

BATHROOM REQUIREMENTS

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 2013 California Residential / Electrical / Mechanical / Plumbing Codes, and the California Energy Efficiency Standards

MANDATORY MEASURES

- Bathroom renovations will require smoke alarms.
 - Smoke alarms are required in all sleeping rooms, on each floor level, in hallways leading to sleeping rooms, and at the top of stairways.
 - o In new construction, alarms shall be interconnected and hard wired with battery back up.
 - o In existing conditions, alarms may be battery operated.
- Carbon Monoxide Alarms are required to meet the new code.
 Alarms are required on each floor level.
 - o In new construction, alarms shall be interconnected and hard wired with battery back up.
 - In existing conditions, alarms may be battery operated and do not need to be interconnected.

ELECTRICAL

- Provide a 20 AMP GFCI electrical outlet within 36" of each bathroom sink basin. An outlet within a medicine cabinet does not comply with this requirement.
- A minimum of (1) 20 amp circuit is required for bathrooms. Such circuits shall have no other outlets outside the bathroom. This circuit may serve more than one bathroom.
- A bath exhaust fan, with a minimum ventilation rate of 50 cfm, w/ back draft damper is required regardless of the presence of a window. Vent to outdoors in an approved duct and terminate not less than 3' from a window.
- Separate water closet compartments shall be provided with an exhaust system with an exhaust rate not less than 50 cubic feet per minute.
- GFCI protection of a hydro-massage / whirlpool tub pump is required.

LIGHTING

- No pendant or track light fixtures in a zone 3' from and 8' above bathtub rim.
- Recessed lighting at tub/shower to be suitable for damp locations, provided with a solid lens and be GFCI protected.
- Bathrooms shall be high efficacy luminaries or controlled by a vacancy (occupancy) sensor certified to comply with sec 119(d) CEES (40 lumens per watt)
- Recessed luminaries 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.

PLUMBING

- Shower and tub/shower control valves shall be pressure balancing / thermostatic type.
- Maximum flow rates:
 - o Water Closets = 1.28 GPM
 - Shower Heads = 2.0 GPM
 - Sink Faucets = 1.5 GPM
- The minimum area within a shower stall is 1024 square inches and be able to scribe a 30" circle within the pan area.
- A shower stall door shall have a minimum 22" wide opening.
- Hydro-massage / whirlpool bathtubs shall have an accessible panel to access the pump. 12" X 12" minimum access to slip joint tub trap and whirlpool tub motor is required.
- Toilet/bidet shall have a minimum 15" dimension from center to wall, and 24" clear in front.

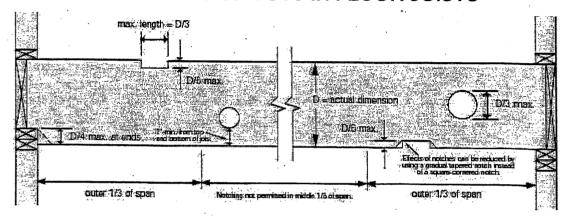
SHOWER WALLS AND CEILING

- When shower wall tiles are installed over a mortar bed, the water proof membrane shall not be less than Grade B Kraft Paper. The lath shall be installed horizontally with approved fasteners into the framing members.
- Steam showers shall have a ceiling with a minimum 2"/ft. slope.
- Provide tempered glass at tub/shower doors and at windows less than 60" from tub/shower drain

MAXIMUM SIZE FOR CUTS IN FLOOR JOISTS

Joist Size	Max. Hole	Max. Notch Depth	Max End Notch	
2X4	None	None	None	
2X6	1-1/2"	7/8"	1-3/8"	
2X8	2-3/8"	1-1/4"	1-1/8"	
2X10	3"	1-1/2"	2-3/8"	
2X12	3-3/4"	1-//8"	2-//8"	

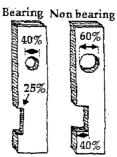
PLACEMENT OF CUTS IN FLOOR JOISTS



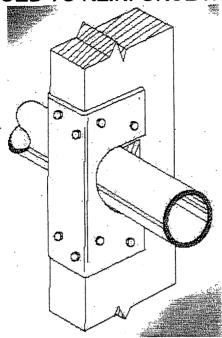
CUTTING, NOTCHING AND BORING WOOD STUDS

	Maximum Diameter of Hole	Distance From Hole to Edge of Stud	Location	Maximum Depth of Cut or Notch
Bearing/Exterior Studs ¹	40% of Stud Width	5/8" Minimum	Not same section as cut or notch	25% of Width of Stud
Interior Nonbearing Studs	60% of Stud Width	5/8" Minimum	Not same section as cut or notch	40% of Width of Stud

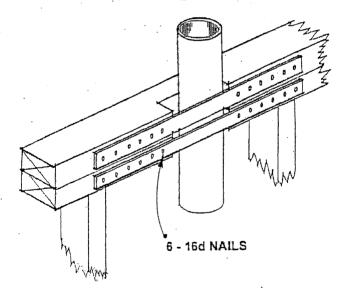
- 1. Exterior or bearing studs may be bored or drilled provided that the diameter of the resulting hole is not greater than 60 percent of the stud width and provided that the studs are doubled and not more than two successive studs are bored, the edge of the hole is no closer than 5/8 inch to the edge of the stud, and the hole is not located in the same section as a cut or notch.
- Approved stud shoes may be used when installed in accordance with the manufacturers recommendations.



STUD SHOE USED TO REINFORCE NOTCHED STUD



CUTTING OF PLATES



Where plumbing, heating or other pipes necessitate the cutting of the soles or plates, a metal tie not less than .058 inch, (16 galvanized gage) and $1\frac{1}{2}$ inches wide shall be fastened to <u>each</u> plate across and to each side of the opening with not less than (6) 16(d) nails.