, if the *owner* or agent is a corporate body.

(Add) **R105.1.2 Permit issuance to a home improvement contractor.** No *permit shall* be issued to a contractor who is required to be registered pursuant to chapter 400 of the Connecticut General Statutes, for work to be performed by such contractor, unless the name, business address and Department of Consumer Protection registration number of such contractor is clearly marked on the application for *permit*, and the contractor has presented such contractor's certificate of registration as a home improvement contractor.

(Amd) **R105.2 Work exempt from permit.** Exemption from the *permit* requirements of this code *shall* not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws, statutes, regulations or ordinances of the *jurisdiction*. *Permits shall* not be required for the following work:

Building:

1. Other than *storm shelters*, one-story detached *accessory structures* used as tool and storage sheds, playhouses and similar uses, provided the floor area is not greater than 200 square feet (18.58 m²).

2. Fences, other than swimming pool barriers, not over 7 feet (2134 mm) high.
3. Retaining walls that are not higher than 3 feet (914 mm) measured from finished grade at the bottom of the wall to finished grade at the top of the wall, unless supporting a surcharge.
4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to *diameter* or width does not exceed 2 to 1.
5. Sidewalks, driveways and on-grade *concrete* or *masonry* patios not more than 30 inches (762 mm) above adjacent grade and not over any *basement* or *story* below.
6. Painting, papering, tiling, carpeting, cabinets, countertops and similar finish work not involving structural changes or *alterations*.
7. Prefabricated *swimming pools* that are equal to or less than 24 inches (610 mm) deep.
8. Swings, nonhabitable tree houses and other playground equipment.
9. Window awnings supported by an *exterior wall* which do not project more than 54 inches (1372 mm) from the *exterior wall* and which do not require additional support.
10. Decks and ramps not exceeding 200 square feet (18.58 m²) in area, that are not more than 30 inches (762 mm) above grade at any point, are not attached to a *dwelling*, *do not require guards*, and do not serve the *exit* door required by Section R311.4.
11. *Repairs* that are limited to 25 percent of roof covering and *building* siding within one calendar year.

Electrical:

1. *Listed* cord-and-plug connected temporary decorative lighting.
2. Reinstallation of attachment plug receptacles but not the outlets therefor.
3. Replacement of branch circuit overcurrent devices of the required capacity in the same location.
4. Electrical wiring, devices, appliances, apparatus or *equipment* operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
5. Minor *repair* work, including the replacement of lamps and fuses or the connection of *approved* portable electrical equipment to *approved* permanently installed receptacles.

Gas:

1. Portable heating or cooking appliances with a self-contained fuel supply.
2. Replacement of any minor part that does not alter approval of *equipment* or make such *equipment* unsafe.
3. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Mechanical:

1. Portable heating appliances with a self-contained fuel supply.
2. Portable *ventilation* appliances.
3. Portable cooling units.
4. Steam, hot- or chilled-water piping contained within any heating or cooling *equipment* regulated by Chapters 18 to 24, inclusive, of this code.
5. Replacement of any minor part that does not alter approval of *equipment* or make such *equipment* unsafe.
6. Portable evaporative coolers.
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
8. Portable fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:

1. The stopping of leaks in *drains*, water, soil, waste or vent pipe; provided if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work *shall* be considered as new work and a *permit shall* be obtained and inspection made as provided in Sections R105 and R109 of this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such *repairs* do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

(Amd) **R105.3.1 Action on application.** Pursuant to section 29-263 of the Connecticut General Statutes, the *building official shall* examine or cause to be examined applications for *permits* and amendments thereto within 30 days after filing and either issue or deny a *permit* within such 30-day period. If the application or *construction documents* do not conform to the requirements of this code and applicable laws, the *building official shall* reject such application in writing, stating the reasons therefore. If the *building official* is satisfied that the proposed work conforms to the requirements of this code and applicable laws, the *building official shall* issue a *permit* as soon as practicable.

(Add) **R105.3.1.1.1 Wind design criteria for existing structures.** For structures where the proposed work is determined to be a substantial improvement or restoration under R105.3.1.1 and having a wind Exposure D, structural elements that are uncovered *shall* be required to be improved to meet the wind speed design criteria in R301.2.1.

(Add) **R105.3.1.2 Zoning approval.** Pursuant to subsection (f) of section 8-3 of the Connecticut General Statutes, no building *permit shall* be issued, in whole or in part, for a *building*, use or structure subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that such *building*, use or structure is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Add) **R105.3.1.3 Historic certificate of appropriateness.** Pursuant to section 7-147s (b) of the Connecticut General Statutes, no building permit for erection of a building or structure or for alteration of an exterior architectural feature within the boundaries of an historic property and no demolition permit for demolition or removal of a building or structure within the boundaries of an historic property shall be issued by a municipality or any department, agency or official thereof until a certificate of appropriateness has been issued.

(Add) **R105.3.1.4 Notice to Public Water Authority.** Pursuant to section 19a-37d of the Connecticut General Statutes, when a *permit* application is filed with the *building official* of any municipality concerning any project that includes a change of use or installation of fixtures or facilities in a *building* that may affect the performance of, or require the installation of, a reduced pressure principle backflow preventer, a double check valve assembly or a pressure vacuum breaker, the *building official* shall provide written notice of the application to the water company serving the *building* not later than seven days after the date the application is filed. Upon receipt of such written notice, the water company shall cause to be performed an evaluation of cross-connection protection by a person who has met the requirements prescribed in the regulations of Connecticut state agencies and such water company shall notify the *building official* regarding its determination. The *building official* shall not issue a *permit* or *certificate of occupancy* until any cross-connection issue has been corrected.

(Amd) **R105.5 Expiration of permit.** Every *permit* issued *shall* become invalid unless the work authorized by such *permit* is commenced within 180 days after its issuance or after commencement of work if more than 180 days pass between inspections. The *building official* is authorized to grant, in writing, one or more extensions of time, for periods of not more than 180 days each. The extension *shall* be requested in writing and justifiable cause *shall* be demonstrated.

Exception: The *building official* may specify an expiration date of not less than 30 days, nor more than 180 days, for commencement of work under *permits* issued to abate unsafe conditions pursuant to Section R115 of this code. Work performed under such *permits shall* be completed as expeditiously as possible.

(Add) **R105.5.1 Nine year closure.** Pursuant to subsection (c) of section 29-265 of the Connecticut General Statutes, nine years from the date of issuance of a building *permit* issued pursuant to section 29-263 for construction or alteration of a one-family dwelling, two-family dwelling or structure located on the same parcel as a one-family dwelling or two-family dwelling, for which construction or alteration a *certificate of occupancy*, as defined in the regulations adopted pursuant to section 29-252, has not been issued by the *building official*, such building *permit* shall be deemed closed.

(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*. When the quality or arrangement of materials is essential for conformity to this code, specific information shall be given to establish such quality or arrangement, and this code shall not be cited, or terms such as “legal,” “per code,” or their equivalent used as a substitute for specific information.

(Add) **R106.2.1 Private sewage disposal system.** The *site plan shall* indicate the location of a private or public sewage disposal system. Private sewage disposal systems *shall* be designed and installed in accordance with the requirements of the Public Health Code adopted under authority of section 19a-36 of the Connecticut General Statutes. All technical and soil data required by the Public Health Code *shall* be submitted with the *site plan*. Approval of such systems *shall* be by the local authority having *jurisdiction*. When such approval is required by the local authority having *jurisdiction*, written proof of such approval *shall* be submitted to the *building official* prior to issuance of a building *permit*.

(Amd) **R106.5 Retention of construction documents.** Pursuant to subsection (e) of section 29-261 of the Connecticut General Statutes, upon receipt of a written request signed by the *owner* of *plans and specifications* on file for a single-family *dwelling* or out-*building*, the *building official shall* immediately return the original *plans and specifications* to the *owner* after a certificate of occupancy is issued with respect to the *plans and specifications*.

(Add) **R106.6 Additional requirements.** Nontransient residential *dwelling*s having more than 16 units or 24,000 square feet total gross area per *building shall* be subject to the additional requirements set forth in Section 107.6 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Amd) **R107.1 General.** The *building official* is authorized to issue a *permit* for temporary structures and temporary uses. Such *permits shall* be limited as to time of service, but *shall* not be permitted for more than 180 days. The *building official* is authorized to grant a single 180-day extension for demonstrated cause.

Exceptions: The following *shall* be exempt from *permit* requirements:

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 Multiple *tents* placed side by side without a fire break clearance of 12 feet (3658 mm), with an aggregate area not exceeding 700 square feet (65 m²) total.
- 2.3 A minimum clearance of 12 feet (3658 mm) to all other structures and *tents*.
3. *Tents* 900 square feet and smaller in total area when occupied by fewer than 50 persons, which have no heating appliances, no installed electrical service and are erected for fewer than 72 hours.

(Amd) **R107.3 Temporary power.** The *building official* is authorized to give permission to temporarily supply utilities before an installation has been fully completed and the final certificate of approval has been issued. The part covered by the temporary permission *shall* comply with the requirements specified for temporary lighting, heat or power in this code or in the NFPA 70, *National Electrical Code*, portion of the 2022 Connecticut State Building Code.

(Amd) **R108.2 Schedule of permit fees.** Each municipality *shall* establish a schedule of fees for each construction document review, building *permit*, certificate of approval and certificate of occupancy. A schedule of adopted fees *shall* be posted for public view.

(Amd) **R108.3 Building permit valuations.** The applicant for a *permit shall* provide an estimated *permit* value at the time of application. *Permit* valuations *shall* include total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the *building official*, the valuation is underestimated on the application, the *permit shall* be denied, unless the applicant can show detailed estimates to meet the approval of the *building official*. Final building *permit* valuation *shall* be set by the *building official*.

(Del) **R108.6 Work commencing before permit issuance.** Delete without substitution.

(Add) **R109.1.4.1 Insulation inspection.** Inspection of the *building* air tightness and insulation installation *shall* be conducted in accordance with Section N1102.4.1.

(Add) **R109.1.5.2 Additional electrical inspections.** Required electrical inspections *shall* include installations of temporary services prior to activation and installation of underground piping and conductors after trenches are excavated and bedded and before backfill is put in place.

(Add) **R109.1.7 Posting of required inspections.** The *building official shall* compile a schedule of required inspections and *shall* post the schedule in the building department for public view.

(Add) **R109.5 Notification of inspection results.** Notification as to passage or failure, in whole or in part, of any required inspection *shall* be made in writing by the *building official* or his duly authorized representative and *shall* be left at the job *site* or delivered to the *permit* holder. It *shall* be the duty of the *permit* holder to ascertain the results of required inspections.

(Amd) **R110.1 Use and occupancy.** Pursuant to subsection (a) of section 29-265 of the Connecticut General Statutes, no building or structure erected or altered in any municipality after October 1, 1970, *shall* be occupied or used, in whole or in part, until a certificate of occupancy has been issued by the *building official*, certifying that such *building*, structure or work performed pursuant to the building *permit* substantially complies with the provisions of this code. Nothing in the code *shall* require the removal, *alteration* or abandonment of, or prevent the continuance of the use and occupancy of, any single-family *dwelling* but within six years of the date of occupancy of such *dwelling* after substantial completion of construction of, *alteration* to or *addition* to such *dwelling*, or of a *building* lawfully existing on October 1, 1945, except as may be necessary for the safety of life or property. The use of a *building* or premises *shall* not be deemed to have changed because of a temporary vacancy or change of ownership or tenancy.

Exceptions:

1. Work for which a certificate of approval is issued in accordance with Section R110.9.

2. A certificate of occupancy is not required for work exempt from *permit* requirements under Section R105.2.

(Add) **R110.1.1 Zoning approval.** Pursuant to subsection (f) of section 8-3 of the Connecticut General Statutes, no certificate of occupancy *shall* be issued for a *building*, use or structure subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that such *building*, use or structure is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Add) **R110.1.2 Statement of professional opinion.** Pursuant to section 29-276c of the Connecticut General Statutes, no certificate of occupancy *shall* be issued for a proposed structure or *addition* to *buildings* classified as nontransient residential *dwellings* having more than 16 units or 24,000 square feet total gross area per *building*, until the *building official* has been provided with a statement signed by the architect or professional engineer and the general contractor stating that the completed structure or *addition* is in substantial compliance with the *approved* plans on file.

(Amd) **R110.4 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. Any occupancy permitted to continue during completion of the work *shall* be discontinued within 30 days after completion of the work unless the *building official* issues a certificate of occupancy. No temporary certificate of occupancy *shall* be issued for work subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that the work is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Add) **R110.6 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, the portion of the *building* to be occupied is in substantial compliance with the requirements of this code and no unsafe conditions exist in portions of the *building* not covered by the partial certificate of occupancy that are accessible from the occupied portion. No partial certificate of occupancy *shall* be issued for work subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that the work is in conformity with such regulations or is a valid nonconforming use under such regulations

(Add) **R110.7 Prefabricated assemblies.** A certificate of approval by an *approved agency shall* be furnished with every prefabricated assembly, including modular housing, except where all elements of the assembly are readily accessible for inspection at the *site*. The *building official shall* inspect placement of prefabricated assemblies and the connections to public utilities and private water and septic systems at the building *site*, as well as any site-built or installed components or equipment to determine compliance with this code. A final inspection *shall* be provided in accordance with Section R109.1.6.

(Add) **R110.8 Manufactured housing used as dwellings.** Provisions for foundation systems and *building* service equipment connections necessary to provide for the installation of new *manufactured homes* and for existing *manufactured homes* to which *additions, alterations* or *repairs* are made are contained in Appendix E.

(Add) **R110.9 Concrete documentation.** Pursuant to section 29-265c of the Connecticut General Statutes, prior to the issuance of a certificate of occupancy for a new residential or commercial building for which a concrete foundation was installed on or after October 1, 2016, the applicant shall provide the building official with written documentation of the name of the individual or entity that supplied the concrete and the name of the individual or entity that installed the concrete. Copies of such documentation shall be maintained in the records of the office of the building official for not less than fifty years.

(Add) **R110.9 Certificate of approval.** The *building official shall* issue a certificate of approval indicating substantial compliance with the requirements of this code for all completed work that requires a building permit but does not require a certificate of occupancy. Such work *shall* include, but not be limited to: fences greater than 7 feet in height; retaining walls greater than 3 feet in height; decks; garages; *swimming pools; basements and attics converted to habitable space; electrical, plumbing, and mechanical repairs or alterations.* No certificate of approval *shall* be issued for work subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that the work is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Del) **SECTION R112 - BOARD OF APPEALS.** Delete this section in its entirety and replace with the following:

(Add) **SECTION R112 – MEANS OF APPEAL**

(Add) **R112.1 Appeal from decision of building official.** Pursuant to subsection (b) of section 29-266 of the Connecticut General Statutes, when a *building official* rejects or refuses to approve the mode or manner of construction proposed to be followed or the materials to be used in the erection or *alteration* of a *building* or structure, or when it is claimed that the provisions of the code do not apply or that an equally good or more desirable form of construction can be employed in a specific case, or when it is claimed that the true intent and meaning of the code has been misconstrued or wrongly interpreted or when the *building official* issues a written order under subsection (c) of section 29-261 of the Connecticut General Statutes, the *owner* of such *building* or structure, whether already erected or to be erected, or his authorized agent may appeal in writing from the decision of the *building official* to the municipal board of appeals. A person, other than such *owner*, who claims to be aggrieved by any decision of the *building official* may, by himself or his authorized agent, appeal in writing from the decision of the *building official* to the municipal board of appeals as provided by subsection (b) of section 29-266 of the Connecticut General Statutes.

(Add) **R112.1.1 Absence of municipal board of appeals.** In the absence of a municipal board of appeals, the provisions of subsection (c) of section 29-266 of the Connecticut General Statutes *shall* be followed.

(Add) **R112.1.2 State Building Inspector review.** Pursuant to subsection (d) of section 29-252 of the Connecticut General Statutes, the State Building Inspector or his designee *shall* review a decision by a local *building official* or municipal board of appeals when he has reason to believe that such official or board has misconstrued or misinterpreted any provision of the Connecticut State Building Code.

(Add) **R112.2 Appointment of municipal board of appeals.** Pursuant to subsection (a) of section 29-266 of the Connecticut General Statutes, a municipal board of appeals consisting of five members *shall* be appointed.

(Add) **R112.2.1 Qualifications.** One member of the municipal board of appeals *shall* be appointed from the general public. The other four members *shall* have at least five years of experience each in *building* design, *building* construction or supervision of *building* construction.

(Add) **R112.2.2 Chair.** The board *shall* annually select one of its members to serve as chair.

(Add) **R112.3 Notice of meeting.** Each appeal *shall* be heard in the municipality for which the *building official* serves within five days, exclusive of Saturdays, Sundays and legal holidays, after the date of receipt of the appeal.

(Add) **R112.4 Determination of aggrievement.** Upon receipt of an appeal from a person other than the *owner* or his agent, the board of appeals *shall* first determine whether such person has a right to appeal.

(Add) **R112.5 Appointment of a panel.** Upon receipt of an appeal from an *owner* or his agent, or approval of an appeal by a person other than the *owner* or his agent, the chairman of the municipal board of appeals *shall* appoint a panel of not less than three members of such board to hear such appeal.

(Add) **R112.6 Rendering of decisions.** The panel *shall*, upon majority vote of its members, affirm, modify or reverse the decision of the *building official* in a written decision upon the appeal and file such decision with the *building official* from whom such appeal has been taken not later than five days, exclusive of Saturdays, Sundays and legal holidays, following the day of the hearing thereon. A copy of the decision *shall* be mailed, prior to such filing, to the party taking the appeal.

(Add) **R112.7 Appeal to the Codes and Standards Committee.** Any person aggrieved by the decision of a municipal board of appeals may appeal to the Codes and Standards Committee within 14 days after the filing of the decision with the *building official* in accordance with the provisions of subsection (c) of section 29-266 of the Connecticut General Statutes.

(Add) **R112.8 Court review.** Any person aggrieved by any ruling of the Codes and Standards Committee may appeal to the Superior Court for the judicial district where such *building* or structure has been or is being erected in accordance with the provisions of subsection (d) of section 29-266 of the Connecticut General Statutes.

(Add) **R113.2.1 Written notice.** The *building official* or his duly authorized representative *shall* provide any notice of violation in writing to the *owner* of the property involved or to the *owner's* agent or to the person doing the work.

(Amd) **R113.4 Violation penalties.** Pursuant to section 29-254a of the Connecticut General Statutes, any person who violates any provision of this code *shall* be fined not less than two hundred nor more than one thousand dollars or imprisoned not more than six months, or both.

(Amd) **R114.4 Failure to comply.** Any person who continues any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe conditions, *shall* be liable for penalties in accordance with Section R113.4.

(Add) **SECTION R115 - UNSAFE STRUCTURES AND EQUIPMENT**

(Add) **R115.1 General.** The procedures to be followed regarding unsafe structures and *equipment shall* be as set forth in Section 116 of the 2021 *International Building Code* portion of the 2022 Connecticut State Building Code.

(Add) **SECTION R116 - EMERGENCY MEASURES**

(Add) **R116.1 General.** The procedures to be followed regarding emergency measures *shall* be as set forth in Section 117 of the 2021 *International Building Code* portion of the 2022 Connecticut State Building Code.

(Add) **SECTION R117- VACANT BUILDINGS**

(Add) **R117.1 General.** Temporarily unoccupied *buildings*, structures, premises or portions thereof, including tenant spaces, *shall* be safeguarded and maintained in accordance with Section 118 of the 2021 *International Building Code* portion of the 2022 Connecticut State Building Code.

CHAPTER 2 – DEFINITIONS

(Amd) **R201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in other portions of the State Building Code, such terms *shall* have the meanings ascribed to them as in those codes.

(Add) **R202.1 Definitions.** Add or amend the following definitions:

(Add) **ATTACHED DWELLING UNIT.** A dwelling unit sharing demising walls, floors, ceiling or common corridors with another dwelling unit or occupied space.

(Amd) **BUILDING, EXISTING.** A *building* or structure, or portion thereof, erected in whole or in part, for which a legal building *permit* and a certificate of occupancy has been issued. *Buildings* or structures or portions thereof erected prior to October 1, 1970 *shall* be deemed existing *buildings* regardless of the existence of a legal *permit* or a certificate of occupancy.

(Add) **COMPLEX.** For application of accessibility requirements, this term means any group of *buildings* located on a single parcel of land or on contiguous parcels of land or any *building* or group of *buildings* that are subdivided into separate occupancies and planned, financed, constructed or promoted by common management for the purpose of sale or lease of the entire *complex* or any subdivision thereof, excluding any single-family detached *dwelling*.

(Add) **Dwelling Unit Enclosure Area.** The sum of the area of ceiling, floors and walls separating a dwelling unit's conditioned space from the exterior or from adjacent conditioned or unconditioned space. Wall height shall be measured from the finished floor of the dwelling unit to the underside of the floor above.

(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*.

(Amd) **REGISTERED DESIGN PROFESSIONAL.** An individual who is registered or licensed by the Department of Consumer Protection pursuant to chapters 390, 391, 396 or 396a of Connecticut General Statutes to practice their respective design profession and acting within the scope of his or her license and practice discipline.

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

CHAPTER 3 – BUILDING PLANNING

(Amd) **R301.1.3 Engineered design.** Where a building of otherwise conventional construction contains structural elements exceeding the limits of Section R301 or otherwise not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of nonconventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the International Building Code is permitted for buildings and structures, and parts thereof, included in the scope of this code. Engineered design shall be certified by a registered design professional.

(Amd) **R301.2.1 Wind design criteria.** *Buildings* and portions thereof *shall* be constructed in accordance with the wind provisions of this code using the ultimate design wind speed in Appendix U. Where different construction methods and structural materials are used for various portions of a *building* or structure, the applicable requirements of this section for each portion *shall* apply. Where not otherwise specified, the wind *loads* listed in Table R301.2(2) adjusted for height and exposure using Table R301.2(3) *shall* be used to determine design load performance requirements for wall coverings, curtain walls, roof coverings, exterior windows, skylights, garage doors and exterior doors. Asphalt shingles *shall* be designed for wind speeds in accordance with Section R905.2.4. A continuous *load path shall* be provided to transmit the applicable uplift forces in Section R802.11.1 from the roof assembly to the foundation.

(Amd) **R301.2.1.1 Alternative wind design provisions** As an alternative to the requirements in Section R301.2.1, the design of *buildings* for wind *loads* may be in accordance with one or more of the following methods:

1. AWC *Wood Frame Construction Manual* (WFCM).
2. ICC *Standard for Residential Construction in High-Wind Regions* (ICC 600).
3. ASCE *Minimum Design Loads for Buildings and Other Structures* (ASCE 7).
4. AISI *Standard for Cold-Formed Steel Framing - Prescriptive Method For One- and Two-Family Dwellings* (AISI S230).
5. *International Building Code*.

(Amd) **TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM		
	Speed ^b (mph)	Wind-Borne debris zone		Weathering ^a	Frost line depth	Termite
As set forth in Appendix U.	As set forth in Appendix U.	See definition	B	Severe	42"	Moderate-Heavy

WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMPERATURE	CLIMATE ZONE
7°F	YES	To be determined locally	1,500 or less	50°F	5A

Manual J Design Criteria ACCA Manual J 8th edition 2016									
Location	Elevation Feet	Latitude Degrees	Heating 99% Outdoor Dry Bulb	Cooling					Daily Range (DR)
				1% Dry Bulb	Coincident Wet Bulb	55% RH Indoors	50% RH Indoors	45% RH Indoors	
Connecticut									
Bridgeport, Sikorsky Memorial AP	10	41	12	84	72	29	36	42	M
Hartford, Brainard Field	19	41	6	88	72	23	30	36	M
New Haven AP	14	41	7	84	73	35	42	48	M
New London	10	41	9	85	72	26	32	39	M
Norwalk	397	41	9	84	71	22	29	36	M
Norwich	197	41	7	86	73	30	37	44	M
Waterbury	850	41	2	85	71	22	28	35	M
Windsor Locks, Bradley Field	197	42	8	88	71	16	22	29	M

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength *concrete* or grade of *masonry* than necessary to satisfy the structural requirements of this code.
- b. Wind exposure category *shall* be determined on a site-specific basis in accordance with Section R301.2.1.4.

(Del) **FIGURE R301.2(1) WEATHERING PROBABILITY MAP FOR CONCRETE^{a,b}.**
Delete without substitution.

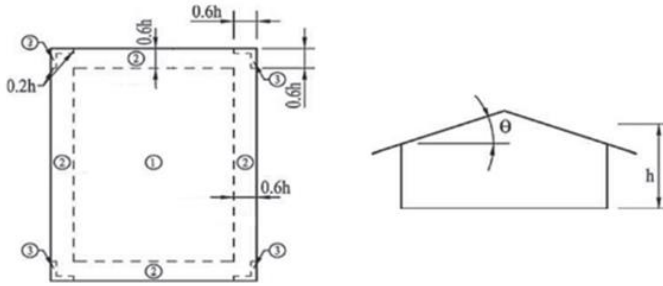
(Del) **FIGURE R301.2(2) ULTIMATE DESIGN WIND SPEEDS.**
Delete without substitution.

(Del) **FIGURE R301.2(3) GROUND SNOW LOADS, P_g FOR THE UNITED STATES (lb/ft²).**
Delete without substitution.

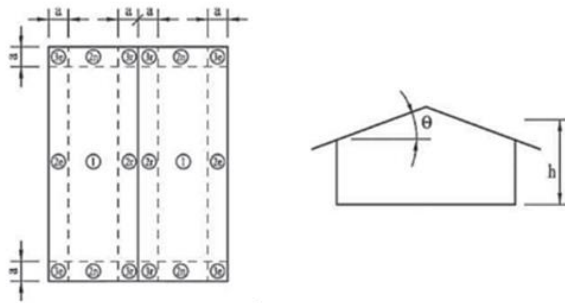
(Del) **FIGURE R301.2(4) GROUND SNOW LOADS, P_g FOR THE UNITED STATES (lb/ft²).**
Delete without substitution.

(Del) **FIGURE R301.2.1 COMPONENT AND CLADDING PRESSURE ZONES.** Delete figure in its entirety and replace with the following:

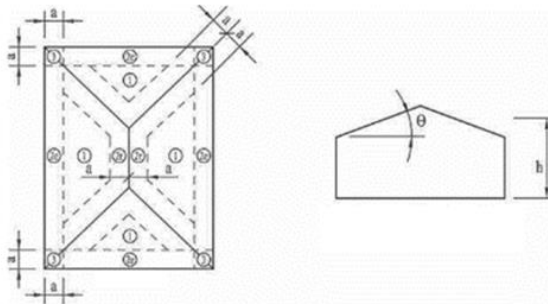
(Add) **FIGURE R301.2.1 COMPONENT AND CLADDING PRESSURE ZONES.**



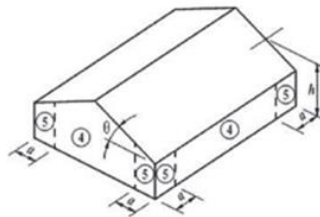
Gable and Flat Roofs $\theta \leq 7^\circ$



Gable Roofs $7^\circ < \theta \leq 45^\circ$



Hip Roofs $7^\circ < \theta \leq 45^\circ$



Walls

For SI: 1 foot = 304.8mm, 1 degree = 0.0175 rad.
Note: a = 4 feet in all cases

FIGURE 301.2(8)
COMPONENT AND CLADDING PRESSURE ZONES

(Amd) **Table R301.2.1(1) COMPONENT AND CLADDING LOADS FOR A BUILDING WITH A MEAN ROOF HEIGHT OF 30 FEET LOCATED IN EXPOSURE B (ASD).** Add footnote h. For Ultimate Design Wind Speeds between those given, the loads shall be interpolated.

(Del) **FIGURE R301.2.1.1 REGIONS WHERE WIND DESIGN IS REQUIRED.**
Delete without substitution.

(Del) **R301.2.1.3 Wind speed conversion.** Delete without substitution.

(Del) **TABLE 301.2.1.3 WIND SPEED CONVERSIONS.** Delete without substitution.

(Amd) **R301.2.1.4 Exposure category.** For each wind direction considered, an exposure category that adequately reflects the characteristics of ground surface irregularities *shall* be determined for the *site* at which the *building* or structure is to be constructed. For a *site* located in the transition zone between categories, the category resulting in the largest wind forces *shall* apply. Account *shall* be taken of variations in ground surface roughness that arise from natural topography and vegetation as well as from constructed features. For a *site* where multiple detached *one- and two-family dwellings, townhouses* or other structures are to be constructed as part of a subdivision or master-planned community, or are otherwise designated as a developed area by the authority having *jurisdiction*, the exposure category for an individual structure *shall* be based upon the *site* conditions that will exist at the time when all adjacent structures on the *site* have been constructed, provided that their construction is expected to begin within one year of the start of construction for the structure for which the exposure category is determined.

(Add) **R301.2.1.4.1 Wind directions and sectors.** For each selected wind direction at which the wind *loads* are to be evaluated, the exposure of the *building* or structure *shall* be determined for the two upwind sectors extending 45 degrees (0.79 rad) either side of the selected wind direction. The exposures in these two sectors *shall* be determined in accordance with Sections R301.2.1.4.2 and R301.2.1.4.3 and the exposure resulting in the highest wind *loads shall* be used to represent winds from that direction.

(Add) **R301.2.1.4.2 Surface roughness categories.** A ground surface roughness within each 45-degree (0.79 rad) sector *shall* be determined for a distance upwind of the *site* as defined in Section R301.2.1.4.3 from the categories defined below, for the purpose of assigning an exposure category as defined in Section R301.2.1.4.3.

Surface Roughness B. Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single-family *dwellings* or larger.

Surface Roughness C. Open terrain with scattered obstructions having heights generally less than 30 feet (9144 mm). This category includes flat open country, and grasslands.

Surface Roughness D. Flat, unobstructed areas and water surfaces. This category includes smooth mud flats, salt flats and unbroken ice.

(Add) **R301.2.1.4.3 Exposure categories.** An exposure category *shall* be determined in accordance with the following:

Exposure B. For *buildings* with a mean roof height of less than or equal to 30 feet (9144 mm), Exposure B *shall* apply where the ground surface roughness, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 1,500 feet (457 m). For *buildings* with a mean roof height greater than 30 feet (9144 mm), Exposure B *shall* apply where Surface Roughness B prevails in the upwind direction for a distance of at least 2,600 feet (792 m) or 20 times the height of the *building*, whichever is greater.

Exposure C. Exposure C *shall* apply for all cases where Exposure B or D does not apply.

Exposure D. Exposure D *shall* apply where the ground surface roughness, as defined by Surface Roughness D, prevails in the upwind direction for a distance of at least 5,000 feet (1524 m) or 20 times the height of the *building*, whichever is greater. Exposure D *shall* also apply where the ground surface roughness immediately upwind of the *site* is B or C, and the *site* is within a distance of 600 feet (183 m) or 20 times the *building height*, whichever is greater, from an Exposure D condition as defined in the previous sentence.

(Del) **R301.2.1.5 Topographic wind effects.** Delete without substitution.

(Del) **R301.2.1.5.1 Simplified topographic wind speed-up method.** Delete without substitution.

(Del) **Table R301.2.1.5.1 ULTIMATE DESIGN WIND SPEED MODIFICATION FOR TOPOGRAPHIC WIND EFFECT.** Delete without substitution.

(Del) **FIGURE R301.2.1.5.1(1) TOPOGRAPHIC FEATURES FOR WIND SPEED-UP EFFECT.** Delete without substitution.

(Del) **FIGURE R301.2.1.5.1(2) ILLUSTRATION OF WHERE ON A TOPOGRAPHIC FEATURE, WIND SPEED INCREASE IS APPLIED.** Delete without substitution.

(Del) **FIGURE R301.2.1.5.1(3) UPWIND OBSTRUCTION.** Delete without substitution.

(Amd) **R301.2.2 Seismic provisions.** Delete section and all of its subsections.

(Add) **R301.2.4.2 Structures being elevated to comply with flood regulations.** Structures being elevated in height to be at or above the design flood elevation with minimal alterations to the existing structure shall be anchored to the new foundation or the raised existing foundation with connections capable of resisting the wind loads and other loads prescribed by this Chapter. New foundations or raised existing foundations shall be designed and constructed in accordance with Section R322 and Chapter 4. Where the alterations to the structure include exposing the structural framing in any portion of the structure, connectors shall be installed as required to transfer wind loads and other loads prescribed by this Chapter through the exposed portion of the structure.

An existing structure shall be reinforced to comply with the structural wind loading requirements for new structures when any of the following occur:

1. When the roof is changed to a steeper pitch making the roof taller relative to the eave.
2. When an additional story is added to any portion of the structure.
3. When the ratio of wall openings to exterior wall length in any story on any side of the building increases by more than five percent (5%).

(Amd) **R301.6 Roof load.** Roofs *shall* be designed for the snow *load* indicated in Table R301.2(1).

(Del) **Table R301.6 – MINIMUM ROOF LIVE LOADS IN POUNDS-FORCE PER SQUARE FOOT OF HORIZONTAL PROJECTION.** Delete table in its entirety without substitution.

(Add) **R301.9 Ungraded lumber.** Pursuant to section 29-256b of the Connecticut General Statutes, the use of ungraded lumber is allowed in utility structures and low-risk structures, which for the purposes of this section *shall* mean *accessory structures*.

(Add) **R302.2.7 Sound transmission.** Wall and floor-ceiling assemblies separating adjacent *townhouse* units *shall* comply with Appendix K.

(Amd) **R302.3 Two-family dwellings.** *Dwelling units in two-family dwellings shall be separated from each other and from common spaces serving both dwelling units by wall or floor-ceiling assemblies having not less than a 1-hour fire-resistance rating when tested in accordance with ASTM E119, UL 263 or Section 703.3 of the International Building Code. Fire-resistance-rated floor-ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend to the underside of the roof sheathing. Fire-resistance-rated assemblies shall be supported to the foundation by construction with the same fire-resistance rating as the assembly supported.*

Exceptions:

1. A fire-resistance rating of ½ hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13.
2. Wall assemblies need not extend through attic spaces when the ceiling is protected by not less than 5/8-inch (15.9 mm) Type X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the dwellings and the structural framing supporting the ceiling is protected by not less than ½-inch (12.7 mm) gypsum board or equivalent.

(Add) **R302.3.2 Sound transmission.** Wall and floor-ceiling assemblies separating dwelling units shall comply with Appendix K.

(Amd) **R302.5.3 Other penetrations.** Penetrations into or through the separation required in Table R302.6 shall be protected as required by Section R302.11, Item 4.

(Amd) **R302.6 Dwelling/garage fire separation.** The garage shall be separated as required by Table R302.6 except that wood structural members of the minimum dimension specified in the 2021 International Building Code for Type IV HT construction shall be acceptable without further protection. Openings in garage walls shall comply with Section R302.5. Attachment of gypsum board shall comply with Table R702.3.5. The wall separation provisions of Table R302.6 shall not apply to garage walls that are perpendicular to the adjacent dwelling unit wall.

(Amd) **TABLE R302.6 DWELLING/GARAGE SEPARATION**

SEPARATION	MATERIAL
From the residence and attics	Not less than 5/8 inch Type X gypsum board or equivalent applied to the garage side ^a
From all habitable rooms above the garage	Not less than 5/8 inch Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than 5/8 inch Type X gypsum board or equivalent ^a
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than 5/8 inch Type X gypsum board or equivalent applied to the interior side of exterior walls that are within this area ^a

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

^a If building is sprinklered in accordance with Section R313, then not less than ½-inch gypsum board or equivalent is required.

(Amd) **R305.1 Minimum height.** *Habitable space, hallways and portions of basements containing these spaces shall have a ceiling height of not less than 7 feet (2134 mm). Bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 feet 8 inches (2032 mm). Existing basements being converted to habitable space shall have a ceiling height of not less than 6 feet 8 inches.*

Exceptions:

1. For rooms with sloped ceilings, the required floor area of the room shall have a ceiling height of not less than 5 feet (1524 mm) and not less than 50 percent of the required floor area shall have a ceiling height of not less than 7 feet (2134 mm).

2. The ceiling height above bathroom and toilet room fixtures shall be such that the fixture is capable of being used for its intended purpose. A shower or tub equipped with a showerhead shall have a ceiling height of not less than 6 feet 8 inches (2032 mm) above an area of not less than 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.
3. Beams, girders, ducts or other obstructions in *basements* containing *habitable space* shall be permitted to project to within 6 feet 4 inches (1931 mm) of the finished floor.
4. Beams and girders spaced apart not less than 36 inches (914 mm) in clear finished width shall project not more than 78 inches (1981 mm) from the finished floor.

(Amd) **R309.1 Floor surface.** Garage floor surfaces *shall* be of *approved* noncombustible material.

The area of floor used for parking of automobiles or other vehicles *shall* be sloped to facilitate the movement of liquids to an *approved* drain or toward the main vehicle entry doorway.

Exception: Detached garages that are separated from the *dwelling* by a minimum distance of 10 feet (3048 mm).

(Amd) **R310.1 Emergency escape and rescue openings required.** Habitable spaces located within *basements*, habitable spaces located in *attics* and every sleeping room *shall* have not less than one operable *emergency escape and rescue opening*. Where *basements* and *attics* contain one or more sleeping rooms, emergency egress and rescue openings *shall* be required in each sleeping room, but *shall* not be required in adjoining habitable areas of the *basement* or *attic*. *Emergency escape and rescue openings shall* open directly into a *public way*, or to a *yard* or *court* that opens to a *public way*.

Exceptions:

1. Habitable *basements* without sleeping rooms are not required to have *emergency escape and rescue openings* when they are provided with two remote, code-compliant *stairways*.
2. In existing *buildings*, *basements* and *attics* being converted to *habitable space* without sleeping rooms are not required to have *emergency escape and rescue openings*.
3. A *yard* shall not be required to open directly into a *public way* where the *yard* opens to an unobstructed path from the *yard* to the *public way*. Such path shall have a width of not less than 36 inches (914 mm).

(Amd) **R310.2.1 Minimum size.** *Emergency escape and rescue openings shall* have a net clear opening of not less than 5.7 square feet (0.530 m²).

Exceptions:

1. *Grade floor openings* or below grade openings *shall* have a net clear opening of not less than 5 square feet (0.465 m²)
2. Existing *buildings* undergoing *alterations* or installation of replacement windows *shall* be permitted to utilize removable sash to achieve the required minimum net clear openings. Such removable sash *shall* be capable of being removed without the use of a key or tool.

(Amd) **R310.2.3 Maximum height from floor.** Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 44 inches (1118 mm) above the floor.

Exception: The 44-inch (1118 mm) maximum sill height *shall* be permitted to 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 and which *shall* comply with Sections R311.7.5.1 and R311.7.5.2. Glazing in windows complying with this exception *shall* not be subject to the provisions of Section R308.4.6 or R308.4.7.

(Amd) **R310.6 Dwelling additions.** Where *dwelling additions* contain sleeping rooms, an *emergency escape and rescue opening* shall be provided in each new sleeping room. Where *dwelling additions* have *basements*, an *emergency escape and rescue opening* shall be provided in the new habitable *basement*.

Exceptions:

1. An *emergency escape and rescue opening* is not required in a new *basement* that contains a sleeping room with an *emergency escape and rescue opening*.
2. An *emergency escape and rescue opening* is not required in a new *basement* where there is an *emergency escape and rescue opening* in an existing *basement* that is accessed from the new *basement*.
3. An operable window complying with Section 310.7.1 shall be acceptable as an *emergency escape and rescue opening*.
4. Habitable *basements* without sleeping rooms are not required to have *emergency escape and rescue openings* when they are provided with two remote, code-compliant *stairways*.

(Amd) **R311.3.1 Floor elevations at the required egress doors.** Landings or finished floors at the required egress door shall not be more than 1½ inches (38 mm) lower than the top of the threshold.

Exception: The landing or floor on the exterior side shall not be more than 8¼ inches (209.5 mm) below the top of the threshold provided the door does not swing over the landing or the floor.

Where exterior landings or floors serving the required egress door are not at grade, they shall be provided with access to grade by means of a *ramp* in accordance with Section R311.8 or a *stairway* in accordance with Section R311.7.

(Amd) **R311.3.2 Floor elevations for other exterior doors.** Doors other than the required egress door shall be provided with landings or floors not more than 8¼ inches (209.5 mm) below the top of the threshold.

Exception: A landing is not required where a *stairway* of three or fewer risers, including the top riser from the *dwelling* to the top tread, is located on the exterior side of the door, provided the door does not swing over the *stairway*.

(Amd) **R311.7.1 Width.** *Stairways* shall not be less than 36 inches (914 mm) in clear width at all points above the permitted *handrail* height and below the required headroom height. The clear width of *stairways* at and below the *handrail* height, including treads and landings, shall not be less than 31½ inches (787 mm) where a *handrail* is installed on one side and 27 inches (698 mm) where *handrails* are provided on both sides.

Exceptions:

1. The width of spiral *stairways* shall be in accordance with Section R311.7.10.1.
2. The width of existing *stairways* serving existing unfinished *attics* or existing unfinished *basements* being converted to *habitable space* or replacement *stairways* within existing *dwellings* shall not be less than 32 inches (813 mm) in clear width at all points above the permitted *handrail* height and below the required headroom height. The clear width of *stairways* at and below the *handrail* height, including treads and landings, shall not be less than 28 inches (711 mm) where a *handrail* is installed on one side and 24 inches (610 mm) where *handrails* are provided on both sides.
3. Where an incline platform lift or *stairway* chairlift is installed on a *stairway* within a *dwelling unit*, a clear passage width not less than 20 inches (508 mm) shall be provided. If the seat and platform can be folded when not in use, the distance shall be measured from the folded position.

(Amd) **R311.7.2 Headroom.** The minimum headroom in all parts of the *stairway* shall not be less than 6 feet, 8 inches (2032 mm) measured vertically from the sloped line adjoining the tread *nosing* or from the floor surface of the landing or platform on that portion of the *stairway*.

Exceptions:

1. Where the *nosing* of treads at the side of a *flight* extend under the edge of a floor opening through which the stair passes, the floor opening shall be allowed to project horizontally into the required headroom a maximum of 4¾ inches (121 mm).

2. The minimum headroom in all parts of existing *stairways* serving existing unfinished *attics* or existing unfinished *basements* being converted to *habitable space* or replacement *stairs* where the pitch or slope cannot be reduced because of existing construction *shall* be 6 feet, 4 inches (1930 mm), measured in accordance with Section R311.7.2.

(Amd) **R311.7.5.1 Risers.** The riser height shall be not more than 8¼ inches (209.5 mm). The riser *shall* be measured vertically between leading edges of adjacent treads. The greatest riser height within any *flight* of *stairs shall* not exceed the smallest by more than ¾ inch (9.5 mm). Risers *shall* be vertical or sloped from the underside of the *nosing* of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the opening between treads does not permit the passage of a 4-inch-diameter (102 mm) sphere.

Exceptions:

1. The maximum riser height of existing *stairs* serving existing unfinished *attics* or existing unfinished *basements* being converted to *habitable space* or replacement *stairs* where the pitch or slope cannot be reduced because of existing construction *shall* be 9 inches (229 mm), measured in accordance with Section R311.7.5.1.
2. The opening between adjacent treads is not limited on spiral stairways .
3. The riser height of spiral stairways shall be in accordance with Section R311.7.10.1.

(Amd) **R311.7.5.2 Treads.** The minimum tread depth *shall* be 9 inches (229 mm). The tread depth *shall* be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any *flight* of *stairs shall* not exceed the smallest by more than ¾ inch (9.5 mm).

Exception: The minimum tread depth of existing *stairs* serving existing unfinished *attics* or existing unfinished *basements* being converted to *habitable space* or replacement stairs within existing *dwellings shall* be 8 inches (203 mm), measured in accordance with Section R311.7.5.2.

(Amd) **R311.7.6 Landings for stairways.** There *shall* be a floor or landing at the top and bottom of each *stairway*. The width perpendicular to the direction of travel *shall* be not less than the width of the *flight* served. Landings of shapes other than square or rectangular *shall* be permitted provided that the depth at the walk line and the total area is not less than that of a quarter circle with a radius equal to the required landing width. Where the *stairway* has a straight run, the depth in the direction of travel *shall* be not less than 36 inches (914 mm).

Exceptions:

1. A floor or landing is not required at the top of an interior *flight* of *stairs*, including *stairs* in an enclosed garage, provided that a door does not swing over the *stairs*.
2. The depth in the direction of travel of landings of existing *stairs* serving existing unfinished *attics* or *basements* being converted to *habitable space* or replacement *stairs* within existing *dwellings shall* be at least equal to the *stair* width but not less than 32 inches (762 mm) where Section R311.7.1, exception 2 is utilized for a reduced *stair* width.

(Add) **R312.1.1.1 Retaining wall guards.** Retaining walls with a difference in height between the finished grade at the top of the wall and the finished grade at the bottom of the wall that is greater than 4 feet (1219 mm) *shall* be provided with *guards* complying with Section R312 when there is a walking surface, parking lot or driveway on the high side located closer than 2 feet (610 mm) to the nearest side of the retaining wall. For the purposes of this section, grass, planting beds or landscaped areas are not a walking surface.

(Amd) **R313.1 Townhouse automatic fire sprinkler systems.** When an automatic residential fire sprinkler system is to be installed in *townhouses*, it *shall* be designed and installed in accordance with Section P2904 or NFPA 13D.

(Del) **R313.1.1 Design and installation.** Delete section.

(Amd) **R313.2 One- and two-family dwellings automatic fire systems.** When an automatic fire sprinkler system is to be installed in *one- and two-family dwellings*, it *shall* be designed and installed in accordance with Section P2904 or NFPA 13D.

(Del) **R313.2.1 Design and installation.** Delete section.

(Amd) **R314.2.2 Alterations, repairs and additions.** When *alterations, repairs* or *additions* requiring a *permit* occur, or when one or more sleeping rooms are added or created in existing *dwellings*, the entire *dwelling unit shall* be provided with smoke alarms located as required for new *dwellings*.

Exceptions:

1. Work involving the *exterior surfaces of dwellings*, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or decks, are exempt from the requirements of this section.
2. Installation, *alteration* or *repairs* of plumbing, mechanical or electrical systems are exempt from the requirements of this section.

(Add) **R314.2.3 During construction.** Pursuant to section 29-315b of the Connecticut General Statutes, whenever a 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 R315.2.3 and this section.

(Amd) **R314.4 Interconnection.** Where more than one smoke alarm is required to be installed within an individual *dwelling unit* in accordance with Section R314.3, the alarm devices *shall* be interconnected in such a manner that the actuation 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.

Exception: Interconnection of smoke alarms in existing areas *shall* not be required where *alterations* or *repairs* do not result in removal of interior wall or ceiling finishes exposing the structure.

(Amd) **R315.2.2 Alterations, repairs and additions.** Where *alterations, repairs* or *additions* requiring a *permit* occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual *dwelling unit* shall be equipped with carbon monoxide alarms located as required for new *dwellings*.

Exceptions:

1. Work involving the exterior surfaces of *dwellings*, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck.
2. Installation, *alteration* or repairs of plumbing systems.
3. Installation, alteration or repairs of mechanical systems that are not fuel fired.

(Add) **R315.2.3 During construction.** Pursuant to section 29-315b of the Connecticut General Statutes, whenever a 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. A combined smoke and carbon monoxide alarm may be installed to comply with R314.2.3 and this section.

(Amd) **R315.3 Location.** Carbon monoxide alarms in *dwelling units* shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional habitable level of the dwelling unit. Where a fuel-burning *appliance* is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom. The alarm *shall* be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

(Del) **FIGURE R318.4 TERMITE INFESTATION PROBABILITY MAP.** Delete without substitution.

(Del) **SECTION R320 – ACCESSIBILITY.** Delete section in its entirety and replace with the following:

(Add) **SECTION R320 – ACCESSIBILITY**

(Add) **R320.1 Scope.** Detached *one- and two-family dwellings shall* be exempt from accessibility requirements. Attached multiple single-family *dwellings (townhouses) shall* comply with Section R320.2 for single-story *townhouses* and with Section R320.3 for multistory *townhouses*. For the purposes of this section, a one-story above-grade *townhouse* with a finished *basement shall* be considered a multistory *townhouse*. Required Type B units *shall* comply with ICC/ANSI A117.1, as amended.

(Add) **R320.2 Single-story townhouses.** Where there are four or more *townhouses* in a single structure, each single-story *townhouse shall* be a Type B unit.

Exception: The number of Type B units *shall* be permitted to be reduced in accordance with Section R320.4.

(Add) **R320.3 Multistory townhouses.** *Buildings or complexes* that contain 10 or more multistory *townhouses shall* have at least 10 percent Type B units. This requirement *shall* be met by providing a sufficient number of single-story Type B units or by providing a sufficient number of multistory *townhouses* that incorporate a Type B unit on the street floor or by a combination of the two. Multistory *townhouses* that incorporate a Type B unit on the street floor *shall* not be required to provide accessibility to floors above or below the street floor. The Type B unit on the street floor *shall* include provisions for living, sleeping, eating, cooking and a complete toilet and bathing facility on that floor.

Exceptions:

1. Structures with fewer than four *dwelling units*.
2. The number of Type B units *shall* be permitted to be reduced in accordance with Section R320.4.

(Add) **R320.4 General exceptions.** Where permitted by Sections R320.2 and R320.3, the required number of Type B units *shall* be permitted to be reduced in accordance with Sections R320.4.1 and R320.4.2.

(Add) **R320.4.1 Site impracticality.** On a *site* with multiple *buildings*, the number of units required by Sections R320.2 and R320.3 to be Type B units may be reduced to a percentage which is equal to the percentage of the entire *site* having grades, prior to development, which are less than 10 percent, provided not less than 20 percent of the Type B units required by Sections R320.2 and R320.3 on the *site* are provided.

(Add) **R320.4.2 Design flood elevation.** The required number of Type B units *shall* not apply to a *site* where the *lowest floor* is required to be at or above the *design flood elevation* resulting in:

1. A difference in elevation between the minimum required floor elevation at the primary entrance and the closest vehicular and pedestrian arrival points, and
2. A slope exceeding 10 percent between the minimum required floor elevation at the primary entrance and the closest vehicular and pedestrian arrival points.

(Add) **R320.5 Accessible route.** At least one *accessible route shall* connect accessible *building* or *facility* entrances with the primary entrance of each Type B unit within the *building* or *complex* and with those exterior and interior facilities that serve the units.

Exception: If the slope of the finished ground level between accessible facilities and *buildings* exceeds one unit vertical in 12 units horizontal (1:12), or where physical barriers prevent the installation of an *accessible route*, a vehicular route with parking that complies with Section 1106 of the 2021 *International Building Code* portion of the 2022 Connecticut State Building Code at each public or *common use facility* or *building* is permitted in place of the *accessible route*.

(Add) **R320.6 Parking.** Two percent, but not less than one, of each type of parking space provided in occupancies which are required to have Type B *dwelling units shall* be accessible. For each six or fraction of six accessible parking spaces, at least one *shall* be a van-accessible parking space.

(Add) **R320.6.1 Parking within or beneath a building.** Where parking is provided within or beneath a *building*, accessible parking spaces *shall* also be provided within or beneath the *building*.

Exception: Private parking garages within or beneath the *building* that contain no more than two parking spaces, that are reserved for the exclusive use of a specific *dwelling unit* and are directly accessed from that *dwelling unit* are not required to be accessible.

(Add) **R320.6.2 Automobile accessible parking spaces.** Pursuant to subsection (h) of section 14-253a of the Connecticut General Statutes, parking spaces for passenger motor vehicles designated for persons who are blind and persons with disabilities *shall* be as near as possible to a *building* entrance or walkway and *shall* be 15 feet (4572 mm) wide, including 5 feet (1524 mm) of cross hatch.

(Add) **R320.6.3 Van accessible parking spaces.** Pursuant to subsection (h) of section 14-253a of the Connecticut General Statutes, parking spaces for passenger vans designated for persons who are blind and persons with disabilities *shall* be as near as possible to a *building* entrance or walkway and *shall* be 16 feet (4877 mm) wide including 8 feet (2438 mm) of cross hatch.

(Add) **R320.6.3.1 Van access clearance.** Pursuant to subsection (i) of section 14-253a of the Connecticut General Statutes, each public parking garage or terminal *shall* have 8 feet 2 inches (2489 mm) vertical clearance at a primary entrance and along the route to at least two parking spaces for passenger vans that conform to Section R320.6.3 and that have 8 feet 2 inches (2489 mm) of vertical clearance.

(Amd) **R321.1 Elevators.** Where provided, passenger elevators, limited use/limited application elevators or elevators installed in private residences *shall* comply with ASME A17.1 and *shall* be installed in accordance with regulations adopted under authority of section 29-192 of the Connecticut General Statutes. Where the provisions of this section conflict with other statutory or regulatory provisions, those requirements *shall* prevail.

(Amd) **R324.3 Photovoltaic systems.** Photovoltaic systems *shall* be designed and installed in accordance with Sections R324.3.1 through R324.7.2.5, the manufacturer's installation instructions and NFPA 70.

(Amd) **R324.4.1.1 Roof load.** Portions of roof structures not covered with *photovoltaic panel systems* shall be designed for dead loads and roof loads in accordance with Sections R301.4 and R301.6. Portions of roof structures covered with *photovoltaic panel systems* shall be designed for the following load cases:

1. 1. Dead load (including *photovoltaic panel* weight) plus snow load in accordance with Table R301.2.

(Add) **R324.5.4 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) **R324.6 Roof access and pathways.** Roof access, pathways and setback requirements shall be provided in accordance with Sections R324.6.1 through R324.6.2.1. Access and minimum spacing shall be required to provide emergency access to the roof, to provide pathways to specific areas of the roof, provide for smoke ventilation opportunity areas, and to provide emergency egress from the roof.

Exceptions:

1. Detached, nonhabitable structures, including but not limited to detached garages, parking shade structures, carports, solar trellises and similar structures, shall not be required to provide roof access.
2. These requirements shall not apply to roofs with slopes of 2 units vertical in 12 units horizontal (17-percent slope) or less.
3. BIPV systems *listed* in accordance with Section 690.12(B)(2) of NFPA 70, where the removal or cutting away of portions of the BIPV system during fire-fighting operations has been determined to not expose a fire fighter to electrical shock hazards.

(Amd) **R324.6.1 Pathways.** Not fewer than two pathways, on separate roof planes from lowest roof edge to ridge and not less than 36 inches (914 mm) wide, shall be provided on all buildings. Not fewer than one pathway shall be provided on the street or driveway side of the roof. For each roof plane with a photovoltaic array, a pathway not less than 36 inches wide (914 mm) shall be provided from the lowest roof edge to ridge on the same roof plane as the photovoltaic array, on an adjacent roof plane, or straddling the same and adjacent roof planes. Pathways shall be over areas capable of supporting fire fighters accessing the roof. Pathways shall be located in areas with minimal obstructions such as vent pipes, conduit, or mechanical equipment.

Exceptions:

1. Where photovoltaic arrays are installed on only one roof slope of a single ridge roof and there is clear access on the opposing slope and that opposing slope has at least one roof access point in accordance with R324.6.3, the pathways from the lowest roof edge to the ridge shall not be required on the roof slope containing the photovoltaic arrays.
2. Where photovoltaic arrays are installed on only one side of the hip rafter of a hipped roof and there is clear access on the opposing slope and that opposing slope has at least one roof access point in accordance with R324.6.3, the pathways from the lowest roof edge to the ridge shall not be required on the roof slope containing the photovoltaic arrays.
3. Where photovoltaic arrays are installed on only one side of the valley beam of a valleyed roof and there is clear access on the opposing slope and that opposing slope has at least one roof access point in accordance with R324.6.3, the pathways from the lowest roof edge to the ridge shall not be required on the roof slope containing the photovoltaic arrays.

(Add) **R324.6.3 Roof access points.** Where required by other sections of this code, roof access points shall be located in areas that do not require the placement of ground ladders over openings such as windows or doors, and located at strong points of building construction in locations where the access point does not conflict with overhead obstructions such as tree limbs, wires or signs.

(Amd) **R327.1 General.** The design and construction of pools and spas shall comply with the 2021 *International Swimming Pool and Spa Code* portion of the 2022 Connecticut State Building Code.

CHAPTER 4 – FOUNDATIONS

(Amd) **R403.1 General.** All *exterior walls shall* be supported on continuous solid or fully grouted *masonry or concrete* footings, crushed stone footings, wood foundations or other *approved* structural systems which *shall* be of sufficient design to accommodate all *loads* according to Section R301 and to transmit the resulting *loads* to the soil within the limitations as determined from the character of the soil. Footings *shall* be supported on undisturbed natural soils or engineered fill. *Concrete* footings *shall* be designed and constructed in accordance with the provisions of Section R403 or in accordance with ACI 332.

Exception: Freestanding *accessory structures* with an area of 600 square feet (56 m²) or less and an eave height of 10 feet (3048 mm) or less.

Footings and freestanding *accessory structures* as exempted above *shall* be supported on undisturbed natural soils or engineered fill and *shall* be anchored to resist wind-induced uplift and overturning.

(Del) **403.1.2 Continuous footing in Seismic Design Categories D₀, D₁ and D₂.** Delete section.

(Del) **403.1.3 Footing and stem wall reinforcing in Seismic Design Categories D₀, D₁ and D₂.** Delete section.

(Del) **FIGURE R403.1.3 REINFORCED CONCRETE FOOTINGS AND MASONRY AND CONCRETE STEM WALLS IN SDC D₀, D₁ AND D₂.** Delete figure in its entirety.

(Del) **403.1.3.1 Concrete stem walls with concrete footings.** Delete section.

(Del) **403.1.3.2 Masonry stem walls with concrete footings.** Delete section.

(Del) **403.1.3.3 Slabs-on-ground with turned-down footings.** Delete section.

(Del) **403.1.3.4 Interior bearing and braced wall panel footings in Seismic Design Categories D₀, D₁ and D₂.** Delete section.

(Del) **403.1.3.5 Reinforcement.** Delete section and all subsections.

(Del) **R403.1.3.6 Isolated concrete footings.** Delete section.

(Amd) **R403.1.4.1 Frost protection.** Except where otherwise protected from frost, foundation walls, piers and other permanent supports of *buildings* and structures *shall* be protected from frost by one or more of the following methods:

1. Extended below the frost line specified in Table R301.2.(1).
2. Constructed in accordance with Section R403.3.
3. Constructed in accordance with ASCE 32.
4. Erected on solid rock.

Exceptions:

1. Protection of freestanding *accessory structures* with an area of 600 square feet (56 m²) or less, of light-frame construction, with an eave height of 10 feet (3048 mm) or less *shall* not be required.
2. Protection of freestanding *accessory structures* with an area of 400 square feet (37 m²) or less, of other than light-frame construction, with an eave height of 10 feet (3048 mm) or less *shall* not be required.
3. Decks and ramps not supported by a *dwelling* need not be provided with footings that extend below the frost line.
4. The footing for the grade level termination of *stairs* or *ramps* attached to decks or landings, whether the deck or landing is supported by a *dwelling* or not, *shall* only be required to be placed at least 12 inches (305 mm) below the undisturbed ground surface in accordance with R403.1.4.

Footings *shall* not bear on frozen soil unless the frozen condition is permanent.

(Add) **R404.4.1 Guards.** Retaining walls with a difference in height between the finished grade at the top of the wall and the finished grade at the bottom of the wall that is greater than 4 feet (1219 mm) *shall* be provided with *guards* complying with Sections R312.1.2 and R312.1.3 when there is a walking surface, parking lot or driveway on the high side located closer than 2 feet (610 mm) to nearest side of the retaining wall. For the purpose of this section, grass, planting beds or landscaped areas *shall* not be a walking surface.

(Add) **R404.6 Deep foundations.** *Deep foundations shall* comply with the requirements set forth in Section 1810 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Add) **R404.6.1 Special inspections of deep foundations.** Special inspections of deep foundations shall be performed in accordance with Sections 1705.7 through 1705.10, as applicable, of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Add) **R405.3 Above-grade drainage.** Above-grade drainage systems, including but not limited to, gutters and downspouts, roof *drains*, and yard *drains*, *shall* not be connected to the foundation drainage system.

CHAPTER 6 – WALL CONSTRUCTION

(Amd) **Table R602.7(1), Footnote e.** Use 30 psf ground snow *load* for cases in which ground snow *load* is less than 30 psf and the *roof live load* is equal to or less than 20 psf. For ground snow *loads* between 30 and 50 psf, linear interpolation is permitted.

(Amd) **Table R602.7(3), Footnote b.** Tabulated values assume #2 *grade* lumber, wet service and incising for refractory species. Use 30 psf ground snow *load* for cases in which ground snow *load* is less than 30 psf and the *roof live load* is equal to or less than 20 psf. For ground snow *loads* between 30 and 50 psf, linear interpolation is permitted.

CHAPTER 8 – ROOF-CEILING CONSTRUCTION

(Amd) **R802.4.1 Rafter size.** - Rafters shall be sized based on the rafter spans in Tables R802.4.1(1) through R802.4.1(8). For ground snow *loads* other than those cited in Tables 802.4.1(3) through 802.4.1(8), rafter spans may be determined using linear interpolation. Rafter spans *shall* be measured along the horizontal projection of the rafter. For other *grades* and species and for other loading conditions, refer to the AWC STJR.

(Amd) **R802.10.2.1 Applicability limits.** The provisions of this section *shall* control the design of truss roof framing when snow controls for *buildings*, not greater than 60 feet (18 288 mm) in length perpendicular to the joist, rafter or truss span, not greater than 36 feet (10 973 mm) in width parallel to the joist, rafter or truss span, not more than three stories above grade plane in height with each *story* not greater than 10 feet (3048 mm) high, and roof slopes not smaller than 3:12 (25-percent slope) or greater than 12:12 (100-percent slope). Truss roof framing constructed in accordance with the provisions of this section *shall* be limited to *sites* subjected to a maximum design wind speed of 140 miles per hour (63 m/s), Exposure B or C, and a maximum ground snow *load* of 70 psf (3352 Pa). For consistent loading of all truss types, roof snow *load* is to be computed as: 1.0 p_g.

CHAPTER 9 – ROOF ASSEMBLIES

(Amd) TABLE R905.2.4.1
CLASSIFICATION OF ASPHALT ROOF SHINGLES

MAXIMUM ULTIMATE DESIGN WIND SPEED, V_{ult} FROM APPENDIX U (mph)	MAXIMUM BASIC WIND SPEED, V_{ASD} FROM APPENDIX U (mph)	ASTM D7158a SHINGLE CLASSIFICATION	ASTM D3161 SHINGLE CLASSIFICATION
110	85	D, G or H	A, D or F
116	90	D, G or H	A, D or F
129	100	G or H	A, D or F
142	110	G or H	F
155	120	G or H	F
168	130	H	F
181	140	H	F
194	150	H	F

For SI: 1 foot = 304.8 mm; 1 mph = 0.447 m/s.

a. The standard calculations contained in ASTM D7158 assume Exposure Category B or C and *building height* of 60 feet or less. Additional calculations are required for conditions outside of these assumptions

CHAPTER 11 [RE] – ENERGY EFFICIENCY

(Amd) **N1101.4 (R102.1.1) Above code programs.** The State Building Inspector and the Codes and Standards Committee may deem a national, state or local energy efficiency program to exceed the energy efficiency required by this chapter. Such energy efficiency program may include, but not be limited to, the Leadership in Energy and Environmental Design rating system, the Green Globes USA program, as established by the Green Building Initiative, the National Green Building Standard, as established by the National Association of Home Builders, or an equivalent rating system approved in accordance with section 29-256a of the Connecticut General Statutes.

Buildings approved in writing by such an energy efficiency program *shall* be considered in compliance with this chapter. The requirements identified as “mandatory” in this Chapter of this code, as applicable, *shall* be met.

(Add) **N1101.10.1.1.1 (R402.2.14) Foamed-in-place insulating material.** Pursuant to section 29-277 of the Connecticut General Statutes, foamed-in-place insulating material, except urethane foam insulation or styrene foam insulation, *shall* not be sold or installed in this state on or after May 28, 2013, unless the manufacturer or supplier has certified to the State Building Inspector that the material complies with the provisions of that section.

(Add) **N1101.15 (R101.5.2) Energy efficiency standards for products.** In addition to the requirements of this code, the testing, certification and enforcement of efficiency standards for new products sold, offered for sale or installed in the State of Connecticut *shall* be in compliance with section 16a-48 of the Connecticut General Statutes and regulations adopted under authority of said statute.

(Amd) **N1102.1 (R402.1) General (Prescriptive).** The *building* thermal envelope *shall* meet the requirements of Sections N1102.1.1 through N1102.1.5.

Exceptions:

1. The following low energy *buildings*, or portions thereof, separated from the remainder of the *building* by building thermal envelope assemblies complying with this section *shall* be exempt from the building thermal envelope provisions of Section N1102.

- 1.1. Those with a peak design rate of energy usage less than 3.4 Btu/h · ft² (10.7 W/m²) or 1.0 watt/ft² of floor area for space conditioning purposes.
 - 1.2. Those that do not contain *conditioned space*.
 - 1.3. Buildings and structures for which heating and cooling is supplied solely by utilization of nonpurchased renewable energy sources including but not limited to, on-site wind, on-site water or on-site solar power, or wood-burning heating appliances that do not rely on backup heat from other purchased, nonrenewable sources.
2. Log homes designed in accordance with ICC 400.

(Add) **N1103.3.1.1 (R403.2.1.1) Duct insulation values.** Minimum duct insulation values stated in Section N1103.2.1 *shall* be installed R-values.

(Amd) **N1103.6 (R403.6) Mechanical ventilation.** The buildings complying with Section R402.4.1 shall be provided with ventilation that complies with the requirements of Section M1505.4 of the International Residential Code or International Mechanical Code, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

(Amd) **N1106.2 (R406.2) ERI compliance.** Compliance based on the Energy Rating Index (ERI) requires that the rated design meet all of the following:

1. The requirements of the sections indicated within Table N1106.2.
2. Maximum value indicated in section N1106.5.

(Amd) **N1106.5 (R406.5) ERI-based compliance.** Compliance based on an ERI analysis requires that the rated proposed design and confirmed built dwelling unit be shown to have an ERI or a Home Energy Rating System (HERS) value less than or equal to 55. Compliance shall be demonstrated without the use of on-site renewable energy.

(Del) **Table N1106.5 (R406.5) MAXIMUM ENERGY RATING INDEX.** Delete without substitution.

(Amd) **N1110.3.1 (R502.3.1) Building envelope.** New *building* envelope assemblies that are part of the *addition shall* comply with Sections N1102.1, N1102.2, N1102.3.1 through N1102.3.5, and N1102.4.

Exceptions:

1. New envelope assemblies are exempt from the requirements of Section N1102.4.1.2.
2. A visual inspection of the *building* envelope tightness and insulation *shall* be considered acceptable when the items listed in Table N1102.4.1.1 (R402.4.1.1), applicable to the method of construction, are field verified. Where required by the code official, an *approved* party independent from the installer of the insulation *shall* inspect the air barrier and insulation.

CHAPTER 13 – GENERAL MECHANICAL SYSTEM REQUIREMENTS

(Amd) **M1301.1 Scope.** The provisions of this chapter *shall* govern the installation of mechanical systems not specifically covered in other chapters applicable to mechanical systems. Installations of mechanical appliances, *equipment* and systems not addressed by this code *shall* comply with the applicable provisions of the *International Mechanical Code* and requirements as noted in Section R101.4.1 for fuel gas.

CHAPTER 14 – HEATING AND COOLING EQUIPMENT AND APPLIANCES

(Amd) **M1402.1 General.** Oil-fired central furnaces shall conform to ANSI/UL 727. Electric furnaces shall conform to UL 1995 or UL/CSA 60335-2-40.

(Amd) **M1403.1 Heat pumps.** Electric heat pumps shall be *listed* and *labeled* in accordance with UL 1995 or UL/CSA 60335-2-40.

(Amd) **M1412.1 Approval of equipment.** Absorption systems shall be installed in accordance with the manufacturer’s instructions. Absorption *equipment* shall comply with UL 1995 or UL/CSA/ 60335-2-40.

(Amd) **M1413.1 General.** Evaporative cooling *equipment* and *appliances* shall comply with UL 1995 or UL/CSA 60335-2-40 and shall be installed:

1. In accordance with the manufacturer’s instructions.
2. On level platforms in accordance with Section M1305.1.3.1.
3. So that openings in exterior walls are flashed in accordance with Section R703.4.
4. So as to protect the potable water supply in accordance with Section P2902.
5. So that air intake opening locations are in accordance with Section R303.5.1.

CHAPTER 15 – EXHAUST SYTEMS

(Amd) **M1502.4.2 Duct installation.** Exhaust ducts shall be supported at intervals not to exceed 12 feet (3658 mm) and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Exhaust duct joints shall be sealed in accordance with Section M1601.4.1 and shall be mechanically fastened. Ducts shall not be joined with screws or similar fasteners that protrude more than 1/8 inch (3.2 mm) into the inside of the duct. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

Exception: Manufactured oval duct with an equivalent diameter of 4” shall be allowed.

CHAPTER 19 – SPECIAL APPLIANCES, EQUIPMENT AND SYSTEMS

(Amd) **M1904.1 Installation.** Gaseous hydrogen *shall* be installed in accordance with the applicable requirements of Sections M1307.4 and M1903.1 and the 2021 *International Building Code* portion of the 2022 Connecticut State Building Code, and the requirements as noted in Section R101.4.1 for fuel gas.

CHAPTER 21 – HYDRONIC PIPING

(Amd) **TABLE M2101.9 HANGER SPACING INTERVALS**

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
ABS	4	10 ^a
CPVC ≤ 1-inch pipe or tubing	3	5 ^a
CPVC ≥ 1¼ inches	4	10 ^a
Copper or copper-alloy pipe	12	10
Copper or copper-alloy tubing	6	10
PB pipe or tubing	2.67	4
PE pipe or tubing	2.67	4
PE-RT ≤ 1 inch	2.67	10 ^a
PE-RT ≥ 1¼ inches	4	10 ^a
PEX tubing ≤ 1 inch	2.67	4
PEX tubing ≥ 1¼ inches	4	10 ^a

Cross-linked polyethylene/aluminum/crosslinked polyethylene (PEX-AL-PEX) pipe smaller than 1 inch	2.67 ^b	10 ^a
Cross-linked polyethylene/aluminum/crosslinked polyethylene (PEX-AL-PEX) pipe 1 inch and larger	4 ^b	10 ^a
PP < 1-inch pipe or tubing	2.67 ^b	4
PP > 1 inches	4 ^b	10 ^a
PVC	4	10 ^a
Steel pipe	12	15
Steel tubing	8	10

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

- a. For sizes 2 inches and smaller, a guide shall be installed midway between required vertical supports. Such guides shall prevent pipe movement in a direction perpendicular to the axis of the pipe.
- b. The maximum horizontal spacing of PP or PP-RCT pipe hangers shall be increased to manufacturer's installation requirements based on maximum operating temperature design.

CHAPTER 22 – SPECIAL PIPING AND STORAGE SYSTEMS

(Amd) **M2201.7 Tank abandonment and removal.** Tank abandonment and removal shall be in accordance with M2201.7.1, M2201.7.2 or M2201.7.3.

(Add) **M2201.7.1 Removal from service of tanks and related equipment.** Except as provided for in M2201.7.2 or M2201.7.3, if a tank and its related piping are abandoned for whatever reason, the tank and all piping connected to it, including the outside fill and vent piping and any piping connected to the appliance, *shall* be emptied of all contents, cleaned, removed from the premises or property, and disposed of in accordance with applicable local, state, and federal rules and regulations.

(Add) **M2201.7.2 Temporary removal from service.** If a liquid fuel-burning appliance is converted to an alternate fuel, but the tank is kept in place so that it can be returned to service at some future date, the following requirements *shall* be met before the alternate fuel is used:

1. The entire contents of the tank *shall* be completely removed and the tank purged of all vapors.
2. The fuel tank vent line *shall* remain intact and open.
3. The outside fill pipe *shall* be removed and the tank opening *shall* be capped or plugged or the outside fill pipe *shall* be capped and filled with *concrete*, and all remaining piping, other than the vent line, *shall* be capped or sealed.

(Add) **M2201.7.3 Permanent abandonment of underground tanks.** Underground tanks *shall* be permitted to be permanently closed in place if the following requirements are met:

1. All applicable authorities having *jurisdiction shall* be notified.
2. A safe workplace *shall* be maintained throughout the prescribed activities.
3. All flammable and *combustible liquids* and residues *shall* be removed from the tank, appurtenances and piping, and *shall* be disposed of in accordance with regulatory requirements and industry practices, using a written procedure.
4. The tank, appurtenances, and piping *shall* be made safe by either purging them of flammable vapors or inerting the potential *explosive* atmosphere. Confirmation that the atmosphere in the tank is safe *shall* be by testing of the atmosphere using a combustible gas indicator if purging, or an oxygen meter if inerting, at intervals in accordance with written procedures.
5. Access to the tank *shall* be made by careful excavation to the top of the tank.
6. All exposed piping, gauging and tank fixtures, and other appurtenances, except the vent, *shall* be disconnected and removed.

7. The tank *shall* be completely filled with an inert solid material.
8. The tank vent and remaining underground piping *shall* be capped or removed.
9. The tank excavation *shall* be backfilled.

CHAPTER 24 – FUEL GAS

(Amd) **G2402.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in other portions of the 2022 Connecticut State Building Code, such terms *shall* have the meanings ascribed to them as in those portions of the code.

(Amd) **G2412.2 Liquefied petroleum gas storage.** The storage system for liquefied petroleum gas *shall* be designed and installed in accordance with NFPA 58.

(Add) **G2412.2.1 Identification label.** 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 LP-gas supplier-owned Department of Transportation (DOT) and American Society of Mechanical Engineers (ASME) containers installed on a consumer’s premises. The firm name(s) and emergency telephone number(s) *shall* be at least ½ inch (12.7 mm) high and of contrasting color to the container. 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. 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.

CHAPTER 25 – PLUMBING ADMINISTRATION

(Del) **P2603.5.1 Sewer depth.** Delete without substitution.

CHAPTER 26 – GENERAL PLUMBING REQUIREMENTS

(Amd) **TABLE P2605.1 PIPING SUPPORT**

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
ABS pipe	4	10 ^b
Aluminum tubing	10	15
Cast-iron pipe	5 ^a	15
Copper or copper-alloy pipe	12	10
Copper or copper-alloy tubing (1¼ inches in diameter and smaller)	6	10
Copper or copper-alloy tubing (1½ inches in diameter and larger)	10	10
Cross-linked polyethylene (PEX) pipe, 1 inch and smaller	2.67 (32 inches)	10 ^b
Cross-linked polyethylene (PEX) pipe, 1¼ inches and larger	4	10 ^b
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe smaller than 1 inch	2.67 (32 inches) ^c	4 ^b
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe 1 inch and larger	4 ^c	10 ^b

CPVC pipe or tubing (1 inch in diameter and smaller)	3	10 ^b
CPVC pipe or tubing (1 ¹ / ₄ inches in diameter and larger)	4	10 ^b
Lead pipe	Continuous	4
PB pipe or tubing	2.67 (32 inches)	4
Polyethylene of raised temperature (PE-RT) pipe, 1 inch and smaller	2.67 (32 inches)	10 ^b
Polyethylene of raised temperature (PE-RT) pipe, 1 ¹ / ₄ inches and larger	4	10 ^b
Polypropylene (PP) pipe or tubing (1 inch and smaller)	2.67 (32 inches) ^c	10 ^b
Polypropylene (PP) pipe or tubing (1 ¹ / ₄ inches and larger)	4 ^c	10 ^b
PVC pipe	4	10 ^b
Stainless steel drainage systems	10	10 ^b
Steel pipe	12	15

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

- a. The maximum horizontal spacing of cast-iron pipe hangers shall be increased to 10 feet where 10-foot lengths of pipe are installed.
- b. For sizes 2 inches and smaller, a guide shall be installed midway between required vertical supports. Such guides shall prevent pipe movement in a direction perpendicular to the axis of the pipe.
- c. The maximum horizontal spacing of PP or PP-RCT pipe hangers shall be increased to manufacturer's installation requirements based on maximum operating temperature design.

CHAPTER 28 – WATER HEATERS

(Amd) **P2804.6.1 Requirements for discharge pipe.** Amend item 10. as follows:

10. Terminate not more than 6 inches (152 mm) and not less than two times the discharge pipe diameter above the floor or waste receptor flood level rim and cut at a 45-degree angle.

CHAPTER 29 – WATER SUPPLY AND DISTRIBUTION

(Add) **P2902.5.3.1 Automatic lawn sprinkler system sensor device.** Pursuant to section 29-265b of the Connecticut General Statutes, an automatic lawn sprinkler system *shall* be equipped with a rain sensor or switch that will automatically override the irrigation cycle when adequate rainfall has occurred.

CHAPTER 30 – SANITARY DRAINAGE

(Del) **Section P3009.1 through P3009.11.** Delete sections, subsections and tables and replace with the following:

(Add) **P3009.1 General.** Subsurface landscape irrigation systems *shall* comply with the Public Health Code of the State of Connecticut adopted pursuant to section 19a-36 of the Connecticut General Statutes.

CHAPTER 31 – VENTS

(Amd) **P3103.1.1 Roof extension.** Open vent pipes that extend through a roof that do not meet the conditions of Section P3103.1.2 or P3103.1.3 shall terminate not less than 12 inches (150 mm) above the roof.

(Amd) **P3103.1.2 Roof used for other than weather protection.** Where a roof is to be used for any purpose other than weather protection, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

(Del) **P3103.2 Frost closure.** Delete without substitution.

(Del) **CHAPTER 34 – GENERAL REQUIREMENTS.** Delete chapter in its entirety and replace with the following:

(Add) **CHAPTER 34 – ELECTRICAL**

(Amd) **3401.1 General.** The design and installation of electrical systems, equipment and components indoors and outdoors that are within the scope of this code, including services, power distribution systems, fixtures, appliances, devices and appurtenances shall comply with the 2020 National Electrical Code (NFPA 70) portion of the 2022 Connecticut State Building Code. Chapters 34 through 43 are included for reference only.

(Del) **CHAPTER 35 – ELECTRICAL DEFINITIONS.** Chapter included for reference only

(Del) **CHAPTER 36 – SERVICES.** Chapter included for reference only

(Del) **CHAPTER 37 – BRANCH CIRCUIT AND FEEDER REQUIREMENTS.** Chapter included for reference only

(Del) **CHAPTER 38 – WIRING METHODS.** Chapter included for reference only.

(Del) **CHAPTER 39 – POWER AND LIGHTING DISTRIBUTION.** Chapter included for reference only

(Del) **CHAPTER 40 – DEVICES AND LUMINAIRES.** Chapter included for reference only

(Del) **CHAPTER 41 – APPLIANCE INSTALLATION.** Chapter included for reference only

(Del) **CHAPTER 42 – SWIMMING POOLS.** Chapter included for reference only.

(Del) **CHAPTER 43 – REMOTE-CONTROL, SIGNALING AND POWER-LIMITED CIRCUITS.** Chapter included for reference only.

CHAPTER 44 – REFERENCED STANDARDS

CSA

CSA Group
8501 East Pleasant Valley Road
Cleveland, OH 44131-5516

CAN/CSA/C22.2 No. 60335-2-40—2019

Safety of Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers
M1403.1, M1412.1, M1413.1

(Amd)
NFPA

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269

Standard reference number—year of publication	Title	Referenced in code section number
(Add) 02-19	Hydrogen Technologies Code	R101.4.1
(Add) 54-21	National Fuel Gas Code	R101.4.1

UL LLC

333 Pfingsten Road
Northbrook, IL 60062

(Amd) UL/CSA 60335-2-40—2019

Standard for Household and Similar Electrical Appliances, Part 2: Requirements for Motor-compressors
M1402.1, M1412.1, M1413.1, M2006.1

APPENDIX E - MANUFACTURED HOUSING USED AS DWELLINGS

(Amd) **AE101.1 General.** The provisions of Appendix E *shall* be applicable only to a *manufactured home* used as a single *dwelling unit* and *shall* apply to the following:

1. Construction, *alteration* and *repair* of any foundation system necessary to provide for the installation of a *manufactured home* unit.
2. Construction, installation, *addition*, *alteration*, *repair* or maintenance of the *building* service equipment necessary for connecting *manufactured homes* to water, fuel or power supplies and sewage systems.
3. *Alterations*, *additions* or *repairs* to existing *manufactured homes*. The construction, *alteration*, moving, demolition, *repair* and use of accessory *buildings* and structures and their *building* service *equipment shall* comply with the requirements of the Connecticut State Building Code.

These provisions *shall* not be applicable to the design and construction of *manufactured homes* and *shall* not be deemed to authorize either modifications or *additions* to *manufactured homes* where otherwise prohibited.

(Amd) **AE120.1 General.** The provisions of Sections AE121 to AE126, inclusive, are applicable only upon request of the building *permit* applicant with the approval of the local *building official*.

(Amd) APPENDIX F – PASSIVE RADON GAS CONTROLS

(Amd) **AF101.1 General.** This appendix contains radon-resistant construction techniques for new construction.

(Del) **FIGURE AF101.1 EPA MAP OF RADON ZONES.** Delete figure.

(Del) **TABLE AF101.1 HIGH RADON-POTENTIAL (ZONE 1) Counties.** Delete table.

(Add) **AF101.2 Radon mitigation preparation construction technique.** All newly constructed detached *one- and two-family dwellings* and *townhouses* shall be provided with radon mitigation preparation construction in accordance with Section AF104 of this code.

Exceptions:

1. Radon-resistant construction technique complying with Section AF103 of this code.
2. Such systems *shall* not be required in existing *buildings* undergoing *repair, addition* or *alteration*. In the case of an *addition* to an existing *building*, this exception also applies to the new construction.

(Add) **AF102.2 Definitions.** Add or amend the following definitions.

(Add) **VENT PIPE.** Not less than a 3-inch diameter (76 mm) ABS or PVC gas-tight pipe extending from the gas permeable layer through the roof.

SECTION AF103 PASSIVE RADON-RESISTANT SYSTEM REQUIREMENTS

(Amd) **AF103.5.3 “T” fitting and vent pipe.** A 3- or 4-inch (76 mm or 102 mm) “T” fitting *shall* be inserted beneath the soil-gas-retarder and be connected to a *vent pipe*. The *vent pipe shall* extend through the *conditioned space* of the *dwelling* and terminate not less than 12 inches (305 mm) above the roof in a location not less than 10 feet (3048 mm) away from any window or other opening into the *conditioned spaces* of the *building* that is less than 2 feet (610 mm) below the exhaust point.

The vent pipe *shall* be the same *diameter* throughout its length and *shall* be supported in accordance with Section P2605.

(Amd) **AF103.6.1 “T” fitting and vent pipe.** Before a slab is cast or other floor system is installed, a “T” fitting *shall* be inserted below the slab or other floor system and the soil-gas-retarder. The “T” fitting *shall* be connected to a vent pipe. The vent pipe *shall* extend through the *conditioned space* of the *dwelling* and terminate not less than 12 inches (305 mm) above the roof in a location not less than 10 feet (3048 mm) away from any window or other opening into the *conditioned spaces* of the *building* that is less than 2 feet (610 mm) below the exhaust point. The vent pipe *shall* be the same *diameter* throughout its length and *shall* be supported in accordance with Section P2605.

(Amd) **AF103.6.2 Multiple vent pipes.** In *dwellings* where interior footings or other barriers separate the gas-permeable layer, each area *shall* be fitted with an individual vent pipe. Vent pipes *shall* connect to a single vent that terminates not less than 12 inches (305 mm) above the roof or each individual vent pipe *shall* terminate separately not less than 12 inches (305 mm) above the roof. The vent pipe *shall* be the same *diameter* throughout its length and *shall* be supported in accordance with Section P2605.

(Amd) **AF103.12 Power source and access for future radon fan.** To provide for future installation of a radon fan, an electrical circuit terminated in an *approved* box *shall* be installed during construction in the anticipated location of the radon fans. An accessible clear space 22 inches (610 mm) in *diameter* by 3 feet (914 mm) in height adjacent to the vent pipe *shall* be provided at the anticipated location of a future radon fan.

(Add) **SECTION AF105 RADON MITIGATION PREPARATION**

(Add) **AF105.1 Soil-gas-retarder.** A continuous membrane of 6-mil (0.15 mm) polyethylene or other *approved* equivalent material used to retard the flow of soil gases into a *dwelling shall* be installed under the floor slab in accordance with Section R506.2.3.

(Add) **AF105.2 “T” fitting and vent pipe.** Before a slab is cast or other floor system is installed, a 3-inch “T” fitting *shall* be inserted beneath the soil-gas-retarder. The “T” fitting *shall* be surrounded by aggregate consisting of material that will pass through a 2-inch (51 mm) sieve and be retained by a ¼-inch (6.4 mm) sieve not less than an 8-inch deep by 24-inch *diameter* hole. The aggregate *shall* be wrapped in filter fabric or equivalent material. The “T” fitting *shall* be connected to a 3-inch-*diameter* (76 mm) ABS or PVC vent

pipe extending from the *basement* through the *conditioned space* of the *dwelling* and terminate and be capped not less than 12 inches (305 mm) above the roof in a location not less than 10 feet (3048 mm) away from any window or other opening into the *conditioned spaces* of the *building* that is less than 2 feet (610 mm) below the exhaust point. The vent pipe *shall* be the same *diameter* throughout its length and *shall* be supported in accordance with Section P2605. The vent pipe *shall* be labeled at the bottom and in the *attic* and *shall* specifically state: “Reserved for a Potential Radon Reduction Mechanical System.”

(Add) **AF105.2.1 Combination foundations.** Where *basement* or crawl space floors are on different levels, each level *shall* have a separate vent pipe. Multiple vent pipes *shall* be permitted to be connected to a single vent pipe that terminates above the roof.

(Add) **AF105.2.2 Drain tile and sump used for depressurization.** As an alternative to inserting a vent pipe into a “T” fitting, a vent pipe *shall* be permitted to be inserted directly into an interior perimeter drain tile loop or through a sump cover.

(Add) **AF105.3 Floor openings.** Openings around bathtubs, showers, water closets, pipes, wires or other objects that penetrate *concrete* slabs, or other floor assemblies, *shall* be filled with a polyurethane caulk or expanding foam applied in accordance with the manufacturer’s instructions. In addition, slab joints inclusive of cracks, penetrations, expansion joints and the slab to foundation connections, *shall* be filled with polyurethane caulk.

(Add) **AF105.4 Sumps.** Sumps open to soil or serving as the termination point for subslab or exterior drain tile loops *shall* be covered with a gasketed or sealed lid. Sumps used as the suction point in a subslab depressurization system *shall* have a lid designed to accommodate the vent pipe. Sumps used as a floor drain *shall* have a lid equipped with a trapped inlet.

(Add) **AF105.5 Waterproofing and dampproofing.** The *exterior surfaces* of foundation walls below grade *shall* be waterproofed or dampproofed in accordance with Section R406.

(Add) **AF105.6 Power source for future radon fan.** To provide for future installation of a potential radon fan AF104.6.1 or AF104.6.2 *shall* be met:

(Add) **AF105.6.1 Conduit for future radon fan.** A ¾-inch electrical compliant conduit from the *basement* or room or space that the electrical panel is located to the *attic* *shall* be installed during construction. This conduit is intended to and dedicated for accommodating electrical wiring should a radon mitigation fan be installed. The conduit *shall* be capped in both the *basement* and in the *attic*. The conduit *shall* be labeled at the top and bottom and specifically state: “Reserved for a Potential Radon Reduction Mechanical System.”

(Add) **AF105.6.2 Circuit for future radon fan.** To provide for future installation of a radon fan, an electrical circuit terminated in an *approved* box *shall* be installed during construction in the anticipated location of the radon fans.

(Add) **AF105.7 Accessible clear space.** An *accessible* clear space 22 inches (610 mm) in diameter by 3 feet (914 mm) in height adjacent to the vent pipe *shall* be provided in the *attic* or at an acceptable location of a potential radon fan.

(Add) **APPENDIX U – WIND SPEEDS, SEISMIC DESIGN CATEGORIES and GROUND SNOW LOADS**

Municipality	Ultimate Design Wind Speed, V_{ult} (mph)	Nominal Design Wind Speed, V_{asd} (mph)	Ground Snow Load pg (psf)	Hurricane-Prone Region
Andover	120	93	30	Yes
Ansonia	120	93	30	Yes
Ashford	120	93	35	Yes
Avon	120	93	35	Yes
Barkamsted	115	89	35	-
Beacon Falls	120	93	30	Yes
Berlin	120	93	30	Yes
Bethany	120	93	30	Yes
Bethel	120	93	30	Yes
Bethlehem	120	93	35	Yes
Bloomfield	120	93	30	Yes
Bolton	120	93	30	Yes
Bozrah	125	97	30	Yes
Branford	125	97	30	Yes
Bridgeport	120	93	30	Yes
Bridgewater	120	93	35	-
Bristol	120	93	35	Yes
Brookfield	120	93	30	Yes
Brooklyn	125	97	35	Yes
Burlington	120	93	35	Yes
Canaan	115	89	40	-
Canterbury	125	97	30	Yes
Canton	120	93	35	Yes
Chaplin	125	97	35	Yes
Cheshire	120	93	30	Yes
Chester	125	97	30	Yes
Clinton	125	97	30	Yes
Colchester	125	97	30	Yes
Colebrook	115	89	40	-
Columbia	125	97	30	Yes
Cornwall	115	89	40	-
Coventry	120	93	30	Yes
Cromwell	120	93	30	Yes
Danbury	120	93	30	Yes
Darien	120	93	30	Yes
Deep River	125	97	30	Yes
Derby	120	93	30	Yes
Durham	120	93	30	Yes
East Granby	120	93	35	Yes
East Haddam	125	97	30	Yes
East Hampton	125	97	30	Yes
East Hartford	120	93	30	Yes
East Haven	125	97	30	Yes
East Lyme	126	98	30	Yes

Municipality	Ultimate Design Wind Speed, V_{ult} (mph)	Nominal Design Wind Speed, V_{asd} (mph)	Ground Snow Load p_g (psf)	Hurricane-Prone Region
East Windsor	120	93	30	Yes
Eastford	120	93	40	Yes
Easton	120	93	30	Yes
Ellington	120	93	35	Yes
Enfield	120	93	35	Yes
Essex	125	97	30	Yes
Fairfield	120	93	30	Yes
Farmington	120	93	35	Yes
Franklin	125	97	30	Yes
Glastonbury	120	93	30	Yes
Goshen	115	89	40	-
Granby	120	93	35	Yes
Greenwich	120	93	30	Yes
Griswold	125	97	30	Yes
Groton	128	99	30	Yes
Guilford	125	97	30	Yes
Haddam	125	97	30	Yes
Hamden	120	93	30	Yes
Hampton	125	97	35	Yes
Hartford	120	93	30	Yes
Hartland	115	89	35	-
Harwinton	120	93	35	Yes
Hebron	125	97	30	Yes
Kent	115	89	40	-
Killingly	125	97	35	Yes
Killingworth	125	97	30	Yes
Lebanon	125	97	30	Yes
Ledyard	126	101	30	Yes
Lisbon	125	97	30	Yes
Litchfield	115	89	35	-
Lyme	125	97	30	Yes
Madison	125	97	30	Yes
Manchester	120	93	30	Yes
Mansfield	120	93	35	Yes
Marlborough	125	97	30	Yes
Meriden	120	93	30	Yes
Middlebury	120	93	35	Yes
Middlefield	120	93	30	Yes
Middletown	120	93	30	Yes
Milford	120	93	30	Yes
Monroe	120	93	30	Yes
Montville	125	97	30	Yes
Morris	115	89	35	-
Naugatuck	120	93	30	Yes
New Britain	120	93	30	Yes
New Canaan	120	93	30	Yes
New Fairfield	115	89	30	-
New Hartford	115	89	35	-

Municipality	Ultimate Design Wind Speed, V_{ult} (mph)	Nominal Design Wind Speed, V_{asd} (mph)	Ground Snow Load pg (psf)	Hurricane-Prone Region
New Haven	125	97	30	Yes
New London	127	98	30	Yes
New Milford	115	89	35	-
Newington	120	93	30	Yes
Newtown	120	93	30	Yes
Norfolk	115	89	40	-
North Branford	125	97	30	Yes
North Canaan	115	89	40	-
North Haven	120	93	30	Yes
North Stonington	127	101	30	Yes
Norwalk	120	93	30	Yes
Norwich	125	97	30	Yes
Old Lyme	126	98	30	Yes
Old Saybrook	126	98	30	Yes
Orange	120	93	30	Yes
Oxford	120	93	30	Yes
Plainfield	125	97	30	Yes
Plainville	120	93	35	Yes
Plymouth	120	93	35	Yes
Pomfret	125	97	40	Yes
Portland	120	93	30	Yes
Preston	125	97	30	Yes
Prospect	120	93	30	Yes
Putnam	125	97	40	Yes
Redding	120	93	30	Yes
Ridgefield	120	93	30	Yes
Rocky Hill	120	93	30	Yes
Roxbury	120	93	35	Yes
Salem	125	97	30	Yes
Salisbury	115	89	40	-
Scotland	125	97	30	Yes
Seymour	120	93	30	Yes
Sharon	115	89	40	-
Shelton	120	93	30	Yes
Sherman	115	89	35	-
Simsbury	120	93	35	Yes
Somers	120	93	35	Yes
South Windsor	120	93	30	Yes
Southbury	120	93	35	Yes
Southington	120	93	30	Yes
Sprague	125	97	30	Yes
Stafford	120	93	35	Yes
Stamford	120	93	30	Yes
Sterling	125	97	35	Yes
Stonington	129	100	30	Yes
Stratford	120	93	30	Yes
Suffield	120	93	35	Yes
Thomaston	120	93	35	Yes

Municipality	Ultimate Design Wind Speed, V_{ult} (mph)	Nominal Design Wind Speed, V_{asd} (mph)	Ground Snow Load p_g (psf)	Hurricane-Prone Region
Thompson	120	93	40	Yes
Tolland	120	93	35	Yes
Torrington	115	89	40	-
Trumbull	120	93	30	Yes
Union	120	93	40	Yes
Vernon	120	93	30	Yes
Voluntown	125	101	30	Yes
Wallingford	120	93	30	Yes
Warren	115	89	40	-
Washington	115	89	35	-
Waterbury	120	93	35	Yes
Waterford	127	98	30	Yes
Watertown	120	93	35	Yes
West Hartford	120	93	30	Yes
West Haven	125	97	30	Yes
Westbrook	125	97	30	Yes
Weston	120	93	30	Yes
Westport	120	93	30	Yes
Wethersfield	120	93	30	Yes
Willington	120	93	35	Yes
Wilton	120	93	30	Yes
Winchester	115	89	40	-
Windham	125	97	30	Yes
Windsor	120	93	30	Yes
Windsor Locks	120	93	35	Yes
Wolcott	120	93	35	Yes
Woodbridge	120	93	30	Yes
Woodbury	120	93	35	Yes
Woodstock	120	93	40	Yes

Notice of Intent to Adopt the 2022 Connecticut State Building Code

The Department of Administrative Services, Office of the State Building Inspector, in conjunction with the Codes & Standards Committee, is announcing its intent to adopt a new State Building Code to be titled the 2022 Connecticut State Building Code. In accordance with the requirements of section 29-252b of the Connecticut General Statutes, 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 Building Inspector
450 Columbus Boulevard, Suite 1303
Hartford, CT 06106
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 [DAS Code Adoption](#) and [Secretary of State](#) web pages.

The 2022 Connecticut State Building Code will adopt the following national model codes, as amended in the 2022 Connecticut State Building Code:

- 2021 International Code Council (ICC) International Building Code
- 2021 International Code Council (ICC) International Residential Code
- 2021 International Code Council (ICC) International Existing Buildings Code
- 2021 International Code Council (ICC) International Mechanical Code
- 2021 International Code Council (ICC) International Plumbing Code
- 2021 International Code Council (ICC) International Energy Conservation Code
- 2020 National Fire Protection Association 70 – National Electrical Code
- 2021 International Code Council (ICC) International Swimming Pool and Spa Code
- 2017 International Code Council / ANSI A117.1 – Accessible and Usable Buildings and Facilities

The Connecticut amendments to these model codes can be found here: [2022 CT State Building Code](#)

The model codes can be viewed here: [ICC Free eCode Viewer](#); [NFPA Free Viewer](#)
or purchased at: [Where to Purchase Model Code Books](#)

The intended effective date for this code is October 1, 2022.

2022 CONNECTICUT STATE BUILDING CODE

Small Business Impact Statement/Flexibility Analysis

In accordance with C.G.S. Section 29-252, the State Building Inspector and the Codes and Standards Committee analyzed the effect on small businesses of the 2022 State Building 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 Building Inspector and the Codes and Standards Committee determined the following:

(Check all appropriate boxes):

Adoption of the 2022 State Building Code will not have an effect on small businesses.

Adoption of the 2022 State Building Code will have an effect on small businesses but will not have an adverse effect on such small businesses.

Adoption of the 2022 State Building 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 Building 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 BUILDING CODE

Fiscal Note

STATUTORY AUTHORITY: 29-252

OTHER AGENCIES AFFECTED: Any agency performing construction and thus using the State Building 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: Joseph V. Cassidy, P.E., State Building Inspector

SUMMARY OF STATE COST AND REVENUE IMPACT OF 2016 STATE BUILDING CODE

AGENCY: DAS

POTENTIAL FUND AFFECTED: General

	First Year 2022	Second Year 2023	Full Operation 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 Building Inspector and the Codes and Standards Committee are statutorily required to adopt the State Building Code.

EXPLANATION OF STATE IMPACT: The fiscal impact to the state of adopting the 2022 State Building 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 \$500 and \$2000 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>
Sent: Friday, February 4, 2022 10:17 AM
To: 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



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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 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 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.

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,



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
To: Hobbs, Darren
Subject: Fwd: Change request for the 2018 CSFC

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From: Rep. McGorty, Ben <Ben.McGorty@cga.ct.gov>
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>
Sent: Monday, February 14, 2022 6:00 PM
To: CodesStandards, DAS
Subject: 2022 Codes - Public Hearing Testimony

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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:

- 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>
Sent: Thursday, February 17, 2022 10:30 AM
To: 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>
Sent: Tuesday, February 22, 2022 10:09 AM
To: 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 life-threatening 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>
Sent: Tuesday, February 22, 2022 12:48 PM
To: 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 [Energy Management Advisory Committee \(EMAC\)](#). 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 PM
To: 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.

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>
Sent: Thursday, March 17, 2022 5:00 PM
To: 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

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Cambridge, MA 02140
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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,



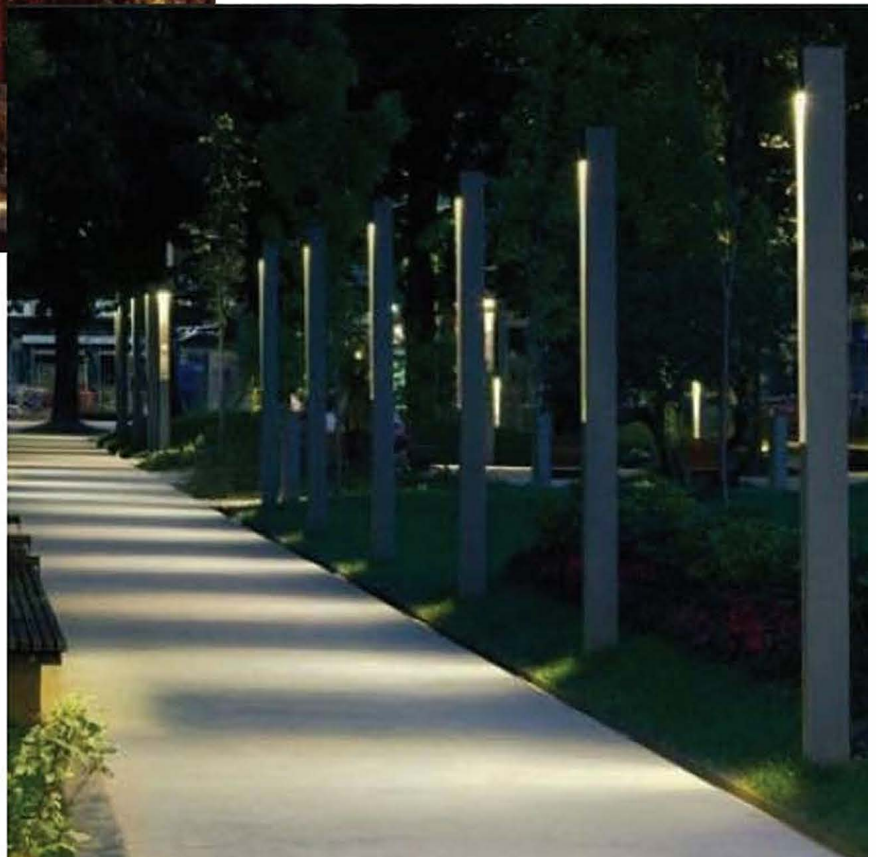
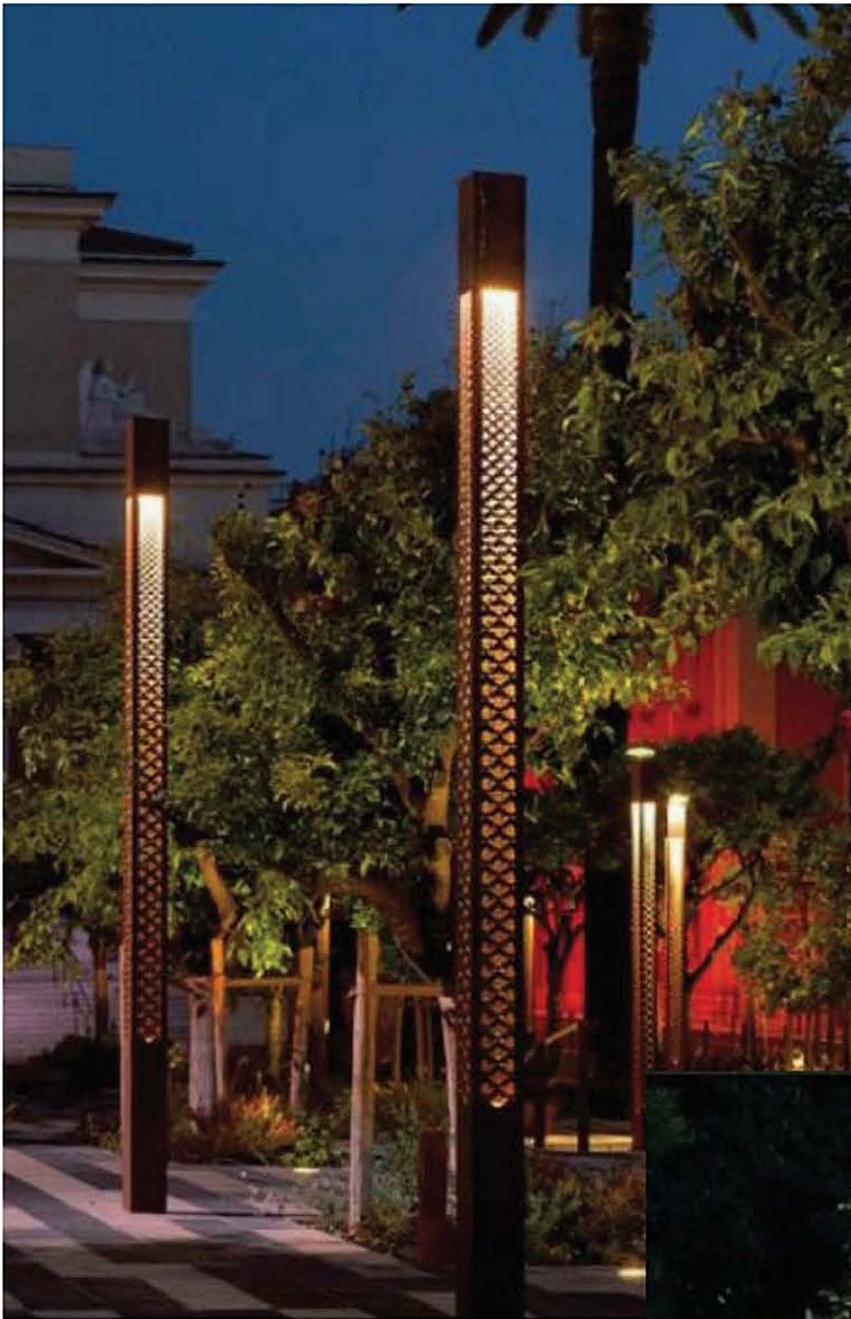
Glenn Heinmiller, FIALD
Chair, IALD Energy + Sustainability Committee
glenn@lampartners.com

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>
Sent: Tuesday, February 22, 2022 3:35 PM
To: 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 https://www.energycodes.gov/sites/default/files/documents/ConnecticutResidentialCostEffectiveness_2018.pdf
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 https://www.energycodes.gov/sites/default/files/documents/02202018_Standard_90.1-2016_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 product-efficiency standards.”⁷

By adopting the 2021 *IECC*, Connecticut can leap ahead and capture the important energy-saving 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 <https://www.cga.ct.gov/2018/act/pa/2018PA-00082-R00SB-00007-PA.htm>.

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 <https://portal.ct.gov/DEEP/Climate-Change/Climate-Change>.

⁸ For an estimate of energy and carbon savings associated with the latest model energy codes, download the Building Energy Codes Emissions Calculator at <https://www.imt.org/resources/building-energy-codes-emissions-calculator/>.

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 <https://energyefficientcodes.org/wp-content/uploads/2019-07-1-Putting-the-IECC-on-a-Glide-Path-to-Net-Zero-Energy-Buildings-by-2050.pdf>.

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

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>
Sent: Wednesday, March 2, 2022 2:16 PM
To: 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,

A handwritten signature in blue ink that reads "Harwood W. Loomis".

Harwood W. Loomis, RA, LBO
Assistant Building Official
E-mail: loomish@southington.org

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.

Proposed amendments to IRC 106.2

(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
To: 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 (underlined):

Comment 1

(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.

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 403.10.6.

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 Michael.Strong@ct.gov

Please use E-Mail or Cell # to reach me while I am working outside the office

From: Harwood Loomis <loomish@southington.org>
Sent: Friday, March 4, 2022 5:03 PM
To: 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](mailto:loomish@southington.org)

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**International Code Council**  
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Middletown, RI 02842  
t: 888.422.7233, ext. 4876  
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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**  
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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,

A handwritten signature in blue ink that reads "William J. Nash, Jr." The signature is written in a cursive style.

William J. Nash, Jr.  
Senior Regional Manager – Government Relations  
International Code Council  
[wnash@iccsafe.org](mailto:wnash@iccsafe.org)  
401-265-0003

March 9, 2022

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 111.3 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 documents adding this section would clarify the language. The language would mirror the language 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\*** 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,

  
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  
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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>  
**Sent:** Tuesday, March 15, 2022 10:02 AM  
**To:** CodesStandards, DAS  
**Cc:** Cassidy, Joseph  
**Subject:** 2022 CT Energy Code change proposal  
**Attachments:** [2022 CT State Energy Code Change Proposal Maria Karpman.docx](#)

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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 [DOE ASHRAE Standard 90.1 2019 Section 11 and Appendix G Compliance Form](#) .

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](http://www.karpmanconsulting.net)

Phone [860.430.1909](tel: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 [ASHRAE Standard 90.1 Performance Based Compliance Form](#) [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] [Performance-Based Code Compliance: A Roadmap to Establish Quality Control and Quality Assurance Infrastructure \(energycodes.gov\)](https://www.energycodes.gov/ashrae-standard-901-performance-based-compliance-form)

[2] [ASHRAE Standard 90.1 Performance Based Compliance Form | Building Energy Codes Program](https://www.energycodes.gov/ashrae-standard-901-performance-based-compliance-form)

**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 shall 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 Energy<sup>1</sup>](#), 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 [using the forms developed by the U.S. Department of Energy<sup>2</sup>](#) and documentation shall be submitted to the rating authority. The information shall be submitted in a report and shall include the following:

.....

---

<sup>1</sup> <https://www.energycodes.gov/ashrae-standard-901-performance-based-compliance-form>

<sup>2</sup> <https://www.energycodes.gov/ashrae-standard-901-performance-based-compliance-form>

**From:** Jason Davidson <JDavidson@phta.org>  
**Sent:** Wednesday, March 16, 2022 5:34 PM  
**To:** CodesStandards, DAS  
**Cc:** Justin Wiley; Nicholas Capezza; Dominick Mond; William J. Nash  
**Subject:** Support: The 2021 International Swimming Pool and Spa Code  
**Attachments:** [Jason Davidson\\_PHTA\\_CT.pdf](#)

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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



**Jason Davidson**  
Director, Government Relations  
O: 703-838-0083 ext: 165  
C: 443-745-8130  
[JDavidson@phta.org](mailto:JDavidson@phta.org)  
[www.phta.org](http://www.phta.org)

**Pool & Hot Tub Alliance**  
2111 Eisenhower Ave., Ste. 500    4775 Granby Circle  
Alexandria, VA 22314                      Colorado 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 Connecticut 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](mailto:jdavidson@phta.org)



2111 Eisenhower Ave., Ste 500  
Alexandria, VA 22314

## 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](http://APSP.org) or [NSFP.org](http://NSFP.org).



2111 Eisenhower Ave., Ste 500  
Alexandria, VA 22314

**From:** Wu, Cornelia <Cwu@NEEP.org>  
**Sent:** Thursday, March 17, 2022 12:21 PM  
**To:** 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](#)

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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](mailto:cwu@neep.org)

**Northeast Energy Efficiency Partnerships (NEEP)**  
781-860-9177 x 135  
[www.neep.org](http://www.neep.org)

Connect with NEEP!





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.





## 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,

A handwritten signature in black ink, appearing to read 'Cornelia Wu', is written over a light blue horizontal line.

Cornelia Wu  
Building Policy Manager  
NEEP - Northeast Energy Efficiency Partnerships  
81 Hartwell Avenue, Lexington, MA 02421  
781-860-9177 Ext.135  
[cwu@neep.org](mailto:cwu@neep.org)

**From:** susan lauzier <susan.lauzier@glastonbury-ct.gov>  
**Sent:** Thursday, March 17, 2022 12:26 PM  
**To:** 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](#)

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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](mailto:susan.lauzier@glastonbury-ct.gov)

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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. Johnson  
Town Manager

RJJ/sal

**From:** Eric Lacey <eric@reca-codes.com>  
**Sent:** Thursday, March 17, 2022 1:34 PM  
**To:** 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](http://www.reca-codes.com)  
[eric@reca-codes.com](mailto: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 Alliance<sup>1</sup> submits these comments in response to a request for public comment in the Notice of Intent to Adopt the 2022 Connecticut State Building Code.<sup>2</sup> **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:

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<sup>1</sup> 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.

<sup>2</sup> Dep't of Administrative Services, *Notice of Intent to Adopt the 2022 Connecticut State Building Code* (Jan. 31, 2022), available at <https://portal.ct.gov/-/media/DAS/Office-of-State-Building-Inspector/2022-CSBC-Notice-Flex-Fiscal.pdf>.

**Summary of U.S. Department of Energy’s Energy and Cost Savings Analyses  
of the Latest Model Energy Codes for Connecticut**

| Residential <sup>3</sup> |                                          |                                              | Commercial <sup>4</sup>      |                                          |                                                  |
|--------------------------|------------------------------------------|----------------------------------------------|------------------------------|------------------------------------------|--------------------------------------------------|
| Residential Model Code   | Energy Cost Savings over Current CT Code | Life Cycle Cost Savings over Current CT Code | Commercial Model Code        | Energy Cost Savings over Current CT Code | Avg Life Cycle Cost Savings over Current CT Code |
| <b>2021 IECC</b>         | <b>8.8%</b>                              | <b>\$4,077</b>                               | <b>ASHRAE Std. 90.1-2019</b> | <b>1.7% - 8.0%</b>                       | <b>\$3.93/ft<sup>2</sup></b>                     |

**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.<sup>5</sup> 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.<sup>6</sup>

According to the U.S. Energy Information Administration, residential and commercial buildings account for nearly 40% of total energy consumption,<sup>7</sup> 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

<sup>3</sup> U.S. Dep’t of Energy, *Cost-Effectiveness of the 2021 IECC for Residential Buildings in Connecticut* (July 2021), available at [https://www.energycodes.gov/sites/default/files/2021-07/ConnecticutResidentialCostEffectiveness\\_2021.pdf](https://www.energycodes.gov/sites/default/files/2021-07/ConnecticutResidentialCostEffectiveness_2021.pdf).

<sup>4</sup> U.S. Dep’t of Energy, *Cost-Effectiveness of ANSI/ASHRAE/IES Standard 90.1-2019 for Connecticut* (July 2021), available at [https://www.energycodes.gov/sites/default/files/2021-07/Cost-effectiveness\\_of\\_ASHRAE\\_Standard\\_90-1-2019-Connecticut.pdf](https://www.energycodes.gov/sites/default/files/2021-07/Cost-effectiveness_of_ASHRAE_Standard_90-1-2019-Connecticut.pdf).

<sup>5</sup> See Conn. Gen. Stat. § 22a-200a.

<sup>6</sup> 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](https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3_Phase1_Report_Jan2021.pdf).

<sup>7</sup> See U.S. Energy Infrastructure Admin., *Frequently Asked Questions (FAQs): How Much Energy is Consumed in U.S. Buildings*, <https://www.eia.gov/tools/faqs/faq.php?id=86&t=1s>.

*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)<sup>8</sup> and ASHRAE Standard 90.1-2019 (Commercial)<sup>9</sup>**

| 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

<sup>8</sup> See U.S. Dep’t of Energy, *Cost-Effectiveness of the 2021 IECC for Residential Buildings in Connecticut*, at iii (July 2021).

<sup>9</sup> 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

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,<sup>1</sup> 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.

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<sup>1</sup> 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 [https://www.energycodes.gov/sites/default/files/documents/ConnecticutResidentialCostEffectiveness\\_2018.pdf](https://www.energycodes.gov/sites/default/files/documents/ConnecticutResidentialCostEffectiveness_2018.pdf)  
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 |
| <b>2018 <i>IECC</i> (Residential)</b> | <b>2.1%<sup>2</sup></b>                      | <b><i>ASHRAE</i> Std. 90.1-2016</b> | <b>8.5%<sup>3</sup></b>                      |
| <b>2021 <i>IECC</i> (Residential)</b> | <b>7.44%<sup>4</sup></b>                     | <b><i>ASHRAE</i> Std. 90.1-2019</b> | <b>4.2%<sup>5</sup></b>                      |

<sup>2</sup> 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](https://www.energycodes.gov/sites/default/files/documents/ConnecticutResidentialCostEffectiveness_2018.pdf).

<sup>3</sup> See U.S. Dep’t of Energy, *Energy Savings Analysis: ANSI/ASHRAE/IES Standard 90.1-2016*, at 23 (Oct. 2017), available at [https://www.energycodes.gov/sites/default/files/documents/02202018\\_Standard\\_90.1-2016\\_Determination\\_TSD.pdf](https://www.energycodes.gov/sites/default/files/documents/02202018_Standard_90.1-2016_Determination_TSD.pdf).

<sup>4</sup> 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](https://www.energycodes.gov/sites/default/files/documents/2021_IECC_PreliminaryDetermination_TSD.pdf).

<sup>5</sup> 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](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.<sup>6</sup> 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 product-efficiency standards.”<sup>7</sup>**

By adopting the 2021 *IECC*, Connecticut can leap ahead and capture the important energy-saving and carbon-reducing improvements incorporated into both the 2018 and 2021 versions of the *IECC*.<sup>8</sup>

## 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**

---

<sup>6</sup> 2018 Act Concerning Climate Change Planning and Resiliency, Public Act No. 18-82 (2018), available at <https://www.cga.ct.gov/2018/act/pa/2018PA-00082-R00SB-00007-PA.htm>.

<sup>7</sup> 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 <https://portal.ct.gov/DEEP/Climate-Change/Climate-Change>.

<sup>8</sup> For an estimate of energy and carbon savings associated with the latest model energy codes, download the Building Energy Codes Emissions Calculator at <https://www.imt.org/resources/building-energy-codes-emissions-calculator/>.

**savings and carbon emissions reductions over the century-long life spans of these buildings ...”<sup>9</sup>**

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.

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<sup>9</sup> 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 <https://energyefficientcodes.org/wp-content/uploads/2019-07-1-Putting-the-IECC-on-a-Glide-Path-to-Net-Zero-Energy-Buildings-by-2050.pdf>.

## **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.*

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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  
**To:** 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**

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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 referenced 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](http://ct.gov/historic-preservation)

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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](mailto:marena.wisniewski@ct.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Jonathan Kinney". The signature is fluid and cursive.

Jonathan Kinney  
State Historic Preservation Officer



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](mailto:marena.wisniewski@ct.gov).

Sincerely,

A handwritten signature in black ink that reads "Jonathan Kinney". The signature is fluid and cursive.

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](http://ct.gov/historic-preservation)

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**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. Versteeg*

Joseph H. Versteeg

March 13, 2022

**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. **Sections 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. Versteeg

March 13, 2022

**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. Versteeg*

Joseph H. Versteeg

March 13, 2022

**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. Versteeg*

Joseph H. Versteeg

March 13, 2022

**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 **one of the following** proscenium opening protection **methods** as follows:

(1) The proscenium opening protection shall comply with 12.4.7.7. **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.**

(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)) **13.4.7.7.1** 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. Versteeg*

Joseph H. Versteeg

March 13, 2022



## 2022 State Building, Fire Safety & Fire Prevention Codes

### Public Comments and Resulting Actions

| Substantive Items |               |                  |                      |               |               |                       |                                                    |                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------|---------------|------------------|----------------------|---------------|---------------|-----------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #                 | 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 in 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 not 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. 8-2o                                                                                                    | 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. Requirement is not relevant to energy code.                                              | 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                           | [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 approval                                                                                                                                                                                                                                                                                                                 |
|                   |               |                  |                      |               | 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 90.1    | 90.1 11.7.2           | Permit Application 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     | e-mail           | 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     | e-mail           | 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 additional references                        | 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.                                                                                                                                                                                                                                                                                                                                                                                           |
|                   |               |                  |                      |               | NFPA 101      | 13.4.7.7.1            | proscenium openings                                | add protection methods                                                                                                                                                                          | Part IV, Section 13.4.7.7.1 proposed language has been included.                                                                                                                                                                                                                                                                                                                                                                                 |