

# PERMABASE® BRAND ULTRABACKER™ CEMENT BOARD UNDERLAYMENT

## MANUFACTURER

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## DESCRIPTION

PermaBase® BRAND UltraBacker™ 1/4" Cement Board Underlay- ment is a rigid substrate made of Portland cement, aggre- gate and a glass mesh and mat facer that provides an exceptionally hard, smooth and durable surface that is able to withstand prolonged exposure to moisture.

## BASIC USES

UltraBacker Cement Board is used as an underlayment for ceramic tile on floors, countertops, tub decks and outdoor kitchen counters.

## ADVANTAGES

- Smooth mesh and mat sur- face is 30% stronger and four times more rigid than com- petitive 1/4" cement boards.
- Improved fastener holding and reinforced edges allow for closer fastening of nails or screws without crumbling or spinout. Is extremely durable in transit and on the jobsite.
- Cuts easily with a standard utility knife versus specialty tools or expensive power tools required to cut tradi- tional cement board and fiber cement board.
- The 1/4" thickness eliminates the need to modify adjacent thresholds when abutting to carpet, wood flooring or other common flooring materials.

- UltraBacker has the lowest water absorption rate (<4%) than other backerboards, which ensures more open time and a better tile bond.
- Mold and moisture resistant. Will not rot, swell or dis- integrate when exposed to moisture.
- Compatible with all brands of thinsets and grouts.
- 30-year limited warranty for interior applications.

## GREENGUARD CERTIFIED

PermaBase UltraBacker Cement Board is GREENGUARD Children & Schools™ Certified for indoor air quality.



## MOLD AND MILDEW RESISTANCE

UltraBacker Cement Board was designed to provide extra protection against mold and mildew. When tested by an independent labora- tory, UltraBacker Cement Board received the highest possible ratings on ASTM G 21 and D 3273. The use of UltraBacker Cement Board in actual installations may not

produce the same results as were achieved in controlled laboratory conditions. No material can be considered "mold proof," nor is it certain that any material will resist mold or mildew indefinitely. When used in conjunction with good design, handling and construction practices, UltraBacker Cement Board can provide increased mold resistance. As with any build- ing material, avoiding water exposure during handling, storage and installation, and after installation is complete, is the best way to avoid the formation of mold or mildew.

## LIMITATIONS

- Joints should be treated with alkali resistant fiberglass mesh tape set in a latex-Portland cement mortar.
- Conventional paper drywall tape, joint compound and drywall nails or screws should not be used.
- UltraBacker should not be used on walls or ceilings.
- Not recommended for use with vinyl flooring.
- UltraBacker Cement Board should not be exposed to tem- peratures over 220°F (105°C).

## ACCESSORIES

*Joint reinforcement:* PermaBase mesh tape must be used on all edges and cuts made to size. Use 2" wide polymer- coated (alkali resistant) mesh tape for interior applications.

*Bonding materials:* Treat joint and set facing material, preferably with latex-Portland cement mortar or with dry-set (thin-set) mortar. All mortars should comply with ANSI A118.1 or A118.4 standards. Type I organic adhesive meet- ing ANSI A-136.1 may be utilized for interior use only.

*Fasteners:* Galvanized roofing nails, 1-1/2" long with hot dipped galvanized coating, for use with wood framing. Nails should meet Federal Specification #FF-N105B/ type 2 style 20.

PermaBase corrosion resistant screws or equivalent, 1-1/4" long, for use with wood framing. Type S-12 screws or equivalent, 1-1/4" long, for use with 20 ga. or heavier steel framing.

*(Continued next page)*

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_ Date \_\_\_\_\_

Submittal Approvals: (Stamps or Signatures)

## COMPOSITION

UltraBacker Cement Board is a nailable, screwable underlayment which is composed of Portland cement, aggregates and reinforcements. It has a significant ability to remain unaffected by prolonged exposure to moisture.

## TECHNICAL DATA

### SIZES & PACKAGING

Size: Thickness, Width & Length	# of Pcs. Per Unit
1/4" x 36" x 5' (7.9 mm x 914 mm x 1524 mm)	50

### PHYSICAL PROPERTIES

Property	Test Method	UltraBacker
Water Absorption % by Weight/24 Hours	ASTM C 473	<4
Flexural Strength (psi)	ASTM C 947	750
Fastener Holding (Wet and Dry, lbs.)	ASTM D 1037 (0.400" head diameter)	90
Weight (psf)	ASTM C 473	2

## RECOMMENDATIONS

### INTERIOR APPLICATIONS

*General:* All framing should comply with local building code requirements and be designed to provide support with a maximum allowable deflection of L/360 under all intended loads.

*Note:* Cut or score UltraBacker on printed side of panel. Install tile and tile setting materials in accordance with current ANSI specifications and Tile Council of North America (TCNA) guidelines.

### Floors & 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 joists 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 Latex-Portland cement mortar or Thin-Set mortar to the subfloor or counter base. Immediately laminate UltraBacker to subfloor or base leaving a 1/8" space between boards at all joints and corners. Leave a 1/4" gap along walls. Stagger joints so they do not line up with underlying substrate joints. Fasten UltraBacker 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 the 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, embed 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.

## EXTERIOR APPLICATIONS

*General:* All framing should comply with local building code requirements and be designed to provide support with a maximum allowable deflection of L/360 under all intended live and dead loads.

*Note:* Cut or score UltraBacker on printed side of panel. Install tile and tile setting materials in accordance with current ANSI specifications and Tile Council of North America (TCNA) guidelines.

### Decks

*Subfloor:* Plywood should be securely glued and fastened to floor joists spaced a maximum of 16" o.c. Subfloor should be sloped at a minimum pitch of 1/4" per foot. The floor surface should be true to plane within 1/8" in 10'.

*Underlayment:* Using a 1/4" square-notched trowel, apply a setting bed of Latex-Portland cement mortar to the subfloor. Immediately laminate UltraBacker to subfloor leaving a 1/8" space between boards at all joints and corners. Leave a 1/4" gap along walls. Stagger joints so they do not line up with underlying substrate joints. Fasten UltraBacker 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 the 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, embed alkali-resistant 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.

*Waterproof membrane:* Trowel apply waterproof membrane to the entire surface of the UltraBacker, following membrane manufacturer's installation instructions in detail.

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