



UltraTech TILEFIXO Royal NT Plus is a polymer modified adhesive for fixing large format tiles and stones for both interior and exterior floor & wall applications.

# **Specifications**

Technical Parameters complies with Type 3TS1 as per IS 15477:2019 & C2TES1 as per EN 12004:2017/ ISO 13007-1:2014

# **Areas of Application**

UltraTech TILEFIXO Royal NT Plus is a polymer modified adhesive for fixing large format tiles, low thickness tiles and natural stones on both interior and exterior floor & wall on cement-based substrates like plaster, concrete, screed, cement boards, bricks etc. It is also ideal for submerged areas like swimming pools, water tanks, fountains etc.

### Features & Benefits

- Excellent adhesion to substrate
- Sustains minor vibrations
- Extended open time, allowing more time for tile fixing
- Single component, easy to use

- Self curing
- Non-sag
- High slip resistance

# **Method of Application**



Remove dust, oil & other bond inhibiting agents.

#### Surface Preparation

- Prepare the surface and clean the tiles before the application of tile adhesive by removing oil, bond inhibiting agents, dirt, dust and laitance.
- Clean the surface following suitable methods like by using wire brush, water jetting, mopping, etc.
- UltraTech BASEKRETE is recommended over vertical surfaces and UltraTech FLOORKRETE for horizontal surfaces to level it in case of higher undulations or for any repair work to attain the flat & levelled surface prior to the application of UltraTech TILEFIXO Royal NT Plus.



#### Mixing

- UltraTech TILEFIXO Royal NT Plus requires 24-27% potable water by weight of material.
- Add UltraTech TILEFIXO Royal NT Plus to the measured quantity of water while continuously stirring using a mechanical stirrer for 2-3 minutes to ensure a consistent and lump-free mix.
- Allow the mix to stand for 2 minutes to mature and then mix it again before use.
- Do not add more water to alter the mix consistency or to extend the pot life. Further water addition will hamper the adhesion strength of the tile adhesive.





### **Application**

- Apply the mixed UltraTech TILEFIXO Royal NT Plus to the prepared substrate using the appropriate notched trowels according to the size of the tiles.
- It is recommended to use suitable spacers while fixing tiles to ensure uniform tile fixing and creation of joints that can be filled later on with UltraTech TILEFIXO STYLE Epoxy Grout or UltraTech TILEFIXO CG Grout.
- A minimum of 3 mm bed thickness of tile adhesive for walls and floors must be achieved. It is recommended to do back buttering on granite & marble for vertical tile application.
- Lay tiles onto the adhesive. Gently press each tile and move it in perpendicular direction to the notches, to ensure no air cavity remains in mortar and good initial bonding is attained.
  Do not disturb the tiles until the adhesive has set.
- It is recommended to fix the tiles within 30 minutes of spreading UltraTech TILEFIXO Royal NT Plus to achieve adequate bonding as per the technical data provided.
- Any tile fixing after 30 minutes of spreading UltraTech TILEFIXO Royal NT Plus will lead to improper adhesion and may result in de-bonding of tiles.
- For vertical surface applications, tiling should start from bottom to top.
- For tile-on-tile, tile-on-old cement floor applications, check for cracks and soundness of existing tiles and repair accordingly. Care should be taken to prepare the existing base with adequate interlocking friction effect by removing polish/wax/smooth top layers.

## **Technical Data**

Bulk Density	1400-1500 kg/m³
Water Powder Ratio	24-27% by weight
Pot Life @ 30°C	3 Hours
Open Time @ 30°C	30 Minutes
Adjustable Time @ 30°C	30 Minutes
Usage Time Post Application	24 Hours
Coverage/20 Kg Bag	3.72 Sq. m. @ 6mm (As per lab conditions)
Adhesive Thickness	Between 3-12mm

## As per EN 12004: 2017 & ISO 13007-1:2014 (C2TES1)

Sr. No.	Technical Parameters	Test Results	Requirements as per EN 12004 & ISO 13007
			C2TES1
1.	Inital Tensile Adhesion (N/mm²)	1.55 - 1.65	C2> 1.0 N/mm <sup>2</sup>
2.	Tensile Adhesion Strength after Water Immersion (N/mm²)	1.15 - 1.25	C2> 1.0 N/mm <sup>2</sup>
3.	Tensile Adhesion Strength after Heat Ageing (N/mm²)	1.45 - 1.55	C2> 1.0 N/mm <sup>2</sup>
4.	Tensile Adhesion Strength after freeze-thaw Cycles (N/mm²)	1.20 - 1.30	C2> 1.0 N/mm <sup>2</sup>
5.	Open Time: Tensile Adhesion Strength @ 30 Min. (N/mm²)	0.60 - 0.70	≥ 0.5 N/mm²
6.	Slip	0.25 - 0.35	≤ 0.5 mm
7.	Deformability (mm)	2.65 - 2.70	≥ 2.5 & < 5 mm

## As per IS 15477:2019 (TYPE 3TS1)

Sr. No.	Technical Parameters	Test Results	Requirements as per IS 15477-2019
			Type 3TS1
1	Tensile Adhesion (N/mm²) 28 Days		
	a) Dry Condition	1.60 - 1.70	Min 1.50
	b) Wet Condition	1.15 - 1.25	Min 1.00
2	Shear Adhesion (N/mm²) 28 Days		
	a) Dry Condition	1.60 - 1.70	Min 1.50
	b) Wet Condition	1.45 - 1.52	Min 1.00
	c) Heat Condition	1.15 -1.25	Min 1.00
3	Slip (mm)	0.20 - 0.30	≤ 0.5
4	Deformability (mm)	2.65 - 2.70	≥ 2.5 & < 5

### **Precautions**

- Allow a minimum of 24 hours for the subsequent usage of the areas where tiling has been done. Do not tile if temperature is likely to drop below 5°C or exceed 50°C. For temperatures below 20°C, allow the adhesive to cure for an extended period of time. Pot life, open time and adjusting time depends on the surface absorption, wind factor, temperature and humidity conditions at site.
- Not suitable for tiling over flexible substrates, such as fibrous cement sheet, plaster board and timber.
- Not suitable for tiling directly onto metals, glass or plastic substrates. Not suitable for tiling directly onto polyurethane membranes and moisture sensitive tiles or stones.
- Avoid application under direct sunlight.
- The technical data provided in this technical data sheet is as per lab testing conditions and may vary as per the actual method of application at sites.
- Consult UltraTech Building Products Technical Services Cell for any further technical assistance.

## **Packaging**

20kg

## **Shelf Life**

UltraTech TILEFIXO Royal NT Plus has a shelf life of 12 months from the date of manufacture. Store in a cool and dry place.

## **Safety Directions**

- UltraTech TILEFIXO Royal NT Plus is non-toxic.
- Use of gloves and goggles is recommended. Any splashes to the skin or eyes should be washed off with clean water immediately
- In case of prolonged irritation, medical advice should be sought. UltraTech TILEFIXO Royal NT Plus is non-flammable.

For best performance, use TILEFIXO Style Epoxy Grout for all grouting work. Available in attractive shades.



**UltraTech Cement Limited** 

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