



LATAPOXY® 310 Stone Adhesive

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

Globally Proven Construction Solutions



Location: National Library, Australia



FEATURES/BENEFITS

- 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 coloured marbles, other stones and tiles.
- Withstands shock and vibration.
- Durable permanent bond, will not deteriorate over time.
- Safe – no solvents.
- Non-sag – when applied up to 25 mm thick.
- Rapid version is available; 5 – 8 minute set up.
- Approved by the following building codes bodies for exterior installations; ICC, IBC.

USES

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

SUITABLE SUBSTRATES

Acceptable Substrates for the Spot Bonding Method.

Please contact LATICRETE Technical Services at 1800 331 012 for specific installation details.

Interior Substrates

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

*Interior only consult cement backer board manufacturer for specific installation recommendations

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

~ Interior use only. Fire treated, marine grade or other chemically treated plywood panels are not acceptable substrates.

Exterior Substrates

Please consult LATICRETE Technical Services at 1800 331 012 for approval prior to use for all exterior applications

Concrete.

- 150 mm thick and reinforced
- 25 MPa compressive strength
- 28 days old prior to installation
- Concrete Masonry Unit (CMU)
- Cavity walls

Packaging

Standard

- One 10 litre pail of part A
- One 10 litre pail of part B

Rapid

- One 5 litre pail of part A
- One 5 litre pail of part B

Manufacturer

LATICRETE Australia Pty Ltd
29 Telford Street
Virginia, QLD 4014 Australia
Telephone: 07 3865 1599
Toll Free: 1800 331 012
Fax: 07 3865 2250
Internet: www.laticrete.com.au

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 millimetres out of Plumb	LATAPOXY® 310 Stone Adhesive Thickness	Approximate coverage / 10 litre unit
Plumb Wall	3 mm	27 – 30 m ²
6 mm	6 mm	14 – 16 m ²
12 mm	12 mm	7 – 7.5 m ²

Cartridge Pack Coverage

One carton (15 cartridges) will yield approximately 14 m² with 6 mm thick dabs, or 27 m² with 3 mm thick dabs when covering 10% of the veneer surface. Cartridge packs and cartridge gun are special orders.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) year if stored at >0°C to <43°C.

Limitations

- Surface temperature for application: 10°C – 35°C.
- For exterior applications, contact LATICRETE Technical Services at 1800 331 012 or techservice@laticrete.com.au 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, thick 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 (except where local building codes specify more stringent deflection requirements).
- DO NOT bond to particle board, fire-retardant plywood, marine grade plywood, Luan, Masonite®, any chemically treated plywood or hardwood surfaces.

Cautions

- Consult SDS for more safety information.
- Keep out of reach of children.
- LATAPOXY 310 Stone Adhesive has a slight, non hazardous odour.
- 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.

TECHNICAL DATA

Meets and exceeds the requirements of AS ISO 13007 1 & 2 as an R2T.

Physical Properties

LATAPOXY 310 Stone Adhesive

Test	Test Method	Result
Consistency	LATICRETE® in house	No sag in thickness to 25 mm
Pot Life at 20°C	LATICRETE in house	30 – 45 minutes
Set Time at 20°C	LATICRETE in house	5 – 6 hours
Shear Bond Strength Marble to Concrete	ANSI A118.3-5.5*	5 – 6.3 MPa
Compressive Strength	ANSI A118.3-5.6	57 – 58 MPa
Tensile Strength	ANSI A118.3-5.7	10.3 – 14.5 MPa
Thermal Shock	ANSI A118.3-5.8**	7 – 11 MPa

Data taken from report TCA 179-01

*Modified test method

** Tile modified to porcelain tile

Test	Test Method	ISO 13007 R2 Specification	Results
7-day cure Shear Adhesive Strength	ISO 13007-2 4.3.4	2 MPa	18 – 33 MPa
7-day cure 21-day Water Immersion Shear Adhesive Strength	ISO 13007-2 4.3.5	2 MPa	14 – 34 MPa
7-day cure 100°C Boiling, Shear Adhesive Strength	ISO 13007-2 4.3.8	2 MPa	22 – 36 MPa
Open Time after 20 mins	ISO 13007-2 4.1	0.5 MPa	2.8 – 3.8 MPa
Slip	ISO 13007-2 4.2	≤0.5 mm	0.1 – 0.3 mm
Transverse Deformation	ISO 13007-2 4.5	≥2.5 mm & ≤5 mm	3.2 – 3.6 mm

Working Properties

Consistency	No sag in thickness to 25 mm
Pot Life	30 – 45 minutes
Set Time at 20°C	5 – 6 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.

Temperature Effects

Temperature	Pot Life	Set Time
4°C	100 minutes	10 hours
21°C	30 – 45 minutes	5 – 6 hours
32°C	25 minutes	2.5 – 3 hours

INSTALLATIONS

Preparation

Store resins at room temperature >21°C for 24 hours before using. 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 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 Australian Standards requirements for Expansion Joints in AS3958.1 Section 5.4.5 and AS3958.2 Section 4.5 or TCNA detail EJ-171 "Movement Joints – Vertical & Horizontal". Do not cover expansion joints with mortar. Finish veneers equipped with any type of resin, mesh, epoxy or fiberglass backing must be ground down to 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 mechanical wheel grinder with diamond wheel/blade. Remove dust with stiff brush and wipe entire surface. Using 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 any actual code compliance)

- For tile or stone
Maximum Thickness: 50 mm – 4645 cm² in area For >4645 cm² contact LATICRETE Technical Service.
- For tile or stone
Weight: 73 kg/m² unless approved by an engineer.

Exception: Adhered veneered units weighing less than 1.4 kg/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 vertical and exterior (if applicable) installation.

Mixing

Combine equal volumes of LATAPOXY® 310 Stone Adhesive Part A and Part B (1:1 mix ratio by volume). Mix until uniform in colour; 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.

[†] United States Patent No.: 6,881,768 (and other Patents).

Application

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

Approximate dab diameter required to achieve 10% coverage with 5 dabs

Tile size	Dab Diameter
300 mm x 300 mm	50 mm
600 mm x 600 mm	100 mm
900 mm x 900 mm	150 mm

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

Joint Treatment

Exterior Application

Use a LATASIL to treat all joints. refer to PDS 1074 for further instructions.

Interior Applications

The following LATICRETE® products may be used:

- SPECTRALOCK® PRO Premium Grout[†]
- PERMACOLOR® Grout
- PERMACOLOR NS Grout
- PERMACOLOR Select® Grout
- Suitable silicone sealant

Test area to ensure proper filling as narrow veneers and wide 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.

AVAILABILITY AND COST

Availability

LATICRETE and LATAPOXY® materials are available worldwide.

For Distributor information:

Toll Free: 1800 331 012

Telephone: 07 3865 1599

For online distributor information, visit LATICRETE at www.laticrete.com.au

Cost

Contact a LATICRETE Distributor in your area.

MAINTENANCE

LATICRETE and LATAPOXY grouts require routine cleaning with a neutral pH detergent and water. All stone and tiles should be maintained and sealed with STONETECH® products as appropriate for the specific tile / stone and installation situation.

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

Technical assistance

Information is available by calling:

Toll Free: 1800 331 012

Telephone: 07 3865 1599

Fax: 07 3865 2250

Technical and safety literature

To acquire technical and safety literature, please visit our website at

www.laticrete.com.au

DISCLAIMER

- The information contained in this document is given in good faith and to the best of our knowledge is true and accurate.
- This information is subject to change without notice and it is the responsibility of the user to obtain up to date and current information.
- The use of this product is beyond our control and liability is assumed by the user when used incorrectly and not in accordance with LATICRETE guidelines.
- The manufacturer is not responsible for any loss or damage arising from incorrect usage of this product.
- The specifier or other party responsible for the project must ensure that the details in this data sheet are appropriate for the intended application and that additional detailing is performed for specific design or any areas that fall outside the scope of this data sheet.
- Efflorescence is a normal condition of Portland cement and is not covered by any warranty. The use of LATAPOXY 310 Stone Adhesive, LATAPOXY 300 Adhesive, SPECTRALOCK® PRO Premium Grout[†] and SPECTRALOCK 2000 IG will not contribute to any noticeable efflorescence.

LATICRETE Australia Pty Ltd

29 Telford Street, Virginia

QLD 4014 Australia

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