



LATAPOXY® 270 Epoxy Adhesive



Two component, high strength epoxy adhesive for installation of tiles/stone veneers, wood and metals on different substrates that meets and exceeds the requirements of international standards.

Features / Benefits

- High strength, shock & impact resistant.
- Versatile- Interior and Exterior areas, walls & ceilings
- Easy to use.
- Economical – saves time and money.
 - Complies to EN/ISO with a R2T classification.
 - Complies to ANSI A 118.3

Substrates

- Concrete – VDF, Tremix and MIVON
- Concrete Masonry & Brick Masonry
- Cement Mortar Beds & Plaster
- Metal floors and walls
- Tile and Stone
- Wood & Plywood**
- Cement Backer Board** & Gypsum board**
- Cement Terrazzo

- Engineered stones & Marbles
- Epoxy resin based substrates
- Rubber, PVC and Linoleum substrates

**Consult the backer board manufacturer's data sheet for the specific recommendations and load bearing capacity of specific board intended for use.

Application

Designed for the installation of stone veneers, metals and thin stones, tiles on various surfaces. Applications include: Interior and exterior, walls, floors and ceilings, new and remodel construction, Residential or commercial applications

Certifications

ANSI A 118.3

Member of
Indian Green Building Council



TECHNICAL DATA

Performance Properties:
LATAPOXY® 270

Applicable Standards:
EN 12004 / ISO 13007/ANSI A 118.3

EN / ISO Data		
Test / Reference	Requirement	Typical Values
7 day cure Shear adhesion strength - ISO 13007-2 4.3.4 (EN 12003-7.3)	$\geq 2 \text{ N/mm}^2$	10-13 N/mm ² (1450-1885 psi) Tile/Stone failure
Shear adhesion strength after water immersion- ISO 13007-2 4.3.5 (EN 12003-7.4)	$\geq 2 \text{ N/mm}^2$	10-13 N/mm ² (1450-1885 psi) Tile/Stone failure
Shear adhesion Strength after Thermal Shock - ISO 13007-2 4.3.8 (EN 12003-7.5)	$\geq 2 \text{ N/mm}^2$	8.5 - 12 N/mm ² (1232-1740psi) Stone failure
Open time after 20 minutes - ISO 13007-2 4.1 (EN 1346)	$\geq 0.50 \text{ N/mm}^2$	3.0 -4.0 N/mm ² (20 minutes)
Vertical Slip Resistance - ISO 13007-2 4.2 (EN 1308)	$\leq 0.50 \text{ mm}$ (0.02 in)	0.3-0.4 mm (0.011-0.016 in)

The adhesive mortar conforms to EN 12004 / ISO 13007 as R2T

ANSI DATA		
Test / Reference	Requirements	Typical values
Compressive Strength - ANSI 118.3 Clause (5.6)	$\geq 3500 \text{ psi}$ (24.13 MPa)	>56 Mpa (8000 psi)
Tensile Strength - ANSI 118.3 Clause (5.7)	$\geq 1000 \text{ psi}$ (6.90 MPa)	8.90 - 12.4 Mpa (1300-1800 psi)
Shear Bond Strength		
Tile to Tile - A118.3 Clause (5.5)	$\geq 1000 \text{ psi}$ (6.90 MPa)	6.90 – 8.60 Mpa (1000-1250 psi) Tile failure observed
Marble to Metal - A118.3 Clause (5.5)	$\geq 1000 \text{ psi}$ (6.90 MPa)	8.2-10.3 Mpa (1200-1500 psi) Stone failure
Thermal Shock (Porcelain tile & Stone) - A118.3 Clause (5.8)	$\geq 500 \text{ psi}$ (3.45 MPa)	5.8 - 9.0 Mpa (850-1300 psi) Tile/Stone failure

LATAPOXY® 300 Product conforms to the requirements of ANSI A118.3.

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.

Packaging:

1 Kg and 5 Kg Pail (Part A: Part B :: 1:1.5)

NOTE:

Filler powder, Part C, is available separately on request, for tile & Stone installations

Colour:

Light brown

Coverage:

10 Sft per pack of 1 Kg with V notched trowel for a bed of 1.5 mm.

Coverage will vary depending on trowel notch size, type and size of tile and substrate smoothness and evenness.

Working Properties at 70° F (21° C)

PROPERTY	TYPICAL VALUES
Mixing Ratio- A : B (By weight)	1 : 1.5
Specific Weight of the Mixture	1550-1650 kg/m ³
Pot Life	60 - 90 Minutes

INSTALLATION

Surface Preparation:

All surfaces should be between 40° F(4° C) and 95° F(35° C) and structurally sound, clean and free of all dirt, oil, grease, loose peeling paint, laitance, concrete sealers or curing compounds.

Substrates must be compact and consistent, free from any rising dampness, with no loose, flaky, or imperfectly anchored parts. The substrate must be stable, without cracks and have already completed the curing period of hygrometric shrinkage. Uneven areas must be corrected with suitable smoothing and finishing products.

Installation shall be made on a dry surface. New concrete slabs must be damp cured and at least 28 days old prior to application. All slabs must be plumb and true to within 1/4" (6mm) in 10ft (3m). 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 EJ171-91 "Expansion Joints". Do not cover expansion joints with mortar. Glass Mesh Mortar Unit: follow TCA installation detail W244.

Mixing:

LATAPOXY® 270 is prepared by mixing together parts A and B from the bottom upwards, using a low-rev (\approx 400/min.) helicoidal agitator, with the preset ratio of 1:1.5 of the packs. Pour part B into the bucket containing part A, being careful to mix the two parts uniformly until a smooth, even coloured mixture is obtained.

For tile and stone installations, where the bed thickness is to be built, filler powder Part C can be added. In such case, add Part C powder slowly to this liquid and mix till uniform smooth paste is obtained. The user must mix full quantity of adhesive of the pack. Part mixing is not recommended as working and physical properties may change.

Note : 1. if the application is fixing of tile/stone of size \geq 1ft X 1ft then add Part C powder to the blended Part A & B and mix homogeneously.

2. If application is bonding substrates on acrylic sheet, then mix Part A and B of Latapoxy 270 homogeneously and apply over acrylic sheet and allow it to air cure for 6-10 hrs. After air curing, apply adhesive with the help of proper sized notch trowel and fix the substrates to be bonded.

Packs of LATAPOXY® 270 adhesive must be stored at a temperature of \approx +25 °C for at least 2/3 days prior to use for best results while mixing and application.

Application:

a) Stone Veneers (FRP Based) also called as Stoneers:

Apply adhesive to the substrate with the flat side of the trowel, pressing firmly to the surface. Comb on additional adhesive with the notched side. Use the proper sized notched trowel to insure full bedding of the substrates. Spread as much adhesive as can be covered with substrates in 10 minutes. Back butter veneer, FRP, large tiles ($>$ 12"x12"), etc to provide full bedding and firm support. Bond substrates into wet, sticky adhesive and

press with rubber roller to imbed tile/ stone veneer and adjust level. Check adhesive for complete coverage by periodically removing a tile and inspecting bedding adhesive transfer onto back of tile.

If adhesive is skinned over (not sticky), remove and replace with fresh adhesive.

b) Tile/Stone

Apply adhesive to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional adhesive with the notched side. Use the proper sized notched trowel to ensure full bedding of the tile. Spread as much adhesive as can be covered with tile in 10 minutes. Back butter large format tiles ($>$ 12"x12") to provide full bedding and firm support. Place tiles into wet, sticky adhesive and beat in using a beating block and rubber mallet to imbed tile and adjust level. Check adhesive for complete coverage by periodically removing a tile and inspecting bedding adhesive transfer onto back of tile. If adhesive is skinned over (not sticky), remove and replace with fresh adhesive.

c) Glass Mosaic tiles

The LATAPOXY® 270 adhesive shall be applied to the surface to be tiled with a notched trowel using a scraping motion to work the adhesive into good contact with the surface to be covered. Notch trowel with notches approximately 4mm is recommended to get a bed thickness of 1.5-2mm. V-notch of 3mm also can be used to get bed thickness of 1.5mm. Apply only so much that can be covered with tile within 10-15 minutes or while the adhesive surface is still tacky. The Glass Mosaic tiles shall then be set in place and beaten gently with mallet or grouting float to insure 100% full bedding. Tiles shall be aligned to achieve uniform joints and then allowed to set until firm.

After the tiles are set firm, the face of the sheets of front mounted glass mosaic tiles shall then be dampened and the face mount paper can be removed.

d) Installation of Tile / Stone on Drywall boards: When the installation of tile or stone is done using LATAPOXY® 270, on drywall boards like cement backer board, wood board, plywood board, calcium silicate board, gypsum wall board, it is advised to provide spacers and fill the resulting grout joints with flexible materials like MYK LATICRETE Stellar Grout / silicone sealant / acrylic sealant.

NOTE TO THE SPECIFIER AND INSTALLER:

While installing tile/stone on the external walls and floors, we need to provide the joints by creating spaces between the tiles/stones and filling them up with MYK LATICRETE Stellar Grout OR LATICRETE® cement based grout mixed with L1776 grout admix plus OR silicone sealants. In the absence of spacer joints, the surface movements can push tiles/stones away from the substrate causing de-bonding of tiles or stones.

It is also important to note that the exterior tile / stone installations are provided with joints (spaces) on the periphery of the area without allowing the tile / stone to be bound by the peripheral masonry work or plaster.

It is also important to note that the tiles/stones are not installed directly on expansion joints. The expansion joints need to be run through the tile / stone work till top surface and filled with materials which accommodate the movements.

Grouting:

Grout installation shall be commenced after a minimum of 24 hours curing time at 70°F (21° C). For maximum stain resistance of Internal spacer joints applications, use SpectraLOCK® Pro Premium Grout OR LATAPOXY® SP-100 Stainfree Grout.

For maximum stain resistance and flexibility of External spacer joints applications, use MYK Laticrete Stellar Grout. Another option is to grout with LATICRETE® Sanded or Unsanded Grout mixed with LATICRETE® 1776 Grout Admix Plus.

Customer Care

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