**Water Resistant Gypsum Board**

**2019 California Building Code (CBC), Section 2509**

Section 205.1 Wet Areas Showers and public toilet walls shall conform to Section 1210.2 of the 2019 CBC.

Section 2509.2 Base for tile. Materials used as a base for wall tile in tub and shower areas and wall ceiling panels in shower areas shall be of materials listed in Table 2509.2 and installed in accordance with the manufacturer’s recommendations.

15. **Application of Gypsum Board to Receive Adhesively Applied Ceramic or Plastic Wall Tile or Plastic Finished Wall Panels**

15.1 Framing around tub enclosures and shower stalls should allow sufficient room so that inside lip of tub, prefabricated receptor or hot-mopped sub-pan will be properly aligned with face of gypsum board. *(See Figures 9 and 10)* This may necessitate furring out from studs the thickness of gypsum board to be used 1/2 inch or 5/8 inch less thickness of the lip, on each wall abutting a tub, receptor, or sub-pan. Interior angles should be framed or blocked to provide solid backing for interior corners.

15.2 When framing is spaced more than 16 inches on center, suitable blocking or backing should be located approximately 1 inch above top of tub or receptor and at gypsum board horizontal joints in area to receive tile. When surface finish is ceramic tile, spacing of studs 2-1/2-inch-thick or less should not exceed 16 inches on center. Studs 3-1/2 inches or more in thickness may be spaced 24 inches on center provided blocking described above is utilized.

**Note to Specifier:** Appropriate blocking, headers or supports should be provided to support tub, other plumbing fixtures and to receive soap dishes, grab bars, towel racks and similar items as may be required.

15.3 Water resistant gypsum backing board may be used as a base for application of ceramic or plastic wall tile or plastic finished wall panels in wet areas such as tub and shower enclosures when installed in accordance with **GA-216 or ASTM C840**. Regular gypsum board may be used as a base for tile and wall panels in **dry areas**. Gypsum board should not be used in extremely critical exposure areas such as saunas, steam rooms or gang shower rooms. Gypsum board used as a base for tile or wall panels in tub or shower enclosures, etc., should not be foil backed and should not be applied over any vapor retarder.

**Note:** A single layer of asphalt impregnated felt, 16 pounds or less, applied as part of the wall system, is not considered a vapor retarder.

15.3.1 Adhesive for application of surfacing material over gypsum board should be as recommended by manufacturers of surfacing material.

15.3.2 Waterproof receptors, pans or sub-pan should have an upstanding lip or flange which should be a minimum of 1 inch higher than water dam or threshold contained in entry way to shower.

15.4 Water resistant gypsum backing board should be applied perpendicularly with factory edge spaced a minimum of 1/4 inch above lip of receptor, tub or sub-pan. Shower pans, receptors or tubs should be installed prior to erection of gypsum board.
FOR FIRE OR SOUND RATED ASSEMBLIES, THE BASE PLY GYPSUM BOARD SHOULD EXTEND FULL HEIGHT, FLOOR TO CEILING (See Figure 11)

**Note:** If necessary, face ply gypsum board should be properly furred away from framing members as specified in 15.1 and installed so that inside surface of lip of tub, or upstanding leg of receptor or pan will be properly aligned with exposed surface of gypsum board.

15.4.1 In areas to receive tile, water resistant gypsum backing board should be attached by nails or screws spaced not to exceed 8 inches on center.

15.4.2 Gypsum board applied with adhesive only should not be used as a base to receive tile.

15.4.3 Tile, in combination with the bonding adhesive used, should be applied to protect the gypsum board and any water sensitive materials if present *(such as joint compound)* from penetration of water or moisture.

15.4.3.1 For application of ceramic, plastic or metal wall tile or plastic finished rigid wall panels or other types of surfacing materials over gypsum board in wet or dry areas, recommendations of manufacturer of tile, wall panels, or other surfacing materials should be followed. Responsibility for performance of completed installations shall rest with surfacing material manufacturer and/or surfacing material applicator.

15.4.3.2 For general recommendations see Appendix.