



CITY OF REDLANDS
DEVELOPMENT SERVICES DEPARTMENT
BUILDING AND SAFETY DIVISION
35 CAJON AVE SUITE 15
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:

- 2022 California Residential Code (CRC);
- 2022 California Plumbing Code (CPC);
- 2022 California Mechanical Code (CMC);
- 2022 California Electric Code (CEC);
- 2022 California Energy Code;
- 2022 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)
- Luminaires located within the actual outside dimensions of the tub or shower up to a height of 8' vertically from the top of the bathtub rim or shower threshold, shall be marked for damp locations, or marked for wet locations where subject to shower spray. CEC 410.10(D)
- Bathroom lighting shall be high efficacy with at least one luminaire controlled by a vacancy sensor. California Energy Code 150.0(k)1.A, 150.0(k)2.I
- Recessed lighting shall meet all requirements of California Energy Code section 150.0(k)1.C, to include the following:
 - Listed as IC (Insulation contact)
 - Labeled as AT (airtight) with leakage less than 2.0 CFM at 75 Pascals
 - Be sealed with a gasket or caulk between luminaire housing and ceiling.
 - Allow for maintenance and replacement to the ballast or driver to be readily accessible to the building occupants from below the ceiling.
 - Shall not contain screw base sockets.
 - Shall contain light sources that comply with References Joint Appendix JA8
- 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" horizontally from water's edge and less than 60" high from any standing or walking surface. CRC R308.4.5
- Shower and Tub/shower control valves shall be pressure balancing/thermostatic mixing type that provide scald and thermal shock protection. CPC 408.3
- When a shower is served by more than one showerhead, the combined flow rate shall not exceed 1.8 gallons per minute at 80 PSI or the shower shall be designed to allow only one showerhead to be in operation at a time. CGBS 4.303.1.3.2
- Fixtures shall meet the following maximum flow rates per CGBS 4.303:
 - Water Closets = 1.28 GPF - Shower Heads = 1.8 GPM - Lavatory Faucets = 1.2 GPM.
- Minimum interior shower size shall be 1024 square inches and shall also be capable of encompassing a 30" circle CPC 408.6
- Site built shower stalls shall comply with CPC 408.7
- Shower door shall open so as to maintain not less than an unobstructed 22" wide opening. CPC 408.5
- 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 402.5
- When additional water closets (toilets) are installed, a maximum of 3 water closets are allowed on a 3" waste line. CPC Table 703.2 footnote 4
- A minimum 12" x 12" access panel is required when a concealed slip joint connection is used. CPC 402.10

WHIRLPOOL/SPA

- Whirlpool (spa) bathtubs shall have an access panel large enough to allow for the removal and replacement of the circulation pump. CPC 409.6
- The circulation pump shall be located above the crown weir of the trap. CPC 409.6
- The pump and the circulation piping shall be self-draining to minimize water retention. CPC 409.6
- 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. CPC 409.4
- Accessible disconnects and GFCI protection is required for the whirlpool (spa) pump, aerator and heater. CEC 680.62(A)
- Circulation pump and all metal parts shall be bonded with a minimum 8 AWG back to the Main service panel. CEC 680.62(C)

BIDETS

- The water supply shall be protected with an air gap or vacuum breaker. CPC 410.2
- The maximum hot water temperature discharging from a bidet is limited to 110°F 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. CPC 410.3