

## LATAPOXY® 310 STONE ADHESIVE

DS-6790-0421

# Globally Proven Construction Solutions



#### 1. PRODUCT NAME

LATAPOXY® 310 STONE ADHESIVE

#### 2. MANUFACTURER

LATICRETE Europe S.r.I. a socio unico

Via Paletti, snc, 41051 Castelnuovo Rangone MO, Italy

Telephone: +39 059 535540 Email: info@laticreteeurope.com

Website: laticrete.eu

#### 3. PRODUCT DESCRIPTION

LATAPOXY® 310 STONE ADHESIVE is a two-component epoxy adhesive for bonding ceramic and natural stone slabs to vertical surfaces for indoor or outdoor applications with local approval (as required) and will not deteriorate over time.

It offers greater productivity on site than traditional mechanical anchorage systems or continuous bed gluing. LATAPOXY 310 STONE ADHESIVE can be used to bond directly to the wall substrate and maintains its non-sag consistency even at high temperatures up to 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

#### **Advantages**

• Fast permanent bond — 45 to 60 minutes set time

- Approved for external installations according to ICC and IBC building standards (local approval may be required)
- 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
- No solvents and low VOC emissions safe, better for you and the environment
- Non-sag when applied up to 25 mm thick
- · Bonds to metal
- Can be used with the LATAPOXY® 310 CORDLESS MIXER to triple productivity of vertical stone and tile installations
- Available in a rapid version (5-8 minute set up)

#### **Suitable Substrates**

- Concrete
- Concrete Masonry Units (CMU)
- Brick Masonry
- Exterior Glue Plywood
- Cement Backer Board (Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use)
- Steel

## **Packaging**

- 1 It Mini Kit (0,5 It Part A + 0,5 It Part B); 320 kits per pallet
- 10 It Kit (5 It Part A + 5 It Part B); 40 kits per pallet
- Cartridge Packs (600 ml x 15 pieces); 36 boxes per pallet
- Cartridge Nozzles (12 pieces per box)
- LATAPOXY® 310 Cordless Mixer, includes
  - (1) cordless mixer,
  - (1) battery charger,
  - (1) 14.4 volt battery,
  - (1) owner's manual

## Coverage / Consumption

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 Millimeters Out of Plumb	LATAPOXY® 310 Thickness	Approx. Coverage/ 10 Liter Unit
Plumb Wall	3 mm	27 – 30 m²
6 mm	6 mm	14 – 16 m²
12 mm	12 mm	7 – 7.5 m <sup>2</sup>

## **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 veneer surface.

## **Shelf Life**

Factory sealed containers of this product are guaranteed to be of first quality for five (5) years if stored at temperatures >32°F (0°C) and <110°f (43°c).>

#### Limitations

- Surface temperature for application: 10°C 35°C.
- For exterior applications, contact Technical Services at technicalservices@laticreteeurope.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<sup>®</sup>, any chemically treated plywood, or hardwood surfaces.
- DO NOT use with steel before cleaning to remove oil, dust oxidation and other bond inhibiting materials.
- DO NOT install directly over single layer wood floors, plywood tubs/showers/fountains or similar constructs.

Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes.

### **Cautions**

Consult MSDS for more safety information.

- · Keep out of reach of children.
- LATAPOXY 310 STONE ADHESIVE has a slight, nonhazardous 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



#### **VOC/LEED Product Information**

This product has been certified for Low Chemical Emissions (ULCOM/GG UL2818) under the UL GREENGUARD Certification Program. For Chemical Emissions. For Building Materials, Finishes and Furnishings (UL 2818 Standard) by UL Environment.

## **Applicable Standard**

- ISO 13007 and EN 12004, R2T
- ANSI A118.3
- ISO 9001:2015 Quality Management System

**Physical Properties** 

Basis	Epoxy resins, aggregates, additives
Colour	Part A: white Part B: brown
Flammability:	No
Classification EN 12004-1:	R2 T

Test	Test Method	ISO 13007-1 R2 Specification	Results
Initial Shear Adhesion Strength:	ISO 13007-2 4.3.4	2 MPa	18 – 33 MPa
Shear Adhesion Strength after Water Immersion:	ISO 13007-2 4.3.5	2 MPa	14–34 MPa
Shear Adhesion Strength after Thermal Shock:	ISO 13007-2 4.3.8	2 MPa	22–36 MPa
Open Time: Tensile Adhesion Strengths after 20 min.	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 and ≤ 5 mm	3.2–3.6 mm

Test	Test Method	Results
Consistency	LATICRETE in house	No sag in thickness to 25 mm
Shear Bond Strength Marble to Concrete	ANSI A118.3–5.5^	730–920 psi
Compressive Strength	ANSI A118.3-5.6	8300–8450 psi
Tensile Strength	ANSI A118.3-5.7	1500–2100 psi
Thermal Shock	ANSI A118.3-5.8^^	1030–1600 psi

<sup>^</sup> modified test method

**Working Properties** 

Working Properties	No Sag in Thickness to 25 mm
Pot Life @ 20°C	30 – 45 minutes
Set Time @ 20°C	5 – 6 hours

**Temperature Effects** 

Temperature	Pot Life	Set Time
4°C	100 minutes	10 hours
21°C	45 minutes	5 – 6 hours
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 (>21°C) for 24 hours before using. 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 local requirements, such as 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.

#### Interior Stone or Tile Applications:

*Thickness*: units shall not exceed 50mm. *Module Weight:* 73 kg/m² unless otherwise approved by project engineer.

## • Exterior Porcelain Tile Applications:

*Thickness*: units shall not exceed 16mm. *Facial Dimensions*: maximum of 0.28m² and no greater than 610mm along any edge or dimension. *Module Weight*: 44.2 kg/m² unless otherwise approved by project engineer.

## • Exterior Stone Applications:

Thickness: units shall not exceed 50mm.
Facial Dimensions: maximum of 0.46m² and no greater than 915mm along any edge or dimension.
Module Weight: 73 km/m² unless otherwise approved by project engineer.

Height: no more than 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 3 mm, maximum of 25 mm.

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

<sup>^^</sup> tile modified to porcelain tile

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 For Exterior Applications**

Use LATASIL™ to treat all joints. Refer to Data Sheet 110 for further instructions.

## **Joint Treatment Interior Applications**

The following products may be used:

- SPECTRALOCK® PRO PREMIUM GROUT
- PERMACOLOR® SELECT GROUT
- LATASIL™

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, please contact LATICRETE EUROPE S.r.l.:

+39 059 535540

info@laticreteeurope.com

For on-line distributor information, visit www.laticrete.eu.

#### Cost

Contact LATICRETE EUROPE S.r.I to obtain complete information and cost.

#### 7. WARRANTY

The supplier warrants that the product will not deteriorate under normal conditions and use. The warranty validity of one (1) year. Contact Technical Services for further information. See 10. FILING SYSTEM:

• DS230.13EU: 1 Year Product Warranty (EN)

• DS 230.10EU: 10 Year System Warranty (EN)

## 8. MAINTENANCE

LATICRETE® and LATAPOXY® are products of high quality designed to achieve lasting installations and avoid maintenance, however performance and durability may depend on properly maintaining products, depending of the cleaning products used

### 9. TECHNICAL SERVICES

#### **Technical Assistance**

Information is available by calling or emailing the Technical Service Hotline:

+39 059 535540

technicalservices@laticreteeurope.com

## **Technical and Safety Literature**

To obtain technical and safety literature, please visit our website at <a href="https://www.laticrete.eu">www.laticrete.eu</a>.

### Warning

The information and the instructions in the data sheet, although based on knowledge gained through years of applications, are indicative. LATICRETE® is unable to directly control the installation methods and conditions of products and does not assume any liability arising from their implementation. Those who want to use LATICRETE® products should conduct adequate tests to determine the site specifications. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation method and site conditions.

LATICRETE® products are covered by a warranty within the limits of what is established by our general conditions of sale and within the limits of correspondence related to technical specifications and applicable certifications, as expressly indicated in the product data sheets, documentation, or applicable technical documentation.

## **10. FILING SYSTEM**

Additional product information is available on our website at <u>laticrete.eu</u>. The following is a list of related documents:

- DS230.13EU: 1 Year Product Warranty
- DS 230.10EU: 10 Year System Warranty
- DS DS-110: LATASIL™ Universal Silicone Sealant