

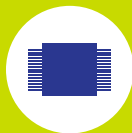
# हर टाइल के पीछे MAGIC

## SUPERFLEX 2K PU ADHESIVE

### TECHNICAL DATA SHEET



Superior Bond  
Strength



No Vertical  
Slip



High Flexibility



High Shock  
Resistance



For Metal &  
Plywood



Low  
VOC



Available in 4 kg Pail

## PRODUCT DESCRIPTION

SuperFlex 2K is a two component PU based Tile Adhesive designed for installation of all types of tiles including engineered stones, glass tiles & metal tiles on all types of substrates which are highly deformable and expandable, absorbent and non-absorbent

## SUITABLE FOR

### Material & Area

- Interior/Exterior floors and walls
- All types of Ceramic, Vitreous & Semi Vitreous tile
- Precast Terrazzo & Engineered stone
- Glass & Metal tiles
- Quartz, Natural Stones & Marbles
- Slim Tiles, Composite/Neno/Artificial/ Engineered stones

### Substrate

- Metal surfaces
- Wood & Plywood
- Rubber, PVC and Linoleum surface
- WPC (Wood Polymer Composite board)
- Epoxy or PU resin-based surface
- Engineered stones & Marbles
- Cement based Plaster/ Concrete/ Screed/ Terrazzo
- Fibre cement slabs
- Heating system
- Thermal Insulation panelling systems
- Concrete Masonry & Brick Masonry

## TECHNICAL DETAILS

Conforms to IS 15477:2019 TYPE 5 'T' 'S2'; EN 12004: R2T; ISO 13007

## PHYSICAL PROPERTIES @ 70° F (21° C)

PARAMETERS	RESULTS
Colour	Off White (after mixing)
Mixing Ratio (Part A to Part B)	94:6
Mixed Density	1550-1600 Kg/m <sup>3</sup>
Consistency	Very Viscose
Deformability	Highly Deformable
Pot Life	60 Minutes
Open Time	30 Minutes
Adjustability	30 Minutes
Vertical Slip/Sag	≤0.5mm
Application Temperature	10°C to 40°C
Resistance to Temperature	-40°C to 100°C
Resistance to Ageing	High
Resistance to Solvents & Oil	Good
Resistance to Acids & Alkaline	Good
Final Setting Time	24 Hours
Time to Light Foot Traffic	24 Hours
Ready for Grouting	24 Hours
Ready to use	3 Days (7 Days for Heavy Traffic)

## PERFORMANCE PROPERTIES

### IS 15477:2019

PARAMETERS	REQUIREMENTS	RESULTS	TEST METHODS
Tensile Adhesion (Dry condition after 28 days)	2.00 N/mm <sup>2</sup>	3.50–4.00 N/ mm <sup>2</sup>	IS 15477:2019 Annexure A Clause 5.1
Shear Adhesion (Dry condition)	6.00 N/mm <sup>2</sup>	6.50–7.50 N/ mm <sup>2</sup>	IS 15477:2019 Annexure B Clause 5.2
Shear Adhesion (Heat aging Condition)	3.00 N/mm <sup>2</sup>	3.50–4.50 N/ mm <sup>2</sup>	IS 15477:2019 Annexure B Clause 5.2
Deformability (S2)	>5.0 mm	8–10 mm	IS 15477:2019 Annexure F Clause 5.6

SuperFlex 2K adhesive conforms to IS 15477:2019 TYPE 5 'T' 'S2'

### ISO 13007 & EN 12004

PARAMETERS	REQUIREMENTS	RESULTS	TEST METHODS
Initial Shear Adhesion Strength	≥ 2.0 N/ mm <sup>2</sup>	4.5–5.5 N/mm <sup>2</sup>	ISO 13007-2:2010 Clause 4.3.4
Shear Adhesion Strength after Water Immersion	≥ 2.0 N/ mm <sup>2</sup>	4.0–5.0 N/mm <sup>2</sup>	ISO 13007-2:2010 Clause 4.3.5
Shear Adhesion Strength after Thermal Shock	≥ 2.0 N/ mm <sup>2</sup>	4.0–5.0 N/mm <sup>2</sup>	ISO 13007-2:2010 Clause 4.3.8
Tensile adhesion- Open time (60 minutes)	≥ 1.0 N/ mm <sup>2</sup>	1.3–1.6 N/mm <sup>2</sup>	ISO 13007-2:2010 Clause 4.4
T – Slip resistance	≤ 0.5mm	0.20–0.30 mm	ISO 13007-2:2010 Clause 4.2

SuperFlex 2K adhesive conforms to EN 12004: R2T/ISO 13007

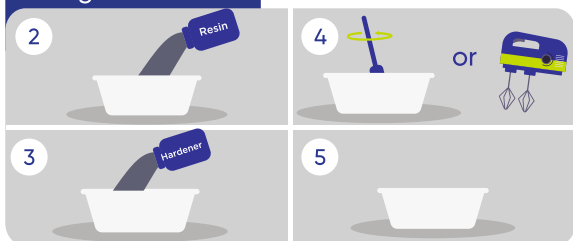
## INSTALLATION

### Surface Preparation



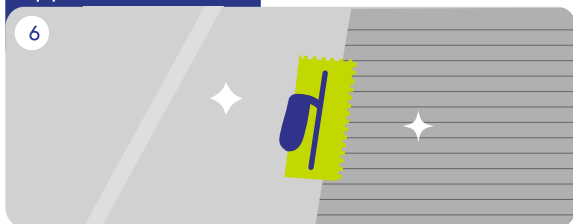
- All surfaces must conform to the dimensional stability requirements outlined in IS 15477:2019.
- They should be level, properly cured, undamaged, compact, rigid, resistant, dry, free from any debonding agents, and protected against damp rising.
- Pre-wet/dampen highly absorbent concrete surface with good quality fresh water.

### Mixing



- Pour hardener (Part B) in Resin (Part A) in a bucket and mix well until you achieve a smooth, consistent mixture. It is advisable to use a low-speed electric stirrer to ensure perfect mixing and avoid overheating the mix, which would reduce the working time. Only mix that much which can be consumed in an hour.

### Application



- The adhesive needs to be applied with a flat side of the trowel.
- Additional mortar should be then applied with the notched edge of the trowel.
- Installation shall be made on a dry surface. New concrete slabs must be damp cured and at least 28 days old prior to application.
- For large size tiles with sides > 2 feet, apply additional adhesive to the back of the tile surface with the flat side of the trowel.
- Periodically inspect or examine the tiles to make sure they are securely adhered. If the adhesive seems to be non-sticky, remove the existing and replace with fresh adhesive. Use a rubber mallet to tap the tile and ensure it is fully bedded in the adhesive.

To create spacer, expansion, isolation joints (for engineered stone/artificial marble) follow these guidelines:

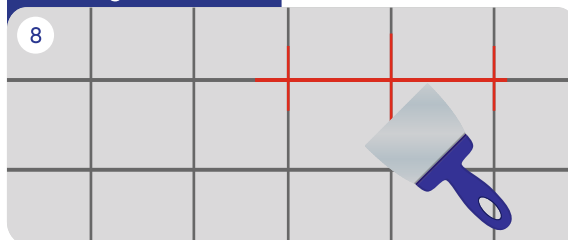
- Spacer of at least 3mm around each engineered stone filled with elastic/PU sealant to prevent thermal stress.
- 10mm expansion joints filled with elastic/PU sealant at every 10 sq. meters in external areas and 15 sq. meters in internal areas.
- 10mm isolation joints filled with elastic/PU sealant at changes in planes, such as where the floor meets the wall.

### Cleaning



- Clean any excess adhesive from the tile surfaces and grout lines immediately with a damp sponge or cloth.

### Grouting



- Grouting should be carried out after 24 hours of tiling. It is advisable to use the appropriate grouting material from Magicrete range of cementitious or epoxy grouts.

Setting time of Superflex 2k in relation to the temperature:

Temperature (°C)	35	30	25	20	15	10
Time (Hours)	2	2.5	3	6	8	18-20

## COVERAGE

A coverage of 8-10 Sq. Ft. per pail of 4 kg is received when used with a bed thickness of 3mm (using 6mm X 6mm square notched trowel).

Note: Coverage is based on smoothness and evenness of the substrate, and the thickness of the mortar used.





## SHELF LIFE

Factory packed pail of SuperFlex 2K carries a shelf life of 12 months in its original packaging, if stored in cool & dry place. However, temperature and other humidity parameters vary from site to site, the information should be treated as a general guideline.

## LIMITATIONS

Adhesives and grouts for tiles are not replacements for waterproof membranes. When a waterproof membrane is required, use Magicrete waterproofing products by Magicrete or any other waterproofing product available in the market.

## SAFETY PRECAUTIONS

- Keep out of reach of children.
- Wear suitable protective clothing, gloves, and eye/face protection.
- After contact with the skin, wash immediately with plenty of clean water.
- In case of eye contact, rinse immediately with plenty of clean water and seek medical advice.

## IMPORTANT NOTES

- Workability times may vary, depending on environmental conditions and the temperature of the tiles.
- Do not lay on substrates subject to moisture rising or which are not completely dry.
- Do not use on wet screed, surface must be fully cured (28 days).
- Applicator must evaluate the use of an additional mechanical fastening system for extra security in case of heavy stone/large tiles for more than 3m height (such as steel hooks fastened to the substrate).
- Protect from direct rainfall/foot traffic for at least 24 hours.
- Leave gap between the tiles with the help of spacers & fill gaps with Magicrete tile grout.
- It is mandatory to use appropriate size notched trowel to achieve required thickness of adhesive.

\*While the company guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control. It is recommended to verify with the company that the product is suitable for the intended use, and that this Data Sheet version is the latest one. The company may modify it without prior notice. Technical characteristics are listed for guidance only. For more information, please contact the company office in your location.

# magicrete®

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## Magicrete Building Solutions Pvt. Ltd.

(ISO 9001 :2015, ISO 14001 :2015 & ISO 45001 :2018 Certified co.)



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