Department of Administrative Services

# 2022 Connecticut State Building Code

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Draft For Public Comment January 31, 2022

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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:

- 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.

(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.
- 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.
- 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) **107.2.2** 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:
- 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.

(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 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 *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.
- (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*.
- (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.

(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 *building*s 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 *building*s 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 *building*s, 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 *building*s located on a single parcel of land or on contiguous parcels of land or any *building* or group of *building*s 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 99<sup>th</sup> 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. 1. Makes the means of egress path not readily apparent due to visual or audio distractions.
- 2. 2.Intentionally confounds identification of the means of egress path.
- 3. 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 Six or fewer children in a dwelling unit.** As defined in subsection (a)(3) of section 19a-77 of the Connecticut General Statutes, a family child care home that accommodates six or fewer children of any age shall be classified as Group R-3 or shall comply with the International Residential Code in accordance with Section 101.2.

(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 Six or fewer children of any age receiving care in a dwelling unit.** As defined in section 19a-77 of the Connecticut General Statutes, a family child care home that accommodates six or fewer children of any age 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 limitedarea 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.
- The structural members supporting the rated assemblies shall not be required to be fireresistance 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) 404.1General.** 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 m<sup>2</sup>) 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 *dwellings* 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.

(Amd) **Table 509.1 INCIDENTAL USES**. Add the following row after the last row:

Storage rooms over 100 square feet	1 hour or provide automatic fire-extinguishing system
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# CHAPTER 7 – FIRE AND SMOKE PROTECTION FEATURES

(Add) **704.6.1 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 m<sup>2</sup>).
  - **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 m<sup>2</sup>).
- 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 m<sup>2</sup>).
- 4. Throughout stories below the *level of exit discharge* where such stories have an area exceeding 2,500 square feet (232 m<sup>2</sup>) 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. In existing buildings four stories or less in height containing not more than four dwelling units where dwelling units are added to an existing Group R use that does not involve a physical increase in the height or area of the building and where each dwelling units has either:
  - 2.1 An exit door directly to the exterior at a level of exit discharge,
  - 2.2 Direct access to an exterior *stair* serving a maximum of two *dwelling units* on the same *story*, or
  - 2.3 Direct access to an interior *stair* serving only that *dwelling unit* and separated from all other portions of the *building* with 1-hour fire-resistance-rated *fire barriers*.

- 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).

(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 *dwellings* with regard to water supply, and
- 6. The sprinkler system is provided with valve supervision by one of the following methods:
  - 6.1. A single *listed* control valve that shuts off both domestic and sprinkler system water supply and a separate valve that shuts off the domestic system only.
  - 6.2. Electrical supervision connected to the facility's fire alarm system.
  - 6.3. Valve closure that causes the sounding of an audible alarm audible throughout the premises.

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

- 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 openended 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, reroofing, re-siding, window replacement and the construction of decks without roofs, are exempt from the requirements of this section.
- 3. Carbon monoxide detectors shall not be required in *buildings* not containing a fuel-burning appliance, *fireplace* or attached garage.

(Add) **915.8 During construction**. Pursuant to section 29-315b of the Connecticut General Statutes, whenever a single-family or two-family dwelling is occupied during interior alterations or additions requiring a building permit where a fuel-burning appliance, fireplace or attached garage exists, the temporary installation of battery-operated carbon monoxide alarms shall be required in the vicinity of such alterations or additions for the duration of construction activities. Combined smoke and carbon monoxide alarms may be installed to comply with 907.2.11.2.3 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 1004.52. 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) 1005.3.1Stairways. 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:**

- 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.

- 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*.

- 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 dwellings undergoing a change of occupancy to Group R-1 bed and breakfast establishments.

# **Exceptions:**

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

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

(Amd) **1011.11 Handrails.** Flights of stairways shall have handrails on each side and shall comply with Section 1014. Where glass is used to provide the handrail, the handrail shall comply with Section 2407.

- 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.

- 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 *nosing*.
- 7. In Group F occupancies where *exit access stairways* serve fewer than three stories and such *stairways* are not open to the public, and where the top of the *guard* also serves as a *handrail*, the top of the guard shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.

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

- 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 4% 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 4% 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.

- 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) **1020.1.2 Group R-1 bed and breakfast establishments.** A *fire-resistance rating* is not required for *corridors* in *Group R-1 bed and breakfast establishments*. Doors leading from *guest rooms* into *corridors* or hallways in *Group R-1 bed and breakfast establishments* shall be equipped with *self-closing* devices.

# (Amd) Table 1020.2 Corridor Fire-Resistance Rating

Amend final row as follows:

,			
I-4	All	1 <sup>e</sup>	0

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.

- 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.

- 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 m<sup>2</sup>) 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.

- 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.

**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 be between 26 inches and 36 inches from the floor and 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 (I) 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.
- 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/m<sup>2</sup>), the following additional information shall also be provided, regardless of whether snow *loads* govern the design of the roof:

- 1. Flat-roof snow load, pf.
- 2. Snow exposure factor, C<sub>e</sub>.
- 3. Snow *load* importance factor, *I*<sub>s</sub>.
- 4. Thermal factor,  $C_t$ .
- 5. Slope factor(s), C<sub>s</sub>.
- 6. Drift surcharge load(s), p<sub>d</sub>.
- 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 *dwellings*.

(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.
- 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,  $V_{asd}$ , 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 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:

 $d_n$  = 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).

 $R = \text{Rain load on the undeflected roof, in psf (kN/m}^2)}$ . 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  $S_1$  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:

- 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 sitebuilt 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.
- 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
Inspect Material Grade and Thickness		X	
Inspect Framing and Details     a. Framing layout, member sizes and bearing lengths		х	
<ul> <li>b. Blocking, bridging and web stiffeners</li> <li>c. Holes<sup>a</sup></li> </ul>		X X	
Inspect Connections     a. Bolted and screwed connections, including diameter, length, spacing and edge distance		X	
b. Welded connections     c. Proprietary hangers and framing anchors, including fastener sizes and quantities		x x	
d. Tie-down anchors, including anchor rod sizes and fastener sizes and quantities		X	
4. Inspect Shear Walls and <i>Diaphragms</i> a. Panel <i>grade</i> and thickness <sup>b</sup> 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	
5. Inspect Cold-Formed Steel Trusses a. Temporary installation restraint/bracing for truss spanning 60 feet or more b. Permanent individual truss member restraint/ bracing for trusses with an		x x	1705.2.4 1705.2.4
overall height of 60 inches or greater		~	

- 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

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

(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

	ТҮРЕ	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	IBC REFERENCE
1.	Inspect Grading of Wood Materials:			
	a. Sawn lumber framing		X	
	b. Structural composite lumber		X X	
	c. Wood structural panels		<b>X</b>	
2.	Inspect Framing and Details			
	a. Framing layout, member sizes and bearing		X	
	lengths b. Blocking and bridging		X	
	c. Holes and notches <sup>a</sup>		x	
3.	Inspect Connections a. Bolted and screwed connections, including			
	diameter, length, spacing and edge distance		X	
	b. Nailed connections, including diameter, length	,		
	type and spacing of nails	,	X	
	<ul> <li>Proprietary hangers and framing anchors,</li> </ul>			
	including fastener sizes and quantities		X	
	<ul> <li>Tie-down anchors, including anchor rod size and fastener sizes and quantities</li> </ul>			
	and rasterier sizes and quantities		X	
4.	Inspect Shear Walls and Diaphragms			
	a. Panel <i>grade</i> and thickness <sup>b</sup>		X	
	b. Fastener size, length and spacing.		X	
	c. Framing member sizes at panel edges		X	
	d. Blocking at panel edges		X	
	e. Field gluing	X		
	f. High-load <i>diaphragms</i>		X	1705.5.1
5.	Inspect Metal-Plate Connected Wood Trusses			
	a. Temporary installation restraint/bracing for true	ss	X	1705.5.2
	spanning 60 feet or more			
	b. Permanent individual truss member restraint/		v	170E E 2
	bracing for trusses with an overall height of 60 inches or greater	'	X	1705.5.2
	c. Multi-ply truss connections.		X	

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	LATERAL BEARING PRESSURE	LATERAL SLIDING RESISTANCE			
	(psf)	(psf/ft below natural grade)	Coefficient of friction <sup>a</sup>	Cohesion (psf) <sup>b</sup>		
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*.

(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:

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

- 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.

# **CHAPTER 28 - MECHANICAL SYSTEMS**

(Amd) **2801.1Scope.** 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) **2901.1Scope.** 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.

- 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 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 9½ 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 m<sup>2</sup>), 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 m<sup>2</sup>) shall not be erected, operated or maintained for any purpose without obtaining a *permit* from the *building official*.

- 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 m<sup>2</sup>)
  - 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 m<sup>2</sup>) 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*.

- 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 m<sup>2</sup>).
- 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 m<sup>2</sup>).
  - 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) 3103.5.7.2 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 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) **3103.5.7.3 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 3103.5.7.2.
- 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 3103.5.7.2.
- (Add) **3103.5.7.4 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 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 9½ inches (235 mm) thick.
- (Add) **3103.5.9 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 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 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 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 .

# **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) 02-20	Hydrogen Technologies Code	101.4.1
(Add) 54-21	National Fuel Gas Code	101.4.1
(Amd) 70-20	National Electrical Code	108.3, 415.11.1.8, 904.3.1, 907.6.1, 909.12.2, 909.16.3, 1205.4.1, 2701.1, 2702.1.2, G501.4, G1001.6, H106.1, H106.2, K101, K111.1

# (Add) **APPENDIX P MUNICIPALITY – SPECIFIC STRUCTURAL DESIGN PARAMETERS**

Municipality	Basic Design Wind Speeds, (mph)		eds, V	Allowa	Speed	ss Design Is, <i>V<sub>asd</sub></i> ph)	Wind	Ground MCE Ground Accelerations		Wind-E Debris F	Hurricane-			
Municipality	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	<b>Load p</b> <sub>g</sub> (psf)	<b>S</b> s (g)	<b>S</b> <sub>1</sub> (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	Prone Region
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 <sub>asd</sub> (mph)			Speeds, V <sub>asd</sub> (mph)			Ground MCE Ground Accelerations			Wind-E Debris F	Hurricane-			
Municipality	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Load $p_g$ (psf)	<b>S</b> s (g)	<b>S</b> ₁ (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	Prone Region
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 V (m	Vind Spec	eds, V	Allowable Stress Design Wind Speeds, V <sub>asd</sub> (mph)				Ground Snow Load	Snow Accelerations		Wind-E Debris F	Hurricane-	
минісіранту	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	<b>p</b> <sub>g</sub> (psf)	<b>S</b> s (g)	<b>S</b> ₁ (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	Region
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	<b>Design V</b> (m	<b>Vind Spe</b> oph)	eds, V	Allowable Stress Design Wind Speeds, V <sub>asd</sub> (mph)				Ground MCE Ground Accelerations			Wind-E Debris R	Hurricane-	
Municipality	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	<b>Load p</b> <sub>g</sub> (psf)	<b>S</b> s (g)	<b>S</b> ₁ (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	Prone Region
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	<b>Design V</b> (m	<b>Vind Spe</b> oph)	eds, V	Allowable Stress Design Wind Speeds, V <sub>asd</sub> (mph)				Ground Snow	Snow Accelerations		Wind-E Debris F	Hurricane-	
Municipality	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Load p <sub>g</sub> (psf)	<b>S</b> s (g)	<b>S</b> ₁ (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	Prone Region
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

Manufactural Man	Basic	_	<b>Vind Spe</b> ph)	eds, V	Allowable Stress Design Wind Speeds, V <sub>asd</sub> (mph)				Ground Snow	Snow Accelerations		Wind-Borne Debris Region <sup>1</sup>		Hurricane-
Municipality	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	Risk Cat. I	Risk Cat. II	Risk Cat. III	Risk Cat. IV	<b>Load p</b> <sub>g</sub> (psf)	<b>S</b> s (g)	<b>S</b> <sub>1</sub> (g)	Risk Cat. III Occup. I-2	Risk Cat. IV	Prone Region
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

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.

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#### **AMENDMENTS TO ICC/ANSI A117.1 - 2017**

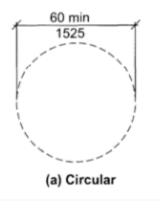
(Amd) **106.2.8 Safety Code for Elevators and Escalators:** ASME A17.1-2013 (American Society of Mechanical Engineers International, Two Park Avenue, New York, NY 10016-5990).

(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.

(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.

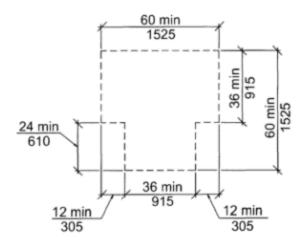
## (Add) FIGURE 304.3.1 Circular Turning Space



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

(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.

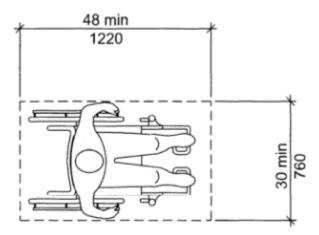
(Add) Figure 304.3.2 T-Shaped Space.



(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 comply provisions relocation of, existing buildings and structures shall with the for alterations, repairs, additions and changes of occupancy or relocation, respectively, in this the International Energy Conservation Code, International code and 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:**

- 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.
- 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. 1.Existing stairway in existing structures shall be required to comply with the requirements of Section 1011.5 of the *International Building Code*.
- 2. 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. 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.

(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.
- 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.

(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.

#### **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. 1.Nonrated permanent partition and horizontal assemblies.
- 2. 2. Fire partition.
- 3. 3. Smoke partition.
- 4. 4.Smoke barrier.
- 5. 5. Fire barrier.
- 6. 6.Fire wall.

### **Exceptions:**

- 1. 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. 2. Automatic sprinkler system shall not be required in a townhouse constructed in accordance with the *International Residential Code*.
- 3. 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) 02-16	Hydrogen Technologies Code	101.8, 702.7.1
(Add) 54-18	National Fuel Gas Code	101.8, 702.7.1

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# 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 *dwellings* and multiple single-family *dwellings* (*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) **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.

(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*.

(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 <sup>b</sup>
Aluminum tubing	10	15
Brass pipe	10	10
Cast-iron pipe	5 <sup>a</sup>	15
Chlorinated polyvinyl chloride (CPVC) pipe and tubing, 1 inch and smaller	3	10 <sup>b</sup>
Chlorinated polyvinyl chloride (CPVC) pipe and tubing, 1 <sup>1</sup> / <sub>4</sub> inches and larger	4	10 <sup>b</sup>
Copper or copper-alloy pipe	12	10
Copper or copper-alloy tubing, 11/4-inch diameter and smaller	6	10
Copper or copper-alloy tubing, 11/2-inch diameter and larger	10	10
Cross-linked polyethylene (PEX) pipe, 1 inch and smaller	2.67 (32 inches)	10 <sup>b</sup>
Cross-linked polyethylene (PEX) pipe, 11/4 inches and larger	4	10 <sup>b</sup>
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe smaller than 1 inch	2.67 (32 inches) <sup>c</sup>	10 <sup>b</sup>
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe 1 inch and larger	4 <sup>c</sup>	10 <sup>b</sup>
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 <sup>b</sup>
Polyethylene of raised temperature (PE-RT) pipe, 11/4 inches and larger	4	10 <sup>b</sup>
Polypropylene (PP) pipe or tubing, 1 inch and smaller	2.67 (32 inches)	10 <sup>b</sup>
Polypropylene (PP) pipe or tubing, 11/4 inches and larger	4 <sup>c</sup>	10 <sup>b</sup>
Polyvinyl chloride (PVC) pipe	4	10 <sup>b</sup>
Stainless steel drainage systems	10	10 <sup>b</sup>
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 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 Roof extension.** 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		Referenced in code
of publication	Title	section number
(Add) 02-16	Hydrogen Technologies Code	101.2.1
(Add) 54-18	National Fuel Gas Code	101.2.1
(Amd) 70—20	National Electrical Code	

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

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

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# 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.

(Amd) **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.

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

(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.

(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.
- 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<sup>a</sup>

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
ABS pipe	4	10°
Aluminum pipe and tubing	10	15
Cast-iron pipe <sup>b</sup>	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°
CPVC pipe or tubing, 11/4-inches and larger	4	10°
Lead pipe	Continuous	4
PB pipe or tubing	2 <sup>2</sup> / <sub>3</sub> (32 inches)	4
PE-RT 1 inch and smaller	2 <sup>2</sup> / <sub>3</sub> (32 inches)	10°
PE-RT 1 <sup>1</sup> / <sub>4</sub> inches and larger	4	10°
PEX tubing 1 inch and smaller	2 <sup>2</sup> / <sub>3</sub> (32 inches)	10°
PEX tubing 1 <sup>1</sup> / <sub>4</sub> inches and larger	4	10°
Cross-linked polyethylene/aluminum/crosslinked polyethylene (PEX-AL-PEX) pipe smaller than 1 inch	2 <sup>2</sup> / <sub>3</sub> (32 inches) <sup>d</sup>	10°
Cross-linked polyethylene/aluminum/crosslinked polyethylene (PEX-AL-PEX) pipe 1 inch and larger	4 <sup>d</sup>	10°
Polypropylene (PP) pipe or tubing, 1 inch and smaller	2 <sup>2</sup> / <sub>3</sub> (32 inches) <sup>d</sup>	10°
Polypropylene (PP) pipe or tubing, 11/4 inches and larger	<b>4</b> <sup>d</sup>	10°
PVC pipe	4	10°
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:**

- 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.

# **CHAPTER13 - 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	CSA Group		
	8501 East Pleasant Valley	8501 East Pleasant Valley Road		
	Cleveland, OH 44131-551	6		
Standard				
reference				
number—		Referenced		
year of		in code		
publication	Title	section number		
(Add)	Safety of Household and Similar Electric	908.1. 916.1, 918.1,		
C22.2 No.	Appliances, Part 2-40: Particular	918.2,1101		
60335-2-	Requirements for Electrical Heat Pumps,	·		
40-2019	Air-Conditioners and Dehumidifiers			

(Amd) NFP	PA National Fire Protection As 1 Battery Park Quincy, MA 02169-7471			
Standard reference number— year of publication	Title	Referenced in code section number		
(Add) 54- 18	National Fuel Gas Code	101.2.2		

(Amd) UL	UL LLC 333Pfingsten 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

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#### 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 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) **C103.1General.** 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.
- (Add) **FULL CUTOFF LUMINAIRE.** A luminaire that allows no direct light emissions above a horizontal plane through the luminaire's lowest light-emitting part.

# **CHAPTER 3 [CE] - GENERAL REQUIREMENTS**

(Add) **C302.2 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 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 x 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 ft<sup>2</sup> (139.4 m<sup>2</sup>) 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 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) **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 R406.4 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 to 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 1½ 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:** 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 (71/2 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 Department of Public Health Regulations.** Public pools shall be designed and installed in accordance with the regulations under authority of section 19a-36 of the Connecticut General Statutes. Where conflicts exist between the requirements of these regulations and this code, the requirements of the regulations shall take precedence.

(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 202 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 at a single-family residence, 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.

#### CHAPTER 3 – PROVISIONS FOR ALL COMPLIANCE METHODS

(Amd) **302.1 Electrical.** Electrical requirements for aquatic facilities shall be in accordance with NFPA 70.

**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 prior to the electrical bonding inspection of any in-ground swimming pool unless the permanent barrier is in place prior to the commencement of the installation. 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) **Section 307 GENERAL DESIGN**. Delete section in its entirety.
- (Del) Section 308 DIMENTIONAL DESIGN. Delete section in its entirety.
- (Del) **Section 311 CIRCULATION SYSTEMS**. 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) **Section 321 LIGHTING**. 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 EXCERSIZE SPAS.** Delete chapter in its entirety.
- (Del) **CHAPTER 6 AQUATIC RECREATIONAL FACILITIES.** Delete chapter in its entirety.

#### 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:**

- 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 m<sup>2</sup>).
- 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 m<sup>2</sup>) 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:

- 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) **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* 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) **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.

(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 *dwellings* 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 m<sup>2</sup>)
  - 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 m<sup>2</sup>) 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.

(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.

- (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) **111.8 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	WIND DESIGN		SEISMIC	SUB	BJECT TO DAMAGE FROM	
LOAD	Speed <sup>b</sup> (mph)	Wind-Borne debris zone	DESIGN CATEGORY	Weathering <sup>a</sup>	Frost line depth	Termite
As set forth in Appendix U.	As set forth in Appendix U.	See definition	В	Severe	42"	Moderate-Heavy

WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMPERATURE	CLIMATE ZONE
7 <sup>o</sup> F	YES	To be determined locally	1,500 or less	50 <sup>o</sup> F	5A

Manual J Design Criteria									
ACCA Manual J 8th edition 2016									
Location	Elevation	Latitude	Heating	Cooling					
	Feet	Degrees	99%	Outd	oor Air	D	esign Graii	ns	Daily
		North	Outdoor	1%	Coincident	55% RH	50% RH	45% RH	Range
			Dry Bulb	Dry Bulb	Wet Bulb	Indoors	Indoors	Indoors	(DR)
Connecticut									
Bridgeport, Sikorsky Memorial AP	10	41	12	84	72	29	36	42	М
Hartford, Brainard Field	19	41	6	88	72	23	30	36	М
New Haven AP	14	41	7	84	73	35	42	48	М
New London	10	41	9	85	72	26	32	39	М
Norwalk	397	41	9	84	71	22	29	36	М
Norwich	197	41	7	86	73	30	37	44	М
Waterbury	850	41	2	85	71	22	28	35	М
Windsor Locks, Bradley Field	197	42	8	88	71	16	22	29	М

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**<sup>a,b</sup>. Delete without substitution.

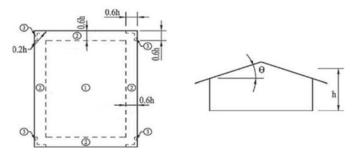
(Del) **FIGURE R301.2(2) ULTIMATE DESIGN WIND SPEEDS.** Delete without substitution.

(Del) FIGURE R301.2(3) GROUND SNOW LOADS, Pg FOR THE UNITED STATES (Ib/ft²). Delete without substitution.

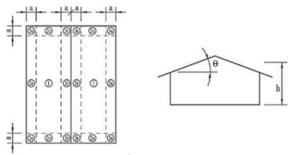
(Del) FIGURE R301.2(4) GROUND SNOW LOADS, Pg FOR THE UNITED STATES (Ib/ft²). Delete without substitution.

# (Del) **FIGURE R301.2.1 COMPONENT AND CLADDING PRESSURE ZONES.** Delete figure in its entirety and replace with the following:

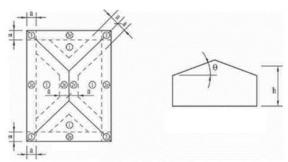
# (Add) FIGURE R301.2.1 COMPONENT AND CLADDING PRESSURE ZONES.



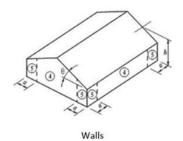
Gable and Flat Roofs Θ ≤ 7°



Gable Roofs 7° < 0 ≤ 45°



Hip Roofs  $7^{\circ}$  < Θ ≤  $45^{\circ}$ 



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 <sup>5</sup>/<sub>8</sub>-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 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 ⅓ inch Type X <i>gypsum board</i> or
	equivalent applied to the garage side <sup>a</sup>
From all habitable rooms above the garage	Not less than ⅓ inch Type X <i>gypsum board</i> or
	equivalent
Structure(s) supporting floor/ceiling	Not less than % inch Type X <i>gypsum board</i> or
assemblies used for separation required by	equivalent <sup>a</sup>
this section	
Garages located less than 3 feet from a	Not less than % inch Type X <i>gypsum board</i> or
dwelling unit on the same lot	equivalent applied to the interior side of
	exterior walls that are within this areaa

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

<sup>&</sup>lt;sup>a</sup> 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. 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 opening area**. *Emergency escape and rescue openings shall* have a net clear opening of not less than 5.7 square feet (0.530 m<sup>2</sup>).

#### **Exceptions:**

- 1. *Grade floor openings* or below grade openings *shall* have a net clear opening of not less than 5 square feet (0.465 m<sup>2</sup>)
- 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) **R310.2.2 Window sill height**. Where a window is provided as the *emergency escape and rescue opening*, it *shall* have a sill height of not more 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) **R310.5 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 8½ 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 8½ 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 8½ 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  $\frac{3}{2}$  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.

**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 per cent, 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:**

- 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 m<sup>2</sup>) 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 D<sub>0</sub>, D<sub>1</sub> and D<sub>2</sub>. Delete section.
- (Del) 403.1.3 Footing and stem wall reinforcing in Seismic Design Categories  $D_0$ ,  $D_1$  and  $D_2$ . Delete section.
- (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  $D_0$ ,  $D_1$  and  $D_2$ . Delete section.
- (Del) 403.1.3.5 Reinforcement. Delete section.
- (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 m<sup>2</sup>) 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<sub>q</sub>.

#### **CHAPTER 9 – ROOF ASSEMBLIES**

# (Amd) TABLE R905.2.4.1 CLASSIFICATION OF ASPHALT ROOF SHINGLES

MAXIMUM ULTIMATE DESIGN WIND SPEED, Vult FROM APPENDIX U (mph)	MAXIMUM BASIC WIND SPEED, V <sub>ASD</sub> 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	Н	F
181	140	Н	F
194	150	H	F

For SI: 1 foot = 304.8 mm; 1 mph = 0.447 m/s.

## **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.

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

(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 · ft<sup>2</sup> (10.7 W/m<sup>2</sup>) or 1.0 watt/ft<sup>2</sup> 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.
- 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) **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 N1106.4 (R406.4) 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) M1402.1General. Oil-fired central furnaces shall conform to ANSI /UL 727. Electric furnaces shall conform to UL 1995 or UL/CSA 60335-2-40.

(Amd) **M1403.1Heat pumps.** Electric heat pumps shall be *listed* and *labeled* in accordance with UL 1995 or UL/CSA 60335-2-40.

(Amd) **M1412.1Approval 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) **M1413.1General.** 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 – HYDRONIC PIPING**

(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 - SPECIAL APPLIANCES, EQUIPMENT AND SYSTEMS

#### (Amd) TABLE M2101.9 HANGER SPACING INTERVALS

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
ABS	4	10 <sup>a</sup>
CPVC ≤ 1-inch pipe or tubing	3	5 <sup>a</sup>
CPVC ≥ 1 <sup>1</sup> / <sub>4</sub> inches	4	10 <sup>a</sup>
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	10ª
PE-RT ≥ 1 <sup>1</sup> / <sub>4</sub> inches	4	10ª
PEX tubing ≤ 1 inch	2.67	4
PEX tubing ≥ 1 <sup>1</sup> / <sub>4</sub> inches	4	10ª
Cross-linked polyethylene/aluminum/crosslinked polyethylene (PEX-AL-PEX) pipe smaller than 1 inch	2.67 <sup>b</sup>	10ª
Cross-linked polyethylene/aluminum/crosslinked polyethylene (PEX-AL-PEX) pipe 1 inch and larger	4 <sup>b</sup>	10ª
PP < 1-inch pipe or tubing	2.67 <sup>b</sup>	4
PP > 1 inches	4 <sup>b</sup>	10 <sup>a</sup>
PVC	4	10 <sup>a</sup>
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 <sup>b</sup>
Aluminum tubing	10	15
Cast-iron pipe	5ª	15
Copper or copper-alloy pipe	12	10
Copper or copper-alloy tubing (1 <sup>1</sup> / <sub>4</sub> inches in diameter and smaller)	6	10
Copper or copper-alloy tubing (1 <sup>1</sup> / <sub>2</sub> inches in diameter and larger)	10	10
Cross-linked polyethylene (PEX) pipe, 1 inch and smaller	2.67 (32 inches)	10 <sup>b</sup>
Cross-linked polyethylene (PEX) pipe, 1 <sup>1</sup> / <sub>4</sub> inches and larger	4	10 <sup>b</sup>
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipesmaller than 1 inch	2.67 (32 inches) <sup>c</sup>	4 <sup>b</sup>
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe 1 inch and larger	4 <sup>c</sup>	10 <sup>b</sup>
CPVC pipe or tubing (1 inch in diameter and smaller)	3	10 <sup>b</sup>
CPVC pipe or tubing (1 <sup>1</sup> / <sub>4</sub> inches in diameter and larger)	4	10 <sup>b</sup>
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 <sup>b</sup>
Polyethylene of raised temperature (PE-RT) pipe, 1 <sup>1</sup> / <sub>4</sub> inches and larger	4	10 <sup>b</sup>
Polypropylene (PP) pipe or tubing (1 inch and smaller)	2.67 (32 inches) <sup>c</sup>	10 <sup>b</sup>
Polypropylene (PP) pipe or tubing (1 <sup>1</sup> / <sub>4</sub> inches and larger)	4 <sup>c</sup>	10 <sup>b</sup>
PVC pipe	4	10 <sup>b</sup>
Stainless steel drainage systems	10	10 <sup>b</sup>
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 M1403.1M1412.1M1413.1

(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) 02-20	Hydrogen Technologies Code	R101.4.1
(Add) 54-21	National Fuel Gas Code	R101.4.1

#### **UL LLC**

# (Amd) UL/CSA 60335-2-40-2019

Standard for Household and Similar Electrical Appliances, Part 2: Requirements for Motor-compressors

M1402.1M1412.1M1413.1M2006.1

#### 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-POTENTAIL (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.

# $(\mbox{Add})$ APPENDIX U – WIND SPEEDS, SEISMIC DESIGN CATEGORIES and GROUND SNOW LOADS

Municipality	Ultimate Design Wind Speed, V <sub>ult</sub> (mph)	Nominal Design Wind Speed, V <sub>asd</sub> (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 <sub>ult</sub> (mph)	Nominal Design Wind Speed, V <sub>asd</sub> (mph)	Ground Snow Load pg (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
	120	93	30	Yes
Hamden	125	97	35	Yes
Hampton Hartford	120	93	30	
	115			Yes
Hartland	120	89 93	35 35	- Van
Harwinton	125	97	30	Yes
Hebron	115	89	40	Yes
Kent	125	97	35	- V
Killingly				Yes
Killingworth	125	97	30	Yes
Lebanon	125	97	30	Yes
Ledyard	130	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 <sub>ult</sub> (mph)	Nominal Design Wind Speed, V <sub>asd</sub> (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	130	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
	120	93	35	Yes
Plymouth	125	97	40	
Pomfret	120		30	Yes
Proston	125	93 97	30	Yes
Preston		93	30	Yes
Prospect	120 125	97	40	Yes
Putnam	120	93	30	Yes
Redding				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 <sub>ult</sub> (mph)	Nominal Design Wind Speed, V <sub>asd</sub> (mph)	Ground Snow Load pg (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	130	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