



MYK LATICRETE

Technical Data Sheet

LATICRETE® 313 Floor and Wall Tile Adhesive



Features / Benefits

- Single component, just add water
- Extended Open time for ease of use
- Economical & Easy to use
- Can be used up to Maximum 12 mm bed thickness
- Exceeds ANSI A118.1T shear bond strength requirements
- Complies with EN / ISO with a C1TE classification.
- Exceeds IS 15477:2019 – Type 2T Adhesive standards.
- Can be fortified with latex admix for external use.

Application

Designed especially for interior floors & walls and external floor applications, of all types of ceramic and vitrified tiles, precast terrazzo and natural stones, in both dry and wet areas, over concrete and on a variety of cement-based substrates, including tile-on-tile applications.

Polymer based adhesive for fixing small to medium format ceramic and vitrified tiles and natural stones on interior floors and walls and exterior floors, in both dry and wet areas on various cement-based substrates and older tiles.

Substrates

- Concrete
- Concrete Masonry
- Cement Mortar Beds
- Cement Plaster
- Ceramic and vitrified tiles*
- Brick Masonry
- Cement Terrazzo
- Existing Natural Stone*

* Surface to be cleaned and roughened before installation of tiles or stones.

Certifications

IS 15477:2019: Type2T

EN: C1TE
A118.1T

Member of
Indian Green Building Council



TECHNICAL DATA

Performance Properties:

LATICRETE® 313 Adhesive mixed with Water

Applicable Standards:

ANSI A118.1-1999; EN 12004 & ISO 13007;

IS15477:2019

ANSI Data		
Property: Test method	Requirement	Typical Values
Open Time (30 Minutes at 28 days): ANSI A118.1 Clause – 5.3	≥75 psi (0.50 MPa)	95 psi – 100 psi (0.65 – 0.69 MPa)
Sag: ANSI A118.1- Clause 6.0	≤0.02 Inches (0.50 mm)	0.014 – 0.016 Inches (0.35 – 0.40 mm)
Glazed wall tile Shear Strength		
7 Days: ANSI A118.1 – Clause 7.1.2	>200psi (1.38 MPa)	200-225 psi (1.38 -1.55 MPa)
7 Days Water immersion: ANSI A118.1- Clause 7.1.3)	>150psi (1.03 MPa)	150-175 psi (1.03 -1.20 MPa)
Porcelain Mosaic Tile Shear Strength		
1 Day: ANSI A118.1 – Clause 7.2.2	>50psi (0.34 MPa)	80 - 100 psi (0.55 – 0.69 MPa)
7 Days: ANSI A118.1 – Clause 7.2.3	>150psi (1.03 MPa)	200 - 260 psi (1.37 – 1.78 MPa)
7 Days Water immersion: ANSI A118.1 – Clause 7.2.4	>100psi (0.69 MPa)	200 - 260 psi (1.37 – 1.78 MPa)
28 Days: ANSI A118.1 – Clause 7.2.5	>150psi (1.03 MPa)	180 - 250 psi (1.24 – 1.71 MPa)
12 Weeks: ANSI A118.1 – Clause 7.2.6	>150psi (1.03 MPa)	180 - 250 psi (1.24 – 1.71 MPa)

The adhesive mortar conforms to ANSI A118.1T

EN / ISO Data		
Property: Test Method	Requirement	Typical Values
Open Time: EN 1346	≥0.50 N/mm ²	0.69 – 0.73 N/mm ²
Slip Resistance: EN 1308	≤0.50 mm	0.35 – 0.40 mm
Tensile Adhesion Strength		
Initial: EN 1348 – Clause 8.2	≥0.50 N/mm ²	0.55 – 0.65 N/mm ²

After Water Immersion: EN 1348 - Clause 8.3	≥0.50 N/mm ²	0.55 – 0.65 N/mm ²
Heat Ageing: EN 1348 – Clause 8.4	≥0.50 N/mm ²	0.55 – 0.65 N/mm ²
Freeze- Thaw: EN 1348 – Clause 8.5	≥0.50 N/mm ²	0.55 – 0.65 N/mm ²

The adhesive mortar conforms to EN12004 / ISO 13007 as C1TE

IS Data		
Property: Test method	Requirement	Typical Values
Tensile Adhesion		
Dry Condition – Annex A (Clause 5.1)	Minimum 1.00 N/mm ²	1.00-1.30 N/mm ²
Wet Condition – Annex A (Clause 5.1)	Minimum 1.00 N/mm ²	1.00 – 1.60 N/mm ²
Shear Adhesion		
Dry Condition – Annex B (Clause 5.2)	Minimum 1.25 N/mm ²	1.25-1.30 N/mm ²
Wet Condition – Annex B (Clause 5.2)	Minimum 1.00 N/mm ²	1.00-1.50 N/mm ²
Heat Ageing Condition – Annex B (Clause 5.2)	Minimum 1.00 N/mm ²	1.00-1.40 N/mm ²
Slip Resistance		
Slip resistance – Annex E (Clause 5.5)	≤0.5mm	0.35 – 0.40 mm

The Adhesive mortar conforms to IS 15477: 2019 - Type 2T Adhesive

Packaging:

20 kg & 50 kg bags

Colour:

Grey & White

Coverage:

Approx. 55-60 Sft per 20 kg pack using 1/4 x 1/4 (6 x 6 mm) square notched trowel for a bed of 3mm.

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)

LATICRETE® 313 Adhesive mixed with Water

Pot Life	3 - 4 hours
Open Time	30 minutes
Adjustment Time	30 minutes
Time to Heavy Traffic	16 - 24 hours

*Specifications subject to change without notification.
The results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.*

INSTALLATION

Surface Preparation:

All surfaces should be between 40° F (4 °C) and 104° F (40 °C) and structurally sound, clean and free of all dirt, oil, grease, loose peeling paint, laitance, concrete sealers or curing compounds.

Check the surface to be true to plumb. All slabs must be plumb and true to within ¼" (6mm) in 10 ft (3m). Rough or uneven concrete surfaces should be made smooth with LATICRETE® Screed/Plaster material to provide a wood float (or better) finish.

Dry, dusty concrete slabs or masonry should be dampened, and excess water swept off. Installation may be made on a damp surface. New concrete slabs shall be damp cured and 28* days old before application.

*No minimum cure time for concrete slabs when thin-set mortar is mixed with latex additive.

Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Do not cover expansion joints with thin set mortar. Follow ANSI Specification AN-3.8 "Requirements for Expansion Joints" or TCA Detail EJ171 "Expansion Joints". For tile installation over the Cement Backer Board: follow TCA installation details W244.

NOTE: For tile or stone installations on plywood and wood substrates, DWA 215 OR DWA 215 PLUS OR PUA 212 is recommended. Please refer specific product Technical Data Sheet for detailed recommendations.

Mixing:

Place clean, potable water into a clean mixing bowl. Add LATICRETE® 313 powder into the mixing bowl. Use approximately 4.6 – 5.4 L of water for 20 kg of powder.

Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow the adhesive to slake for 5 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel.

Note: Addition of LATICRETE® latex admix*, partially or completely replacing water would enhance the bond strength, flexibility of the thinset mortar.

* Contact MYK LATICRETE technical services for large format tile or stone installations on exterior surfaces.

APPLICATION:

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 the adhesive for complete coverage by periodically removing a tile and inspecting bedding adhesive transfer onto back of tile. Use of MYK Laticrete spacers is recommended to provide grout joints between tiles / stones. The joint width shall be as per the recommendation of architect / engineer. Remove the spacers when the adhesive is set firm.

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

For highly absorbent natural stones which may form a wet patch when adhesive is used, it is recommended to use suitable Laticrete Impregnating sealer on all sides. LATICRETE® 3642 Latex admix can also be used as a bottom coat for natural stones to prevent wet patches during

installation. Please refer Technical Data Sheets of product intended for use for specific instructions of use

HOT & COLD WEATHER TILING:

* Please refer to technical document on Hot & Cold weather tiling

Grouting:

Grout installation shall commence after a minimum of 24 hours curing time at 70 °F (21° C). Grout with LATICRETE® Sanded or Unsanded Grout mixed with LATICRETE® 1776 Grout Admix Plus.

For maximum stain resistance of Internal spacer joints applications, use LATAPOXY® SP-100 Stainfree Grout OR MYK LATICRETE Stellar Grout

CUSTOMER CARE

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