R-39 Rev. 03/2012
(Title page)

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State of Connecticut
REGULATION
of

NAME OF AGENCY
DEPARTMENT OF CONSTRUCTION SERVICES

Concerning

SUBJECT MATTER OF REGULATION
STATE BUILDING CODE

2013 AMENDMENT TO THE STATE BUILDING CODE

Section 1. Section 29-252-1d, State Building Code – 2005 Connecticut Supplement as amended in 2009 and 2011 is amended as follows:

Sec. 29-252-1d. State Building Code – [2009 Amendment to the] 2013 Amendment to the 2005 Connecticut Supplement.

The 2003 International Building Code, 2003 International Existing Building Code, 2003 International Plumbing Code, 2003 International Mechanical Code, 2009 International Energy Conservation Code and [2003] 2009 International Residential Code of the International Code Council, Inc. and the [2005] 2011 NFPA 70 National Electrical Code of the National Fire Protection Association Inc., except as amended, altered or deleted by this Connecticut Supplement, are hereby adopted by reference as the 2005 State Building Code.

The requirements of the 2009 Amendment to the 2005 State Building Code shall apply to all work for which a permit application was made on or after [the date of adoption] August 1, 2009 and before October 6, 2011.

The requirements of the 2011 Amendment to the 2005 State Building Code shall apply to all work for which a permit application was made on or after October 6, 2011 and before the date of adoption.

The requirements of the 2013 Amendment to the 2005 State Building Code shall apply to all work for which a permit application was made on or after the date of adoption.

Copies of the International Codes may be obtained from the International Code Council, Inc., 4051 W. Flossmoor Rd., Country Club Hills, IL 60478 (website: www.iccsafe.org). Copies of the [2005] NFPA 70 National Electrical Code may be obtained from the National Fire Protection Association Inc., 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101 (website: www.nfpa.org). Copies of the 2005 Connecticut Supplement [and the 2009 Amendment] with the 2009, 2011 and 2013 Amendments may be downloaded from [www.ct.gov/dps] www.ct.gov/dcs.

[2009 AMENDMENT TO THE 2005 CONNECTICUT SUPPLEMENT]

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

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

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

NOTE: Because this amendment does not repeal section 29-252-1d of the Regulations of Connecticut State Agencies, deletions of some or all of existing sections are accomplished by bracketing text to be removed. Additions to existing sections of the Connecticut Supplement are underlined. Where new sections are being added to the Connecticut Supplement, they are identified as (NEW) and do not contain bracketing or underlining.

Section 2. Section 29-252-1d, State Building Code – 2005 Connecticut Supplement as amended in 2009 and 2011 is amended as follows:

(NEW) (Del) **2003 INTERNATIONAL RESIDENTIAL CODE**
Delete the document and its amendments in their entirety and substitute with the 2009 International Residential Code as amended herein:

AMENDMENTS TO THE 2009 INTERNATIONAL RESIDENTIAL CODE

CHAPTER 1 – SCOPE AND ADMINISTRATION

(Amd) **R101.1 Title.** These regulations shall be known as the 2009 International Residential Code portion of the 2005 State Building Code, hereinafter referred to as "the code" or "this code".

(Amd) **R101.2 Scope.** The provisions of the 2009 International Residential 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 with a separate means of egress and their accessory structures.

> **Exception:** Existing buildings undergoing repair, movement, alteration or additions and change of occupancy shall be permitted to comply with the 2003 International Existing Building Code. The choice to comply with this code or the 2003 International Existing Building Code shall be made by the permit applicant at the time of application for the building permit.

(Add) **R101.4 Referenced codes and regulations.**

(Add) **R101.4.1 Fuel gas.** The 2009 International Fuel Gas Code is not adopted by the State of Connecticut. In addition to the requirements of this code, the installation and operation of gas

equipment and piping shall comply with sections 29-329 and 29-331 of the Connecticut General Statutes, and the regulations known as the Connecticut Gas Equipment and Piping Code adopted by the State Fire Marshal under authority of section 29-329 of the Connecticut General Statutes, and the regulations known as the Connecticut Liquefied Petroleum Gas and Liquefied Natural Gas Code adopted by the Commissioner of Construction Services under authority of section 29-331 of the Connecticut General Statutes. References to the International Fuel Gas Code within the body of the model document shall be considered to be references to such statutes and regulations.

(Add) **R101.4.2 Oil burning equipment, piping, and storage.** In addition to the requirements of this code, the installation of oil burners and equipment used in connection therewith, including tanks, piping, pumps, control devices and accessories shall comply with sections 29-316 and 29-317 of the Connecticut General Statutes, and the regulations known as the Connecticut Oil Burning Equipment Code adopted by the Commissioner of Construction Services under the authority of section 29-317 of the Connecticut General Statutes.

(Add) **R101.4.3 Private sewage disposal.** The 2009 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 the authority of section 19a-36 of the Connecticut General Statutes. References to the 2009 International Private Sewage Disposal Code within the body of the model document shall be considered to be references to the Public Health Code.

(Add) **R101.4.4 Property maintenance.** The 2009 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 the local property maintenance codes when such codes are adopted by the town, city or borough. References to the 2009 International Property Maintenance Code found within the body of the model document shall be considered null and void.

(Add) **R101.4.5 Fire prevention.** References to the 2003 International Fire Code within the body of the model document shall be considered to be references to the 2005 Connecticut State Fire Safety Code and the Connecticut State Fire Prevention Code.

(Add) **R101.4.6 Electrical.** The provisions of Part VIII of this code or of the 2011 NFPA 70 National Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto. The permit applicant shall state which code will be followed at the time of permit application.

(Add) **R101.4.7 Demolition of structures.** The demolition of structures shall be conducted in accordance with the State Demolition Code as found in Chapter 541 of the Connecticut General Statutes.

(Amd) **R102.4.1 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. 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. Where differences occur between provisions of this code and referenced standards, the provisions of this code shall apply.

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 instruction shall apply.

(Amd) **R102.5 Appendices.** The following appendices of the 2009 International Residential Code are hereby specifically adopted and included in this code: E, G, H, K, O, P, and R.

(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 therefore shall be known as the building official.

(Add) **R103.2 Appointment.** 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 in accordance with section 29-260 of the Connecticut General Statutes, 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 purposes 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 the provisions of 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 Construction 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.** In accordance with the provisions of subsection (d) of section 29-261 of the Connecticut General Statutes, the building official or his or her assistant shall have the right of entry to such buildings or structures, except single-family residences, for the proper performance of his or her duties between the hours of nine a.m. and five p.m., except that in the case of an emergency he or she shall have the right of entry at any time, if such entry is necessary in the interest of public safety. On receipt of information from the local fire marshal or from any other authentic source that any building in his or her 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 or her assistant shall immediately make inspection in accordance with the provisions of section 29-393 of the Connecticut General Statutes.

(Amd) **R104.10 Modifications.** The State Building Inspector may grant 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 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 within 14 days after mailing of the decision in accordance with subsection (b) of section 29-254 of the Connecticut General Statutes.

(Del) **R104.10.1 Areas prone to flooding.** Delete and substitute the following:

(Add) **R104.10.1 Records.** The application for modification, variation or exemption 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 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 and 10-410 of the Connecticut General Statutes, which have been classified as such in the State Register of Historic Places, provided 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.

(Add) **R104.10.3 Urban homesteading property exemption.** In accordance with section 29-259 of the Connecticut General Statutes, exemptions may be granted to the provisions of this code for property acquired by an urban homesteading agency, pursuant to section 8-169r of the Connecticut General Statutes, and transferred to a qualified applicant pursuant to section 8-169s of the Connecticut General Statutes, provided such exemptions shall not affect the safe design, use or construction of such property. Exemptions shall be granted in accordance with Section R104.10 of this code.

(Add) **104.11.2 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, shall be deemed evidence of compliance with this code.

(Add) **R105.1.1 By whom application is made.** Application for a permit shall be made by the owner in fee or by an authorized agent. If the application is made by a person other than the owner in fee, it shall be accompanied by an affidavit of the owner or a signed statement of the applicant witnessed by the building official or such official's designee to the effect that the proposed work is authorized by the owner in fee and that the applicant is authorized to make such application. 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.

(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 town, city or borough, or the State of Connecticut.
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 does not exceed 200 square feet (18.58 m^2).

2. Fences not over 6 feet (1829 mm) high.

3. Retaining walls that are not over 3 feet (914 mm) in height 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 (18927 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. Minor repairs and maintenance: A permit shall not be required for minor repair work, including replacement of lamps and fuses or the connection of approved portable electrical equipment to approved permanently installed receptacles.

2. Listed cord-and-plug connected temporary decorative lighting.

3. Reinstallation of attachment plug receptacles and devices but not the outlets therefore.

4. Replacement of branch circuit overcurrent devices of the required capacity in the same location.

5. Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.

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 through 24 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 refrigerant 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.** 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 applicant or construction documents do not conform to the requirements of this code and pertinent laws, statutes, regulations and ordinances, 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) **R105.3.1.1 Determination of substantially improved or substantially damaged existing buildings in flood hazard areas.** For applications for reconstruction, rehabilitation, addition or other improvement of existing buildings or structures located in an area prone to flooding as established by Table R301.2(1), the building official shall examine or cause to be examined the construction documents and shall prepare a finding with regard to the value of the proposed work. For buildings that have sustained damage of any origin, the value of the proposed work shall include the cost to repair the building or structure to its predamaged condition.

(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 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 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 and not 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 a permit 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 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) **R106.5 Retention of construction documents.** In accordance with the provisions of 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 106.1.4 of the 2003 International Building Code portion of the 2005 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 (32.52 m^2) in total area.
3. Tents 900 square feet (83.61 m^2) and smaller in total area when occupied by fewer than 50 persons, have no heating appliances, no installed electrical service, and are erected for fewer than 72 hours.

(Amd) **R107.3 Temporary power.** The building official may give permission to temporarily supply and use power in part of an electrical installation before such installation has been fully completed and the final certificate of occupancy or 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 2011 NFPA 70 National Electrical Code portion of the 2005 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 N1102.4.2.

(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.** The Building Official or his duly authorized representative shall provide in writing, notification as to passage or failure, in whole or in part, of any required inspection and shall leave such notification at the job site or deliver such notification 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 conforms to the provisions of the State Building 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. 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 that 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.

(Del) **SECTION R112 BOARD OF APPEALS.** Delete this section in its entirety and replace with the following:

(Add) **SECTION R112 MEANS OF APPEALS**

(Add) **R112.1 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) **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.** In accordance with the provisions of subsection (d) of section 29-252 of the Connecticut General Statutes, the State Building Inspector or such inspector's designee shall review a decision by a local building official or municipal board of appeals appointed pursuant to section 29-266 of the Connecticut General Statutes, 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.** A municipal board of appeals consisting of five members shall be appointed in accordance with the provisions of subsection (a) of section 29-266 of the Connecticut General Statutes.

(Add) **R112.2.1 Qualifications.** One member of the municipal board of appeals shall be appointed from the general public. The other four members shall have at least five years experience each in building design, building construction or supervision of building construction.

(Add) **R112.2.2 Chairman.** The board shall annually select one of its members to serve as chairman.

(Add) **R112.3 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) **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 (b) 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.** 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) **R114.2 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 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 115 of the 2003 International Building Code portion of the 2005 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 116 of the 2003 International Building Code portion of the 2005 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 117 of the 2003 International Building Code portion of the 2005 State Building Code.

CHAPTER 2 - DEFINITIONS

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

(Amd) **BUILDING, EXISTING.** An existing building is 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 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.

(Amd) **FIRE SEPARATION DISTANCE.** The distance measure from the building face to one of the following:

1. To the closest interior lot line; or
2. To the centerline of a street, an alley, or public way; or
3. To an imaginary line between two buildings on the property.

The distances shall be measured at right angles from the face of the wall.

(Add) **GREENHOUSES.** A one-story structure, enclosing an uninhabitable space, with glazing in excess of 50 percent of the gross area of the exterior walls and roof.

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

(Add) **SERVICE WATER HEATING.** Supply of hot water for purposes other than comfort heating.

(Add) **TWO-FAMILY DWELLING.** A building containing two dwelling units with not more than six lodgers or boarders per dwelling unit where personal care services are not provided.

(Amd) **SUNROOM.** A one-story structure, enclosing a habitable space, with glazing in excess of 40 percent of the gross area of the exterior walls and roof, and with the area of windows and doors operable to the exterior equal to a minimum of 20 percent of the area of the sunroom floor.

(Amd) **WIND BORNE 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 limitations.** Buildings and portions thereof shall be constructed in accordance with the wind provisions of this code using the basic wind speed in Table R301.2(1) as determined from Appendix R. Where different construction methods and structural materials are used for various portions of a building, the applicable requirements of this section for each portion shall apply. Where wind loads for wall coverings, curtain walls, roof coverings, exterior windows, skylights, garage doors and exterior doors are 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 R905.2.6.

(Del) **R301.2.1.1 Design criteria.** Delete without substitution.

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

GROUND SNOW LOAD: 30 pounds per square foot

WIND SPEED[b] (mph): Basic Wind Speed (3 second gust) shall be as set forth in Appendix R.

SEISMIC DESIGN CATEGORY: As set forth in Appendix R.

SUBJECT TO DAMAGE FROM: Weathering[a]: Severe
Frost Line Depth: 42 inches
Termite: Moderate to Heavy

WINTER DESIGN TEMPERATURE: 7° F

ICE SHEILD UNDERLAYMENT REQUIRED: Yes

FLOOD HAZARDS: To be determined locally

AIR FREEZING INDEX: 1,500 or less

MEAN ANNUAL TEMPERATURE: 50° F

CLIMATE ZONE: 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 TEMPERATURES (°F)**
Deleted without Substitution

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

(Del) **FIGURE R301.2(3) WEATHERING PROBABILITY MAP FOR CONCRETE**
Deleted without Substitution

(Del) **FIGURE R301.2(4) BASIC WIND SPEEDS FOR 50-YEAR MEAN RECURRENCE INTERVAL**
Deleted without Substitution

(Del) **FIGURE R301.2(5) GROUND SNOW LOADS, Pg, FOR THE UNITED STATES (lb/ft^2)**
Deleted without Substitution

(Del) **FIGURE R301.2(6) TERMITE INFESTATION PROBABILITY MAP**
Deleted without Substitution

(Amd) **R301.2.1.3 Wind speed conversion.** When referenced documents are based on the fastest mile wind speeds, the three-second gust wind velocities, V_{3s}, of Appendix R shall be converted to fastest mile wind velocities, V_{fm}, using Table R301.2.1.3.

(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 considered. For a site 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 arises 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, master-planned

community, or 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 their construction is expected to begin within one year of the start of construction for the structure for which the exposure category is determined. For any given wind direction, the exposure in which a specific building or other structure is sited shall be assessed as being one of the following categories:

1. Exposure A. Large city centers with at least 50 percent of the buildings having a height in excess of 70 feet (21336 mm). Use of this exposure category shall be limited to those areas for which terrain representative of Exposure A prevails in the upwind direction for a distance of at least 0.5 mile (0.8 km) or 10 times the height of the building or other structure, whichever is greater. Possible channeling effects or increased velocity pressures due to the building or structure being located in the wake of adjacent buildings shall be taken into account.

2. Exposure B. Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. Exposure B shall be assumed unless the site meets the definition of another type exposure.

3. Exposure C. Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B type terrain where the building is directly adjacent to open areas of Exposure C type terrain in any quadrant for a distance of more than 600 feet (183 m). This category includes flat open country, and grasslands.

4. Exposure D. Flat, unobstructed areas exposed to wind flowing over open water, including inland waterways, for a distance of at least 1 mile (1.61 km). This exposure shall apply only to those buildings and other structures exposed to the wind coming from over the water. Exposure D extends inland from the shoreline a distance of 1,500 feet (457 m) or 10 times the height of the building or structure, whichever is greater.

(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 BASIC WIND 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) ILLUSTRATION OF WHERE ON A TOPOGRAPHIC FEATURE, WIND SPEED INCREASE IS APPLIED.** 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 R. Soil Site Class shall be as defined in Section 1615.1.1 of the International Building Code.

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

(Del) **R301.2.2.1.2 Alteration 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 30 pound 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 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) **TABLE R302.1 EXTERIOR WALLS.**

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	(Fire-resistance rated)	1 hour-tested in accordance with ASTM E 119 or UL 263 with exposure from both sides	< 5 feet
	(Not fire-resistance rated)	0 hours	≥ 5 feet
Projections	(Fire-resistance rated)	1 hour on the underside	≥2 feet to 5 feet
	(Not fire-resistance rated)	0 hours	5 feet
Openings in walls	Not allowed	N/A	< 3 feet
	25% maximum of wall area	0 hours	3 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R302.4.1 or R302.4.2	< 5 feet
		None required	5 feet

For SI: 1 foot = 304.8 mm.
N/A = Not Applicable.

(Amd) **R302.2 Townhouses.** Each townhouse shall be considered a separate building and shall be separated by fire-resistance-rated walls meeting the requirements of Section 302.1 for exterior walls.

> **Exception:** A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. If the adjacent townhouses are provided with an automatic residential fire sprinkler system, this wall may be

a 1-hour fire-resistance-rated wall assembly. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

(Amd) **R302.2.4 Structural independence.** Each individual townhouse shall be structurally independent.

Exceptions:

1. Foundations supporting exterior walls or common walls.

2. Structural roof and wall sheathing from each unit may fasten to the common wall framing.

3. Nonstructural wall and roof coverings.

4. Flashing at termination of roof coverings over common wall.

5. Townhouses separated by a common fire-resistance-rated wall as provided in Section R302.2.

(Amd) **R302.3 Two-family dwellings.** Dwelling units in two-family dwellings shall be separated from each other and from common spaces serving both dwelling units by wall or floor-ceiling assemblies having not less than a 1-hour fire-resistance rating when tested in accordance with ASTM E 119 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.

(Amd) **R302.5.1 Opening protection.** Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1⅜ inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 1⅜ inches (35 mm) in thickness or 20-minute fire-rated doors in solid wood jambs. Doors between the garage and the residence shall be equipped with a self-closing device.

(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 Dwellings/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. This provision does 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
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
Garages located less than 10 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

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

(Amd) **R305.1 Minimum height.** Habitable rooms, hallways, corridors, bathrooms, toilet rooms, laundry rooms and basements shall have a ceiling height of not less than 7 feet (2134 mm). The required height shall be measured from the finished floor to the lowest projection from the ceiling.

Exceptions:

1. Beams, girders, pipes, ducts or other obstructions spaced not less than 4 feet (1219 mm) on center shall be permitted to project not more than 6 inches (152 mm) below the required ceiling height.

2. Basements without habitable spaces shall have a ceiling height of not less than 6 feet 8 inches (2032 mm). Beams, girders, pipes, ducts or other obstructions shall be permitted to project not more than 4 inches (102 mm) below the required ceiling height.

3. Not more than 50 percent of the required area of a habitable room or space is permitted to have a sloped or furred ceiling less than 7 feet (2134 mm) in height. No portion of the required floor area shall be less than 5 feet (1524 mm) in height.

4. Bathrooms are permitted to have sloped or furred ceilings, but shall have a minimum ceiling height of 6 feet 8 inches (2032 mm) over the fixtures and at the front clearance area for the fixtures as shown in Figure R307.1. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches (2032 mm) above a minimum area 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

5. Ceiling height in existing basements being converted to habitable space shall be not less than 6 feet 10 inches (2083 mm) clear except under beams, girders, pipes, ducts or other obstructions where the clear height shall be a minimum of 6 feet 4 inches (1931 mm).

(Del) **R305.1.1 Basements.** Delete without substitution.

(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 (3048 mm).

(Amd) **R310.1 Emergency escape and rescue openings required.** Habitable spaces located within basements, and habitable spaces within attics, and every sleeping room within the dwelling shall have at least 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. Where emergency escape and rescue openings are provided, they shall have a sill height of not more than 44 inches (1118 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. 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. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

> **Exceptions:**
>
> 1. Habitable basements without sleeping rooms are not required to have emergency escape and rescue openings when they are provided with two remote, code-compliant stairways.
>
> 2. In existing buildings, basements and attics being converted to habitable space without sleeping rooms are not required to have emergency escape and rescue openings.
>
> 3. The 44 inch (1118 mm) maximum sill 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 and which shall comply with Sections R311.7.4.1 and R311.7.4.2. Glazing in windows complying with this exception shall not be subject to the provisions of Section R308.4, item 7.

(Amd) **R310.1.4 Operational constraints.** Emergency escape and rescue openings shall be operational from the inside of the room without the use of a key or tool and the net clear opening dimensions shall be obtained by the normal operation of the opening from the inside.

> **Exception:** Existing buildings undergoing alterations or installation of replacement windows shall be permitted to utilize a 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) **R310.3 Bulkhead enclosures.** Bulkhead enclosures shall provide direct access to the basement. The bulkhead enclosure with the door panels in the fully open position shall provide the minimum net clear opening required by Section R310.1.1. Bulkhead enclosures shall also comply with Section R311.7.9.2.

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

> **Exception:** The exterior landing or floor shall not be more than 8¼ inches (209 mm) below the top of the threshold provided the door does not swing over the landing or floor.

When 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 mm) below the top of the threshold.

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

(Amd) **R311.7.1 Width.** Stairways shall not be less than 36 inches (914 mm) in clear width at all points above the permitted handrail height and below the required headroom height. 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 R311.7.9.1.
>
> 2. The width of existing or replacement stairways serving existing unfinished attics or existing unfinished basements being converted to habitable space 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 or replacement stairways serving existing unfinished attics or existing unfinished basements being converted to habitable space shall be 6 feet 6 inches (1982 mm), measured as above.

(Del) **R311.7.3 Walkline.** Delete without substitution.

(Amd) **R311.7.4.1 Riser height.** The maximum riser height shall be 8¼ inches (209 mm). The minimum riser height shall be 4 inches (102 mm). Riser height shall be measured vertically between leading edges of adjacent treads.

Exception: The maximum riser height of existing or replacement stairs serving existing unfinished attics or existing unfinished basements being converted to habitable space shall be 9 inches (229 mm), measured as above.

The greatest riser height within any flight of stairs shall not exceed the smallest by more the ⅜ inch (9.5 mm).

(Amd) **R311.7.4.2 Tread depth.** 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.

Exception: The minimum tread depth of existing or replacement stairs serving existing unfinished attics or existing unfinished basements being converted to habitable space shall be 8 inches (203 mm), measured as above.

The greatest tread depth within any flight of stairs shall not exceed the smallest by more than ⅜ inch (9.5 mm). Winder and circular stairway treads shall have a minimum tread depth of 9 inches (229 mm) measured as above at a point 12 inches (305 mm) from the sides where the treads are narrower. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point. The greatest winder tread depth at the 12 inch (305 mm) walk line within any flight of stairs shall not exceed the smallest by more than ⅜ inch (9.5 mm). The greatest circular tread depth at any walking line within any circular flight of stairs, measured at a consistent distance from a side of the stairway, shall not exceed the smallest by more than ⅜ inch (9.5 mm).

(Amd) **R311.7.7.2 Continuity.** Handrails for stairways shall be continuous for the full length of each flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned to a wall or terminate in newel posts or safety terminations. Handrails adjacent to a wall shall have a space of not less than 1½ inch (38 mm) between the wall and handrails.

Exceptions:

1. Handrails shall be permitted to be interrupted by a newel post at a level landing.

2. The use of a volute, turnout, starting easing or starting newel shall be permitted over the lowest tread.

(Add) **R312.1.1 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 312 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 shall not be considered a walking surface.

(Amd) **R313.1 Townhouse automatic fire sprinkler systems.** When an automatic residential fire sprinkler system is to be installed in townhouses, it shall be designed and installed in accordance with Section P2904 or NFPA 13D.

(Del) **R313.1.1 Design and installation.** Delete without substitution.

(Amd) **R313.2 One- and two-family dwellings automatic fire sprinkler 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) **R314.3.1 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 equipped with smoke alarms located as required for new dwellings. The smoke alarms shall have a power source in accordance with Section R314.4.

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 decks without roofs, 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 Power source.** Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when 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. Smoke alarms shall be interconnected.

Exception:

1. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power.

2. Interconnection and 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.** Carbon monoxide alarms 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.

(Add) **R315.1.1 Power source.** In new construction, the required carbon monoxide alarms shall be permanently installed and shall receive their primary power from the building wiring when such wiring is served from a commercial source. When primary power from the building wiring is interrupted, they shall receive power from a battery. Wiring shall be permanent and without disconnecting switch other than those required for overcurrent protection. Carbon monoxide alarms may be battery operated when installed in buildings without commercial power or in buildings that undergo alterations or additions regulated by Section R315.2.

(Amd) **R315.2 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 R315.1.1.

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, re-siding, window replacement and the construction of decks without roofs, 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.

(Amd) **R319.1 Address numbers.** Approved numbers or addresses shall be provided for all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property.

(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 A117.1-2003, 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 may be reduced in accordance with Section R 320.4.

(Add) **R320.3 Multi-story townhouses.** Buildings or complexes that contain 10 or more multi-story townhouses shall have at least 10 percent Type B units. This requirement shall be met by providing a sufficient number of single-story Type B units or by providing a sufficient number of multi-story townhouses that incorporates 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 may 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 may 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 1 unit vertical in 12 units horizontal (1:12), or where physical barriers prevent the installation of an accessible route, a vehicular route with parking that complies with Section 1106 of the 2003 International Building Code portion of the 2005 State Building

Code at each public or common use facility or building is permitted in place of the accessible route.

(Add) **R320.6 Parking.** Two percent, but not less than one, of each type of parking space provided in occupancies 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. Cross-hatched portions shall not be shared between spaces.

(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. Cross-hatched portions shall not be shared between spaces.

(Add) **R320.6.3.1 Van access clearance.** Pursuant to subsection (i) of section14-253a of the Connecticut General Statutes, each 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 provision, those requirements shall prevail.

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 of sufficient design to accommodate all loads according to Section R301 and 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 footing 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 Minimum depth.** The depth of all exterior footings shall conform to Section R403.1.4.1.

(Amd) **R404.4 Retaining walls.** Retaining walls that are not laterally supported at the top and that retain in excess of 36 inches (914 mm) of unbalanced fill shall be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning.

(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 R312.2 and R312.3 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 purposes of this section, grass, planting beds or landscaped areas shall not be a walking surface.

(Add) **R404.6 Pier and Pile Foundations.** Pier and pile foundations shall comply with the requirements set fourth in Chapter 18 of the 2003 International Building Code portion of the 2005 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) **FIGURE 602.6.1 TOP PLATE FRAMING TO ACCOMMODATE PIPING.** Delete "8-16d nails" and replace with "8-10d nails".

CHAPTER 8 – ROOF-CEILING CONSTRUCTION

(Amd) **R802.10.2.1 Applicability limits.** The provisions of this section shall control the design of truss roof framing when snow control for buildings not greater than 60 feet (18288 mm) in length perpendicular to the joist, rafter or truss span, not greater than 36 feet (10973) in width parallel to the joist, rafter or truss span, not greater than two stories 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 110 miles per hour (49 m/s), Exposure A, B, or C, and a maximum ground snow load of 70 psf (3352 Pa). For consistent loading of all truss types, a roof snow load of 30 pounds per square foot shall be utilized.

CHAPTER 9 – ROOF ASSEMBLIES

(Amd) **TABLE R905.2.4.1(1)**
CLASSIFICATION OF ASPHALT ROOF SHINGLES PER ASTM D 7158

MAXIMUM BASIC WIND SPEED FROM APPENDIX R (mph)	CLASSIFICATION REQUIREMENT
85	D, G or H
90	D, G or H
100	G or H
110	G or H
120	G or H
130	H
140	H
150	H

For SI: 1 mile per hour = 0.447 m/s.

(Amd) **TABLE R905.2.4.1(2)**
CLASSIFICATION OF ASPHALT SHINGLES PER ASTM D 3161

MAXIMUM BASIC WIND SPEED FROM APPENDIX R (mph)	CLASSIFICATION REQUIREMENT
85	A, D or F
90	A, D or F
100	A, D or F
110	F
120	F
130	F
140	F
150	F

For SI: 1 mile per hour = 0.447 m/s.

(Amd) **R905.2.7.2 Underlayment and high wind.** Underlayment applied in areas subject to high winds, above 110 mph (49 m/s) per Appendix R, shall be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners are to be applied along the overlap not farther apart than 36 inches (914 mm) on center.

CHAPTER 11 – ENERGY EFFICIENCY

(Add) **N1101.4.1.1 Urea-formaldehyde insulation.** Pursuant to section 29-277 of the Connecticut General Statutes, urea-formaldehyde foamed-in-place insulation shall not be installed in any building or structure on or after June 1, 1981.

(Amd) **N1101.8 Above code programs.** The State Building Inspector and the Codes and Standards Committee shall be permitted to 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 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 chapter. The following sections shall be met as applicable: N1102.4, N1103.1, N1103.2.2, N1103.2.3, N1103.3, N1103.4, N1103.5, N1103.6, N1103.7, and N1103.8.

(Add) **N1101.8.1 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.

(Amd) **N1102.2.11 Thermally isolated sunroom insulation.** Greenhouses and sunrooms shall comply with 2009 IECC, Section 402.2.11.

(Del) **N1102.3.5 Thermally isolated sunroom U-factor.** Delete without substitution.

(Add) **N1102.5 Maximum fenestration *U*-factor and SHGC.** The area-weighted average maximum fenestration *U*-factor permitted using trade-offs from Section N1102.1.3 shall be 0.48 in Zones 4 and 5 and 0.40 in Zones 6 through 8 for vertical fenestration, and 0.75 in Zones 4 through 8 for skylights.

(Amd) **N1103.2.3 Building cavities.** Building framing cavities shall not be used as supply or return ducts.

(Add) **N1103.4.1 Pipe insulation.** All service hot water piping within 10 feet (3048 mm) of service water heating equipment shall have a minimum insulation value of R-2. Systems with distribution manifolds shall be insulated between service water heating equipment and the distribution manifold or 10 feet (3048 mm), whichever is less. In addition, the first 5 feet (1524 mm) of cold water pipes from the water heating tanks shall have a minimum insulation value of R-2.

(Amd) **N1103.8.3 Pool covers.** Heated pools shall be equipped with a vapor retardant pool cover on or at the water surface. Pools heated to more than 90 degrees F (32 degrees C) shall have a pool cover with a minimum insulation value of R-12.

> **Exception:** Pools deriving more than 60 percent of the energy for heating from site-recovered energy or solar energy source.

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 16 – DUCT SYSTEMS

(Amd) **M1601.1.1 Above-ground duct system.** Above-ground duct systems shall conform to the following:

1. Equipment connected to duct systems shall be designed to limit discharge air temperature to a maximum of 250° F (121° C).

2. Factory-made air ducts shall be constructed of Class O or Class 1 materials as designated in Table M1601.1.1 (1).

3. Fibrous duct construction shall conform to the SMACNA Fibrous Glass Duct Construction Standards or NAIMA Fibrous Glass Duct Construction Standards.

4. Minimum thickness of metal duct material shall be as listed in Table M1601.1.1 (2). Galvanized steel shall conform to ASTM A653.

5. Use of gypsum products to construct return air ducts or plenums is permitted, provided the air temperature does not exceed 125° F (52° C) and exposed surfaces are not subject to condensation.

6. Duct systems shall be constructed of materials having a flame spread index not greater than 200.

CHAPTER 19 – SPECIAL FUEL-BURNING SYSTEMS

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

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 2005 State Building Code, such terms shall have the meanings ascribed to them as in those portions of the code.

(Amd) **G2411.1.1 Corrugated stainless steel tubing (CSST).** CSST gas piping shall be bonded in accordance with manufacturer's installation instructions.

(Amd) **G2412.2 Liquefied petroleum gas storage.** Storage facilities for liquefied petroleum gas shall be in accordance with regulations known as the Connecticut Liquefied Petroleum Gas and Liquefied Natural Gas Code adopted by the Commissioner of Construction Services under authority of section 29-331 of the Connecticut General Statutes.

(Amd) **G2415.1 Prohibited locations.** Piping shall not be installed in or through a circulating air duct, return, exhaust, or a clothes chute, chimney or gas vent, dumbwaiter or elevator shaft. Piping installed downstream of the point of delivery shall not extend through any townhouse unit other than the unit served by such piping, including basements and underfloor spaces.

(Amd) **G2423.1 General.** Service stations for CNG fuel shall be in accordance with regulations known as the Connecticut Gas Equipment and Piping Code adopted by the State Fire Marshal under authority of section 29-329 of the Connecticut General Statutes.

CHAPTER 26 – GENERAL PLUMBING REQUIREMENTS

(Amd) **P2601.2 Connection.** Plumbing fixtures, drains and appliances used to receive or discharge liquid wastes or sewage shall be connected to the sanitary drainage system of the building or premises in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems.

> **Exception:** Bathtubs, showers, lavatories, clothes washers and laundry trays are not required to discharge to the sanitary drainage system where those fixtures discharge to an approved gray water recycling system.

(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) **P2603.6.1 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.

(Amd) **P2905.9.1.3 PVC plastic pipe.** A purple primer complying with ASTM F 656-02 shall be applied to all PVC solvent cemented joints. Solvent cement that is not purple in color for PVC plastic pipe conforming to ASTM D 2564-04e01 shall be applied to all joint surfaces.

(NEW) CHAPTER 31 - VENTS

(Amd) **P3103.1 Roof extensions.** All 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 enclosure.** Delete without substitution.

CHAPTER 34 – GENERAL REQUIREMENTS

(Add) **E3401.2.1 Alternative compliance.** Compliance with the requirements of the 2011 NFPA 70 National Electrical Code portion of the 2005 State Building Code shall be deemed to be alternative compliance with the requirements of Chapters 34 through 43 inclusive of this code. At the time of permit application, the permit applicant shall state which code will be followed.

CHAPTER 36 – SERVICES

(Add) **E3609.7.1 Corrugated stainless steel tubing (CSST).** CSST gas piping shall be bonded in accordance with manufacturer's installation instructions.

CHAPTER 38 – WIRING METHODS

(Amd) TABLE 3802.1 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	RNC	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 steel 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 bushings 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	--
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[i]	3[d, l]	2.5[e]	--	2.5[e]

INSTALLATION REQUIREMENTS (Requirement applicable only to wiring methods marked "A")	AC MC	EMT IMC RMC	ENT	FMC LFC	NM UF	RNC	SE	SR[a]	USE
Maximum support distance in inches from box or other terminations.	12[b, f]	36	36	12[b, g]	12[h, i]	36	12	--	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. Thirty-six inches where flexibility is necessary.
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, 602.6, and R802.7 for additional limitations on the location of bored holes in 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) **E3902.2 Garage and accessory building receptacles.** All 125-volt, single-phase, 15- or 20-ampere receptacles installed in garages and grade-level portions of unfinished accessory buildings used for storage or work areas shall have ground-fault circuit-interrupter protection for personnel.

Exceptions:

1. Receptacles that are not readily accessible.

2. A single receptacle for a single appliance or a duplex receptacle for two appliances located within dedicated space for each appliance that in normal use is not easily moved from one place to another, and that is cord- and plug-connected.

(Amd) **E3902.11 Arc-fault circuit-interrupter protection.** All 120-volt, single-phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit bedrooms shall be protected by an arc-fault circuit interrupter, listed to provide protection of the entire branch circuit.

Exception:

1. Where a combination AFCI is installed at the first outlet to provide protection for the remaining portion of the branch circuit, the portion of the branch circuit between the branch-circuit overcurrent device and such outlet shall be wired with metal outlet and junction boxes and RMC, IMC, EMT or steel armored cable, Type AC meeting the requirements of Section E3908.8.

2. AFCI protection is not required for a branch circuit supplying only a fire alarm system where the branch circuit is wired with metal outlet and junction boxes and RMC, IMC, EMT or steel armored cable Type AC meeting the requirements of Section E3908.8.

CHAPTER 40 – DEVICES AND LUMINAIRES

(Amd) **E4002.14 Tamper-resistant receptacles.** In areas specified in Section E3901.1, 125-volt, 15- and 20-ampere receptacles shall be listed tamper-resistant receptacles.

Exception: Receptacles in the following locations shall not be required to be tamper-resistant:

1. Receptacles located more than 5.5 feet (1676 mm) above the floor.

2. Receptacles that are part of a luminaire or appliance.

3. A single receptacle for a single appliance or a duplex receptacle for two appliances where such receptacles are located in spaces dedicated for the appliances served and, under conditions of normal use, the appliances are not easily moved from one place to another. The appliances shall be cord-and-plug connected to such receptacles in accordance with Section E3909.4.

(Amd) **E4003.12 Luminaires in clothes closets.** For the purposes of this section, storage space shall be defined as a volume bounded by the sides and back closet walls and planes extending from the closet floor vertically to a height of 6 feet (1829 mm) or the highest clothes-hanging rod and parallel to the walls at a horizontal distance of 24 inches (610 mm) from the sides and back of the closet walls respectively, and continuing vertically to the closet ceiling parallel to the walls at a horizontal distance of 12 inches (305 mm) or the width of the shelf, whichever is greater. For a closet that permits access to both sides of a hanging rod, the storage space shall include the volume below the highest rod extending 12 inches (305 mm) on either side of the rod on a plane horizontal to the floor extending the entire length of the rod (see Figure E4003.12).
The listed luminaires installed in clothes closets shall be limited to surface-mounted or recessed incandescent luminaires with completely enclosed lamps, surface-mounted or recessed fluorescent luminaires, and surface-mounted fluorescent or LED luminaires identified as suitable for installation within the storage area. Incandescent luminaires with open or partially enclosed lamps and pendent luminaires or lamp-holders shall be prohibited. The minimum clearance between luminaires installed in clothes closets and the nearest point of a storage area shall be as follows:

1. Surface-mounted incandescent or LED luminaires shall be installed on the wall above the door or on the ceiling, provided there is a minimum clearance of 12 inches (305 mm) between the fixture and the nearest point of a storage space.

2. Surface-mounted fluorescent luminaires shall be installed on the wall above the door or on the ceiling, provided there is a minimum clearance of 6 inches (152 mm).

3. Recessed incandescent luminaires or LED luminaires with a completely enclosed light source shall be installed in the wall or the ceiling provided there is a minimum clearance of 6 inches (152 mm).

4. Recessed fluorescent luminaires shall be installed in the wall or on the ceiling provided there is a minimum clearance of 6 inches (152 mm) between the fixture and the nearest point of a storage space.

5. Surface-mounted fluorescent or LED luminaires shall be permitted to be installed within the storage space where identified for this use.

CHAPTER 41 - APPLIANCE INSTALLATION

(Amd) **E4101.6 Support of ceiling-suspended paddle fans.** Ceiling-suspended fans (paddle) shall be supported independently of an outlet box or by a listed outlet box or outlet box system identified for the use and installed in accordance with Section E3905.9. Outlet boxes or outlet box systems used as the sole support of a ceiling-suspended (paddle) fan shall be listed.

CHAPTER 42 – SWIMMING POOLS

(Amd) **E4204.5.2 Connections.** Connections shall be made by exothermic welding or by listed pressure connections or clamps that are labeled as being suitable for the purpose and that are made of stainless steel, brass, copper or copper alloy. Connection devices or fittings that depend solely on solder shall not be used. Sheet metal screws shall not be used to connect bonding conductors or connection devices. Thread forming machine screws that engage not less than two threads are permitted.

(Amd) **E4209.3 Accessibility.** Hydromassage bathtub electrical equipment shall be accessible without damaging the building structure or building finish. Ground-fault circuit-interrupter devices shall be located in a readily accessible location for testing purposes. Ground-fault circuit-interrupter devices shall not be installed within the enclosure of the hydromassage tub.

CHAPTER 44 – REFERENCED STANDARDS

(Amd) **ACCA** Air Conditioning Contractors of America
2800 Shirlington Road, Suite 300
Arlington, VA 22206

Standard Reference Number	Title	Referenced in code section number
Manual D-09	Residential Duct Systems	....M1601.1, M1602.2
Manual J-02	Residential Load Calculations-Eighth Edition	.....M1401.3
Manual S-04	Residential Equipment Selection	.....M1401.3

(Amd) **ICC** International Code Council, Inc.
500 New Jersey Avenue, NW
6th Floor
Washington, DC 20001

Standard reference number	Title	Referenced in code section number
IBC-03	International Building Code	.....G2402.3, R101.2, R301.1, R301.1.3, R301.2.2.1.1, R301.2.2.1.2, R301.2.2.4, R301.3, R308.5, R321.1, R403.1.8, R802.1.3.4, R905.10.3, Table AH107.4(1), AH107.4.3
ICC/ANSI A117.1-03	Accessible and Usable Buildings and Facilities	.....R321.3
ICC 400-06	Standard on the Design and Construction of Log Structures	.....R301.1.1
ICC 500-08	ICC/NSSA Standard on the Design and Construction of Storm Shelters	.....R323.1
ICC 600-08	Standard for Residential Construction in High Wind Regions	.....R301.2.1.1
IECC-09	International Energy Conservation Code	.....N1101.2
IFC-03	International Fire Code	.....G2402.3, G2412.2, G2423.1, M2201.7, R101.4.5
IMC-03	International Mechanical Code	.....G2402.3
IPC-03	International Plumbing Code	.....G2402.3, Table R301.2(1), R903.4.1, AO102.6

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

Standard reference number	Title	Referenced in code section number
13-02	Installation of Sprinkler Systems	.....R317.1
13D-02	Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings	...P2904.1, P2904.2, P2904.6.1, R313.2.1
31-92	Installation of Oil-burning Equipment	.....M1801.3.1, M1805.3
58-95	Liquefied Petroleum Gas Code	.....G2412.2, G2414.6.2
70-08	National Electrical Code	...E3401.1, E3401.2, E4301.1, Table E4303.2, E4304.3, E4304.4

Standard reference number	Title	Referenced in code section number
72-02	National Fire Alarm Code	.....R314.1, R314.2
85-04	Boiler and construction Systems Hazards Code	.....G2452.1
211-03	Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances	.....G2427.5.5.1, R1002.5
259-03	Test Method for Potential Heat of Building Materials	.....R316.5.7, R316.5.8
286-00	Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth	.....R302.9.4, R316.4, R316.5.8, R316.6
501-05	Standard on Manufactured Housing	.....R202, AE201
853-07	Standard for the Installation of Stationary Fuel Cell Power Systems	.....M1903.1

APPENDIX – E – MANUFACTURED HOUSING USED AS DWELLINGS

(Amd) **AE101.1 General.** The provisions of Appendix E shall be applicable only to a manufactured home used as a single dwelling unit and shall apply to the following:

1. Construction, alteration and repair of any foundation system that is necessary to provide for the installation of a manufactured home unit.

2. Construction, installation, addition, alteration, repair or maintenance of the building service equipment that is 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 2005 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 501-05 Standard on Manufactured Housing.....AE201

APPENDIX G – SWIMMING POOLS, SPAS AND HOT TUBS

SECTION AG102 DEFINITIONS

(Amd) **RESIDENTIAL.** For the purposes of this Section, "Residential" means situated on the premises of a detached one- or two-family dwelling or which is accessory to an individual one-family townhouse for the exclusive use of its residents and invited guests.

(Amd) **AG105.2 Outdoor swimming pool.** Delete items 10, 10.1 and 10.2 and replace with the following:

10. Where an above-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 which meets the requirements of Section AG105.2, Items 1 through 9.

(Add) **AG105.6 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 AG105.2 is in place prior to the commencement of the installation. The temporary enclosure shall be a minimum of 4 feet (1219 mm) 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) **AG105.7 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.

(Del) **APPENDIX I – PRIVATE SEWAGE DISPOSAL.** Delete Appendix I without substitution.

(Del) **APPENDIX J – EXISTING BUILDINGS AND STRUCTURES.** Delete Appendix J without substitution.

(Del) **APPENDIX L – PERMIT FEES.** Delete Appendix L without substitution.

(Del) **APPENDIX M – HOME DAY CARE – R-3 OCCUPANCY.** Delete Appendix M without substitution.

(Add) **APPENDIX R – WIND SPEEDS and SEISMIC DESIGN CATEGORIES**

Municipality	Basic Wind Speed (3-second gust) (mph)	Seismic Design Category[1]	
		Site Class A-D	Site Class E
Andover	100	B	B
Ansonia	100	B	B
Ashford	100	B	B
Avon	100	B	B
Barkhamsted	100	B	B
Beacon Falls	100	B	B
Berlin	100	B	B
Bethany	100	B	B
Bethel	100	B	C
Bethlehem	100	B	B
Bloomfield	100	B	B
Bolton	100	B	B
Bozrah	105	B	B
Branford	100	B	B
Bridgeport	100	B	C
Bridgewater	100	B	C
Bristol	100	B	B
Brookfield	100	B	C
Brooklyn	105	B	B
Burlington	100	B	B
Canaan	100	B	B
Canterbury	105	B	B
Canton	100	B	B
Chaplin	105	B	B
Cheshire	100	B	B
Chester	105	B	B
Clinton[2]	105	B	B
Colchester	105	B	B
Colebrook	100	B	B
Columbia	105	B	B
Cornwall	100	B	B
Coventry	100	B	B
Cromwell	100	B	B
Danbury	100	B	C
Darien	100	B	C
Deep River	105	B	B
Derby	100	B	B
Durham	100	B	B
East Granby	100	B	B
East Haddam	105	B	B
East Hampton	100	B	B
East Hartford	100	B	B
East Haven	100	B	B
East Lyme[2]	105	B	B

Municipality	Basic Wind Speed (3-second gust) (mph)	Seismic Design Category[1]	
		Site Class A-D	Site Class E
East Windsor	100	B	B
Eastford	100	B	B
Easton	100	B	C
Ellington	100	B	B
Enfield	100	B	B
Essex	105	B	B
Fairfield	100	B	C
Farmington	100	B	B
Franklin	105	B	B
Glastonbury	100	B	B
Goshen	100	B	B
Granby	100	B	B
Greenwich	100	B	C
Griswold	105	B	B
Groton[2]	110	B	B
Guilford	105	B	B
Haddam	105	B	B
Hamden	100	B	B
Hampton	105	B	B
Hartford	100	B	B
Hartland	100	B	B
Harwinton	100	B	B
Hebron	100	B	B
Kent	100	B	B
Killingly	105	B	B
Killingworth	105	B	B
Lebanon	105	B	B
Ledyard	110	B	B
Lisbon	105	B	B
Litchfield	100	B	B
Lyme	105	B	B
Madison[2]	105	B	B
Manchester	100	B	B
Mansfield	105	B	B
Marlborough	100	B	B
Meriden	100	B	B
Middlebury	100	B	B
Middlefield	100	B	B
Middletown	100	B	B
Milford	100	B	B
Monroe	100	B	C
Montville	105	B	B
Morris	100	B	B
Naugatuck	100	B	B
New Britain	100	B	B

Municipality	Basic Wind Speed (3-second gust) (mph)	Seismic Design Category[1]	
		Site Class A-D	Site Class E
New Canaan	100	B	C
New Fairfield	100	B	C
New Hartford	100	B	B
New Haven	100	B	B
New London[2]	110	B	B
New Milford	100	B	C
Newington	100	B	B
Newtown	100	B	C
Norfolk	100	B	B
North Branford	100	B	B
North Canaan	100	B	B
North Haven	100	B	B
North Stonington	110	B	B
Norwalk	100	B	C
Norwich	105	B	B
Old Lyme[2]	105	B	B
Old Saybrook[2]	105	B	B
Orange	100	B	B
Oxford	100	B	B
Plainfield	105	B	B
Plainville	100	B	B
Plymouth	100	B	B
Pomfret	105	B	B
Portland	100	B	B
Preston	105	B	B
Prospect	100	B	B
Putnam	105	B	B
Redding	100	B	C
Ridgefield	100	B	C
Rocky Hill	100	B	B
Roxbury	100	B	B
Salem	105	B	B
Salisbury	100	B	B
Scotland	105	B	B
Seymour	100	B	B
Sharon	100	B	B
Shelton	100	B	C
Sherman	100	B	C
Simsbury	100	B	B
Somers	100	B	B
South Windsor	100	B	B
Southbury	100	B	C
Southington	100	B	B
Sprague	105	B	B
Stafford	100	B	B

Municipality	Basic Wind Speed (3-second gust) (mph)	Seismic Design Category[1]	
		Site Class A-D	Site Class E
Stamford	100	B	C
Sterling	105	B	B
Stonington[2]	110	B	B
Stratford	100	B	C
Suffield	100	B	B
Thomaston	100	B	B
Thompson	100	B	B
Tolland	100	B	B
Torrington	100	B	B
Trumbull	100	B	C
Union	100	B	B
Vernon	100	B	B
Voluntown	105	B	B
Wallingford	100	B	B
Warren	100	B	B
Washington	100	B	B
Waterbury	100	B	B
Waterford[2]	110	B	B
Watertown	100	B	B
West Hartford	100	B	B
West Haven	100	B	B
Westbrook[2]	105	B	B
Weston	100	B	C
Westport	100	B	C
Wethersfield	100	B	B
Willington	100	B	B
Wilton	100	B	C
Winchester	100	B	B
Windham	105	B	B
Windsor	100	B	B
Windsor Locks	100	B	B
Wolcott	100	B	B
Woodbridge	100	B	B
Woodbury	100	B	B
Woodstock	100	B	B

Footnotes:

1. If Site Class F is present, the Short Period Design Spectral Response Acceleration (S_{DS}) shall be determined according to Section 1615.1 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.

Section 3. Section 29-252-1d, State Building Code – 2005 Connecticut Supplement as amended in 2009 and 2011 is amended as follows:

(NEW) (Del) **2005 NFPA 70 NATIONAL ELECTRICAL CODE**
Delete the document and its amendments in their entirety and substitute with the 2011 NFPA 70 National Electrical Code as amended herein:

AMENDMENTS TO THE 2011 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 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 2009 International Residential Code portion of the 2005 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 laterals, and associated metering; or

b Are located in legally established easements, right-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.

(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 that are in accordance with the provisions of the 2009 International Residential Code portion of the 2005 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 2003 International Building Code portion of the 2005 State Building Code. For the purpose 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, 1111 Country Club Road, Middletown, CT 06457. www.ct.gov/dcs.

This code may require new products, methods of construction or materials that may not yet be available at the time the code is adopted. In such event, the local building official shall be permitted to approve the use of products, methods of construction or materials that comply with the requirements of the 2014 NFPA 70 National Electrical Code.

CHAPTER 1 – GENERAL

ARTICLE 100 – Definitions.

(Amd) **Authority Having Jurisdiction.** The organization, office or individual responsible for approving equipment, material, an installation, or a procedure. The local building official has the responsibility for approving construction documents, issuing permits, approving materials and procedures and for making inspections from time to time as the construction process requires. The State Building Inspector has the responsibility for administering the 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 purpose 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, 1111 Country Club Road, Middletown, CT 06457.

CHAPTER 2 – WIRING AND PROTECTION

(Amd) **210.8 Ground-Fault Circuit-Interrupter Protection for Personnel.**

(Amd) **(A) Dwelling Units.** All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in Sections 210.8(A) (1) to (8), inclusive, shall have ground-fault circuit-interrupter protection for personnel.

(1) Bathrooms

(2) Garages, and also accessory buildings that have a floor at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use

Exception to (2): Receptacles that are not readily accessible.

(3) Outdoors

Exception to (3): Receptacles that are not readily accessible and are supplied by a branch circuit dedicated to electric snow-melting, deicing, or pipeline and vessel heating equipment may be installed in accordance with 426.28 or 427.22, as applicable.

(4) Crawl spaces – at or below grade level

(5) Unfinished basements – for purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like

Exception to (5): A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

Receptacles installed under the exception to 210.8(A) (5) shall not be considered as meeting the requirements of Section 210.52(G).

(6) Kitchens – where the receptacles are installed to serve the countertop surfaces

(7) Sinks – located in areas other than kitchens where receptacles are installed within 6 feet (1.8 mm) of the outside edge of the sink

(8) Boathouses

(Amd) **210.12 Arc-Fault Circuit – Interrupter Protection.** All 120-volt, single-phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit bedrooms shall be protected by an arc-fault circuit interrupter, listed to provide protection of the entire branch circuit.

Exceptions:
1. If RMC, IMC, EMT, Type MC, or steel armored Type AC cables meeting the requirements of Section 250.118 and metal outlet and junction boxes are installed for the

portion of the branch circuit between the branch circuit overcurrent device and the first outlet, an outlet branch circuit type AFCI may be installed at the first outlet to provide protection for the remaining portion of the branch circuit.

2. Where a listed metal or nonmetallic conduit or tubing is encased in not less than 2 inches (50 mm) of concrete for the portion of the branch circuit between the branch circuit overcurrent device and the first outlet, an outlet branch circuit type AFCI may be installed at the first outlet to provide protection for the remaining portion of the branch circuit.

3. Where an individual branch circuit to a fire alarm system installed in accordance with 760.41(B) or 760.121 (B) is installed in RMC, IMC, EMT, or steel-sheathed cable, Type AC or Type MC, meeting the requirements of 250.118, with metal outlet and junction boxes, AFCI protection may be omitted.

(Amd) **250.50 Grounding Electrode System**. If available on the premises at each building or structure served, each item in 250.52(A)(1) through (A)(6) 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) through (A)(7) shall be installed and used.

(Add) **250.104 (B) (1) Corrugated Stainless Steel Tubing (CSST)**. CSST gas piping shall be bonded in accordance with manufacturer's installation instructions.

CHAPTER 3 – WIRING METHODS AND MATERIALS

(Amd) **300.4 (E) Cables and Raceways Installed Under Roof Decking.** A cable, or raceway–type wiring method, installed in exposed or concealed locations under metal-corrugated sheet roof decking, shall be installed and supported so the nearest outside surface of the cable or raceway is not less than 1½ inch (38 mm) from the nearest surface of the roof decking.

Exception: Rigid metal conduit and intermediate metal conduit shall not be required to comply with 300.4(E).

(Add) **300.4.1 Drilling and Notching.**

(A) Structural Floor, 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 (102 mm) or greater in nominal thickness shall not be notched except at the ends of 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 (51 mm) 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 (51 mm) 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 (102 mm) and the length of the cantilever does not exceed 24 inches (610 mm).

(2) Engineered Wood Products. Cuts, notches and holes bored in trusses, laminated veneer lumber, glue-laminated members or I-joists are not permitted unless the effects of such penetrations are specifically considered in the design of the member and permitted by the manufacturer.

(B) 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 ⅝ inch (15.9 mm) 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 percent of its width, provided that such studs located in exterior walls or interior bearing partitions are doubled and not more than two successive doubled studs are bored.

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

(C) Top Plates. When wiring or conduit is placed in or partly in an exterior wall or interior bearing partition necessitating cutting, drilling or notching of the top plate by more than 50 percent of its width, a galvanized metal tie of not less than 0.054 inches thick (1.37 mm) (16 ga) and 1½ inches (38 mm) wide shall be fastened to each plate across and to each side of the opening with not less than eight 10d nails at each side or equivalent.

Exception: Galvanized metal ties are not required when the entire side of the wall with the notch is covered by wood structural panel sheathing.

CHAPTER 4 – EQUIPMENT FOR GENERAL USE

(Amd) **422.16 (B) (2) Built-in Dishwashers and Trash Compactors.** Built-in dishwashers and trash compactors may be cord-and-plug connected with a flexible cord identified as suitable for the purpose in the installation instructions of the appliance manufacturer where all of the following conditions are met.

(1) The flexible cord shall be terminated with a grounding-type attachment plug.

Exception: A listed dishwasher or trash compactor distinctly marked to identify it as protected by a system of double insulation, or its equivalent, shall not be required to be terminated with a grounding-type attachment plug.

(2) The length of the cord shall be 3 feet to 4 feet (0.9 m to 1.2 m) measured from the face of the attachment plug to the plane of the rear of the appliance.

(3) Receptacles shall be located to avoid physical damage to the flexible cord.

(4) The receptacle shall be located in the space occupied by the appliance or adjacent thereto.

(5) The receptacle shall be readily accessible without removing the appliance.

CHAPTER 5 – SPECIAL OCCUPANCIES

(Del) **550.25 Arc-Fault Circuit-Interrupter Protection.** Delete without substitution.

CHAPTER 6 – SPECIAL EQUIPMENT

(Amd) **680.73 Accessibility.** Hydromassage bathtub electrical equipment shall be accessible without damaging the building structure or building finish. Where the hydromassage bathtub is cord- and plug-connected with the supply receptacle accessible only through a service access opening, the receptacle shall be installed so that its face is within direct view and not more than 1 foot (300 mm) of the opening. Ground-fault circuit-interrupter devices shall be located in a readily accessible location for testing purposes. Ground-fault circuit-interrupter devices shall not be installed within the enclosure of the hydromassage tub.

CHAPTER 7 SPECIAL CONDITIONS

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.

Statement of Purpose

This change is intended to update the State Building Code to be consistent with technology concerning products, materials and methods of construction with respect to one- and two-family dwellings, attached multiple single-family dwellings (townhouses) and electrical installations in all construction. This amendment replaces the 2003 International Residential Code (IRC) with the 2009 edition of the IRC and replaces 2005 NFPA 70 National Electrical Code with the 2011 edition of NFPA 70.

R-39 Rev. 03/2012
(Certification page—see Instructions on back)

CERTIFICATION

This certification statement must be completed in full, including items 3 and 4, if they are applicable.

1) **I hereby certify that the above** *(check one)* ☐ Regulations ☐ Emergency Regulations

2) **are** *(check all that apply)* ☐ adopted ☐ amended ☐ repealed **by this agency pursuant to the following authority(ies):** *(complete all that apply)*

   a. *Connecticut General Statutes* section(s) _____.

   b. Public Act Number(s) _____.
   (Provide public act number(s) if the act has not yet been codified in the Connecticut General Statutes.)

3) **And I further certify that notice of intent to adopt, amend or repeal said regulations was published in the *Connecticut Law Journal* on _____;**
(Insert date of notice publication if publication was required by CGS Section 4-168.)

4) **And that a public hearing regarding the proposed regulations was held on _____;**
(Insert date(s) of public hearing(s) held pursuant to CGS Section 4-168(a)(7), if any, or pursuant to other applicable statute.)

5) **And that said regulations are EFFECTIVE** *(check one, and complete as applicable)*
   ☐ When filed with the Secretary of the State
   OR ☐ on *(insert date)* _____

DATE	SIGNED *(Head of Board, Agency or Commission)*	OFFICIAL TITLE, DULY AUTHORIZED

*APPROVED by the **Attorney General** as to legal sufficiency in accordance with CGS Section 4-169, as amended*

DATE	SIGNED *(Attorney General or AG's designated representative)*	OFFICIAL TITLE, DULY AUTHORIZED

*Proposed regulations are **DEEMED APPROVED** by the Attorney General in accordance with CGS Section 4-169, as amended, if the attorney General fails to give notice to the agency of any legal insufficiency within thirty (30) days of the receipt of the proposed regulation.*

(For Regulation Review Committee Use ONLY)

☐ Approved ☐ Rejected without prejudice

☐ Approved with technical corrections ☐ Disapproved in part, *(Indicate Section Numbers disapproved only)*

☐ Deemed approved pursuant to CGS Section 4-170(c)

By the Legislative Regulation Review Committee in accordance with CGS Section 4-170, as amended	DATE	SIGNED *(Administrator, Legislative Regulation Review Committee)*

Two certified copies received and filed and one such copy forwarded to the Commission on Official Legal Publications in accordance with CGS Section 4-172, as amended.

DATE	SIGNED *(Secretary of the State)*	BY

(For Secretary of the State Use ONLY)

GENERAL INSTRUCTIONS

1. All regulations proposed for adoption, amendment or repeal, *except* emergency regulations, must be presented to the Attorney General for his/her determination of legal sufficiency. (See CGS Section 4-169.)

2. After approval by the Attorney General, the original and one electronic copy (in Word format) of all regulations proposed for adoption, amendment or repeal must be presented to the Legislative Regulation Review Committee for its action. (See CGS Sections 4-168 and 4-170 as amended by Public Act 11-150, Sections 18 and 19.)

3. Each proposed regulation section must include the appropriate regulation section number and a section heading. (See CGS Section 4-172.)

4. New language added to an existing regulation must be in underlining or CAPITAL LETTERS, as determined by the Regulation Review Committee. (See CGS 4-170(b).)

5. Existing language to be deleted must be enclosed in brackets [ ]. (See CGS 4-170(b).)

6. A completely new regulation or a new section of an existing regulation must be preceded by the word "(NEW)" in capital letters. (See CGS Section 4-170(b).)

7. The proposed regulation must have a statement of its purpose following the final section of the regulation. (See CGS Section 4-170(b).)

8. The Certification Statement portion of the form must be completed, including all applicable information regarding *Connecticut Law Journal* notice publication date(s) and public hearing(s). (See more specific instructions below.)

9. Additional information regarding rules and procedures of the Legislative Regulation Review Committee can be found on the Committee's web site: http://www.cga.ct.gov/rr/ .

10. A copy of the Legislative Commissioners' Regulations Drafting Manual is located on the LCO website at http://www.cga.ct.gov/lco/pdfs/Regulations_Drafting_Manual.pdf.

CERTIFICATION STATEMENT INSTRUCTIONS

(Numbers below correspond to the numbered sections of the statement)

1. Indicate whether the regulation is a regular or an emergency regulation adopted under the provisions of CGS Section 4-168(f).

2. a) Indicate whether the regulations contains newly adopted sections, amendments to existing sections, and/or repeals existing sections. Check all cases that apply.

   b) Indicate the specific legal authority that authorizes or requires adoption, amendment or repeal of the regulation. If the relevant public act has been codified in the most current biennial edition of the *Connecticut General Statutes*, indicate the relevant statute number(s) instead of the public act number. If the public act has not yet been codified, indicate the relevant public act number.

3. Except for emergency regulations adopted under CGS 4-168(f), and technical amendments to an existing regulation adopted under CGS 4-168(g), an agency must publish notice of its intent to adopt a regulation in the *Connecticut Law Journal*. Enter the date of notice publication.

4. CGS Section 4-168(a)(7) prescribes requirements for the holding of an agency public hearing regarding proposed regulations. Enter the date(s) of the hearing(s) held under that section, if any; also enter the date(s) of any hearing(s) the agency was required to hold under the provisions of any other law.

5. As applicable, enter the effective date of the regulation here, or indicate that it is effective upon filing with the Secretary of the State. Please note the information below.

   Regulations are effective upon filing with the Secretary of the State or at a later specified date. See CGS Section 4-172(b) which provides that each regulation is effective upon filing, or, if a later date is required by statute or specified in the regulation, the later date is the effective date. An effective date may not precede the effective date of the public act requiring or permitting the regulation. Emergency regulations are effective immediately upon filing with the Secretary of the State, or at a stated date less than twenty days thereafter.

DEPARTMENT OF CONSTRUCTION SERVICES
2013 Amendment to the State Building Code

The Department of Construction Services conducted a public hearing on April 10, 2013, regarding the regulation draft. Comments were accepted before, during, and for a short period after the public hearing. The summary of comments and responses that follows was distributed with the final regulation draft to all persons who commented.

2013 Amendment to the 2009 State Building Code
Public Comments/Responses

8-NEC: Hasley Cook, President, Electrical Wiring Systems, Legrand, recommends in Chapter 4 Equipment for General Use, Article 406 deleting "406.12 Tamper-Resistance Receptacles in Dwelling Units. Delete without substitution." thus restoring the requirements of the underlying model code. *The recommendation was accepted.*

47-IRC: Hasley Cook, President, Electrical Wiring Systems, Legrand, recommends in Chapter 40 Devices and Luminaires Section E4002 deleting "E4002.14 Tamper-Resistance Receptacles in Dwelling Units. Delete without substitution." thus restoring the requirements of the underlying model code. *The recommendation was accepted.*

9-NEC: Robert Simon, Hubbell Incorporated, recommends in NEC Chapter 4 Article 406.12 deleting "406.12 Tamper-Resistance Receptacles in Dwelling Units. Delete without substitution." thus restoring the requirements of the underlying model code. *The recommendation was accepted.*

Bill Eithier, Chief Executive Officer, Homebuilders & Remodelers Association of Connecticut, Inc., recommends opposing all amendments to either the 2009 IRC or the 2011 NEC that impose a requirement to install tamper-resistant receptacles. *The recommendation was rejected. The committee received several recommendations to require tamper-resistant receptacles and accepted such recommendations.*

48-IRC: Donald Vigneau, Northeast Energy Efficiency Partnerships, Inc. (NEEP), recommends in Section R202 Definitions changing the definition of "conditioned space" to "an area or room within a building being heated or cooled, containing uninsulated ducts, or with a fixed opening directly into an adjacent conditioned space." *The recommendation was rejected. Any potential confusion can be addressed by continuing education and/or an OSBI written clarification to clarify the requirements.*

49-IRC: Donald Vigneau, NEEP, recommends in N1101.1 Scope to add "building thermal envelope" to the exception as follows: "portions of the building envelope that do not enclose conditioned space are exempt form building thermal envelope provisions of this chapter." *The recommendation was rejected. Any potential confusion can be addressed by continuing education and/or an OSBI written clarification to clarify the requirements.*

50-IRC: Donald Vigneau, NEEP, recommends amending section N1102.2.2 to read "Ceilings without attic spaces. Where Section N1102.1 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the requirements of Section N1102.1 shall be limited to 500 ft2 (46 m2) <u>or 20 percent</u> of the total insulated ceiling area<u>, whichever is less</u>." *The recommendation was rejected. Any potential confusion can*

be addressed by continuing education and/or an OSBI written clarification to clarify the requirements.

51-IRC: Donald Vigneau, NEEP, recommends in Section N1102.4.2 adding "Air-permeable insulation is inside of an air barrier" in the right column in the first row of Table N1102.4.2. *The recommendation was rejected. This provision as written does not pose a conflict and no substantial reason for altering the model code was provided.*

52-IRC: Donald Vigneau, NEEP, recommends amending Section N1102.5 to read "Maximum fenestration U-factor and SHGC, The area-weighted average maximum fenestration U-factor permitted using trade offs from Section N1102.1.3 shall be 0.48 in Zones 4 and 5 and 0.40 in Zones 6 through 8 for vertical fenestration and 0.75 in Zones 4 through 8 for skylights." *The recommendation was accepted.*

10-NEC: Robert Simon, Hubbell Incorporated, recommends in Chapter 4, Article 406 deleting "406.12 Tamper-Resistance Receptacles in Dwelling Units. Delete without substitution." thus restoring the requirements of the underlying model code. *The recommendation was accepted.*

53-IRC: J. Claude Jean, Building Official, Marlborough, Connecticut, recommends referencing the 2011 edition of NFPA 31 rather than the 1992 edition particularly as it relates to chimney liners for fuel oil fired burners. *The recommendation was rejected. The proposal conflicts with section 29-317 of the Connecticut General Statutes.*

54-IRC: Donald Vigneau, NEEP, recommends amending Chapter 5 Referenced Standards/National Green Building Standard to reference the ICC/NAHB 700-2012 with Connecticut amendments rather than ICC/NAHB 700-2009. *The recommendation was rejected. Amendment to N1101.8 already addresses the above energy code programs.*

55-IRC: Jeffrey Sargent, National Fire Protection Association (NFPA), recommends in Section E4002.14 replacing the 2009 IRC requirement for tamper-resistant receptacles with the text from the 2012 IRC, Section 4002.14. *The recommendation was accepted.*

56-IRC: Jeffrey Sargent, NFPA, recommends in Section 3902.11 replacing the 2009 IRC requirements for arc-fault circuit interrupter protection with the text from the 2012 IRC, Section 3902.12. The recommendation was rejected. *The change is unnecessary because the code provides the option to choose the requirements of the 2011 NEC or the 2009 IRC.*

Paul Costello, Independent Electrical Contractors of New England, Inc., provided informational material that included a recommendation to restore the model code language regarding tamper resistant receptacles. *This recommendation was accepted (See 8 NEC).* The material also contained a recommendation to require arc-fault circuit interrupter protection in mobile homes and manufactured homes. *This recommendation was rejected. The code does not regulate mobile homes or manufactured homes, only the connections to such mobile homes or manufactured homes.*

NOTE: The agency also made a number of technical and editorial changes based on issues identified during continuing reviews of the document by staff.