

RHINOBOARD®

FIBER CEMENT CERAMIC TILE & FLOORING BACKERBOARD

- Ideal for tile, stone, wood, vinyl or other resilient flooring
- Cuts, scores and snaps cleanly
- Strong, long lasting underlayment
- Suitable for wet areas
- Lightweight
- Lifetime Warranty

PRODUCT DESCRIPTION

1/4" nominal (6 mm) RhinoBoard is a fiber cement backerboard. A nailable, screwable underlayment panel which is composed of Portland cement, ground sand, cellulose fiber, and other proprietary additives. RhinoBoard is an extremely reliable underlayment for flooring and countertop needs. This product does not contain asbestos or formaldehyde. The board reduces subfloor modifications to adjacent floors, thresholds, carpets and cabinets (additional leveling may be needed).

Lightweight — only 25 lbs. per 36" x 60" sheet (10.9 kg per 91 cm x 152 cm sheet) and easy to score, snap, cutout and nail.

USES

RhinoBoard is designed for use as an interior substrate for horizontal applications such as floors, countertops and vanities for installing ceramic tile, natural stone, wood, vinyl and other resilient flooring.

MATERIALS & ACCESSORIES

Bonding Materials: For leveling beds (under RhinoBoard), joint treatment and to set ceramic tile, use a polymer-modified thin-set mortar such as FlexBond® Fortified Thin-Set Mortar. All mortars should comply with ANSI A118.4 or ANSI A118.11 standards.

Fasteners

Ceramic Tile Floor Installation: Galvanized roofing nails, 1 1/2" (38 mm) long or SuperiorBilt® Concrete Backerboard Screws 1 1/4" (32 mm) long.

Resilient Floor Installation: 18 gauge, corrosion-resistant, polymer-coated, minimum 3/4" (19 mm) staples with a 1/4" (6 mm) or larger crown.

Countertop Installation: 3/4" (19 mm) corrosion-resistant roofing nails.

LIMITATIONS

Interior use only. RhinoBoard should not be used as a structural, load-bearing member. RhinoBoard is suitable for wet areas but not as a water barrier. If the area will not be kept dry or if areas under flooring must be protected, use Custom's RedGard™ Waterproofing and Anti-Fracture Membrane.

APPLICATIONS

Interior Applications Only

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 cm x 30 cm), contact Technical Support for recommendations regarding subfloor deflection requirements. Framing members should be minimum 2" x 10" (5 cm x 25 cm) joists spaced a maximum of 16" (40.6 cm) o.c. If floor is framed using I-joists, they must be spaced no more than 19.2" (48.7 cm) on center.

Waterproof Membrane: As needed, apply RedGard™ Waterproofing and Anti-Fracture Membrane to the entire surface of the RhinoBoard, following installation instructions in detail.

Installation of Ceramic Tile or Stone Over Wood Subfloors

Subfloor: 5/8" (16 mm) exterior grade plywood or OSB panels (PRP-108) should be securely glued and fastened to floor joists 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" (48.7 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) thick subfloor must be used for all installations. All plywood or OSB subfloor sheets must be gapped 1/8" (3 mm).

Underlayment: Using a 1/4" x 1/4" (6 mm x 6 mm) square-notch trowel, apply a leveling bed of polymer-modified thin-set mortar to the subfloor. Immediately place RhinoBoard to subfloor leaving a 1/8" - 3/16" (3 mm - 5 mm) space between panels at all joints and corners and 1/4" (6 mm) at perimeter walls. Stagger panel joints so they do not line up with underlying substrate joints. Fasten RhinoBoard every 6" - 8" (15.2 cm - 20.3 cm) throughout panel field and around all edges while leveling bed mortar is still workable. Around perimeter of each board, locate fasteners within 1/2" - 2" (1.3 cm - 5 cm) of edge. Fill all joints with a polymer-modified thin-set mortar and finish flush with surface of the board. Taping of joints is not required.



CUSTOM®
BUILDING PRODUCTS

Installation of Ceramic Tile or Stone Over Wood Counters

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 membrane (15 lb. roofing felt or 4 mil polyethylene film) between plywood and RhinoBoard. Secure RhinoBoard with 3/4" (19 mm) galvanized roofing nails or SuperiorBilt Concrete Backerboard Screws. Place fasteners every 6" - 8" (15.2 cm - 20.3 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. Joints where counter tile and wall tile meet must be caulked with a flexible sealant.

Vinyl Flooring Installation

The wood subfloor must be dry (not to exceed 15% moisture). With the label side (smooth side) facing up, lay panels leaving a 1/8" - 3/16" (3 mm - 5 mm) space between boards at all joints and corners and 1/4" (6 mm) at perimeter walls. Stagger joints so they do not line up with underlying substrate joints. Remove or scrape off label. Using a minimum 3/4" (19 mm) galvanized chisel-point staples with a 1/4" (6 mm) or larger crown, or galvanized ring-shanked underlayment nails, fasten RhinoBoard every 6" - 8" (15.2 cm - 20.3 cm) throughout panel field and around all edges. Around perimeter of each board, locate fasteners within 1/2" - 2" (1.3 cm - 5 cm) of edge. Avoid resin, rosin, and cement-coated fasteners that can discolor vinyl flooring. Taping of joints is not required. All fasteners should be flush with or slightly below (no more than 1/16" [1.6 mm]) the RhinoBoard surface. Fasten one panel at a time. Do not tack corners. Install cut edges against the wall. Only factory edges should be joined. Sand uneven panel joints until they are smooth and even. Sanding must be done in a well-ventilated area with proper protection (see Safety). If you cannot feel the seam, sanding is not required. Avoid over-sanding that will cause depressions in the floor. Apply Custom's SpeedFinish™ Patching & Finishing Compound (or other approved patching compound recommended by the vinyl flooring manufacturer) to the joints between panels to create a smooth, flat surface. This may require more than one coat. Fill all panel end and edge joints, depressions, screw/nail heads, and damaged spots.

Follow patching compound application instructions and safety recommendations. Scrape or sand the patched areas so that they are smooth and even. Allow compound to dry; sand again until smooth. Clear all debris from underlayment and vacuum to eliminate excess dust or dirt. Lightly dampen board with a sponge or cloth. You can now install the floorcovering, carefully following the adhesive and floorcovering instructions. Allow a minimum of 24 hours after floorcovering installation before placing heavy appliances or furniture on floor.

WARRANTY

RhinoBoard is part of the Custom Building Products' Lifetime Backerboard Systems Warranty. For details, call Technical Services at 800-272-8786.

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
RH3660	36" x 60" x 6 mm (91 cm x 153 cm x 6 mm)

TECHNICAL DATA

	ASTM	SPECIFICATIONS	RHINOBOARD
Weight:			1.6 lbs. per ft ² (.73 kg/m ²)
Compressive Strength:	D 2394	≤ .05" @ 1250 psi	.006" @ 1250 psi
Flexural Strength Wet/Dry:	C 947	≥ 750 psi	1700 psi
Fastener Pull Thru:	D 1037	≥ 90 lbs.	160 lbs. (73 kg)
Moisture Movement:	D 1037	≤ .07%	.06%

