1 Product Name
MegaLite® Ultimate Crack Prevention Large Format Tile Mortar

2 Manufacturer
Custom Building Products
Technical Services
10400 Pioneer Boulevard, Unit 3
Santa Fe Springs, CA 90670
Customer Support: 800-272-8786
Technical Services: 800-282-8786
Fax: 800- 200-7765
Email: contactus@cbpmail.net
custombuildingproducts.com

3 Product Description
Ultimate performing lightweight mortar protects against cracks. Offers the ultimate in bond strength for the most demanding installation requirements with the flexibility to withstand horizontal substrate movement. Formulated with CustomLite® technology, it's 40% lighter than other mortars, providing excellent handling characteristics, and offers non-sag, non-slip installation on walls. Diverse in application, it is capable of thin-set or medium-bed use up to 3/4" (19 mm) thick on horizontal surfaces after beat in. Non-slump, medium-bed features provide the ultimate support for large format tile and stone. Formulated with premium white cements and select recycled content for a white backdrop for the delicate installation of hard-to-bond glass tile. A 30 lb (13.6 kg) bag covers the same area as a 50 lb (22.68 kg) bag of traditional mortar. Use for interior or exterior floors, countertops and walls. Formulated with recycled material, contributes to LEED® certification. Exceeds ANSI A118.4TE, A118.15TE and A118.11 without the need for additives.

Key Features
- Maximum flexibility to prevent cracks in tile
- Unsurpassed bond strength
- Non-slug for floors, sag and slip resistant for walls
- Lightweight - 30 lbs. covers the same area as 50 lbs. of traditional mortar

Suitable Tile Types
- Vitreous, semi-vitreous or non-vitreous tile: ceramic, quarry, cement body tile, pavers
- Impervious porcelain and glass
- Brick and stone veneer
- Cement-based precast terrazzo
- Gauged or ungauged natural stone tile

Suitable Substrates
- Concrete, mortar beds, masonry, Portland cement plaster
- WonderBoard® Lite, cement backerboards
- Liquid-applied waterproofing membranes such as RedGard® Waterproofing and Crack Prevention Membrane, Custom® 9240 and RedGard® SpeedCoat
- Crack isolation sheet membranes such as Crack Buster® Pro
- Uncoupling mats such as RedGard® Uncoupling Mat
- Substrates treated with MBP Multi-Surface Bonding Primer
- Exterior Grade Plywood (interior residential and light commercial dry areas)
- Gypsum wallboard (interior dry areas)
- Existing ceramic tile (scarified)
- Fully-bonded sheet vinyl flooring (scarified)
- Plastic laminates (scarified)
- Cutback adhesive (see preparation instructions)

Composition of Product
Modified dry-set mortar, which is a proprietary blend of Portland cement, inorganic aggregates, copolymers and chemicals.

Benefits of Product in the Installation
- Maximum bond strength and flexibility
- Isolates cracks
- Non-slip, non-slump medium bed for heavy floor and wall tile and stone
- Exceeds ANSI A118.4TE, A118.15TE and A118.11 standards without the need for additives
- A 30 lb (13.6 kg) bag covers the same amount as a 50 lb (22.68 kg) bag of traditional mortar
- Not formulated with silica sand
Limitations to the Product

- Do not bond directly to hardwood, Luan plywood, particle board, parquet, cushion or sponge-back vinyl flooring, metal, fiberglass, plastic or OSB panels.
- When setting moisture sensitive natural stone, cement or agglomerate tile use EBM-Lite™ Epoxy Bonding Mortar 100% Solids or CEG-Lite™ 100% Solids Commercial Epoxy Grout.
- Do not use to install resin-backed stone use EBM-Lite™ Epoxy Bonding Mortar 100% Solids, CEG-Lite™ 100% Solids Commercial Epoxy Grout or contact Custom's® Technical Services for recommendations.
- For clear and translucent glass CUSTOM recommends Glass Time Premium Thin-Set Mortar. When setting glass tile larger than 6” x 6” (15 x 15 cm), contact Custom's® Technical Services for recommendations.
- When setting dimensional stone larger than 12” x 12” (30 x 30 cm), contact Custom's® Technical Services for recommendations regarding subfloor deflection requirements.

Packaging

- 30 lb (13.6 kg) bag
- Gray or white

4 Technical Data

Applicable Standards


International Organization for Standardization (ISO) 13007-2 for Thin Set Mortar.

ASTM International (ASTM)

- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester

Resilient Floor Covering Institute (RFCl) Recommended Work Practices for Removal of Resilient Floor Coverings

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

Technical Chart

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Requirement</th>
<th>Typical Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot Life</td>
<td></td>
<td></td>
<td>4 Hours</td>
</tr>
<tr>
<td>Open Time (E)</td>
<td>A118.15 Section 5.3</td>
<td>E = 30 Minutes</td>
<td>Pass</td>
</tr>
<tr>
<td>4 Week Shear Bond Strength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glazed Wall Tile</td>
<td>A118.15 Section 7.1.2</td>
<td>&gt; 450 psi</td>
<td>725 - 850 psi (51.0 - 59.8 kg/cm²)</td>
</tr>
<tr>
<td>Porcelain Tile</td>
<td>A118.15 Section 7.2.5</td>
<td>&gt; 400 psi</td>
<td>650 - 725 psi (45.7 - 51.0 kg/cm²)</td>
</tr>
<tr>
<td>Quarry Tile to Plywood</td>
<td>A118.11 Section 4.1.2</td>
<td>&gt; 150 psi</td>
<td>350 - 425 psi (24.6 - 29.9 kg/cm²)</td>
</tr>
<tr>
<td>Sag on Walls</td>
<td>A118.15 Section 6.0</td>
<td>&lt; 0.02”</td>
<td>Pass</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 can contribute towards LEED® v3 certification:

- Up to 2 points towards MR Credit 5, Regional Materials
- Up to 2 points towards MR Credit 4, Recycled Content
- Up to 1 point towards IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants

5 Instructions

General Surface Prep

USE CHEMICAL-RESISTANT GLOVES, such as nitrile, when handling product.

Surfaces must be structurally sound. Remove all grease, oil, dirt, curing compounds, sealers, adherives or any other contaminant that would prevent a good bond. Glossy or painted surfaces must be sanded, or abraded, and stripped of all contaminants. Concrete must be cured 28 days and accept water penetration. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a coarse finish to enhance the bond. Plywood flooring including those under resilient flooring must be structurally sound and meet all ANSI and deflection requirements. For questions about proper subfloor installation, call Technical Services. Smooth concrete surfaces, existing glazed tile, terrazzo, or polished stone should be scarified. Sheet vinyl must be well bonded and stripped of old finish. Roughen the surface by sanding or abrading, then rinse and allow to dry. Expansion joints should never be bridged with setting material. Do not sand flooring materials containing asbestos.
Bonding to Concrete Surfaces

Concrete or plaster must be fully cured and must accept water penetration. Test by sprinkling water on various areas of the substrate. If water penetrates, then a good bond can be achieved; if water beads, surface contaminants are present, and loss of adhesion may occur. Contaminants should be mechanically removed before installation. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a coarse finish to enhance the bond. Smooth concrete slabs must be mechanically abraded to achieve proper bond.

Bonding to Lightweight Cement and Gypsum Surfaces

Lightweight or gypsum-based underlayments must obtain a minimum 2000 psi (13.8 MPa) compressive strength. The underlayment must be sufficiently dry and properly cured to the manufacturer’s specifications for permanent, non-moisture permeable coverings. Surfaces to be tiled must be structurally sound and subject to deflection not to exceed current industry standards. Surfaces shall be free of all oil, dirt, dust, curing compounds, waxes, sealers, efflorescence, or any other foreign matter. All lightweight cement or gypsum surfaces should be primed, with a properly applied sealer or a primer coat of RedGard, consisting of 1 part RedGard diluted with 4 parts clean, cool water. Mix in a clean bucket at low speed to obtain a lump free solution. The primer can be brushed, rolled or sprayed to achieve an even coat. Apply the primer coat to the floor at a rate of 300 ft²/gal (7.5 M2/L). Drying time depends on site conditions, but is normally less than 1 hour. Extremely porous surfaces may require 2 coats. At this point, RedGard can be applied to the primed lightweight or gypsum based surface. Refer to the individual product data sheet or packaging directions for application instructions. Expansion joints must be installed in accordance with local building codes and ANSI/TCNA guidelines. Refer to TCNA EJ 171.

Bonding to Plywood Surfaces

Plywood floors, including those under resilient flooring, must be structurally sound and must meet all ANSI A108.01 Part 3.4 requirements. Maximum allowable deflection: L/360 tile L/720 stone. See TCNA F150-13 tile installations, TCNA F141-13 and F250-13 for stone. For questions about proper subfloor installation requirements, call Custom® Technical Services.

Bonding to Backerboards

WonderBoard Lite® backerboard may be installed over structurally sound plywood subfloors for ceramic tile installations. Refer to TCNA F144-13 tile installations, TCNA F250-13 stone installations. Call Custom® Technical Services when installing natural stone over plywood subfloor.

Bonding to Existing Surfacing Material

Resilient flooring or plastic laminates must be well-bonded, as well as clean and free of all contaminants. Roughen the surface by sanding or scarifying; rinse and allow to dry. Do not sand flooring that contains asbestos. For existing well-bonded ceramic tile, mechanically abrade the surface. Rinse and allow to dry. When sanding, an approved respirator should be used.
Curing of Product
Curing time is affected by ambient and surface temperatures and humidity. Use the following as a guideline. Allow 24 hours before grouting and light traffic. Allow 7-10 days before heavy or vehicular traffic. Before exposure to heavy or vehicular traffic, assure assembly is rated "Heavy or Extra Heavy" per TCNA Service Requirements. As necessary, use plywood or other load distributing protection when moving heavy equipment across tiled assembly. Submerged installations must cure for 14 days before filling with water.

Cleaning of equipment
Clean with water before the material dries.

Storage
Store in a cool, dry area.

Health Precautions
See Safety Data Sheet for more information.
This product contains Portland cement and free silica. Avoid eye contact and prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, flush with water for 15 minutes and consult a physician. Do not breathe dust; wear a NIOSH approved respirator.

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>Location</th>
<th>Item Code</th>
<th>Size</th>
<th>Color</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>MLMG30</td>
<td>30 lb (13.6 kg)</td>
<td>Gray</td>
<td>Bag</td>
</tr>
<tr>
<td>USA</td>
<td>MLMW30</td>
<td>30 lb (13.6 kg)</td>
<td>White</td>
<td>Bag</td>
</tr>
<tr>
<td>Canada</td>
<td>CMLMW15</td>
<td>15 lb (6.8 kg)</td>
<td>White</td>
<td>Bag</td>
</tr>
<tr>
<td>Canada</td>
<td>CMLMW30</td>
<td>30 lb (13.6 kg)</td>
<td>White</td>
<td>bag</td>
</tr>
</tbody>
</table>

7 Product Warranty
Obtain the applicable LIMITED PRODUCT WARRANTY at www.custombuildingproducts.com/product-warranty or send a written request to Custom Building Products, Inc., Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured under the authority of Custom Building Products, Inc. © 2017 Quikrete International, Inc.

When MegaLite® Ultimate Crack Prevention Large Format Tile Mortar 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.

Published Date: 1/2/2019
**Coverage**

SQUARE FOOT COVERAGE PER 30 LB BAG (SQUARE METER PER 13.6 KG)

<table>
<thead>
<tr>
<th>Trowel Size</th>
<th>Min Coverage</th>
<th>Max Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longest side of tile less than 8&quot; use 1/4&quot; x 1/4&quot; x 1/4&quot; (6 x 6 x 6 mm) Square-Notch</td>
<td>90 sq. ft. (8.4 M²)</td>
<td>100 sq. ft. (9.3 M²)</td>
</tr>
<tr>
<td>Longest side of tile 8&quot; to 15&quot; use 1/4&quot; x 3/8&quot; x 1/4&quot; (6 x 9.5 x 6 mm) Square-Notch</td>
<td>63 sq. ft. (5.8 M²)</td>
<td>70 sq. ft. (6.5 M²)</td>
</tr>
<tr>
<td>Longest side of tile more than 15&quot;+ use 1/2&quot; x 1/2&quot; x 1/2&quot; (13 x 13 x 13 mm) Square-Notch</td>
<td>45 sq. ft. (4.2 M²)</td>
<td>50 sq. ft. (4.6 M²)</td>
</tr>
<tr>
<td>Longest side of tile more than 15&quot;+ use 3/4&quot; × 9/16&quot; × 3/8&quot; (19 × 14 × 9.5 mm) U-Notch</td>
<td>36 sq. ft. (3.3 M²)</td>
<td>40 sq. ft. (3.7 M²)</td>
</tr>
</tbody>
</table>

Recommended minimum coverage (80% for dry areas and 95% for wet areas and exteriors). Back buttering may be necessary.

Note that mortar coverage does not include backbuttering tiles. When backbuttering, consider the tile underside pattern and depth to estimate thickness and usage to add to your estimate.

Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions. For more sizes, use the material calculator at CustomBuildingProducts.com or contact CUSTOM Technical Services at 800-282-8786.