



RESIDENTIAL BATH REMODEL

GUIDELINES

Bathroom remodels and renovations generally require a construction permit along with City Planning and Building and Safety Division approvals. **At a minimum, a dimensioned floor plan of bathroom as well as floor plan of whole living space per City Standards is required for permit processing.** The following information can be used as a guideline for gaining code compliance:

PLOT/SITE PLAN REQUIRED REF HANDOUT #15

Applicable Codes:

2022 California Residential Code
2022 California Building Code
2022 California Electrical Code
2022 California Mechanical Code
2022 California Plumbing Code
2022 California Green Code

2022 California Residential Compliance Manual
2022 California Fire Code
2020 L.A. County Fire Code
2022 Covina Municipal Code
2022 California Energy Code

A bathroom renovation that requires a permit generally includes but is not limited to the removal and/or relocation of wall framing, sinks, bathtub & showers, replacement/changes to the mechanical, plumbing or electrical systems including lighting and removal & replacement of the wall board. The replacement of the toilet, towel bars, mirrors, paint and floor coverings, where no other work is included is considered a maintenance item and no permit is required for these items.

(Ref Handout #15 Plot Plan required for each permit.)

The following details the minimum requirements of the bathroom electrical, mechanical and plumbing systems from a Code perspective:

ELECTRICAL

- a) 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.
- b) Receptacles shall be listed and labeled as **tamper-resistant**.
- c) A minimum of (1) receptacle outlet shall be installed in bathrooms within 3' of each basin. **CEC 210.52(d)**
- d) No pendant light fixtures in zone 3' away and 8' above the bathtub or shower.
- e) Luminaries 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.
- f) Bathroom lighting shall be high efficacy luminaries (40 lumens per watt) or controlled by a vacancy (occupancy) sensor certified to comply with sec 119(d) CEES. This is a manual on, auto off device.

- g) Automatic on or devices with an override switch position are not approved. High efficacy, incandescent lighting or fans are required to be switched separately.
- h) Recessed luminaires installed in an insulated ceiling shall be IC rated (zero clearance) and AT rated (airtight) and shall be sealed and/or gasket between ceiling and housing.
- i) For occupancies with a horizontal (floor/ceiling assembly) rated separation, the recessed fixtures shall be protected to the rating of the separation (1 hour) or be listed for the required protection. This generally applies to residential condominium construction where units are above or below other units.
- j) Bathroom renovations (projects over \$1,000) will require that smoke and carbon monoxide alarms for the dwelling are installed to meet the current code. CRC sections **R314** and **R315**
- k) 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 no including crawl spaces and uninhabitable attics.
- l) Carbon Monoxide alarms are required in dwelling units and sleeping units when fuel-burning appliances are installed and/or dwelling units have attached garages. Either condition requires the alarms.
- m) When more than one alarm of either type is required to be installed within an individual dwelling unit, the alarm devices shall be interconnected in such a manner that activation of one alarm will activate all the other alarms.
- n) 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.
- o) Multipurpose alarms that combine both a smoke alarm and carbon monoxide alarm shall comply with all applicable standards of both CRC sections **R314** and **R315** and be listed by the office of the state fire marshal.

MECHANICAL

- a) Each bathroom shall be mechanically ventilated in accordance with division 4 of the California Green Building Standards **2022 CEC 402.5**
- b) A minimum rate of 50 CFM is required. Fan shall meet ASHRA standard 62.2. A maximum of 3 zone rating is required

PLUMBING

- a) Provide tempered glass at tub/shower doors and at windows less than 60" from tub/shower drain
- b) Shower and Tub/shower control valves shall be pressure balancing / thermostatic per **CPC 408.3**.
- c) Fixtures shall meet the following maximum flow rates:
- d) Water Closets = 1.28 GPM, - Shower Heads = 2.0 GPM, - Sink Faucets = min.0.8 max.1.5 GPM.
- e) Minimum shower size is 1024 square inches (32" x 32" finished interior size minimum) **CPC 408.6**
- f) Site built shower stalls shall comply with **CPC 408.7**
- g) Stall shower door to open out a minimum of 22" clear wide opening. **CPC 408.5**
- h) Toilet and/or Bidet 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**
- i) When additional water closets (toilets) are installed, a maximum of 3 water closets are allowed on a 3" waste line.
- j) The hot water valve shall be installed on the left side. **CPC 417.5**
- k) A minimum 12" x 12" access panel is required when a slip joint p-trap waste & overflow is provided.

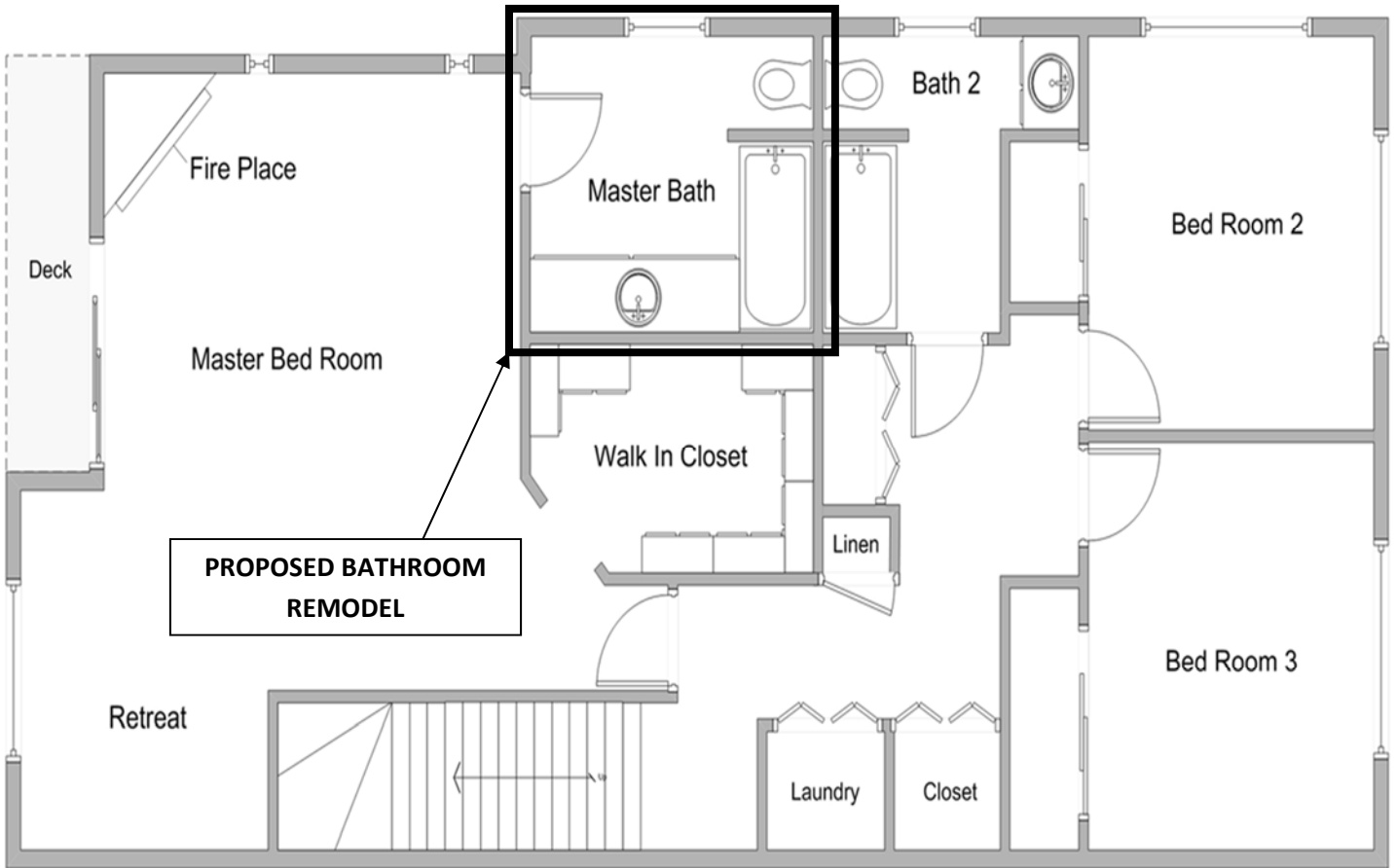
The following plan references may be used as a guide for plan design and plan check submittal:

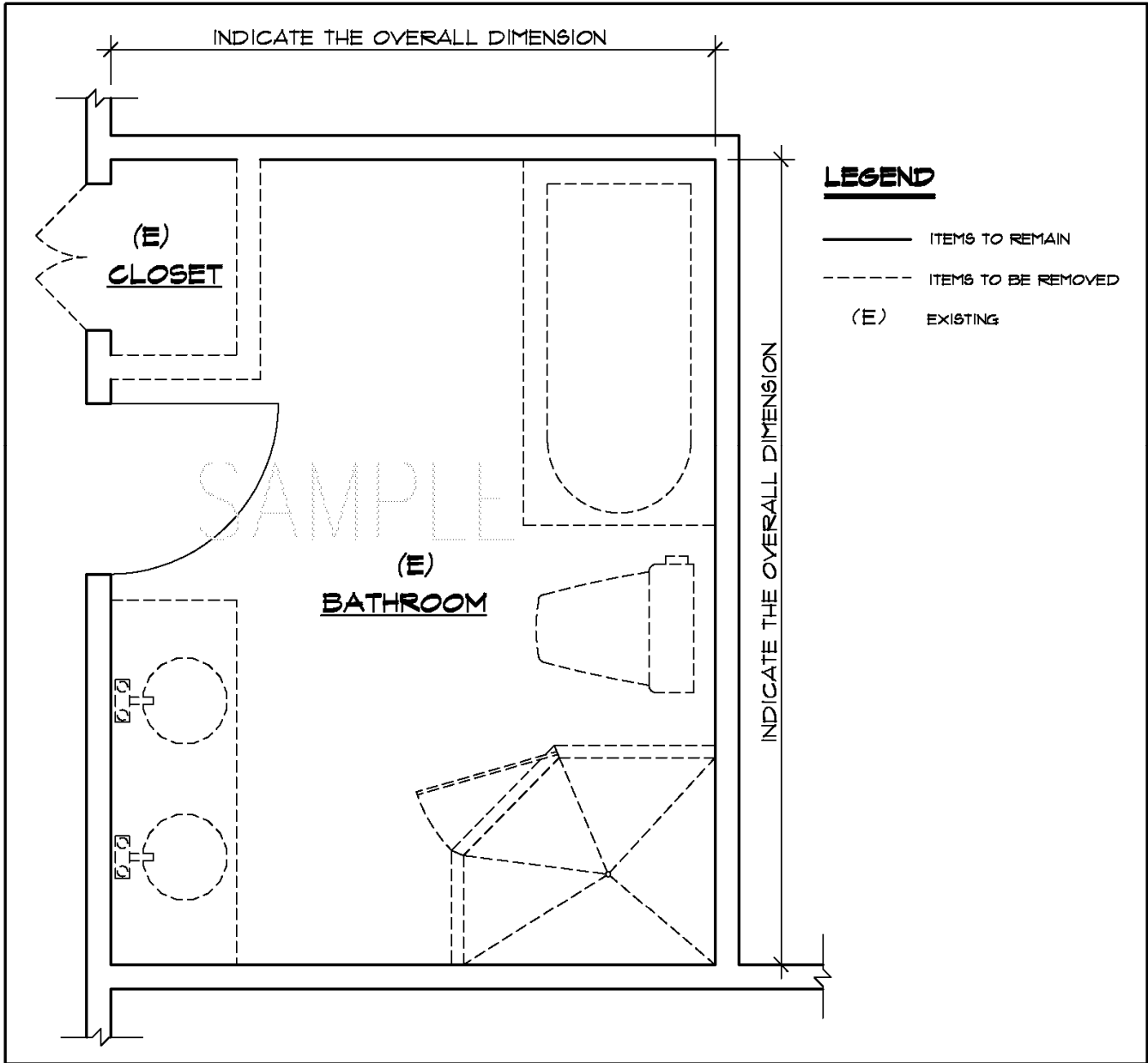


RESIDENTIAL BATH REMODEL

FLOOR PLAN OF WHOLE LIVING SPACE

- Indicate on living space floor plan bathroom/s where proposed remodel will be done.



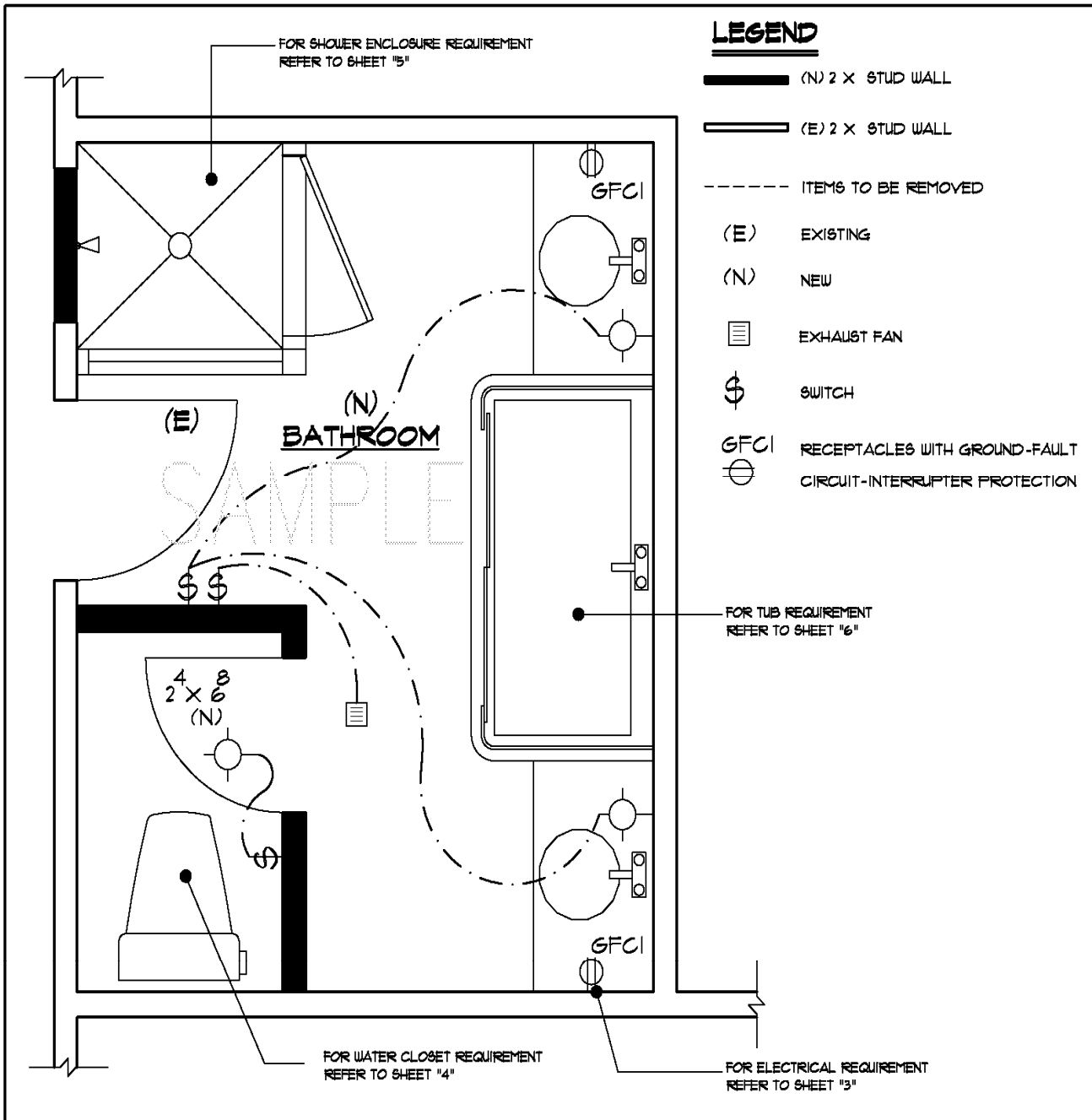


A **EXISTING LAYOUT / DEMOLITION**
(PLAN VIEW)

The purpose of preparing this plan is to show

- 1) What is the existing layout
- 2) Which Items are going to be removed & which items will remain as existing

In this example all (E) plumbing fixtures, portion of (E) closet wall inside bathroom and (E) closet door are going to be removed.

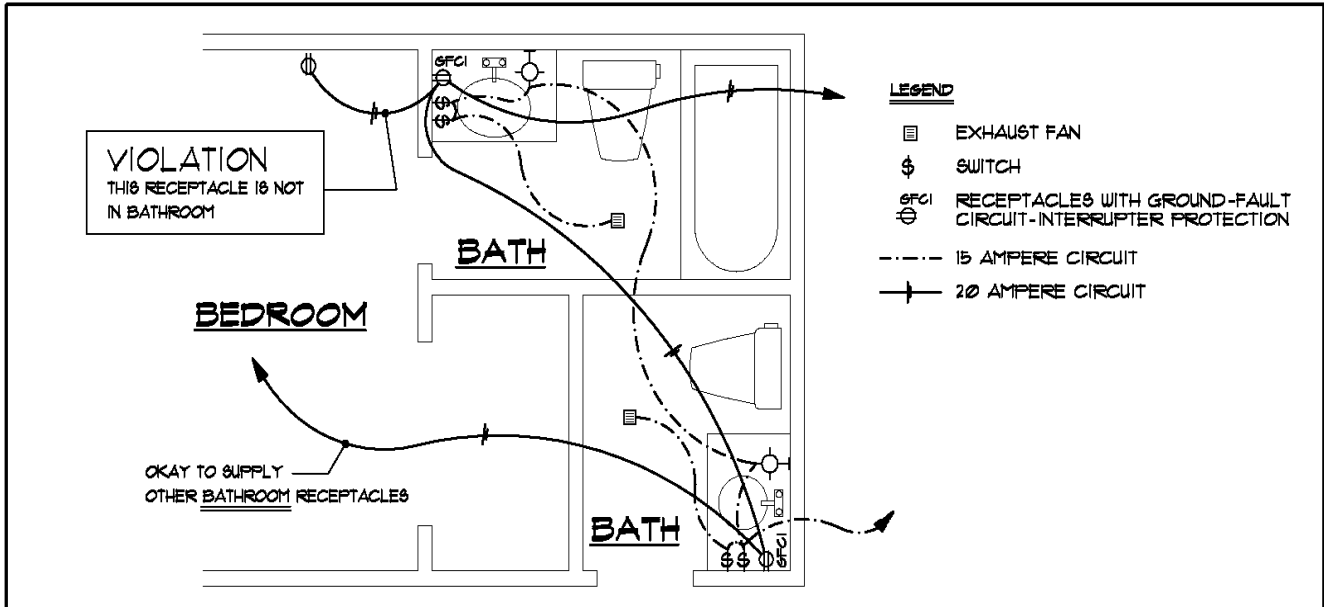


A **PROPOSED LAYOUT**
(PLAN VIEW)

The purpose of preparing this plan is to show

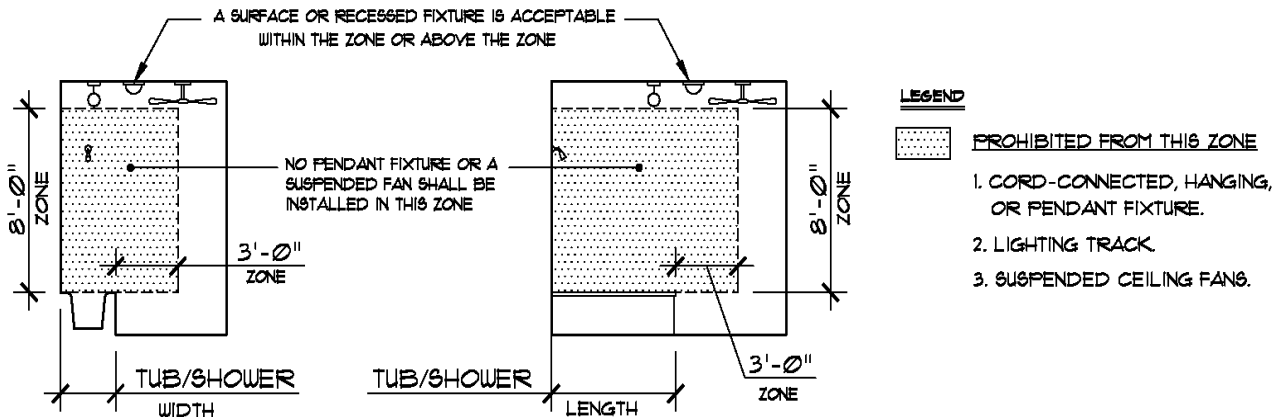
1) What is the proposed layout

In this example: Install (N) Shower & Enclosure in previous (E) closet location, (N) water closet and (N) walls for water closet enclosure, two new vanities and sinks, and Tub with glass enclosure.



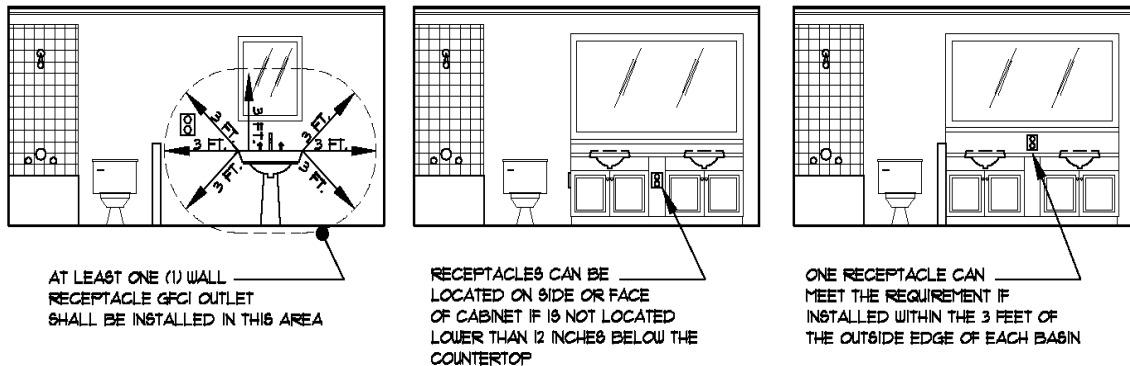
A

BRANCH CIRCUITS
(PLAN VIEW)



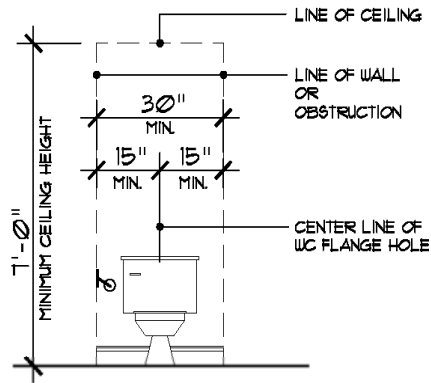
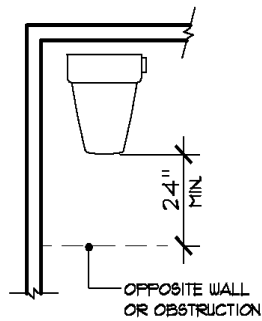
B

PROHIBITED ZONE FOR FIXTURE INSTALLATION
(ELEVATION / SECTION)

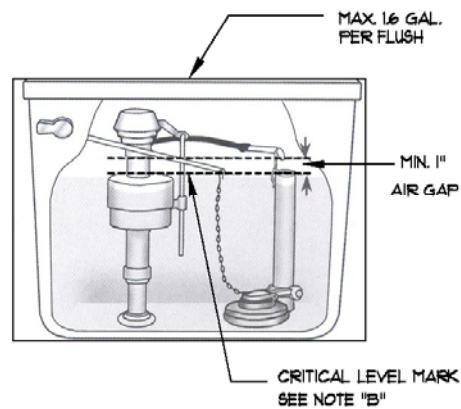
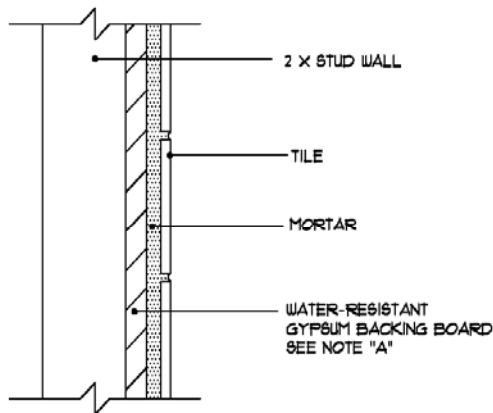


C

ACCEPTABLE LOCATIONS FOR GFCI RECEPTABLES



A WATER CLOSET COMPARTMENT REQUIRED DIMENSION



B BASE FOR TILE

C TOILET FILL VALVE

NOTE " A "

Sec R702.3.8 Water-resistant gypsum backing board.

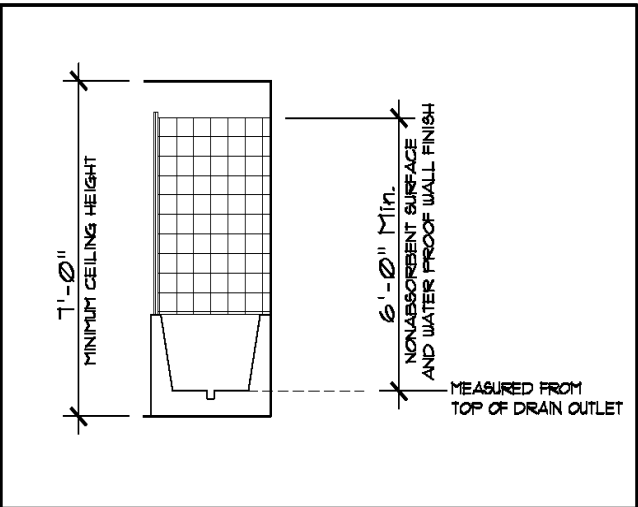
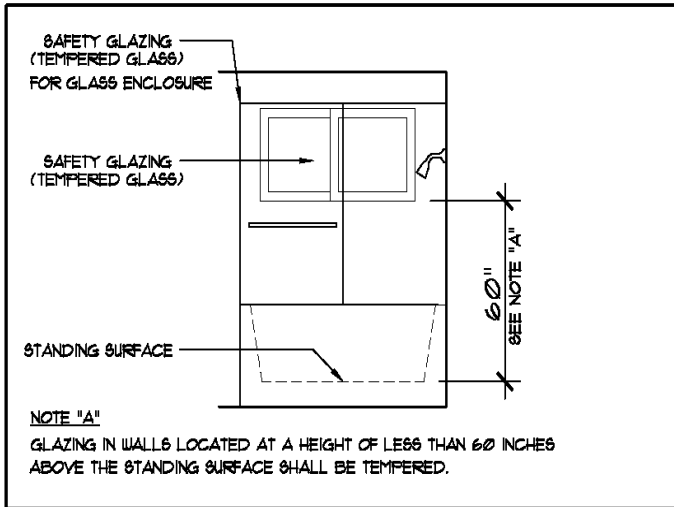
Gypsum board used as the base or backer for adhesive application of ceramic tile or other required nonabsorbent finish material shall conform to ASTM C 1396, C 1178 or C1278. Use of water-resistant gypsum backing board shall be permitted on ceilings where framing spacing does not exceed 12 inches on center for 1/2-inch-thick or 16 inches for 5/8-inch-thick gypsum board. Water-resistant gypsum board shall not be installed over a Class I or II vapor retarder in a shower or tub compartment. Cut or exposed edges, including those at wall intersections, shall be sealed as recommended by the manufacturer.

Sec R702.3.8.1 Limitations.

Water resistant gypsum backing board shall not be used where there will be direct exposure to water, or in areas subject to continuous high humidity.

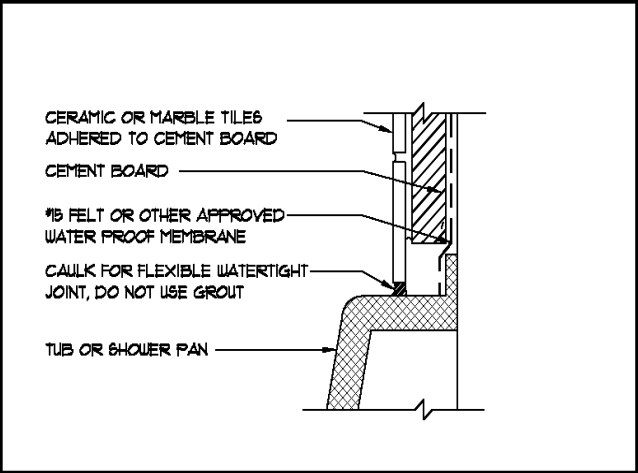
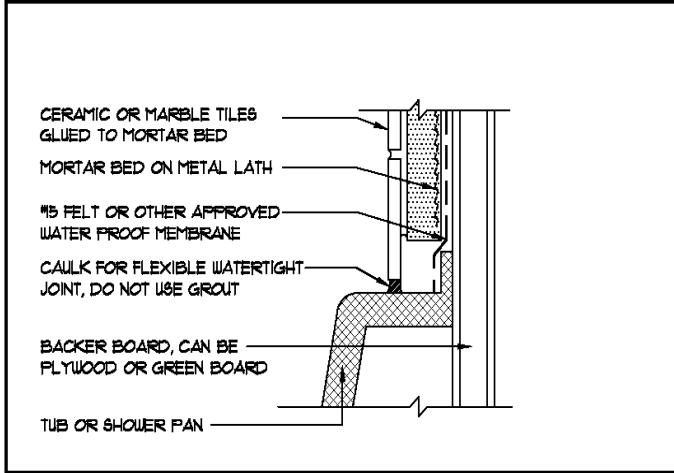
NOTE " B "

- Water closet tanks shall be equipped with a ballcock. the ballcock shall be installed with the critical level at least one (1) inch above the full opening of the overflow pipe. In cases where the ballcock has no hush tube, the bottom of the water supply inlet shall be installed one (1) inch above the full opening of the overflow pipe.



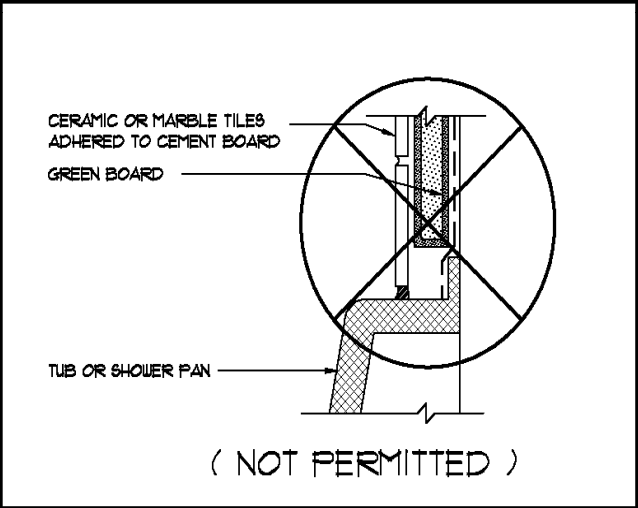
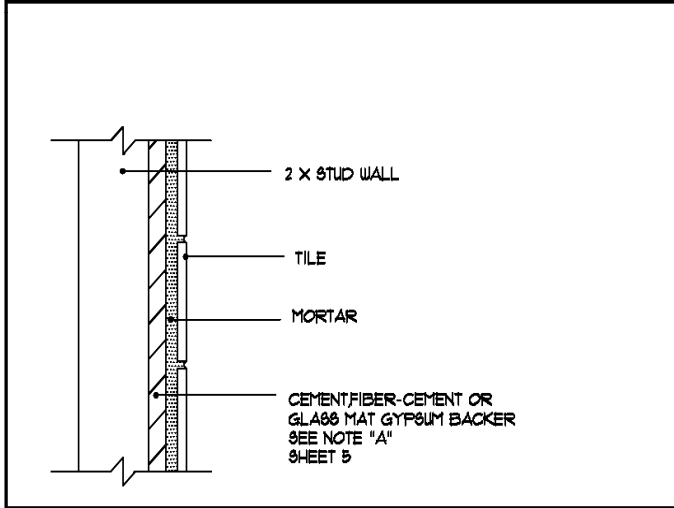
A TUB ENCLOSURE (PLAN VIEW)

B TUB ENCLOSURE (SECTION)



C TILE ON MORTAR BED

D TILE ON CEMENT BOARD



E BASE FOR TILE

F TILE ON GREEN BOARD

