



LATICRETE® 320 Stone Adhesive



Polymer modified thick bed stone adhesive for fixing small to large format stones on interior and exterior floor.

Features / Benefits

- Single component, just add water
- High strength, polymer modified
- No lippage & Easy to use
- Bonds to various substrates
- Exceeds ANSI A118.4 shear bond strength requirements
- Complies with EN 12004.
- Exceeds IS 15477 – Type 2 Adhesive standards.
- Can be used up to 40mm bed thickness.

Application

Designed especially for interior and exterior floor installations of all types of natural stones over concrete and on a variety of substrates. Can be used for wall installations for stone or tile. Good underwater shear bond allows this product to be used for wet areas like swimming pools, sauna, water bodies and washrooms. Can be used for tile-on-tile applications, ceramic and vitrified tiles also

Substrates

- Concrete, Tremix concrete, VDF concrete
- Precast concrete
- Cement based screed
- Gypsum based screed
- Ceramic tile, Vitrified Tile and Natural Stone
- Cement Backer Board**
- Cement Terrazzo
- Existing natural stone or tile surface

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

Certifications

IS 15477
Type: 2

Member of
Indian Green Building Council



EN: 12004/C2TE



A118.4

TECHNICAL DATA

Performance Properties:

LATICRETE® 320 Thick Bed Stone Adhesive mixed with Water

Applicable Standards:

ANSI A118.4; EN 12004; IS15477

Tensile adhesion strength, EN1348 when used with 12mmX12mm Notch trowel

EN 1348 Data		
Tensile Adhesion Strength		
Initial: EN 1348 – Clause 8.2	≥1.00 N/mm ²	1.50 – 1.60 N/mm ²
After Water Immersion: EN 1348 - Clause 8.3	≥1.00 N/mm ²	1.30 – 1.35 N/mm ²
Heat Ageing: EN 1348 – Clause 8.4	≥1.00 N/mm ²	1.30 – 1.40 N/mm ²
Freeze- Thaw: EN 1348 – Clause 8.5	≥1.00 N/mm ²	1.10 – 1.20 N/mm ²

The adhesive mortar conforms to EN12004

IS Data		
Property: Test method	Requirement	Typical Values
Tensile Adhesion		
Dry Conditions – Annex A (Clause 5.1)	Min.1.00 N/mm ²	1.15 – 1.25 N/mm ²
Wet Conditions – Annex A (Clause 5.1)	Min.1.00 N/mm ²	1.15 – 1.25 N/mm ²
Shear Adhesion		
Dry Conditions – Annex B (Clause 5.2)	Min.1.25 N/mm ²	1.35 – 1.45 N/mm ²
Heat Ageing Annex B (Clause 5.2)	Min.1.00 N/mm ²	1.05 – 1.15 N/mm ²
Wet Conditions– Annex B (Clause 5.2)	Min.1.00 N/mm ²	1.10 – 1.20 N/mm ²

The Adhesive mortar conforms to IS 15477: Type 2 Adhesive

Packaging:

30 kg bags

Colour:

Grey and white

Coverage:

Approx. 33-38 Sft per 30 kg bag with 1/2" x 1/2" (12 mm x 12 mm) square notched trowel for average bed of 6 mm.

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

Shelf Life:

Factory sealed containers of this product are guaranteed to be of first quality for (1) year * when stored between >68°F (20°C) and <104°F (40°C) under shed and off the ground in a dry area

. *High humidity will reduce the shelf life of bagged product

Working Properties at 70° F (21° C)

LATICRETE®320 Thick Bed Stone Adhesive mixed with Water

Open Time	20 minutes
Adjustability Time	20 minutes
Pot Life	2 hours
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" (6 mm) in 10 ft (3 m). 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 adhesive mortar. Follow 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. For tile installation over the Cement Backer Board: follow TCA installation details W244.

NOTES: For tile or stone installations on plywood and wood substrates, 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.

For all stone with a back-protection mesh, it is important to remove the mesh first and remove the epoxy layer by light grinding to ensure perfect bond with the adhesive.

Mixing:

Place clean, potable water into a clean mixing bowl. Add LATICRETE® 320 powder into the mixing bowl. Use approximately 8.4 – 9.0 Litres of water for 30 kg of powder.

Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow the adhesive to slake for 5-10 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel.

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

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

APPLICATION:

Natural Stone Installation:

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 stone. Spread as much adhesive as can be covered with stone in 10 minutes. Back butter large format stones (> 12"x12") to provide full bedding and firm support. Place stones into wet, sticky adhesive and beat in using a beating block and rubber mallet to imbed stone and adjust level. Check adhesive for complete coverage by periodically removing a stone and inspecting bedding adhesive transfer onto back of stone. The use of MYK LATICRETE spacers is recommended to provide grout joints between 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

NOTE TO THE SPECIFIER AND INSTALLER:

While installing stone on the external floors, we need to provide the joints by creating spaces between the stones and filling them up with LATICRETE cement-based grout mixed with LATICRETE 1776 grout admix plus or flexible grout. (In the absence of spacer joints, the surface movements can push stones away from the substrate causing tenting of stones and de-bonding of stones).

The exterior stone installations shall be provided with joints (spaces) on the periphery of the area without allowing the stone to be bound by the peripheral masonry work or plaster.

HOT & COLD WEATHER TILING:

* Please refer 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 MYK LATICRETE Sanded or Unsanded Grout mixed with LATICRETE® 1776 Grout Admix Plus.

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

For maximum stain resistance of external spacer joints applications, use MYK Laticrete Stellar Grout, which can accommodate movements and is UV resistant.

CUSTOMER CARE

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