DEPARTMENT OF ADMINISTRATIVE SERVICES

2018 Connecticut State Building Code

DIVISION OF CONSTRUCTION SERVICES
Office of the State Building Inspector

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Hartford, CT 06103

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Legislative Submission Version
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INTRODUCTION

Adopted and Referenced Publications

Pursuant to Connecticut General Statute §29-252, as amended by Public Act 16-215, the following national model codes, as amended herein, are adopted and shall be known as the 2018 Connecticut State Building Code:

2015 International Building Code
2009 ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities
2015 International Existing Building Code
2015 International Plumbing Code
2015 International Mechanical Code
2015 International Energy Conservation Code
2017 NFPA 70, National Electrical Code, of the National Fire Protection Association Inc.
2015 International Residential Code of the International Code Council, Inc.

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 2017 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 2018 Connecticut State Building Code document may be downloaded from the website: www.portal.ct.gov/DAS.

The requirements of the 2018 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 2015 INTERNATIONAL BUILDING CODE

CHAPTER 1 – SCOPE AND APPLICATION

(Amd) **101.1 Title.** The 2015 International Building Code as amended in this section shall be known as the 2015 International Building Code portion of the 2018 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 2015 International Residential Code portion of the 2018 Connecticut State Building Code.

(Amd) **101.2.1 Appendices.** The provisions of Appendices C, H, I and N 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 Connecticut State Fire Safety and the Connecticut 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) **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 Connecticut General Statute 19a-36, 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 Connecticut State Fire Safety Code and the 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 document shall be considered to be references to the Connecticut State Fire Safety Code.

(Add) **101.4.8 Electrical.** The provisions of the 2017 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 Connecticut Fire Safety and Fire Prevention Codes.

(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 2015 International Existing Building Code portion of the 2018 Connecticut State Building Code or the 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 Connecticut 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 – DEPARTMENT OF BUILDING SAFETY.** 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.

(Add) **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 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) **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 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 State Building Code where strict compliance with the 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 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, exemptions 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 the 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 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 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 (0.75kW) or less.
8. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:

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

(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 defined in Connecticut General Statute 29-252a from the State Building Inspector.

Exception: Pursuant to 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) **105.3.1 Action on application.** Pursuant to Connecticut General Statutes 29-263, 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 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 therefore 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, 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) **105.3.1.2 Fire marshal approval.** Pursuant to Connecticut General Statutes 29-263, 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) **105.3.3 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 in fee 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 application for permit, 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.

(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 20-304a or a professional engineer licensed in accordance with chapter 391.

(Add) **107.2.5.2 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.** For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of application and that are to be submitted to the building official within a specified period.

Any deferred submittal 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 their 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 their design by reviewing the fabrication process to ensure conformance with their 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 Connecticut General Statute 29-276b, this section shall apply to any proposed structure or addition thereto that exceeds one or more of the following threshold limits:

(1) Having four stories;

(2) 60 feet in height;

(3) With a clear span of 150 feet in width;

(4) Containing 150,000 square feet of total gross floor area;

Exception: For Group S (Storage) the limit shall be 250,000 total gross square feet.

(5) With an occupancy of 1,000 persons.

(6) Group I (Institutional) use with 150 beds or persons;

(7) Group R-1 (Residential) hotels or motels with 200 rooms in a single structure;

(8) Group R-2 (Residential) multi-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, portion of the State Building 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) **110.3.8.1 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 the 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 defined in Connecticut General Statute 29-252a 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.

(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 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.

(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 (a) 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 (a) 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 have at least five years of experience each in building design, building construction or supervision of building construction.

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

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

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

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

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

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

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

(Add) **SECTION 117 – EMERGENCY MEASURES**

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

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

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

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

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

(Add) **SECTION 118 – VACANT BUILDINGS**

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

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

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

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

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

Exceptions:

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

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

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

Exceptions:

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

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

CHAPTER 2 – DEFINITIONS

(Amd) **201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in other codes adopted as portions of the 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:

(Amd) **APPROVED AGENCY.** An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved. 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 2018 Connecticut State Fire Safety Code.

(Add) **COMPLEX.** For application of accessibility requirements, this term means any group of buildings located on a single parcel of land or on contiguous parcels of land or any building or group of buildings that are subdivided into separate occupancies and planned, financed, constructed or promoted by common management for the purpose of sale or lease of the entire complex or any subdivision thereof, except any single-family detached dwelling.
(Amd) **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 that contains only: The owner's dwelling unit and guest rooms without permanent provisions for cooking, with a total building occupant load of not more than 16 persons (see Section 310.3.1).

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

(Add) **HOTEL.** 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 N.

(Del) LODGING HOUSE. Delete without substitution.

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

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

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

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

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

(Add) **STORY.** For application of accessibility requirements, this term means that part of a building comprised between a floor and the floor or roof next above.

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

(Add) **SWIMMING POOL**. Any structure intended for swimming, recreational bathing or wading that contains water over 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground pools; hot tubs, spas and fixed-in-place wading pools.

(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.

(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 N.

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. During the regular school year, a maximum of three additional children who are in school full-time, shall be permitted, except that if the

provider has more than three children who are in school full-time, all of the provider's children shall be permitted.

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

(Amd) **308.3.4 Three or fewer persons receiving care**. A facility with three or fewer persons receiving custodial care shall be classified as Group R-3 or shall comply with the International Residential Code.

(Amd) **308.4 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) **308.4.2 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) **308.4.3 Alternative compliance for small I-2 homes.** See Section 407.13 for alternative compliance provisions for Group I-2 homes serving four to six persons who are incapable of self-preservation.

(Amd) **308.5 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 308.5.1 to 308.5.5, inclusive (see Section 408.1).

(Amd) **308.6 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) **308.6.1 Classification as Group E.** A child day care facility that provides care for more than six but no more than 100 children 3 years or less of age, where the rooms in which the children are cared for are located on the level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

(Amd) **308.6.3 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) **308.6.4 Six or fewer persons 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. During the regular school year, a maximum of three additional children who are in school full-time, including the provider's own children, shall be permitted, except that if the provider has more than three children who are in school full-time, all of the provider's children shall be permitted.

(Amd) **310.2 Definitions.** The following terms are defined in Chapter 2:

BOARDING HOUSE.
CONGREGATE LIVING FACILITIES.

DORMITORY.
GROUP HOME.
GROUP R-1 BED AND BREAKFAST ESTABLISHMENT
GUEST ROOM.
HOTEL.
PERSONAL CARE SERVICE.
TRANSIENT.

(Amd) **310.3 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 house (transient) with more than 10 occupants.

Congregate living facilities (transient) with more than 10 occupants.

Hotels (transient)

Motels (transient)

(Add) **310.3.1 Group R-1 bed and breakfast establishments.** A building that the owner occupies or that is adjacent to a building that the owner occupies as his/her primary place of residence, has a total building occupant load of not more than 16 persons including the owner-occupants, and has no provisions for cooking or warming food in the guest rooms. A Group R-1 bed and breakfast establishment shall not be permitted within a mixed-use building.

(Add) **310.3.1.1 Kitchens in Group R-1 bed and breakfast establishments.** Kitchens in Group R-1 bed and breakfast establishments shall be separated by ½-hour rated fire separation assemblies.

Exceptions:

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

(Amd) **310.4 Residential Group R-2.** Residential Group R-2 occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

Apartment houses

Boarding houses with more than six occupants

Congregate living facilities with more than six occupants

Convents

Dormitories

Fraternities and sororities

Hotels

Live/work units

Monasteries

Motels

Vacation timeshare properties

(Amd) **310.5 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.

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

Care facilities in accordance with Section 308.3.4, 308.4.2, or 308.6.4

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

(Del) **310.5.1 Care facilities within a dwelling unit.** Delete without substitution.

(Del) **310.5.2 Lodging houses.** Delete without substitution.

(Amd) **310.6 Residential Group R-4.** Residential Group R-4 occupancy shall include buildings, structures or portions thereof for more than 3 but not more than 16 occupants, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. Buildings of Group R-4 shall be classified as one of the occupancy conditions specified in Section 310.6.1 or 310.6.2. 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.

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

(Amd) **406.3.4.1 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 1⅜ 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) **407.11 Laboratories.** In addition to other requirements of this code, laboratories employing quantities of flammable, combustible or hazardous materials that exceed exempt amounts shall be protected in accordance with NFPA 99.

(Add) **407.12 Medical gas systems.** Medical gas systems shall comply with Chapter 12 of the International Plumbing Code and Section 5306 of the International Fire Code.

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

(Add) **407.13.1 Height, area and construction type.** Height and area shall comply with Chapter 5 and the requirements of Chapter 6 except as provided in Section 407.13.1.1.

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

(Add) **407.13.2 Size of doors.** The minimum width of all door openings shall provide a clear width of 34 inches (914 mm). Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad).

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

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

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

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

(Add) **407.13.5 Sleeping room walls.** All client sleeping room walls separating the sleeping

rooms from the hallways and other habitable or occupiable spaces of the building shall be constructed as smoke partitions in accordance with Section 710.

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

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

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

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

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

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

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

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

(Add) **407.13.10 Standby power.** Standby power shall be provided for small I-2 home in accordance with Section 2702.

(Del) **410.3.6 Scenery**. Delete section.

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

(Add) **422.7 Medical gas systems.** Medical gas systems shall comply with Chapter 12 of the International Plumbing Code and Section 5306 of the International Fire Code.

(Amd) **424.5 Area limits.** Children's play structures greater than 300 square feet (28 m²) in area shall comply with Section 411.

(Add) **SECTION 427 – GROUP E**

(Add) **427.1 Proximity to the level of exit discharge.** Proximity to the level of exit discharge shall be provided in accordance with Sections 427.1.1 and 427.1.2. For the purpose of this section, normally occupied shall include such spaces as libraries, cafeterias, gymnasiums and multipurpose rooms. This does not include administrative offices, healthcare rooms nor special one-on-one rooms.

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

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

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

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

(Add) **427.2 Subdivision of building spaces.** Group E occupancies shall be subdivided into compartments by smoke barriers complying with Section 709 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) **427.2.1 Area of smoke compartments**. The area of any smoke compartment required by Section 427.2 shall not exceed 30,000 square feet (2787 m²) with no dimension exceeding 300 feet (91 m).

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

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS

(Add) **504.5 Group R-1 bed and breakfast establishments.** The height limitation for existing 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 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 INCIDENTAL USES**. Add the following row after the last row:

Storage rooms over 100 square feet	1 hour or provide automatic fire-extinguishing system

CHAPTER 6 – TYPES OF CONSTRUCTION

(Amd) **602.3 Type III**. Type III construction is that type of construction in which the exterior walls are of noncombustible material and the interior building elements are of any material permitted by this code. *Fire-retardant-treated wood* framing and sheathing complying with Section 2303.2 shall be permitted within *exterior wall* assemblies of a 2-hour rating or less.

(Amd) **602.4.1 Fire-retardant-treated wood in exterior walls**. *Fire-retardant-treated wood* framing and sheathing complying with Section 2303.2 shall be permitted within *exterior wall* assemblies with a 2-hour rating or less.

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 Groups I-1, R-1, R-2 and R-3.
   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. Elevator lobby separation as required by Section 3006.2.
5. Egress balconies as required by Section 1019.2.

(Amd) **712.1.12 Unenclosed stairs and ramps**. Vertical floor openings created by unenclosed stairs or ramps in accordance with Section 1019.3 shall be permitted.

(Add) **720.1.1 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 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 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 intervening floors of the building where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5 m^2).

   Exception: Existing restaurants in existing non-sprinklered buildings that were designated Use Group A-3 under a previous edition of the State Building Code that undergo addition, alteration or change of occupancy that results in an increase in the restaurant's fire area 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.** An automatic sprinkler system shall be installed in Group E occupancies pursuant to Section 29-315 of the Connecticut General Statutes.

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

1. A Group M fire area exceeds 12,000 square feet (1115 m2).
2. A Group M fire area is located more than three stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m2).
4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m2).
5. Throughout stories below the level of exit discharge where such stories have an area exceeding 2,500 square feet (232 m2) and are used for the sale, storage or handling of combustible goods or merchandise.

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

Exceptions:

1. Group R-1 bed and breakfast establishments.
2. Existing buildings four stories or less in height undergoing a change of occupancy from a one- or two-family building or Group R-3 to Group R-2 containing not more than four dwelling units that does not involve an increase in height or area and where each dwelling unit has either:

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

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

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

3. Existing buildings converted prior to June 15, 1994, from a one- or two-family building or Group R-3 to Group R-2 containing not more than four dwelling units.
4. Horizontal additions containing a newly introduced Group R occupancy that are added to existing buildings shall be required to have an automatic sprinkler system installed in the addition only if the addition is completely separated from the existing building by fire barriers with a minimum one-hour fire-resistance rating.
5. In a building with a maximum of two dwelling units where:

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

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

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

(Amd) **903.2.8.4 Care facilities.** An automatic sprinkler system 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.

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

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

1. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling assemblies having a fire-resistance-rating of not less than 2 hours.

2. Fire service access elevator machine rooms and machinery spaces.
3. Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008.

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

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

(Del) **903.5 Testing and maintenance.** Delete subsection without substitution.

(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 without substitution.

(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 Connecticut State Fire Prevention Code.

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

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

(Del) **907.2.7.1 Occupant notification.** Delete without substitution.

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

Exceptions:

1. An automatic fire detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit access that leads directly to an exit.
2. An automatic fire detection system is not required in Group R-1 bed and breakfast establishments (see Section 907.2.11.1.1.).

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

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

Exceptions:

1. A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, egress exit, court or yard.
2. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and the occupant notification appliances will automatically activate throughout the notification zones upon a sprinkler water flow.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units or sleeping units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units or sleeping units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1026.6, Exception 4.

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

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

(Add) **907.2.11.2.2 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.

(Amd) **907.2.11.6 Power source.** Pursuant to Section 29-292 of the Connecticut General Statutes, in new construction, required smoke alarms shall receive their primary power from the building wiring and shall be equipped with a battery backup. Smoke alarms with integral strobes not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

(Amd) **907.6.6.1 Automatic telephone-dialing devices.** Automatic telephone-dialing devices used to transmit an emergency alarm shall comply with the requirements of subsection (c) of section 28-25b of the Connecticut General Statutes.

(Del) **907.6.6.2 Termination of monitoring service.** Delete without substitution.

(Del) **907.8 Inspection, testing and maintenance.** Delete without substitution.

(Del) **908.7 Carbon monoxide alarms.** Delete this section in its entirety and replace with Section 915.

(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. Such system shall be in accordance with Section 2702.2.17.

(Amd) **SECTION 915 - CARBON MONOXIDE DETECTION**

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

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

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

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

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

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

Exceptions:

1. Carbon monoxide detection shall not be required in dwelling units and sleeping units without communicating openings between the fuel-burning appliance or fuel-burning fireplace and the dwelling unit or sleeping unit.
2. Carbon monoxide detection shall not be required in dwelling units and sleeping units where a carbon monoxide 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 carbon monoxide detection is provided in an approved location between openings to a private garage and dwelling units or sleeping units.

(Amd) **915.2.3 Group E occupancies.** Carbon monoxide detection system shall be provided in the locations specified in Section 915.2.3.1 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) **915.4.4 Interconnection of alarms.** Carbon monoxide alarms shall be interconnected in accordance with Section 9.6.4 of NFPA 720.

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

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

(Amd) **915.7 Alterations and additions.** When alterations or additions requiring a permit occur to buildings with Group R-3 and R-4 occupancies and to Group R-1 bed and breakfast

establishments, or when one or more sleeping rooms are added or created in such occupancies, the entire occupancy shall be provided with carbon monoxide detectors located as required for new construction. The carbon monoxide detectors shall have a power source in accordance with Section 915.4.1.

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

Exceptions:

1. The carbon monoxide detectors may be battery operated or plug-in and are not required to be interconnected when other remodeling considerations do not require the removal of the appropriate wall or ceiling coverings to facilitate concealed interconnected wiring.
2. Alterations to the exterior surfaces of existing buildings including, but not limited to, re-roofing, re-siding, window replacement and the construction of decks without roofs, are exempt from the requirements of this section.
3. Carbon monoxide detectors shall not be required in buildings not containing a fuel-burning appliance, fireplace or attached garage.

(Del) **SECTION 916 - EMERGENCY RESPONDER RADIO COVERAGE.** Delete this section in its entirety without substitution.

CHAPTER 10 – MEANS OF EGRESS

(Add) **1003.8 Security device.** Any security device or system that emits any medium that could obscure a means of egress in any building, structure or premises shall be prohibited.

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

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

Exceptions:

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

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

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

Exceptions:

1. Facilities with smoke-protected assembly seating shall be permitted to use the capacity factors in Table 1029.6.2 indicated for level or ramped aisles for means of egress components other than stairways where the entire path for means of egress from the seating to the exit discharge is provided with a smoke control system complying with Section 909.
2. Facilities with outdoor smoke-protected assembly seating shall be permitted to the capacity factors in Section 1029.6.3 indicated for level or ramped aisles for means of egress components other than stairways where the entire path for means of egress from the seating to the exit discharge is open to the outdoors.

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

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

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

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

Exceptions:

1. Occupancies in Group U.
2. Aisle accessways in Group A.
3. Within dwelling units and sleeping units in Groups R-1, R-2 and R-3.
4. Within sleeping units of Group I occupancies.
5. In Group R-1 bed and breakfast establishments shall not be required when illumination of the means of egress is initiated upon initiation of a fire alarm.

(Add) **1008.2.3 Arrangement of illumination.** Required illumination shall be arranged so that the failure of any single lamp does not result in an illumination level of less than 0.2 foot-candle (2.15 lux) at the floor level.

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

1. Electrical equipment rooms.
2. Fire command centers.

3. Fire pump rooms.
4. Generator rooms.
5. Public restrooms with an area greater than 300 square feet (27.87 m2).
6. Means of egress components, other than those within sleeping rooms, of Group R-1 bed and breakfast establishments.

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

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

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

Exceptions:

1. Alternating tread devices in accordance with Section 1011.14.
2. 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 and the greatest tread depth within any flight of stairs shall not exceed the smallest by 3/8 inch.
7. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.
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 in climates subject to snow and ice shall be protected to prevent the accumulation of same.

(Amd) **1011.11 Handrails.** Stairways shall have handrails on each side and shall comply with Section 1012. Where glass is used to provide the handrail, the handrail shall also comply with Section 2407.

Exceptions:

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

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

or shall be located directly adjacent to it. Such symbol shall meet the requirements of Section 1013.

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

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

Exception: Group R-1 bed and breakfast establishments.

(Amd) **1014.9 Intermediate handrails.** Stairways shall have intermediate handrails located in such a manner that all portions of the stairway width exceeding 75 inches (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 not be less than 42 inches (1067 mm) high, measured vertically as follows:

1. From the adjacent walking surfaces.
2. On stairways and stepped aisles, from the line connecting the leading edges of the tread nosings.
3. On ramps and ramped aisles, from the ramp surface at the guard.

Exceptions:

1. For occupancies in Group R-3 not more than three stories above grade in height, and within individual dwelling units in occupancies in Group R-2 not more than three stories above grade in height with separate means of egress, required guards shall not be less than 36 inches (914 mm) in height measured vertically above the adjacent walking surfaces or adjacent fixed seating.
2. For occupancies in Group R-3, 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 not be less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.
4. For occupancies in Group R-1 bed and breakfast establishments, level guards shall be not less than 36 inches (914 mm) high, measured vertically above the adjacent walking surface.
5. The guard height in assembly seating areas shall comply with Section 1029.16 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.

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

Exceptions:

1. From a height of 36 inches (914 mm) to 42 inches (1067 mm), guards shall not have openings which allow passage of a sphere 4⅜ 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 at the end of aisles where they terminate at a fascia of boxes, balconies and galleries 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 4⅜ 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 with a difference in finished grade from the top of the wall to 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 retaining wall. For the purpose of this section, grass, planting beds or landscaped areas shall not be considered a walking surface.

(Amd) **Table 1017.2 Exit Access Travel Distance**.

Amend final row as follows:

I-2, I-3, I-4	Not Permitted[e]	200[c]

Add new footnote as follows:

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

(Amd) **1019.3 Occupancies other than Groups I-2 and I-3**. In other than Group I-2 and I-3 occupancies, floor openings containing exit access stairways or ramps that do not comply with

one of the conditions listed in this section shall be enclosed with a shaft enclosure constructed in accordance with Section 713.

1. In buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1 with other than Group H or I occupancies, an exit access stairway serving an occupant load of less than 10 not more than one story above the level of exit discharge.
2. In Group R-1, R-2 or R-3 occupancies, exit access stairways and ramps connecting four stories or less serving and contained within a single residential dwelling unit or sleeping unit or live/work unit.
3. Exit access stairways serving and contained within a Group R-3 congregate residence or a Group R-4 facility are not required to be enclosed.
4. Exit access stairways connecting the first and second floors of 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 parking garage.
7. Exit access stairways and ramps serving open-air seating complying with the exit access travel distance requirements of Section 1029.7.
8. Exit access stairways and ramps serving the balcony, gallery or press box and the main assembly floor in occupancies such as theaters, places of religious worship, auditoriums and sport facilities.
9. Stairways serving outdoor facilities where all portions of the means of egress are essentially open to the outside.
10. Exit access stairways serving mezzanines complying with the provisions of Section 505.

(Amd) **Table 1020.1 Corridor Fire-Resistance Rating**

Amend second to last row as follows:

I-2[a], I-4	All	Not Permitted[d]	0

Add new footnote as follows:

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

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

(Add) **1022.2.2.2 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 (3660 mm) in storage height.

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

Exception: Membrane penetrations shall be permitted on the outside of the interior exit stairway and ramp. Such penetrations shall be protected in accordance with Section 714.3.2.

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

Exception: Membrane penetrations shall be permitted on the outside of the *exit passageway*. Such penetrations shall be protected in accordance with Section 714.3.2.

(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 serving an occupant load greater than 30 in the following newly constructed occupancies:

1. Group A occupancies with a total occupant load greater than 300.
2. Group B medical occupancies.
4. Group E occupancies.
5. Group I-1 occupancies.
6. Group I-2 occupancies.
7. Group R-1 hotels and motels.
8. Group R-2 dormitories.

Exceptions:

1. Group E occupancies where each classroom has at least one door directly to the exterior and rooms for assembly purposes have at least one-half of the required means of egress doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
2. In corridors or hallways located within Group R-1 and R-2 sleeping units or dwelling units.
3. Such systems shall not be required in existing buildings of any occupancy including those undergoing repair, addition, alteration or change of occupancy. In the case of an addition to an existing building, this exception also applies to the new construction.

(Add) **1025.6.1 Size and location.** Luminous egress path marking systems or devices shall be sized and located in exit access corridors as prescribed by Section 1025.2.4. In exit access corridors exceeding 120 inches (3048 mm) in width, the marking shall be provided on both sides of the corridor.

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

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

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

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

(Amd) **1029.2 Assembly main exit.** Pursuant to Section 29-381a of the Connecticut General Statutes, in a building, room or space used for assembly purposes and is provided with a single main entrance/exit, the main exit shall be of sufficient width to accommodate not less than two-thirds of the occupant load, but such width shall not be less than the total required width of all means of egress leading to the exit. This applies to Group A occupancies that are newly constructed, have an increase in the number of occupants by addition or alteration or are created by change of occupancy. Where the building is classified as a Group A occupancy, the main exit shall front on at least one street or an unoccupied space of not less than 10 feet (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) **1030.1 General**. In addition to the means of egress required by this chapter, emergency escape and rescue openings shall be provided in the following occupancies:

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

Basements and sleeping rooms below the fourth story above grade plane shall have not fewer than one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency escape and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement.

Such openings shall open directly into a public way or to a yard or court that opens to a public way.

Exceptions:

1. Basements with a ceiling height of less than 80 inches (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 exit balcony that opens to a public way.
3. Basements without habitable spaces and having not more than 200 square feet (18.6 m^2) in floor area shall not be required to have emergency escape and rescue openings.
4. 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:
   4.1. One means of egress and one emergency escape and rescue opening.
   4.2. Two means of egress.

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

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

Exceptions:

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

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

Exceptions:

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

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

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

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

Section 1102**.** Add the following:

(Add) **COMPLEX.**

(Add) **STORY.**

(Add) **STREET FLOOR.**

(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.** The following additional exceptions to requirements for accessibility are in accordance with section 29-274 of the Connecticut General Statutes:

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 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 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 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 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 not less than 32 inches.

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 and mezzanine in multilevel buildings and facilities.

Exceptions:

1. An accessible route is not required to stories and mezzanines that comply with Sections 1103.2.15 and 1103.2.16, respectively.
2. Stories or mezzanines that do not contain accessible elements or other spaces as determined by Section 1107 or 1108 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) **1105.2 Automatic entrances.** Where controls for automatic doors are provided they shall be in an accessible location within 10 feet of the entrance.

(Add) **1105.2.1 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 the retail business is open to the public.

(Add) **1106.1.1 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) **1106.2 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 shall be accessible.
2. In Group I-1 and R-1 occupancies, accessible parking shall be provided in accordance with Table 1106.1.
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.
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) **1106.5 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 R-2 and R-3 occupancies, van-accessible spaces located within private garages shall be permitted to have vehicular routes, entrances, parking spaces and access aisles with a minimum vertical clearance of 7 feet.

(Add) **1106.5.1 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) **1106.5.1.1 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) **1107.6.2.2.1 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 A117.1-2009. 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. Bedrooms in monasteries and convents shall be counted as sleeping units for the purpose of determining the number of units. Where the sleeping units are grouped into suites, only one sleeping unit in each suite shall count towards the number of required Type A units.

Exceptions:

1. The number of Type A units is permitted to be reduced in accordance with Section 1107.7.
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) **1107.7.2 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 entrance 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 entrance 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.

(Add) **1109.2.2.1 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.

(Del) **1109.2.3 Lavatories.** Delete in its entirety and replace with the following:

(Amd) **1109.2.3 Lavatories**. Where lavatories are provided, at least 5 percent, but not less than one, shall be accessible. Where an accessible lavatory is located within the accessible water closet compartment at least one additional accessible lavatory shall be provided in the multicompartment toilet room outside the water closet compartment. Where the total lavatories provided in a toilet room or bathing facility is four or more, at least one lavatory with enhanced reach ranges shall be provided.

(Add) **1109.2.4 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. Emergency instructions shall be provided outside the toilet room at the normally occupied location.

(Add) **1109.8.1 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 1109.8. 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 regulations adopted under authority of section 29-200 of the Connecticut General Statutes.

(Add) **1109.16 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) **1111.1 Signs.** Required accessible elements shall be identified by the International Symbol of Accessibility at the following locations:

1. Accessible parking spaces as required by Section 1106. Pursuant to subsection (h) of section 14-253a of the Connecticut General Statutes, such spaces shall be designated by above-grade signs with white lettering against a blue background and shall bear the words “RESERVED parking permit required” and “violators will be fined” in addition to the International Symbol of Accessibility. When such a sign is replaced, repaired or erected, it shall indicate the minimum fine for a violation of subsection (l) of section 14-253a of the Connecticut General Statutes. Such indicator may be in the form of a notice affixed to such sign. Newly installed signs shall be 60 inches (1525 mm) minimum above the floor or ground of the parking space, measured to the bottom of the sign.
2. Accessible passenger loading zones.
3. Accessible rooms where multiple single-user toilet or bathing rooms are clustered at a single location.
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) **1111.5 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 membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-per cent slope) for drainage.

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

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

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

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

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

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

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

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

CHAPTER 16 – STRUCTURAL DESIGN

(Amd) **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^2), 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, Ce.
3. Snow load importance factor, I.
4. Thermal factor, Ct.
5. Drift surcharge loads, Pd.
6. Width of snow drifts, W.
7. Existing roofs. Confirmation that existing adjacent lower roofs have been evaluated for increased snow loads and/or owners of existing adjacent lower roofs have been advised of the potential for increased snow loads as required by Section 7.12 of ASCE 7.

TABLE 1607.1 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS, L_O, AND MINIMUN CONCENTRATED LIVE LOADS[g]

(Del)

5. Balconies and decks[h]	Same as occupancy served	----------

Delete row 5 in its entirety and replace with the following:

(Add)

5. Balconies and decks[h]	1.5 times the live load for the area served. Not required to exceed 100 psf.	----------

(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. The calculated value of p_f without the 30 pounds per square foot minimum requirement shall be used to determine partial loading effects, unbalanced snow loads, snow drifting loads, roof projections and parapets, and snow sliding loads in accordance with Sections 7.5, 7.6, 7.7, 7.8 and 7.9 of ASCE-7.

(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. Values for "unobstructed slippery roofs" in Figure 7-2 of ASCE-7 shall not be utilized, unless approved by the building official.

(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 N.

(Del) Table 1608.2. Delete figure without substitution.

(Del) Figure 1609.3(1). Delete figure without substitution.

(Del) Figure 1609.3(2). Delete figure without substitution.

(Del) Figure 1609.3(3). Delete figure without substitution.

(Amd) **1609.3 Design wind speed.** The ultimate design wind speed, V_{ult}, in mph, for the determination of the wind loads shall be determined by Appendix N. When required, the nominal design wind speed, V_{asd}, shall be determined by Appendix N.

(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) **1613.3.1 Mapped acceleration parameters.** The parameters S_s and S_1 shall be determined from the MCE spectral response accelerations shown in Appendix N.

(Del) Figure 1613.1(1). Delete figure without substitution.

(Del) Figure 1613.1(2). Delete figure without substitution.

(Del) Figure 1613.1(3). Delete figure without substitution.

(Del) Figure 1613.1(4). Delete figure without substitution.

(Del) Figure 1613.1(5). Delete figure without substitution.

(Del) Figure 1613.1(6). Delete figure without substitution.

(Del) Figure 1613.1(7). Delete figure without substitution.

(Del) Figure 1613.1(8). Delete figure without substitution.

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. Special inspections and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.7 or the conventional light-frame construction provisions of Section 2308.
4. The contractor is permitted to employ the approved agencies where the contractor is also the owner.

5. 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.** Special inspectors shall keep records of inspections. The special inspector shall furnish inspections reports to the building official and to the registered design professional in responsible charge. Reports shall indicate that work inspected 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 correction of any discrepancies noted in the inspections 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 required by Section 1705 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 procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency. Approved fabricators shall include:

1. A fabricator of structural steel certified by the American Institute of Steel Construction Inc.'s Certification Program for Structural Steel Fabricators, Standard for Steel Building Structures.
2. A manufacturer of metal building systems accredited by the ICC International Accreditation Service (IAS) in accordance with accreditation criteria IAC-AC-472.
3. A manufacturer of K-, LH-, or DLH-Series Joist or Joist Girders who is a member of the Steel Joist Institute and has completed the Institute's examination of complete engineering design details and calculations of joists, bridging and accessories for which standards have been adopted; data obtained from physical tests of joists to verify conclusions from analysis of the applicant company's engineering design, details and calculations; an initial plant inspection and subsequent periodic inspections are required to ensure that the applicant/member company possesses the facilities, equipment and personnel required to properly fabricate joists.
4. A fabricator of precast concrete certified by the Precast/Prestressed Concrete Institute's Plant Certification Program, commercial category.
5. A fabricator of cold-formed steel trusses certified by the Truss Plate Institute's Quality Assurance Program.
6. A fabricator of wood trusses certified by the Truss Plate Institute's Quality Assurance Program.
7. A fabricator of structural timber components and assemblies certified by the American Institute of Timber Construction's AITC 115 – Standard for Fabricated Structural Glued Laminated Timber Components and Assemblies.

At the completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building official stating that the work was performed in accordance with the approved construction documents.

(Amd) **1704.6.2 Structural observations for wind requirements.** Structural observations shall be provided for those structures sited where V_{asd} as determined in accordance with Appendix N exceeds 110 mph (49 m/sec), where one or more of the following conditions exist:

1. The structure is classified as Risk Category III or IV in accordance with Table 1604.5.
2. The building height of the structure is greater than 75 feet (22 860 mm).
3. When so designated by the registered design professional responsible for the structural design.
4. When such observation is specifically required by the building official.

(Amd) **1705.2.4. Cold-formed steel trusses.** Where a cold-formed steel truss clear span is 30 feet (9,144 mm) or greater, the special inspector shall verify that the permanent individual truss member restraint/bracing is installed in accordance with the approved truss submittal package. Where a cold-formed steel truss clear span is 60 feet (18,288 mm) or greater, the special inspector shall verify that the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing are installed in accordance with the approved truss submittal package.

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

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

1. Buildings and structures in risk category I, per Table 1604.5
2. Buildings and structures in risk category II per table 1604.5, which are in wind exposure categories B or C per 1609.4.3 and are not more than three stories high.

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

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	IBC REFERENCE
1. Inspect Material Grade and Thickness		***X***	
2. Inspect Framing and Details			
a. Framing layout, member sizes and bearing lengths		***X***	
b. Blocking, bridging and web stiffeners		***X***	
c. Holes[a]		***X***	
3. Inspect Connections			
a. Bolted and screwed connections, including diameter, length, spacing and edge distance.		***X***	
b. Welded connections.		***X***	
c. Proprietary hangers and framing anchors, including fastener sizes and quantities.		***X***	
d. Tie-down anchors, including anchor rod sizes and fastener sizes and quantities.		***X***	
4. Inspect Shear Walls and Diaphragms			
a. Panel grade and thickness[b]		***X***	
b. Steel strapping size, grade and thickness		***X***	
c. Fastener size, length and spacing		***X***	
d. Framing member sizes at panel edges		***X***	
e. Blocking at panel edges		***X***	
5. Inspect Cold-Formed Steel Trusses			
a. Temporary installation restraint/bracing for truss spanning 60’ or more		***X***	***1705.2.4***
b. Permanent individual truss member restraint/ bracing for trusses spanning 30’ or more		***X***	***1705.2.4***

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.

(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, per Table 1604.5
2. Buildings and structures in risk category II per table 1604.5, which are in wind exposure categories B or C per 1609.4.3 and are not more than three stories high.

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

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	IBC REFERENCE
1. Inspect Grading of Wood Materials:			
a. Sawn lumber framing		***X***	
b. Structural composite lumber		***X***	
c. Wood structural panels		***X***	
2. Inspect Framing and Details			
a. Framing layout, member sizes and bearing lengths		***X***	
b. Blocking and bridging		***X***	
c. Holes and Notches[a]		***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***	
c. Proprietary hangers and framing anchors, including fastener sizes and quantities.		***X***	
d. Tie-down anchors, including anchor rod size and fastener sizes and quantities.		***X***	
4. Inspect Shear Walls and Diaphragms			
a. Panel grade and thickness[b]		***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 Diaphragms		***X***	***1705.5.1***
5. Inspect Metal-Plate Connected Wood Trusses			
a. Temporary installation restraint/bracing for truss spanning 60' or more		***X***	***1705.5.2***
b. Permanent individual truss member restraint/ bracing for trusses spanning 30' or more		***X***	***1705.5.2***
c. Multi-ply truss connections.		***X***	

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

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

(Amd) **1705.5.2. Metal-plate-connected wood trusses.** Where a truss clear span is 30 feet (9,144 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.

(Del) **1705.11.1 Structural Wood**. Delete without substitution.

(Del) **1705.11.2 Cold-formed steel light-framed construction**. Delete without substitution.

(Del) **1705.12.2 Structural Wood**. Delete without substitution.

(Del) **1705.12.3 Cold-formed steel light-framed construction**. Delete without substitution.

CHAPTER 18 – SOILS AND FOUNDATIONS

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

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

For SI: 1 pound per square foot = 0.0479 kPa, 1 pound per square foot per foot = 0.157 kPa/m
a. Coefficient to be multiplied by the dead load.
b. Cohesion value to be multiplied by the contact area, as limited by Section 1806.3.2

(Add) **1807.2.1.1 Guards.** Retaining walls with a difference in finished grade from the top of the wall to 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 retaining wall. For the purpose of this section, grass, planting beds or landscaped areas shall not be considered a walking surface.

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

1. Extending a minimum of 42 inches 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 m^2) or less for light frame construction or 400 square feet (37 m^2) 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) **2211.3.3 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/bracing and the permanent individual truss member restraint/bracing for all trusses with clear spans 60 feet (18 288 mm) or greater.

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/bracing and the permanent individual truss member restraint/bracing for all trusses with clear spans 60 feet (18 288 mm) or greater.

CHAPTER 24 – GLASS AND GLAZING

(Amd) **2407.1.2 Support.** Each handrail or guard shall be supported by a minimum of three glass balusters or shall be otherwise supported to remain in place should one baluster panel fail. Glass balusters shall not be installed without an attached handrail or guard.

CHAPTER 27 – ELECTRICAL

(Add) **2702.2.17 Electric fire pumps.** Buildings provided with standby electrical power for the purpose of continuing operations or occupancy shall provide standby power in accordance with Article 701 of the 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) **2801.1 Scope.** Mechanical appliances, equipment and systems shall be constructed, installed and maintained in accordance with this chapter, the International Mechanical Code and applicable statutes and regulations as set forth in Section 101.4 of this code. Masonry chimneys, fireplaces and barbeques shall comply with Chapter 21 and the International Mechanical Code.

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

CHAPTER 29 – PLUMBING SYSTEMS

(Amd) **2901.1 Scope.** The provisions of this chapter and the International Plumbing Code shall govern the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing equipment and systems. Toilet and bathing rooms shall be constructed in accordance with Section 1210. Plumbing systems and equipment shall be constructed, installed and maintained in accordance with the International Plumbing Code. 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 for the type of occupancy and in the minimum number shown in Table 2902.1. Types of occupancies not shown in Table 2902.1 shall be considered individually by the building official. The number of occupants shall be determined by this code. Occupancy classification shall be determined in accordance with Chapter 3.

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) **2902.1.2 Single-user toilet facility and bathing room fixtures.** The plumbing fixtures located in single-user toilet facilities and bathing rooms, including family or assisted-use toilet and bathing rooms that are required by Section 1109.2.1 of the International Building Code, shall contribute towards the total number of required plumbing fixtures for a building or tenant space. Single user toilet facilities and bathing rooms, and family or assisted-use toilet and bathing rooms shall be identified for use by any person.

(Amd) **2902.2 Separate facilities.** Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employee and customers, of 15 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.
5. Toilet rooms in Educational Group E Kindergarten and day care occupancies, and in Institutional Group I-4 child day care may be designated as unisex which are primarily for children's use.

6. Single-user toilet facility and bathing room fixtures provided in accordance with 2902.1.2.

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 and membrane-covered-frame 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) **3102.3.1.1 Label.** Tents and membrane structures shall have a permanently affixed label which shall identify the size of the structure and the fabric or material type.

(Add) **3102.3.1.2 Certification.** An affidavit or affirmation shall be submitted to the building official. The affidavit or affirmation shall attest to the following information relative to the flame resistance of the fabric:

1. Names and addresses of the owners of the tent, canopy or membrane structure.
2. Date the fabric was last treated with flame-resistant solution.
3. Trade name or kind of chemical used in the treatment.
4. Name of person or firm treating the material.
5. Name of testing agency and test standard by which the fabric was tested.

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

(Add) **3102.10 Heating and cooking equipment.** Heating and cooking equipment shall be in accordance with Section 3104.15 of the 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 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 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 this section shall apply to structures, including tents and other membrane structures, erected for a period of less than 180 consecutive calendar days out of any 365 consecutive calendar days on a single premises. Tents 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.

(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^2) shall not be erected, operated or maintained for any purpose without obtaining a permit from the building official.

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Tents open on all sides which comply with all of the following:
   2.1 Individual tents having a maximum size of 700 square feet (65 m^2)
   2.2 The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet (3658 mm), not exceeding 700 square feet (65 m^2) 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 Place of assembly.** For the purposes of this section, a place of assembly 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) **3103.5.3 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 application for approval. The tent or membrane structure floor plan shall indicate details of the means of egress facilities, seating capacity, arrangement of the seating and location and type of heating and electrical equipment.

(Add) **3103.5.4 Location and parking.** The location and parking for temporary tents and membrane structures shall be in accordance with this section.

(Add) **3103.5.4.1 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 tents.

Exceptions:

1. Separation distance between membrane structures and tents not used for cooking is not required when the aggregate floor area does not exceed 15,000 square feet (1394 m^2).
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^2).

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) **3103.5.5 Location of structures in excess of 15,000 square feet in area.** Membrane structures having an area of 15,000 square feet (1394 m^2) 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) **3103.5.6 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) **3103.5.7 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) **3103.5.8 Membrane material.** The membrane material for all tents and membrane structures shall be of: approved noncombustible material as set forth in Section 703.5; flame-resistant material as determined in accordance with NFPA 701 and the manufacturer's test protocol; or material treated in an approved manner to render the material flame-resistant.

(Add) **3103.5.8.1 Label.** Tents and membrane structures shall have a permanently affixed label which shall identify the size of the structure and the fabric or material type.

(Add) **3103.5.8.2 Certification.** An affidavit or affirmation shall be submitted to the building official and a copy retained on the premises on which the tent or membrane structure is located. The affidavit or affirmation shall attest to the following information relative to the flame resistance of the fabric:

1. Names and addresses of the owners of the tent, canopy or membrane structure.
2. Date the fabric was last treated with flame-resistant solution.
3. Trade name or kind of chemical used in the treatment.
4. Name of person or firm treating the material.
5. Name of testing agency and test standard by which the fabric was tested.

(Add) **3103.5.9 Anchorage required.** Tents or membrane structures and their appurtenances shall be adequately roped, braced and anchored to withstand the elements of weather and prevent against collapsing. Documentation of structural stability shall be furnished to the building official upon request.

(Add) **3103.5.9.1 Ballasting**. Ballasting of tents and membrane structures used for a temporary period, as described in Section 3103.1, shall be in accordance with the tent manufacturer's instructions, an approved engineering method or in accordance with the *Guidelines for Ballasting Commercial Tents* as published by the Industrial Fabrics Association International.

(Add) **3103.5.9.2 Tents and membrane structures exceeding one story.** Tents and membrane structures exceeding one story shall be designed and constructed to comply with Chapter 16.

(Add) **3103.5.10 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) **3103.5.10.1 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) **3103.5.10.2 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) **3103.5.10.2.1 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) **3103.5.10.3 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) **3103.5.10.4 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) **3103.5.11 Seating arrangements.** Seating in tents and membrane structures shall be in accordance with Chapter 10.

(Add) **3103.5.12 Means of egress.** Means of egress for temporary tents and membrane structures shall be in accordance with Sections 3103.12.1 to 3103.12.8, inclusive.

(Add) **3103.5.12.1 Distribution.** Exits shall be spaced at approximately equal intervals around the perimeter of the tent or membrane structure, and shall be located such that all points are 100 feet (30 480 mm) or less from an exit.

(Add) **3103.5.12.2 Number.** Tents, or membrane structures or a usable portion thereof shall have at least one exit and not less than the number of exits required by Table 3103.12.2. The total width of means of egress in inches (mm) shall not be less than the total occupant load served by a means of egress multiplied by 0.2 inches (5mm) per person.

(Add) **TABLE 3103.12.2**
MINIMUM NUMBER OF MEANS OF EGRESS AND MEANS OF EGRESS WIDTHS FROM TEMPORARY MEMBRANE STRUCTURES AND TENTS

Occupant load	Minimum Number of Means of Egress	Minimum Width of Each Means of Egress	
		Tents	Membrane Structures
10 to 199	2	72	36
200 to 499	3	72	72
500 to 999	4	96	72
1,000 to 1,999	5	120	96
2,000 to 2,999	6	120	96
Over 3,000[a]	7	120	96

a. When the occupant load exceeds 3,000, the total width of means of egress (in inches) shall not be less than the total occupant load multiplied by 0.2 inches per person.

(Add) **3103.5.12.3 Exit openings from tents.** Exit openings from tents shall remain open unless covered by a flame-resistant curtain. The curtain shall comply with the following requirements:

1. Curtains shall be free sliding on a metal support. The support shall be a minimum of 80 inches (2032 mm) above the floor level at the exit. The curtains shall be arranged so that, when open, no part of the curtain obstructs the exit.
2. Curtains shall be of a color, or colors, that contrasts with the color of the tent.

(Add) **3103.5.12.4 Doors.** Exit doors shall swing in the direction of exit travel. To avoid hazardous air and pressure loss in air-supported membrane structures, such doors shall be automatic closing against operating pressures. Opening force at the door edge shall not exceed 15 pounds (67 N).

(Add) **3103.5.12.5 Aisle.** The width of aisles without fixed seating shall be in accordance with the following:

1. In areas serving employees only, the minimum width shall be 24 inches (610 mm) or not less than the width required by the number of employees served.
2. In public areas, smooth-surfaced, unobstructed aisles having a minimum width of not less than 44 inches (1118 mm) shall be provided from seating areas, and aisles shall be progressively increased in width to provide, at all points, not less than 1 foot (305 mm) of aisle width for each 50 persons served by such aisle at that point.

(Add) **3103.5.12.6 Exit signs.** Exits shall be clearly marked. Exit signs shall be installed at required exit doorways and where otherwise necessary to indicate clearly the direction of egress when the exit serves an occupant load of 50 or more.

(Add) **3103.5.12.6.1 Exit sign illumination.** Exit signs shall be either listed and labeled in accordance with UL 924 as the internally illuminated type and used in accordance with the listing or shall be externally illuminated by luminaires supplied in the following manner:

1. Two separate circuits, one of which shall be separated from all other circuits, or occupant loads of 300 or less; or
2. Two separate sources of power, one of which shall be an approved emergency system, shall be provided when the occupant load exceeds 300. Emergency systems shall be supplied from storage batteries or from the on-site generator set, and the system shall be installed in accordance with NFPA 70. The emergency system provided shall have a

minimum duration of 90 minutes when operated at full design demand.

(Add) **3103.5.12.7 Means of egress illumination.** Means of egress shall be illuminated with light having an intensity of not less than 1 footcandle (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) **3103.5.12.8 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 not less than 8 feet (2438 mm). The surface of the means of egress shall be maintained in an approved manner.

(Add) **3103.5.13 Spot lighting.** Spot or effect lighting shall only be by electricity, and all combustible construction located within 6 feet (1829 mm) of such equipment shall be protected with approved noncombustible insulation not less than 9¼ inches (235 mm) thick.

(Add) **3103.5.14 Heating and cooking equipment.** Heating and cooking equipment shall be in accordance with Section 3104.15 of the State Fire Safety Code.

(Add) **3103.5.15 LP-gas.** The storage, handling and use of LP-gas and LP-gas equipment shall be in accordance with Section 3104.16 of the State Fire Safety Code.

(Add) **3103.5.16 Flammable and combustible liquids.** The use of flammable-fuel-fired equipment shall be in accordance with Section 3104.17 of the State Fire Safety Code.

(Add) **3103.5.17 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) **3105.3 Design and construction.** Awnings and canopies shall be designed and constructed to withstand wind or other lateral loads, snow 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, wood of Type IV size, 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 General.** Swimming pools shall comply with the requirements of Section 3109.2 to 3109.9, inclusive, and other applicable sections 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) 3109.2 Definition. The following terms are defined in Chapter 2:

SWIMMING POOLS.

SPA, EXERCISE

(Add) **3109.3 Public swimming pools.** Public swimming pools shall be completely enclosed by a barrier meeting the requirements of Section 3109.4.

(Add) **3109.4 Swimming pool barriers.** Residential and public swimming pool barriers shall comply with Sections 3109.4.1 to 3109.4.3, inclusive.

Exception: A residential spa or hot tub with a safety cover complying with ASTM F 1346 need not comply with Section 3109.4.

(Add) **3109.4.1 Barrier height and clearances.** The top of the barrier shall be not less than 48 inches (1219 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The vertical clearance between grade and the bottom of the barrier shall be not greater than 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, and the vertical clearance between the top of the pool structure and the bottom of the barrier shall be not greater than 4 inches (102 mm).

(Add) **3109.4.1.1 Openings.** Openings in residential swimming pool barriers as defined by the exception to Section 3109.1.1 shall not allow passage of a 4-inch-diameter (102 mm) sphere. Openings in public swimming pool barriers shall not allow passage of a 2-inch diameter (51 mm) sphere.

(Add) **3109.4.1.2 Solid barrier surfaces.** Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

(Add) **3109.4.1.3 Closely spaced horizontal members.**
Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall be not greater than 1¾-inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than 1¾-inches (44 mm) in width.

(Add) **3109.4.1.4 Widely spaced horizontal members.** Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members in residential pools shall be not greater than 4 inches (102 mm) and spacing between vertical members in public pools shall

be not greater than 2 inches (51 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1¾ inches (44 mm) in width.

(Add) **3109.4.1.5 Chain link dimensions.** Mesh size for chain link fences shall be not greater than a 2¼-inch square (57 mm square) unless the fence is provided with slats fastened at the top or the bottom that reduce the openings to not more than 1¾-inches (44 mm).

(Add) **3109.4.1.6 Diagonal members.** Where the barrier is composed of diagonal members, the opening formed by the diagonal members shall be not greater than 1¾-inches (44 mm).

(Add) **3109.4.1.7 Gates.** Access doors or gates shall comply with the requirements of Sections 3109.4.1.1 through 3109.4.1.6 and shall be equipped to accommodate a locking device. Pedestrian access doors or gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Doors or gates other than pedestrian access doors or gates shall have a self-latching device. Release mechanisms shall be in accordance with Sections 1010.1.9 and 1109.13. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the door or gate, the release mechanism shall be located on the pool side of the door or gate 3 inches (76 mm) or more, below the top of the door or gate, and the door or gate and barrier shall be without openings greater than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

(Add) **3109.4.1.8 Dwelling wall as a barrier.** Where a wall of a dwelling serves as part of the barrier, one of the following shall apply:

1. Doors with direct access to the pool through that wall shall be equipped with an alarm that produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. In dwellings not required to be accessible units, Type A units or Type B units, the deactivation switch shall be located 54 inches (1372 mm) or more above the threshold of the door. In dwelling units required to be accessible units, Type A units or Type B units, the deactivation switch shall be located not higher than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the threshold of the door.
2. The pool shall be equipped with a power safety cover which complies with ASTM F1346.
3. All doors with direct access to the pool through that wall shall be equipped with a self-closing and self-latching device with the release mechanism located a minimum of 54 inches above the door threshold. Swinging doors shall open away from the pool area.

(Add) **3109.4.1.9 Pool structure as a barrier.** Where an above-ground or on-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then the ladder or steps shall be surrounded by a barrier that meets the requirements of Sections 3109.4.1.1 to 3109.4.1.8, inclusive.

Exception: A residential spa or hot tub with a safety cover complying with ASTM F 1346.

(Add) **3109.4.2 Indoor swimming pools.** Walls surrounding indoor swimming pools shall be required to comply with Section 3109.4.1.8.

(Add) **3109.4.3 Prohibited locations.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

(Add) **3109.5 Entrapment avoidance.** Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

(Add) **3109.6 Temporary enclosure.** A temporary enclosure shall be installed prior to the electrical bonding inspection of any in-ground swimming pool unless the permanent barrier specified in Section 3109 is in place prior to the commencement of the installation. The temporary enclosure shall be a minimum of 4 feet in height, shall have no openings that will allow passage of a 4-inch sphere and shall be equipped with a positive latching device on any openings.

(Add) **3109.7 Pool alarm.** Pursuant to section 29-265a of the Connecticut General Statues 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 or more enters the water in a swimming pool.

Exception: Hot tubs and portable spas shall be exempt from this requirement.

(Add) **3109.8 Accessibility.** Public swimming pools, when less than 50 meters in length, shall be provided with ramps or approved fixed or portable lifting equipment for the purpose of providing assisted access to the water for persons with disabilities. Public swimming pools, when 50 meters or more in length, shall be provided with ramps. All public swimming pools, pool decks, toilet facilities, showers, locker and dressing areas shall be accessible and located along accessible routes.

(Add) **3109.8.1 Slopes and handrails.** The slopes of ramps for accessibility, where required, shall not exceed one unit vertical to eight units horizontal (1:8) where located at least 24 inches below the water line and one unit vertical to 12 units horizontal (1:12) above that point. Ramps shall be provided with handrails on both sides in accordance with Section 1010.8.

(Add) **3109.9 Pool structure.** The pool structure shall be engineered and designed to withstand the expected forces to which the pool will be subjected.

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 chapter 541 of the Connecticut General Statutes and with Chapter 33 of this code.31-

CHAPTER 35 – REFERENCED STANDARDS

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

Standard reference number—year of publication	Title	Referenced in code section number
(Add) 02-11	Hydrogen Technologies Code	101.4.1
(Amd) 30-18	Flammable and Combustible Liquids Code	415.6, 507.8.1.1.1, 507.8.1.1.2
(Add) 54-15	National Fuel Gas Code	101.4.1

(Amd) 70-17	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) 102-16	Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures	3103.5

(Add) **APPENDIX N MUNICIPALITY – SPECIFIC STRUCTURAL DESIGN PARAMETERS**

(APPENDIX N) MUNICIPALITY - SPECIFIC STRUCTURAL DESIGN PARAMETERS												
				Wind Design Parameters								
Municipality	**Ground Snow Load** (psf)	**MCE Spectral Accelerations** (%g)		**Ultimate Design Wind Speeds,** V_{ult} (mph)			**Nominal Design Wind Speeds,** V_{asd} (mph)			**Wind-Borne Debris Regions**[1]		**Hurricane-Prone Regions**
		S_s	S_1	Risk Cat.I	Risk Cat.II	Risk Cat III-IV	Risk Cat. I	Risk Cat. II	Risk Cat. III-IV	Risk Cat. II & III except Occup I-2	Risk Cat III Occup I-2 & Risk Cat. IV	
Andover	30	0.176	0.063	120	130	140	93	101	108			Yes
Ansonia	30	0.195	0.064	115	125	135	89	97	105			Yes
Ashford	35	0.173	0.063	120	130	140	93	101	108			Yes
Avon	35	0.181	0.064	110	120	130	85	93	101			Yes
Barkhamsted	40	0.177	0.065	110	120	125	85	93	97			Yes
Beacon Falls	30	0.192	0.064	115	125	135	89	97	105			Yes
Berlin	30	0.183	0.063	115	125	135	89	97	105			Yes
Bethany	30	0.189	0.063	115	125	135	89	97	105			Yes
Bethel	30	0.215	0.066	110	120	125	85	93	97			Yes
Bethlehem	35	0.190	0.065	110	120	125	85	93	97			Yes
Bloomfield	35	0.180	0.064	115	125	130	89	97	101			Yes
Bolton	30	0.177	0.063	115	125	135	89	97	105			Yes
Bozrah	30	0.170	0.061	120	135	145	93	105	112		Type A	Yes
Branford	30	0.180	0.061	120	130	140	93	101	108		Type B	Yes
Bridgeport	30	0.209	0.064	115	125	135	89	97	105		Type B	Yes
Bridgewater	35	0.201	0.066	110	120	125	85	93	97			Yes
Bristol	35	0.185	0.064	110	120	130	85	93	101			Yes
Brookfield	35	0.208	0.066	110	120	125	85	93	97			Yes
Brooklyn	35	0.171	0.062	120	130	140	93	101	108			Yes
Burlington	35	0.182	0.064	110	120	130	85	93	101			Yes
Canaan	40	0.173	0.065	105	115	120	81	89	93			
Canterbury	35	0.171	0.061	120	130	140	93	101	108		Type A	Yes
Canton	35	0.180	0.064	110	120	130	85	93	101			Yes
Chaplin	35	0.173	0.062	120	130	140	93	101	108			Yes
Cheshire	30	0.186	0.063	115	125	135	89	97	105			Yes
Chester	30	0.172	0.060	120	130	140	93	101	108		Type A	Yes
Clinton	30	0.169	0.059	120	135	140	93	105	108	Type B	Type A	Yes
Colchester	30	0.174	0.061	120	130	140	93	101	108			Yes
Colebrook	40	0.174	0.065	105	115	125	81	89	97			
Columbia	30	0.175	0.062	120	130	140	93	101	108			Yes
Cornwall	40	0.180	0.065	105	115	120	81	89	93			
Coventry	30	0.176	0.063	120	130	140	93	101	108			Yes
Cromwell	30	0.181	0.063	115	125	135	89	97	105			Yes
Danbury	30	0.217	0.067	110	120	125	85	93	97			Yes
Darien	30	0.242	0.068	110	120	130	85	93	101			Yes
Deep River	30	0.170	0.060	120	130	140	93	101	108		Type A	Yes
Derby	30	0.195	0.064	115	125	135	89	97	105			Yes
Durham	30	0.179	0.062	115	130	140	89	101	108			Yes

(APPENDIX N) MUNICIPALITY - SPECIFIC STRUCTURAL DESIGN PARAMETERS												
				Wind Design Parameters								
Municipality	**Ground Snow Load** (psf)	**MCE Spectral Accelerations** (%g)		**Ultimate Design Wind Speeds,** V_{ult} (mph)			**Nominal Design Wind Speeds,** V_{asd} (mph)			**Wind-Borne Debris Regions**[1]		**Hurricane-Prone Regions**
		S_s	S_1	Risk Cat.I	Risk Cat.II	Risk Cat III-IV	Risk Cat. I	Risk Cat. II	Risk Cat. III-IV	Risk Cat. II & III except Occup I-2	Risk Cat III Occup I-2 & Risk Cat. IV	
Eastford	40	0.172	0.063	120	130	140	93	101	108			Yes
East Granby	35	0.177	0.065	110	120	130	85	93	101			Yes
East Haddam	30	0.172	0.061	120	130	140	93	101	108			Yes
East Hampton	30	0.177	0.062	120	130	140	93	101	108			Yes
East Hartford	30	0.180	0.064	115	125	135	89	97	105			Yes
East Haven	30	0.182	0.062	120	130	140	93	101	108		Type B	Yes
East Lyme	30	0.164	0.059	125	135	145	97	105	112	Type B	Type A	Yes
Easton	30	0.215	0.066	110	120	130	85	93	101			Yes
East Windsor	35	0.177	0.064	115	125	135	89	97	105			Yes
Ellington	35	0.176	0.064	115	125	135	89	97	105			Yes
Enfield	35	0.176	0.065	110	125	130	85	97	101			Yes
Essex	30	0.168	0.059	120	135	145	93	105	112		Type A	Yes
Fairfield	30	0.215	0.065	115	125	135	89	97	105		Type B	Yes
Farmington	35	0.183	0.064	115	125	135	89	97	105			Yes
Franklin	30	0.171	0.061	120	130	140	93	101	108		Type A	Yes
Glastonbury	30	0.180	0.063	115	125	135	89	97	105			Yes
Goshen	40	0.181	0.065	105	115	125	81	89	97			
Granby	35	0.176	0.065	110	120	130	85	93	101			Yes
Greenwich	30	0.259	0.070	110	120	130	85	93	101			Yes
Griswold	30	0.168	0.060	125	135	145	97	105	112		Type A	Yes
Groton	30	0.160	0.058	125	135	145	97	105	112	Type B	Type A	Yes
Guilford	30	0.176	0.061	120	130	140	93	101	108		Type B	Yes
Haddam	30	0.175	0.061	120	130	140	93	101	108			Yes
Hamden	30	0.185	0.063	115	125	135	89	97	105			Yes
Hampton	35	0.172	0.062	120	130	140	93	101	108			Yes
Hartford	30	0.181	0.064	115	125	135	89	97	105			Yes
Hartland	40	0.175	0.065	110	120	125	85	93	97			Yes
Harwinton	35	0.183	0.065	110	120	130	85	93	101			Yes
Hebron	30	0.177	0.063	120	130	140	93	101	108			Yes
Kent	40	0.188	0.065	105	115	120	81	89	93			
Killingly	40	0.171	0.062	120	130	140	93	101	108			Yes
Killingworth	30	0.173	0.061	120	130	140	93	101	108			Yes
Lebanon	30	0.173	0.062	120	130	140	93	101	108			Yes
Ledyard	30	0.163	0.059	125	135	145	97	105	112		Type A	Yes
Lisbon	30	0.169	0.061	125	135	145	97	105	112		Type A	Yes
Litchfield	40	0.184	0.065	110	120	125	85	93	97			Yes
Lyme	30	0.164	0.059	125	135	145	97	105	112		Type A	Yes
Madison	30	0.173	0.060	120	130	140	93	101	108		Type B	Yes
Manchester	30	0.178	0.064	115	125	135	89	97	105			Yes
Mansfield	35	0.173	0.062	120	130	140	93	101	108			Yes

(APPENDIX N) MUNICIPALITY - SPECIFIC STRUCTURAL DESIGN PARAMETERS												
				Wind Design Parameters								
Municipality	**Ground Snow Load** (psf)	**MCE Spectral Accelerations** (%g)		**Ultimate Design Wind Speeds,** V_{ult} (mph)			**Nominal Design Wind Speeds,** V_{asd} (mph)			**Wind-Borne Debris Regions**[1]		**Hurricane-Prone Regions**
		S_s	S_1	Risk Cat.I	Risk Cat.II	Risk Cat III-IV	Risk Cat. I	Risk Cat. II	Risk Cat. III-IV	Risk Cat. II & III except Occup I-2	Risk Cat III Occup I-2 & Risk Cat. IV	
Marlborough	30	0.177	0.062	120	130	140	93	101	108			Yes
Meriden	30	0.183	0.063	115	125	135	89	97	105			Yes
Middlebury	35	0.191	0.064	110	120	130	85	93	101			Yes
Middlefield	30	0.181	0.063	115	125	135	89	97	105			Yes
Middletown	30	0.180	0.063	115	130	135	89	101	105			Yes
Milford	30	0.194	0.063	115	125	135	89	97	105		Type B	Yes
Monroe	30	0.205	0.065	110	120	130	85	93	101			Yes
Montville	30	0.165	0.059	125	135	145	97	105	112		Type A	Yes
Morris	35	0.187	0.065	110	120	125	85	93	97			Yes
Naugatuck	30	0.190	0.064	110	125	135	85	97	105			Yes
New Britain	30	0.183	0.064	115	125	135	89	97	105			Yes
New Canaan	30	0.240	0.068	110	120	130	85	93	101			Yes
New Fairfield	35	0.212	0.067	105	115	125	81	89	97			
New Hartford	40	0.180	0.065	110	120	130	85	93	101			Yes
New Haven	30	0.186	0.062	115	125	135	89	97	105		Type C	Yes
Newington	30	0.182	0.064	115	125	135	89	97	105			Yes
New London	30	0.161	0.058	125	135	145	97	105	112	Type B	Type A	Yes
New Milford	35	0.198	0.066	105	115	125	81	89	97			
Newtown	30	0.208	0.066	110	120	130	85	93	101			Yes
Norfolk	40	0.175	0.065	105	115	125	81	89	97			
North Branford	30	0.179	0.061	120	130	140	93	101	108			Yes
North Canaan	40	0.173	0.065	105	115	120	81	89	93			
North Haven	30	0.184	0.062	115	125	135	89	97	105			Yes
North Stonington	30	0.163	0.059	125	135	145	97	105	112		Type A	Yes
Norwalk	30	0.232	0.067	110	120	130	85	93	101			Yes
Norwich	30	0.168	0.060	125	135	145	97	105	112		Type A	Yes
Old Lyme	30	0.164	0.059	125	135	145	97	105	112	Type B	Type A	Yes
Old Saybrook	30	0.164	0.059	125	135	145	97	105	112	Type B	Type A	Yes
Orange	30	0.192	0.063	115	125	135	89	97	105			Yes
Oxford	30	0.196	0.064	110	125	130	85	97	101			Yes
Plainfield	35	0.170	0.061	125	135	145	97	105	112		Type A	Yes
Plainville	35	0.184	0.064	115	125	135	89	97	105			Yes
Plymouth	35	0.186	0.064	110	120	130	85	93	101			Yes
Pomfret	40	0.172	0.063	120	130	140	93	101	108			Yes
Portland	30	0.180	0.063	115	130	135	89	101	105			Yes
Preston	30	0.167	0.060	125	135	145	97	105	112		Type A	Yes
Prospect	30	0.188	0.064	115	125	135	89	97	105			Yes

(APPENDIX N) MUNICIPALITY - SPECIFIC STRUCTURAL DESIGN PARAMETERS												
				Wind Design Parameters								
Municipality	**Ground Snow Load** (psf)	**MCE Spectral Accelerations** (%g)		**Ultimate Design Wind Speeds,** V_{ult} (mph)			**Nominal Design Wind Speeds,** V_{asd} (mph)			**Wind-Borne Debris Regions**[1]		**Hurricane-Prone Regions**
		S_s	S_1	Risk Cat.I	Risk Cat.II	Risk Cat III-IV	Risk Cat. I	Risk Cat. II	Risk Cat. III-IV	Risk Cat. II & III except Occup I-2	Risk Cat III Occup I-2 & Risk Cat. IV	
Putnam	40	0.172	0.063	120	130	140	93	101	108			Yes
Redding	30	0.220	0.067	110	120	130	85	93	101			Yes
Ridgefield	30	0.230	0.068	110	120	125	85	93	97			Yes
Rocky Hill	30	0.181	0.063	115	125	135	89	97	105			Yes
Roxbury	35	0.197	0.065	110	120	125	85	93	97			Yes
Salem	30	0.170	0.060	120	135	140	93	105	108		Type A	Yes
Salisbury	40	0.173	0.065	105	115	120	81	89	93			
Scotland	30	0.172	0.061	120	130	140	93	101	108			Yes
Seymour	30	0.194	0.064	115	125	135	89	97	105			Yes
Sharon	40	0.179	0.065	105	115	120	81	89	93			
Shelton	30	0.199	0.064	115	125	135	89	97	105			Yes
Sherman	35	0.202	0.066	105	115	120	81	89	93			
Simsbury	35	0.179	0.064	110	120	130	85	93	101			Yes
Somers	35	0.174	0.064	115	125	135	89	97	105			Yes
Southbury	35	0.198	0.065	110	120	130	85	93	101			Yes
Southington	30	0.185	0.064	115	125	135	89	97	105			Yes
South Windsor	30	0.178	0.064	115	125	135	89	97	105			Yes
Sprague	30	0.171	0.061	120	130	140	93	101	108		Type A	Yes
Stafford	35	0.173	0.064	115	125	135	89	97	105			Yes
Stamford	30	0.249	0.069	110	120	130	85	93	101			Yes
Sterling	35	0.170	0.061	125	135	145	97	105	112		Type A	Yes
Stonington	30	0.159	0.058	125	140	150	97	108	116	Type B	Type A	Yes
Stratford	30	0.201	0.064	115	125	135	89	97	105		Type B	Yes
Suffield	35	0.176	0.065	110	120	130	85	93	101			Yes
Thomaston	35	0.186	0.064	110	120	130	85	93	101			Yes
Thompson	40	0.172	0.063	120	130	140	93	101	108			Yes
Tolland	35	0.175	0.064	115	125	135	89	97	105			Yes
Torrington	40	0.182	0.065	110	120	125	85	93	97			Yes
Trumbull	30	0.207	0.065	115	125	135	89	97	105			Yes
Union	40	0.172	0.064	115	125	135	89	97	105			Yes
Vernon	30	0.177	0.064	115	125	135	89	97	105			Yes
Voluntown	30	0.168	0.060	125	135	145	97	105	112		Type A	Yes
Wallingford	30	0.183	0.063	115	125	135	89	97	105			Yes
Warren	40	0.186	0.065	105	115	125	81	89	97			
Washington	35	0.192	0.065	105	120	125	81	93	97			Yes
Waterbury	35	0.189	0.064	110	125	130	85	97	101			Yes
Waterford	30	0.161	0.058	125	135	145	97	105	112	Type B	Type A	Yes
Watertown	35	0.189	0.064	110	120	130	85	93	101			Yes
Westbrook	30	0.167	0.059	120	135	145	93	105	112	Type B	Type A	Yes

(APPENDIX N) MUNICIPALITY - SPECIFIC STRUCTURAL DESIGN PARAMETERS												
				Wind Design Parameters								
Municipality	**Ground Snow Load** (psf)	**MCE Spectral Accelerations** (%g)		**Ultimate Design Wind Speeds,** V_{ult} (mph)			**Nominal Design Wind Speeds,** V_{asd} (mph)			**Wind-Borne Debris Regions[1]**		**Hurricane-Prone Regions**
		S_s	S_1	Risk Cat.I	Risk Cat.II	Risk Cat III-IV	Risk Cat. I	Risk Cat. II	Risk Cat. III-IV	Risk Cat. II & III except Occup I-2	Risk Cat III Occup I-2 & Risk Cat. IV	
West Hartford	30	0.181	0.064	115	125	135	89	97	105			Yes
West Haven	30	0.188	0.062	115	125	135	89	97	105		Type B	Yes
Weston	30	0.224	0.067	110	120	130	85	93	101			Yes
Westport	30	0.226	0.067	110	120	130	85	93	101		Type B	Yes
Wethersfield	30	0.181	0.064	115	125	135	89	97	105			Yes
Willington	35	0.174	0.063	115	125	135	89	97	105			Yes
Wilton	30	0.231	0.068	110	120	130	85	93	101			Yes
Winchester	40	0.177	0.065	105	120	125	81	93	97			Yes
Windham	30	0.173	0.062	120	130	140	93	101	108			Yes
Windsor	35	0.179	0.064	115	125	135	89	97	105			Yes
Windsor Locks	35	0.177	0.064	110	125	130	85	97	101			Yes
Wolcott	35	0.187	0.064	110	125	130	85	97	101			Yes
Woodbridge	30	0.191	0.063	115	125	135	89	97	105			Yes
Woodbury	35	0.194	0.065	110	120	130	85	93	101			Yes
Woodstock	40	0.172	0.063	120	130	140	93	101	108			Yes

1. Wind-Borne Debris Regions:

   Type A: Full Municipality.

   Type B: Areas south of Interstate 95.

   Exception: Areas that are more than one mile from the coastal mean high-water line as certified by a registered design professional may be classified as being outside a wind-borne debris region.

   Type C: Areas south of Metro North/Amtrak Railroad to the west of the Quinnipiac River and areas south of Interstate 95 to the east of the Quinnipiac River.

   Exception: Areas that are more than one mile from the coastal mean high-water line as certified by a registered design professional may be classified as being outside a wind-borne debris region.

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AMENDMENTS TO ICC/ANSI A117.1 - 2009

(Amd) **105.2.5 Safety Code for Elevators and Escalators:** ASME A17.1-2013 (American Society of Mechanical Engineers International, Three Park Avenue, New York , NY 10016-5990)..

(Amd) **105.2.6 Safety Standard for Platform Lifts and Stairway Chairlifts:** ASME A18.1-2008 (American Society of Mechanical Engineers International, Three Park Avenue, New York , NY 10016-5990).

(Amd) **502.2 Vehicle space size.** Pursuant to section 29-270a 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 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 may 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 1106.5 and 1106.5.1.1 of the 2015 International Building Code portion of the State Building Code.

(Amd) **502.7 Identification.** Accessible parking spaces shall be identified by above grade signs in accordance with Section 1111.1 of the 2015 International Building Code portion of the State Building Code.

(Del) **504 Stairways.** Delete Section 504 in its entirety without substitution.

(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 2015 International Building Code portion of the 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 Public Act 16-78, 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) **1004.3 Accessible Route.** Accessible routes within Type B dwelling units shall comply with Section 1004.3.

Exception: Exterior spaces less than 60 inches in depth.

(Amd) **1004.3.1 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 2015 INTERNATIONAL EXISTING BUILDING CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **101.1 Title.** The 2015 International Existing Building Code shall be known as the 2015 International Existing Building Code portion of the 2018 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 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 Connecticut State Fire Safety Code and 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 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 the 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 Connecticut State Fire Safety Code and the 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 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 provisions of Part IV of the Connecticut State Fire Safety 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 – DEPARTMENT OF BUILDING SAFETY.** Delete in its entirety and refer to Section 103 of the 2015 International Building Code portion or Section R103 of the 2015 International Residential Code portion, as applicable, of the 2018 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 2015 International Building Code portion or Section R104 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Duties and Powers of Code Official.

(Del) **SECTION 105 – PERMITS.** Delete in its entirety and refer to Section 105 of the 2015 International Building Code portion or Section R105 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Permits.

(Del) **SECTION 106 – CONSTRUCTION DOCUMENTS.** Delete in its entirety and refer to Section 107 of the 2015 International Building Code portion or Section R106 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Submittal Documents.

(Del) **SECTION 107 – TEMPORARY STRUCTURES AND USES.** Delete in its entirety and refer to Section 108 of the 2015 International Building Code portion or Section R107 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Temporary Structures and Uses.

(Del) **SECTION 108 – FEES.** Delete in its entirety and refer to Section 109 of the 2015 International Building Code portion or Section R107 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Fees.

(Del) **SECTION 109 – INSPECTIONS.** Delete in its entirety and refer to Section 110 of the 2015 International Building Code portion or Section R109 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Inspections.

(Del) **SECTION 110 – CERTIFICATE OF OCCUPANCY.** Delete in its entirety and refer to Section 111 of the 2015 International Building Code portion or Section R110 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Certificate of Occupancy.

(Del) **SECTION 112 – BOARD OF APPEALS.** Delete in its entirety and refer to Section 113 of the 2015 International Building Code portion or Section R112 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Means of Appeal.

(Del) **SECTION 113 - VIOLATIONS.** Delete in its entirety and refer to Section 114 of the 2015 International Building Code portion or Section R113 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Violations.

(Del) **SECTION 114 – STOP WORK ORDER.** Delete in its entirety and refer to Section 115 of the 2015 International Building Code portion or Section R114 of the 2015 International Residential Code portion, as applicable, of the 2018 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 2015 International Building Code portion of the 2018 Connecticut State Building Code – Unsafe Buildings and Equipment.

(Del) **SECTION 116 – EMERGENCY MEASURES.** Delete in its entirety and refer to Section 117 of the 2015 International Building Code portion of the 2018 Connecticut State Building Code – Emergency Measures.

(Del) **SECTION 117 – DEMOLITION.** Delete in its entirety and refer to Section 102.6.3 of the 2015 International Building Code portion of the 2018 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 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 4 – PRESCRIPTIVE COMPLIANCE METHOD

(Amd) **402.5 Smoke alarms in existing portions of a building**. Where an 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) **402.6 Carbon monoxide alarms in existing portions of a building.** Where an addition 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 International Building Code.

(Amd) **403.10 Smoke alarms.** When alterations requiring a permit occur in Group I-4 and E day care facilities, Group I-1 or R occupancies, 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) **403.12 Carbon monoxide alarms.** Where an 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 2015 International Building Code portion of the 2018 Connecticut State Building Code.

(Amd) **407.3 Stairways.** Existing stairways in an existing structure shall be required to comply with the requirements of Section 1011.5 of the 2015 International Building Code portion of the 2018 State Building Code.

(Amd) **408.1.1 Historic buildings.** Exemptions may be granted to the provisions of this code for historic structures pursuant to Section 29-259 of the Connecticut General Statutes.

(Amd) **410.4.2 Complete change of occupancy.** Where an entire building undergoes a change in occupancy, it shall comply with Section 410.4.1 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 2015 International Building Code portion of the 2018 State 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) **410.8.3 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 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) **410.8.6 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 1107 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) **410.8.7 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 1107 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) **410.8.8 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 1107 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 1107 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) **410.8.10 Toilet rooms**. Where it is technically infeasible to alter existing toilet and bathing rooms to be accessible, an accessible single occupancy toilet room constructed in accordance with Section 1109.2.4 of the International Building Code is permitted. The single occupancy toilet

room shall be located on the same floor and in the same area as the existing toilet or bathing rooms. At the inaccessible toilet and bathing rooms, directional signs indicating the location of the nearest accessible toilet or bathing facility within the facility 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) **410.8.15 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.

CHAPTER 7– ALTERATIONS – LEVEL 1

(Amd) **702.6.1 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 incorporated in the Connecticut State Fire Safety and the Connecticut Fire Prevention Codes. These requirements apply to liquid petroleum storage systems, gas piping systems extending from the point of delivery to the inlet connections of appliances, the installation and operation of residential and commercial gas appliances and related accessories as covered by this code.

(Add) **704.2 Minimum standards.** In addition to the requirements of this code, means of egress in existing buildings shall meet the requirements of the provisions of Part IV of the Connecticut State Fire Safety Code for the proposed occupancy.

(Amd) **705.1.3 Lifts and limited use/limited application elevators in existing buildings.** Vertical or inclined 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 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) **705.1.9 Toilet rooms**. Where it is technically infeasible to alter existing toilet and bathing rooms to be accessible, an accessible single occupancy toilet room constructed in accordance with Section 1109.2.4 of the International Building Code is permitted. The single occupancy toilet

room shall be located on the same floor and in the same area as the existing toilet or bathing rooms. At the inaccessible toilet and bathing rooms, directional signs indicating the location of the nearest accessible toilet or bathing facility within the facility 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) **707.3.2 Roof diaphragms resisting wind loads in high-wind regions.** Where roofing materials are removed from more than 50 percent of the roof diaphragm or section of a building located where the ultimate design wind speed, V_{ult}, determined in accordance with Appendix N of the 2015 International Building Code portion of the 2018 State Building Code is greater than 115 mph (51 m/s) 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 the International Building Code, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting at least 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the International Building Code.

CHAPTER 8 – ALTERATIONS – LEVEL 2

(Amd) **804.4.3 Smoke alarms.** When alterations requiring a permit occur in Group I-4 and E day care facilities, Group I-1 or R occupancies, 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) **804.5 Carbon monoxide alarms.** Where an 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 International Building Code.

(Amd) **805.2 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 Part IV of the 2018 Connecticut State Fire Safety Code.

(Amd) **805.3.3 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 9 – ALTERATIONS – LEVEL 3

(Add) **Section 909. Carbon Monoxide Alarms**

(Add) **909.1. Carbon Monoxide Alarms**. Carbon monoxide alarms complying with section 804.5 shall be provided through the building in accordance with the 2015 International Building Code portion of the State Building Code.

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) **1012.2.1 Fire sprinkler system.** Where a change of occupancy classification occurs that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Chapter 9 of the 2015 International Building Code portion of the State Building Code, such system shall be provided throughout the building or portion thereof where the change of occupancy occurs.

(Amd) **1012.2.2 Fire alarm and detection system.** Where a change of occupancy classification occurs that requires a fire alarm and detection system to be provided based on the new occupancy in accordance with Chapter 9 of the 2015 International Building Code portion of the State Building Code, such system shall be provided throughout the building or portion thereof where the change of occupancy occurs. Existing alarm notification appliances shall be automatically activated throughout the building. Where the building is not equipped with an existing fire alarm system, alarm notification appliances shall be provided throughout the area where the change of occupancy occurs and shall be automatically activated.

(Amd) **1012.8.2 Complete change of occupancy.** Where an entire building undergoes a change of occupancy, it shall comply with Section 1012.8.1 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 2015 International Building Code portion of the State Building Code.

4. Accessible parking, complying with Section 1106 of the 2015 International Building Code portion of the State Building Code, where parking is being provided.
5. At least one accessible passenger loading zone, when passenger 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 2015 International Building Code portion of the 2018 State 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.

CHAPTER 11 – ADDITIONS

(Amd) **1104.1 Smoke alarms in existing portions of a building.** Where an 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) **1104.2 Carbon monoxide alarms in existing portions of a building.** Where an addition 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 International Building Code.

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.

(Amd) **1204.1.4 Toilet and bathing facilities**. Where toilet rooms are provided, at least one accessible single occupancy toilet room complying with Section 1109.2.4 of the 2015 International Building Code portion of the State Building Code shall be provided. At the inaccessible toilet and bathing rooms, directional signs indicating the location of the nearest accessible toilet or 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.

CHAPTER 14 – PERFORMANCE COMPLIANCE METHODS

(Amd) **1401.2 Applicability.** Structures existing prior to the adoption date of the 2018 State Building Code, 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 5 through 13, inclusive, of this code. The provisions in Sections 1401.2.1 to 1401.2.5, inclusive, of this code 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 not apply to buildings with occupancies in Group H or 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) 02-11	Hydrogen Technologies Code	……101.8, 704.2
(Add) 54-15	National Fuel Gas Code	……101.8
(Amd) 70—17	National Electrical Code	……..107.3, 301.2, 607.1.1, 607.1.2, 607.1.3, 607.1.4, 607.1.5, 808.1, 808.3.4, 808.3.7, 1008.1, 1008.2, 1008.3, 1008.4

AMENDMENTS TO THE 2015 INTERNATIONAL PLUMBING CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **101.1 Title.** The 2015 International Plumbing Code and this Section shall be known as the 2015 International Plumbing Code portion of the 2018 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 2015 International Residential Code portion of the 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 Connecticut State Fire Safety and the Connecticut 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 2017 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 – DEPARTMENT OF PLUMBING INSPECTION.** Delete Section 103 in its entirety Delete in its entirety and refer to Section 103 of the 2015 International Building Code portion of the 2018 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 2015 International Building Code portion of the 2018 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 State Building Code requirements may be requested in accordance with section 104.10 of the International Building Code portion of the 2018 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 defined in Connecticut General Statute 29-252a 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 in fee 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 application for permit, and the contractor has presented such contractor's certificate of registration as a home improvement contractor.

(Amd) **106.5 Permit issuance.** Pursuant to Connecticut General Statutes 29-263, 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 therefore. 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 therefore as soon as practicable.

(Amd) **106.5.6 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.

(Del) **106.6.1 Work commencing before permit issuance.** Delete without substitution.

(Amd) **106.6.2 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) **106.6.3 Fee refunds.** The building official is authorized to establish a refund policy.

(Add) **107.2.6 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) **107.8 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.

(Add) **108.2.1 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) **108.4 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) **108.5 Stop work orders.** Upon notice from the building official, work on any plumbing system that is being done contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which the work is authorized to resume. Where an emergency exists, the building official shall not be required to give a written notice prior to stopping the work. 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 condition, shall be liable for penalties in accordance with Section 108.4.

(Del) **SECTION 109 – MEANS OF APPEAL** Delete this section in its entirety and refer to Section 113 of the 2015 International Building Code portion of the 2018 Connecticut State Building Code – Means of Appeal.

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 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) **REGISTERED DESIGN PROFESSIONAL.** An architect, engineer or interior designer, registered or licensed to practice professional architecture, engineering or interior design, as defined by the statutory requirements of the professional registration laws of the State of Connecticut, and acting within the scope of his or her practice.

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 without substitution.

(Del) **312.10.1 Inspections.** Delete without substitution.

(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.

CHAPTER 4 – FIXTURES, FAUCETS AND FIXTURE FITTINGS

(Amd) **403.1 Minimum number of fixtures.** Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 403.1. Types of occupancies 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. Occupancy classification 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) **403.1.2 Single-user toilet facility and bathing room fixtures.** The plumbing fixtures located in single-user toilet facilities and bathing rooms, including family or assisted-use toilet and bathing rooms that are required by Section 1109.2.1 of the International Building Code, shall contribute towards the total number of required plumbing fixtures for a building or tenant space. Single user toilet facilities and bathing rooms, and family or assisted-use toilet and bathing rooms shall be identified for use by any person.

(Amd) **403.2 Separate facilities.** Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.
5. Toilet rooms in Educational Group E Kindergarten and day care occupancies, and in Institutional Group I-4 child day care may be designated as unisex which are primarily for children's use.
6. Single-user toilet facility and bathing room fixtures provided in accordance with 403.1.2.

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

(Amd) **405.3.4 Water closet compartment.** Each water closet utilized by the public or employees shall occupy a separate compartment with walls or partitions and a door enclosing the fixture to ensure privacy.

Exceptions:

1. Water closet compartments shall not be required in a single-occupant toilet room with a lockable door.
2. Toilet rooms located in Educational Group E Kindergarten and day care occupancies, and in Institutional Group I-4 child day care and containing two or more water closets shall be permitted to have one water closet without an enclosing compartment provided the toilet room is accessed through a door or other configuration to provide privacy.
3. This provision is not applicable to toilet areas located within Group I-3 housing areas.

(Amd) **405.3.5 Urinal partitions.** Each urinal utilized by the public or employees shall occupy a separate area with walls or partitions to provide privacy. The walls shall begin at a height not greater the 12 inches (305 mm) from and extend not less than 60 inches (1524 mm) above the finished floor surface. The walls or partitions shall extend from the wall surface at each side of the urinal not less than 18 inches (457 mm) or to a point not less than 6 inches (152 mm) beyond the outermost front lip of the urinal measured from the finished backwall surface, whichever is greater.

Exceptions:

1. Urinal partitions shall not be required in a single occupant or family/assisted-use toilet room with a lockable door.

2. Toilet rooms located in Educational Group E Kindergarten and day care occupancies, and in Institutional Group I-4 child day care and containing two or more urinals shall be permitted to have one urinal without partitions provided the toilet room is accessed through a door or other configuration to provide privacy.

(Add) **412.5 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 6 - WATER SUPPLY AND DISTRIBUTION

(Amd) **608.17 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) **608.17.1 through 608.17.8.** Delete subsections and referenced table without substitution.

CHAPTER 7 – SANITARY DRAINAGE

(Amd) **701.2 Sewer required.** Buildings in which plumbing fixtures are installed and premises having drainage piping shall be connected to a public sewer, where required, or an approved private sewage disposal system in accordance with the Public Health Code adopted under authority of section 19a-36 of the Connecticut General Statutes.

(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 four feet of developed length of such connection. The four feet 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, except where a roof is to be used for any purpose other than weather protection, the vent extensions shall terminate not less than 7 feet above the roof.

(Del) **903.2 Frost closure.** Delete without substitution.

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. 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 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 and bibliography**. 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 of the State of Connecticut.

CHAPTER 15 – REFERENCED STANDARDS

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

Standard reference number—year of publication	Title	Referenced in code section number
(Add) 02-11	Hydrogen Technologies Code	101.2.1
(Add) 54-15	National Fuel Gas Code	……101.2.1
(Amd) 70—17	National Electrical Code	. . . . . .502.1, 504.3, 1114.1.3

(Del) **APPENDIX A – PLUMBING PERMIT FEE SCHEDULE.** Delete Appendix A without substitution.

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AMENDMENTS TO THE 2015 INTERNATIONAL MECHANICAL CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **101.1 Title.** The 2015 International Mechanical Code and this Section shall be known as the 2015 International Mechanical Code portion of the 2018 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 multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall comply with 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 Connecticut State Fire Safety and the Connecticut 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 Connecticut Fire Safety Code and the Connecticut 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 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 – DEPARTMENT OF MECHANICAL INSPECTION.** Delete Section 103 in its entirety and refer to Section 103 of the 2015 International Building Code portion of the 2018 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 2015 International Building Code portion of the 2018 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 State Building Code requirements may be requested in accordance with section 104.10 of the International Building Code portion of the 2018 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 defined in Connecticut General Statute 29-252a from the State Building Inspector.

(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 in fee 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.

(Amd) **106.4 Permit issuance.** Pursuant to Connecticut General Statutes 29-263, 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 therefore. 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 therefore as soon as practicable.

(Amd) **106.4.6 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.

(Del) **106.5.1 Work commencing before permit issuance.** Delete without substitution.

(Amd) **106.5.2 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) **106.5.3 Fee refunds.** The building official is authorized to establish a refund policy.

(Add) **107.2.6 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) **107.7 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.

(Add) **108.2.1 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) **108.4 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, pursuant to section 29-254a of the Connecticut General Statutes.

(Amd) **108.5 Stop work orders.** Upon notice from the building official, work on any mechanical system that is being done contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which the work is authorized to resume. Where an emergency exists, the building official shall not be required to give a written notice prior to stopping the work. 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 condition, shall be liable for penalties in accordance with Section 108.4.

(Del) **SECTION 109 - MEANS OF APPEAL.** Delete this section in its entirety and refer to Section 113 of the 2015 International Building Code portion of the 2018 Connecticut State Building Code – Means of Appeal.

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 State Building Code, such terms shall have the meanings ascribed to them as in those codes.

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

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

(Amd) **Code official**. See Building Official.

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

Conditions:

1. The material does not comply with the requirements for a noncombustible material.
2. The material, in the form in which it is used, exhibits a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg), when tested in accordance with NFPA 259, Standard Test Method for Potential Heat of Building Materials.
3. The material shall have a structural base of a noncombustible material with a surfacing not exceeding a thickness of 1/8 inch (3.2mm) where the surfacing exhibits a flame spread index not greater than 50 when tested in accordance with ASTM E 84, Standard Test Method for Surface Burning Characteristics of Building Materials, or ANSI/UL 723, Standard for Test for Surface Burning Characteristics of Building Materials.
4. The material shall be composed of materials that, in the form and thickness used, neither exhibit a flame spread index greater than 25 nor evidence of continued progressive combustion when tested in accordance with ASTM E 84 or ANSI/UL 723 and are of such composition that all surfaces that would be exposed by cutting through the material on any plane would neither exhibit a flame spread index greater than 25 nor exhibit evidence of continued progressive combustion when tested in accordance with ASTM E 84 or ANSI/UL 723.

(Amd) **REGISTERED DESIGN PROFESSIONAL.** An architect, engineer or interior designer, registered or licensed to practice professional architecture, engineering or interior design, as defined by the statutory requirements of the professional registration laws of the State of Connecticut, and acting within the scope of his or her practice.

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 Connecticut State Fire Safety and the Connecticut 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.

CHAPTER 5 – EXHAUST SYSTEMS

(Amd) **505.2 Makeup air required.** Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m^3/s) shall be provided with makeup air at a rate approximately equal to the difference between the exhaust air rate and 400 cubic feet per minute. Such makeup air systems shall be equipped with a means of closure.

Exception: 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 m^3/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m^3/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.

(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 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.

A 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.

(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 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 506.3.6 shall be permitted to be reduced in accordance Section 308.

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

Exceptions:

1. Clearance shall not be required from gypsum wallboard or 1/2-inch (12.7 mm) or thicker cementitious wallboard attached to noncombustible structures provided that a smooth, cleanable, nonabsorbent and noncombustible material is installed between the hood and the gypsum or cementitious wallboard over an area extending not less than 18 inches (457 mm) in all directions from the hood.
2. Type 1 hoods listed and labeled for clearances less than those required in 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 506.3.6 shall be permitted to be reduced in accordance 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.

(Amd) **606.2.1 Supply air systems.** Smoke detectors shall be installed in supply air systems with a design capacity greater than 2,000 cubic feet per minute in the supply air duct downstream of any filters and ahead of any branch connections.

(Amd) **606.2.2 Common supply and return air systems.** Where multiple air-handling systems share common supply or return air ducts or plenums with a combined design capacity greater

than 2,000 cubic feet per minute, the supply air system shall be provided with smoke detectors in accordance with Section 606.2.1.

Exception: Individual smoke detectors shall not be required for each fan-powered terminal unit, provided such units do not have an individual design capacity greater than 2,000 cubic feet per minute and will be shut down by the activation of the smoke detectors required by Section 606.2.1.

In all cases the smoke detectors shall comply with Sections 606.4 and 606.4.1.

(Amd) **606.2.3 Return air risers.** Where return air risers serve two or more stories and serve any portion of a return air system having a design capacity greater than 15,000 cubic feet per minute, smoke detectors shall be installed at each story. Such smoke detectors shall be located upstream of the connection between the return air riser and any air ducts or plenums.

Exception: Smoke detectors are not required in the return air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the 2018 Connecticut State Fire Safety Code. The area smoke detection system shall comply with Section 606.4.

CHAPTER 10 - BOILERS, WATER HEATERS AND PRESSURE VESSELS

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

CHAPTER 15 – REFERENCED STANDARDS

(Amd) NFPA	National Fire Protection Association 1 Battery Park Quincy, MA 02169-7471	
Standard reference number—year of publication	Title	Referenced in code section number
(Add) 02-11	Hydrogen Technologies Code	101.2.2
(Add) 54-15	National Fuel Gas Code	……101.2.2
(Amd) 70-17	National Electrical Code	……...301.7, 306.3.1, 306.4.1, 511.1.1.

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AMENDMENTS TO THE 2015 INTERNATIONAL ENERGY CONSERVATION CODE

IECC – COMMERCIAL PROVISIONS

CHAPTER 1 [CE] – SCOPE AND ADMINISTRATION

(Amd) **C101.1 Title.** The 2015 International Energy Conservation Code and this Section shall be known as the 2015 International Energy Conservation Code portion of the 2018 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 International Building Code portion of the 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 Chapter 4 shall be met.

(Amd) **C103.1 General.** Two sets of construction documents and other supporting data shall be submitted to the building official at the time of application for the building permit. The construction documents and designs submitted 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 waive the submission of construction documents and other supporting data not required to be prepared by a registered design professional if the

work proposed is not required by the provisions of this code, or the building official determines that the nature of the work applied for is such that review of the construction documents is not necessary to obtain 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.

(Amd) **C106.1 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 C106.1.1 and C106.1.2. Any reference to an ICC code adopted as part of the State Building Code or the State Fire Safety Code shall mean a reference to such ICC code as amended by the State of Connecticut.

(Del) **SECTION C107 – FEES.** Delete in its entirety and refer to Section 109 of the 2015 International Building Code portion of the 2018 Connecticut State Building Code – Fees.

(Del) **SECTION C108 – STOP WORK ORDER.** Delete in its entirety and refer to Section 115 of the 2015 International Building Code portion of the 2018 Connecticut State Building Code – Stop Work Order.

(Del) **SECTION C109 – BOARD OF APPEALS.** Delete in its entirety and refer to Section 113 of the 2015 International Building Code portion of the 2018 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 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) **Section C302 – LIGHT POLLUTION CONTROLS**

(Add) **C302.1 Light pollution controls.** When the power for exterior lighting is supplied through the energy service to the building, luminaires used for exterior lighting shall be full cutoff luminaires.

Exceptions:

1. Luminaires with an output of 2,600 lumens or less.
2. Luminaires intended to illuminate the façade of buildings or to illuminate other objects including, but not limited to flagpoles, landscape and water features, statuary and works of art.
3. Luminaires for historic lighting on the premises of an historic building as defined in the 2015 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) **C401.2 Application**. Commercial buildings shall comply with one of the following:

1. The requirements of ANSI/ASHRAE/IESNA 90.1 with Appendix G excerpt.
2. The requirements of Sections C402 through C405. In addition, commercial buildings shall comply with Section C406 and tenant spaces shall comply with Section C406.1.1.
3. The requirements of Section C402.5, C403.2, C404, C405.2, C405.3, C405.4, C405.6 and C407. The building energy costs shall be equal to or less than 85 percent of the standard reference design building.

(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.ft^2) or 1.0 watts per square foot (watt/ft^2) of floor area for space conditioning purposes.
2. Those that do not contain conditioned space.
4. 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.
5. Greenhouses.

IECC – RESIDENTIAL PROVISIONS

CHAPTER 1 [RE] – SCOPE AND ADMINISTRATION

(Amd) **R101.1 Title.** The 2015 International Energy Conservation Code and this Section shall be known as the 2015 International Energy Conservation Code portion of the 2018 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 the State of 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 2015 International Building Code portion of the 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.** Two sets of construction documents and other supporting data shall be submitted to the building official at the time of application for the building permit. The construction documents and designs submitted 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 waive the submission of construction documents and other supporting data not required to be prepared by a registered design professional if the work proposed is not required by the provisions of this code, or the building official determines that the nature of the work applied for is such that review of the construction documents is not necessary to obtain 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.

(Amd) **R106.1 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 R106.1.1 and R106.1.2. Any reference to an ICC code adopted as part of the State Building Code or the State Fire Safety Code shall mean a reference to such ICC code as amended by the State of Connecticut.

(Del) **SECTION R107 – FEES.** Delete in its entirety and refer to Section 109 of the 2015 International Building Code portion or Section R108 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Fees.

(Del) **SECTION C108 – STOP WORK ORDER.** Delete in its entirety and refer to Section 115 of the 2015 International Building Code portion or Section R114 of the 2015 International Residential Code portion, as applicable, of the 2018 Connecticut State Building Code – Stop Work Order.

(Del) **SECTION R109 – BOARD OF APPEALS.** Delete in its entirety and refer to Section 113 of the 2015 International Building Code portion or Section R112 of the 2015 International Residential Code portion, as applicable, of the 2018 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 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) **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) **R402.1 General (Prescriptive).** The *building thermal envelope* shall meet the requirements of Sections R402.1.1 through R402.1.5.

Exception: 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. Those with a peak design rate of energy usage less than 3.4 Btu/h• ft^2 or 1.0 watts per square foot (watt/ft^2) 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.

(Add) **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 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 and verified as having an air leakage rate of not exceeding three air changes per hour. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380, ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inches 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*.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weather stripping 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, if installed at the time of the test, shall be open.
4. Exterior or interior terminations for continuous ventilation systems shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

Exception: Low-rise attached dwelling unit buildings in Climate Zone 5: For dwelling units greater than 850 square feet of floor area, the air leakage threshold shall be set at five air changes per hour. For dwelling units less than or equal to 850 square feet of floor area, the air leakage threshold shall be set at 6.5 air changes per hour. Testing shall be conducted with a blower door, unguarded, at a pressure of 0.2 inches w.g. (50 Pascals). If guarded blower door testing (a test with one or more adjacent units pressurized, which should eliminate any leakage between units) is being performed, this exception is not allowed and the standard testing requirements of Section 402.4.1.2 apply. 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. For buildings with more than 7 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 unit 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.

(Add) **R403.3.1.1 Duct insulation values.** Minimum duct insulation values stated in Section 403.2.1 shall be installed R-values.

(Amd) **R403.3.3 Duct testing (Mandatory).** Ducts shall be pressure tested in accordance with ANSI/RESNET/ICC 380 to determine air leakage by one of the following methods:

1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.
2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exceptions:

1. A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.
2. Where ducts from an existing heating and cooling system are extended to an addition or are extended due to an alteration, duct systems with less than 40 linear feet (12.19 m) of

new duct in unconditioned spaces shall not be required to be tested in accordance with Section 403.3.3.

A written report of the results of the test shall be signed by the party conducting the test and provided to the code official.

(Amd) **R403.3.4 Duct leakage (Prescriptive).** The total leakage of the ducts, where measured in accordance with Section R403.3.3, shall be as follows:

1. Rough-in test: The total leakage shall be less than or equal to 8 cubic feet per minute (226.5 L/min) per 100 square feet (9.29 m2) of conditioned floor area where the air handler is installed at the time of the test. Where the air handler is not installed at the time of the test, the total leakage shall be less than or equal to 3 cubic feet per minute (84.95 L/min) per 100 square feet (9.29 m2) of conditioned floor area.
2. Postconstruction test: Total leakage shall be less than or equal to 8 cubic feet per minute (226.5 L/min) per 100 square feet (9.29 m2) of conditioned floor area.

(Amd) **R406.3 Energy Rating Index**. The Energy Rating Index (ERI) shall be determined in accordance with ANSI/RESNET/ICC 301.

(Del) **R406.3.1 ERI reference design**. Delete without substitution.

(Amd) **R406.4 ERI-based compliance.** Compliance based on an ERI analysis requires that the *rated design* be shown to have a maximum ERI of 61 without the use of renewable energy when compared to the ERI reference design.

(Del) **Table R406.4 MAXIMUM ENERGY RATING INDEX.** Delete without substitution.

(Amd) **R406.6.1 Compliance software tools.** Software tools for determining ERI shall be Approved Software Rating Tools in accordance with ANSI/RESNET/ICC 301.

(Amd) **R406.6.4 Specific approval.** Performance analysis tools meeting the applicable sections of Section R406 shall be *approved*. Documentation demonstrating the approval of performance analysis tools in accordance with Section 406.6.1 shall be provided to the *code official.*

(Add) **R406.6.5 Input values.** When calculations require input values not specified by Sections R402, R403, R404 and R405, those input values shall be taken from ANSI/RESNET/ICC 301.

(Del) **R406.7 Calculation software tools**. Delete without substitution.

CHAPTER 5 – EXISTING BUILDINGS

(Amd) **R502.1.1.1 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. Where nonconditioned space is changed to conditioned space, the building envelope of the addition shall comply where the UA, as determined in Section 402.1.4 of the existing building and the addition, and any alterations that are part of the project, is less than or equal to UA generated for the existing building.

2. A visual inspection of the building envelope tightness and insulation installation 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.

CHAPTER 6 – REFERENCED STANDARDS

(Add) American National Standards Institute
ANSI 25 West 43rd Street, Fourth Floor
New York, NY 10036

Standard reference number—year of publication	Title	Referenced in code section number
(Add) ANSI/RESNET/ICC 301-2014	Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using an Energy Rating Index	R1106.3 R1106.6
(Add) ANSI/RESNET/ICC 380-2016	Standard for Testing Airtightness of Building Enclosures, Airtightness of Heating and Cooling Air Distribution Systems, and Airflow of Mechanical Ventilation Systems	R1102.4.1.2 R1103.3.3

AMENDMENTS TO THE 2017 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. installations in detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures shall be in accordance with the requirements of this code or with the requirements of the 2015 International Residential Code portion of the State Building Code;

c. utility connections, additions and alterations to mobile homes;

d. utility connections to recreational vehicles; and

e. 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.

(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.

(6) Installations in one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height, that are in accordance with the provisions of the 2015 International Residential Code portion of the State Building Code.

(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 2015 International Building Code portion of the 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, Hartford CT 06103. www.portal.ct.gov/DAS.

CHAPTER 1 – GENERAL

ARTICLE 100 – Definitions.

(Amd) **Accessible, readily (Readily Accessible).** Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to actions such as to use tools, to climb over or remove obstacles, or to resort to portable ladders, and so forth. For overcurrent devices located within listed enclosures or assemblies for which access requires the use of a tool, the readily accessible requirement of this section shall not apply.

(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 State Building Code, interpreting the State Building Code and for granting exceptions from specific rules of the 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, Hartford CT 06103. www.portal.ct.gov/DAS.

CHAPTER 2 – WIRING AND PROTECTION

(Del) **240.67 Arc Energy Reduction.** Delete in its entirety without substitution.

(Amd) **250.50 Grounding Electrode System.** If available on the premises at each building or structure served, each item in 250.52 (A)(1) to (A)(7), inclusive, shall be bonded together to form the grounding electrode system. Where none of these grounding electrodes are available, one or more of the grounding electrodes specified in 250.52 (A)(4) to (A)(8), inclusive, shall be installed and used.

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.

Exceptions:

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.
2. Approved stud shoes may be used when installed in accordance with the manufacturer's recommendations.

(4) Top plates. When wiring, conduit, piping or ductwork is placed in or partly in an exterior wall or interior bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 per cent of its width, a galvanized metal tie of not less than 0.054 inch thick (1.37 mm) (16 ga) and 1 ½ inches (38 mm) wide shall be fastened across and to the plate at each side of the opening with not less than eight 10d (0.148 inch diameter) nails at each side or equivalent. The metal tie must extend a minimum of 6 inches past the opening.

Exception: When the entire side of the wall with the notch or cut is covered by wood structural panel sheathing.

CHAPTER 4 – EQUIPMENT FOR GENERAL USE

(Amd) **404.2 Switch Connections**.

(A) Three-Way and Four-Way Switches. Three-way and four-way switches shall be wired so that all switching is done only in the ungrounded circuit conductor. Where in metal raceways or metal-armored cables, wiring between switches and outlets shall

be in accordance with 300.20(A).

Exception: Switch loops shall not require a grounded conductor.

(B) Grounded Conductors. Switches or circuit breakers shall not disconnect the grounded conductor of a circuit.

Exception: A switch or circuit breaker shall be permitted to disconnect a grounded circuit conductor where all circuit conductors are disconnected simultaneously, or where the device is arranged so that the grounded conductor cannot be disconnected until all the ungrounded conductors of the circuit have been disconnected.

(**C) Switches Controlling Lighting Loads**. The grounded circuit conductor for the controlled lighting circuit shall be installed at the location where switches control lighting loads that are supplied by a grounded general-purpose branch circuit serving bathrooms, hallways, stairways, or rooms suitable for human habitation or occupancy as defined in the applicable building code. Where multiple switch locations control the same lighting load such that the entire floor area of the room or space is visible from the single or combined switch locations, the grounded circuit conductor shall only be required at one location. A grounded conductor shall not be required to be installed at lighting switch locations under any of the following conditions:

(1) Where conductors enter the box enclosing the switch through a raceway, provided that the raceway is large enough for all contained conductors, including a grounded conductor

(2) Where the box enclosing the switch is accessible for the installation of an additional or replacement cable without removing finish materials

(3) Where snap switches with integral enclosures comply with 300.15(E)

(4) Where lighting in the area is controlled by automatic means
(5) Where a switch controls a receptacle load

The grounded conductor shall be extended to any switch location as necessary that require line-to-neutral voltage to operate the electronics of the switch in the standby mode and shall meet the requirements of 404.22.

Informational Note: The provision for a (future) grounded conductor is to complete a circuit path for electronic lighting control devices.

(Amd) **404.22 Electronic Lighting Control Switches**. Electronic lighting control switches shall be listed.

(Amd) **406.4 General Installation Requirements**

(D) Replacements. Replacement of receptacles shall comply with 406.4(D)(1), 406.4(D)(2), 406.4(D)(3), 406.4(D)(5) and 406.4(D)(6).

(D)(4) Arc-Fault Circuit-Interrupter Protection. Where a receptacle outlet is located in an areas specified in 210.12(A) or (B), a replacement receptacle at this outlet shall be one of the following:

(1) A listed outlet branch-circuit type arc-fault circuit-interrupter receptacle
(2) A receptacle protected by a listed outlet branch-circuit type arc-fault circuit-interrupter receptacle
(3) A receptacle protected by a listed combination type arc-fault circuit-interrupter type circuit breaker

Exception: The replacement of receptacles in one- or two-family dwellings shall not be required to meet 406.4(D)(4), unless the receptacle being replaced provides arc-fault circuit-interrupter protection.

(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) 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

(Amd) **690.12 Rapid Shutdown of PV Systems on Buildings.** PV system circuits installed on or in buildings shall include a rapid shutdown function to reduce shock hazard for emergency responders in accordance with 690.12(A) through (D).

Exception: Ground mounted PV system circuits that enter buildings, of which the sole purpose is to house PV system equipment, shall not be required to comply with 690.12.

(A) Controlled Conductors. Requirements for controlled conductors shall apply to PV circuits supplied by the PV system.

(B) Controlled Limits. The use of the term *array boundary* in this section is defined as 305 mm (1 ft) from the array in all directions. Controlled conductors outside the array boundary shall comply with 690.12(B)(1) and inside the array boundary shall comply with 690.12(B)(2).

(1) Outside the Array Boundary. Controlled conductors located outside the boundary or more than 1 m (3 ft) from the point of entry inside a building shall be limited to not more than 30 volts within 30 seconds of rapid shutdown initiation. Voltage shall be measured between any two conductors and between any conductor and ground.

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(F).

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(G).

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 that indicates the type and location of on-site optional standby power sources. A sign shall not be required for individual unit equipment for standby illumination.

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AMENDMENTS TO THE 2015 INTERNATIONAL RESIDENTIAL CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **R101.1 Title.** The 2015 International Residential Code and this Section shall be known as the 2015 International Residential Code portion of the 2018 State Building Code, hereinafter referred to as “the code” or “this code”.

(Amd) **R101.2 Scope.** The provisions of the 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 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 and their accessory structures not more than three stories above grade plane in height.

Exception: Existing buildings undergoing repair, movement, alteration or additions and change of occupancy may comply with the 2015 International Existing Building Code. The permit applicant shall make the choice to comply with this code or the 2015 International Existing Building Code at the time of application for the building permit.

(Add) **R101.2.1 Live/work units in one- and two-family dwellings**. 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 2015 International Residential Code for One- and Two-family Dwellings portion of the 2018 State Building Code.

(Add) **R101.2.2 Live/work units in townhouses**. Live/work units located in townhouses and complying with the requirements of Section 419 of the International Building Code shall be permitted to be constructed in accordance with the International Residential Code for One- and Two-family Dwellings. Fire suppression required by Section 419.5 of the International Building Code where constructed under the 2015 International Residential Code for One- and Two-family Dwellings shall conform to Section P2904.

(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 Connecticut General Statute 19a-36, 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 2015 International Fire Code within the body of the model document shall be considered to be references to the 2018 Connecticut State Fire Safety Code.

(Add) **R101.4.5 Applicable electrical code.** The applicable electrical code requirements for buildings constructed under this code are those of chapters 34-43 of this code. The permit applicant may elect at the time of application for permit to follow the requirements of the 2017 NFPA 70 National Electrical Code portion of the 2018 State Building Code, as an alternative compliance to the electrical requirements of this code. The applicant must indicate this choice on the permit application and on all construction documents.

(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.

(Add) **R101.4.7 Existing buildings code.** The permit applicant may elect at the time of application for permit to follow the requirements of the 2015 International Existing Building Code portion of the 2018 State Building Code, as an alternative compliance to the requirements of this code. The applicant must indicate this choice on the permit application and on all construction documents.

(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 Regulations of Connecticut State Agencies known as the 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 2015 International Residential Code are hereby specifically adopted and included in this code: E; F; G; H; K; O; P and V.

(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 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) **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.** 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 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 State Building Code where strict compliance with the 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 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.

(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 104.10.1 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 in fee 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. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area is not greater than 200 square feet (18.58 m2).
2. Fences, other than swimming pool barriers, not over 7 feet (2134 mm) high.
3. Retaining walls that are not higher than 3 feet (914 mm) measured from finished grade at the bottom of the wall to finished grade at the top of the wall, unless supporting a surcharge.
4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
5. Sidewalks, driveways and on-grade concrete or masonry patios not more than 30 inches (762 mm) above adjacent grade and not over any basement or story below.
6. Painting, papering, tiling, carpeting, cabinets, countertops and similar finish work not involving structural changes or alterations.
7. Prefabricated swimming pools that are equal to or less than 24 inches (610 mm) deep.
8. Swings, non-habitable 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 not exceeding 200 square feet (18.58 m^2) in area, that are not more than 30 inches (762 mm) above grade at any point, are not attached to a dwelling and do not serve the exit door required by Section R311.4.
11. Repairs that are limited to 25 percent of roof covering and building siding within one calendar year.

Electrical:

1. Listed cord-and-plug connected temporary decorative lighting.
2. Reinstallation of attachment plug receptacles but not the outlets therefor.
3. Replacement of branch circuit overcurrent devices of the required capacity in the same location.
4. Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
5. Minor repair work, including the replacement of lamps and fuses or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Gas:

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

Mechanical:

1. Portable heating appliances with a self-contained fuel supply.
2. Portable ventilation appliances.
3. Portable cooling units.
4. Steam, hot- or chilled-water piping contained within any heating or cooling equipment regulated by Chapters 18 to 24, inclusive, of this code.
5. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
6. Portable evaporative coolers.
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
8. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste or vent pipe; provided if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in Sections R105 and R109 of this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

(Amd) **R105.3.1 Action on application.** Pursuant to Connecticut General Statutes 29-263, 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 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.

(Amd) **R105.5 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 may grant, in writing, one or more extensions, 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 R115 of this code. Work performed under such permits shall be completed as expeditiously as possible.

(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 2015 International Building Code portion of the State Building Code.

(Amd) **R107.1 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.

Exceptions: The following shall be exempt from permit requirements:

1. Tents used exclusively for recreational camping purposes.
2. Tents less than 350 square feet total area.
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 2017 NFPA 70, National Electrical Code, portion of the 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 N1102.4.1.2.

(Add) **R109.1.5.2 Additional electrical inspections.** Required electrical inspections in addition to those required by Sections R109.1.2 and R109.1.6 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) **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 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.** Each 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) **R114.2 Unlawful continuance.** 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 2015 International Building Code portion of the 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 2015 International Building Code portion of the 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 2015 International Building Code portion of the 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:

(Amd) **ATTIC, HABITABLE.** A finished area, not considered a story and not containing any dormers, complying with all of the following requirements:

1. The occupiable floor area is at least 70 square feet (6.5 m²), in accordance with Section R304,
2. The occupiable floor has a ceiling height in accordance with Section R305, and
3. The occupiable space is enclosed by the roof assembly above, knee walls (if applicable) on the sides and the floor-ceiling assembly below.
4. Roofs of habitable attics containing dormers will be considered a story.

(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) **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.

(Amd) **WINDBORNE DEBRIS REGION.** Areas south of Interstate 95 in the following municipalities: Clinton, East Lyme, Groton, Madison, New London, Old Lyme, Old Saybrook, Stonington, Waterford, and Westbrook.

Exception: Areas that are more than one mile from the coastal mean high-water line as certified by a registered design professional may be classified as being outside of a wind-borne debris region.

CHAPTER 3 – BUILDING PLANNING

(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 V. 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. AF&PA *Wood Frame Construction Manual* (WFCM).
2. ICC *Standard for Residential Construction in High-Wind Regions* (ICC 600).
3. ASCE *Minimum Design Loads for Buildings and Other Structures* (ASCE 7.
4. AISI *Standard for Cold-Formed Steel Framing - Prescriptive Method For One- and Two-Family Dwellings* (AISI S230).
5. *International Building Code.*

(Amd) **TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM		
	Speed[b] (mph)	Wind-Borne debris zone		Weathering[a]	Frost line depth	Termite
As set forth in Appendix V.	As set forth in Appendix V.	See definition	As set forth in Appendix V.	Severe	42”	Moderate-Heavy

WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMPERATURE	CLIMATE ZONE
7^{O}F	YES	To be determined locally	1,500 or less	50^{O}F	5A

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) ISOLINES OF THE 97½ PERCENT WINTER (DECEMBER, JANUARY AND FEBRUARY) DESIGN TEMPERATURE (^{O}F).**
Delete without substitution.

(Del) **FIGURE R301.2(2) SEISMIC DESIGN CATEGORIES – SITE CLASS D.**
Delete without substitution.

(Del) **FIGURE R301.2(3) WEATHERING PROBABILITY MAP FOR CONCRETE[a,b].**
Delete without substitution.

(Del) **FIGURE R301.2(4)A BASIC WIND SPEEDS.**
Delete without substitution.

(Del) **FIGURE R301.2(4)B REGIONS WHERE WIND DESIGN IS REQUIRED.**
Delete without substitution.

(Del) **FIGURE R301.2(4)C WIND – BORNE DEBRIS REGIONS.**
Delete without substitution.

(Del) **FIGURE R301.2(5) GROUND SNOW LOADS, P_g FOR THE UNITED STATES (lb/ft^2).**
Delete without substitution.

(Del) **FIGURE R301.2(6) TERMITE INFESTATION PROBABILITY MAP.**
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) **R301.2.2.1 Determination of seismic design category.** Buildings shall be assigned a seismic design category in accordance with Appendix V. Soil site class shall be as defined in Section 1613.3.2 of the 2015 International Building Code.

(Del) **R301.2.2.1.1 Alternate determination of seismic design category.** Delete without substitution.

(Del) **R301.2.2.1.2 Alternate determination of seismic design Category E.** Delete without substitution.

(Del) **R301.2.2.4 Seismic design Category E.** Delete without substitution.

(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 accessory structures.

(Amd) **R302.2 Townhouses**. Walls separating townhouses shall be constructed in accordance with Section R302.2.1 or R302.2.2.

(Amd) **R302.2.1 Double walls**. Each townhouse shall be separated by two 1-hour fire-resistance-rated walls assemblies tested in accordance with ASTM E119, UL 263 or Section 703.3 of the *International Building Code*.

(Amd) **R302.2.2 Common walls**. Common walls separating townhouses shall be assigned a fire-resistance rating in accordance with item 1 or 2. The common wall shared by two townhouses shall be constructed without plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to be tight against exterior walls and the underside of the roof sheathing.

Electrical installations shall be in accordance with Chapter 34 through 43. Penetrations of the membrane of common walls for electrical outlet boxes shall be in accordance with Section R302.4.

1. Where a fire sprinkler system in accordance with P2904 is provided, the common wall shall be not less than a 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E119, UL 263 or Section 703.3 of the International Building Code.
2. Where a fire sprinkler system in accordance with P2904 is not provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E119, UL 263 or Section 703.3 of the International Building Code.

(Amd) **R302.2.3 Continuity**. The fire-resistance-rated wall or assembly separating townhouses shall be continuous from the foundation to the underside of the roof sheathing, deck or slab. The fire-resistance rating shall extend the full length of the wall or assembly, including wall extensions through and separating attached enclosed accessory structures.

(Amd) **R302.2.4 Parapets for townhouses**. Parapets constructed in accordance with Section R302.2.5 shall be constructed for townhouses as an extension or exterior walls or common walls in accordance with the following:

1. Where roof surfaces adjacent to the wall or walls are at the same elevation, the parapet shall extend not less than 30 inches (762 mm) above the roof surfaces.
2. Where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is not more than 30 inches (762 mm) above the lower roof, the parapet shall extend not less than 30 inches (762 mm) above the lower roof surface.

Exception: A parapet is not required in the preceding two cases where the roof covering complies with a minimum Class C rating as tested in accordance with ASTM E108 or UL 790 and the roof decking or sheathing is of noncombustible materials or fire-retardant-treated wood for a distance of 4 feet (1219 mm) on each side of the wall or walls, or one layer of 5/8-inch (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing, supported by not less than nominal 2-inch (51 mm) ledgers attached to the sides of the framing members, for a distance of not less than 4 feet (1219 mm) on each side of the wall or walls and any openings or penetrations in the roof are not within 4 feet (1219 mm) of the common walls. Fire-retardant-treated wood shall meet the requirements of Sections R802.1.5 and R803.1.2.

3. A parapet is not required where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is more than 30 inches (762 mm) above the lower roof. The common wall construction from the lower roof to the underside of the higher roof deck shall have not less than a 1-hour fire-resistance rating. The wall shall be rated for exposure from both sides.

(Add) **R302.2.5 Parapet construction**. Parapets shall have the same fire-resistance rating as that required for the supporting wall or walls. On any side adjacent to a roof surface, the parapet shall have noncombustible faces for the uppermost 18 inches (457 mm), to include counterflashing and coping materials. Where the roof slopes toward a parapet at slopes greater than 2 units vertical and 12 units horizontal (16.7-percent slope), the parapet shall extend to the same height as any portion of the roof within a distance of 3 feet (914 mm), and the height shall be not less than 30 inches (762 mm).

(Add) **302.2.6 Structural independence**. Each individual townhouse shall be structurally independent.

Exceptions:

1. Foundations supporting exterior walls or common walls.
2. Structural wall or roof sheathing from each unit fastened to the common wall framing.
3. Nonstructural wall and roof coverings.
4. Flashing at termination or roof covering over common wall.
5. Townhouses separated by a common wall as provided in Section R302.2.2, Item 1 or 2.

(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 1-hour fire-resistance rating when tested in accordance with ASTM E119 or UL 263. 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 ⅝ inch (15.9 mm) Type X gypsum board and an attic draft stop construction

as specified in Section R302.12.1 is provided above and along the wall assembly separating the dwellings. The structural framing supporting the ceiling shall also be 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 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 ⅝ inch Type X gypsum board or equivalent applied to the garage side[1]
From all habitable rooms above the garage	Not less than ⅝ inch Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than ⅝ inch Type X gypsum board or equivalent[1]
Garages located less than 3 feet from a dwelling unit on the same lot	Not less than ⅝ inch Type X gypsum board or equivalent applied to the interior side of exterior walls that are within this area[1]

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

[1] If building is sprinklered in accordance with 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 having a ceiling height of not less than 6 feet 8 inches (2032 mm).

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 shower head 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 within 6 feet 4 inches (1931 mm) of the finished floor.

4. Ceiling height in existing basements being converted to habitable space shall not be less than 6 feet 8 inches clear except under beams, girders, pipes, ducts or other obstructions where the clear height shall be a minimum of 6 feet 4 inches.

(Amd) **R305.1.1 Basements.** Portions of basements that do not contain habitable space, hallways, bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 feet 6 inches (2032 mm).

Exception: Beams, girders, ducts or other obstructions may project to within 6 feet 4 inches (1931 mm) of the finished floor.

(Amd) **R309.1 Floor surfaces.** 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.

(Amd) **R310.1 Emergency escape and rescue openings required.** Basements, habitable 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.

(Amd) **R310.2.1 Minimum opening area**. Emergency and escape rescue openings shall have a net clear opening of not less than 5.7 square feet (0.530 m^2). The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. The net clear opening height shall be not less than 24 inches (610 mm) and the net clear opening width shall be not less than 20 inches (508 mm).

Exceptions:

1. Grade floor or below grade openings shall have a net clear opening of not less than 5 square feet (0.465 m^2)
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 th emergency escape and rescue opening, it shall have a sill height of not more than 44 inches (1118 mm) above the floor; where the sill height is below grade, it shall be provided with a window well in accordance with Section R310.2.3.

Exception: The 44-inch 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.

(Add) **R310.2.5 Replacement windows**. Replacement windows installed in buildings meeting the scope of this code shall be exempt from the maximum sill height requirements of Section R310.2.2 and the requirements of Section R310.2.1, provided that the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window is of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
2. The replacement window is not part of a change of occupancy.

(Amd) **R310.5 Dwelling additions.** Where dwelling additions occur that contain sleeping rooms, an emergency escape and rescue opening shall be provided in each new sleeping room. Where dwelling additions occur that have basements, an emergency escape and rescue opening shall be provided in the new 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 accessible from the new basement.
3. 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) **R310.6 Alterations or repairs of existing basements.** Delete without substitution.

(Amd) **R311.3.1 Floor elevations at the required egress doors.** Landings or finished floors at the required egress door shall not be more than 1½ inches (38 mm) lower than the top of the threshold.

Exception: The landing or floor on the exterior side shall not be more than 8¼ inches (209.5 mm) below the top of the threshold provided the door does not swing over the landing or the floor.

Where exterior landings or floors serving the required egress door are not at grade, they shall be provided with access to grade by means of a ramp in accordance with Section R311.8 or a stairway in accordance with Section R311.7.

(Amd) **R311.3.2 Floor elevations for other exterior doors.** Doors other than the required egress door shall be provided with landings or floors not more than 8¼ inches (209.5 mm) below the top of the threshold.

Exception: A landing is not required where a stairway of three or fewer risers, including the top riser from the dwelling to the top tread, is located on the exterior side of the door, provided the door does not swing over the stairway.

(Amd) **R311.7.1 Width.** Stairways shall not be less than 36 inches in clear width at all points above the permitted handrail height and below the required headroom height. Handrails shall not

project more than 4½ inches (114 mm) on either side of the stairway and the minimum clear width of the stairway 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. Handrails shall not project more than 4 inches (102 mm) on either side of the stairway and the minimum clear width of the stairway 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 (1982 mm), measured as stated above.

(Amd) **R311.7.5.1 Risers.** The maximum riser height shall be 8 ¼ 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 ⅜ 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 as stated above.
2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.

(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 ⅜ 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 as above.

(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 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 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 finished grade from the top of the wall to 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 retaining wall. For the purposes of this section, grass, planting beds or landscaped areas are not a walking surface.

(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 without substitution.

(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.

(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) **R314.6 Power source.** Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when the primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

Exceptions:

1. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power.
2. Hard-wiring of smoke alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure.

(Amd) **R315.1 Carbon monoxide alarms.** For new construction, an approved carbon monoxide alarm shall be installed outside of each sleeping area in the immediate vicinity of the bedrooms and on each additional habitable level of the dwelling unit. When more than one carbon monoxide alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one carbon monoxide alarm will activate all of the carbon monoxide alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exception: Carbon monoxide alarms shall not be required in dwelling units not containing a fuel-burning appliance, fireplace or attached garage.

(Amd) **R315.2.2. 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 individual dwelling shall be provided with carbon monoxide alarms located as required for new dwellings. The carbon monoxide alarms shall have a power source in accordance with Section R315.5.

Exceptions:

1. The carbon monoxide alarms 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 and ceiling coverings to facilitate concealed interconnected wiring.
2. Alterations to the exterior surfaces of dwellings including, but not limited to re-roofing, residing, window replacement and the construction of decks, shall be exempt from the requirements of this section.
3. Carbon monoxide alarms shall not be required in dwelling units not containing a fuel-burning appliance, fireplace or attached garage.
4. Installation, alteration or repairs of plumbing, mechanical or electrical systems are exempt from the requirements of this section.

(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 multi-story townhouses. For the purposes of this section, a one-story above-grade townhouse with a finished basement shall be considered a multi-story 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 Multi-story townhouses.** Buildings or complexes that contain 10 or more multi-story townhouses shall have at least 10 per cent 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 multi-story townhouses that incorporate a Type B unit on the street floor or by a combination of the two. Multi-story 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 twelve 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 2015 International Building Code portion of the 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) **R324.2 Solar thermal systems.** Solar thermal systems shall be designed and installed in accordance with Chapter 23.

(Amd) **R324.3 Photovoltaic systems.** Photovoltaic systems shall be designed and installed in accordance with Sections R324.3.1 through R324.7.2.5 and NFPA 70. Inverters shall be listed and labeled in accordance with UL 1741. Systems connected to the utility grid shall use inverters listed for utility interaction.

(Amd) **R324.6.1 Fire separation distances.** For the purposes of fire separation distances, ground-mounted photovoltaic systems shall be considered accessory structures and subject to the applicable fire separation requirements of this code.

(Add) **R324.7 Access and pathways**. Roof access, pathways and spacing requirements shall be provided in accordance with Sections R324.7.1 through R324.7.2.5.

Exception: Detached garages and accessory structures to one and two-family dwellings and townhouses, such as parking shade structures, carports, solar trellises and similar structures.

(Add) **R324.7.1 Roof access points**. 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.

(Add) **R324.7.2 Solar photovoltaic systems**. Solar photovoltaic systems shall comply with Sections R324.7.2.1 through R324.7.2.5.

(Add) **R324.7.2.1 Size of solar photovoltaic array**. Each photovoltaic array shall be limited to 150 feet by 150 feet (45 720 by 45 720 mm). Multiple arrays shall be separated by a clear access pathway not less than 3 feet (914 mm) in width.

(Add) **R324.7.2.2 Hip roof layouts**. Panels and modules installed on dwellings with hip roof layouts shall be located in a manner that provides a clear access pathway not less than 3 feet (914 mm) in width from the eave to the ridge on each roof slope where panels and modules are located. The access pathway shall be located at a structurally strong location on the building capable of supporting the live load of fire fighters accessing the roof.

Exceptions:

1. This requirement shall not apply to roofs with slopes of 2 units vertical in 12 units horizontal (16.6 percent) and less.
2. Where panels are installed on only one roof slope and there is clear access on the opposing slope.

(Add) R324.7.2.3 Single ridge roofs. Panels and modules installed on dwellings with a single ridge shall be located in a manner that provides two, 3-foot-wide (914 mm) access pathways from the eave to the ridge on each roof slope where panels or modules are located.

Exceptions:

1. This requirement shall not apply to roofs with slopes of 2 units vertical in 12 units horizontal (16.6 percent) and less.
2. Where panels are installed on only one roof slope and there is clear access on the opposing slope.

(Add) R324.7.2.4 Roofs with hips and valleys. Panels and modules installed on dwellings with roof hips or valleys shall not be located less than 18 inches (457 mm) from a hip or valley where panels or modules are to be placed on both sides of a hip or valley. Where panels are to be located on one side only of a hip or valley that is of equal length, the 18-inch (457 mm) clearance does not apply.

Exception: These requirements shall not apply to roofs with slopes of 2 units vertical in 12 units horizontal (16.6 percent) and less.

(Amd) **R326.1 General.** The provisions of this section shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling.

(Add) **R326.2 Pools in flood hazard areas**. Pools that are located in flood hazard areas established by Table R301.2(1), including above-ground pools, on-ground pools and in-ground pools that involve placement of fill, shall comply with Section R326.2.1 or R326.2.2.

Exception: Pools located in riverine flood hazard areas which are outside of designated floodways.

(Add) **R326.2.1 Pools located in designated floodways**. Where pools are located in designated floodways, documentation shall be submitted to the building official which demonstrates that the construction of the pool will not increase the design flood elevation at any point within the jurisdiction.

(Add) **R326.2.2 Pools located where floodways have not been designated**. Where pools are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction.

(Add) **R326.3 Definitions**. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL. See “Swimming pool”.

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB. See “Swimming pool”.

IN-GROUND POOL. See “Swimming pool”.

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling, or a one-family townhouse not more than three stories in height where the pool is intended to be used by the owners and invited guests.

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

SPA, NONPORTABLE. See “Swimming pool”.

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming or recreational bathing that contains water more than 24 inches (610 mm) deep.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

(Add) **R326.4 Swimming pools.** Swimming pools shall be designed and constructed as follows:

(Add) **R326.4.1 In-ground pools.** In-ground pools shall be designed and constructed in compliance with ANSI/NSPI-5.

(Add) **R326.4.2 Above-ground and on-ground pools.** Above-ground and on-ground pools shall be designed and constructed in compliance with ANSI/NSPI-4.

(Add) **R326.4.3 Pools in flood hazard areas**. In flood hazard areas established by Table R301.2(1), pools in coastal high-hazard areas shall be designed and constructed in compliance with ASCE 24.

(Add) **R326.5 Spas and hot tubs.** Spas and hot tubs shall be designed and constructed as follows:

(Add) **R326.5.1 Permanently installed spas and hot tubs**. Permanently installed spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-3.

(Add) **R326.5.2 Portable spas and hot tubs**. Portable spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-6.

(Add) **R326.6 Barrier requirements**. The provisions of this section shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

(Add) **R326.6.1 Outdoor swimming pool**. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa, shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
2. Openings in the barrier shall not allow the passage of a 4-inch-diameter (102 mm) sphere.
3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions, except for normal construction tolerances and tooled masonry joints.
4. Where the barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1¾-inches (44 mm) in width. Where there are

decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 3/4 inches (44 mm) in width.

5. Where the barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1¾- inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a 2 1/4-inch (57 mm) square, unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1¾- inches (44 mm).
7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1 ¾ inches (44 mm).
8. Access gates shall comply with the requirements of Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool, and shall be self-closing and have a self-latching device. Gates, other than pedestrian access gates, shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
   8.1 The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate; and
   8.2 The gate and barrier shall have no opening larger than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.
9. Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:
   9.1 The pool shall be equipped with a powered safety cover in compliance with ASTM F1346;
   9.2 Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or
   9.3 Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described herein.
10. Where an above-ground or on-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, the ladder or steps shall be surrounded by a barrier that meets the requirements of Section AG105.2, Items 1 to 9, inclusive.

(Add) **R326.6.2** Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Item 9 of Section R326.6.1.

(Add) **R326.6.3 Barrier perimeter clearance**. The required barrier height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier, free of structures, equipment or similar objects.

(Add) **R326.6.4 Barrier exceptions**. Spas or hot tubs with a safety cover which comply with ASTM F1346 shall be exempt from the provisions of this appendix.

(Add) **R326.6.5 Temporary enclosure**. A temporary enclosure shall be installed prior to the electrical bonding inspection of any in-ground swimming pool unless the permanent barrier specified in Section R326.6.1 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 sphere and shall be equipped with a positive latching device on any openings.

(Add) **R326.6.6 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 or more enters the water in a swimming pool.

Exception: Hot tubs and portable spas shall be exempt from this requirement.

(Add) **R326.7 Entrapment protection for swimming pool and spa suction outlets**. Suction outlets shall be installed in accordance with ANSI/APSP-7.

(Add) **R326.8 Abbreviations**. The following abbreviations are defined as:

ANSI—American National Standards Institute
11 West 42nd Street
New York, NY 10036

APSP—Association of Pool and Spa Professionals
NSPI—National Spa and Pool Institute
2111 Eisenhower Avenue
Alexandria, VA 22314

ASCE—American Society of Civil Engineers
1801 Alexander Bell Drive
Reston, VA 98411-0700

ASTM—ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428

UL—Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096

(Add) **R326.9 Referenced standards**. The following standards are referenced:

ANSI/APSP	
ANSI/APSP/ICC-3—14 American National Standard for Permanently Installed Residential Spas and Swim Spas	R326.5.1
ANSI/APSP/ICC-4—12 American National Standard for Aboveground/Onground Residential Swimming Pools	R326.4.2
ANSI/APSP/ICC-5—11 American National Standard for Residential Inground Swimming Pools	R326.4.1
ANSI/APSP/ICC-6—13 American National Standard for Residential Portable Spas and Swim Spas	R326.5.2
ANSI/APSP/ICC-7—13 American National Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs and Catch Basins	R326.7
ASTM	
ASTM F1346—91 (2010) Standard Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs	R326.6.1, R326.6.4
UL	
UL 2017—2008 General-Purpose Signaling Devices and Systems - with revisions through May 2011	R326.6.1

CHAPTER 4 – FOUNDATIONS

(Add) R401.3.1 Drainage nuisances. Any surface or roof drainage which creates a structural or health hazard, or any other nuisance to the owners or occupants of adjacent premises, or to the public by reason of discharge into, onto or across any adjacent building, premises or public thoroughfare, shall be a violation. The building official shall require the drainage to be disposed of in an approved manner.

(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 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.

(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^2) 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 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 finished grade from the top of the wall to 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 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 2015 International Building Code portion of the 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) **R802.5 Allowable rafter spans.** R802.5 Allowable rafter spans. Spans for rafters shall be in accordance with Tables R802.5.1(1) through R802.5.1(8). For ground snow loads other than those cited in Tables 802.5.1(3) through 802.5.1(8), spans for rafters may be determined using linear interpolation. For other grades and species and for other loading conditions, refer to the AWC STJR. The span of each rafter shall be measured along the horizontal projection of the rafter.

(Amd) **R802.10.2.1 Applicability limits.** The provisions of this section shall control the design of truss roof framing when snow controls for buildings, not greater than 60 feet (18 288 mm) in length perpendicular to the joist, rafter or truss span, not greater than 36 feet (10 973 mm) in width

parallel to the joist, rafter or truss span, not more than three stories above grade plane in height with each story not greater than 10 feet (3048 mm) high, and roof slopes not smaller than 3:12 (25-percent slope) or greater than 12:12 (100-percent slope). Truss roof framing constructed in accordance with the provisions of this section shall be limited to sites subjected to a maximum design wind speed of 140 miles per hour (63 m/s), Exposure B, or C, and a maximum ground snow load of 70 psf (3352 Pa). For consistent loading of all truss types, roof snow load is to be computed as: 1.0 p_g.

CHAPTER 9 – ROOF ASSEMBLIES

(Amd) R905.1.1 Underlayment. Underlayment for asphalt shingles, clay and concrete tile, metal roof shingles, mineral-surfaced roll roofing, slate and slate-type shingles, wood shingles, wood shakes and metal roof panels shall conform to the applicable standards listed in this chapter. Underlayment materials required to comply with ASTM D 226, D 1970, D 4869 and D 6757 shall bear a label indicating compliance to the standard designation and, if applicable, type classification indicated in Table R905.1.1(1). A minimum 4-inch-wide (102 mm) strip of self-adhering polymer-modified bitumen membrane complying with ASTM D 1970, installed in accordance with the manufacturer's instructions for the deck material, shall be applied over all joints in the roof decking. Underlayment shall be applied over the entire roof and over the 4-inch-wide (102 mm) membrane strips and shall be applied in accordance with Table R905.1.1(2). Underlayment shall be attached in accordance with Table R905.1.1(3).

Exceptions:

1. As an alternative, self-adhering polymer-modified bitumen underlayment complying with ASTM D 1970 installed in accordance with both the underlayment manufacturer's and roof covering manufacturer's instructions for the deck material, roof ventilation configuration and climate exposure for the roof covering to be installed, shall be permitted.
2. The 4-inch-wide (102 mm) strips of self-adhering polymer-modified-bitumen membrane are not required for roofs sheathed with lumber having a nominal width of less than 3 feet (92 cm).

TABLE R905.2.4.1
CLASSIFICATION OF ASPHALT ROOF SHINGLES

MAXIMUM ULTIMATE DESIGN WIND SPEED, V_{ult} FROM FIGURE R301.2(4)A (mph)	MAXIMUM BASIC WIND SPEED, V_{ASD} FROM APPENDIX V (mph)	ASTM D7158a SHINGLE CLASSIFICATION	ASTM D3161 SHINGLE CLASSIFICATION
110	85	D, G or H	A, D or F
116	90	D, G or H	A, D or F
129	100	G or H	A, D or F
142	110	G or H	F
155	120	G or H	F
168	130	H	F
181	140	H	F
194	150	H	F

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

a. The standard calculations contained in ASTM D7158 assume Exposure Category B or C and building height of 60 feet or less. Additional calculations are required for conditions outside of these assumptions

CHAPTER 11 [RE] – ENERGY EFFICIENCY

(Add) **N1101.15 (R101.5.2) Energy efficiency standards for products.** In addition to the requirements of this code, the testing, certification and enforcement of efficiency standards for new products sold, offered for sale or installed in the State of Connecticut shall be in compliance with section 16a-48 of the Connecticut General Statutes and regulations adopted under authority of said statute.

(Amd) **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 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)**) N1102.1 (R402.1) General (Prescriptive).** The building thermal envelope shall meet the requirements of Sections N1102.1.1 through N1102.1.5.

Exception: 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. Those with a peak design rate of energy usage less than 3.4 Btu/h · ft^2 (10.7 W/m^2) or 1.0 watt/ft^2 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) **N1102.4.1.2 (R402.4.1.2) Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding three air changes per hour. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380, ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inches 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.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weather stripping 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, if installed at the time of the test, shall be open.
4. Exterior or interior terminations for continuous ventilation systems shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

Exception: Low-rise attached dwelling unit buildings in Climate Zone 5: For dwelling units greater than 850 square feet of floor area, the air leakage threshold shall be set at five air changes per hour. For dwelling units less than or equal to 850 square feet of floor area, the air leakage threshold shall be set at 6.5 air changes per hour. Testing shall be conducted with a blower door, unguarded, at a pressure of 0.2 inches w.g. (50 Pascals). If guarded blower door testing (a test with one or more adjacent units pressurized, which should eliminate any leakage between units) is being performed, this exception is not allowed and the standard testing requirements of Section N1102.4.1.2 (402.4.1.2) apply. 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. For buildings with more than 7 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 unit 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.

(Add) **N1103.3.1.1 (R403.2.1.1) Duct insulation values.** Minimum duct insulation values stated in Section N1103.2.1 shall be installed R-values.

(Amd) **N1103.3.3 (R403.3.3) Duct testing (Mandatory).** Ducts shall be pressure tested in accordance with ANSI/RESNET/ICC 380 to determine air leakage by one of the following methods:

1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.
2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or other-wise sealed during the test.

Exceptions:

1. A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.
2. Where ducts from an existing heating and cooling system are extended to an addition or are extended due to an alteration, duct systems with less than 40 linear feet (12.19 m) of

new duct in unconditioned spaces shall not be required to be tested in accordance with Section 1103.3.3.

A written report of the results of the test shall be signed by the party conducting the test and provided to the code official.

(Amd) **N1103.3.4 (R403.3.4) Duct leakage (Prescriptive).** The total leakage of the ducts, where measured in accordance with Section N1103.3.3, shall be as follows:

1. Rough in test: Total leakage shall be less than or equal to 8 cubic feet per minute (226.5 L/min) per 100 square feet (9.29 m2) of conditioned floor area where the air handler is installed at the time of the test. Where the air handler is not installed at the time of the test, the total leakage shall be less than or equal to 3 cubic feet per minute (85 L/min) per 100 square feet (9.29 m2) of conditioned floor area.

Exceptions:

1. The total leakage test is not required for ducts and air handlers located entirely within the building thermal envelope.
2. Where ducts from an existing heating and cooling system are extended to an addition or are extended due to an alteration, duct systems with less than 40 linear feet (12.19 m) in unconditioned spaces shall not be required to be tested in accordance with Section 403.2.2.
3. Post-construction test: Total leakage shall be less than or equal to 8 cubic feet per minute (226.5 L/min) per 100 square feet (9.29 m2) of conditioned floor area.

(Amd) **N1106.3 (R406.3) Energy Rating Index**. The Energy Rating Index (ERI) shall be determined in accordance with ANSI/RESNET/ICC 301.

(Amd) **N1106.4 (R406.4) ERI-based compliance.** Compliance base on an ERI analysis requires that the *rated design* be shown to have a maximum ERI of 61 without the use of renewable energy when compared to the ERI *reference design.*

(Del) **Table N1106.4 (R406.4) MAXIMUM ENERGY RATING INDEX.** Delete without substitution.

(Amd) **N1106.6 (R406.6.1) Compliance software tools.** Software tools used for determining the ERI shall be Approved Software Rating Tools in accordance with ANSI/RESNET/ICC 301.

(Add) **N1106.6.4 (R406.6.4) Specific approval.** Performance analysis tools meeting the applicable sections of Section R406 shall be *approved*. Documentation demonstrating the approval of performance analysis tools in accordance with Section 1106.6.1 shall be provided to the *code official.*

(Add) **N1106.6.5 (R406.6.5) Input values.** When calculations require input values not specified by Sections N1102, N1103, N1104 and N1105, those input values shall be taken from ANSI/RESNET/ICC 301.

(Del) **Section N1106.7 (R406.7)**

(Amd) **N1108.1.1.1 (R502.1.1.1) 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. Where nonconditioned space is changed to conditioned space, the building envelope of the addition shall comply where the UA, as determined in Section N1102.1.5, of the existing building and the addition, and any alterations that are part of the project, is less than or equal to UA generated for the existing building.
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 15 – EXHAUST SYTEMS

(Amd) **M1503.4 Makeup air required.** Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m^3/s) shall be provided with makeup air at a rate approximately equal to the difference between the exhaust air rate and 400 cubic feet per minute. Such makeup air systems shall be equipped with a means of closure.

Exception: Where all appliances in the house are of sealed combustion, power-vent, unvented, or electric, the exhaust hood system may exhaust up to 600 cubic feet per minute (0.28 m^3/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m^3/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.

CHAPTER 19 – SPECIAL APPLIANCES, EQUIPMENT AND SYSTEMS

(Amd) **M1904.1 Installation.** Gaseous hydrogen shall be installed in accordance with the applicable requirements of Sections M1307.4 and M1903.1 and the 2015 International Building Code portion of the State Building Code, and the requirements as noted in Section R101.4.1 for Fuel Gas.

CHAPTER 22 – SPECIAL PIPING AND STORAGE SYSTEMS

(Amd) **SECTION M2201.7 – TANK ABANDONEMENT AND REMOVAL**

(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 State Building Code, such terms shall have the meanings ascribed to them as in those portions of the code.

(Del) **G2411.1.1 (310.1) CSST**. Delete in its entirety without substitution.

(Add) **G2411.2 (310.1.1) CSST.** This section applies to corrugated stainless steel tubing (CSST) that is not listed with an arc-resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26. CSST gas *piping* systems and piping systems containing one or more segments of CSST shall be electrically continuous and bonded to the electrical service grounding electrode system or, where provided, the lightning protection grounding electrode system.

(Add) **G2411.2.1 (310.1.1.1) Point of connection.** The bonding jumper shall connect to a metallic pipe, pipe fitting or CSST fitting.

(Add) **G2411.2.2 (310.1.1.2) Size and material of jumper.** The bonding jumper shall be not smaller than 6 AWG copper wire or equivalent.

(Add) **G2411.2.3 (310.1.1.3) Bonding jumper length.** The length of the bonding jumper between the connection to a gas piping system and the connection to a grounding electrode system shall not exceed 75 feet (22 860 mm). Any additional grounding electrodes installed to meet this requirement shall be bonded to the electrical service grounding electrode system or, where provided, the lightning protection grounding electrode system.

(Add) **G2411.2.4 (310.1.1.4) Bonding connections.** Bonding connections shall be in accordance with NFPA 70.

(Add) **G2411.2.5 (310.1.1.5) Connection devices.** Devices used for making the bonding connections shall be listed for the application in accordance with UL 467.

(Add) **G2411.3 Arc-resistant CSST.** This section applies to corrugated stainless steel tubing (CSST) that is listed with an arc-resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26. The CSST shall be electrically continuous and bonded to an effective ground fault current path. Where any CSST component of a piping system does not have an arc-resistant jacket or coating system, the bonding requirements of Section G2411.2 shall apply. Arc-resistant-jacketed CSST shall be considered to be bonded where it is connected to an appliance that is connected to the appliance grounding conductor of the circuit that supplies that appliance.

(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 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

(Amd) **P2503.5.1 Rough plumbing**. DWV systems shall be tested on completion of the rough piping installation by water or, for piping systems other than plastic, by air, without evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough-in piping has been installed, as follows:

1. Water test. Each section shall be filled with water to a point not less than 10 feet (1524 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.
2. Air test. The portion under test shall be maintained at a gauge pressure of 5 pounds per square inch (psi) (34 kPa) or 10 inches of mercury column (34 kPa). This pressure shall be held without introduction of additional air for a period of 15 minutes.

CHAPTER 26 – GENERAL PLUMBING REQUIREMENTS

(Add) **P2602.1.1 Individual sewage disposal systems and individual water supply systems.** Installations shall be approved in accordance with this code and the regulations enforced by the local health director in accordance with the Public Health Code of the State of Connecticut adopted pursuant to section 19a-36 of the Connecticut General Statutes.

(Del) **P2603.5.1 Sewer depth.** Delete without substitution.

CHAPTER 29 – WATER SUPPLY AND DISTRIBUTION

(Add) **P2902.5.3.1 Automatic lawn sprinkler system sensor device.** An automatic lawn sprinkler system shall be equipped with a rain sensor or switch that will automatically override the irrigation cycle in accordance with section 29-265b of the Connecticut General Statutes.

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.

CHAPTER 31 – VENTS

(Amd) **P3103.1 Roof extension.** Open vent pipes that extend through a roof shall be terminated at least 12 inches (305 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extension shall be at least 7 feet (2134 mm) above the roof.

(Del) **P3103.2 Frost closure**. Delete without substitution.

CHAPTER 34 – GENERAL REQUIREMENTS

CHAPTER 36 – SERVICES

(Amd) **E3608.1 Grounding electrode system.** If available on the premises at each building or structure served, each item in Section E3608.1.1 to E3608.1.6, inclusive, of this code shall be bonded together to form the grounding electrode system. Where none of these grounding electrodes are available, one or more of the grounding electrodes specified in Section E3608.1.3 to E3608.1.6, inclusive, shall be used.

CHAPTER 38 – WIRING METHODS

(Amd) **TABLE E3802.1 GENERAL INSTALLATION AND SUPPORT REQUIREMENTS FOR WIRING METHODS[a, b, c, d, e, f, g, h, i, j, k]**

INSTALLATION REQUIREMENTS (Requirement applicable only to wiring methods marked "A")	AC MC	EMT IMC RMC	ENT	FMC LFC	NM UF	RN C	SE	SR[a]	USE
Where wiring methods run parallel with the framing member or furring strip, the wiring shall be not less than 1¼ inches from the edge of a furring strip or a framing member, such as a joist, rafter or stud, or shall be physically protected.	A	---	A	A	A	---	A	---	---
Bored holes in framing members for wiring shall be not less than 2 inches from the edge of the joists or rafters and 1¼ inch from the edge of studs or shall be protected with a minimum 0.0625-inch steel plate or sleeve, a listed steel plate or other physical protection.	A[k]	---	A[k]	A[k]	A[k]	---	A[k]	---	---
Where wiring methods are installed in grooves, to be covered by wallboard, siding, paneling, carpeting or similar finish, wiring methods shall be protected by 0.0625-inch thick steel plate, sleeve, or equivalent; a listed plate; or by not less than 1¼-inch free space for the full length of the groove in which the cable or raceway is installed.	A	---	A	A	A	---	A	A	A
Securely fastened bushing or grommets shall be provided to protect wiring run through openings in metal framing members.	---	---	A[j]	---	A[j]	---	A[j]	---	---
The maximum number of 90-degree bends shall not exceed four between junction boxes.	---	A	A	A	---	A	---	---	---
Bushings shall be provided where entering a box, fitting or enclosure unless the box or fitting is designed to afford equivalent protection.	A	A	A	A	---	A	---	A	---
Ends of raceways shall be reamed to remove rough edges.	---	A	A	A	---	A	---	A	---

INSTALLATION REQUIREMENTS (Requirement applicable only to wiring methods marked "A")	AC MC	EMT IMC RMC	ENT	FMC LFC	NM UF	RN C	SE	SR[a]	USE
Maximum allowable on center support spacing for the wiring method in feet.	4.5[b,c]	10[l]	3[b]	4.5[b]	4.5[j]	3[d, l]	2.5[e]	---	2.5[e]
Maximum support distance in inches from box or other terminations.	12[b, f]	36	36	12[b, g]	12[h, i]	36	12	---	---

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad.
a. Installed in accordance with listing requirements.
b. Supports not required in accessible ceiling spaces between light fixtures where lengths do not exceed 6 feet.
c. Six feet for MC cable.
d. Five feet for trade sizes greater than 1 inch.
e. Two and one-half feet where used for service or outdoor feeder and 4.5 feet where used for branch circuit or indoor feeder.
f. Twenty-four inches where flexibility is necessary.
g. Where flexibility after installation is necessary, lengths of flexible metal conduit and liquid tight flexible metal conduit measured from the last point where the raceway is securely fastened shall not exceed: 36 inches for trade sizes ½ through 1¼, 48 inches for trade sizes 1½ through 2 and 5 feet for trade sizes 2½ and larger.
h. Within 8 inches of boxes without cable clamps.
i. Flat cables shall not be stapled on edge.
j. Bushings and grommets shall remain in place and shall be listed for the purpose of cable protection.
k. See Sections R502.8 and R802.7 for additional limitations on the location of bored holes in horizontal framing members.
l. Where oversized, concentric or eccentric knockouts are not encountered, a raceway not greater than 18 inches in length shall not require support where it is a continuous length without couplings. Such raceways shall terminate at an outlet box, junction box, device box, cabinet, or other termination at each end of the raceway.

CHAPTER 39 – POWER AND LIGHTING DISTRIBUTION

(Amd) **FIGURE E3901.4 COUNTERTOP RECEPTACLES.** Add GFCI designation to the receptacle shown in the pictorial figure at the center island countertop.

(Amd) **E3902.17 Arc-fault circuit interrupter protection for branch circuit extensions or modifications.** Where branch-circuit wiring is modified, replaced, or extended in any of the areas specified in Section E3902.12, the branch circuit shall be protected by one of the following:

1. A combination-type AFCI located at the origin of the branch circuit.
2. An outlet branch-circuit type AFCI located at the first receptacle outlet of the existing branch circuit.

Exceptions:

1. AFCI protection shall not be required for replacement receptacles.
2. AFCI protection shall not be required where an extension of the existing conductors is not more than 6 feet (1.8 m) in length and does not include any additional outlets or devices.

CHAPTER 44 – REFERENCED STANDARDS

(Amd)
ANSI American National Standards Institute
25 West 43rd Street, Fourth Floor
New York, NY 10036

Standard reference number—year of publication	Title	Referenced in code section number
(Add) ANSI/RESNET/ICC 301-2014	Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using an Energy Rating Index	R1106.3 R1106.6
(Add) ANSI/RESNET/ICC 380-2016	Standard for Testing Airtightness of Building Enclosures, Airtightness of Heating and Cooling Air Distribution Systems, and Airflow of Mechanical Ventilation Systems	R1102.4.1.2 R1103.3.3

(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) 02-11	Hydrogen Technologies Code	R101.4.1
(Add) 54-15	National Fuel Gas Code	R101.4.1
(Amd) 70-17	National Electrical Code	E3401.1, E3401.2, E4301.1, Table E4303.2, E4304.3, E4304.4, R324.3

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 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.

Exception: In addition to these provisions, new and replacement manufactured homes to be located in flood hazard areas as determined locally shall meet the applicable requirements of Section R322 of this code.

(Amd) **AE600.1 General.** The provisions of Sections AE601 to AE606, inclusive, are applicable only upon request of the building permit applicant with the approval of the local building official.

(Amd) **SECTION AE606 REFERENCED STANDARDS**

ASTM C 270 – 07 Specification for Mortar for Unit Masonry……..AE602

NFPA 501 – 10 Standard on Manufactured Housing……..……AE201

(Amd) APPENDIX F – PASSIVE RADON GAS CONTROLS

(Amd) **AF101.1 General.** This appendix contains radon-resistant construction techniques for new construction.

(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.

(Amd) **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.

SECTION AF103 PASSIVE RADON-RESISTANT SYSTEM REQUIREMENTS

(Amd) **AF103.2 Entry routes.** Potential radon entry routes shall be closed in accordance with Sections AF103.2.1 to AF103.2.7, inclusive, of this code.

(Amd) AF**103.3.2 “T” fitting and vent pipe.** A 3- or 4-inch “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) **AF103.4.3 "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 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 above the roof or each individual vent pipe shall terminate separately not less than 12 inches above the roof. The vent pipe shall be the same diameter throughout its length and shall be supported in accordance with Section P2605.

(Amd) **AF103.10 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 AF104 RADON MITIGATION PREPARATION

(Add) **AF104.1 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 R506.2.3.

(Add) **AF104.2 "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) **AF104.2.1 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) **AF104.2.2 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) **AF104.3 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) **AF104.4 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) **AF104.5 Waterproofing and dampproofing.** The exterior surfaces of foundation walls below grade shall be waterproofed or dampproofed in accordance with Section R406.

(Add) **AF104.6 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) **AF104.6.1 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) **AF104.6.2 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) **AF104.7 Accessible clear space.** An accessible clear space 22 inches (610 mm) in diameter by 3 feet (914 mm) in height adjacent to the vent pipe shall be provided in the attic or at an acceptable location of a potential radon fan.

(Add) **APPENDIX V – WIND SPEEDS, SEISMIC DESIGN CATEGORIES and GROUND SNOW LOADS**

Municipality	Ultimate Wind Speed, V_{ult}	Nominal Wind Speed, V_{asd}	Seismic Design Category[1]		Ground Snow Load, *Pg* (psf)
			Site (Soil) Class A-D	Site (Soil) Class E	
Andover	130	101	B	B	30
Ansonia	125	97	B	B	30
Ashford	130	101	B	B	35
Avon	120	93	B	B	35
Barkhamsted	120	93	B	B	40
Beacon Falls	125	97	B	B	30
Berlin	125	97	B	B	30
Bethany	125	97	B	B	30
Bethel	120	93	B	C	30
Bethlehem	120	93	B	B	35
Bloomfield	125	97	B	B	35
Bolton	125	97	B	B	30
Bozrah	135	105	B	B	30
Branford	130	101	B	B	30
Bridgeport	125	97	B	C	30
Bridgewater	120	93	B	C	35
Bristol	120	93	B	B	35
Brookfield	120	93	B	C	35
Brooklyn	130	101	B	B	35
Burlington	120	93	B	B	35
Canaan	115	89	B	B	40
Canterbury	130	101	B	B	35
Canton	120	93	B	B	35
Chaplin	130	101	B	B	35
Cheshire	125	97	B	B	30
Chester	130	101	B	B	30
Clinton[2]	135	105	B	B	30
Colchester	130	101	B	B	30
Colebrook	115	89	B	B	40
Columbia	130	101	B	B	30
Cornwall	115	89	B	B	40
Coventry	130	101	B	B	30
Cromwell	125	97	B	B	30
Danbury	120	93	B	C	30
Darien	120	93	B	C	30
Deep River	130	101	B	B	30
Derby	125	97	B	B	30
Durham	130	101	B	B	30
Eastford	130	101	B	B	40
East Granby	120	93	B	B	35
East Haddam	130	101	B	B	30
East Hampton	130	101	B	B	30
East Hartford	125	97	B	B	30

Municipality	Ultimate Wind Speed, V_{ult}	Nominal Wind Speed, V_{asd}	Seismic Design Category[1]		Ground Snow Load, *Pg* (psf)
			Site (Soil) Class A-D	Site (Soil) Class E	
East Haven	130	101	B	B	30
East Lyme[2]	135	105	B	B	30
Easton	120	93	B	C	30
East Windsor	125	97	B	B	35
Ellington	125	97	B	B	35
Enfield	125	97	B	B	35
Essex	135	105	B	B	30
Fairfield	125	97	B	C	30
Farmington	125	97	B	B	35
Franklin	130	101	B	B	30
Glastonbury	125	97	B	B	30
Goshen	115	89	B	B	40
Granby	120	93	B	B	35
Greenwich	120	93	B	C	30
Griswold	135	105	B	B	30
Groton[2]	135	105	B	B	30
Guilford	130	101	B	B	30
Haddam	130	101	B	B	30
Hamden	125	97	B	B	30
Hampton	130	101	B	B	35
Hartford	125	97	B	B	30
Hartland	120	93	B	B	40
Harwinton	120	93	B	B	35
Hebron	130	101	B	B	30
Kent	115	89	B	B	40
Killingly	130	101	B	B	40
Killingworth	130	101	B	B	30
Lebanon	130	101	B	B	30
Ledyard	135	105	B	B	30
Lisbon	135	105	B	B	30
Litchfield	120	93	B	B	40
Lyme	135	105	B	B	30
Madison[2]	130	101	B	B	30
Manchester	125	97	B	B	30
Mansfield	130	101	B	B	35
Marlborough	130	101	B	B	30
Meriden	125	97	B	B	30
Middlebury	120	93	B	B	35
Middlefield	125	97	B	B	30
Middletown	130	101	B	B	30
Milford	125	97	B	B	30
Monroe	120	93	B	C	30
Montville	135	105	B	B	30
Morris	120	93	B	B	35
Naugatuck	125	97	B	B	30
New Britain	125	97	B	B	30

Municipality	Ultimate Wind Speed, V_{ult}	Nominal Wind Speed, V_{asd}	Seismic Design Category[1]		Ground Snow Load, *Pg* (psf)
			Site (Soil) Class A-D	Site (Soil) Class E	
New Canaan	120	93	B	C	30
New Fairfield	115	89	B	C	35
New Hartford	120	93	B	B	40
New Haven	125	97	B	B	30
Newington	125	97	B	B	30
New London[2]	135	105	B	B	30
New Milford	115	89	B	B	35
Newtown	120	93	B	C	30
Norfolk	115	89	B	B	40
North Branford	130	101	B	B	30
North Canaan	115	89	B	B	40
North Haven	125	97	B	B	30
North Stonington	135	105	B	B	30
Norwalk	120	93	B	C	30
Norwich	135	105	B	B	30
Old Lyme[2]	135	105	B	B	30
Old Saybrook[2]	135	105	B	B	30
Orange	125	97	B	B	30
Oxford	125	97	B	B	30
Plainfield	135	105	B	B	35
Plainville	125	97	B	B	35
Plymouth	120	93	B	B	35
Pomfret	130	101	B	B	40
Portland	130	101	B	B	30
Preston	135	105	B	B	30
Prospect	125	97	B	B	30
Putnam	130	101	B	B	40
Redding	120	93	B	C	30
Ridgefield	120	93	B	C	30
Rocky Hill	125	97	B	B	30
Roxbury	120	93	B	B	35
Salem	135	105	B	B	30
Salisbury	115	89	B	B	40
Scotland	130	101	B	B	30
Seymour	125	97	B	B	30
Sharon	115	89	B	B	40
Shelton	125	97	B	C	30
Sherman	115	89	B	C	35
Simsbury	120	93	B	B	35
Somers	125	97	B	B	35
Southbury	120	93	B	B	35
Southington	125	97	B	B	30
South Windsor	125	97	B	B	30
Sprague	130	101	B	B	30
Stafford	125	97	B	B	35
Stamford	120	93	B	C	30

Municipality	Ultimate Wind Speed, V_{ult}	Nominal Wind Speed, V_{asd}	Seismic Design Category[1]		Ground Snow Load, *Pg* (psf)
			Site (Soil) Class A-D	Site (Soil) Class E	
Sterling	135	105	B	B	35
Stonington[2]	140	108	B	B	30
Stratford	125	97	B	C	30
Suffield	120	93	B	B	35
Thomaston	120	93	B	B	35
Thompson	130	101	B	B	40
Tolland	125	97	B	B	35
Torrington	120	93	B	B	40
Trumbull	125	97	B	C	30
Union	125	97	B	B	40
Vernon	125	97	B	B	30
Voluntown	135	105	B	B	30
Wallingford	125	97	B	B	30
Warren	115	89	B	B	40
Washington	120	93	B	B	35
Waterbury	125	97	B	B	35
Waterford[2]	135	105	B	B	30
Watertown	120	93	B	B	35
Westbrook[2]	135	105	B	B	30
West Hartford	125	97	B	B	30
West Haven	125	97	B	B	30
Weston	120	93	B	C	30
Westport	120	93	B	C	30
Wethersfield	125	97	B	B	30
Willington	125	97	B	B	35
Wilton	120	93	B	C	30
Winchester	120	93	B	B	40
Windham	130	101	B	B	30
Windsor	125	97	B	B	35
Windsor Locks	125	97	B	B	35
Wolcott	125	97	B	B	35
Woodbridge	125	97	B	B	30
Woodbury	120	93	B	B	35
Woodstock	130	101	B	B	40

Footnotes:

1. If Site Class F is present, the Short Period Spectral Response Acceleration (S_{DS}) shall be determined according to Section 1613.3 of the *International Building Code*, and the Seismic Design Category shall be determined in accordance with Table 301.2.2.1.1.
2. Areas south of Interstate 95 in this municipality are classified as a Wind-Borne Debris Region. See Section R202 for exceptions.