

State of Connecticut
irc code update
2005 - 2012

Mark W. Tebbets
New England Code Consulting
14 Sunrise Avenue
Pawcatuck, Connecticut 06379

2012 INTERNATIONAL
RESIDENTIAL CODE
CHAPTER 1 ADMINISTRATION

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• **R101.2 Scope.** The provisions of the *International Residential Code for One- and Two-family Dwellings* shall apply to the construction, *alteration*, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures*.

Don't forget the exceptions!!!

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• Exceptions:

• 1. Live/work units complying with the requirements of Section 419 of the *International Building Code* shall be permitted to be built as one- and two-family *dwellings* or townhouses. Fire suppression required by Section 419.5 of the *International Building Code* when constructed under the *International Residential Code for One- and Two-family Dwellings* shall conform to Section P2904.

R101.2 Scope

Live/work unit is a dwelling unit or sleeping unit in which a significant portion of the space includes a non-residential use that is operated by the tenant and shall comply with 419.1- 419.8 (IBC)

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R101.2 Scope

• 2. Owner-occupied lodging houses with five or fewer guestrooms shall be permitted to be constructed in accordance with the *International Residential Code for One- and Two-family Dwellings* when equipped with a fire sprinkler system in accordance with Section P2904.

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Ct exception

• 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.

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

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• (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 Administrative 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.

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• (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 section 29-317 of the Connecticut General Statutes, and the regulations known as the Connecticut Oil Burning Equipment Code adopted by the Commissioner of Administrative Services under the authority of section 29-317 of the Connecticut General Statutes.

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- (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.

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- (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.

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- (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.

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• (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.

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• (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.

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• (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 means 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.

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- (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.

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- (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.

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- (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:

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• **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 m²).
- 2. Fences not over 7 feet (2134 mm) high.
- 3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
- 4. Water tanks supported directly upon *grade* if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
- 5. Sidewalks, driveways and on-grade concrete or masonry patios not more than 30 inches (762 mm) above adjacent grade and not over any basement or story below.

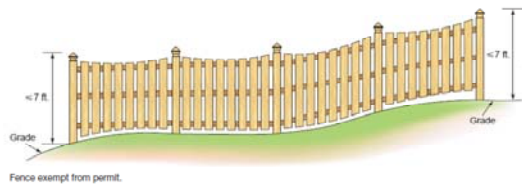
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- 6. Painting, papering, tiling, carpeting, cabinets, countertops and similar finish work not involving structural changes or alterations.
- 7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
- 8. Swings, non-habitable tree houses and other playground equipment.
- 9. Window awnings supported by an exterior wall which do not project more than 54 inches (137 mm) from the exterior wall and do not require additional support.
- 10. Decks not exceeding 200 square feet (18.58 m²) in area, that are not more than 30 inches (762 mm) above *grade* at any point, are not attached to a *dwelling* 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.

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CHAPTER 2 DEFINITIONS

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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.

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.

ACCESSORY STRUCTURE. A structure not greater than 3,000 square feet (279 m2) in floor area, and not over two stories in height, the use of which is customarily accessory to and incidental to that of the dwelling(s) and which is located on the same lot.

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• **GUESTROOM.** Any room or rooms used or intended to be used by one or more guests for living or sleeping purposes.

• **LODGING HOUSE.** A one-family dwelling where one or more occupants are primarily permanent in nature, and rent is paid for guestrooms.

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- **ATTIC, HABITABLE.** A finished or unfinished area, not considered a *story*, complying with all of the following requirements:
 1. The occupiable floor area is at least 70 square feet (17m²), in accordance with Section R304,
 2. The occupiable floor area has a ceiling height in accordance with Section R305, and
 3. The occupiable space is enclosed by the roof assembly above, knee walls (if applicable) on the sides and the floor-ceiling assembly below.

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

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- **FIRE SEPARATION DISTANCE.** The distance measured 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 *lot*.
- The distance shall be measured at a right angle from the face of the wall.



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- **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.
- **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*.

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- **STRUCTURAL COMPOSITE LUMBER.** Structural members manufactured using wood elements bonded together with exterior adhesives. Examples of structural composite lumber are:
 - **Laminated veneer lumber (LVL).** A composite of wood veneer elements with wood fibers primarily oriented along the length of the member, where the veneer element thicknesses are 0.25 inches (6.4 mm) or less.
 - **Parallel strand lumber (PSL).** A composite of wood strand elements with wood fibers primarily oriented at the length of the member, where the least dimension of the wood strand element is 0.25 inch (6.4 mm) or less and their average lengths are a minimum of 300 times the least dimension of the wood strand elements.
- **Laminated strand lumber (LSL).** A composite of wood strand elements with wood fibers primarily oriented along the length of the member, where the least dimension of the wood strand elements is 0.10 inch (2.54 mm) or less and their average lengths are a minimum of 150 times the least dimension of the wood strand elements.
- **Oriented strand lumber (OSL).** A composite of wood strand elements with wood fibers primarily oriented along the length of the member, where the least dimension of the wood strand elements is 0.10 inch (2.54 mm) or less and their average lengths are a minimum of 75 times and less than 150 times the least dimension of the wood strand elements.

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- **STAIR.** A change in elevation, consisting of one or more risers.
- **STAIRWAY.** One or more flights of stairs, either interior or exterior, with the necessary landings and platforms connecting them to form a continuous and uninterrupted passage from one level to another within or attached to a building, porch or deck.
- **FLIGHT.** A continuous run of rectangular treads or winders or combination thereof from one landing to another.

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- **NATURALLY DURABLE WOOD.** The heartwood of the following species with the exception that an occasional piece with corner sapwood is permitted if 90 percent or more of the width of each side on which it occurs is heartwood.
- **Decay resistant.** Redwood, cedar, black locust and black walnut.
- **Termite resistant.** Alaska yellow cedar, redwood, Eastern red cedar and Western red cedar including all sapwood of Western red cedar.

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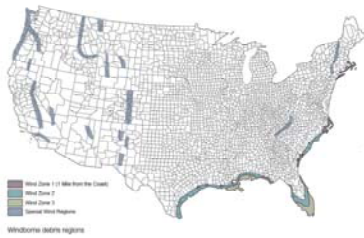
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CHAPTER 3 BUILDING PLANNING

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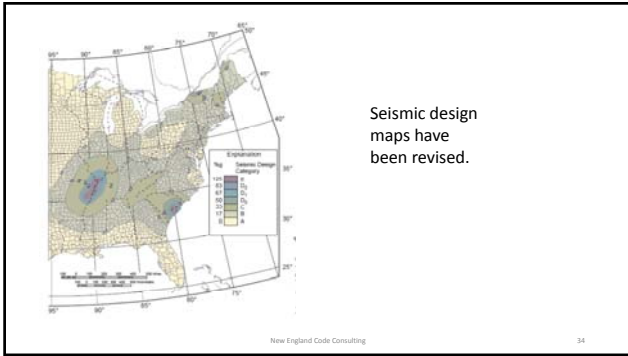


Wind borne debris areas have been updated.

Windborne debris regions

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R301.2.2 Seismic Provisions. The seismic provisions of this code shall apply to buildings constructed in Seismic Design Categories C, D0, D1 and D2, as determined in accordance with this section as follows: see appendix R

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- (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.

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•Appendix R

Municipality	Basic Wind Speed (1 minute gust) (mph)	Seismic Design Categories ^a	
		Site Class A-F ^b	Site Class E
Andover	110	II	II
Amherst	110	II	II
Amherst College	110	II	II
Amherst Regional	110	II	II
Belmont	110	II	II
Beverly	110	II	II
Beverly Hills	110	II	II
Billerica	110	II	II
Billerica Regional	110	II	II
Billerica Town	110	II	II
Billerica Village	110	II	II
Billerica West	110	II	II
Billerica Woods	110	II	II
Billerica Woods II	110	II	II
Billerica Woods III	110	II	II
Billerica Woods IV	110	II	II
Billerica Woods V	110	II	II
Billerica Woods VI	110	II	II
Billerica Woods VII	110	II	II
Billerica Woods VIII	110	II	II
Billerica Woods IX	110	II	II
Billerica Woods X	110	II	II
Billerica Woods XI	110	II	II
Billerica Woods XII	110	II	II
Billerica Woods XIII	110	II	II
Billerica Woods XIV	110	II	II
Billerica Woods XV	110	II	II
Billerica Woods XVI	110	II	II
Billerica Woods XVII	110	II	II
Billerica Woods XVIII	110	II	II
Billerica Woods XIX	110	II	II
Billerica Woods XX	110	II	II
Billerica Woods XXI	110	II	II
Billerica Woods XXII	110	II	II
Billerica Woods XXIII	110	II	II
Billerica Woods XXIV	110	II	II
Billerica Woods XXV	110	II	II
Billerica Woods XXVI	110	II	II
Billerica Woods XXVII	110	II	II
Billerica Woods XXVIII	110	II	II
Billerica Woods XXIX	110	II	II
Billerica Woods XXX	110	II	II
Billerica Woods XXXI	110	II	II
Billerica Woods XXXII	110	II	II
Billerica Woods XXXIII	110	II	II
Billerica Woods XXXIV	110	II	II
Billerica Woods XXXV	110	II	II
Billerica Woods XXXVI	110	II	II
Billerica Woods XXXVII	110	II	II
Billerica Woods XXXVIII	110	II	II
Billerica Woods XXXIX	110	II	II
Billerica Woods XL	110	II	II
Billerica Woods XLI	110	II	II
Billerica Woods XLII	110	II	II
Billerica Woods XLIII	110	II	II
Billerica Woods XLIV	110	II	II
Billerica Woods XLV	110	II	II
Billerica Woods XLVI	110	II	II
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Billerica Woods XLVIII	110	II	II
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Billerica Woods L	110	II	II
Billerica Woods LI	110	II	II
Billerica Woods LII	110	II	II
Billerica Woods LIII	110	II	II
Billerica Woods LIV	110	II	II
Billerica Woods LV	110	II	II
Billerica Woods LVI	110	II	II
Billerica Woods LVII	110	II	II
Billerica Woods LVIII	110	II	II
Billerica Woods LVIX	110	II	II
Billerica Woods LX	110	II	II
Billerica Woods LXI	110	II	II
Billerica Woods LXII	110	II	II
Billerica Woods LXIII	110	II	II
Billerica Woods LXIV	110	II	II
Billerica Woods LXV	110	II	II
Billerica Woods LXVI	110	II	II
Billerica Woods LXVII	110	II	II
Billerica Woods LXVIII	110	II	II
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Billerica Woods LXXXXXXXVI	110	II	II
Billerica Woods LXXXXXXXVII	110	II	II
Billerica Woods LXXXXXXXVIII	110	II	II
Billerica Woods LXXXXXXXIX	110	II	II
Billerica Woods LXXXXXXX	110	II	II

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2012 CODE: R302.1 Exterior Walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1); or for dwellings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904 shall comply with Table R302.1(2).

TABLE R302.1(1) Exterior Walls.

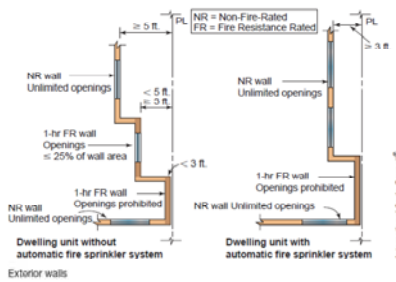
Exterior Wall Element	Minimum Fire Resistance Rating	Maximum Fire Separation Distance
Walls	1-hour limited by automatic sprinkler system with 2001 wall requirement	< 3 feet
	0-hour	> 3 feet
Projections	1-hour on the exterior side	< 3 feet to < 3 feet
	0-hour	> 3 feet
Openings in walls	Not allowed	< 3 feet
	25% maximum of Wall Area	< 3 feet
Penetrations	Classified	< 3 feet
	Classified with Section R302.4	< 3 feet
	Not required	< 3 feet

TABLE R302.1(2) Exterior Walls—Dwellings with Fire Sprinklers

Exterior Wall Element	Minimum Fire Resistance Rating	Maximum Fire Separation Distance
Walls	0-hour resistance with automatic sprinkler system with Section R302.4	< 3 feet
	0-hour	> 3 feet
Projections	0-hour	< 3 feet
	0-hour	> 3 feet
Openings in walls	Not allowed	< 3 feet
	Unlimited	< 3 feet
Penetrations	All	< 3 feet
	Classified with Section R302.4	< 3 feet
	Not required	< 3 feet

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- **R302.2.2 Parapets.** Parapets constructed in accordance with Section R302.2.3 shall be constructed for townhouses as an extension of exterior walls or common walls in accordance with the following:
 1. Where roof surfaces adjacent to the wall or walls are at the same elevation, the parapet shall extend not less than 30 inches (762 mm) above the roof surfaces.
 2. Where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is not more than 30 inches (762 mm) above the lower roof, the parapet shall extend not less than 30 inches (762 mm) above the lower roof surface.

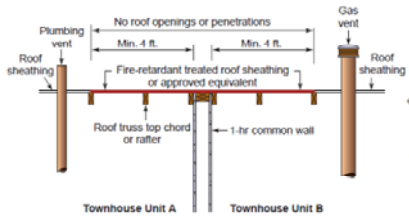
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- **Exception:** A parapet is not required in the two cases above when the roof is covered with a minimum class C roof covering, and the roof decking or sheathing is of noncombustible materials or approved fire-retardant-treated wood for a distance of 4 feet (1219 mm) on each side of the wall or walls, or one layer of 5/8-inch (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing, supported by a minimum of nominal 2-inch (51 mm) ledgers attached to the sides of the roof framing members, for a minimum distance of 4 feet (1219 mm) on each side of the wall or walls **and there are no openings or penetrations in the roof within 4 feet (1219 mm) of the common walls.**

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No roof openings or penetrations within 4 feet of the townhouse separation are allowed when using the exception to the parapet provisions.

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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 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8-inches (35 mm) thick, or 20-minute fire-rated doors, equipped with a self-closing device.

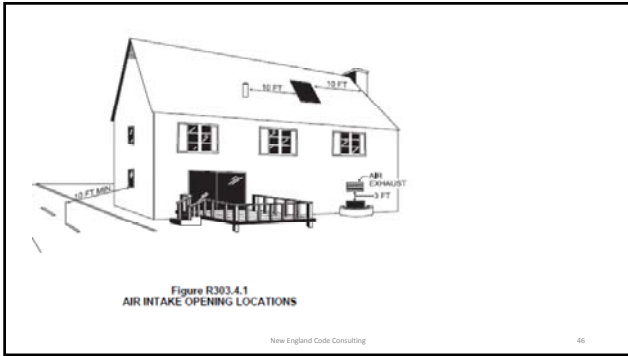
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R303.4 Mechanical ventilation. Where the air infiltration rate of a dwelling unit is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2 inch w.c (50 Pa) in accordance with Section N1102.4.1.2, the dwelling unit shall be provided with whole-house mechanical ventilation in accordance with Section M1507.3.

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• **R303.5.1 Intake openings.** Mechanical and gravity outdoor air intake openings shall be located a minimum of 10 feet (3048 mm) from any hazardous or noxious contaminant, such as vents, chimneys, plumbing vents, streets, alleys, parking lots and loading docks, except as otherwise specified in this code. Where a source of contaminant is located within 10 feet (3048 mm) of an intake opening, such opening shall be located a minimum of 3 feet (914 mm) below the contaminant source. For the purpose of this section, the exhaust from dwelling unit toilet rooms, bathrooms and kitchens shall not be considered as hazardous or noxious.

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• **R303.7 Stairway illumination.** All interior and exterior stairways shall be provided with a means to illuminate the stairs, including the landings and treads. Interior stairways shall be provided with an artificial light source located in the immediate vicinity of each landing of the stairway. For interior stairs the artificial light sources shall be capable of illuminating treads and landings to levels not less than 1 foot-candle (11 lux) measured at the center of treads and landings. Exterior stairways shall be provided with an artificial light source located in the immediate vicinity of the top landing of the stairway. Exterior stairways providing access to a *basement* from the outside *grade* level shall be provided with an artificial light source located in the immediate vicinity of the bottom landing of the stairway.

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• **R308.1 Identification.** Except as indicated in Section R308.1.1 each pane of glazing installed in hazardous locations as defined in Section R308.4 shall be provided with a manufacturer's designation specifying who applied the designation, designating the type of glass and the safety glazing standard with which it complies, which is visible in the final installation. The designation shall be acid etched, sandblasted, ceramic-fired, laser etched, embossed, or be of a type which once applied cannot be removed without being destroyed. A *label* shall be permitted in lieu of the manufacturer's designation.

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• **Exceptions:**

- 1. For other than tempered glass, manufacturer’s designations are not required provided the *building official* approves the use of a certificate, affidavit or other evidence confirming compliance with this code.
- 2. Tempered spandrel glass is permitted to be identified by the manufacturer with a removable paper designation.

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- **R308.1.1 Identification of multiple assemblies.** Multi-pane assemblies having individual panes not exceeding 1 square foot (0.09 m2) in exposed area shall have at least one pane in the assembly identified in accordance with Section R308.1. All other panes in the assembly shall be *labeled* “CPSC 16 CFR 1201” or “ANSI Z97.1” as appropriate.
- **R308.2 Louvered windows or жалousies.** Regular, float, wired or patterned glass in жалousies and louvered windows shall be no thinner than nominal 3/16 inch (5 mm) and no longer than 48 inches (1219 mm). Exposed glass edges shall be smooth.

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- **R308.2.1 Wired glass prohibited.** Wired glass with wire exposed on longitudinal edges shall not be used in жалousies or louvered windows.
- **R308.3 Human impact loads.** Individual glazed areas, including glass mirrors in hazardous locations such as those indicated as defined in Section R308.4, shall pass the test requirements of Section R308.3.1.

• **Exceptions:**

- 1. Louvered windows and жалousies shall comply with Section R308.2.
- 2. Mirrors and other glass panels mounted or hung on a surface that provides a continuous backing support.
- 3. Glass unit masonry complying with Section R610.

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- **R308.4 Hazardous locations.** The locations specified in Sections R308.4.1 through R308.4.7 shall be considered specific hazardous locations for the purposes of glazing.

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- **R308.4.1 Glazing in doors.** Glazing in all fixed and operable panels of swinging, sliding and bi-fold doors shall be considered a hazardous location.

1

Exceptions:

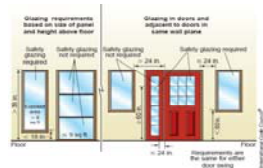
- 1. Glazed openings of a size through which a 3-inch diameter (76 mm) sphere is unable to pass.
- 2. Decorative glazing.

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- **R308.4.2 Glazing adjacent doors.** Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge of the glazing is within a 24-inch (610 mm) arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) above the floor or walking surface shall be considered a hazardous location.

2



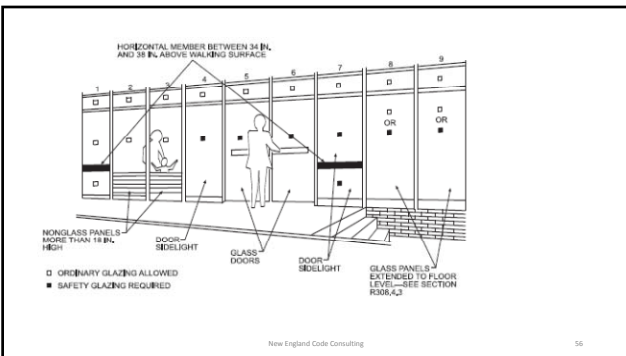
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- **R308.4.3 Glazing in windows.** Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered a hazardous location:
 1. The exposed area of an individual pane is larger than 9 square feet (0.836 m²);
 2. The bottom edge of the glazing is less than 18 inches (457 mm) above the floor;
 3. The top edge of the glazing is more than 36 inches (914 mm) above the floor; and
 4. One or more walking surfaces are within 36 inches (914 mm), measured horizontally and in a straight line, of the glazing.

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- **R308.4.4 Glazing in guards and railings.** Glazing in guards and railings, including structural baluster panels and nonstructural in-fill panels, regardless of area or height above a walking surface shall be considered a hazardous location.

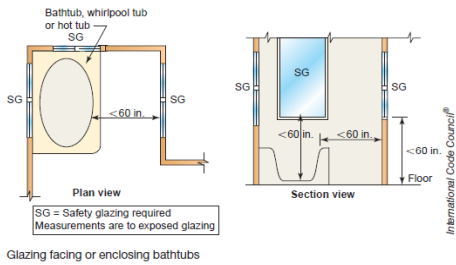
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- **R308.4.5 Glazing and wet surfaces.** Glazing in walls, enclosures or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and indoor or outdoor swimming pools where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface shall be considered a hazardous location. This shall apply to single glazing and all panes in multiple glazing.

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SG = Safety glazing required
Measurements are to exposed glazing

Glazing facing or enclosing bathtubs

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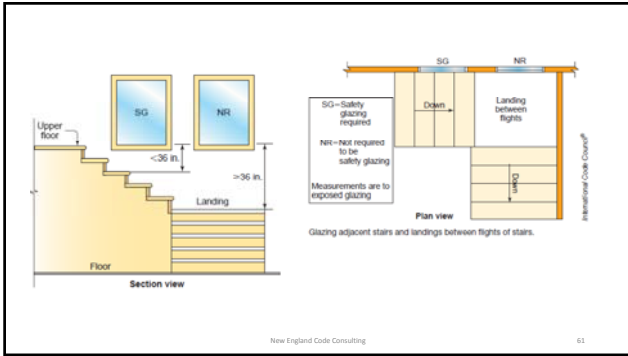
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- **R308.4.6 Glazing adjacent stairs and ramps.** Glazing where the bottom exposed edge of the glazing is less than 36 inches (914 mm) above the plane of the adjacent walking surface of stairways, landings between flights of stairs and ramps shall be considered a hazardous location.

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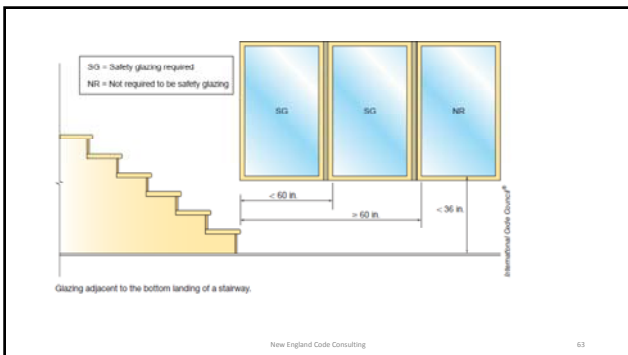
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• **R308.4.7 Glazing adjacent to the bottom stair landing.**
Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches (914 mm) above the landing and within 60 inches (1524 mm) horizontally of the bottom tread shall be considered a hazardous location.

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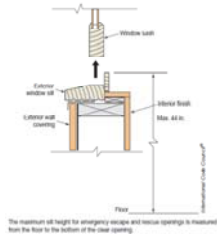


- **R309.4 Automatic garage door openers.** Automatic garage door openers, if provided, shall be listed and labeled in accordance with UL 325.
- The code does not require an automatic garage door opener. However, if one is installed, it must be listed and labeled in accordance with UL 325. Federal law requires automatic residential garage door openers to conform to the entrapment protection requirements of UL 325.

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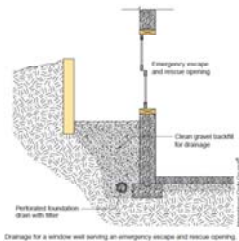
- **R310.1 Emergency escape and rescue required.** Basements, habitable attics and every sleeping room shall have at least one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches (1118 mm) measured from the finished floor to the bottom of the clear opening.....



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- **R310.2.2 Drainage.** Window wells shall be designed for proper drainage by connecting to the building's foundation drainage system required by Section R405.1 or by an approved alternative method.
- **Exception:** A drainage system for window wells is not required when the foundation is on well-drained soil or sand-gravel mixture soils according to the United Soil Classification System, Group I Soils, as detailed in Table R405.1.



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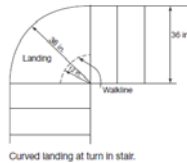
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- **R311.4 Vertical egress.** Egress from habitable levels including habitable attics and *basements* not provided with an egress door in accordance with Section R311.2 shall be by a ramp in accordance with Section R311.8 or a stairway in accordance with Section R311.7.

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- **R311.7.6 Landings for stairways.** There shall be a floor or landing at the top and bottom of each stairway. The minimum width perpendicular to the direction of travel shall be no less than the width of the flight served. Landings of shapes other than square or rectangular shall be permitted provided the depth at the walk line and the total area is not less than that of a quarter circle with a radius equal to the required landing width. Where the stairway has a straight run, the minimum depth in the direction of travel shall be not less than 36 inches.



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- **R311.8.1 Maximum slope.** Ramps shall have a maximum slope of 1 unit vertical in 12 units horizontal (8.3-percent slope).
- **Exception:** Where it is technically infeasible to comply because of site constraints, ramps may have a maximum slope of one unit vertical in eight horizontal (12.5-percent slope).

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• **R312.1.1 Where required.** *Guards* shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or *grade* below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a *guard*.

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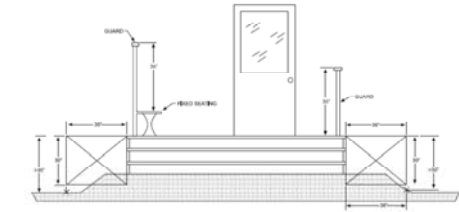


FIG. 312.1.1

Figure R312.1.1
DROP OFF AND GUARD HEIGHT REQUIREMENTS

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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 are not a walking surface.

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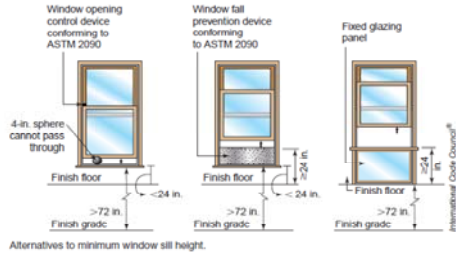
• **R312.2.1 Window sills.** In dwelling units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610 mm) above the finished floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4- inch-diameter (102 mm) sphere where such openings are located within 24 inches (610 mm) of the finished floor.

• **Exceptions:**

- 1. Windows whose openings will not allow a 4-inch diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position.
- 2. Openings that are provided with window fall prevention devices that comply with ASTM F 2090.
- 3. Windows that are provided with window opening control devices that comply with Section R312.2.2.

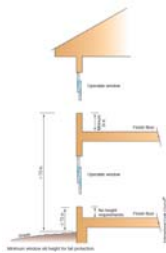
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- **R314.3 Location.** Smoke alarms shall be installed in the following locations:
 1. In each sleeping room.
 2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
 3. On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

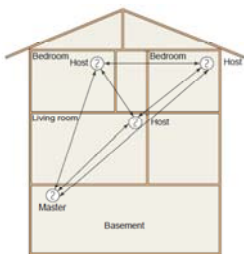
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- **R314.5 Interconnection.** Where more than one smoke alarm is required to be installed within an individual dwelling unit in accordance with Section R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

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Smoke Alarms



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- **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 unit* shall be equipped with smoke alarms located as required for new *dwellings*.
- **Exceptions:**
 1. Work involving the exterior surfaces of *dwellings*, such as the replacement of roofing or siding, or the *addition* or replacement of windows or doors, or the *addition* of a porch or deck, are exempt from the requirements of this section.

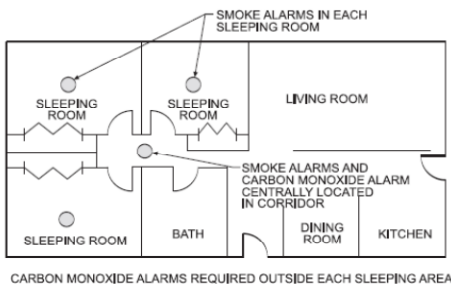
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- **R315.1 Carbon monoxide alarms.** Carbon monoxide alarms shall be installed outside of each sleeping area in the immediate vicinity of the bedrooms and on each additional habitable level of the dwelling unit. When more than one carbon monoxide alarm 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.

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• **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 a 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.

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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.

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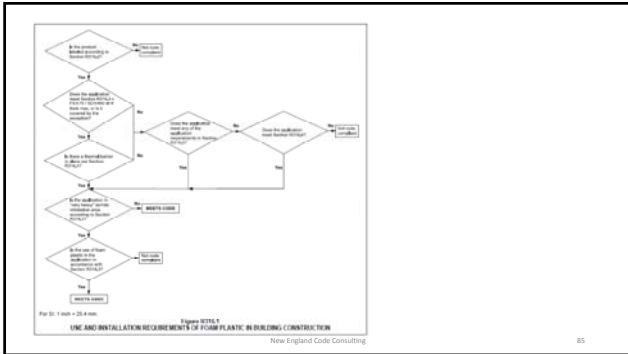
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Foam Plastic

• **R316.2 Labeling and identification.** Packages and containers of foam plastic insulation and foam plastic insulation components delivered to the job site shall bear the *label* of an *approved agency* showing the manufacturer's name, the product listing, product identification and information sufficient to determine that the end use will comply with the requirements.

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• R317.3 Fasteners and connectors in contact with preservative-treated and fire-retardant-treated wood.
Fasteners, including nuts and washers, and connectors in contact with preservative-treated wood and fire-retardant-treated wood shall be in accordance with this section. The coating weights for zinc-coated fasteners shall be in accordance with ASTM A 153.

• R317.3.1 Fasteners for preservative-treated wood.
Fasteners, including nuts and washers, for preservative-treated wood shall be of hot-dipped, zinc-coated galvanized steel, stainless steel, silicon bronze or copper. Coating types and weights for connectors in contact with preservative-treated wood shall be in accordance with the connector manufacturer's recommendations. In the absence of manufacturer's recommendations, a minimum of ASTM A 653 type G185 zinc-coated galvanized steel, or equivalent, shall be used.

• Exceptions:

- 1. One-half-inch-diameter (12.7 mm) or greater steel bolts.
- 2. Fasteners other than nails and timber rivets shall be permitted to be of mechanically deposited zinc coated steel with coating weights in accordance with ASTM B 695, Class 55 minimum.
- 3. Plain carbon steel fasteners in SBX/DOT and zinc borate preservative-treated wood in an interior, dry environment shall be permitted.

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• R317.3.3 Fasteners for fire-retardant-treated wood used in exterior applications or wet or damp locations. Fasteners, including nuts and washers, for fire-retardant-treated wood used in exterior applications or wet or damp locations shall be of hot-dipped, zinc-coated galvanized steel, stainless steel, silicon bronze or copper. Fasteners other than nails and timber rivets shall be permitted to be of mechanically deposited zinc-coated steel with coating weights in accordance with ASTM B 695, Class 55 minimum.

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• R317.3.4 Fasteners for fire-retardant-treated wood used in interior applications. Fasteners, including nuts and washers, for fire-retardant-treated wood used in interior locations shall be in accordance with the manufacturer's recommendations. In the absence of the manufacturer's recommendations, Section R317.3.3 shall apply.

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- **R317.4 Wood/plastic composites.** Wood/plastic composites used in exterior deck boards, stair treads, handrails and guardrail systems shall bear a *label* indicating the required performance levels and demonstrating compliance with the provisions of ASTM D 7032.

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- **R317.4.1 Labeling.** Deck boards and stair treads shall bear a label that indicates compliance to ASTM D 7032 and includes the allowable load and maximum allowable span. Handrails and guardrail systems or their packaging shall bear a label that indicates compliance to ASTM D 7032 and includes the maximum allowable span.
- **R317.4.2 Installation.** Wood/plastic composites shall be installed in accordance with the manufacturer's instructions.

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- **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.

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•(Del) **SECTION R320 – ACCESSIBILITY.** Delete section in its entirety and replace with the following:

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- **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.
- **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.

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- **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.

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• **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.

• **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.

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• **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.

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• **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.

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• **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.

• **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.

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• **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.

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• **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 section 14-253a 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.

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• **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 regulatory provisions, those requirements shall prevail.

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• **R322.1 General.** Buildings and structures constructed in whole or in part in flood hazard areas (including A or V Zones) as established in Table R301.2(1) shall be designed and constructed in accordance with the provisions contained in this section. Buildings and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with ASCE 24.

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• (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.

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• (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.

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• (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 are not a walking surface.

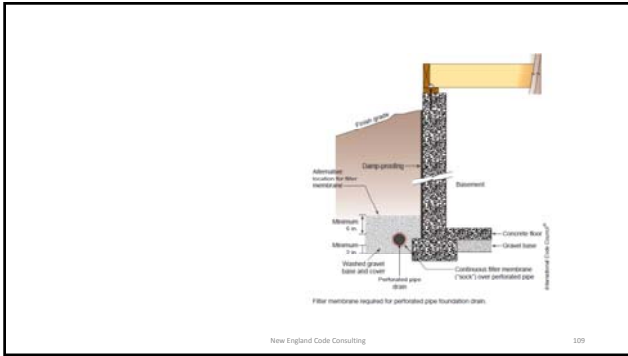
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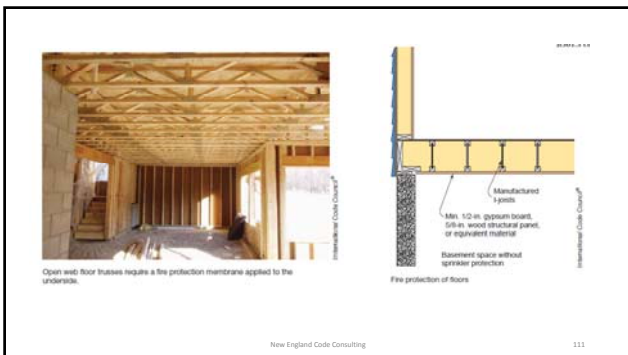
• **R405.1 Concrete or masonry foundations.** Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below *grade*. Drainage tiles, gravel or crushed stone drains, perforated pipe or other *approved* systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an *approved* drainage system. Gravel or crushed stone drains shall extend at least 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an *approved* filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Perforated drains shall be surrounded with an *approved* filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on a minimum of 2 inches (51 mm) of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered

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• **R501.3 Fire protection of floors.** Floor assemblies, not required elsewhere in this code to be fire-resistance rated, shall be provided with a 1/2-inch (12.7 mm) gypsum wallboard membrane, 5/8-inch (16 mm) wood structural panel membrane, or equivalent on the underside of the floor framing member.



THE END

For Today

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