



# MULTIMAX™ LITE

DS-34082-0420

**Globally Proven  
Construction Solutions**



## 1. PRODUCT NAME

MULTIMAX™ LITE

## 2. MANUFACTURER

LATICRETE International, Inc.

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## 3. PRODUCT DESCRIPTION

The ultimate, lightweight one-step, polymer fortified, Large and Heavy Tile mortar for interior and exterior installation of ceramic tile, porcelain tile, glass tile, stone, quarry tile, pavers and brick. MULTIMAX LITE features maximum non-sag performance on walls and maximum buildup of up to 3/4" (19 mm) without shrinkage on floors. MULTIMAX LITE is free of silica sand and has a smooth, lightweight, easy-to-trowel consistency and a long open time for ease of installation. The robust formula is fiber-reinforced for maximum strength and durability, exceeding ANSI A118.15 requirements. MULTIMAX LITE utilizes LATICRETE HYDROMATIC CURE CHEMISTRY™. This technology accelerates the hydration process to rapidly consume the water in the system, allowing the material to cure in a predictable manner. MULTIMAX LITE is a LATICRETE functional equivalent to 255 MULTIMAX and exceeds its performance criteria.

Equipped with Microban Anti-Microbial Protection

## Uses

- For wall installations of ceramic tile, porcelain tile, glass tile and stone.
- Can be used as a Large and Heavy Tile mortar for flooring installations.
- Ideal for showers, bathrooms and areas where mastic is used.

## Advantages

- Lightweight- 25 lb (11.3 kg) bag has coverage of 50 lb (22.7 kg) traditional mortar
- Equipped with anti-microbial technology to protect the treated article.
- Incredible non-sag performance even with heavy tile.
- 40 Minute Open Time
- Smooth creamy
- Exceeds ISO 13007-C2TES1P1 classification
- lightweight formula.
- Submerged applications
- Exceeds ANSI A118.15 HET, A118.4 and A118.11
- ASTM C627 Extra Heavy (TCNA)
- High shear bond strength.
- Bonds to most substrates
- 25 Year System Warranty\*\*.
- Excellent Large and Heavy Tile performance
- 3/4" (19 mm) thick without shrinkage
- One mortar for Large and Heavy Tile
- walls and thin-bed installations
- Fiber-reinforced for maximum strength and performance
- Ideal for Gauged Porcelain Tile and Gauged Porcelain Tile Panels

## Suitable Substrates

- Brick Masonry
- Cement Backer Board
- Cement Plaster/Render
- Cement Terrazzo
- Concrete
- Concrete Block
- Concrete Masonry
- Existing Ceramic Tile and Stone
- Gypsum Plaster
- HYDRO BAN Board
- Mortar Bed

- Non Water Soluble Cut-Back Adhesive
- Properly Prepared Vinyl Or Other Resilient Tile
- STRATA\_MAT
- Exterior Glue Plywood (Interior Only)
- Gypsum Wallboard
- Plastic Laminate

- For white and light-colored stones, use MULTIMAX LITE (white).

#### 4. TECHNICAL DATA

##### Applicable Standard

- ANSI A118.15
- ANSI A118.11
- ANSI A118.4
- ISO 13007-1

#### Approximate Coverage

|  | ft <sup>2</sup> | m <sup>2</sup> |
|--|-----------------|----------------|
| <b>Wall Application 4.9 qts (4.6L) of water</b>                  |                 |                |
| 1/4" x 3/8" (6 mm x 9 mm) notched trowel                         | 50-60           | 4.6 - 5.5      |
| <b>Large and Heavy Tile Application 5.1 qts (4.8 L) of Water</b> |                 |                |
| 1/2" x 1/2" (12 mm x 12 mm) notched trowel                       | 40 - 50         | 3.7 - 4.6      |
| <b>Thin Bed Applications—5.3 qts (5 L) of Water</b>              |                 |                |
| 1/4" x 1/4" (6 mm x 6 mm) notched trowel                         | 85 - 95         | 7.9 - 8.8      |
| 1/4" x 3/8" (6 mm x 9 mm) notched trowel                         | 60 - 70         | 5.5 - 6.5      |

#### Shelf Life

Advanced plastic bag provides two (2) year shelf life. (non-rapid versions only) \*\*\*High humidity will reduce the shelf life of bagged product.

#### Limitations

- Not for use directly over particle board, luan, Masonite® or hardwood floors.
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE® Waterproofing Membrane (see Section 10 FILING SYSTEM).
- Suitable for use with glass tile only when used as a thin bed adhesive. Maximum adhesive mortar thickness not to exceed 3/16" ( 4.7mm). Follow glass tile manufacturers installation instructions.

#### Cautions

- Consult SDS for safety information.
- Some marbles and other natural stone have low flexural strength and might not be suitable for installation over wood floors.
- Use LATAPOXY® 300 Adhesive for installing green marble or water sensitive stone and agglomerates, and resin backed tiles and stones.
- During cold weather, protect finished work from traffic until fully cured.

## Physical Properties

| Test   | Test Method          | Results                       |
|--|----------------------|-------------------------------|
| 28 day Cure 20 cycle Freeze/Thaw Quarry Tile Shear Strength    | ANSI A118.15 7.3.3   | 400-500 psi ( 2.7 - 3.4 MPa)  |
| 30 minute Open Time  | ANSI A118.15 5.3.5   | 100-125 psi (0.7 - 0.8 MPa)   |
| 28 day Quarry Tile Shear Strength                              | ANSI A118.15 7.3.2   | 400-500 psi ( 2.7 - 3.4 MPa)  |
| 14 day cure 14 day Heat Age Porcelain Tile Shear Strength      | ANSI A118.15 7.2.7   | 500-600 psi (3.4 - 4.1 MPa)   |
| 28 day Cure 20 Cycle Freeze/Thaw Porcelain Tile Shear Strength | ANSI A118.15 7.2.6   | 425-475 psi (2.9 - 3.2 MPa)   |
| 7 day Cure 7 day Water Immersion Shear Strength                | ANSI A118.15 7.1.3   | 325-425 psi (2.2 - 2.9 MPa)   |
| 7 day Porcelain Tile Shear Strength                            | ANSI A118.15 7.2.3   | 500-600 psi (3.4 - 4.1 MPa)   |
| 1 day Porcelain Tile Shear strength                            | ANSI A118.15 7.2.2   | 225-275 psi (1.5 - 1.8 MPa)   |
| 14 day Cure 14 Day Heat Cure wall tile shear strength          | ANSI A118.15 7.1.4   | 550-600 psi (3.7 - 4.1 MPa)   |
| 7 Day Wall Tile Shear Strength                                 | ANSI A118.15 7.1.2   | 525 -575 psi (3.6 - 3.9 MPa)  |
| 7 day Water Immersion Shear Strength, Porcelain Mosaic Tile    | ANSI A118.15 7.2.4   | 350-450 psi (2.41- 3.10 MPa)  |
| 28 day Shear Bond, Porcelain Mosaic Tile                       | ANSI A118.15 7.2.5   | 500-600 psi (3.45- 4.14 MPa)  |
| 28 day Shear Bond, Quarry Tile/Plywood                         | ANSI A118.11 4.1.1.2 | 180-250 psi ( 1.24- 1.72 MPa) |
| Sag on Wall  | ANSI A118.15.6.0     | 0 in. (0 mm)                  |
| 28 day Cure Tensile Adhesive Strength                          | ISO 13007-4.4 4.2    | 1.5-2.0 Mpa                   |
| 7 day Cure 21 day Water Immersion Tensile Adhesive Strength    | ISO 13007-4.4 4.3    | 1.0-1.5 Mpa                   |

|  |                   |             |
|--|-------------------|-------------|
| 14 day Cure 14 Day Heat Age Tensile Adhesive Strength                            | ISO 13007-4.4 4.4 | 1.5-2.0 MPa |
| 7 day Cure 21 Day Water Immersion 25 Freeze/Thaw Cycle Tensile Adhesive Strength | ISO 13007-4.4 4.5 | 1.0-1.5 Mpa |
| Transverse Deformation   | ISO 13007-4.4 4.5 | 3.0-3.5     |

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

## 5. INSTALLATION

### Surface Preparation

All surfaces should be between 40°F (4°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, paint, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with a LATICRETE latex fortified underlayment or leveling mortar to provide a proper finish. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. All slabs must be plumb and true to within 1/4" (6 mm) in 10 ft (3 m).

*Note: MULTIMAX Lite does not require a minimum cure time for concrete slabs. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01–3.7 “Requirements For Movement Joints: Preparations by Other Trades” or TCNA detail EJ-171 “Movement Joints—Vertical & Horizontal”. Do not cover expansion joints with mortar.*

1. Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/480 for stone installations where L=span length.

2. Minimum construction for interior plywood floors.

**SUBFLOOR:** 5/8" (15 mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced 16" (400 mm) o.c. maximum; fasten plywood 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) between sheet ends and 1/4" (6 mm) between sheet edges at the perimeter; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive.

**UNDERLAYMENT:** 5/8" (15 mm) thick exterior glue plywood fastened 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. in the panel field (both directions) with 8d ring shank, coated or hot dip galvanized nails (or

screws); allow 1/8" (3mm) to 1/4" (6 mm) between sheets and 1/4" (6 mm) between sheet edges and any abutting surfaces; offset underlayment joints from joints in subfloor and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive. Refer to Technical Data Sheet 152 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors".

#### **Mixing: For walls and Large Heavy Tile applications:**

Place clean, potable water into a clean pail. Use approximately 4.8-5.0 qts (4.5-4.7 L) of water for 25 lbs (11.3 kg) of powder. (To mix smaller quantities use 3.7 parts powder to 1 part water.) **For Thin Bed applications:** Use approximately 5.2-5.4 qts (4.9-5.1 L) of water for 25 lbs (11.3kg) of powder. (To mix smaller quantities use 3.4 parts powder to 1 part water.) Slowly add MULTIMAX LITE. Mix with a mixer to a smooth, trowelable consistency. Allow mortar to slake for 5 minutes. Remix without adding any more water or powder. During use, stir occasionally to keep mix fluffy. DO NOT temper with water.

#### **Mixing with PERMACOLOR® Select Color Kits (MULTIMAX LITE white only) Requires 2**

PERMACOLOR® Select Color Kits. (Each Color Kit contains 2 individual color packets, use all 4 color packets) Place water in a clean mixing container. Remove color packets from the cardboard container as well as the protective plastic sleeve. The internal bag is a water dispersible packet – when using the 25 lbs. (11.3 kg) bag of MULTIMAX LITE, drop all color packs directly in to water in clean mixing container. Mix with a drill mixer until pigment is dispersed evenly in container and the dispersible packet is no longer visible. Add MULTIMAX LITE and mix as directed above. Please note that additional water may be necessary when using PERMACOLOR Select color Kits.

**Application: Walls:** Key materials into substrate thoroughly. Comb on additional mortar with the notched side, use 1/4" x 3/8" (6 mm x 9 mm) notched trowel. Back butter all tile and stone 8" x 8" (200 mm x 200 mm) or larger to provide full bedding of the veneer. **Large Heavy Tile:** Key the mortar to the substrate with the flat side of the trowel. Press firmly to work into the surface. Comb on additional mortar with the notched side. Use 1/2" x 1/2" (12 mm x 12 mm) or 3/4" (18 mm) half loop trowel. Grouting: Grout installation after a minimum of 24 hours curing time at 70°F (21°C). Grout with PERMACOLOR® Select, PERMACOLOR® Grout, SPECTRALOCK® PRO Premium Grout†, SPECTRALOCK PRO Grout†, 1500 Sanded Grout or 1600 Unsanded Grout gauged with 1776 Grout Enhancer or with water. Cleaning Clean tools with water.

## **6. AVAILABILITY AND COST**

### **Availability**

LATICRETE materials are available worldwide.

### **For Distributor Information, Call:**

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line distributor information, visit LATICRETE at [laticrete.com](http://laticrete.com)

### **Cost**

Contact a LATICRETE Distributor in your area.

## **7. WARRANTY**

See 10. FILING SYSTEM:

- DS 025.0: 25 Year System Warranty
- DS 230.13: 1 Year Product Warranty
- DS 230.15APD: LATICRETE 15 Year Tile & Stone System Warranty
- DS 230.99: LATICRETE Lifetime System Warranty (United States and Canada)

## **8. MAINTENANCE**

LATICRETE and LATAPOXY grouts require routine cleaning with a neutral pH soap and water. All other LATICRETE and LATAPOXY materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

## **9. TECHNICAL SERVICES**

### **Technical Assistance**

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 1235

Telephone: +1.203.393.0010, ext. 1235

Fax: +1.203.393.1948

### **Technical and Safety Literature**

To acquire technical and safety literature, please visit our website at [laticrete.com](http://laticrete.com).

## **10. FILING SYSTEM**

Additional product information is available on our website at [laticrete.com](http://laticrete.com). The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty (United States and Canada) A component of: DS 230.15APD: LATICRETE 15 Year Tile & Stone System Warranty – For Steel or Wood Framed Exterior Facades (United States and Canada)
- DS 025.0APD: LATICRETE 25 Year Tile & Stone System Warranty (United States and Canada)
- DS 230.99: LATICRETE Lifetime Tile & Stone System Warranty (United States and Canada)
- DS 230.05: LATICRETE 5 Year System Warranty (United States and Canada)
- DS 230.10: LATICRETE 10 Year System Warranty (United States and Canada)
- DS 230.15: LATICRETE 15 Year System Warranty – For Steel or Wood Framed Exterior Facades (United States and Canada)

- DS 025.0: LATICRETE 25 Year System Warranty (United States and Canada)
- DS 230.99: LATICRETE Lifetime System Warranty

United States Invention Patent No.: 6,784,229 (and other Patents)