

## **LATICRETE® 335 Super Flex**Multipurpose Floor And Wall Adhesive



#### Features / Benefits

- Single component, just add water
- · High strength, polymer modified
- Economical & Easy to use
- Bonds to various substrates
- Exceeds ANSI A118.4 shear bond strength requirements
- Complies with EN / ISO with a C2TES1 classification.
- Exceeds IS 15477:2019 Type 3 TS1 Adhesive standards.
- Water and shock resistant.

#### **Application**

Designed especially for interior and exterior floor and wall installations of all types of ceramic tile, vitreous, semi-vitreous tile, glass mosaic tiles, precast terrazzo and natural stones over concrete and on a variety of substrates. 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.



Multipurpose highly polymer modified adhesive for fixing large format tiles and stones on interior and exterior floor & wall.

#### **Substrates**

- Concrete & Concrete Masonry
- MIVON Concrete, VDF, Tremix Concrete
- Cement Mortar Beds
- Cement Plaster
- Ceramic tile, Vitrified Tile and Natural Stone
- Glass mosaic tile
- Brick Masonry
- Cement Backer Board\*\*
- Cement Terrazzo
- Calcium Silicate Board\*\*
- Gypsum Wallboard\*\*

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

# IS 15477:2019 Type: 3 TS1 Member of Indian Green Building Council All 18.4ET

#### TECHNICAL DATA

#### Performance Properties:

LATICRETE® 335 Superflex multipurpose floor and wall adhesive mixed with Water

#### **Applicable Standards:**

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

ANSI AT 16.4, EN 12004 & 150 15007, 1515477.2017  ANSI Data				
Property : Test   Requirement   Typical Values				
method		Typical values		
Open Time (30				
Minutes at 28				
days): ANSI	≥75 psi	130 psi – 150 psi		
A118.4 Clause –	(0.50 Mpa)	(0.89 – 1.03 Mpa)		
5.3				
Sag: ANSI		0.008 - 0.012		
A118.4- Clause	≤0.02 Inches	Inches		
6.0	(0.50 mm)	(0.20-0.30 mm)		
	   wall tile Shec	r Strength		
7 Days: ANSI	wan me snec	350-375 psi		
A118.4 – Clause	>300psi	(2.40 Mpa-2.57		
7.1.2	(2.07Mpa)	(2.40 Mpa-2.37 Mpa)		
7 Days Water		Μρα		
immersion: ANSI	>200psi	250-275 psi		
A118.4- Clause	(1.38Mpa)	(1.72 Mpa-1.89		
	(1.36MPd)	Mpa)		
7.1.3) Porcelain Mosaic Tile Shear Strength				
1 Day: ANSI	MOSGIC THE ST	iedi sileligili		
A118.4 – Clause	>75psi	125 - 175 psi		
7.2.2	(0.50Mpa)	(0.86 – 1.20 Mpa)		
7 Days: ANSI				
A118.4 – Clause	>200psi	275 - 325 psi		
7.2.3	(1.38Mpa)	(1.89 – 2.23 Mpa)		
7.2.3 7 Days Water				
immersion: ANSI	>150psi	225 - 275 psi		
A118.4 – Clause	(1.03Mpa)	(1.55 – 1.89 Mpa)		
7.2.4	(1.03Mpd)	(1.55 – 1.67 Mpd)		
28 Days: ANSI				
A118.4 – Clause	>200psi	300 - 350 psi		
7.2.5	(1.38Mpa)	(2.06 – 2.40 Mpa)		
	-	·		
28 Days : W/ Freeze-Thaw				
	>175psi	275 - 325 psi		
cycling. ANSI A118.4 – Clause	(1.20Mpa)	(1.89 – 2.23 Mpa)		
7.2.5		·		
12 Weeks: ANSI				
A118.4 – Clause	>200psi	300 - 350 psi		
7.2.7	(1.38Mpa)	(2.06 – 2.40 Mpa)		
	rry Tile Shear S	Strength		
28 Days : ANSI	iny me shedi s	on engin		
A118.4 – Clause	>150psi	250 - 300 psi		
7.3.2	(1.03Mpa)	(1.72 – 2.06 Mpa)		
		·		
28 Days : W/				
Freeze-Thaw	>100psi	200 - 250 psi		
cycling. ANSI	(0.69Mpa)	(1.37 – 1.72 Mpa)		
A118.4 – Clause	' '	• '		
7.3.3				

The adhesive mortar conforms to ANSI A118.4ET

EN / ISO Data				
Property: Test Method	Requirement	Typical Values		
Open Time: EN 1346	≥0.50 N/mm²	0.85 – 1.10 N/mm²		
Slip Resistance: EN 1308	≤0.50 mm	0.20 - 0.30 mm		
Tensile Adhesion Strength				
Initial: EN 1348 – Clause 8.2	≥1.00 N/mm²	1.50 – 2.00 N/mm²		
After Water Immersion : EN 1348 - Clause 8.3	≥1.00 N/mm²	1.50 – 1.75 N/mm²		
Heat Ageing: EN 1348 – Clause 8.4		1.15 – 1.40 N/mm²		
Freeze- Thaw: EN 1348 – Clause 8.5	 ≥1.00 N/mm²	1.75 – 2.00 N/mm²		
Transverse Deformation: EN12002	≥2.5mm <5.00mm	2.55 mm - 2.65 mm		

### The adhesive mortar conforms to EN12004 / ISO 13007 as C2TES1 $\,$

IS Data				
Property : Test method	Requirement	Typical Values		
Tensile Adhesion				
Dry Condition – Annex A (Clause 5.1)	Minimum 1.5 N/mm²	1.70-1.80 N/mm²		
Wet Condition – Annex A (Clause 5.1)	Minimum 1.0 N/mm²	1.50-1.60 N/mm²		
Shear Adhesion				
Dry Condition – Annex B (Clause 5.2)	Minimum 1.5 N/mm²	1.80-1.90 N/mm²		
Heat Ageing – Annex B (Clause 5.2)	Minimum 1.0 N/mm²	1.20-1.30 N/mm²		
Wet Conditions – Annex B (Clause 5.2)	Minimum 1.0 N/mm²	1.30-1.40 N/mm²		
Slip Resistance				
Slip Resistance – Annex E (Clause 5.5)	≤0.5 mm	0.3-0.4 mm		
Transverse Deformation				
Transverse Deformation: (Clause 5.6)	≥2.5mm <5.00mm	2.55 mm - 2.65 mm		

The Adhesive mortar conforms to IS 15477: 2019 - Type 3 T S1 Adhesive

#### Packaging:

20 kg & 50 kg bags

#### Colour:

Grey and white

#### Shelf Life:

Factory sealed containers of this product are guaranteed to be of first quality for (1) year \* If stored off the ground in a dry area

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

#### 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®335 Multipurpose Adhesive mixed with Water

Open Time	30 minutes
Adjustability Time	30 minutes
Pot Life	4 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 ½"(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 adhesive mortar. Follow ANSI Specification AN-3.8 "Requirements for Expansion Joints" or TCA Detail EJ171 "Expansion Joints". For tile installation over 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 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 also 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® 335 powder into the mixing bowl. Use approximately

Grey - 5.5 - 6L of water for 20 kg of powder White- 6.0-6.5 L 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 5-10 minutes. Adjust consistency if

necessary. Remix and apply with the proper sized notched trowel.

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

#### APPLICATION:

#### a) 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. 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 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

#### b) Glass Mosaic tiles: (Paper Face mounted)

The LATICRETE® 335 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. Excess adhesive must be cleaned from the surface of the tile with a wet cloth or sponge while the adhesive is fresh and has not hardened.

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.

For Glass mosaic tiles which are mesh backed, use resin-based adhesive for installation. The cement-based adhesives are not compatible with resin backed (mesh backed) tiles.

#### NOTE TO THE SPECIFIER AND INSTALLER:

The adhesive bed thickness should be maximum of 12mm only.

While installing tile/stone on the external walls and floors, we need to provide the joints by creating spaces between the tiles/stones and fill them up with MYK LATICRETE cement based grout mixed with MYK LATICRETE 1776 grout admix plus or a flexible grout. (In the absence of spacer joints, the surface movements can push tiles/stones away from the substrate causing debonding 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.

#### **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 grout or Unsanded Grout mixed with LATICRETE® 1776 Grout Admix Plus.

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