



LATAPOXY® 310 Stone Adhesive

DS-679-0724

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

LATAPOXY® 310 Stone Adhesive

2. MANUFACTURER

LATICRETE International, Inc.
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Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 1235

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3. PRODUCT DESCRIPTION

LATAPOXY 310 Stone Adhesive is a two component, high strength epoxy adhesive, which is formulated for the spot bonding method of tile and stone installations on vertical surfaces. LATAPOXY 310 Stone Adhesive maintains its non-sag consistency at high temperatures up to 95°F (35°C).

Uses

- Spot bonding marble, granite, adhered masonry veneer and large format ceramic tile on walls and overheads, interior or exterior applications
- Ideal for fireplace surrounds, elevators and stair risers
- Adhesive for bedding and fastening marble, granite and other stone slabs on walls and wainscoting
- Adhesive for fabricating granite, marble and other stone
- Approved by TCNA for Interior applications method W215 and W260

Advantages

- Fast Permanent Bond—45 minutes to 1 hour set time
- Easy to Use—1:1 mixing ratio by volume
- Non-Staining—ideal for white and light colored marbles, other stones and tiles
- Withstands shock and vibration
- Safe—no solvents
- Non-Sag—when applied up to 1" (25 mm) thick
- Durable permanent bond, will not deteriorate over time
- Rapid version is available; 5–8 minute set up
- Conforms to EN 12004 and ISO 13007 with a classification of R2T

Suitable Substrates

- Concrete
- Cement Mortar Bed
- Brick Masonry
- Existing Ceramic Tile And Stones
- Exterior Glue Plywood (Interior Only)
- Steel

Packaging

Mini Unit—2 gal (8 L) units packed in one carton.

-8 mini jars of Part A, 0.5 QT (0.5 L)

-8 mini jars of Part B, 0.5 QT (0.5 L),

40 cartons per pallet, Available in standard and rapid versions

Full Unit—2.6 gal (10 L) All components packed in one carton

-1.3 gal (5 L) Part A pail

-1.3 gal (5 L) Part B pail,

40 cartons per pallet, Available in standard and rapid versions.

Cartridge Packs—2.3 gal (9 L) For use in LATAPOXY 310 Cordless Mixer:

-15 x 20oz (600 mL) cartridge packs of Part A and Part B per carton, 27 cartons per pallet. Available in standard and rapid version.

Commercial unit 5.2 gal (20 L) containing the following:

- 2.6 gal (10 L) Part A pail

- 2.6 gal (10 L) Part B pail

Approximate Coverage

The coverage for LATAPOXY® 310 Stone Adhesive will vary depending upon the amount of product required to

plumb the wall. The chart below is based on 10% coverage of the area of each tile or stone piece.

Average Inches (or millimeters) Out of Plumb	LATAPOXY® 310 Thickness	Approx. Coverage/ 10 Liter Unit
Plumb Wall	1/8" Thick (3 mm)	300–325 ft ² (27–30 m ²)
1/4" (6 mm)	1/4" Thick (6 mm)	150–170 ft ² (14–16 m ²)
1/2" (12 mm)	1/2" Thick (12 mm)	75–80 ft ² (7–7.5 m ²)

Cartridge pack coverage

One carton (15 cartridges) will yield approximately 150 ft² (14 m²) with 1/4" (6 mm) thick dabs, or 300 ft² (27 m²) with 1/8" (3 mm) thick dabs when covering 10% of the veneer surface.

Limitations

- Surface temperature for application: 50°F (10°C)—95°F (35°C). For exterior applications, contact Technical Services at 1.800.243.4788, ext. 235 or support@laticrete.com for approval prior to use.
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Sandstone, slate and fissile stones are not recommended veneers and should not be used with LATAPOXY 310 Rapid Stone Adhesive. These stones and other porous stones may delaminate or break apart due to the nature of their porous and layered composition.
- DO NOT bond to particle board fire-retardant plywood, marine grade plywood, luan, Masonite®, any chemically treated plywood, or hardwood surfaces.

Cautions

- Consult MSDS for more safety information.
- Keep out of reach of children.
- LATAPOXY 310 Stone Adhesive has a slight, non-hazardous odor.
- During cold weather, protect finished work from traffic until fully cured.
- LATAPOXY 310 Stone Adhesive Part A is corrosive to eyes and skin before curing. Avoid contact with eyes and or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Consult local building code for requirements.

4. TECHNICAL DATA

Applicable Standard

- ANSI A118.3
- EN 12004
- ISO 13007

Physical Properties

LATAPOXY 310 Stone Adhesive

Test	Test Method	Results
Consistency	LATICRETE in house	No sag in thickness to 1 inch (25 mm)
Pot Life at 72°F (20°C)	LATICRETE in house	30–45 minutes
Set Time at 72°F (20°C)	LATICRETE in house	5–6 hours
Shear Bond Strength Marble to Concrete	ANSI A118.3–5.5 [^]	730–920 psi (5–6.3 MPa)
Compressive Strength	ANSI A118.3–5.6	8300–8450 psi (57–58 MPa)
Tensile Strength	ANSI A118.3–5.7	1500–2100 psi (10.3–14.5 MPa)
Thermal Shock	ANSI A118.3–5.8 ^{^^}	1030–1600 psi (7–11 MPa)

Test	Test Method	ISO 13007-1 R2 Specification	Results
7 day cure shear adhesive strength	ISO 13007-2 4.3.4	2 MPa (290 psi)	18 – 33 MPa (2610–4785 psi)
7 day cure 21 day water immersion shear adhesive strength	ISO 13007-2 4.3.5	2 MPa (290 psi)	14–34 MPa (2030–4930 psi)
7 day cure 4 100°C boiling water cycles shear adhesive strength	ISO 13007-2 4.3.8	2 MPa (290 psi)	22–36 MPa (3190–5220 psi)
Open time after 20 minutes	ISO 13007-2 4.1	0.5 MPa (73 psi)	2.8–3.8 MPa (406–551 psi)
Slip	ISO 13007-2 4.2	Less than or equal to 0.5 mm (0.02 in)	0.1–0.3 mm (0.0039–0.012 in)
Transverse deformation	ISO 13007-2 4.5	Greater than or equal to 2.5 mm (0.1 in) and less than 5 mm (0.2 in)	3.2–3.6 mm (0.13–0.14 in.)

Working Properties

LATAPOXY® 310 Stone Adhesive

Consistency	No Sag in Thickness to 1" (25 mm)
Pot Life @ 72°F (20°C)	30–45 minutes
Set Time @ 72°F (20°C)	5–6 hours

Temperature Effects

LATAPOXY 310 Stone Adhesive

Temperature	Pot Life	Set Time
40°F (4°C)	100 minutes	10 hours
70°F (21°C)	45 minutes	5–6 hours
90°F (32°C)	25 minutes	2.5–3 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

• Preparation

Store resins at room temperature (>70°F [>21°C]) for 24 hours before using. Surface temperature for application: 50°F (10°C)—95°F (35°C). All surfaces must be sound, clean, and free of oil, waxes, frost, curing agents, form release agents or other bond inhibiting contaminants. All substrates must be clean and dry when application of LATAPOXY 310 Stone Adhesive is made. 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.

Finished veneers equipped with any type of resin, mesh, epoxy or fiberglass backing must be ground down to the bare stone in those areas to receive LATAPOXY 310 Stone Adhesive. Clean and grind back of stone at areas to receive the LATAPOXY 310 Stone Adhesive spots using a mechanical wheel grinder with a diamond wheel/blade. Remove dust with a stiff brush and wipe entire surface. Using a damp sponge (not wet), wipe the tile or stone to remove any particles or remaining dust to ensure a clean direct bond and that all ground material is removed. Wipe dry with a clean cloth, then apply LATAPOXY 310 Stone Adhesive.

Recommended Guidelines for Spot Bonding Stone:

(Please consult your Local Code for actual code compliance)

1. Interior Stone or Tile Applications
 - Thickness – units shall not exceed 2" (50mm).
 - Module Weight – 20 lb/ft² (73 kg/m²) unless otherwise approved by project engineer.
2. Exterior Porcelain Tile (applications)
 - Thickness – units shall not exceed 5/8" (16mm).
 - Facial Dimensions – maximum of 432 in² (0.28m²) and no greater than 24" (610mm) along any edge or dimension.
 - Module Weight – 9 lb/ft² (44.2 kg/m²) unless otherwise approved by project engineer.
3. Exterior Stone Applications
 - Thickness – units shall not exceed 2" (50mm)
 - Facial Dimensions – maximum of 720 in² (0.46m²) and no greater than 36" (915mm) along any edge or dimension.
 - Module Weight – 15 lb/ft² (73 kg/m²) unless otherwise approved by project engineer.
 - Height – No more than 30 ft (9.1 m)

Note: Always check with the tile or stone manufacturer to make sure the tile or stone is suitable for vertical and exterior (if applicable) installations.

Mixing

Combine equal volumes of LATAPOXY 310 Stone Adhesive Part A and Part B (1:1 mix ratio by volume). Mix until uniform in color; no swirls. Small quantities can be mixed with a putty knife or margin trowel. Larger quantities can be mixed with an electric drill mixer (low speed). Cartridge packs are designed for use only with the LATAPOXY 310 Cordless Mixer.

Application

Apply dabs evenly distributed on back of the stone or tile; 5 dabs minimum, 1 in each corner and 1 in center. Cover at least 10% of the area of each piece. Finished dab thickness must be a minimum of 1/8" (3 mm), maximum of 1" (25 mm).

Approximate Dab Diameter Required to Achieve 10% Coverage With 5 Dabs:

Tile Size	Dab Diameter
12" x 12" (300 mm X 300 mm)	2" (50 mm)
24" x 24" (600 mm X 600 mm)	4" (100 mm)
36" x 36" (900 mm X 900 mm)	6" (150 mm)

After installation of LATAPOXY 310 Stone Adhesive onto the veneer, install onto substrate and adjust for plumb and level.

Joint Treatment

Exterior Applications:

Use LATASIL™ to treat all joints. Refer to Data Sheet 6200.1 for further instructions.

Interior Applications:

The following products may be used:

- ®
- ?

Test area to ensure proper filling as narrow veneers and wider gaps behind the veneer may

not allow for joint filling with an epoxy or cement grout.

Note: Control, expansion or other movement of joints must be treated with a flexible sealant.

Cleaning

Clean tools and work while epoxy is fresh, using warm water. Detergent or soap can be added to the water for easier cleaning.

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:

- 25 Year System Warranty (US) (English)
- 25 Year MVIS System Warranty (US) (English)
- 1 Year Product Warranty (US) (English)
- 25 Year MVIS System Warranty (Canada) (English)
- 25 años de garantía limitada del sistema - MVIS (Estados Unidos) (Español)
- Garantie limitée de 25 ans sur les systèmes MVIS (Canada) (Français)

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. All stone and tile should be maintained and sealed with LATICRETE STONETECH® professional products as appropriate for the specific tile/stone and installation situation.

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:

- DS 230.13: LATICRETE® Product Warranty (United States and Canada)
- DS 025.0: LATICRETE 25 Year Tile & Stone System Warranty (United States and Canada)
- DS 250.0: PERMACOLOR® Grout?
- DS 281.0: PERMACOLOR Select
- DS 256.0: 1500 Sanded Grout
- DS 258.0: 1600 Unsanded Grout
- DS 265.0: 1776 Grout Enhancer
- DS 679.3: LATAPOXY 310 Rapid Stone Adhesive
- DS 681.0: SPECTRALOCK® PRO Premium Grout†
- DS 683.0: LATAPOXY 310 Cordless Mixer
- DS 685.0: SPECTRALOCK PRO Grout†
- DS 6200.1: LATASIL™

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