

RESIDENTIAL BUILDING CODE CHECKLIST

Construction Design Plans

- ✓ Design plans stamped by the design professional are not required for one and two family detached dwellings; farm outbuildings; pre-engineered manufactured buildings; above grade less than 1000 square feet buildings; and alterations costing less than 15% of assessed value or greater than \$50,000.
- ✓ Non-residential and three family dwellings require stamped plans

Building permit

- ✓ Once approved, valid for 180 days
- ✓ Permit expires if work does not start within 180 days

One and Two Family Dwellings

- ✓ 3 or less stories
- ✓ Two family dwellings must be separated by 1 hour fire resistance for all construction unless protected by 13R sprinkler (ceilings with 5/8 inch type sheetrock require no separation in attic)

Foundations

- ✓ Perimeter drainage
- ✓ Foundation wall damp-proof or if high water table then water-proofed
- ✓ 6 mil poly over rock and under cellar floor
- ✓ Crawl space ventilated with one square foot opening per 150 square feet of floor or 1 square foot/1500 square feet of floor space if underside of floor is treated with Class A vapor retarder. Cannot be under door and must be within 3 feet of foundation of corner.
- ✓ Heated garage requires frost wall footing depth a minimum of 14 inches
- ✓ Footing width 14 inches or greater
- ✓ Footing projections 2 inches or greater
- ✓ Floating slab allowed for 24 foot by 24 foot or smaller garage and heated dwellings
- ✓ #4 rebar at top and bottom of frost wall
- ✓ 4 inch thick slab
- ✓ Vertical outside wall insulation with 5.6 R value
- ✓ Foundation wall thickness 6 to 8 inches
- ✓ 4 inches to 6 inches above ground exposure of wall

Wall Construction

- ✓ #3 grade lumber or higher
- ✓ Solid sawn or jointed/laminated
- ✓ 16 inches on center
- ✓ Bottom plate thickness
- ✓ Particle board sheathing 16 inches on center
- ✓ Drilled holes < 40% of exterior stud diameter
- ✓ Notches < 25% of exterior stud diameter
- ✓ Notches in interior wall studs <40% stud diameter
- ✓ Drilled holes in interior wall studs <60%
- ✓ Notches in top plate for pipe installation <50% of plate diameter

Exterior Walls

- ✓ < 5 feet to property line requires one hour fire protection on inside and outside walls minus sheds < 200 square feet area coverage.
- ✓ No openings in wall <3 feet to property line
- ✓ 25% maximum opening in wall for setback of 3 to 5 feet
- ✓ Fire blocking between floors

Minimum Room Sizes (304)

- ✓ One room must be at least 120 square feet area except for kitchens which must be a minimum of 70 square feet
- ✓ All habitable rooms must be 7 feet or greater in all dimensions (H W L)
- ✓ Floor area only counts for ceilings >5 feet height

Ceiling Height (305)

- ✓ All ceilings must be a minimum of 7 feet high except sloped ceilings must have 50% of room at 7 feet and except for bathrooms and unfinished basements (80 inch height minimum)

Glazing (308)

Window less than 18 inches off floor and within 24 inches of door requires tempered glass

Light, Ventilation, Heating (303)

- ✓ Area for doors and windows must equal a minimum of 8% of room floor area with at least 4% openable.
- ✓ Dwelling must have heating capacity to maintain 68 degrees at two feet above floor and 3 feet from exterior wall.

R313 Automatic Sprinkler System

½ inch sheetrock or 5/8 inch wood structural panel on underside of floor except:

- ✓ Floors over sprinkled rooms
- ✓ Floors over crawl spaces not for storage or fuel fired appliances
- ✓ Fire blocking per story
- ✓ <80 square feet per floor level
- ✓ 2x10 or greater lumber

Smoke

- ✓ Wired and battery backup of smoke alarms in bedroom and outside bedroom exit
- ✓ Smoke alarms <20 feet to kitchen or bathroom must be photo electric
- ✓ Carbon monoxide alarms in each bedroom and within 15 feet of bedroom exit if attached garage or fuel fired appliances (ie not electric heat)

Foam Plastic

- ✓ Styrafoam must be labeled for assuring surface burning characteristics
- ✓ Foam separated from interior by ½ inch sheetrock or 1 inch concrete except in roof
- ✓ Attics and crawl spaces (uninhabitable) must be covered but does not require ½ inch sheetrock

Means of Egress (311)

- ✓ Each dwelling one side hinged door with 32 inch opening and height of 78 inches that is
- ✓ Landing 3 feet by 3 feet except interior stairs when the door does not swing over stairs
- ✓ Stairs vertical rise between floors must be less than 12 feet
- ✓ Landing for egress door must be 1.5 inches or less to landing or floor
- ✓ Landing below exterior door 7 ¾ inches or less if door does not swing over it
- ✓ Exempt includes storm and screen doors

Stairs

- ✓ Stairs from cellar bulkhead is exempt unless a means of egress
- ✓ Guards required for stairs if greater than 30 inches above ground
- ✓ Guards 34 inches to 36 inches high and no greater than 38 inches if used for hand-rail
- ✓ Handrails 34 inches to 38 inches on one side with 4 or more treads
- ✓ Handrails graspable and 1.5 inches or greater from wall
- ✓ Riser height = 7.75 inches from nose to nose and tread depth =10 inches
- ✓ Treads for winding or circular stairs is 6 inches to 10 inches
- ✓ Spiral stairs 26 inches or greater width at handrail height and tread no less than 7.5 inches 12 inches out from narrowest side
- ✓ Treads depth and risers height cannot vary by more than 3/8 inches
- ✓ Tread nosing depth .75 to 1.25 inches for treads less than 11 inches
- ✓ Open riser ok provided a 4 inch diameter sphere or less will not pass through for 30 inches above grade
- ✓ Stairs at handrail 36 inches or greater width and below handrail 31.5 inches or greater (for one rail) or at least 27 inch width for two handrails

Other

- ✓ 2 means of escape in basements, sleeping rooms, and live-in attics
- ✓ A bulkhead to a basement can be a second means of escape
- ✓ Sleeping rooms in basement or attic must have secondary means of escape
- ✓ Means of escape must be 5.7 square feet (28 x 28 inches) with minimum clear width=20 inches and minimum clear height=24 inches.
- ✓ Window sill height must be 44 inches or lower
- ✓ 313 R sprinkler eliminates requirement for second means of escape