FlexBond®-LFT Premium Crack Prevention Large Format Tile Mortar



1. Product Name

FlexBond®-LFT Premium Crack Prevention Large Format Tile Mortar

2. Product Description

Polymer modified, medium bed mortar for use with large format tiles over difficult to bond substrates and tiles. Exceptional flexibility and bond strength ideal for non porous tile over plywood, vinyl and laminates. Provides protection and isolation against cracks in the substrate up to 1/16″.

Available in Canada Only

Key Features

- High flexibility to prevent cracks in tile
- Supports large and heavy tile for flat, even floor installations
- Sag and slip resistant - immediately holds wall tiles in place
- Exceeds ANSI A118.15 and A118.11

Suitable Substrates

- Concrete, mortar beds, masonry, Portland cement plaster
- 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

FlexBond® Crack Prevention Mortar is a dry, proprietary blend of Portland cement, copolymers, inorganic aggregates and chemicals

Benefits of Product in the Installation

- Specially formulated for use with large format tiles
- Non-slumping formula eliminates lippage
- Outstanding flexibility and bond strength for difficult substrate and tile applications
- Protects against cracking caused by minor in-plane surface movement
- Isolates small cracks and can be applied over small cracks without additional preparation
- Exceeds ANSI A118.4, A118.15 and A118.11 standards without the need for additives
- Approved for industry-recommended interior and exterior applications

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 resin 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 or translucent glass, CUSTOM recommends Glass Tile Premium Thin-Set Mortar. When setting glass tile larger than 6" x 6" (15 x 15 cm), contact Custom's® Technical Services for recommendations.
- Ensure that the substrate meets deflection requirements.

Packaging

- 50 lb (22.68 kg) bag
- White

3. Technical Data

Applicable Standards

American National Standards Institute (ANSI) - ANSI A108.5, A118.4, A118.15 and A118.11 of the American National Standards for the Installation of Ceramic Tile ASTM International (ASTM)

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2" [50-mm] Cube Specimens)
- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester

Resilient Floor Covering Institute - (RFCI) Recommended Work Practices for Removal of Resilient Floor Coverings
Tile Council of North America (TCNA) - TCNA Handbook for Ceramic Tile Installation, TCNA Method EJ171
Complies with ISO 13007-2

Technical Chart

Property	Test Method	Requirement	Typical Results
Pot Life			> 90 minutes
Open Time (E)	A118.15 Section 5.3	E = 30 Minutes	Pass
4 Week Shear Bond Strength			
Glazed Wall Tile	A118.15 Section 7.1.2	> 450 psi	> 550 psi (38.68 kg/cm²)
Porcelain Tile	A118.15 Section 7.2.5	> 400 psi	> 450 psi (31.65 kg/cm²)
Quarry Tile to Plywood	A118.11 Section 4.1.2	> 150 psi	> 250 psi (17.58 kg/cm²)
Sag on Walls	A118.15 Section 6.0	< 0.02 mm	Pass

Environmental Consideration

Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing

FlexBond®-LFT Premium Crack Prevention Large Format Tile Mortar

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

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 broomed or brushed finish to enhance the bond. Smooth concrete slabs must be mechanically abraded to ensure a good bond.

Bonding to Gypsum Surfaces

Lightweight or gypsum-based underlayments must first be treated with RedGard® Waterproofing and Crack Prevention Membrane and must obtain a minimum 2000 psi (13.8 MPa) compressive strength at the recommended cure time. 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 the current ANSI standards. All lightweight concrete and gypsum-based underlayment surfaces to receive RedGard® must be primed with 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 ft/gal (7.5 M/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 EJ171.

Bonding to Plywood and OSB 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 Cutback Adhesive

Adhesive layers must be removed, as they reduce mortar bond strength to cement surfaces. Use extreme caution; adhesives may contain asbestos fibers. Do not sand or grind adhesive residue, as harmful dust may result. Never use adhesive removers or solvents, as they soften the adhesive and may cause it to penetrate into the concrete. Adhesive residue must be wet-scraped to the finished surface of the concrete, leaving only the transparent staining from the glue. To determine desirable results, do a test bond area before starting. Refer to the RFCI Pamphlet, Recommended Work Practices for Removal of Resilient Floor Coverings, for further information.

Movement Joint Placement

Expansion joints and cold joints, as described in ANSI A108.01, should never be bridged with setting material. They must be brought through the tile work and filled with an appropriate elastomeric sealant. Contact Custom® Building Products for the proper treatment of control or saw cut joints. Refer to TCNA F125, F125A and TCNA EJ171.

Mixing Ratios

Mix 5.5 - 6 qts (5.2 - 5.6 L) clean water per 50 lb (22.68 kg) bag of mortar.

Mixing Procedures

Mix by hand or use a low 150-200 RPM speed 1/2" (13 mm) drill to achieve a smooth, paste-like consistency. Let the mixture slake or stand 5-10 minutes; stir again and use. Stir occasionally, but do not add more water. When properly mixed, troweled ridges will stand without slump.

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 €œHeavy 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.

Health Precautions

This product contains Portland cement and free silica. Avoid eye contact or 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.

4. Size & Availability

Location	Item Code	Size	Color	Package
Canada	CFBLFTMW50	50 lb (22.68 kg)	White	Bag

5. Product Warranty

This product is eligible for Custom® Building Products 15 Year Installation Systems Warranty and a Lifetime Residential warranty. Custom® Building Products warrants to the original consumer purchaser that its product shall be free from defects in material and workmanship under normal and proper usage for a period of one year following the date of original purchase. Custom's® sole liability under this warranty shall be limited to the replacement of the product. Some states, countries or territories do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty will not extend to any product which has been modified in any way or which has not been used in accordance with Custom's® printed instructions. Custom® makes no other warranties either

FlexBond®-LFT Premium Crack Prevention Large Format Tile Mortar

expressed or implied. This warranty gives you specific legal rights, and you may have other rights that vary from state to state or from one country/territory to another. For details and complete warranty information, visit custombuildingproducts.com.

6. Product Maintenance

Properly installed product requires no special maintenance.

7. Technical Services Information

For technical assistance, contact Custom® Building Products.

8. Filing System

Additional product information is available from the manufacturer upon request.

Related Products

Prism® Ultimate Performance Grout
Polyblend®Plus Sanded Grout
Fusion Pro® Single Component® Grout
Commercial 100% Silicone Sealant

Coverage Chart

SQUARE FOOT COVERAGE PER 50 LB BAG (SQUARE METER PER 22.68 KG)

Trowel Size	Min Coverage	Max Coverage
Longest side of tile 8" to 15" use 1/4" x 3/8" x 1/4" (6 x 9.5 x 6 mm) Square-Notch	63 ft² (5.9 M²)	70 ft² (6.5 M²)
Longest side of tile more than 15"+ use 1/2" x 1/2" x 1/2" (13 x 13 x 13 mm) Square-Notch	45 ft² (4.2 M²)	50 ft² (4.6 M²)
Longest side of tile more than 15"+ use 3/4" x 9/16" x 3/8" (19 x 14 x 9.5 mm) U-Notch	36 ft² (3.3 M²)	40 ft² (3.7 M²)

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.

CUSTOM BUILDING PRODUCTS® CUSTOM® A QUIKRETE® COMPANY