

MULTIMAX™ 1 Pre-Mixed Adhesive Mortar

DS-65331-0825

Globally Proven Construction Solutions



1. PRODUCT NAME

MULTIMAX™ 1 Pre-Mixed Adhesive Mortar

2. MANUFACTURER

LATICRETE International, Inc. 1 LATICRETE Park North Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 1235 Toll Free: 1.800.243.4788, ext. 1235

Fax: +1.203.393.1684 Website: laticrete.com

3. PRODUCT DESCRIPTION

A revolutionary, ready-to-use adhesive that meets the highest performance requirements of a cementitious adhesive mortar (ANSI A118.15). Ideal for both Large and Heavy Tile and thin-bed installations. No mixing or water required. For interior and exterior installation of ceramic tile, porcelain tile, glass tile, stone, quarry tile, pavers, and brick. MULTIMAX™ 1 Pre-Mixed Adhesive Mortar features non-sag performance on walls and maximum buildup of up to ¾" (19 mm) without shrinkage on floors. It has a smooth, easy-to-trowel consistency.

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.

Suitable Substrates

- Concrete and Brick Masonry
- · Cement Backer Board
- Cement Plaster/Render
- HYDRO BAN Board
- Mortar Bed
- STRATA MAT
- Existing Ceramic Tile and Stone
- Exterior Glue Plywood (Interior Only)
- Properly Prepared Vinyl Or Other Resilient Tile (Interior Only)
- Gypsum Plaster
- Gypsum Wallboard (Interior use only, non-wet areas)
- Plastic Laminate
- Self-Leveling and Patching Compounds (Interior Only)

Packaging

3.5 Gallon Pail

Approximate Coverage

Trowel Size	(ft²)	(m²)
1/4" X 1/4" (6mm x 6mm) notched	64	5.9
1/4" X 3/8"" (6mm x 6mm) notched	42	3.9
1/2" X 1/2" (12mm x 12mm) notched	32	3.0

Shelf Life

Containers are to be stored in a clean, dry area between 40-100°F (4-38°C). Shelf life of unopened containers is two years if properly stored. Do not allow to freeze.

Limitations

- Not for use directly over particle board, luan, Masonite[®] or hardwood floors.
- 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.

 Installation of porcelain tiles greater than 6"x 6" over non-absorptive substrates will result in an extended cure time.

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.
- Protect finished work from traffic until fully cured.
- Protect from freezing. Product is stable up to 3 freeze/thaw cycles

4. TECHNICAL DATA

Applicable Standard

- ANSI A118.15HET
- ANSI A118.11
- ANSI A118.4

Physical Properties

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Test	Test Method	Results
28 day Cure 20 cycle Freeze/Thaw Quarry Tile Shear Strength	ANSI A118.15 7.3.3	200 - 260 psi (1.4 - 1.8 MPa)
20 minute Open Time	ANSI A118.15 5.3.5	340 - 360 psi (2.3 - 2.5MPa)
28 day Quarry Tile Shear Strength	ANSI A118.15 7.3.2	500 - 560 psi (3.4 - 3.9 MPa)
14 day cure 14 day Heat Age Porcelain Tile Shear Strength	ANSI A118.15 7.2.7	980 - 1180 psi (6.8 - 8.1 MPa)
28 day Cure 20 Cycle Freeze/Thaw Porcelain Tile Shear Strength	ANSI A118.15 7.2.6	220 - 320 psi (1.5 - 2.2 MPa)
7 day Cure 7 day Water Immersion Shear Strength	ANSI A118.15 7.1.3	300 - 360 psi (2.1 - 2.5 MPa)
7 day Porcelain Tile Shear Strength	ANSI A118.15 7.2.3	270 - 490 psi (1.9 - 3.4 MPa)
1 day Porcelain Tile Shear strength	ANSI A118.15 7.2.2	110 - 150 psi (0.8 - 1.0 MPa)
14 day Cure 14 Day Heat Cure wall tile shear strength	ANSI A118.15 7.1.4	850 - 970 psi (5.9 - 6.7 MPa)
7 Day Wall Tile Shear Strength	ANSI A118.15 7.1.2	550 - 600 psi (3.8 - 4.1 MPa)
7 day Water Immersion Shear Strength, Porcelain Mosaic Tile	ANSI A118.15 7.2.4	250 - 390 psi (1.7 - 2.7 MPa)
28 day Shear Bond, Porcelain Mosaic Tile	ANSI A118.15 7.2.5	510 - 910 psi (3.5 - 6.3 MPa)
28 day Shear Bond, Quarry Tile/Plywood	ANSI A118.11 4.1.1.2	350 - 440 psi (2.4 - 3.0 MPa)
Sag on Wall	ANSI A118.15.6.0	0 in (0 mm)

Working Properties

Open Time @ 70° F (21°C) 30 Minutes Time To Traffic 24 hours

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 50°F (10°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 self-leveling mortar to provide a proper finish. Dry, dusty concrete slabs or masonry should be wiped clean and excess water swept off. All slabs must be plumb and true to within 1/4" (6 mm) in 10 ft (3 m).

Note: Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01 and EJ-171. 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 F.7.3.12 0315 Data Sheets are subject to change without notice. For latest revision, visit laticrete.com. DS-34082-1220 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".

Application: Apply mortar to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional mortar with the notched side. Back butter all tile and stone 15" inches (200mm) or larger to provide full bedding. Firmly press each tile / stone into the wet, sticky adhesive mortar and move them perpendicularly, across the ridges, forward and back to flatten the ridges and fill the valleys. Check mortar for complete coverage by periodically removing a tile and inspecting bedding mortar transfer onto back of tile. If mortar is skinned over (not sticky), remove and replace with fresh mortar. Use proper sized notched trowel to ensure full bedding of the tile.

Note: When installing tile over 12" inches (300 mm) on any side and using MULTIMAX 1 on a non-porous (waterproof) substrate such as HYDRO BAN Liquid Applied Membrane, HYDRO BAN Sheet Membrane or HYDRO BAN Board, we recommend using the included Activator packet.

- Mixing the Activator: Add the pouch to 12 oz (355 mL) of water in a spray bottle. This will cause the solution to get warm which is normal and expected. Gently agitate or swirl the solution to help facilitate dissolution.
- Spray rate and Coverage: The activator spray is sufficient to cover the entire 3.5 gal (13.2 L) volume of MULTIMAX 1.
- Application: Once the activator is fully dissolved within the water, follow the application instructions above. Before bedding the tile, we recommend spraying the solution from the spray bottle onto the troweled material so that the adhesive is slightly dampened but not soaked. This will help speed up the curing process.

CAUTION: The activator spray is CAUSTIC and should only be used while wearing Rubber Gloves, Safety Glasses and an N95 Mask. If the activator solution makes contact with the skin or eyes, flush with COLD water immediately for at least 15 minutes and seek medical attention if required. Refer to the SDS for more information.

Re-use inner disc when re-storing.

Grouting: Grout installation after a minimum of 24 hours curing time at 70°F (21°C).

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

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

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**.

10. FILING SYSTEM

Additional product information is available on our website at <u>laticrete.com</u>. The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty
- DS-230.05: LATICRETE 5 Year System Warranty
- DS 230.10: LATICRETE 10 Year System Warranty
- DS 230.15: LATICRETE 15 Year Tile & Stone System Warranty For Direct Adhered Veneers Over Steel or Wood Framed Exterior Facades
- DS 025.0: LATICRETE 25 Year System Warranty
- DS 230.99: LATICRETE Lifetime System Warranty