



# 2013 Code Requirements for Small Residential Additions & Remodels

Address: \_\_\_\_\_ Permit #: \_\_\_\_\_

1. Each bathroom containing a tub, a shower or a tub/shower combination shall have an exhaust fan. (CRC R303.3.1)
2. Bathroom exhaust fans shall be humidity controlled per CMC Chapter 4 and California Green Building Standards Code Chapter 4, Division 4.5.
3. Wall covering shall be cement plaster, tile or approved equal to 70" above drain at showers or tub with showers. Materials other than structural elements to be moisture resistant. (CRC R307.2.)
4. Provide a temperature limiting device for the showers, tubs, shower/tub combinations and whirlpool bathtubs to a maximum of 120 degrees F. The thermostat of the water heater is not considered a control for meeting this provision. (CPC 414.5 and 418.0)
5. Provide safety glazing or tempered glass in the following hazardous locations per CRC section 308:
  - a. Fixed and sliding panels of sliding door assemblies and panels in swinging doors.
  - b. Doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers and in any portion of a building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60 inches above a standing surface and drain inlet.
  - c. Fixed or operable panels adjacent to a door where the nearest exposed edge of the glazing is within a 24-inch 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 above the walking surface.
  - d. Individual fixed or operable panels, other than those locations described above, that meet all of the following conditions:
    - i) Exposed area of an individual pane is greater than 9 square feet, and:
    - ii) Exposed bottom edge is less than 18 inches above the floor, and:
    - iii) Exposed top edge is greater than 36 inches above the floor, and:
    - iv) One or more walking surfaces are within 36 inches horizontally of the plane of the glazing.
  - e. Glass railings, regardless of height, above a walking surface (including structural baluster panels and nonstructural in-fill panels). All glass guard rails shall have a top rail continuous over three panels minimum.
  - f. Walls and fences used as the barrier for indoor and outdoor swimming pools and spas when all of the following conditions are present:

- i) The bottom edge of the glazing is less than 60 inches above the pool side of the glazing, and:
      - ii) The glazing is within 5 feet of a swimming pool or spa water's edge.
    - g. Walls enclosing stairway landings or within 5 feet of the bottom and top of stairways where the bottom edge of the glass is less than 36 inches above a walking surface. Exception: The side of the stair has a guardrail or handrail including balusters or in-fill panels, complying with the provisions of CBC Section(s) 1013 and 1607.7 and the pane of glass is greater than 18 inches from the railing.
6. All bedrooms, basements or rooms used for sleeping shall have emergency rescue windows or doors. (CRC R310.1):
- a. Minimum net clear opening of 5.7 square feet. First floor may be 5.0 Sq. Ft. minimum
  - b. Minimum net clear opening width of 20 inches.
  - c. Minimum net clear height of 24 inches.
  - d. The bottom of the clear opening shall not be more than 44 inches above the floor.
7. Verify installation and location(s) of hard wired smoke detectors as follows: (CRC R314.)
- a. Installation of smoke detectors shall comply with UL 217 and NFPA 72.
  - b. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of the bedrooms.
  - c. In each room used for sleeping purposes.
  - d. Smoke detectors shall be inter-connected per CRC R314.5.
  - e. Smoke detectors shall be "hard wired" and shall be equipped with battery back up and be interconnected in all new construction. (CRC R314.4 & R314.5.)
  - f. Battery operated smoke detector permitted in existing construction where no other alterations are being done, and lack of access would require the removal of interior finishes.
  - g. In existing construction smoke detectors that no longer function or are over 10 years old shall be replaced. (CRC R314.3.2.)
8. For all new construction, carbon monoxide detectors are required per CRC R315. Note the following:
- a. CO detectors are required within dwelling units that have fuel burning appliances, and in dwelling units with attached garages.
  - b. Provide CO detectors outside each separate sleeping area, and on each level of a dwelling unit, including a basement.
  - c. Where more than one CO detector is required, they shall be interconnected per CRC R315.1.2.
  - d. CO detectors shall comply with UL 2034, UL 2075 and/or NFPA 720.
  - e. In new construction CO detectors shall be hard wired with a battery backup.
  - f. In existing construction, battery operated CO detectors are allowed where ceiling and wall finishes would be required to be removed to install electrical wiring.

### **Title 24 Energy:**

9. Provide a minimum 100 cfm kitchen hood exhaust to the exterior with metal duct work. A ceiling or wall exhaust may be used that provides 5 air changes per hour.
10. For kitchen, bath and other exhaust fans, size the ducts per ASHRAE 62.2, Table 7.1, or Table 4-9 of the 2008 Residential Compliance Manual.
11. Intermittently operated (kitchen, bath, etc.) local exhaust fans shall be rated at 3.0 sones or less.
12. In kitchens, provide fluorescent lighting or other means to obtain high efficacy fixtures per Table 150-C. Incandescent fixtures can be used for only 50% of the kitchen lighting wattage.
13. In bath, garages, laundry, utility rooms or closets over 70 sq. ft., provide high efficacy fixtures per Table 150-C, or provide incandescent fixtures on vacancy sensors.
14. In all other spaces including habitable rooms and hallways, provide high efficacy fixtures, or have incandescent fixtures on vacancy sensors or on dimmer switches.
15. For outdoor lighting attached to the building(s), provide high efficacy fixtures, or use incandescent fixtures on motion detectors, and controlled either by photo control, astronomical controlled time clocks, or an energy management system.

### **California Green Building Standards Code:**

16. All new plumbing fixtures need to be low water use as follows:
  - Toilets: 1.28 gpf
  - Lavatories: 1.5 gpm
  - Kitchen Sinks: 1.8 gpm
  - Showers: 2.0 gpmCGBSC 4.303.1.
17. In residences constructed before 1994, plumbing fixtures must be low flow fixtures as follows:
  - Toilets: 1.6 gpf
  - Lavatories: 2.2 gpm
  - Kitchen Sinks: 2.2 gpm
  - Showers: 2.5 gpmOr the fixtures must be updated to the current standards.
18. When a shower is provided with multiple shower heads, the sum of flow to all the heads shall not exceed the 20% reduced limit, or the shower shall be designed so that only one head is on at a time. (CGBSC 4.303.2)
19. A minimum of 50% of the construction waste shall be recycled. Complete the attached waste management form and return for review. (CGBSC 4.408)
20. The builder is to provide an operation manual for the owner at the time of final inspection. (CGBSC 4.410.1)
21. Note on the plans "During construction all ducts and other air distribution equipment shall be covered with tape, plastic, sheet metal, or other methods to reduce the amount of dust or debris which may collect in the system".
22. VOC's are to be documented for:
  - Adhesives,
  - Paints and Coatings,
  - Carpet,
  - Composition Wood Products.

Documentation to be provided by Product Certifications & Specifications, Chain of Custody Certifications, or other means acceptable to the enforcing agency. (CGBSC 4.504.2)

23. Moisture content of wood shall not exceed 19% before it is enclosed in construction. The moisture content needs to be certified by one of 3 methods specified. Building materials with visible signs of water damage should not be used in construction. Insulation that appears wet, or has a high moisture content should be removed, or allowed to dry prior to enclosure.
24. The bathroom fan shall be controlled by a humidistat, be Energy Star rated, and vented directly to the outside, unless the fan is part of the whole house ventilation system. (CGBSC 4.506)

**Plumbing/Mechanical/Electrical Plan:**

25. The center of toilets shall be no closer than 15" to a side wall or other obstruction. Provide a 24" deep by 30" wide clear space in front of the toilets. (CPC 407.5)
26. Bathroom outlets shall be on a 20 amp circuit, with no other outlets allowed. (CEC 210-11 (c) (3))
27. Furnace and water heater installations shall comply with CMC Chapter 3 and CPC Chapter 507. Combustion air shall comply with UMC Chapter 7.
28. Show how heat producing appliances (water heater/dryer/furnace) in garage will be protected from automobile damage (wheel blocks are not sufficient). Elements of appliances which create a glow, spark, or flame shall be located a minimum of 18" above garage floor. (CPC 508.14)
29. One switched light fixture or switch controlled lighting outlet shall be installed in every habitable room, bathroom, stairway, hall, attached garage, and at outdoor entrances. (CEC 210-70(a))
30. Provide at least one outside weatherproof GFI 120-volt receptacle at front and back of dwelling unit. (CEC 210-52(e)) / (CEC 406.8(A)8)
31. Provide at least one receptacle in garage or basement in addition to any receptacle provided for stationary appliances. (CEC 210-52(g)) / (CEC 406.8(A) 8)
32. Provide G.F.I. protection to all 120 volt, 15 and 20 amp receptacles installed outdoors, in bathrooms, in basement, at kitchen counter top surfaces, within 6 feet of a bar or utility sinks, and in garages. Exception: Single outlet receptacles in garages utilized for a fixed or stationary appliance. (CEC 210-8(a))
33. All electrical outlets specified in 210.52 shall be tamper resistant.
34. Walls 2' wide or greater shall have an outlet. Outlets shall be spaced no more than 12' apart, and a maximum of 6' from end of walls or opening. (CEC 210-52(a))
35. In the kitchen and dining area, a receptacle shall be provided for each counter space wider than 12" so that no point is more than 24" from an outlet. (4' 0" max spacing between outlets.) (CEC 210-52(c))
36. Surface mounted fully enclosed lighting fixtures in clothes closets must be 12" from storage area(s). Flush mounted fully enclosed and fluorescent lights must be 6" away. (CEC 410.8)
37. At bathrooms, provide at least one GFI outlet within 3 feet of each lavatory in the baths. (CEC 210-52 (d))
38. Bathroom outlets shall be on a 20 amp circuit, with no other outlets allowed. (CEC 210-11 (c) (3))
39. Circuits serving 15 and 20 amp outlets in all rooms and closets, except kitchen and baths, must be arc-fault circuit- interrupter protected per CEC 210-12.