



## Building/Energy Code Requirements Subject-to-Field-Inspection Permits (Single Family/Duplex/Townhouse Residential)

Property Address: \_\_\_\_\_  
 Application/Permit #: \_\_\_\_\_

I understand the items below are required by code and if applicable to my project, will have to be addressed before the Building Inspector will approve the final inspection. I understand that this is not an all-inclusive list of code requirements, and the Building Inspector may require changes in addition to these items. I understand that if I am uncertain as to specific code requirements, I may contact my inspector for clarification. Otherwise, I accept responsibility for code compliance and for making changes as required by my inspector to meet code requirements.

I also understand and acknowledge that no review will take place under this permit to verify existing uses and occupancies. I accept full responsibility for the accuracy of the information regarding the existing legally established uses, and understand that in no case does this permit serve to establish a new use or occupancy, nor to change an existing use or occupancy.

**I understand that this document is to be kept with my issued permit and is part of the approved permit documents. I further understand and acknowledge that this permit may be revoked should I exceed the scope of work authorized by this permit or should I fail to comply with the requirements therein.**

(Signature) \_\_\_\_\_

1. *Separation between dwelling and garage/carport:*
  - a. No separation required if entirely open on 2 or more sides and no enclosed uses. (Open decks above are okay. Non-rated walls and openable windows between the dwelling and carport are okay).
  - b. Minimum ½" GWB on garage/carport side of walls required for all garages/carports not covered by 1a above.
  - c. 1-hour fire rated wall required if less than 5 feet from property line (no openings allowed less than 3' from property line, 25% maximum openings between 3' and 5' to property line). Overhangs must be a minimum 2' from property line, except steel gutter allowed closer and 5/8" GWB sheathing required on underside when 5' or less from property line.
2. *Egress windows: Required for 1 window/bedroom or sleeping area (below 4<sup>th</sup> floor) and 1 window/basement.*
  - a. Min. net clear area = 5.7\* sq. ft., (min. 3'0" x 4'6" if double hung or 4'0" x 3'6" window if slider). \* 5.0 sq. ft. if sill height is within 44" of grade (above or below).
  - b. Min. net clear opening width = 20"; min. net clear opening height = 24".
  - c. Max. sill height = 44" (one permanently installed step with max. 8" rise and min. 9" run okay for existing bedrooms).
3. *Required glazing for habitable rooms:*
  - a. Min. glazed exterior opening area = 8% of floor area.
  - b. Glazed openings not required where permanently installed artificial light is provided.
  - c. OK if openings are below decks & roofed porches w/min. ceiling ht. of 7 ft. (long side 65% open).
4. *Mechanical/Ventilation – required for habitable rooms of additions and alterations more than 500 sq. ft. or that include a kitchen, bathroom and other areas where cooking odor or excess water vapor will be produced.*
  - a. Min. 50 CFM for bathroom and laundry; min. 100 CFM for kitchen.
  - b. Min. air intake openings = 4 sq. in. per room.
  - c. Whole house fan: SRC Ch.15
5. *Smoke alarms* required inside and outside of sleeping areas and on all floors. Direct wiring is required for smoke detectors, unless removal of interior wall or ceiling finishes is necessary to install the wiring.
6. *Carbon monoxide alarms* required outside sleeping areas and on all floors, unless work only involves exterior surfaces of the building.
7. *Stair requirements (applies to all R-3 stairs and R-2 private stairways):*
  - a. Min. width = 36"
  - b. Max. height/rise = 7 ¾"; min. tread run = 10"
  - c. Min. headroom = 6'8"
  - d. Handrail 34"-38" above tread nosing (return ends)
  - e. Handrail grasp dimension: min. 1 ¼", max. 2"
  - f. Winding stairs:
    - Min. tread run at narrowest point = 6"
    - Min. tread run 12" from narrowest point = 10"

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- g. Spiral stairs:
- Min. clear walking area width = 26"
  - Min. tread run 12" from narrowest point = 7 ½"/max. riser height = 9 ½"  
Min. headroom = 6'6"
8. *Ceiling height in additions and alterations:*
- a. Min. 7'0": for new construction or additions
  - b. Min. 6'4": if building was in existence prior to 10/17/79 (see DR 23-2008 for specifics).
  - c. Rooms with sloped ceilings require minimum ceiling height in ½ of the area. (Portions of the room with ceiling height less than 5 ft. do not count in total area).
9. *Energy requirements for alterations and additions, prescriptive approach – Table R402.1.1*
- a. The values in items b. through h. below apply to alterations and additions, and are for wood framing only – metal framing not allowed under prescriptive approach.  
For *alterations only*, where existing framing remains and the framing cavity is exposed during construction, the cavity must be filled with insulation. Where the framing cavity is not exposed during construction, no additional insulation is required. Where new framing is installed, full insulation is required as specified below:
  - b. Min. ceiling insulation = R-49 (R-38 if full thickness of insulation extends over the wall top plate)
  - c. Min above-grade wall insulation = R-21 stud cavity insulation + R-10 at headers
  - d. Min above-grade "mass wall" insulation (typically concrete or CMU) = R-21 cavity or R-21 continuous
  - e. Min below-grade wall insulation: R-10 continuous on outside of wall or R-15 continuous on inside of wall or R-21 stud cavity insulation + R-10 at headers + thermal break between slab and the below-grade wall or R-13 stud cavity insulation + R-5 continuous insulation on inside or outside of wall
  - f. Min. floor insulation above unheated space = R-30
  - g. Min. perimeter insulation for unheated slab on grade = R-10 for 2 feet
  - h. Min. insulation for heated slab on grade = R-10 under entire slab plus R-10 perimeter insulation
  - i. Max. window and door (fenestration) U-factor = U-0.30 (see Tip #303A and 403)
  - j. In any one dwelling unit (including both new and existing portions), one side-hinged door up to 21 sq ft plus up to 15 sq ft of glazed fenestration can be exempt from U-value requirements.
  - k. Maximum skylight U-factor = U = 0.50
  - l. Other: add notes for Energy certificate (R401.3), duct leakage testing if furnace replaced (R101.4.3.1)
10. *Additional Energy requirements for additions only (Prescriptive approach):*
- a. Meet the requirements of Section 8 above
  - b. Provide calculations if using area-weighted averaging for glazing U-values (see Tip 303)
  - c. Additional energy efficiency requirements (Table R406.2): specify option(s) selected:  
0.5 credits required up to 750 sq ft addition, 1.5 credits 751 – 1,500 sq ft, 2.5 credits over 5,000 sf
  - d. Other: add note requiring building air leakage testing. (R402.4.1.2)
  - e. Heat source for the addition: \_\_\_\_\_ new; \_\_\_\_\_ extension of existing system; \_\_\_\_\_ unheated.
  - f. If new heating or cooling, maximum additional capacity allowed is determined per ACCA Manual J and Manual S.
  - g. If replacing an existing system or adding new heating or cooling, the Equipment Sizing Form must be provided with Electrical/Furnace Permit application.
11. Foundation location: **Property corners** must be accurately determined and indicated on site for foundation inspection. A survey **may** be required. Fence locations will not be accepted as establishing property corners.
12. Other requirements:
- a. *Guardrails:* min. 36" ht. max. 4" spacing between intermediate members (42" min. ht. for R-2 exterior).
  - b. *Footings:* bottom min. 12" below grade, top of foundation wall min. 6" above grade.
  - c. *Concrete slabs on grade:* 3 ½" min. thicknesses.
  - d. *Pier blocks:* min. 12" x 12" size; resting on concrete pad min. 12" below grade.
  - e. *Foundation walls:* Provide one (1) #4 rebar top and bottom and at all windows/door openings. Limit 4' max. backfill, see Tip 303A.
  - f. *Foundation anchor bolts:* min. ½" x 10", 6 ft. on center max. with two (2) bolts per piece of plate and at least one (1) bolt within 12" at end of each piece (required for new construction).