FLOORS AND COUNTERS

Subfloor or Base: For flooring applications with 16" o.c. floor joists, 5/8" tongue-and-groove exterior-grade plywood or 3/4" tongue-and-groove exterior-grade OSB may be used. For 19.2" o.c. and 24" o.c. floor joists, 3/4" tongue-and-groove exterior-grade plywood or OSB must be used. Tile size for floors with 24" o.c. floor joists must be 12" x 12" or larger. The joist and subfloor assembly must meet L/360 as well as the appropriate code tables for live and dead loads.

Underlayment: Using a 1/4" square-notched trowel, apply a setting bed of polymer-modified mortar (or thin-set mortar) to the subfloor or counter base. Immediately laminate PermaBASE® Cement Board to subfloor or base with ends and edges closely butted but not forced together. Leave a 1/4" gap along walls. Stagger all joints so that they do not line up with underlying substrate joints. Fasten PermaBASE Cement Board every 8" o.c. throughout board field and around all edges while setting bed mortar is still workable. Around perimeter of each board, locate fasteners 2" from corners and not less than 3/8" from the edges. Fill all joints solid with bonding material. On non-tapered joints such as butt ends, apply a 6" wide, 1/16" thick coat over the entire joint. For all joints, immediately embed 2" fiberglass mesh tape fully into applied bonding material; ensure that tape is centered over joint. Apply bonding material over fasteners to fully conceal. Remove all excess bonding material and allow to cure.

LIMITATIONS

- Joints should be treated with alkali-resistant fiberglass mesh tape set in a polymer-modified mortar.

- Conventional paper drywall tape, joint compound and drywall nails or screws should not be used.

- Maximum wall framing spacing should not exceed 16" o.c. and must be designed to limit deflection to L/360 under all live and dead loads.

- Steel framing must be 20 gauge (galvanized) or heavier – 16" o.c.

- 1/4" UltraBacker should not be used on walls or ceilings.

- PermaBASE Cement Board is not a water barrier; consult local building code for moisture barrier requirements.

- Not recommended for use under vinyl flooring.

- PermaBASE Cement Board should not be exposed to temperatures over 220°F (105°C).

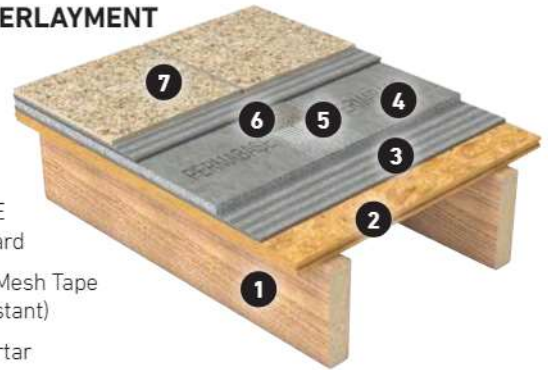- PermaBASE Cement Board is not a nailing base for other finishes.

COUNTERTOP INSTALLATION

1. OSB/Plywood
2. Dry-Set Mortar
3. PermaBASE Cement Board
4. Fiberglass Mesh Tape (Alkali-Resistant) Embedded in Mortar
5. Dry-Set Mortar
6. Tile

FLOOR UNDERLAYMENT

1. Joists
2. Subfloor
3. Dry-Set Mortar
4. PermaBASE Cement Board
5. Fiberglass Mesh Tape (Alkali Resistant)
6. Dry-Set Mortar
7. Tile

FLOOR UNDERLAYMENT

1. Open-Web Wood Trusses
2. Subfloor
3. Dry-Set Mortar
4. PermaBASE Cement Board
5. Mesh Tape
6. Dry-Set Mortar
7. Mortar Bed
8. Tile