

## Technical Data Sheet



**High Performance  
 Polymer Modified  
 Adhesive**



**JKCement TileMaxX 777 Ultra Flex White Adhesive is highly polymer modified with high flexibility and enhanced properties of slip resistance and excellent bond strength required for fixing large format tiles, big stones and granites on vertical and horizontal surfaces in interiors and exteriors. This adhesive is specially designed to be used for various types of substrates.**

### Area of Application

This product is with high flexibility and enhanced properties of shear strength. It is suitable for fixing large format tiles, natural stones on vertical and horizontal surface, especially in external condition. It is applicable on various substrates such as all cement based, dry boards, gypsum boards etc. This is also suitable for vibrational areas, wet and submerged applications like saunas, spas, fountains and swimming pools. It can be used upto a maximum of 12mm bed thickness.

### Substrates

- Plastered Surface
- Concrete Surface
- Brick Masonry
- Cement terrazzo
- Existing vitrified tile\* and ceramic tile\*
- Existing natural stone\*
- Cement backer board\*\*
- Calcium silicate board\*\*
- Gypsum wallboard\*\*
- Bison boards\*\*
- Plywood\*\*

\* Surface should be cleaned and roughened before application of tiles or stones.

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

### Key Benefits and Features

- Single component, just add water
- Excellent workability & easy mixing
- Higher shear bond strength
- Absorbs dynamic load
- Sustains heat ageing
- Highly deformable
- High durability and flexibility
- Water and shock resistant
- Sag resistant
- No water curing required
- Interior and exterior application
- For wet and dry applications
- Complies with EN/ISO C2TS1 classification
- As per IS 15477:2019 - Type 4TS1 standard
- No VOC - for healthy living

### Typical Properties

Color	White
Powder Density	1.24 - 1.40 Kg/Litre
Open Time	15 ± 5 Minutes
Adjustment Time	20 ± 5 Minutes
Pot Life	90 - 120 Minutes

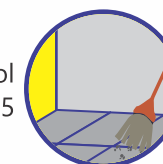
Water-Powder Ratio	27% - 30%
Foot Traffic/ Ready To Use	24 Hours

Note : Result depends on weather and site conditions

### Application Method

#### 1. Surface Preparation

- Surfaces temperature should be cool before application, ideally below 35 degrees.
- Surface should be structurally sound and free from dirt, oil, grease, loose peeling paint, concrete sealer or curing compound.
- All slabs must be plumb and true with in: Walls – 3mm in 2.5m, and Floors – 1.5mm in 1.0m
- Rough or uneven concrete surfaces should be made smooth with Screed/Plaster material. Use a wood float for better finish.
- Dry, dusty concrete slabs or masonry should be dampened and excess water should be swept off.



Installation may be made on a damp surface.

- New concrete slabs shall be damp cured and should be 28 days old before application.

#### 2. Mixing and Blending

- Take 5 - 6 Litres of potable water into a clean container.
- Gradually mix 20 Kg JKCement TileMaxX with slow speed mixer to get a uniform lump-free paste in workable consistency.
- Allow paste to settle for 5-10 minutes. Adjust consistency, if necessary.
- Mixed paste should be used within 90-120 minutes.

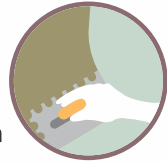


Contd..

## Application Method

### 3. Fixing Application

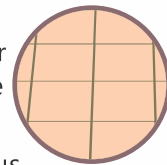
- Apply adhesive uniformly on a substrate to a desired thickness with flat side of notch trowel. Comb with a notch trowel using notched side.
- Use proper size of notched trowel to ensure full bedding of the tile.
- Spread as much adhesive paste as it can be tiled within 10 minutes.
- Large format tiles\* (above 12"x12" size) should be back buttered to provide full bedding and firm support.
- Press the tile against the applied tile adhesive and fix it by using rubber mallet. Imbed tile and adjust level.
- Ensure that back of the tile is fully covered with the tile adhesive.
- Ensure adequate gap between tiles/stones to accommodate thermal expansion and contraction.



- As required one can use spacer to provide grout joints between tiles/stones. Remove the spacers when the adhesive is firmly set.
- If the Tile adhesive is dried and skinned, then adhesive should be removed and replaced with a fresh adhesive.

### 4. Grouting

- Grouting should be carried out after 24 hours from the time of tile installation.
- Grout with TileMaxX Cementitious Grout.
- For stain resistance, use TileMaxX Epoxy Grout.



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

\* Tiles & stones should be clamped for safety in all interior and exterior wall installation above 3 meters.

## Technical Information

### Test specification requirement as per IS 15477:2019

S.No.	Test Property	Test Method	Specification	Typical Value
1	<b>Tensile Adhesion (N/mm<sup>2</sup>)</b>			
	(a) Dry Condition - 28 days	IS 15477:2019 Annex A (Clause 5.1)	Min. 1.5 N/mm <sup>2</sup>	1.55 - 1.70 N/mm <sup>2</sup>
	(b) Wet Condition - 21 days	IS 15477:2019 Annex A (Clause 5.1)	Min. 1.0 N/mm <sup>2</sup>	1.05 - 1.20 N/mm <sup>2</sup>
2	<b>Shear Adhesion (N/mm<sup>2</sup>)</b>			
	(a) Dry Condition - 28 Days	IS 15477:2019 Annex B (Clause 5.2)	Min. 1.5 N/mm <sup>2</sup>	1.70 - 1.90 N/mm <sup>2</sup>
	(b) Heat Ageing Conditions - 28 Days	IS 15477:2019 Annex B (Clause 5.2)	Min. 1.0 N/mm <sup>2</sup>	1.70 - 2.00 N/mm <sup>2</sup>
	(c) Wet Condition - 28 Days	IS 15477:2019 Annex B (Clause 5.2)	Min. 1.0 N/mm <sup>2</sup>	1.20 - 1.30 N/mm <sup>2</sup>
3	<b>Slip (required for vertical application only)</b>	IS 15477:2019 Annex E (Clause 5.5)	Shall not be more than 0.5 mm	0.35 - 0.45 mm
4	<b>Deformability (required for vertical application only)</b>			
	(a) Deformable Adhesive S1	IS 15477:2019 Annex F (Clause 5.6)	≥ 2.5 mm, < 5.0 mm	2.6 - 4.0 mm
	(b) Highly Deformable Adhesive S2	IS 15477:2019 Annex F (Clause 5.6)	≥ 5.0 mm	NA

## Technical Information

### Test specification requirement as per EN 12004 & ISO 13007

S.No.	Test Property	Test Method	Specification	Typical Value
1	<b>Open Time : Tensile Adhesion Strength (N/mm<sup>2</sup>)</b>			
	(a) After 5 Minute	EN 1346		1.52 - 1.67 N/mm <sup>2</sup>
	(b) After 20 Minute	EN 1346	≥ 0.5 N/mm <sup>2</sup> After not less than 20 minute	0.53 - 0.68 N/mm <sup>2</sup>
	(c) After 30 Minute	EN 1346	≥ 0.5 N/mm <sup>2</sup> After not less than 30 minute	NA
2	<b>Tensile Adhesion Strength (N/mm<sup>2</sup>)</b>			
	(a) Dry Conditions - 28 Days	EN 1348	≥ 1.0 N/mm <sup>2</sup>	1.60 - 1.72 N/mm <sup>2</sup>
	(b) Water Immersion Conditions - 28 Days	EN 1348	≥ 1.0 N/mm <sup>2</sup>	1.0 - 1.10 N/mm <sup>2</sup>
	(c) Heat Ageing Conditions - 28 Days	EN 1348	≥ 1.0 N/mm <sup>2</sup>	1.05 - 1.14 N/mm <sup>2</sup>
3	<b>Slip Resistance (for vertical application)</b>	EN 1308	≤ 0.5mm	0.48 mm
4	<b>Transverse Deformation</b>			
	(a) Deformable Adhesive - S1	EN 12002	≥ 2.5 mm, < 5 mm	3.50 mm
	(b) Highly Deformable Adhesive - S2	EN 12002	≥ 5 mm	NA

**Coverage :** Approx 50-55\* sq.ft. per 20 Kg bag when applied by notch trowel of size 1/4" x 1/4" (6mm x 6mm) square notched trowel at an average thickness of 3mm.

\* Coverage depends upon trowel notch size, type and size of tiles and substrate evenness and smoothness

**Shelf Life :** 12 months from the date of manufacturing, when stored in dry area.

*Note : Actual coverage and field performance will depend on installation method and site conditions.*