1/4" WONDERBOARD® CEMENT BACKERBOARD

- Excellent for places where tile meets carpet or cabinets
- Dimensionally stable — can be used in wet areas
- Perfect for floors, exterior decks or countertops
- Patented open-mesh edges for tapeless installation
- Lifetime Warranty
- Pre-printed dots for fastener spacing

PRODUCT DESCRIPTION

1/4" (6 mm) WonderBoard® is a glass-mesh, cement backerboard. Remains stable while increasing in strength, even when exposed to continuous moisture, reducing potential damage from moisture penetration. Reduces subfloor modifications to adjacent floors, thresholds, carpets and cabinets. Tapeless installation on open mesh edges provides superior edge bond strength. Easy to score, snap, cutout and nail.

USES

1/4" WonderBoard is designed for use as an interior or exterior substrate for horizontal applications such as floors, decks, countertops and vanities for ceramic tile and natural stone.

COMPOSITION

Cementitious Backer Unit (CBU): A nailable, screwable underlayment panel which is composed of stable Portland cement, aggregates and reinforcements that has a significant ability to remain unaffected by prolonged exposure to moisture.

MATERIALS & ACCESSORIES

Bonding Materials: A polymer-modified mortar meeting ANSI A118.11 such as FlexBond® Fortified Thin-Set Mortar should be used for the leveling bed and joint treatment. For installation of tile or stone, mortars meeting ANSI A118.1, A118.4 or A118.11 or a Type I ceramic tile adhesive meeting ANSI A136.1 can be used. Follow the installation recommendations for each mortar or adhesive. For best performance, a polymer-modified mortar is recommended.

Fasteners: Galvanized roofing nails, 1 1/2" (38 mm) long or SuperiorBilt® Cement Backerboard Screws (1 1/4" {32 mm} long). Nails should meet Federal Specification #FF-N105B/type 2 style 20, or equivalent.

LIMITATIONS

- 1/4" WonderBoard should not be used as a structural load-bearing member.
- 1/4" WonderBoard is unaffected by water but is not a water barrier. If the area below the backerboard must be kept dry, a waterproof membrane such as RedGard® Waterproofing and Anti-Fracture Membrane must be used.
- Do not use drywall fiberglass tape.

APPLICATIONS

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 of the span under all intended loads. When setting dimensional stone larger than 12" x 12" (30 x 30 cm), contact Technical Support for recommendations regarding subfloor deflection requirements.

Control Joints: Tiled surfaces exceeding 24' - 36' (7.32 - 11 m) in a continuous plane or surfaces abutting a dissimilar structure should be protected from structural movement with control (expansion) joints. Location width and details of control joints should follow sound architectural practices. See TCA Handbook EJ171.

Wood Floors

Subfloor: 5/8" (16 mm) exterior grade plywood or OSB panels (PRP-108) should be securely glued and fastened to floor joists. Floor joists should be spaced a maximum of 16" (40 cm) o.c. 3/4" (19 mm) exterior grade plywood or OSB subfloor framed with I-joists spaced a maximum of 19.2" (48 cm) o.c. is also acceptable. When setting dimensional stone larger than 12" x 12" (30 cm x 30 cm), a 3/4" (19 mm) subfloor must be used for all installations. All plywood or OSB subfloor sheets must be gapped 1/8" (3 mm). For best results, be sure plywood subfloor panels are gapped 1/8" (3 mm) at seams.

CUSTOM® BUILDING PRODUCTS

Installation: Using a 1/4" (6 mm) square-notch trowel, apply a setting bed of polymer-modified mortar to the subfloor. Immediately laminate 1/4" WonderBoard to subfloor leaving a 1/8" - 3/16" (3 - 5 mm) space between boards at all joints and corners. Stagger joints so they do not line up with underlying substrate joints. Fasten backerboard every 6" - 8" (15 - 20 cm) o.c. throughout board field and around all edges while setting bed mortar is still workable. Around perimeter of each board, locate fasteners within 1/2" - 2" (1.3 - 5 cm) of edge. Fill all joints solid with polymer-modified mortar. Taping of floor joints is not required.

Wood Counters

Installation: 3/4" (19 mm) exterior grade plywood should be securely fastened to the cabinet. Maximum variation in plywood surface should be no more than 1/8" in 10' (3 mm in 3 m) from the required plane. It is also recommended that the plywood be cut in a dot dash fashion with a circular saw. Apply a moisture barrier of 15 lb. (6.8 kg) roofing felt or 4 mil polyethylene film between plywood and WonderBoard. Secure WonderBoard with 3/4" (19 mm) galvanized roofing nails or SuperiorBilt Cement Backerboard Screws. Place fasteners every 6" - 8" (15 - 20 cm) throughout panel field and around perimeter. Fill all joints between panels with a polymer-modified thin-set mortar. Taping of joints is not required. All change of plane such as joints where counter tile and wall tile meet must be caulked with a flexible sealant.

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 of the span under all intended live and dead loads.

Control Joints: Finished surfaces exceeding 12' - 16' (3.6 - 4.8 m) in a continuous plane or surfaces abutting a dissimilar structure should be protected from structural movement with control (expansion) joints. Location, width and details of control joints should be specified to local building code and specific application requirements. See TCA handbook EJ171.

Decks

Subfloor: Plywood should be securely glued and fastened to floor joists spaced a maximum of 16" (40 cm) o.c. Subfloor should be sloped at a minimum pitch of 1/4" (6 mm) per foot (30 cm). The floor surface should be true to plane within 1/8" in 10' (3 mm in 30 M). 3/4 exterior grade plywood or OSB subfloor framed with I-joists spaced a maximum of 19.2" (48 cm) o.c. is also acceptable. When setting dimensional stone larger than 12" x 12" (30 x 30 cm), a 3/4" (19 mm) subfloor must be used for all installations. All plywood or OSB subfloor sheets must be gapped 1/8" (3 mm).

Installation: Using a 1/4" (6 mm) square-notch trowel, apply a setting bed of latex-modified mortar to the subfloor. Install 1/4" WonderBoard to subfloor, leaving a 1/8" - 3/16" (3 - 5 mm) space between boards at all joints and corners. Fasten backerboard every 6" - 8" (15 - 20 cm) o.c. throughout board field and around all edges while setting bed mortar is still workable. Around the perimeter of each board, locate fasteners within 1/2" - 2" (1.3 - 5.1 cm) of edge. Fill all joints and corners solid with latex-modified mortar. Taping of floor joints is not required.

Waterproof Membrane: Apply RedGard Waterproofing and Anti-Fracture Membrane to the entire surface of the 1/4" WonderBoard, following membrane installation instructions.

WARRANTY

1/4" WonderBoard is eligible for the Custom Building Products' Lifetime Backerboard Systems Warranty. For details, call Technical Services at 800-282-8786.

SAFETY

AVOID BREATHING SILICA DUST. This product when cut, drilled, or abraded produces dust containing Free Silica which may cause cancer or delayed lung injury (Silicosis) if inhaled. Work outdoors, in well ventilated area, or use mechanical ventilation. Please wear safety glasses and dust mask. If in dusty areas or where airborne dust exceeds PEL wear NIOSH/MSHA approved respirator. This product contains one or more chemicals known to the State of California to cause cancer. See Material Safety Data Sheet for detailed information.

ORDERING INFORMATION

ITEM CODE	SIZE
FLB48	36" x 48" x 1/4" (91 cm x 122 cm x 6 mm)
FLB60	36" x 60" x 1/4" (91 cm x 153 cm x 6 mm)

TECHNICAL DATA

	ASTM	1/4" WONDERBOARD
Weight:	D1037	2 lbs. per ft^2 (.9 kg/m^2)
Compressive Strength Wet/Dry:	D 2394	≥ 2500 psi (≥ 175.8 kg/cm^2)
Flexural Strength Wet/Dry:	C 947	≥ 1500 psi (≥ 105.5 kg/cm^2)
Fastener Pull Thru:	D 1037	≥ 100 lb. (45.4 kg)
Moisture Movement:	D 1037	.07%
Flame Spread Smoke Development:	E 84	0/0
Wind Load:	E 330	30 lbs. per sq. ft. (13.6 kg/m^2)

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