



# LATAPOXY® 310 Stone Adhesive®

DS-679.0-1013

**Globally Proven  
Construction Solutions**



**A new way to bond**

Un nuevo método de adhesión



Scan for more information.  
Más información en el interior del folleto.

## 1. PRODUCT NAME

LATAPOXY® 310 Stone Adhesive

## 2. MANUFACTURER

LATICRETE UK

Speke Hall Industrial Estate

Speke, Liverpool, Merseyside, L24 1YA

United Kingdom

Tel: 0151 486 6101

Fax: 0151 448 1982

e-mail: [sales@laticrete.co.uk](mailto:sales@laticrete.co.uk)

[www.laticrete.co.uk](http://www.laticrete.co.uk)

## 3. PRODUCT DESCRIPTION

LATAPOXY® 310 Stone Adhesive is a two component, ultra high strength epoxy adhesive, which is formulated for the “spot bonding” dot & dab method of tile and stone installations on vertical surfaces. LATAPOXY® 310 Stone Adhesive maintains its incredible non-sag consistency at high temperatures up to 95°F (35°C) and allows tile & stone to be fixed with spot bonding contact coverage of just 10% of the tile back area.

### Uses

- Spot bonding marble, granite, adhered masonry veneer and large format ceramic tile on walls and overheads, interior or exterior applications.
- Ideal for fire surrounds elevators and stair risers.
- Adhesive for bedding and fastening marble, granite and other stone slabs on walls and masonry based vertical elevations.
- 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.
- Available in buckets (2-part), integrated gun cartridges and as a unique “spot on” tube packed handy mix size.
- 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 1" (25 mm) thick.
- Rapid version is available; 5–8 minute set up.
- Approved by the following building code bodies for exterior installations: ICC, IBC.
- Conforms to EN 12004 and ISO 13007 with a classification of R2T

### Interior Substrates

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

\*Consult cement backer board 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 on 0151 486 6101 or [www.laticrete.co.uk](http://www.laticrete.co.uk) for approval prior to use for all exterior applications. There is a maximum height restriction of 30 ft (9.1 m). For exterior installations outside of North America, contact the LATICRETE International, Inc. International Department at 1.800.243.4788, ext. 230.

Concrete surfaces must be of a minimum 150 mm thick, reinforced and sufficiently cured to demonstrate a compressive strength of a minimum 24 N/mm<sup>2</sup> and must be minimum 28 days old prior to installation using LATAPOXY® 310.

All brick or stone exterior masonry onto which LATAPOXY® 310 is used to fixed tiles or veneers must be structurally sound and able to withstand the applied shear weight loading per square metre

### 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 wall alignment (+/-)	Thickness of LATAPOXY 310	Coverage per litre of 310
Even / True	3mm	3.0 m <sup>2</sup>
(+/-) 3mm	6mm	1.5 m <sup>2</sup>
(+/-) 6mm	12mm	0.7 m <sup>2</sup>

### Packaging

**SPOT ON** integrated tubes (114gm):

- 36 x 114gm spot on “hand mix” tubes per inner case

**MINI** unit 8 ℓ kit contains 4 litres of parts A & B as follows:

- 8 mini 0.5 litre pots of part A & 8 mini 0.5 litre pots of part B

**FULL** unit 10 ℓ kit containing the following:

- 1 X 5 ℓ Part A Tub with a 1 x 5 ℓ Part B Tub

**GUN CARTRIDGE** packs total 9 litre as per the following:

- 15 cartridge packs of part A and part B  
(For use in LATAPOXY® 310 cordless mixer)

**COMMERCIAL** unit 20 ℓ containing the following:

- 10 litre part A bucket along with a 10 litre part B bucket

### Cartridge Pack Coverage

One carton (15 cartridges) will yield approximately 14 m<sup>2</sup> with 6 mm thick dabs, or 27 m<sup>2</sup> with 3 mm thick dabs when covering 10% of the tile or veneer back surface.

### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at >32°F (>0°C) to <110°F (<43°C).

### 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.
- **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 or L/600 for exterior veneers where L=span length (except where local building codes specify more stringent deflection requirements)
- DO NOT bond to particle board, luan, Masonite® 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 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.

## 4. TECHNICAL DATA

### Applicable Standards

ANSI A118.3, EN 12004 and 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)

\* Modified test method; \*\* Tile modified to porcelain tile

Test	Test Method	ISO 13007 Specification	Results
7 day cure shear adhesive strength	ISO 13007-2 4.3.4	2.0 N/mm <sup>2</sup>	18.0 – 33.0
7 day cure 21 day water immersion shear strength	ISO 13007-2 4.3.5	2.0 N/mm <sup>2</sup>	14.0 - 34.0
7 day cure 4 100°C boiling water cycles shear strength	ISO 13007-2 4.3.8	2.0 N/mm <sup>2</sup>	22.0 – 36.0
Open time after 20 minutes	ISO 13007-2 4.1	0.5 N/mm <sup>2</sup>	2.8 – 3.8
Slip	ISO 13007- 4.2	< 0.5mm	0.1 – 0.3mm
Transverse deformation	ISO 13007-2 4.5	> 2.5 & < 5.0mm	3.2 – 3.6mm

### Working properties:

LATAPOXY® 310 stone adhesive

Consistency	No sag at 25mm thickness
Pot Life (21°C)	30 – 45 minutes
Setting time (21°C)	5 – 6 hours

### Temperature effects:

LATAPOXY® 310 stone adhesive

Temperature	Pot Life (minutes)	Setting Time (hours)
4°C	100	10
21°C	45	5 – 6
32°C	25	2.5 - 3

## 5. INSTALLATION

### Preparation

Store resins at room temperature (>21°C) for 24 hours before using. All surfaces must be sound, clean and free from 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 "BS 5385-5:2009 section 8 for the design & installation of movement joints within the tiled area. Do not cover movement joints with mortar". Do not cover expansion joints with mortar.

Finished veneers equipped with any type of resin, mesh, epoxy or fibre glass 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. Stone or Interior Tile Applications:

**Size** - Maximum Thickness and Facial Dimension: 50 mm thick & 4645 cm<sup>2</sup> in area.

**Module Weight:** 73 kg/m<sup>2</sup> unless otherwise approved by an engineer.

#### 2. Porcelain Tile (exterior)

**Size** - Maximum Thickness and Facial Dimension: 15 mm thick & 2786 cm<sup>2</sup> in area.

**Module Weight:** 44 kg/m<sup>2</sup> unless otherwise approved by an engineer

**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 colour with 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). NB. 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 centre. Cover at least 10% of the area of each piece. Finished dab thickness must be a minimum of 3 mm and a maximum of 25 mm.

### Approximate dab diameter to give 10% coverage with 5 dabs:

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

After installation of LATAPOXY® 310 stone adhesive onto the veneer, install onto substrate and adjust for plumb to give a true even level.

### Joint Treatment

#### Exterior Applications:

Use LATICRETE® Latasil™ to treat all joints. Refer to Data Sheet 6200.1 for further instructions.

#### Interior Applications:

The following LATICRETE products may be used: LATICRETE® SpectraLOCK® PRO Premium Grout, or LATICRETE® PERMACOLOUR™ Grout.

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® and LATAPOXY® materials are available worldwide. For on-line Distributor Information, call 0151 486 6101 or visit LATICRETE UK at [www.laticrete.co.uk](http://www.laticrete.co.uk)

## 7. MAINTENANCE

Non-finish LATICRETE® and LATAPOXY installation materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

## 8. TECHNICAL SERVICES

### Technical Assistance

Information is available by calling the LATICRETE UK Technical Service Hotline:

Tel: 0151 486 6101

Fax: 0151 448 1982

e-mail: [sales@laticrete.co.uk](mailto:sales@laticrete.co.uk)

### Technical and Safety Literature

To acquire technical and safety literature, please visit our website at [www.laticrete.co.uk](http://www.laticrete.co.uk)

## 9. 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 specification.

---

LATICRETE International, Inc.

One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4788 • +1.203.393.0010 • [www.laticrete.com](http://www.laticrete.com)

©2013 LATICRETE International, Inc.

All trademarks shown are the intellectual properties of their respective owners.