**Product Description**

Diamondback Tile Backer is used behind tiles in interior wet areas such as bathrooms, laundries, utility rooms and kitchens. Diamondback products consist of a high performance, water-resistant gypsum board produced with CertainTeed’s patented, proprietary Embedded Glass Reinforced Gypsum (EGRG®) Technology. Tile can be directly applied, eliminating the need for surface sealants, skim adhesive coats or waterproofing membranes.

1/4” (6.4 mm) Diamondback Tile Backer is suitable for use as an underlayment for countertops and residential and light commercial flooring applications. Diamondback Tile Backer Type X provides the same moisture resistance as Diamondback Tile Backer, plus it has a specially formulated core for use in fire resistance-rated designs. Diamondback Tile Backer and Diamondback Tile Backer Type X are available in a variety of sizes to meet various applications requirements.

**Basic Uses**

Diamondback Tile Backer and Diamondback Tile Backer Type X Boards are used in interior wet areas, non-wet areas, high-humidity areas and are typically used for adhering ceramic tiles to walls and floors in bathrooms, in shower and tub enclosures walls, kitchens, laundry and utility rooms. They may be used for walls and ceilings, countertops, floors and as a wall backing for laminate-faced panels or fiberglass tub and shower units to provide impact, fire and sound resistance.

**Advantages**

- Scores and snaps like standard gypsum board.
- Mold resistant rating of 10 (no mold) when tested per ASTM D3273.
- Up to 50% lighter weight than cement backer boards and up to 20% lighter weight than other ASTM C1178 gypsum tile backer boards.
- The proprietary moisture barrier face eliminates the need for an additional moisture/vapor retarder.
- Lifetime limited warranty for residential tile installations.
- 20 year limited warranty for commercial tile installations.
- Tile can be applied directly with latex-Portland cement mortar.
- Consistently high quality.
- Uniform edge and field hardness.

When storing boards for extended periods of time, cumulative pressure on unsupported lower units causes gypsum board to sag. For 4’ x 8’ (1220 mm x 2440 mm) boards, four inch (100 mm) wide risers (separators) should be spaced evenly at 28 inches (700 mm), then 24 inches (600 mm) for the next lift, followed by 28 inches (700 mm) for the next lift spacing across the 8’ (2440 mm) length of the board. A good stock rotation and inventory control plan will help avoid minor sagging. 3’ x 5’ (915 x 1525 mm) boards are palletized without risers (separators).

**Limitations**

- Not recommended for continuous exposure to temperatures exceeding 125˚F (52˚C).
- Boards should be stacked flat with care taken to prevent sagging or damage to edges, ends and surfaces.
- Storing board lengthwise leaning against the framing is not recommended.
- Boards should be carried, not dragged, to place of installation to prevent damaging edges.

Cutting and scoring should be done from the textured colored face side.

In cold weather, temperatures within the enclosure should stay within the range of 50˚ to 95˚F (10˚ to 35˚C) and with sufficient ventilation to carry off excess moisture.

**Composition and Materials**

Manufactured panel with water-resistant EGRG core. Diamondback Tile Backer Type X has a specially formulated core for use in fire resistance-rated designs.

**Sizes and Types**

<table>
<thead>
<tr>
<th>Thickness</th>
<th>X Width x Length:</th>
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<tbody>
<tr>
<td>1/4” (6.4 mm)</td>
<td>1/2” (12.7 mm)</td>
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<tr>
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<td>2.4 (11.7)</td>
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</table>

**Weight, Lbs./Sq.Ft.(Kg/m²):**

1/4” (6.4 mm) | 1.6 (7.8) |
1/2” (12.7 mm) | 1.6 (7.8) |
5/8” (15.9 mm) | 2.4 (11.7) |

**Thickness x Width x Length:**

1/4” x 3’ x 5’ (6.4 mm x 915 mm x 1525 mm)
1/4” x 4’ x 4’ (6.4 mm x 1220 mm x 1220 mm)
1/2” x 32’ x 5’ (12.7 mm x 815 mm x 1525 mm)
1/2” x 3’ x 5’ (12.7 mm x 915 mm x 1525 mm)
1/2” x 4’ x 5 (12.7 mm x 1220 mm x 1525 mm)
1/2” x 4’ x 8’ (12.7 mm x 1220 mm x 2440 mm)
5/8” x 4’ x 5’ (15.9 mm x 1220 mm x 1525 mm)
5/8” x 4’ x 8’ (15.9 mm x 1220 mm x 2440 mm)

**Edges:** Square

**Packaging:** Stacked face to back with no end tapes
Special lengths may be available on special order. Consult your nearest CertainTeed sales representative.

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(Continued on back)
Applicable Standards
Diamondback® Tile Backer meets ASTM C 1178 requirements; Diamondback Tile Backer Type X meets ASTM C 1178 Type X requirements.

1/4" (6.4 mm) Diamondback Tile Backer has passed the ASTM C 627 Robinson Floor Test for residential and light commercial floors. This includes TCNA Recognition for specific Floor Systems.

• Diamondback has achieved GREENGUARD GOLD® Certification.

Technical Data
Surface Burning Characteristics
Diamondback Tile Backer achieves a Class A rating when tested in accordance with ASTM E 84 (UL 723, CAN/ULC-S102).

Fire Resistance
Fire resistance tests are conducted in accordance with ASTM E119, (ANSI/UL 263, CAN-ULC-S101) and no warranty is made other than conformance to the standard under which the assembly was tested. Minor discrepancies may exist in the values of ratings, attributable to changes in materials and standards, as well as differences between testing facilities. Assemblies are classified by Underwriters Laboratories Inc. for USA and Canada. Ratings are applicable with or without tile. For fire resistance ratings, refer to the Gypsum Association Fire Resistance Design Manual GA-600 and UL Fire Resistance Directory-Vol.1.

Installation
Applicable Standards and References
• ASTM C1178
• Gypsum Association GA-216
• Gypsum Association GA-214
• CAN/CSA-A82.31
• Tile Council of North America’s TCNA Handbook for Ceramic, Glass, and Stone Tile Installation
• ANSI’s American National Standard Specifications for the Installation of Ceramic Tile

Framing
Installation of Diamondback Tile Backer and Diamondback Tile Backer Type X should be consistent with methods described in the standards and references noted. Framing members shall be plumb, true and firmly secured. If necessary, studs around tub enclosures and shower stalls should be furred so the inside lip of the fixture is flush with the face of the Diamondback Tile Backer. The top of the furring should be even with the upper edge of the tub or shower pan.

When used as a tile substrate for walls, minimum 20-gauge steel or wood framing, spacing should not exceed 16" (400 mm) o.c. without blocking for 1/2" (12.7 mm); or 24" (610 mm) o.c. with blocking for 1/2" (12.7 mm) and 24" o.c. for 5/8" (15.9 mm).

When used as a tile substrate for ceilings, apply perpendicular to framing spaced a maximum 12" (300 mm) o.c. for 1/2" (12.7 mm) and 16" (400 mm) o.c. for 5/8" (15.9 mm). Always provide appropriate blocking, headers or supports for tub, plumbing fixtures, soap dishes, grab bars, towel racks, etc.

Placing Fixtures
Waterproof receptors, pans, or sub pans shall have upstanding lip or flange not less than 1" (25 mm) higher than the water dam or threshold of shower entry way, and shall be installed prior to erection of Diamondback Tile Backer.

Install a temporary strip or shim which, when removed, will provide a 1/4" (6 mm) clearance between the Diamondback Tile Backer and the lip of the tub or shower receptor.

Applying the Diamondback Tile Backer Board
Apply the Diamondback Tile Backer horizontally to minimize butt joints. Glass-reinforced edge should abut the top edge of the temporary strip or shim.

For fire or sound-rated construction, Diamondback Tile Backer should extend full height, floor-to-ceiling, behind tub and/or shower enclosures.

Fasten the 1/2" (12.7 mm) board with 1-1/2" (38 mm) galvanized roofing nails, 6" (150 mm) o.c., or 1-1/2" (38 mm) corrosion resistant backerboard screws, 6"(150 mm) o.c. Drive nails and screws flush with surface. Do not countersink fasteners.

In areas to be tiled; joints and corners shall be treated with nominal 2" (50 mm) alkali-resistant fiberglass mesh tape embedded in a skim coat of the tile setting material. Do not use regular joint compound and paper tape.

Caulk/seal penetrations around pipes, fixtures, etc., and where Diamondback Tile Backer butts against dissimilar materials with a waterproof, flexible sealant or tile adhesive.

Applying Tile
Apply a tile setting material to the textured coated face only using a latex/polymer modified thinset meeting ANSI A118.4.

All tile joints shall be completely and continuously grouted.

Tile should be applied down to the top edge of the shower floor surfacing material, or the return of the shower pan, and extend over tub lip. The tile shall completely cover the following areas, including all joints and corners:

• Over tubs without shower heads — minimum of 6"(150 mm) above rim of tub.
• Over tubs with showers — minimum of 5" (125 mm) above rim or 6" (150 mm) above shower head, whichever is higher.
• Surfacing material shall be applied to the full specified height for a distance of not less than 4" (100 mm) beyond the outside face of the tub or receptor. Areas beyond an outside corner are excluded.

Fill space between fixtures and the tile with a flexible sealant.

For application of plastic-finished rigid wall panels, recommendations of the panel manufacturer should be followed.

Countertops
See Diamondback Tile Backer product brochure for countertop tile backer applications.

Residential and Light Commercial Floors
See Diamondback Tile Backer product brochure for interior floor tile applications.

Covered by U.S. Patent No. 6,524,679; 6,878,321; 6,866,492; and other patents pending.