



RESIDENTIAL BATHROOM REMODEL

BUILDING INSPECTION REQUIREMENTS

A permit is required for bathroom remodels that include the replacement of the tub/shower enclosure. If a permit is required, it shall be obtained prior to the start of the remodel.

Following is a listing of the general requirements based on the 2019 California Building Code, 2019 California Residential Code, 2019 California Electrical Code, 2019 California Green Building Standards (CalGreen), 2019 California Mechanical Code, 2019 California Plumbing Code, and 2019 California Energy Efficiency Standards. This brochure is intended to provide general information, contact the Building Inspection Division for any questions or additional information.

Tub/Shower Requirements

- The mixing valve in a shower (including over a tub) shall be pressure balancing set at a maximum 120° F. The water-filler valve in bathtubs/whirlpools shall have a temperature limiting device set at a maximum of 120° F. The water heater thermostat cannot be used to meet these provisions. (CPC 408.3, 409.4)
- New or reconfigured shower stalls shall be a minimum finished interior of 1,024 square inches and be capable of encompassing a 30 inch diameter circle. Any door shall have a clear opening of 22 inches minimum. (CPC 408.5, 408.6)
- Shower stalls and bathtubs with shower heads installed, shall have walls finished with a non-absorbent surface for a minimum of 70" above the floor. (CPC 408.6 and CRC R307.2)
- Hydro-massage tubs (e.g. Jacuzzi tubs) shall have access to the motor, be supplied by a GFCI protected dedicated circuit, and be listed by a recognized testing agency (e.g. UL). All metal cables, fittings, piping, or other metal surfaces, within 5 feet of the inside wall of the Hydro-massage tub shall be properly bonded. Hydro-massage tubs shall be bonded with a minimum #8 AWG bare copper wire, and the bonding shall be accessible. (CEC 680.70)
- Underlayment material used as backer for wall tile, or solid surface material in tub and shower enclosures, shall be installed in accordance with the manufacturer's recommendations. Shower floors shall be lined with an approved shower pan or an on-site built watertight approved lining. On-site built shower linings shall extend a minimum of 3 inches vertically up the wall and shall be sloped ¼" per foot to weep holes. (CPC 408.7)
- When a curb is provided at a shower, it shall be a minimum of 1 inch above the shower floor and between 2 inches and 9 inches above the top of the drain. A watertight nailing flange that extends a minimum of 1 inch high shall be installed where the shower floor meets the vertical surface of the shower compartment. The finished floor of the shower compartment shall be uniformly sloped between ¼" and ½" per foot towards to the drain. (CPC 408.5)

Water Closet Requirements

- The water closet shall have a clearance of 30 inches wide (15 inches each side of the center line) from the center line and 24 inches in front. (CPC 402.5)
- Where the water closet (or other plumbing fixture) contacts with the wall or floor, the joint shall be caulked and sealed to be watertight. (CPC 402.2)

Tempered Glazing (CBC 2406.3, 2406.4 and CRC 308.1, R308.4)

Tempered glazing shall be installed in the locations listed below. Tempered glazing shall be permanently identified by a manufacturer marking that is permanently applied and cannot be removed without being destroyed (e.g. sand blasted, acid etched, ceramic fired, laser etched, or embossed). A label shall be permitted in lieu of the manufacturer's designation.

- Within a portion of wall enclosing a tub/shower where the bottom exposed edge of the glazing is less than 60 inches above the standing surface and drain inlet.
- Within 60 inches horizontally of water's edge of a tub/shower where the glazing is less than 60 inches above the walking surface.

Electrical and Lighting Requirements

- All receptacles shall be GFCI protected and tamper-resistant (TR). If any new/additional outlets are installed, the bathroom shall have a dedicated 20-amp circuit. (CEC 210.8, 210.11, 406.12)
- Exhaust fans with a minimum ventilation rate of 50 CFM are required in all bathroom remodels unless the existing ceiling is left in place, even if an operable window is installed. Exhaust fans and lighting shall have separate control switches (even if a combination unit is installed). The exhaust fan may need to be supplied by a GFCI protected circuit based on the manufacturer's requirements. (CEES 150.0(k), 150.0(o))
- Lighting fixtures located above and within 8 feet vertically of the bathtub rim or shower stall threshold shall be listed for a damp location, or listed for wet locations where subject to shower spray. (CEC 410.10)
- All installed lighting fixtures shall be high efficacy in accordance with CEES Table 150.0-A.

In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces shall be controlled by a vacancy sensor.

Recessed lighting shall be listed as IC (zero clearance to insulation), AT (air tight), and be sealed/caulked between the fixture housing and ceiling. (CEES 150.0(k))

Water Efficient Plumbing Fixtures (CalGreen 301.1.1)

Residential buildings undergoing permitted alterations, additions, or remodels are required to replace all non-compliant plumbing fixtures (based on water efficiency) throughout the house with water-conserving plumbing fixtures. The following table shows what is considered to be a non-compliant plumbing fixture and the current water efficiency standards for various plumbing fixtures. All existing non-compliant plumbing fixtures shall be replaced with fixtures meeting the current standards.

Plumbing Fixture	Non-Compliant Plumbing Fixture	Current Standard for the Maximum Flow Rate of Newly Installed Plumbing Fixtures
Water Closet (Toilet)	Greater than 1.6 gallons/flush	1.28 gallons/flush
Showerhead	Greater than 2.5 gallons/minute	2.0 gallons/minute at 80psi
Faucet -Bathroom	Greater than 2.2 gallons/minute	1.2 gallons/minute At 60 psi
Faucet - Kitchen	Greater than 2.2 gallons/minute	1.8 gallons/minute at 60 psi (average)

Residential building constructed after January 1, 1994 are exempt from this requirement.

Smoke and Carbon Monoxide Alarms (CBC 907.2.11, CRC 314 and 315)

Smoke alarms shall be installed per manufacturer's installation instructions in all sleeping rooms, in each area/hallway adjacent to sleeping rooms, each story of the building, and in any basement. All battery powered smoke alarms shall have a 10-year battery.

Carbon monoxide (CO) alarms shall be installed per manufacturer's installation instructions in each area/hallway adjacent to sleeping rooms, any bedroom containing (or opening to a bathroom containing) a fuel burning appliance, each story of the building, and any basement. CO alarms are not required if there is no fuel burning appliance or fireplace in the house and where the garage is detached from the house.

PERMIT PROCESS

Inspections

The number of inspections required depends on the type of underlayment used in the tub/shower enclosure and the scope of the project. Following are the minimum inspections required, information about additional required inspections can be provided when the building permit is issued.

1. A rough plumbing and electrical inspection should be scheduled for the tub/shower valve and electrical wiring prior to installation of any wallboard.
2. The next inspections scheduled should be the underlayment and the shower pan test, if applicable.
3. The final inspection should be scheduled after all the work is completed.

Building Permit Application Requirements

- If the fixtures will be relocated or the bathroom size will change, provide a floor plan showing the existing and proposed conditions, including any affected load-bearing walls.