



Building Planning
Chapter 3 of the
International Residential Code
Presented by
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Seven horizontal lines for notes.

Chapter 3 Building Planning

- Provides guidelines for the minimum level of structural integrity, life safety, fire safety & livability of 1 & 2 family dwelling and town houses 3 stories above average grade plan.
It is a compilation of requirements specific to building planning, design & construction.
It sets forth the requirements for lighting, ventilation, sanitation, minimum rooms size, ceiling height environmental comfort.
It includes the limitations on glazing for hazardous areas specifications for stairs, guards, means of egress, snow, wind, seismic, flood loads as well as live and dead loads.

Seven horizontal lines for notes.

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- Section R301 Design Criteria
R301.1 Application-Buildings, structures, & all parts thereof, shall be constructed to support all loads. The constructions shall result in a system that provides a complete load path from their point of origin through the load-resisting elements to the foundation.
R301.1.1 Alternative provisions-The following can be used as an alternative; The wood frame construction manual, the standard for cold-formed steel framing, ICC-400 design & construction of log structures. If engineering is used with the design of these standards the design shall comply with the IBC.

Seven horizontal lines for notes.

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- R301.1.2 Construction systems-Light frame buildings are based on platform & balloon frame & concrete & masonry are based on balloon framing.
- R301.1.3 Engineered design-where structural elements exceeds the requirements of this code accepted engineering practice is allowed for that element and the remaining elements may still meet the requirement of this code. Engineering design in accordance with the IBC is permitted for building, structures and parts thereof included in the scope of this code.

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- R301.2 Climatic & geographic design criteria-Buildings shall be constructed in accordance with the provisions of this code as limited by the provisions of this section. Additional criteria shall be established by the local jurisdiction and set forth in table R301.2.1 as amended by the CT. 2013 supplement.

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

GROUND SNOW LOAD: 30 pounds per square foot

WIND SPEED* (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: Weathering¹ Severe
Frost Load Depth: 42 inches
Venture: Moderate to Heavy

WINTER DESIGN TEMPERATURE: 79 F

ICE SHIELD UNDERLAYMENT REQUIRED: Yes

FLOOD HAZARDS: To be determined locally

AIR FREEZING INDEX: 1,500 or less

MEAN ANNUAL TEMPERATURE: 50² F

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- (Amd) R301.2.1 Wind limitations-Construction for buildings shall be in accordance with the wind provisions of the basic wind speeds in table R301.2(1) as determined by Appendix R. Where not otherwise specified, the wind loads of table R301.2(2) adjusted for height & exposure in table R301.2(3) shall be used to determine the design load requirements of wall coverings, curtain walls, roof covering, exterior windows, skylights, garage doors and exterior doors.
- (DEL) R301.2.1.1 Design criteria- With the deletion of this section there is no more high wind requirements in CT.

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TABLE R301.2(2)
COMBINATION WIND SPEEDS FOR BUILDING EXPOSURE CATEGORIES
WIND SPEEDS IN MPH (MINIMUM TO MAXIMUM)

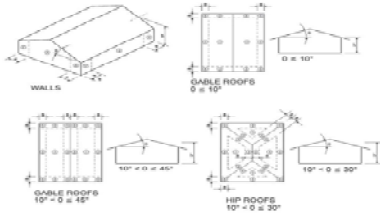
WIND SPEED CATEGORY	EXPOSURE CATEGORY	WIND SPEED (MPH)									
		15	20	25	30	35	40	45	50	55	60
I	A	15	20	25	30	35	40	45	50	55	60
	B	15	20	25	30	35	40	45	50	55	60
	C	15	20	25	30	35	40	45	50	55	60
	D	15	20	25	30	35	40	45	50	55	60
	E	15	20	25	30	35	40	45	50	55	60
	F	15	20	25	30	35	40	45	50	55	60
	G	15	20	25	30	35	40	45	50	55	60
	H	15	20	25	30	35	40	45	50	55	60
	I	15	20	25	30	35	40	45	50	55	60
	J	15	20	25	30	35	40	45	50	55	60
II	A	15	20	25	30	35	40	45	50	55	60
	B	15	20	25	30	35	40	45	50	55	60
	C	15	20	25	30	35	40	45	50	55	60
	D	15	20	25	30	35	40	45	50	55	60
	E	15	20	25	30	35	40	45	50	55	60
	F	15	20	25	30	35	40	45	50	55	60
	G	15	20	25	30	35	40	45	50	55	60
	H	15	20	25	30	35	40	45	50	55	60
	I	15	20	25	30	35	40	45	50	55	60
	J	15	20	25	30	35	40	45	50	55	60

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TABLE R301.2(3)
HEIGHT AND EXPOSURE ADJUSTMENT COEFFICIENTS FOR TABLE R301.2(2)

MEAN ROOF HEIGHT	EXPOSURE		
	B	C	D
15	1.00	1.21	1.47
20	1.00	1.29	1.55
25	1.00	1.35	1.61
30	1.00	1.40	1.66
35	1.05	1.45	1.70
40	1.09	1.49	1.74
45	1.12	1.53	1.78
50	1.16	1.56	1.81
55	1.19	1.59	1.84
60	1.22	1.62	1.87

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- R301.2.1.2 Protection of openings-Openings in buildings located in wind borne debris regions shall have the glazing protected in accordance with ASTM E 1996 & 1886, garage doors with glazing need to meet the requirements of ANSI/DASMA 115. The exception for wood structural panels is still in place.
- The question is with the deletion of R301.2.11 how do we get to wind borne debris regions.

Chapter 2 Definitions

- (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 certified by a registered design professional may be classified as being outside of a wind-borne debris region.

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- (Amd) R301.2.1.3 Wind speed conversion-Where referenced documents reference fastest mile table R301.2.1.3 must be used to convert to the 3-second gust required by CT.
- (Amd) R301.2.1.4 Exposure category- For each wind direction considered, an exposure category that adequately reflects the characteristics of the ground surfaces shall be determined for the site which the building or structure is to be considered.
- (Amd)R301.2.2.1 Determination of seismic design category-Buildings shall be assigned a SDC in accordance with Appendix R. Soil site classes shall be defined in 1615.1.1 of the IBC.

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TABLE R301.2.1.3
EQUIVALENT BASIC WIND SPEEDS^a

3-second gust, V_{3s}	85	90	100	105	110	120	125	130	140	145	150	160	170
Fastest mile, V_{1m}	71	76	85	90	95	104	109	114	123	128	133	142	152

For SDC 1 and for Area II - 0.447 mph.
a. Linear interpolation is permitted.

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- R301.2.3 Snow Loads-Based on the ground snow load for CT. of 30 lbs. per sq. ft. the prescriptive table allows up to 70 lbs. per sq. ft. over that the design shall be in accordance with accepted engineering practices.

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- R301.3 Story height-Determined in accordance with these provisions and shall be limited to story heights of not more than:
Wood framed wall 10' plus floor framing of 16", 12' allowed with wall bracing increased by 1.10 for wind and 1.20 for seismic.
Steel walls 10' plus 16" floor framing.
Masonry walls 12' plus 16" floor framing (gables add 8')
Walls exceeding chapter 6 requires engineering, when the story height is exceeded the engineering design must be in accordance with IBC for both wind and seismic.

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- R301.4 Dead load-Actual weight of material & construction with consideration for the dead load of fixed service equipment.
- (Amd) R301.6 Roof load-Shall be designed for the 30 lb. snow load in table 301.2(1)
- (Add) R301.9 Ungraded lumber-29-256b of the CGS allows the use of ungraded lumber in accessory structures.
- Accessory structure-is now limited to 3,000 sq. ft. and not over 2 stories in height.

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- Table R301.5 Minimum uniformly distributed live loads-New 30 lbs. live load for habitable attics.
- Change-Exterior balconies & decks are now 40 lbs. live load, the 03 had balconies at 60 lbs. live load.

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TABLE R302.5
MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS
(in pounds per square foot)

USE	LIVE LOAD
Attics without storage ^a	10
Attics with limited storage ^{b,c}	20
Habitable attics and attics served with fixed stairs	30
Balconies (exterior) and decks ^d	40
Fire escapes	40
Guardrails and handrails ^e	200 ^f
Guardrail in-fill components ^g	50 ^f
Passenger vehicle garages ^h	50 ^f
Rooms other than sleeping room	40
Sleeping rooms	30
Stairs	40 ^f

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- R302 Fire-Resistant Construction
- R302.1 Exterior walls-Of dwellings and accessory buildings shall comply with table 301.2 with 5 exceptions:
 - 1) walls, projections, openings perpendicular to line for fire separation distance.
 - 2) walls of dwellings and accessory structures on same lot.
 - 3) structures exempt from permits,
 - 4) detached garages located within 2ft. Of lot line with 4 " projections and
 - 5) foundation vents installed to code.

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- (Amd) Townhouses-shall be considered a separate building and shall be separated by fire-resistance rated walls meeting the requirements of R302.1 and table R302.1.
- R302.2.1 Continuity-Requires the walls separating townhouses to be continuous from the foundation to the underside of the roof sheathing, deck or slab.

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- R302.2.2 Parapets-Shall be constructed for townhouses as an extension of exterior walls or common walls in accordance with the following:
 - 1) When the roof surface or wall is at the same elevation the parapet shall extend not less than 30" above the roof.
 - 2) When the roof surface or wall is not more than 30" from higher to lower roof the parapet shall extend not less than 30" above the lower roof.
 - 3) Not required where the upper roof is greater than 30" from the lower roof and the common wall is a minimum of 1 hr. rated on both sides. Exception:

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- A parapet is not required with a class C roofing system, roof decking or sheathing is non-combustible or fire-retardant treated wood 4' each side of wall or 5/8" type X gypsum is applied directly below decking or sheathing 4' each side of wall supported by 2" ledgers attached to framing.

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- (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 & wall sheathing from each unit fastened to the common wall framing.
 - 3) Non structural wall & roof covering.
 - 4) Flashing at termination of roof covering over common walls.
 - 5) Townhouses separated by a common fire-resistance rated wall as provided in R302.2 (IE 2 Hr. common wall).

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(Amd) TABLE R302.1 EXTERIOR WALLS

EXTERIOR WALL ELEMENT	FIRE-RESISTANCE RATING	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	0 hours	< 5 feet
Walls (Not fire-resistance rated)	0 hours	0 hours	≥ 5 feet
Projections (Fire-resistance rated)	1 hour on the underside	0 hours	≥ 2 feet to 5 feet
Projections (Not fire-resistance rated)	0 hours	0 hours	5 feet
Not allowed	Not allowed	N/A	< 3 feet
Openings in walls	25% maximum of wall area	0 hours	3 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.

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- (Amd)R302.3 Two-Family dwellings-Requires a 1 Hr. rated wall or floor/ceiling between units and common spaces serving both units, extending to walls and underside of roof sheathing.
- Exception #1 allows for ½ hour rating with the use of a NFPA 13 sprinkler system.
- Exception #2 allows the one hour dwelling separation to extend to the ceiling where there is 5/8" type X gypsum, the attic is draft stopped along the separation wall and the structural supporting wall are protected by ½" gypsum board.

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- R302.3.1 Supporting construction-Requires the rated floor assembly to have supported construction equal to or greater than the rated floor assembly.
- (Amd) R302.5.1 Opening protections-From garage to dwelling not allowed from a sleeping area, shall be solid door 1 3/8" thick, solid or honey comb core steel door 1 3/8" thick or a 20 minute rated door in a solid wood jamb, the door shall be equipped with a self-closing device.
- R302.5.2 Duct penetration-Allows ducts in garage penetrating the wall or ceiling separation with the ducts being 26 gage and no openings into the garage.

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- (Amd) R302.5.3 Other penetrations-into and through the rated wall shall be protected by R302.11 Item 4.
- (Amd) R302.6 Dwelling/garage fire separation-Must comply with table R306.
- Exception: Wood structural members of a minimum specified dimension of type 4 construction in accordance with the IBC.
- R302.7 Under-stair protection-Enclosed accessible spaces under stairs shall have walls, under-stair surfaces and any soffit protected with ½” gypsum.

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SEPARATION	MATERIAL
From the residence and attic	Not less than ½ inch gypsum board or equivalent applied to the garage side
From all habitable rooms above the garage	Not less than ½ inch Type X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than ½ inch gypsum board or equivalent
Garages located less than 10 feet from a dwelling unit on the same lot	Not less than ½ inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area

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- R302.10.1 Insulation-Shall have a flame spread index of 25 & a smoke development of 450, exposed attic insulation shall have a critical radiant flux not less than 0.12 watts per sq. centimeter.
- R302.11 Fire blocking-Required in combustible construction, designed to cut off concealed draft openings, both vertical and horizontal, there are 6 locations that require fire blocking.
- Batts or blankets of mineral or glass fiber are allowed to meet the 10’ horizontal wall requirements.

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- R302.12 Draftstopping-Required in combustible construction, shall be installed in concealed spaces of floor/ceiling not exceeding 1,000 sq. ft. The material shall not be less than ½" gypsum, 3/8" wood structural panels, or other approved materials, in floors installed parallel to flooring members and the integrity of the draftstopping shall be maintained.

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- R303 Light, Ventilation & heating
- R303.1 Habitable rooms-Glazing areas of not less than 8% of the floor area, natural ventilation through windows or doors to the exterior, with a minimum openable area of 4% of the floor area ventilated.
- Exceptions:
 - 1) The window is not for emergency escape & rescue or there is a whole house ventilation system supplying outdoor air at 15 CFM per occupant based on 2 for the first bedroom & 1 for each additional bedroom.

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- 2) Where exception 1 is met & artificial light is provided at 6 foot candles over the area of the room 30" above the floor.
- 3) Sunrooms can be used for ventilation where over 40% of the walls are open or enclosed by screening.
- R303.2 Adjoining rooms-Can be used for light & ventilation when at least ½ of the common wall opening is unobstructed & provides an opening not less than 1/10 of the floor area of the interior room & not less than 25 sq. ft.

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- R303.3 Bathrooms-Including water closet compartments shall have a glazed area in windows of not less than 3 sq. ft. of which ½ must be openable unless there is mechanical ventilation of 50 CFM intermittent or 20 CFM continuous, exhausted directly to the exterior.
- R303.6 Stairway illumination-All exterior & interior stairways are required to have illumination. Interior at the vicinity of each landing equaling not less than 1 foot candle, exterior at the top landing unless serving a basement then at the bottom landing. Activated with a wall switch at each floor level with 6 or more risers.

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- R303.7 Required glazed openings-Directly onto a street, public way, yard or court located on the same lot. Exceptions: Roofed porch 65% unobstructed with 7' ceiling, eave projections are not obstructions, under decks, balconies, bays or floor cantilevers with at least a 36" vertical clear space.
- R303.8 Required heating-Based on a winter design temperature of 50 degrees in CT. the dwelling unit must maintain a minimum room temperature of 68 degrees at 3' above the floor & 2' from the exterior walls.

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- R304 Minimum Room Areas
- One room 120 sq. ft. gross, all other rooms 70 sq. ft. except kitchens, a minimum horizontal dimension of 7', sloped ceiling with less than 5' not counted in area.
- R305 Ceiling Height
- (Amd) R305.1 Minimum height-Habitable spaces, hallways, corridors, bathrooms, toilet rooms, laundry rooms and basements shall have a ceiling height of 7'. There are 5 exceptions.

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- R306 Sanitation
- Every dwelling unit shall have a water closet, lavatory, tub or shower, a kitchen area with a sink.
- All plumbing fixtures shall connect to a sanitary sewer or private sewage disposal system.
- All plumbing fixtures shall be connected to an approved water supply of hot & cold water.
- Bathroom fixtures shall comply with the spacing requirements & the area around tubs or showers shall have a non-absorbent surface 6' above the floor.

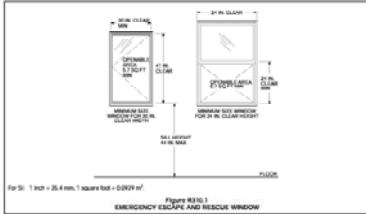
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- R309 Garages & Carports
- R309.1 Floor surfaces-Must be non-combustible, sloped to an approved drain or the main entry door.
- The exception is detached garages a minimum of 10' from the dwelling.
- R309.3 Flood hazard areas-Garage floors shall be elevated to or above the design flood elevation. Allowed to be located below the design flood elevation provide at grade on 1 side, used solely for parking, building access or storage & meeting the requirements of R322.

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- R310 Emergency Escape & Rescue Openings
- (Amd) R310.1 Emergency escape & rescue required-Habitable spaces in basements, habitable attics & every sleeping room shall have at least one openable emergency escape & rescue opening, with a sill height of not more than 44" above the floor. The net clear opening dimension shall be obtained by the normal operation from the inside.
- The exception is habitable basements with 2 remote code compliant stairways, existing attics & basements converted to habitable spaces without sleeping rooms.

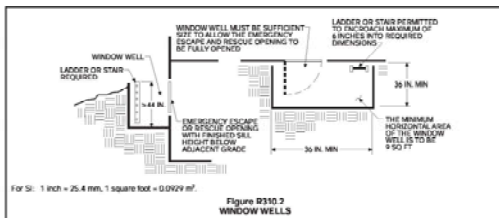
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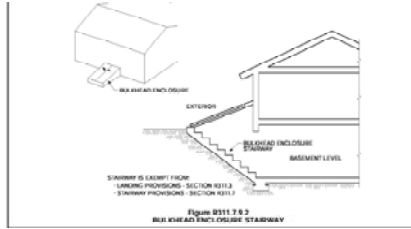
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- R310.2 Window Wells-Minimum horizontal area of 9 sq. ft. with a 36" projection & the area must allow for the window to totally open. When the vertical depth is greater than 44" a permanently affixed ladder or steps useable with the window totally open, the steps can encroach 6" into the well. Steps are 12" wide & project 3" & not more than 18" on center.
- (Amd) R310.3 Bulkhead enclosures-Allowed with direct access to the basement, the door panels when fully open must meet the 5.7 sq. ft. opening and be hinged. The maximum height from the floor to grade is 8' or less.

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- R310.4 Bars, Grills, covers & screens-Allowed over emergency escape & rescue openings provided the minimum 5.7 or 5 sq. ft. is maintained, the device is releasable or removable from the inside without a key, tool or special knowledge or a force greater than required to open the window or door.
- R310.5 Emergency escape & rescue windows under decks & porches- Allowed provided the deck allows the full opening of the window & provides a path of not less than 36" height.

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- R311 Means of Egress
- R311.1 Means of egress-Shall provide a continuous & unobstructed vertical & horizontal path to the exterior egress door without traveling through a garage.
- R311.2 Egress door-One side hinged is required with a 32" clear width between the door & stop opened 90% with a 78" height measured from threshold to stop. Readily openable from the inside with the use of a key or special knowledge or effort.

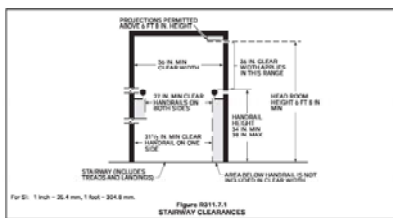
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- R311.3 Floors & landings at exterior doors-Required on both sides of the door, the landing width equal to door with a minimum length of 36" with a 2% slope. The one exception is balconies 60 sq. ft. or less accessible from the door only.
- R311.4 Vertical egress-From habitable levels including habitable attics & basements not provided with a means of egress.
- R311.5 Construction- Requires exterior landings, decks, balconies & stairs be positively anchored for both vertical & lateral forces or be self-supporting.

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- (Amd) R311.7 Width-Stairs shall be 36" wide above handrail height & below headroom height.
- Handrail projection of 4 1/2" allowed, minimum width at or below handrail height for 1 rail 31 1/2", 27" for 2 rails.
- Exception: Spiral stairs, & existing stairs of unfinished attics & basements remodeled to habitable space allows 32" above rail & below headroom, handrail projection of 4", 28" for 1 rail & 24" for 2 rails.
- Incline lift or chair lift clear passage of 20".

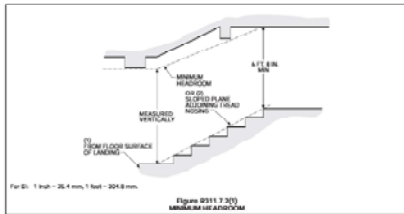
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- (Amd) R311.7.2 Headroom-6'8" measured at slope line of tread nosing.
- Exception: Allows the flight to extend under floor opening by 4 3/4" or less.
- Existing unfinished attics & basements remodeled to habitable space 6'6".

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- (Amd) R311.7.4.1 Risers-Maximum of 8 1/4"
- Minimum of 4"
- Measured between adjacent treads
- No More than 3/8" difference in total rise
- Exception: Unfinished attics & basement remodeled to habitable space 9"

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- (Amd) R311.7.4.2 Treads- Minimum of 9"
- Measured between vertical plane of treads
- Tread difference not more than 3/8" in flight of stairs.
- Winder & circular treads minimum of 9" at a point 12" from narrow side, with winders having a minimum of 6" ay any point

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- R311.7.4.3 Profile-Nosing radius not greater than 9/16"
- Nosing minimum 3/8" maximum 1 1/14" on solid risers.
 - Risers vertical or maximum slope of 30%.
 - Open risers permitted with opening less than 4"
 - Exception: No nosing required with 11" tread.
 - Open risers allow for stairs 30" or less in total rise.

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- R311.7.5 Landings for stairways-Required at the top & bottom.
- Maximum 12' vertical rise between landings.
- Width equal to stairs with 36" minimum in direction of travel.
- Exception: Not required at the top of interior stairways provided door does not swing over the stairs.
- R311.7.6 Stairway Walking surface-Treads & landings shall slope no steeper than 1-48" (2%)

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- R311.7.7 Handrails-Required on one side of stairs.
- Continuous from top to bottom returned to wall or post.
- Not less than 1 1/2" between wall and handrail.
- Grip size meeting the requirements of Type I or Type II.
- R311.7.9.1 Spiral stairways-Permitted with minimum width at or below handrails of 26".
- Each tread 7 1/2" minimum 12" from narrow side.
- All treads identical.
- Maximum Rise 9 1/2"
- Headroom 6'6".

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- R3118 Ramps-Slope 1 in 12" unless technically infeasible because of site constraint then 1 in 8" allowed.
- Landings 3' by 3' top and bottom where doors open onto ramp 7 change of direction.
- Handrails meet the same requirements as stairs.
- Handrails provide on one side.

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- R312 Guards
- Required at open-sided walking surfaces of stairs, ramps, landings, decks, porches & balconies located more than 30" to the floor or grade below at a point 36" horizontal from the open side edge.
- 36" high from walking surfaces or adjacent fixed seating.
- Exception: On open side of stairs 34" high from edge of nosing or combination guard/handrail then 34 to 38".
- Openings less than 4", except triangle at stair/riser 6" and stair guards allows 4 3/8"

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- (Add) R312.1.1 Retaining wall guards-Required with grade difference of greater than 4' where there is a walking surface, parking lot or driveway on the high side closer than 2' to the retaining wall.
- R313 Automatic Fire Sprinkler Systems
- (Amd) Town houses and 1 7 2 family dwellings do not require sprinkler systems if installed they shall be designed & installed in accordance with P2904 or NFPA 13D.

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- R314 Smoke Alarms
- Must be listed in accordance with UL217
- Installed to code & provisions of NFPA 72
- Household fire alarm systems are permitted provided same level of detection. Where install as combination/audible notification must be permanent, owned by home owner, monitored by approved supervising station in accordance with NFPA 72

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- R314.3 Location-In each sleeping room, outside each separate sleeping area,
- On each additional story including basements & habitable attics. Inter-connected.
- (Amd) 314.3.1 Alterations, repairs & additions-Occur requiring a permit or when one or more sleeping rooms are created or added.
- Exceptions: Exterior work such as roofing, siding, replacement windows or doors, or decks without a roof as well as plumbing, mechanical or electrical systems.

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- (Amd) R314.4 Power source-From the primary power when served from commercial source.
- When power fails from a battery backup.
- No disconnect with the exception of overcurrent protection.
- Exception: Battery permitted when there is no commercial power to building or when alterations or repairs do not include removal of wall & ceiling finish.

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- R315 Carbon Monoxide Alarms
- Outside each sleeping area & on each habitable level, connected in series, audible in all bedrooms over background noise with the door closed.
- Not required without fuel-burning appliances, fireplaces or attached garages.
- Alterations, repairs, additions and power source same as smoke alarms.

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- R316 Foam Plastic
- Must be labeled & identified for it's use.
- Have a flame spread of 75 & smoke development of 450
- Must have a thermal barrier.
- Separated from the interior with ½' gypsum or equal
- Must remain in place for 15 minutes.
- Thermal barrier is not required under conditions for masonry, roofing, attics, crawl spaces & interior trim.

Building Planning

- R317 Protection of Wood & Wood Base Products Against Decay-
- Locations required:
- 1) Wood joist or the bottom of wood structural floors closer than 18" or girders closer than 12" to the ground.
- 2) All wood members resting on concrete or masonry foundations walls less than 8" from exposed ground.
- 3) Sills or sleepers on concrete or masonry slabs in direct contact with the ground unless separated by moisture barrier.

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- 4) Ends of girders in masonry or concrete walls with less than ½" spacing on the tops, sides or ends.
- 5) wood siding, sheathing & wall framing of exterior walls less than 6" from the ground or less than 2" from concrete steps, porch slabs or patio slabs.
- 6) Wood structural members supporting moisture permeable floors or roofs exposed to the weather.
- 7) Wood furring strips or other framing members in contact with masonry or concrete walls.

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- R318 Protection Against Subterranean Termites-The infestation in CT. is moderate to heavy requiring one of the six methods or combination thereof:
- 1) Chemical treatment
- 2) Baiting
- 3) Pressure-preservative-treated wood
- 4) Natural durable termite-resistant wood
- 5) Physical barriers
- 6) Cold formed steel framing

Building Planning

- R319 Site Address
- (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 & legible from the street or road fronting the property.

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- (Add) Accessibility
- 1 & 2 family dwellings are exempt.
- Town houses shall comply
- Single story town house of 4 or more each unit shall be type B
- Multi-story with 10 or more 10% type B
- Exception:
- Within structures with fewer than 4
- Site impracticality allows % reduction for grade, prior to development of less than 10%, provided not less than 20% of type B for both single & multi-story

Building Planning

- Design flood elevation, type b shall not apply to lowest level that is at or above design flood elevation where the minimum floor elevation at the entry & closest arrival point & slope exceeding 10% between entrance & arrival point.
- (Add) R320.5 Accessible route-At least one connecting accessible building or facility with entry to type B within the building or complex.
- Exception: Slope or finished grade exceeding 1 in 12 or physical barriers then a vehicular route with parking is allowed.

Building Planning

- (Add) R320.6 Parking-2% but not less than 1 required for type B a
- & each 6 or fraction thereof a van accessible space required.
- (Add) R320.6.1 Parking within or beneath a building-Where provided shall have accessible parking.
- Exception: Private parking with no more than 2 spaces for exclusive use of that unit, directly accessed to that unit.

Building Planning

- (Add) R320.6.2 Automobile accessible parking spaces-By statute shall be 15' wide including 5' of cross hatching, not shared as close as possible to entry.
- Van space 16' wide including 8' of cross hatching not shared as close as possible to entry.
- Van clearance by statute shall be 8'2" at the entry & route to a minimum of 2 spaces.

Building Planning

- R322 Flood-Resistant Construction
- Designed & constructed to this section or ASCE 24.
- The design flood elevation used to define areas prone to flooding can be determined from Federal data, accepted hydrologic & hydraulic engineering practice.
- The design professional shall document the technical method used.
- The lowest floor is the lowest enclosed floor including basements, excluding unfinished flood-resistant enclosure used solely for vehicle parking, access or limited storage as long as the area will not violate this section.

Building Planning

- R322.1.6 Protection of mechanical & electrical systems-Must be at or above flood zone.
- If part of a substantial improvement at or above flood zone & shall not be mounted on or penetrate walls intended to break away.
- Exception: Allowed below if designed to prevent water entry & can resist hydrostatic & hydrodynamic loads & stress, electrical design for wet locations and water and sewer designed to minimize infiltration in accordance with plumbing code.

Building Planning

- R322.1.9 Manufactured homes-Shall be elevated, anchored & tied-down in accordance with appendix E sections AE 604 & AE 605,
- Foundations and anchorage shall be designed using ASCE 24.
- R322.2 Flood hazard areas (including A zones)-States prone to flooding with no waves flood hazard area, with waves 1 1/2' to 3' Coastal A Zone.
- R322.2.3 Foundation design & construction- By Chapter 4, unless designed to R404 then unsupported 6" plain masonry no more than 3'. 8" plain masonry no more than 4', 8" reinforced masonry 8'.

Building Planning

- R322.3 Costal high-hazard areas (including V zones)-Areas subject to waves over 3', high-velocity waves or waves inducing erosion.
- New or substantially improved must be located out of reach of mean high tide.
- Alterations to sand dunes & mangrove stands requires engineering analysis.

Building Planning

- R323 Storm Shelters
- For separate detached buildings or safe rooms within the building.
- For safe refuge from storms.
- Constructed in accordance with ICC/NSSA-500

Building Planning

- THE END
- ANY QUESTIONS
