



STONE TILE FIXIT

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STF-45

TECHNICAL DATA SHEET

Compliance

C2TE – En12004

Type 3T – IS 15477:2019

Extended
Open Time

Highly
Polymer
Modified

Superior
Bond
Strength

General Purpose Polymer Modified
Adhesive for Stone & Tiles

STF-45

STF-45 is a blended polymer modified cement-based powder tile adhesive specially designed for heavy duty tile applications like granamite, mosaic on internal surfaces. It gives excellent bond on cementitious surfaces like, concrete, plaster, etc. STF-45 has an excellent waterproofing ability also. This highly flexible adhesive is suitable for fixing ceramic, glazed surfaces, natural stones, etc. on a new substrate.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

- Surface shall be free from other substances like oil, grease, dust, oil, paint etc.
- Ensure no any other particles over the surface where tiling to be done.
- All surface must be leveled for less consumption & achieve good courage.
- Dusty surface shall be dampened with water for good adhesion.

MIXING

- Add 3 part of powder to 1 part of water in required container.
- Mix it well with low revolution mixture drill machine until the homogeneous paste is obtained.
- Water can be adjusted during mixing to get proper smoothness of mixture.
- Leave the mixture for 3 to 5 minutes after mixing.

APPLICATION

- Apply the adhesive on the surface where tiling shall be done.
- Spread the adhesive with notched trowel.
- Apply the adhesive on tiles & spread thoroughly on entire surface.
- Clean the tiles before applying adhesive.
- Fix the tile on appropriate surface.
- Tiles must be fixed within 10-15 minutes.
- Press the tiles firmly into position with a slight twisting action for proper spreading of adhesive. If required use rubber mallet to adjust level.
- Remove additional adhesive from the tiles face and between joints.
- Clean the tiles with cotton waste in next 30 minutes.
- Avoid foot traffic at least for 24 hours.
- Carry out grouting after 24 hours.



PRODUCT DATA

Appearance	Gray / White
Form	Powder
Bulk Density	1.3 – 1.5 gm/cc
Mixing ratio	1:3 (water: powder)
Pot life	Approx 120 minutes
Open time	Minimum 30 minutes
Setting time	24 hours
Adhesive Thk	3-12 mm

COVERAGE

- Approximately 1.5 to 2 sqft per 1 kg adhesive.
- Coverage can be varied from place to place because of surface levelness & flatness.
- Ensure proper level/flatness of surface for better coverage.

AREA OF APPLICATION

- Concrete surfaces
- Cement mortar beds
- Tile on tile application
- Existing stone flooring / tile flooring
- Plastered wall
- Terrace / Balconies

MATERIAL CAN BE FIXED

- Heavy duty large format tiles
- Marble & Natural stones
- Granite & other stones
- Large format Vitrified tiles
- Glass mosaic tiles

Surface to be cleaned & roughened before installation of tiles

PACKING

20 & 40 Kg Double Layered Bopp Bags

SHELF LIFE

12 Months From The Month of Manufacturing

PRECAUTIONS & LIMITATIONS

- Strictly not recommended for the direct use on gypsum board, plywood, wood, metal & painted area.
- Rectify undulations from the existing floors and walls.

TECHNICAL PERFORMANCE

ACCORDING TO EN12004

Testing Properties	Requirement	Test Values
Open Time @20 minutes	$\geq 0.5 \text{ N/mm}^2$	0.55 to 0.65 N/mm ²
Tensile adhesion at dry condition	$\geq 1 \text{ N/mm}^2$	1.4 to 1.7 N/mm ²
Tensile adhesion after water immersion	$\geq 1 \text{ N/mm}^2$	1.2 to 1.5 N/mm ²
Tensile adhesion after heat ageing	$\geq 1 \text{ N/mm}^2$	1.3 to 1.6 N/mm ²
Tensile adhesion after freeze/thaw cycle	$\geq 1 \text{ N/mm}^2$	1.2 to 1.4 N/mm ²
Slip Resistance (T)	$\leq 0.5 \text{ mm}$	0.3 to 0.5 mm

ACCORDING TO IS 15477:2019

Testing Properties	Requirement	Test Values
Tensile adhesion at dry condition	$\geq 1.50 \text{ N/mm}^2$	1.8 to 2.20 N/mm ²
Tensile adhesion at wet condition	$\geq 1.00 \text{ N/mm}^2$	1.2 to 1.5 N/mm ²
Shear Adhesion at dry condition	$\geq 1.5 \text{ N/mm}^2$	1.8 to 2.20 N/mm ²
Shear adhesion after heat ageing	$\geq 1 \text{ N/mm}^2$	1.4 to 1.7 N/mm ²
Shear adhesion at wet condition	$\geq 1 \text{ N/mm}^2$	1.2 to 1.3 N/mm ²
Slip Resistance (T)	$\leq 0.5 \text{ mm}$	0.3 to 0.5 mm

Note: Test results are indicative as per testing method specified in standard. Test results may vary as per substrate, site condition & testing machine etc. Actual field performance will depend on installation methods and site conditions.

ADVANTAGES

- Excellent Adhesion & Low Shrinkage
- Flexible to accommodate physical & thermal movements
- Easy to use, just mix with water & apply
- Soaking of tiles is not required
- No need curing, no need hacking
- Excellent Workability
- Suitable for commercial application
- Long open time – suitable for large format tiles
- Allow to sustain minor vibrations

SAFETY PRECAUTIONS

- Keep out of reach from Childrens.
- Wear suitable eye protection & gloves.
- In case of contact with eye, rinse immediately with water and seek medical services.



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