This summary guide does not cover all bathroom designs. The requirements listed are the minimum standards for issuance of your building permit and the inspections of the work.

BUILDING REQUIREMENTS

2016 California Residential Code (CRC)

Gypsum Board In Showers and Water Closets

(Section R702.4.2 CRC)

Cement, fiber-cement or glass mat gypsum backers installed in accordance with manufacturers recommendations shall be used as a base for wall tile in tub and shower areas and wall and ceiling panels in shower areas.

Water-resistant Gypsum Backing Board Limitations

(Section R702.3.7 CRC)

Shall not be used in the following locations:

- 1. Over a vapor retarder in shower or bathroom compartment.
- 2. Where there will be direct exposure to water or in areas subject to continuous high humidity. 702.3.7.1
- 3. On ceilings where frame spacing exceeds 12 inches on center for ½ inch thick water-resistant gypsum board or more than 16 inches on center for 5/8 inch thick water resistant gypsum board. Table R702.3.6

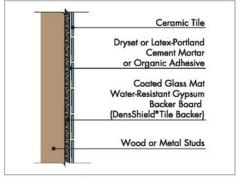
Gypsum Board In Rest Of Bathroom

(Section R702.3.1 CRC)

Regular gypsum board is permitted under tile or wall panels in other wall and ceiling areas. 2016 2509.2 CBC

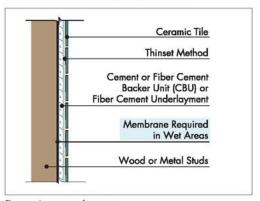
INTERIOR WALLS

DensShield® Tile Backer*



For use in wet or dry areas

Cement Backer / Fiber Cement Backer / Fiber Cement Underlayment Thinset*



For use in wet or dry areas

*Refer to Tile Council of North America 2007 Handbook for details.

The City of Novato does not endorse specific manufacturer's products; examples shown are for illustration purposes only.

ELECTRICAL REQUIREMENTS

2016 California Electric Code (CEC)

Required Circuits

Bathroom shall have at least one 120-volt, 20-ampere branch circuit for the bathroom outlet(s) only. When serving only one bathroom, this circuit can also serve the lighting or other equipment in the room. (210.11(C) (3) CEC

Required Outlets

One receptacle required in bathrooms within 3 feet from outside edge of each basin. The receptacle(s) shall be located on a wall or partition that is adjacent to the basin or basin countertop or on the face of the basin cabinet not more than 12 inches below the countertop.

(210.52 (D) CEC)

 $\label{eq:conditional} Receptacle(s) \ \ shall \ \ be \ \ Ground \ \ -Fault \ \ Circuit \ - \\ Interrupter \ Protection \ (GFI)$

(210.8(A) (1) CEC) and Tamper-Resistant (406.12 CEC)

LIGHTING REQUIREMENTS

2016 California Energy Code (CEC)

The Energy Code definition of a bathroom is a room containing a shower, tub, toilet, or a sink that is used for personal hygiene.* A sink used for personal hygiene in a room other than a bathroom, must meet the lighting requirements for a bathroom.

^{*}p.24 "Residential space type"

Lighting

Lighting installed in a bathroom shall meet the following requirements:

- A. A minimum of one high efficacy luminaire shall be installed: and
- **B.** At least one luminaire shall controlled by vacancy sensors. (CEC, Subchapter 7, pp 121-122.)

PLEASE SEE

GUIDE TO RESIDENTAL LIGHTING AND ELECTRICAL For More Details

PLUMBING REQUIREMENTS

2016 California Plumbing Code (CPC)

Shower Compartments (408.6 CPC)

Minimum interior of 1024 Sq. Inches Minimum dimensions so a 30 inch circle will fit in the compartment.

Minimum height above floor drain is 70 inches (411.7 CPC)

Shower doors shall open to provide a minimum of 22 inch unobstructed egress opening (408.5 CPC)

On Site Shower Pan (Receptor) (408.7 CPC)

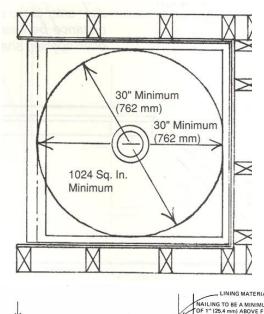
On ground type, shall be water tight, constructed with approved material, adequately reinforced and with an approved flange floor drain. Lining to be pitched ¼ per foot to weep holes in drain.

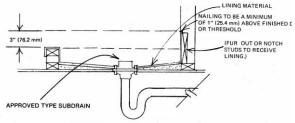
Above ground type, watertight lining minimum of 3 inches above finished dam height. Dam to be at least 2 inches higher than high points of finished shower floor, but not more than 9 inches. (408.5 CPC)

Shower and Tub-Shower Control Valves

(CPC) 408.3

Control valves shall be pressure balance, thermostatic, or combination of pressure balance/thermostatic mixing valves. (408.3 CPC)





RESIDENTIAL MANDATORY MEASURES

2016 California Green Building Standards Code

- A. Water closets/toilets shall not exceed 1.28 gallons per flush.
- B. Showerheads (single & multiple) shall not exceed 2.0 gallons per minute at 80 psi.
- C. Faucets/sinks shall not exceed 1.2 gallons per minute. (4.303.1.4.1 CGBSC)
- D. Bathroom Exhaust fans shall be ENERGY STAR compliant, be ducted to outside the building, & unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control (humidistat). (4.506 CPC)

Guide to Residential Bathroom Remodels



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