



CITY OF REDLANDS
DEVELOPMENT SERVICES DEPARTMENT
BUILDING AND SAFETY DIVISION
35 CAJON AVE SUITE 20
REDLANDS, CALIFORNIA 92373

RESIDENTIAL BATHROOM RENOVATION

INTRODUCTION

Bathroom renovations generally require a Building permit. The following information can be used as a guideline for the bathroom requirements. Bathroom renovations require compliance with the:

- 2016 California Residential Code (CRC);
- 2016 California Plumbing Code (CPC);
- 2016 California Mechanical Code (CMC);
- 2016 California Electric Code (CEC);
- 2016 California Energy Code;
- 2016 California Green Building Standards Code(CGBS);
- and The City of Redlands Local Ordinances.

A bathroom renovation includes the removal and/or relocation of vanity cabinets, sinks, tub & showers, replacement/changes to the lighting or removal & replacement of the wall board. When the replacement of the toilet, towel bars, mirrors, paint and floor coverings and no other work is included it is considered a maintenance item and no permit is required for these items.

The following details the minimum requirements of the bathroom electrical, mechanical and plumbing systems:

ELECTRICAL

- Provide a 20 AMP GFCI protected electrical outlet within 36” of the outside edge of each basin. The outlet shall be located on a wall or partition that is adjacent to the basin or installed on the side or face of the basin cabinet not more than 12” below the top of the basin. CEC 210.52(D)
- Receptacles shall be listed as tamper-resistant. CEC 406.12(A)
- A minimum of (1) 20 amp circuit is required for bathroom receptacle outlets. Such circuits shall have no other outlets. This circuit may serve more than one bathroom. CEC 210.11(C)(3)
- No parts of cord-connected luminaires, chain-, cable-, or cord-suspended luminaires, lighting track, pendants, or ceiling-suspended fans shall be allowed within a zone measured 3’ horizontally and 8’ vertically from the top of the bathtub rim or shower stall threshold. CEC 410.10(D)
- Luminaries located within the actual outside dimensions of the tub or shower up to 80” vertically from the top of the bathtub rim or shower threshold, shall be marked for damp location.
- Bathroom lighting shall be high efficacy fluorescent or LED controlled by a vacancy sensor.
- Recessed luminaires installed in an insulated ceiling shall be IC rated (zero clearance) and AT rated (air tight) and shall be sealed and/or gasketed between ceiling and housing. For occupancies with a horizontal (floor/ceiling assembly) rated separation, the recessed fixtures shall be protected to the rating of the separation (1 hour) or be listed for the required protection. This generally applies to residential condominium construction where units are above or below other units.

MECHANICAL

- A bath exhaust fan w/ back draft damper is required regardless of the presence of a window. Exhaust must vent to outdoors in an approved duct. Terminate the outlet a minimum of 3' from an opening or property line. A minimum rate of 50^{cfm} is required. A maximum of 3 sones rating is required. ASHRA 62.2, CMC Table 403.7
- Bathroom exhaust fans shall be ENERGY STAR compliant and ducted to terminate outside the building. The fan must be controlled by a humidity control that is either a separate component or integrated into the unit. CGBS 4.506.1
- Exhaust fans shall be switched separately from the bathroom lighting. California Energy Code 150.0(k)2.B

PLUMBING

- Provide tempered glass at tub/shower doors and at windows less than 60" from tub/shower drain
- Shower and Tub/shower control valves shall be pressure balancing / thermostatic per CPC 418.0
- Multiple showerheads serving one shower, the combined flow rate of all the showerheads shall not exceed the maximum flow rate specified in the 20% reduction column contained in CGBS Table 4.303.2 or the shower shall be designed to allow one showerhead to be in operation at a time.
- Fixtures shall meet the following maximum flow rates:
Water Closets = 1.6 GPM - Shower Heads = 2.5 GPM - Sink Faucets = 2.2 GPM.
- Minimum shower size is 1024 square inches (30" circle) CPC 411.7
- Site built shower stalls shall comply with CPC 411.8
- Stall shower door to open out a minimum of 22" wide opening. CPC 411.6
- Toilet and/or Bidet require a total minimum 30" clear space, 15" from the center of the fixture to the wall, and a minimum of 24" clear space in front of the fixture. CPC 407.6
- When additional water closets (toilets) are installed, a maximum of 3 water closets are allowed on a 3" waste line.
- The hot water valve shall be installed on the left side. CPC 415.0
- A minimum 12" x 12" access panel is required when a slip joint p-trap waste & overflow is provided.

WHIRLPOOL/SPA

- Whirlpool (spa) bathtubs shall have a readily accessible access panel. CPC414.1.
- The circulation pump shall be located above the crown weir of the trap. CPC414.2.
- The pump and the circulation piping shall be self-draining to minimize water retention. CPC414.3.
- Suction fittings on whirlpool bathtubs shall comply with the listed standards. CPC414.4
- The maximum hot water temperature discharging from the bathtub filler is limited to 120° by a device that conforms to ASSE 1070 or CSA B125.3. The water heater thermostat shall not be considered a control for meeting this provision.
- Accessible disconnects and GFCI protection is required for the whirlpool (spa) pump, aerator and heater. CEC 210.8

BIDETS

- The water supply shall be protected with an air gap or vacuum breaker. CPC603.2.
- The maximum hot water temperature discharging from a bidet is limited to 110° by a device that conforms to ASSE 1070 or CSA B125.3. The water heater thermostat shall not be considered a control for meeting this provision.