

**MYK LATICRETE****Technical Data Sheet**

LATICRETE® 315 PLUS

Premium Floor and Wall Tile Adhesive



Polymer-modified adhesive for fixing ceramic tiles, Vitrified tiles and stones on interior floor, wall and external floors.

Features / Benefits

- Single component, just add water
- Interior applications, polymer modified
- Economical & Easy to use
- Bonds to various substrates
- Exceeds ANSI A118.4 shear bond strength requirements
- Complies with EN / ISO with a C2TE classification.
- Exceeds IS 15477:2019 – Type 2 T Adhesive standards.
- Can be fortified with latex admix for use on external Wall area.

Application

Designed especially for interior floor and wall installations and external floor installations of all types of ceramic tile, vitrified tile, precast terrazzo and natural stones over concrete and on a variety of cement-based substrates. Ideal for tile-on-tile and bathroom tiling. Can be used upto a maximum 12mm bed thickness

Substrates

- Concrete
- Concrete Masonry
- Cement Mortar Beds
- Cement Plaster
- Existing Vitrified Tile* & Ceramic Tile*
- Brick Masonry
- Cement Terrazzo*
- Existing Natural Stone*

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

Certifications

IS 15477:2019
Type: 2 T

Member of
Indian Green Building Council



EN: C2TE



TECHNICAL DATA

Performance Properties:

LATICRETE® 315 Plus Adhesive mixed with Water

Applicable Standards:

ANSI A118.4; EN 12004 & ISO 13007; IS15477:2019

ANSI Data		
Property: Test method	Requirement	Typical Values
Open time (30 Minutes at 28 days): ANSI A118.4 Clause – 5.3	≥75 psi (0.50 Mpa)	120 psi – 140 psi (0.82 – 0.96 Mpa)
Sag: ANSI A118.4- Clause 6.0	≤0.02 Inches (0.50 mm)	0.012 – 0.016 Inches (0.30-0.40 mm)
Glazed wall tile Shear Strength		
7 Days: ANSI A118.4 – Clause 7.1.2	>300psi (2.07Mpa)	325-350 psi (2.23 Mpa-2.40 Mpa)
7 Days Water immersion: ANSI A118.4- Clause 7.1.3)	>200psi (1.38Mpa)	225-250 psi (1.54 Mpa-1.72 Mpa)
Porcelain Mosaic Tile Shear Strength		
1 Day: ANSI A118.4 – Clause 7.2.2	>75psi (0.50Mpa)	125 - 175 psi (0.86 – 1.20 Mpa)
7 Days: ANSI A118.4 – Clause 7.2.3	>200psi (1.38Mpa)	250 - 275 psi (1.72 – 1.89 Mpa)
7 Days Water immersion: ANSI A118.4 – Clause 7.2.4	>150psi (1.03Mpa)	200 - 250 psi (1.37 – 1.72 Mpa)
28 Days: ANSI A118.4 – Clause 7.2.5	>200psi (1.38Mpa)	250 - 300 psi (1.72 – 2.06 Mpa)
28 Days: Freeze-Thaw cycling. ANSI A118.4 – Clause 7.2.5	>175psi (1.20Mpa)	225 - 275 psi (1.54 – 1.89 Mpa)
12 Weeks: ANSI A118.4 – Clause 7.2.7	>200psi (1.38Mpa)	250 - 300 psi (1.72 – 2.06 Mpa)
Quarry Tile Shear Strength		
28 Days: ANSI A118.4 – Clause 7.3.2	>150psi (1.03Mpa)	200 - 250 psi (1.37 – 1.72 Mpa)
28 Days: Freeze-Thaw cycling. ANSI A118.4 – Clause 7.3.3	>100psi (0.69Mpa)	150 - 200 psi (1.03 – 1.37 Mpa)

The adhesive mortar conforms to ANSI A118.4ET

EN / ISO Data		
Property: Test Method	Requirement	Typical Values
Open Time: EN 1346	≥0.50 N/mm ²	0.75 – 1.00 N/mm ²
Slip Resistance: EN 1308	≤0.50 mm	0.25 - 0.35 mm
Tensile Adhesion Strength		
Initial: EN 1348 – Clause 8.2	≥1.00 N/mm ²	1.25 – 1.50 N/mm ²
After Water Immersion : EN 1348 - Clause 8.3	≥1.00 N/mm ²	1.15 – 1.40 N/mm ²
Heat Ageing: EN 1348 – Clause 8.4	≥1.00 N/mm ²	1.00 – 1.25 N/mm ²
Freeze- Thaw: EN 1348 – Clause 8.5	≥1.00 N/mm ²	1.25 – 1.50 N/mm ²

The adhesive mortar conforms to EN12004 / ISO13007 as C2TE

IS Data		
Property : Test method	Requirement	Typical Values
Dry Conditions – Tensile Adhesion		
Annex A (Clause 5.1)	Minimum 1.00 N/mm ²	1.15-1.25 N/mm ²
Wet Conditions – Annex A (Clause 5.1)	Minimum 1.00 N/mm ²	1.15-1.25 N/mm ²
Shear Adhesion		
Dry Conditions - (Annex B (Clause 5.2)	Minimum 1.25 N/mm ²	1.35-1.45 N/mm ²
Heat Ageing - Annex B (Clause 5.2)	Minimum 1.00 N/mm ²	1.05-1.15 N/mm ²
Wet Conditions - Annex B (Clause 5.2)	Minimum 1.00 N/mm ²	1.10-1.20 N/mm ²
Slip resistance - Annex E (Clause 5.5)	≤ 0.5 mm	0.35-0.45 mm

The Adhesive conforms to IS 15477: Type 2 T

Packaging:

20 kg & 50 kg bags

Colour:

Grey and white

Coverage:

Approx. 70-80 Sft per 20kg bag with 1/4" x 1/4" (6mm x 6mm) square notched trowel for average 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® 315 Plus Adhesive mixed with Water

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

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 1/4"(6mm) in 10 ft(3m). Rough or uneven concrete surfaces should be made smooth with MYK 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".

NOTE: For tile or stone installations on gypsum and cement drywall boards, plywood and wood substrates, use of MYK LATICRETE DWA 215 OR MYK LATICRETE DWA 215 Plus OR MYK LATICRETE 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® 315 Plus, powder into the mixing bowl. Use approximately 5.5 - 6L of water for 20 kg of powder.

Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow 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 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 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 sealers 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.

NOTE TO THE SPECIFIER AND INSTALLER:

While installing tile/stone on the external floors, we need to provide the joints by creating spaces between the tiles/stones and fill them up with flexible grout. (In the absence of spacer joints, the surface movements can push tiles/stones away from the substrate causing de-bonding of tiles or stones).

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.

LIMITATIONS:

- Not suitable for external wall installations
- Not suitable for tiles and stones with mesh backing

HOT & COLD WEATHER TILING:

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

Grouting:

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

For maximum stain resistance of Internal spacer joints applications, use SP-100 Stainfree Grout.

For exterior floor areas grouting, use MYK LATICRETE Stellar grout OR MYK LATICRETE Sanded or Unsanded Grout mixed with MYK LATICRETE 1776 Grout Admix Plus.

CUSTOMER CARE

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