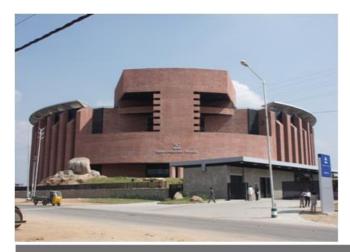
## **Technical Data Sheet**

## 

## LATICRETE<sup>®</sup> 111 Crete Filler Powder



## Features / Benefits

- Designed for use with Laticrete 73 Crete Admix or Laticrete 4237 High performance Latex admix
- High strength formula with ultimate flexibility, ideal for external applications
- Bonds to various substrates
- Exceeds ANSI A118.4 shear bond strength requirements
- Complies with EN / ISO standards.
- Exceeds IS 15477:2019 Type3 TES1 Adhesive standards.
- Water and shock resistant
- Can be used up to 12mm bed thickness.

## Application

Designed especially for interior and exterior floor and wall installations of all types of ceramic tile, vitreous, semi-vitreous tile, glass mosaic tiles, Large format tiles, precast terrazzo, medium and large format natural stones, pavers and brick 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 and also as slurry bond adhesive in wet on wet applications.



Crete Filler powder designed for polymer fortification with Laticrete 73 or Laticrete 4237, to form an adhesive with high strength, ultimate flexibility for fixing very 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
- Calcium Silicate Board\*\*
- Brick Masonry
- Cement Backer Board\*\*
- Cement Terrazzo
- Natural Stone
- Gypsum Wallboard\*\*

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



## TECHNICAL DATA

## Performance Properties:

LATICRETE<sup>®</sup> 111 Crete filler powder mixed with Laticrete 73 Latex admix.

#### Applicable Standards:

ANSI A118.4; EN 12004 & ISO 13007; IS15477:2019		
ANSI Data		
Property : Test method	Requirement	Typical Values
<b>Open Time</b> (30 Minutes at 28 days): ANSI A118.4 Clause – 5.3	≥75 psi (0.50 Mpa)	130 psi – 150 psi (0.89 – 1.03 Mpa)
<b>Sag:</b> ANSI A118.4- Clause 6.0	≤0.02 Inches (0.50 mm)	0.014 – 0.018 Inches (0.35-0.45 mm)
Glazed	wall tile Shec	r Strength
7 Days: ANSI A118.4 – Clause 7.1.2	>300psi (2.06Mpa)	425-450 psi (2.92 Mpa-3.09 Mpa)
7 Days Water immersion: ANSI A118.4- Clause 7.1.3)	>200psi (1.38Mpa)	350-400 psi (2.40 Mpa-2.75 Mpa)
	Mosaic Tile Sh	near Strength
1 Day: ANSI A118.4 – Clause 7.2.2	>75psi (0.50Mpa)	150 - 175 psi (1.03 – 1.20 Mpa)
7 Days: ANSI A118.4 – Clause 7.2.3	>200psi (1.38Mpa)	350 - 400 psi (2.40 – 2.75 Mpa)
7 Days Water immersion: ANSI A118.4 – Clause 7.2.4	>150psi (1.03Mpa)	300 - 325 psi (2.06 – 2.23 Mpa)
28 Days: ANSI A118.4 – Clause 7.2.5	>200psi (1.38Mpa)	375 - 425 psi (2.58 – 2.92 Mpa)
28 Days : W/ Freeze-Thaw cycling. ANSI A118.4 – Clause 7.2.6	>175psi (1.20Mpa)	375 - 425 psi (2.58 – 2.92 Mpa)
12 Weeks: ANSI A118.4 – Clause 7.2.7	>200psi (1.38Mpa)	400 - 450 psi (2.75 – 3.09 Mpa)
Quarry Tile Shear Strength		
28 Days : ANSI A118.4 – Clause 7.3.2	>150psi (1.03Mpa)	300 - 325 psi (2.06 – 2.23 Mpa)
28 Days : W/ Freeze-Thaw cycling. ANSI A118.4 – Clause 7.3.3	>100psi (0.69Mpa)	275 - 300 psi (1.89 – 2.06 Mpa)

The adhesive mortar conforms to ANSI A118.4ET

EN / ISO Data		
Property: Test Method	Requirement	
Open Time: EN 1346	≥0.50 N/mm²	0.90 – 1.15 N/mm²
Slip Resistance: EN 1308	≤0.50 mm	0.35 - 0.45 mm
<b>Tensile Adhesion</b>	Strength	
Initial: EN 1348 – Clause 8.2	≥1.00 N/mm²	1.80 –2.10 N/mm²
After Water Immersion : EN 1348 - Clause 8.3	≥1.00 N/mm²	1.50 – 1.80 N/mm²
Heat Ageing: EN 1348 – Clause 8.4	≥1.00 N/mm²	1.80 – 2.00 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	3.3mm-3.8mm

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

IS Data			
	Requirement	Typical Values	
method		-	
	Tensile Adhes	sion	
Dry Condition – Annex A (Clause 5.1)	Minimum 1.50 N/mm	1.80-1.90 N/mm²	
Wet condition – Annex A (Clause 5.1)	Minimum 1.00 N/mm	1.50-1.60 N/mm²	
· · ·	Shear Adhesion		
Dry Condition – Annex B (Clause 5.2)	Minimum 1.50 N/mm²	1.90-2.00 N/mm²	
Heat Ageing – Annex B (Clause 5.2)	Minimum 1.00 N/mm²	1.30-1.40 N/mm²	
Wet Condition – Annex B (Clause 5.2)	Minimum 1.00 N/mm²	1.50-1.60 N/mm²	
	Slip Resistan	ce	
Slip Resistance – Annex E (Clause 5.5)	≤0.50 mm	0.30-0.40 mm	
Transverse Deformation			
Annex F (Clause 5.6)		3.3mm-3.8mm	

The Adhesive mortar conforms to IS 15477:2019 -Type 3 TS1 Adhesive

### Performance Properties:

LATICRETE<sup>®</sup> 111 Crete filler powder mixed with Laticrete 4237 High Performance Latex Admix.

#### **Applicable Standards:**

		2007.1015177.2019
ANSI A118.4; EN 12004 & ISO 13007; IS15477:2019 ANSI Data		
Property : Test method	Requirement	Typical Values
<b>Open Time</b> (30 Minutes at 28 days): ANSI A118.4 Clause – 5.3	≥75 psi (0.50 Mpa)	150 psi – 160 psi (1.03 – 1.10 Mpa)
<b>Sag:</b> ANSI A118.4- Clause 6.0	≤0.02 Inches (0.50 mm)	0.012 – 0.014 Inches (0.30-0.36 mm)
	wall tile Shec	
7 Days: ANSI A118.4 – Clause 7.1.2	>300psi (2.06Mpa)	450-475 psi (3.09 Mpa-3.26 Mpa)
7 Days Water immersion: ANSI A118.4- Clause 7.1.3)	>200psi (1.38Mpa)	375-400 psi (2.57 Mpa-2.75 Mpa)
Porcelain	Mosaic Tile Sh	near Strength
1 Day: ANSI A118.4 – Clause 7.2.2	>75psi (0.50Mpa)	175 - 200 psi (1.20 – 1.37 Mpa)
7 Days: ANSI A118.4 – Clause 7.2.3	>200psi (1.38Mpa)	425 - 450 psi (2.92 – 3.09 Mpa)
7 Days Water immersion: ANSI A118.4 – Clause 7.2.4	>150psi (1.03Mpa)	375 - 400 psi (2.57 – 2.75 Mpa)
28 Days: ANSI A118.4 – Clause 7.2.5	>200psi (1.38Mpa)	475 - 500 psi (3.26 – 3.43 Mpa)
28 Days : W/ Freeze-Thaw cycling. ANSI A118.4 – Clause 7.2.6	>175psi (1.20Mpa)	400 - 425 psi (2.75 – 2.92 Mpa)
12 Weeks: ANSI A118.4 – Clause 7.2.7	>200psi (1.38Mpa)	475 - 525 psi (3.26 – 3.61 Mpa)
Quarry Tile Shear Strength		
28 Days : ANSI A118.4 – Clause 7.3.2	>150psi (1.03Mpa)	375 - 400 psi (2.57 – 2.75 Mpa)
28 Days : W/ Freeze-Thaw cycling. ANSI A118.4 – Clause 7.3.3	>100psi (0.69Mpa)	325 - 350 psi (2.23 – 2.40 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/mm²	1.00 – 1.15 N/mm²
Slip Resistance: EN 1308	≤0.50 mm	0.30 - 0.35 mm
<b>Tensile Adhesion</b>	Strength	
Initial: EN 1348 – Clause 8.2	≥1.00 N/mm²	1.80 –2.20 N/mm²
After Water Immersion : EN 1348 - Clause 8.3	≥1.00 N/mm²	1.50 – 1.80 N/mm²
Heat Ageing: EN 1348 – Clause 8.4		2.00 – 2.30 N/mm²
Freeze- Thaw: EN 1348 – Clause 8.5	≥1.00 N/mm²	1.80 – 2.00 N/mm²
Transverse Deformation: EN12002	≥2.5mm <5.00mm	3.5mm-4.0mm

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

IS Data			
Property : Test	Requirement	Typical Values	
method			
	Tensile Adhes	sion	
Dry Condition – Annex A (Clause 5.1)	Minimum 1.50 N/mm	2.00-2.10 N/mm <sup>2</sup>	
Wet condition – Annex A (Clause 5.1)	Minimum 1.00 N/mm	1.75-1.85 N/mm²	
	Shear Adhes	ion	
Dry Condition – Annex B (Clause 5.2)	Minimum 1.50 N/mm²	2.05-2.15 N/mm <sup>2</sup>	
Heat Ageing – Annex B (Clause 5.2)	Minimum 1.00 N/mm²	2.00-2.10 N/mm <sup>2</sup>	
Wet Condition – Annex B (Clause 5.2)	Minimum 1.00 N/mm²	1.85-1.95 N/mm²	
	Slip Resistance		
Slip Resistance – Annex E (Clause 5.5)	≤0.50 mm	0.30-0.40 mm	
Transverse Deformation			
Transverse Deformation – Annex F (Clause 5.6)	<5.00mm	3.5mm-4.0mm	
The Adhesive mortar conforms to IS 15477:2019 - Type3 T S1 Adhesive			

## Packaging:

20 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. 55-60 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® 111 mixed with Laticrete 73 Latex Liquid

Open Time	Approx. 30
	minutes
Adjustment Time	Approx.30
	Minutes
Pot Life	Approx 4-6 hours
Time to Heavy	16 - 24 hours
Traffic	

LATICRETE® 111 mixed with Laticrete 4237 High Performance Latex Liquid

Open Time	Approx. 30 minutes
Adjustment Time	Approx. 30 minutes
Pot Life	Approx 4-6 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"(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". 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 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 MYK Laticrete 73 Latex Admix (or MYK Laticrete 4237 high performance Latex admix) into a clean mixing bowl. Add LATICRETE<sup>®</sup> 111 Crete filler powder into the mixing bowl. Use approximately 5 - 6 Liters of latex 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.

### 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 faced only)

The LATICRETE® 111 mixed with Laticrete 73 Latex admix (or Laticrete 4237 high performance Latex admix), 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.

NOTE: Not suitable for mesh-backed glass mosaic tiles. Contact MYK Laticrete Technical Services for recommendation for mesh-backed glass mosaic tiles installation.

## 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 LATICRETE® cement-based grout mixed with L1776 grout admix plus or 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.

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

#### **Customer Care**

## MYK LATICRETE India Pvt Ltd.

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