



## Residential Bathroom Remodel

To apply for a bathroom remodel permit, submit three sets of plans on minimum 8½" x 11" paper. Provide existing and proposed layout and show fixture locations, receptacle layout, light switch locations, and lighting locations with type of lighting. See reverse side of this handout for sample bathroom floor plan.

### **Building**

- 1) Minimum ceiling height in a bathroom is 7'-0" clear, from the finished floor to the finished ceiling.
- 2) Insulation shall be installed in all walls, floors and ceilings open for construction between conditioned space and unconditioned space such as exterior walls, garages, crawl spaces, and attics.  
*Walls: R-13, Ceilings: R-30, Floors: R-19*
- 3) Per 2010 California Residential Code cement, fiber-cement or glass mat gypsum backers are allowed to be installed in accordance with the manufacturer recommendations as a base for wall tile in tub and shower areas and wall and ceiling panels in shower areas.
- 4) Tile SHALL NOT be installed directly on green board or plain gypsum board in shower and tub areas.
- 5) Windows less than 60" of the standing surface of the tub or shower shall be tempered glazing.
- 6) All shower and tub door assemblies and glass splashguards shall be safety glazing.

### **Electrical**

- 1) The 20-amp bathroom circuit shall only serve receptacles within the bathroom. The circuit may serve the receptacles and lights in stand-alone bathrooms. The circuit may serve multiple bathrooms for receptacles **ONLY**.
- 2) A GFCI protected receptacle shall be located within 36" from the edge of the sink.
- 3) A minimum of one high efficacy lighting fixture shall be installed in each bathroom; and all other lighting in each bathroom shall be high efficacy or controlled by vacancy sensors.
- 4) Light fixtures located in wet location shall be listed for wet location and require water resistant trims.
- 5) Electrical panels shall not be installed in bathrooms

### **Plumbing**

- 1) Toilets shall have a minimum net clearance of 15" measured from the center of the toilet to wall or obstruction.
- 2) Toilets shall have a minimum net clear space in front of toilet of 24".
- 3) Shower and tub-shower combinations in buildings shall be provided with individual control valves of the pressure balance, thermostatic, or combination pressure balance / thermostatic mixing valve type that provide scald and thermal shock protection.
- 4) Showers shall have a minimum interior diameter of 30".
- 5) Non absorbent wall surfaces for showers or tub / showers shall extend to a height of not less than 72" above floor.
- 6) Plastic liners and underlayment shall be sloped a minimum of ¼" to the drain and be wrapped up the wall a minimum of 3 inches above the top of finished dam.
- 7) A water test is required to verify the pan does not leak and to verify the weep holes are draining correctly (see back for shower pan test).

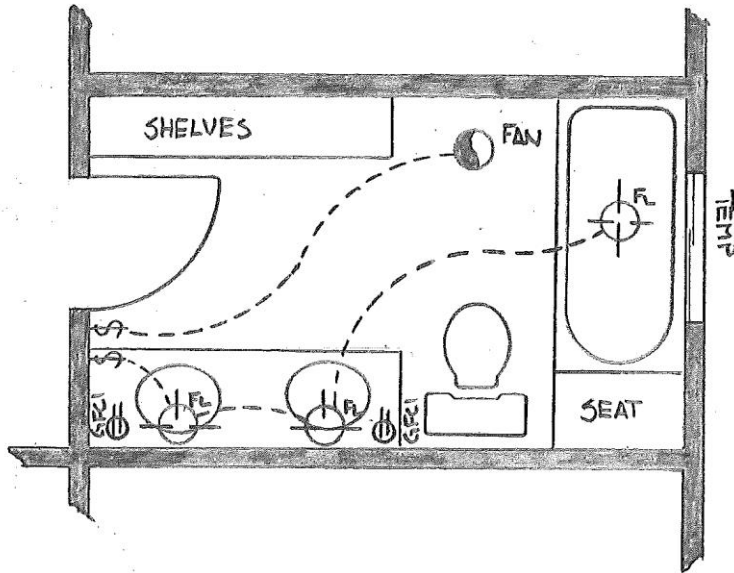
### **Mechanical**

- 1) Each bathroom (room which contains a bathtub, shower, or tub/shower combination) shall be mechanically ventilated. Fans shall be ENERGY STAR compliant and terminate outside the building (3 feet from operable windows). Unless functioning as a whole house system, fans must be controlled by a humidity control capable of a relative humidity range of ≤ 50% to a maximum of 80%. Control may be adjusted manually or automatic.

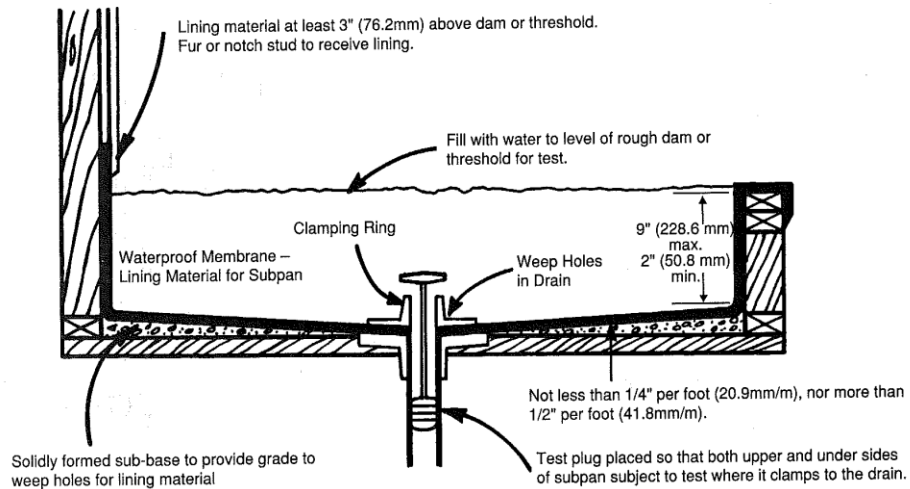
### **Final Inspection**

- 1) Smoke alarms shall be operational and be located in all sleeping rooms, outside each separate sleeping area in the immediate vicinity of the bedrooms, and at each story, including basements.
- 2) Carbon monoxide alarms shall be operational and located outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom(s) and on every level of a dwelling unit including basements.

# Sample Bathroom Plan



# Shower Pan Installation



## Test Procedure for a Site-Constructed Shower Receptor