



RESIDENTIAL BATHROOM REMODEL SUBMITTAL REQUIREMENTS

GENERAL REQUIREMENTS:

All work requires the installation of listed/approved *smoke alarms* and *carbon monoxide alarms*.

Smoke Alarms: Must be installed:

- a) In each room used for sleeping purposes.
- b) In each hallway outside of the sleeping room(s).
- c) On each level of the dwelling, including basements.

Carbon Monoxide Alarms must be installed in dwellings which contain a fuel-fired appliance or have an attached garage:

- a) Outside of each sleeping room in the immediate vicinity of the bedroom(s).
- b) On each level of the dwelling, including basements.
- c) Where a fuel burning appliance is within a bedroom, a CO alarm shall be installed in the bedroom.
- d) Combination smoke/carbon monoxide alarms are acceptable.

SUBMIT:

- One (1) properly completed building permit application.
- One (1) digital set of building plans (1/4"-1' scale).
- One (1) digital copy of each of the following documents (if applicable):
 - Structural Calculations
 - CalGreen Forms
 - California Energy Compliance Report

PLANS SHALL CONSIST OF:

Cover Sheet Showing:

- Project address.
- Location map.
- Square footage of the remodeled area.
- Project Scope
- Note on plan: Project to comply with the 2022 CBC, CEC, CMC, CPC, CA Energy Code, CA Green Building Standards Code, and City of East Palo Alto Municipal Code.
- Note on plan: At a minimum, 65% of the project waste stream shall be recycled. All construction and demolition debris shall be contained on-site (not in the public right of way) in constantly covered bins. Prior to final project approval, a receipt shall be provided verifying 65% recycling has occurred. Self-hauling is prohibited in the City of East Palo Alto; an authorized hauler shall be utilized for this mandatory requirement.

Floor Plan:

Show the area of alteration to include both existing and proposed floor plan.

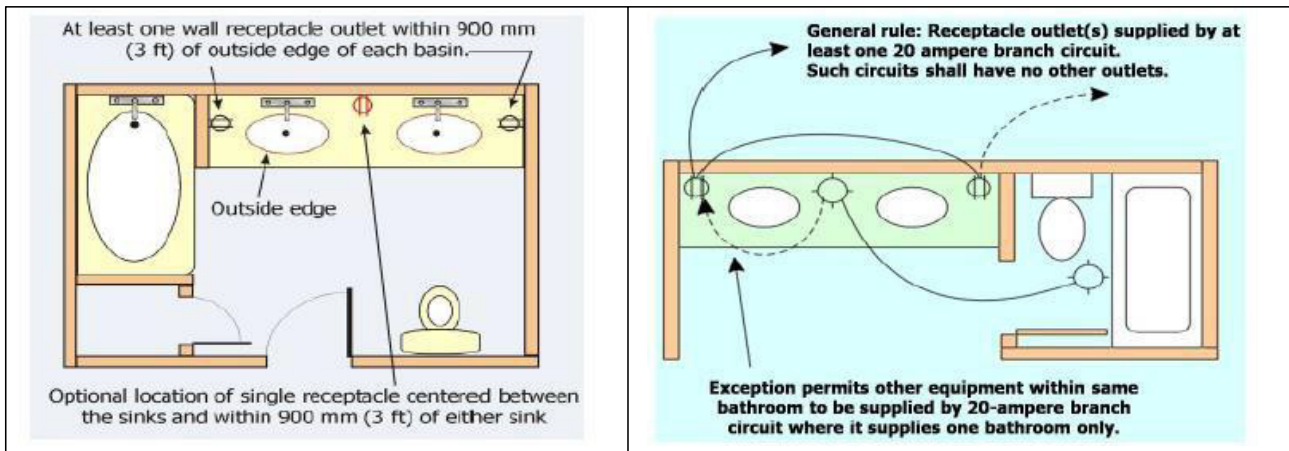
- Proposed electrical work.
- Location of existing and new walls and windows
- Locations of smoke and carbon monoxide alarms.
- Proposed mechanical work.
- Proposed plumbing work.
- Location and use of all adjacent rooms.

GENERAL CODE REQUIREMENTS:

Electrical:

- Listed tamper resistant receptacles required in bathroom.
- Min. (1) 20-amp circuit for bathrooms receptacles (**See Figure 1**).
- GFCI protection required for all outlets in bathrooms, with at least one outlet within 36" of each sink.
- Receptacles shall not be installed within or directly over a bathtub or shower stall.
- Light fixtures in wet locations shall be "*Suitable for Wet Locations*".
- All lighting/fan fixtures located in wet or damp locations shall be rated for the application.
- Separate circuits for lights and receptacle outlets.
- All 125-volt, single-phase, 15- and 20- ampere receptacles installed within 6ft. of the outside edge of the bathtub or shower stall shall provide GFCI protection.
- Light pendants, ceiling fans, lighting tracks, etc. shall not be located within 3ft horizontally and 8ft vertically above a shower and/or bathtub threshold.

FIGURE 1



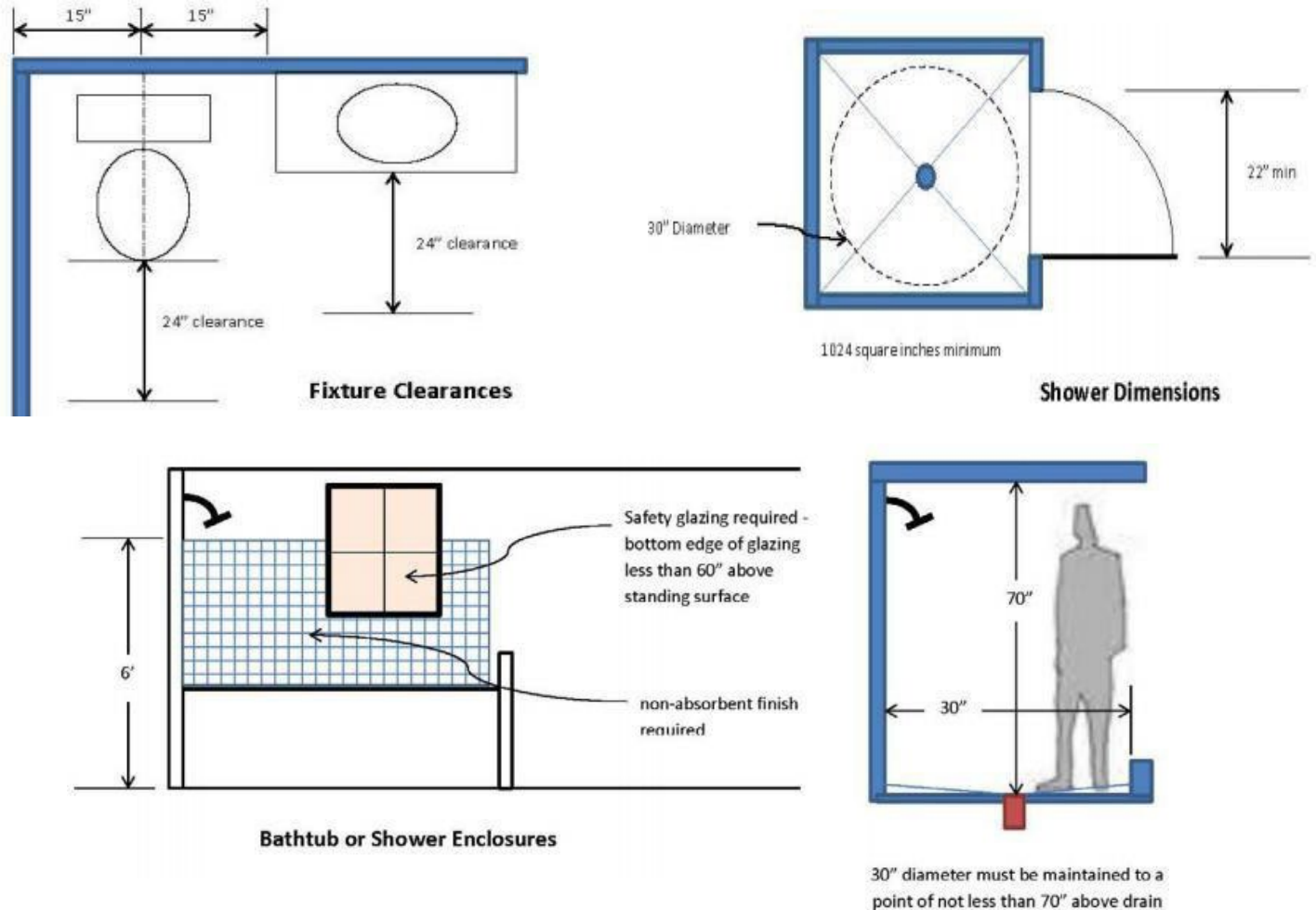
Mechanical:

- Exhaust fans with integral/combo lighting system shall be switched separately from lighting OR have a lighting system that can be manually turned on and off while allowing the fan to continue to operate for an extended period of time. Lighting integral an exhaust fan must be high-efficiency.
- Exhaust fan within bathroom shall be controlled by a humidity control; listed/approved switch mounted humidity sensor acceptable. Minimum 50 CFM
- Termination of environmental air ducts shall be to the exterior and 3 ft. minimum from property lines or other openings into the building.
- Bathroom containing a bathtub, shower, or tub/shower combination shall be provided with an Energy Star rated environmental fan with humidity control.

Plumbing:

- The adjacent space next to showers without thresholds shall be considered a “wet location” and shall comply with the CBC, CRC, and CEC provisions
- Showers and bathtubs with showers require a non-absorbent surface up to 6’ above the floor.
- Drain, waste and vent (DWV) system shall be tested with no less than 10’ of head water above the system for 15 minutes OR 5 psi air test for 15 minutes. ***Cannot use air test** on plastic DWV piping.
- Shower compartments, regardless of shape, shall have a minimum finished interior of 1024 square inches (32” by 32”) and shall also be capable of encompassing a 30” circle. The required area and dimensions shall be measured at a height equal to the top of the threshold and shall be maintained to point of not less than 70” above the shower drain outlet (**See Figure 2**).
- Maximum water flow rates are:
 - Water Closets: 1.28 GPF
 - Lavatory Faucets: 1.2 GPM
 - Showerheads: 1.8 GPM

Figure 2

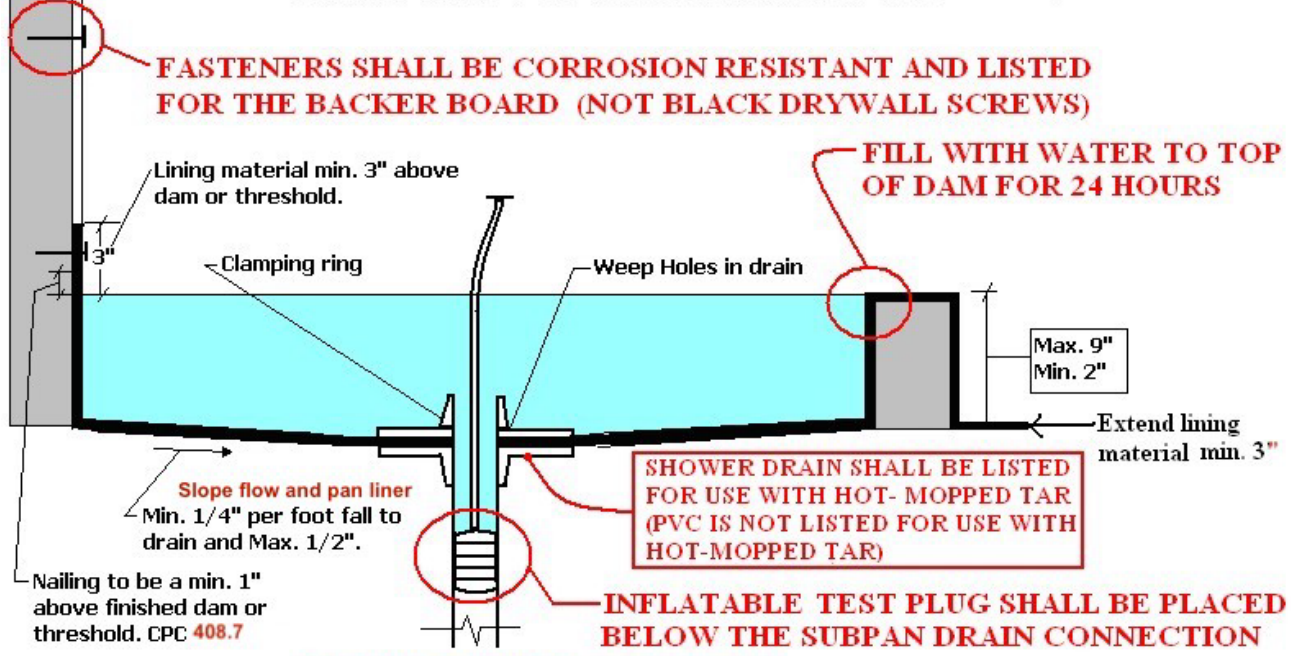


Top three frequently missed/inspection failures:
 1. WRONG BACKER BOARD 2. WRONG FASTENERS 3. WRONG TEST PLUG

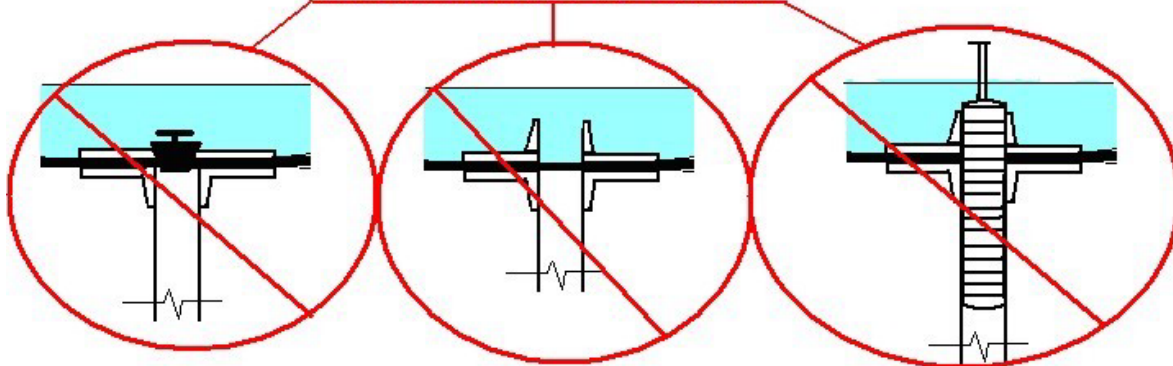
NOT ALLOWED:
GREEN BOARD, PURPLE BOARD, MOLD RESISTANT BOARD, ANY PAPER FACED BOARD IS NOT ALLOWED IN SHOWER AND TUB COMPARTMENTS.

APPROVED TILE BACKER METHODS FOR SHOWER AND TUB COMPARTMENT CRC R702.4.2
METHOD 1* FIBERGLASS MAT BACKER BOARD (DENSIELD, GLASROC)
• DO NOT INSTALL A WATER-RESISTIVE VAPOR BARRIER BEHIND FIBERGLASS MAT BACKER BOARD
METHOD 2. CEMENT AND FIBER-CEMENT BACKER BOARDS (HARDI-BACKER, GLAS-CRETE, DURAROCK)
• A WATER-RESISTIVE VAPOR BARRIER IS REQUIRED BEHIND CEMENT BOARD (MIN. GRADE B PAPER)
* MORTAR BACKED (LATH AND PLASTER)
• A WATER-RESISTIVE BARRIER (MINIMUM GRADE B PAPER) IS REQUIRED BEHIND LATH

ON-SITE BUILT-UP SHOWER RECEPTORS



WRONG METHOD OF TESTING



PLEASE NOTE, THIS INFORMATION IS INTENDED TO BE A GUIDE FOR SUBMITTAL REQUIREMENTS AND MAY NOT INCLUDE ADDITIONAL INFORMATION NEEDED FOR SPECIFIC PROJECTS.