



Globally Proven
Construction Solutions

LATAPOXY® 310 Stone Adhesive

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



FEATURES/BENEFITS

- Fast permanent bond
- Easy to use - 1:1 mixing ratio by weight
- Non-staining — ideal for white and light colored marbles, other stones and tiles
- Withstands shock and vibration
- Low Modulus
- Durable permanent bond will not deteriorate over time
- Safe - no solvents
- Non-Sag — when applied up to 1" (25mm) thick.

Approved by the following building code bodies for exterior installations: BOCA; ICBO; SBCCI; ICC

USES

- Spot bonding marble, granite and large format ceramic tile on walls and overheads, interior or exterior, dry or wet applications.
- Adhesive for bonding masonry, precast concrete and stone panels.
- Ideal for fireplace surroundings, elevators and stair risers.
- Adhesive for fabricating granite, marble and other stone
- Adhesive for bedding and fastening marble, granite and other stone slabs on walls and wainscoting

MANUFACTURER/ DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd (Level 2, A3)
No. 38 Sungei Kadut, Street 2, Singapore 729245
Telephone: +65 6515 3028 Fax: +65 6515 3037
Internet: se.laticrete.com

STANDARDS/CERTIFICATIONS

- ISO 13007-1
- ANSI A118.3, American National Standard Specifications for Chemical Resistant, Water Cleanable Tile-Setting and -Grouting Epoxy and Water Cleanable Tile-Setting Epoxy Adhesive

Acceptable Substrates

Interior Substrates

- Concrete
- Concrete masonry units (CMU)
- Brick/masonry
- Exterior grade plywood
- Aluminum*
- Cement backer board*
- Steel**

*Consult cement backer board/ aluminum manufacturer for specific installation recommendations

** Steel surface must be cleaned to remove oil, dust oxidation and other bond inhibiting materials

Exterior Substrates

Please consult LATICRETE Technical Services prior to use for all exterior applications.

- Concrete
 - Must be minimum 6" (150mm) thick reinforced
 - Must be minimum 3500 psi (24 MPa)
 - Must be minimum 28 days old prior to installation
- CMU
 - Double wythe walls only
- Steel

Packaging

Full Unit: 10 Kg Set containing the following:

- 5kg Part A (Pail)
- 5kg Part B (Pail)

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 with 5 equal spots.

Average mm Out of Plumb	LATAPOXY 310 Thickness	Approx. Coverage / 10kg Set
Plumb Wall	3mm Thickness	27-30m ²
6mm	6mm Thickness	14-16m ²
12mm	12mm Thickness	7-7.5m ²

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at $\geq 0^{\circ}\text{C}$ to $\leq 43^{\circ}\text{C}$.

Limitations

- Surface temperature for application: 8°C – 35°C
- For exterior applications, contact Technical Services (65) 6515 3028 or enquiry@laticrete.com.sg for approval prior to use.
- Sandstone, slate and fissile stones are not recommended veneers and should not be used with LATAPOXY 310 Stone Adhesive. These stones and other porous stones may delaminate or break apart due to the nature of their porous and layered composition.
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.

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 or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Consult local building code for requirements.

TECHNICAL DATA

Performance Properties

Test	Test Method	Results
Water absorption	ANSI A118.3-1999	<0.15%
Shear bond strength marble to concrete	ANSI A118.3-5.5	>5.6 N/mm ²
Compressive Strength	ANSI A118.3-5.6	>57N/mm ²
Tensile strength	ANSI A118.3-5.7	>12N/mm ²
Thermal Shock	ANSI A118.3-5.8	>9N/mm ²

Data taken from report TCA 179-01

* modified test method

** Tile modified to porcelain tile

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.

Test	Test Method	Specification	Results
Shear adhesive strength (7 days)	ISO 13007-2 4.3.4	$\geq 2\text{N/mm}^2$	>25N/mm ²
7 day cure 21 day water immersion shear adhesive strength	ISO 13007-2 4.3.5	$\geq 2\text{N/mm}^2$	>24N/mm ²
7 day cure 4 100°C boiling water cycles shear adhesive strength	ISO 13007-2 4.3.8	$\geq 2\text{N/mm}^2$	>29N/mm ²
Open time after 20 minutes	ISO 13007-2 4.1	$\geq 0.5\text{N/mm}^2$	>3N/mm ²
Slip	ISO 13007-2 4.2	$\leq 0.5\text{ mm}$	<0.35mm
Transverse deformation	ISO 13007-2 4.5	$\leq 5\text{ mm}$	<3.7mm

* LATAPOXY 310 Stone Adhesive is ISO 13007-1 R2T

Working Properties

Consistency	No Sag in Thickness to 25mm
Pot life @ 20°C	30-45 minutes
Set time @ 20°C	5-6 hours

Temperature Effects

Temp	Pot Life	Set Time
4°C	100 minutes	10 hrs
21°C	45 minutes	5-6 hrs
32°C	25 minutes	2.5-3 hrs

INSTALLATION

Preparation

Before using, store resins at room temperature $>8^{\circ}\text{C}$ for 24 hours to ensure ease of mixing. All surfaces must be sound, clean, free of oil, waxes, frost, curing agents, form release agents or other bond inhibiting contaminants. All substrates must be clean and dry when applying LATAPOXY 310 Stone Adhesive. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification AN-3.8 "Requirements for Expansion Joints" or TCA Detail EJ171— Current Year "Expansion Joints". **DO NOT** cover expansion joints with mortar. Finished veneers equipped with any type of resin, mesh, epoxy or fiberglass backing must be ground in those areas to receive LATAPOXY 310 Stone Adhesive.

Clean and grind back of stone in 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. Size—for Tile or Stone

Maximum Thickness: 50 mm - 720 in² ($\leq 4645 \text{ cm}^2$) in area. For $>4645 \text{ cm}^2$ contact LATICRETE Technical Services.

2. Module Weight — for tile or stone

Weight 73kg/m² unless approved by an engineer.

Exception — Adhered veneered units weighing less than 1.4kg/m² shall not be limited in dimension or area.

Note: Always check with the tile or stone factory to make sure the tile or stone is suitable for wall 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).

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 back of the veneer, install onto substrate and adjust for plumb and level.

Joint Treatment

Exterior applications - Use Latasil™ to treat all joints for all exterior applications. Refer to DS 6200.1 for further instructions.

Cleaning

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

AVAILABILITY AND COST

Availability

LATICRETE and LATAPOXY materials are available worldwide. For distributor information, call:

Telephone: (65) 6515-3028

Fax: (65) 6515-3037

For on-line distributor information, visit LATICRETE at se.laticrete.com

Cost

Contact a LATICRETE Distributor in your area.

WARRANTY

LATICRETE International warrants LATAPOXY 310 Stone Adhesive is free from manufacturing defects and will not break down, deteriorate or disintegrate under normal usage for a period of two (2) years from date of purchase subject to terms and conditions. In addition, LATAPOXY 310 Stone Adhesive is warranted for a period of ten (10) years from the date of purchase subject to the terms and conditions when used with Latasil Tile & Stone Sealant.

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.

TECHNICAL SERVICES/ CONTACT

Technical Assistance

Information is available by calling:

LATICRETE South East Asia Pte Ltd
(Level 2, A3)

No. 38 Sungei Kadut, Street 2,
Singapore 729245

Telephone: (65) 6515-3028

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Technical and safety literature

To acquire technical and safety literature, please visit our website at
se.laticrete.com