WonderBoard® Lite Backerboard

1 Product Name
WonderBoard® Lite Backerboard

2 Manufacturer
Custom Building Products
Technical Services
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3 Product Description
A 20% lighter fiberglass mesh-reinforced cement backerboard for residential and commercial tile, stone, slate and thin-brick applications. High-flexural strength, along with moisture resistance, makes WonderBoard® Lite ideal for both interior and exterior substrate applications. WonderBoard Lite meets the performance standards of ANSI A118.9.

Key Features
- Meets all ANSI standards for cement backerboard
- For use in wet areas
- For indoor and outdoor use
- Contains no fiber or gypsum

Uses
- Walls
- Floors
- Ceilings
- Counters
- Vanities

Composition of Product
WonderBoard® Lite panels are composed of stable Portland cement, EPS beads, aggregates and reinforcement.

Sizes
- 36" x 60" x 7/16" (914 x 1524 x 11 mm) for floors, walls and countertops
- 36" x 60" x 1/4" (914 x 1524 x 6 mm) for floors and countertops. Stud walls require additional layers under board to meet code.

Benefits of Product in the Installation
- New formula -- same durable performance with faster, easier installation.
- 7/16 board aligns to 1/2" (13 mm) drywall without use of shims or spacers on wall studs.
- WonderBoard® Lite includes a preprinted pattern on the panel surface and is easy to score, snap, cut and fasten, simplifying installation.
- Remains stable when exposed to moisture, reducing risk of moisture damage.

Limitations to the Product
- Do not use WonderBoard® Lite for exterior surfaces where imposed wind loads exceed 30 lb/sq ft (146 kg/sq m).
- Do not use WonderBoard® Lite as a structural load bearing member.
- WonderBoard® Lite is not a waterproof barrier. If the area behind the backerboard must be kept dry, use RedGard® Waterproofing and Crack Prevention Membrane or Custom® 9240 Waterproofing and Anti-Fracture Membrane
- Do not use drywall fiberglass tape for this product.
- Do not use wallboard joint compound for this product.
- Not for controlling vertical-movement cracks.

4 Technical Data
Applicable Standards
American National Standards Institute (ANSI) ANSI A108.11, A118.9, A108.5 and A118.4 American National Standards for the Installation of Ceramic Tile ASTM International (ASTM) ASTM C1325
- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester
- ASTM C947 Standard Test Method for Flexural Properties of Thin-Section Glass-Fiber-Reinforced Concrete (Using Simple Beam With Third-Point Loading)
- ASTM D2394 Standard Methods for Simulated Service Testing of Wood and Wood-Base Finish Flooring

National Fire Protection Association (NFPA) NFPA 255 Standard Method of Test of Surface Burning Characteristics of Building Materials

Tile Council of North America (TCNA) TCNA Handbook for Ceramic Tile Installation, TCNA Method EJ171

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### Technical Chart

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Requirement</th>
<th>Typical Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shear Bond Strength - A118.4 Mortar</td>
<td>ASTM D-2394</td>
<td>&gt; 0.050&quot; @ 1250 psi</td>
<td>&gt; 0.050&quot; @ 1200 psi</td>
</tr>
<tr>
<td>Compression Indentation</td>
<td>ASTM C-473</td>
<td>+/- 1/8&quot;</td>
<td>+/- 1/8&quot;</td>
</tr>
<tr>
<td>Facial Dimension</td>
<td>ASTM C-473</td>
<td>no damage at 12&quot;</td>
<td>no damage</td>
</tr>
<tr>
<td>Falling Ball Impact</td>
<td>ASTM D-1037</td>
<td>&gt; 50 psi</td>
<td>&gt; 50 psi</td>
</tr>
<tr>
<td>Fastener Holding</td>
<td>ASTM D-1037</td>
<td>&gt; 90 lbs.</td>
<td>140 lb (63.5 kg)</td>
</tr>
<tr>
<td>Flame Spread/Smoke Development</td>
<td>ASTM E-84</td>
<td>&lt; 10/10</td>
<td>0</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>ASTM C-947</td>
<td>&gt; 750 psi</td>
<td>900 psi (62.9 kg/cm sq.)</td>
</tr>
<tr>
<td>Moisture Movement - Linear Variation</td>
<td>ASTM D-1037</td>
<td>&lt; 0.07%</td>
<td>&lt;0.07%</td>
</tr>
<tr>
<td>Bacteria Resistance</td>
<td>ASTM E-2180</td>
<td>&lt; 1</td>
<td>No growth</td>
</tr>
<tr>
<td>Fungus Resistance</td>
<td>ASTM G-21</td>
<td>&lt; 1</td>
<td>No growth</td>
</tr>
<tr>
<td>Squareness</td>
<td>ASTM C-473</td>
<td>square</td>
<td>+/- 1/8&quot;</td>
</tr>
<tr>
<td>Thickness</td>
<td>ASTM C-473</td>
<td>+/- 1/32&quot;</td>
<td>+/- 1/32&quot;</td>
</tr>
</tbody>
</table>

### Environmental Consideration

Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product may contribute to LEED® certification.

### 5 Instructions

**Installation**

Use a polymer-modified mortar meeting ANSI A118.4 standards, such as FlexBond® Crack Prevention Mortar, for leveling bed and joint treatment; mortars meeting ANSI A118.1, A118.4 or A118.11 adhesive can also be used. Follow instructions for each mortar. Use 1.5" (38 mm) galvanized roofing nails or 1.25" (32 mm) SuperiorBilt® backerboard screws. For wood or 20 gauge steel framing, use 1.25" (32 mm) SuperiorBilt® backerboard screws or an equivalent. Nails should meet or be equivalent to Federal Specification FF-N105B/Type 2 Style 20. Additional blocking will most likely be required for glass applications. Tiled surfaces that exceed 36" (11 M) in a continuous plane or with surfaces that abut a dissimilar structure should incorporate perimeter and generic movement joints in the tile network. Location width and details of control joints must follow sound architectural practices. See TCNA Handbook Ej 171.

**Application of Product**

**Wood Floors**

For the subfloor, securely glue and fasten minimum 5/8" (16 mm) exterior grade plywood or OSB panels (PRP-108) to the floor joists. Floor joists should be spaced a maximum of 16" (40 cm) o.c.; a 3/4" (19 mm) Exterior Grade Plywood or OSB subfloor with I-joints 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) non-deflecting subfloor is required. All plywood or OSB subfloor sheets must be gapped 1/8" (3 mm). Use 1" (2.5 cm) bond-breaker tape over gaps in the subfloor to prevent gaps from filling with thin-set. Using a 1/4" (6 mm) square-notch trowel, apply a setting bed of polymer-modified mortar to the subfloor. Immediately laminate the WonderBoard® Lite to the subfloor, leaving a 1/8" - 3/16" (3-5 mm) space between the boards at all joints and corners. Stagger joints so they do not line up with underlying substrate joints. While the setting bed mortar is still workable, fasten WonderBoard® Lite every 4" - 6" (10-15 cm) o.c. throughout the board field and around all edges. Around the perimeter of each board, locate fasteners within 1/2" - 1" (1.3-2.5 cm) of the edge. Fill all joints and corners, prefill the gap with polymer-modified bonding mortar; then embed 2" (5 cm) mesh tape and smooth material over the joint and corner.

**Walls and Ceilings**

For wall framing, edges parallel to framing should be continuously supported (typical sleeper studs should be used). Framing for a tub surround or prefabricated shower pan should be plumb and square. Provisions for the sheet membrane pan liner must be made to ensure proper backerboard installation at the interface of the tub or pan flange. For ceiling framing, the complete ceiling assembly allowable deflection due to dead load should not exceed 1/360 of the span. Framing members in the walls and ceiling should not exceed 16" (40 cm) o.c. The weight applied to the walls and ceiling frame, including insulation, backerboard, bonding material and facing material, should not exceed 15 lb/ft (73 kg/M). Backerboard edges parallel to the framing should be continuously supported. Provide additional blocking, when necessary, to permit proper backerboard attachment and reduce deflection between the joists. Leaving a 1/8" 3/16" (3-5 mm) space at all joints and corners, install the WonderBoard® Lite panels. Stagger board joints with those of adjacent rows. Fasten the backerboard every 6" (15 cm) along the joist or rafter. It is recommended that blocking be installed between the joists to support the ends of the backerboard. Fill all joints and corners, prefill the gap with polymer-modified bonding mortar, and then embed 2" (5 cm) mesh tape and smooth the material over the joint and corner.

A moisture barrier must be installed to protect the wall cavity for wet area installations. Nail or staple 15 lb roofing felt or 4 mil polyethylene sheeting to the studs. Precut WonderBoard® Lite panels and make any necessary cutouts. Install WonderBoard® Lite, leaving a 1/8"-3/16" (3-5 mm) space at all joints and corners. Stagger board joints with those of adjacent rows. Fasten backerboards every 8" (20.3 cm) o.c. along studs. At all joints and corners, prefill gaps with polymer-modified mortar, then embed 2" (5 cm) alkali-resistant fiberglass mesh tape and smooth material over joint and corner. Any shelf, ledge or horizontal surface subjected to water exposure must have a slight downward slope for water runoff. These areas also require proper waterproofing. Apply RedGard® according to directions.
For installation of tile, natural stone or a similar material, comply with ANSI A108 standard specifications. Install according to installation instructions for the corresponding mortar data sheets.

**Health Precautions**

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 a well-ventilated area, or use mechanical ventilation. Wear safety glasses and a dust mask; in very dusty areas or where airborne dust exceeds PEL, wear a NIOSH/MSHA approved respirator. This product contains one or more chemicals known to the State of California to cause cancer.

**Conformance to Building Codes**

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

### 6 Availability & Cost

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCB60L</td>
<td>36&quot; x 60&quot; x 7/16&quot; (91 cm x 153 cm x 11 mm)</td>
</tr>
<tr>
<td>FLB60L</td>
<td>36&quot; x 60&quot; x 1/4&quot; (91 cm x 153 cm x 6 mm)</td>
</tr>
</tbody>
</table>

### 7 Product Warranty


When WonderBoard® Lite Backerboard is used as a part of a qualifying full installation system of CUSTOM products, the installation can qualify for up to a lifetime system warranty. CUSTOM will repair and/or replace, at its discretion, the affected area of the system. For more information, find details and limitations to this warranty at custombuildingproducts.com.

### 8 Product Maintenance

Properly installed product requires no special maintenance.

### 9 Technical Services Information

For technical assistance, contact Custom technical services at 800-282-8786 or visit custombuildingproducts.com.

### 10 Filing System

Additional product information is available from the manufacturer upon request.

**Related Products**

- SpeedFinish™ Patching & Finishing Compound