



## **RESIDENTIAL BATHROOM RENOVATION**

### **INTRODUCTION**

Bathroom renovations generally require a Building Permit. At a minimum, a legible floor plan depicting the layout of the renovation is required for permitting.

The following information can be used as a general guideline for the minimum requirements for a bathroom renovation project and may be attached to your plan as general compliance notes.

A bathroom renovation includes the removal and/or relocation of vanity cabinets, sinks, water closets, tubs & showers, replacement/changes to the lighting or removal, and replacement of the wall board. Replacement of the towel bars, mirrors, paint, and floor coverings, where no other work is included, is considered a maintenance item and no permit is required.

The applicant is responsible for compliance with all code regulations/requirements. If the scope of work is altered after permit issuance, the applicant shall request the permit be updated.

If the scope of work involves reconfiguring the bathroom layout, modifications to the structural system or removal of wall to accommodate an enlarged wall opening, a complete review will be required.

Bathroom renovations trigger the upgrade to current code compliance consisting of the following:

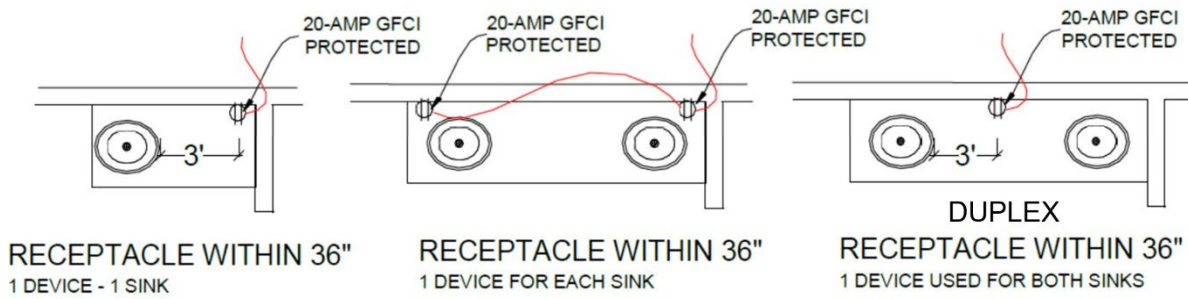
- 2025 California Residential Code (CRC);***
- 2025 California Electric Code (CEC);***
- 2025 California Plumbing Code (CPC);***
- 2025 California Mechanical Code (CMC);***
- 2025 California Energy Code;***
- 2025 California Green Building Standards (CGBSC);***
- and The City of Laguna Beach Local Ordinances.***

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

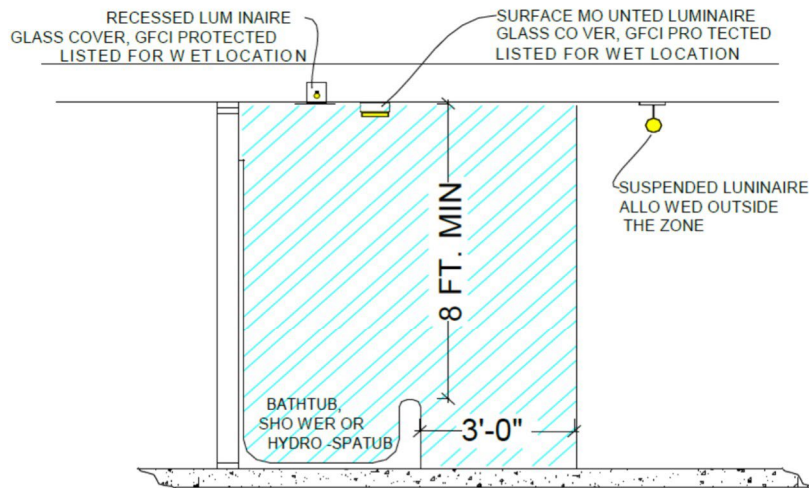
### **ELECTRICAL**

- Provide a 20 AMP GFCI protected electrical outlet within 36” of the outside edge of each bathroom sink basin. 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 countertop. For a double sink configuration, a single duplex outlet, located between the sinks will supply both sinks provided the 36” maximum distance is provided. (CEC 210.52(D))
- All receptacles located within a bathroom shall have GFCI protection. (CEC 210.8(A)(1))
- A minimum of (1) 20 amp branch circuit is required for bathrooms. Such circuits shall have no other outlets. This circuit may serve more than one bathroom (CEC 210.11(c)(3)).

1 - 20 AMP BRANCH CIRCUIT. CIRCUIT SHALL HAVE NO OTHER OUTLETS. MAY SERVE MORE THAN ONE BATHROOM



- No cord connected or hanging pendant, track light or suspended ceiling fan fixtures in zone 3' away from the edge of the tub/shower and/or 8' above the bathtub or shower flood level. This is the Electrical Exclusion Zone. (CEC 410.10(D)(1))



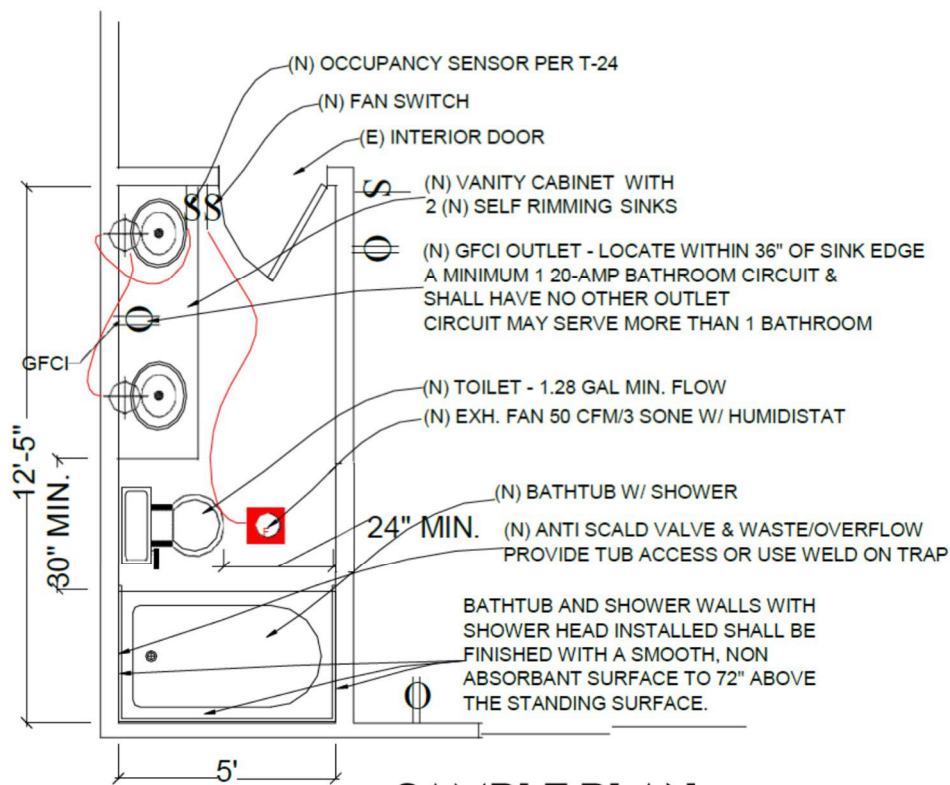
### DESIGNATED ZONE

CHAIN, CABLE OR CORD SUSPENDED LUMINAIRES, CORD CONNECTED LUMINAIRES, TRACK LIGHTING, PENDANTS AND/OR CEILING-SUSPENDED FANS ARE NOT PERMITTED WITHIN THE ZONE

- Approved luminaires located within the actual outside dimensions of the tub or shower, up to 8 feet vertically from the top of the bathtub rim or shower threshold, shall be marked as suitable for damp locations, provided with a solid lens and be GFCI protected. (CEC 410.10)
- New or replaced bathroom lighting fixtures shall be high efficacy JA8 luminaires with at least one fixture controlled by a vacancy (occupancy) sensor certified to comply with Energy code section 150.0(k). This is a manual on, auto off device approved by the energy commission. Automatic on/off or devices with an override switch position are not approved.
- Recessed luminaires installed in an insulated ceiling shall be IC (zero clearance) and AT (air tight) rated and shall be sealed and have a gasket 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 assembly (typically 1 hour) or be listed and approved for the required fire rating. This generally applies to residential condominium, multi-family, and mixed-use construction where units are above or below other units.

Project valuation over \$1,000 will require the smoke and carbon monoxide alarms for the dwelling to meet the current code (CRC sections R310 and R311).

- Smoke alarms are required in all sleeping rooms, outside each sleeping area in the immediate vicinity of the bedrooms, on each floor level including basements and habitable attics, but not including crawl spaces and uninhabitable attics, in the immediate vicinity of a sleeping loft, and within a room or space open to a sleeping loft. Specific installed locations shall be in conformance with CRC R310.3.3.
- Carbon Monoxide alarms are required in dwelling units and sleeping units when fuel-fired appliances or fireplaces are installed and/or dwelling units have attached garages. Either condition requires the alarms.
- Carbon monoxide alarms shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms, on every occupiable level of a dwelling unit including basements, and within a bedroom where a fuel-burning appliance is located within a bedroom or its attached bathroom.
- In existing conditions, alarms may be battery operated when the repairs or alterations do not result in the removal of the wall and ceiling finishes or there is no access by means of an attic, basement or crawlspace.
- Multipurpose alarms that combine both a smoke alarm and carbon monoxide alarm shall comply with all applicable standards of both CRC sections R310 and R311 and be listed by the office of the state fire marshal.



**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. The outlet must terminate a minimum of 3' from an opening (window) or property line. CMC 502.5. A **minimum** rate of 50 <sup>cfm</sup> is required. Exhaust fan(s) shall meet the ASHRA standard 62.2. A **maximum** sound rating of 3 Sone is required.

- Bathroom exhaust fans shall be ENERGY STAR compliant and unless the bathroom exhaust fan is part of the Whole House Ventilation System, fans must be controlled by a humidistat which shall be readily accessible. Humidistat controls shall be capable of adjustment between the relative humidity ranges of 50 to 80 percent. Respective to this standard, a bathroom is a room which contains a bathtub, shower, or tub/shower combination. Compliance may be accomplished by installation of a separate humidistat fan control (switch) or a control integral to the exhaust fan (CGC 4.506).
- Additionally, every toilet room is required to have a minimum 50 cfm exhaust fan, 3 sones or less sound rating, and vented to the outside. (CMC 403.7)

Alterations that do not replace or relocate the existing fan or when the ceiling finishes are not removed and/or there is no access available for the installation of an exhaust fan, may continue to use the existing exhaust fans provided they vent to the outside air. Bathrooms that do not include an existing fan must install a compliant fan at the time of the renovation (CGC 4.506).

## **PLUMBING**

- Shower and Tub/shower control valves shall be pressure balancing/thermostatic (anti-scald) per CPC section 408.4.
- Multiple showerheads serving one shower shall be designed to allow only one showerhead to be in operation at a time, or the flow all heads combined shall not exceed 1.8 GPM at 80psi. Control valves and shower heads shall be installed on the side wall or otherwise arranged so the shower head does not discharge directly at the entrance to the compartment and the bather can adjust the valves prior to stepping into the shower spray. (CGBS 4.303, CPC 408.10)
- Fixtures shall meet the following maximum flow rates set by the California Energy Commission:  
***Water Closets = 1.28 GPM - Shower Heads = 1.8 GPM - Sink Faucets = 1.2 GPM.***
- The minimum shower size is 1024 square inches and contain an area providing a 30" circle per CPC section 408.7.
- Stall shower door to open out a minimum of 22" wide opening (CPC 408.6).
- Water closets (toilet) 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 proposed, a maximum of 5 water closets are allowed on a 3" horizontal waste line. Installation of a 6<sup>th</sup> water closet will require installation and/or verification of a 4" waste and building sewer line. (CPC Table 703.2 footnote 4)
- The hot water valve shall be installed on the left side. (CPC 417.5)
- A minimum 12" x 12" access panel is required when a slip joint p-trap waste & overflow is provided. The use of a weld on (glue) waste & overflow and p-trap eliminates the access door requirement. (CPC 402.10)
- A Sewer video is required for any proposed increase in plumbing fixture count.

## **SHOWER PAN**

- Shower pans shall be of approved materials and where constructed to have a finished dam or threshold, it shall not be less than 1 inch lower than the sides and back; And, not less than 2" or more than 9" in finished height. (CPC 408.6)
- Gypsum wallboard or green board shall not be used as a tile substrate in shower enclosures. Fiber-cement backer board, fiber mat-reinforced cementitious backer, or other approved materials shall be installed with a water proof barrier and approved fasteners in accordance with its listing and approval and manufacturer's standards.

## **GLASS**

- Safety glazing is required for all glazing located less than 60 inches above the standing or walking surface located within 60 inches, measured horizontally and in a straight line from the water's edge of the tub or shower. (CRC R324.4.5)

## **WHIRLPOOL/SPA**

- Whirlpool (spa) bathtubs shall have a readily accessible access panel (CPC409.6).
- The circulation pump shall be located above the crown weir of the trap (CPC409.6).
- The pump and the circulation piping shall be self-draining to minimize water retention (CPC 409.6).
- Suction fittings on whirlpool bathtubs shall comply with the manufacturer's specifications (CPC 409.6.1).
- 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, or ASSE 1084. (CPC 409.4)
- Accessible disconnects and GFCI protection is required for the whirlpool (spa) pump, aerator and heater (CEC 680, 210.8).
- Hydromassage bathtubs and their associated electrical components shall be on an individual branch circuit(s) and protected by a readily accessible GFCI protection devices. Receptacles located within 6 ft of the inside walls of a hydromassage tub shall be GFCI protected. (CEC 680.71)

## **BIDETS**

- Bidets 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 per CPC section 402.5.
- The water supply shall be protected from backflow by a listed and approved atmospheric vacuum breaker, or a pressure vacuum breaker backflow prevention assembly, or a spill-resistant pressure vacuum breaker. (CPC 410.2).
- 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. (CPC 410.3)