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# MULTI-BOND LFT

## PROFESSIONAL LARGE FORMAT TILE MORTAR

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MULTI-BOND LFT Professional Large Format Tile Mortar is a general purpose, economical, polymer-modified medium bed mortar for use with large format porcelain, ceramic and natural stone tile. With a non-slumping formula to eliminate lippage, MULTI-BOND LFT can be applied to 3/4" (19 mm) thick on horizontal and vertical applications. MULTI-BOND LFT exceeds ANSI A118.4 and A118.11.

### Key Features

- For most standard floor and wall installations
- Supports large and heavy tile for flat, even installations

### Suitable Tile Types

- Vitreous, semi-vitreous or non-vitreous tile: ceramic, quarry, cement body tile, pavers
- Impervious porcelain
- 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 and fabric waterproofing membranes such as WATERPROOF WATERPROOFING & ANTI-FRACTURE MEMBRANE, Custom® 9240 Waterproofing and Anti-Fracture Membrane
- Crack isolation sheet membranes such as Crack Buster® Pro
- Uncoupling mats such as SpiderWeb® II
- 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

- Specially formulated for large format tiles
- Non-slumping formula eliminates lippage
- Cost-efficient, all-purpose mortar
- Good bond strength
- Cures quickly even in cold climates
- Approved for industry-recommended interior and exterior applications
- Exceeds ANSI A118.4 and A118.11 standards without the need for additives

### Limitations

- Do not bond directly to hardwood, Luan plywood, particle board, parquet, cushion or sponge-back vinyl flooring, metal, fiberglass, plastic or OSB panels.
- Not recommended for interior and exterior pools and water features. JAMO recommends CUSTOM's MegaLite® Crack Prevention Mortar and ProLite® Large Format Tile & Stone Mortar for the installation of ceramic and porcelain tile in submerged applications. For additional information, contact Technical Services.
- When setting moisture sensitive natural stone, cement or resin agglomerate tile use CUSTOM's® EBMLite™ Epoxy Bonding Mortar 100% Solids or CEGLite™ 100% Solids Commercial Epoxy Grout.
- Do not use to install resin-backed stone; use EBMLite™ Epoxy Bonding Mortar 100% Solids, CEGLite™ 100% Solids Commercial Epoxy Grout or contact Technical Services for recommendations.
- For clear or translucent glass, JAMO recommends CUSTOM's Glass Tile Premium Thin-Set Mortar. When setting glass tile larger than 6" x 6" (15 x 15 cm), contact Technical Services for recommendations.
- Ensure that the substrate meets deflection requirements.



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### Surface Preparation

**General Surface Prep: USE IMPERVIOUS GLOVES, such as nitrile, when handling product.**

Surfaces must be structurally sound. Remove all grease, oil, dirt, curing compounds, sealers, adhesives 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 grease, 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 JAMO WATERPROOF WATERPROOFING & ANTI-FRACTURE MEMBRANE, consisting of 1 part WATERPROOF 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<sup>2</sup>/gal (7.5 M<sup>2</sup>/L). Drying time depends on site conditions, but is normally less than 1 hour. Extremely porous surfaces may require 2 coats. At this point, JAMO WATERPROOF 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 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 Technical Services.

### Bonding to Backerboards

As an alternative to an additional layer of plywood, 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 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.



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### 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

Movement joints are required for perimeters and other changes of plane in all installations. Expansion joints, perimeter 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, such as CUSTOM's 100% Silicone. Contact Technical Services for the proper treatment of control or saw cut joints. Refer to TCNA EJ171, F125 and F125A.

### Mixing

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

### Application

Installation must conform to ANSI A108.5. Use a properly-sized notch trowel to ensure proper coverage under tiles. Using the flat side of the trowel, apply a skim coat of mortar to the surface. With the notch side of the trowel held at a 45° angle, apply additional mortar to the surface, combing in one direction. Press the tile firmly into place in a perpendicular motion across ridges, moving back and forth. The perpendicular motion flattens ridges and closes valleys, allowing maximum coverage. With some tile, back-buttering is advisable. Adjust the tile promptly and beat it in with a

beating block and rubber mallet. Periodically pull up a tile and check the back to ensure proper adhesive coverage. If the material has skinned over (not sticky to the touch), recomb with the notch trowel; if too dry, remove and replace the dry material with fresh material. MULTI-BOND LFT should not be used to fill low spots in the flooring. Mortar thickness should be less than 3/4" (19 mm) when beat in. Ambient temperature should be maintained above 50°F (10°C) or below 100°F (38°C) for 72 hours to achieve proper bond.

### Coverage\*

Trowel Size	Min Coverage	Max Coverage
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) Square-Notch	85 ft <sup>2</sup> (7.8 M <sup>2</sup> )	95 ft <sup>2</sup> (8.8 M <sup>2</sup> )
1/4" x 3/8" x 1/4" (6 x 9.5 x 6 mm) Square-Notch	60 ft <sup>2</sup> (5.6 M <sup>2</sup> )	67 ft <sup>2</sup> (6.2 M <sup>2</sup> )
1/2" x 1/2" x 1/2" (13 x 13 x 13 mm) Square-Notch	42 ft <sup>2</sup> (3.9 M <sup>2</sup> )	47 ft <sup>2</sup> (4.4 M <sup>2</sup> )
3/4" x 9/16" x 3/8" (19 x 14 x 9.5 mm) U-Notch	34 ft <sup>2</sup> (3.2 M <sup>2</sup> )	38 ft <sup>2</sup> (3.5 M <sup>2</sup> )

\*Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions. For more tile and joint sizes, use the material calculator at [CustomBuildingProducts.com](http://CustomBuildingProducts.com) or contact CUSTOM Technical Services at 800-282-878.

### Cleaning

Clean with water before the material dries.

### Storage

Store in a cool, dry area.

### Warranty

Seller warrants that should this product prove to be defective material, it will replace the same or refund the purchase price of the goods. THIS WARRANTY IS IN PLACE OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. WARRANTIES OF MERCHANTABILITY AND OF FITNESS ARE HEREBY DISCLAIMED. The suitability of a product for an intended use shall be solely up to the user. Seller assumes no liability for consequential damages. Its liability shall in no event exceed the purchase price of the materials supplied by it. No person has the authority to change these items and there are no warranties except as herein stated.



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### Caution

EYE, SKIN, & RESPIRATORY IRRITANT. This product contains free crystalline silica which may cause cancer or delayed lung injury (Silicosis). Avoid the creation of dust whenever possible. Do not mix with other chemical products. Do not get in eyes. Do not get on skin or clothing. Do not breathe fumes. Do not take internally. KEEP OUT OF REACH OF CHILDREN. Use in well-ventilated areas. Wear chemical resistant gloves and eye protection. FIRST AID TREATMENT: Contains Portland cement and crystalline silica. If eye or skin contact, flush thoroughly with water for at least 15 minutes. In case of respiratory tract irritation, move person to fresh air. If irritation persists, seek medical attention. If ingested, do not induce vomiting. Seek medical attention.

THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

WARNING! This product contains one or more chemicals known to the State of California to cause cancer. For additional information, refer to the Safety Data Sheet (SDS) on Jamoinc.com.

### Order Information

Item Code	Color	Size	Packaging
121 131	Grey	50 pounds (22.68 kg)	Bag
121 001	White	50 pounds (22.68 kg)	Bag

### Technical Data

#### Applicable Standards

American National Standards Institute (ANSI) — ANSI A108.5, A118.4 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-in [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			2 Hours
Open Time	A118.4 Section 5.3	> 20 Minutes	Pass
4 Week Shear Bond Strength			
Glazed Wall Tile	A118.4 Section 5.1.5	> 300 psi	450 - 550 psi (31.6 - 38.7 kg/cm <sup>2</sup> )
Porcelain Tile	A118.4 Section 5.2.4	> 200 psi	350 - 450 psi (24.6 - 31.6 kg/cm <sup>2</sup> )
Quarry Tile to Plywood	A118.11 Section 4.1.2	> 150 psi	150 - 250 psi (10.6 - 17.6 kg/cm <sup>2</sup> )

### Product Maintenance

Properly installed product requires no special maintenance.

### Technical Services Information

For technical assistance, contact JAMO technical services at 800/826-6852 or visit jamoinc.com.

### Filing System

Additional product information is available from the manufacturer upon request.

### VOC Content

No VOCs

### Expected Wear

Properly installed tile will last for more than 60 years.

