



TRI-LITE® Rapid

DS-36639-0524

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

TRI-LITE® Rapid

2. MANUFACTURER

LATICRETE International, Inc.

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3. PRODUCT DESCRIPTION

A fast setting, lightweight, high performance tri-purpose mortar designed for Large and Heavy Tile, thin-bed and features superior non-sag performance for wall installations. TRI-LITE RAPID contains no respirable crystalline silica levels that exceed the OSHA action level* * OSHA action level set forth in OSHA's Respirable Crystalline Silica (RCS) standard for construction, 29 CFR 1926.1153, as tested by an independent laboratory to be below the OSHA action level for RESPIRABLE CRYSTALLINE SILICA - SEE LATICRETE.COM/SILICA

Uses

- For wall installations of interior and exterior ceramic tile, porcelain tile and stone.
- Can be used as a Large and Heavy Tile adhesive for flooring installations.
- Ideal for most types of thin-set flooring applications.

Advantages

- Rapid setting, ready for grouting in 3 to 4 hours.
- Lightweight formula. A 27.5 lb (12.5 kg) bag provides the same coverage as a 50 lb (22.7 kg) of traditional mortar.
- Excellent Large and Heavy Tile Mortar used as a bonding mortar from a minimum of 3/32" (2.4mm) up to a 3/4" (19mm) without shrinkage.
- Incredible non-sag performance, including large and heavy tile.
- Smooth, creamy easy-to-trowel consistency
- "Extra Heavy" rating per ASTM C627 (TCNA)
- Exceeds ANSI A118.4, A118.11 and A118.15 FHT Requirements
- Exceeds ISO 13007 C2FTS1P1 classification

Suitable Substrates

- Exterior Glue Plywood (Interior Only)
- Concrete
- Concrete Block
- Ceramic Tile and Stone
- Ceramic Tile and Stone
- Gypsum Wallboard
- Concrete and Brick Masonry
- Laminate
- Non-Water Soluble Cut-Back Adhesive
- Non-Water Soluble Cut-Back Adhesive
- Vinyl Or Other Resilient Tile
- Brick Masonry
- Cement Plaster
- Concrete and Masonry Surfaces
- Cement Backer Board (Interior Only)

Packaging

27.5 lb (12.5 kg) bag

Colors

White

Approximate Coverage

27.5 lb (12.5 kg) bag

Trowel Size	ft ²	m ²
1/4" x 1/4" (6 mm x 6 mm) notched trowel	80 - 95	7.4 - 8.8
1/4" x 3/8" (6 mm x 9 mm) notched trowel	60 - 70	5.6 - 6.5
1/2" x 1/2" (12 mm x 12 mm) notched trowel	40 - 47	3.7 - 4.4

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored off the ground in a dry area. High humidity will reduce the shelf life of bagged product.

Limitations

- Not for use directly over OSB, 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).
- Not for use in submerged applications. For these applications, use 254 Platinum, 257 TITANIUM or MULTIMAX Lite.
- Not a remedy to level or flatten substrates. Use a suitable LATICRETE Underlayment for this purpose.
- Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or, L/480 for thin bed stone installations where L=span length or L/600 for exterior, vertical applications (except where local building codes specify more stringent deflection requirements)

Cautions

- Consult SDS for safety information.
- Some marbles and other stones 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.

4. TECHNICAL DATA

Applicable Standard

- ANSI A118.4, ANSI A118.11, ANSI A118.15 FHT
- This product currently has a Product Specific (Type III) Environmental Product Declaration (EPD). The PCR

review, life cycle assessment and declaration were independently verified by UL Environment in accordance with ISO 14025, ISO 14040 and ISO 14044.

Physical Properties

ANSI A118.15

Test	ANSI A118.15 Specification	Results
Porcelain Tile Shear Strength ANSI A118.15 7.2.2: 24 hrs	100 psi (0.6 MPa)	375-475 psi (2.6-3.3 MPa)
Porcelain Tile Shear Strength ANSI A118.15 7.2.3: 7 days	300 psi (2.0 MPa)	550-650 psi (3.8-4.5 MPa)
Porcelain Tile Shear Strength ANSI A118.15 7.2.4: 7d Water Immersion	200 psi (1.3 MPa)	450-525psi (3.1-3.6 MPa)
Porcelain Tile Shear Strength ANSI A118.15 7.2.5: 28 days	400 psi (2.7 MPa)	600-700psi (4.1-4.8 MPa)
Quarry Tile Shear Strength ANSI A118.15 7.3.2: 28 days	150 psi (1.0 MPa)	350-450 psi (2.4-3.1 MPa)
Wall Tile Shear Strength ANSI A118.15 7.1.2: 7 days	450 psi (3.1 MPa)	500-575 psi (3.4-4.0 MPa)
Wall Tile Shear Strength ANSI A118.15 7.1.3: 7d Water Immersion	250 psi (1.7 MPa)	300-400 psi (2.1-2.8 MPa)
Sag	<0.50 mm	0 mm
Open Time: 10 minutes at 28 days ANSI A118.15 5.3	75 psi (0.5 MPa)	175-225 psi (1.2-1.6 MPa)
Open Time: 20 minutes at 28 days ANSI A118.15 5.3	75 psi (0.5 MPa)	80-130 psi (0.6-0.90 MPa)

Working Properties

Open Time	20 minutes
Pot Life	60 minutes
Time To Grout	3-4 hours
Time to Heavy Traffic	5 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 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. New concrete slabs shall be damp cured and 28 days old before application. All slabs must be plumb and true to within 1/4"

(6 mm) in 10' (3 m). 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" (3 mm) 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—27.5 lb (12.5 kg) bag

For Walls and Large and Heavy Tile

Applications

Place 3.8 - 4.1 qts (3.6 -3.9 L) of clean water in a pail and slowly add the entire bag of TRI-LITE Rapid. Mix with slow speed mixer for one minute, DO NOT temper with water.

For Thin Bed Applications

Place 4.4 - 4.5 qts (4.2 -4.3 L) of clean water in a pail and slowly add the entire bag of TRI-LITE Rapid. Mix with a slow speed mixer for 1 minute or until a creamy smooth consistency is reached.

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.

Note: Use proper sized notched trowel to ensure full bedding of the tile. Spread only enough mortar that can be covered with tile within 15–20 minutes. Place tile and beat in with rubber mallet to embed. Adjust as necessary. Check mortar for complete coverage by periodically removing a tile and inspecting the transfer onto the back of the tile. The size and weight of the veneer will vary. Conduct a small test area for non-sag performance. Due to job site conditions and differences in finish material types; ledger boards, shims, wedges or spacers may be required to maintain finish levels and heights.

Large and 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.

Note: Use the proper sized notched trowel to ensure full bedding of the tile. Spread as much mortar as can be covered with tile in 15–20 minutes. Back butter large tiles 8" x 8" (200 mm x 200 mm) to provide full bedding and firm support. Place tile into wet sticky mortar and beat in using a beating block and rubber mallet to embed tile and adjust until level. 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.

Grouting

Grout installation after a minimum of 3-4 hours curing time at 70°F (21°C). Grout with SPECTRALOCK® PRO Premium Grout†, SPECTRALOCK PRO Grout†, PERMACOLOR®? Grout mixed with water, or 1500 Sanded Grout or 1600 Unsanded Grout gauged with 1776 Grout Enhancer or with water.

Cleaning

Clean tools with water.

- DS 230.13: LATICRETE Product Warranty
- DS 230.0: LATICRETE 25 Year System Warranty (United States and Canada)
- DS 236.0: 9235 Waterproofing Membrane
- DS 250.0: PERMACOLOR? Grout
- DS 256.0: 1500 Sanded Grout
- DS 258.0: 1600 Unsanded Grout
- DS 265.0: 1776 Grout Enhancer
- DS 633.0: LATAPOXY 300 Adhesive
- DS 663.0: HYDRO BAN®
- DS 681.0: SPECTRALOCK PRO Premium Grout†
- DS 685.0: SPECTRALOCK PRO Grout†
- TDS 152: “Bonding Ceramic Tile, Stone or Brick Over Wood Floors”

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:

- 10 Year System Warranty (US) (English)
- 1 Year Product Warranty (US) (English)
- 25 Year System Warranty (US) (English)

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.

10. FILING SYSTEM

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

LATICRETE International, Inc.

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