

# Exterior Installation of PermaBASE CI®



## WALLS

**Wall Framing:** Framing members should be spaced a maximum of 16" o.c. and shall be a minimum of 2"x 4" nominal (wood) or 20 gauge (metal). Edges of PermaBASE CI® Insulated Cement Board parallel to framing should be continuously supported. Provide additional blocking when necessary to permit proper attachment.

**Water Barrier:** While PermaBASE CI Insulated Cement Board is unaffected by moisture, a water/air resistive barrier (WRB) must be installed to protect the cavity. The type and specific placement or location of the water barrier will vary based on local building codes and/or manufacturers' specifications, installation guidelines and warranties. Consult the WRB manufacturer's recommendations for specific installation guidelines.

### PermaBASE CI Insulated Cement Board:

**Note:** PermaBASE CI can be cut using three methods:

1. Score PermaBASE CI from the foam side using a utility knife to score/cut completely through the insulation and into the back of the cement board. The board can then be snapped. Cut through the mesh on the front of board to complete the cut.
2. PermaBASE CI can be cut to length effectively with a hand saw.
3. While wearing the proper protective equipment such as safety glasses and approved respirator, use a power saw with the appropriate blade to cut through the entire panel. Penetrations can be created in the panel with a drywall saw.

Apply PermaBASE CI with ends and edges closely butted, but not forced, together. Stagger end joints in successive courses. Drive fasteners into field of cement board first, working toward ends and edges. Space fasteners maximum 8" o.c. with perimeter fasteners at least 3/8" and less than 5/8" from ends and edges. Ensure PermaBASE CI Insulated Cement Board is tight to framing. Do not overdrive screws to the point they penetrate the fiberglass mesh in PermaBASE CI.

**Joint Reinforcement:** Trowel bonding material to completely fill the tapered recessed board joints and gaps between each panel. On non-tapered joints, apply a 6" wide, approx. 1/16" thick, coat of bonding material over entire joint. For all joints, immediately embed 4" alkali-resistant fiberglass mesh tape fully into applied bonding material and allow to cure. Same bonding material should be applied to corners, control joints, trims or other accessories. Feather bonding material over fasteners to fully conceal.

**Control Joints:** For exterior installations, consult finish manufacturer for spacing requirements. For exterior tile applications, control joints should be spaced a maximum of every 12'. If no recommendation is available, allow a maximum of 16 lineal feet between control joints. A control joint must be installed but not limited to the following locations: where expansion joints occur in the framing or building (discontinue all cross-furring members located behind joint); when boards abut dissimilar materials; where framing material changes; at changes of building shape or structural system; at each story separation. Place control joints at corners of window and door openings or follow specifications of architect. Control joint cavity shall not be filled with coating or other materials.



## LIMITATIONS

- Treat joints with 4" wide alkali-resistant fiberglass mesh tape set in a modified mortar or stucco basecoat.
- Steel framing must be minimum 20-gauge (galvanized) (.0312" design thickness) or heavier.
- Do not expose PermaBASE CI to temperatures over 220°F (105°C).
- Do not use PermaBASE CI as a nailing base for other finishes.
- Thin veneer construction can reveal planar irregularities in framing.
- Minor cracking at joints may become visible in finished exterior surface.
- For exterior finishes applied directly to PermaBASE CI, reinforcing mesh must be embedded in basecoat (consult exterior finish manufacturer for additional installation requirements).
- Sheathing selection and installation varies according to type of wall construction.

### Advantages of Creating Continuous Insulation with PermaBASE:

- Provides better thermal comfort, lowers heating and cooling costs, reduces likelihood of trapped moisture.
- Helps mitigate the loss of heat/air conditioning by insulating the studs.
- Allows multiple finishes on one substrate.
- Works in all climates – adaptable to varying regional system requirements.
- 15-year exterior warranty.
- Speeds up your schedule – faster to install than traditional method.