

## Technical Data Sheet

# TILEGRIP FX PLUS

High performance, Fast Setting, Highly Deformable, Slip Resistant  
Flexible, Cementitious Fiber Reinforced Tile Adhesive

### Description:

TILEGRIP FX PLUS is a Fiber Reinforced high performance, high polymer modified slip resistant fast setting, flexible powder adhesive for ceramic, porcelain tiles, marble, natural and artificial stone **C2 FT S2**. It has a base of special binders combined with selected aggregates of a suitable granulometric size and special additives. TILEGRIP FX PLUS has a rapid setting and hydration time which prevent vertical slipping, it is a single component and therefore easy to apply by simply adding water.

Once mixed with water, the product become, easily workable, with perfect adherence and highly thixotropic properties.

TILEGRIP FX PLUS is suitable for fixing large sizes of natural stone marble, tiles and porcelain vertically and horizontally and for tiles on tiles application.

### Uses:

TILEGRIP FX PLUS is used as an adhesive for fixing internally and externally ceramic, porcelain tiles, mosaic, natural or artificial stone, on both walls and floors. It can be applied on variety of substrates, such as cementitious walls, concrete, screed floor, AAC Block, gypsum board, cement board and tiled substrate. This includes:

- For interior and exterior fixing of all types and sizes of ceramic tiles (single and double fired tiles, porcelain, klinker, terracotta, etc.)
- Tile over tile application for maintenance and renovation works.
- External application of porcelain, marble and stones.
- Can be used as adhesive for insulation material such as expanded polystyrene, cellular polyurethane.

- Ideal for fixing non-porous tiles on top of non-porous surface.
- For all tiling application where when need to put the tiled area into service rapidly
- Repairs for swimming pools, industrial plants, shopping malls, restaurant, etc. If rapid setting time is required.
- Fixing all types of mosaic, porcelain, marble and stone tiles, which are extremely sensitive to moisture.

### Advantages:

- Fast-setting. Floors can be walked on in 2 hours and can be used in 24 hours.
- It can be used for all kinds of residential and commercial buildings.
- High bond to substrates.
- Easily applied to fix tiles on all types of cementitious substrates.
- Compatible with all types of cement substrates.
- High flexibility to accommodate the different deformation between the tile and the substrate.
- Waterproofing features with high elasticity.
- High thixotropic mortar. Can be applied on vertical surfaces without sagging even for heavy and large tiles.
- Excellent resistance to water and weather changes.

### Instructions for Use:

#### Surface Preparation:

All surfaces should be sound, clean, dry and free from loose material, efflorescence, laitance, curing compounds, dirt, oil and grease. Ensure that concrete and block substrates are fully cured to accommodate all shrinkage factors.

For Gypsum surfaces, treat the surface with

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ARMORPIME AC primer before application of TILEGRIP FX PLUS.

Moisten the surface with clean water before applying the mixed product in order to reduce the absorption of water by the substrate from the mortar.

Inspect the porosity of tiles. For porous tile, it is necessary to mix TILEGRIP FX PLUS with ELASTOGRIP-latex additive or moisten the backside of the tiles to eliminate the risk of water absorption from the mix.

## Mixing:

Add TILEGRIP FX PLUS bag of 20 Kg. into a container of 5.6 to 6.0 Lt. of clean water, mix until a uniform, lump free consistency mix is achieved. For mixing process, a slow speed drill (200-300 rpm) fitted with a suitable paddle is recommended.

Allow the mix to rest for about 5 minutes and then remix before application.

## Application:

With a notched trowel, spread the mixed TILEGRIP FX PLUS an average of 4 mm thick layer to the substrate evenly and in sufficient quantity. Sweep a second pass with the notched part of the trowel to even the distribution of the material. With pressure and twist movement fix the tile into the wet adhesive. Apply sufficient pressure on tile to ensure full contact between the back of the tile and the adhesive. After application and fixing of tiles, remove excess adhesive with a wet cloth before adhesive dries.

In case of application on large tiles, apply extra mix to the backside of the tile and then place the tile to the adhesive bed on the substrate.

When applying the tile over tile, make sure the surface of the old tile is clean, free from oil and contaminants. Check that old tiles are properly adhered to the substrate. If any loose tiles exist, remove and glue it back in or fill the area with proper concrete repair material before the application of TILEGRIP FX PLUS.

Prepare enough material that can be tiled during the open time of the mix. Spreading large areas may result to drying the adhesive or creating superficial skin before tiles can be fix, which will cause poor adhesion. Where there is a formation of a superficial skin, the adhesive must be reworked with the notched trowel.

Do not wet the adhesive if superficial skin is formed because this will form an anti-adhesive film instead of dissolving it.

For outdoor fixing of tiles, if the tile size is greater than 900 cm<sup>2</sup> or when applying in swimming pools and basins filled with water, spread the adhesive on the back of the tile (back-buttering) in order to ensure complete coverage.

Remove excess of the adhesive mortar with damp cloth before it dries. Joints between the ceramic tiles can be grouted after 12 hours and floor joints can be grouted after 24 hours with cementitious or epoxy grouts. Expansion joints must be sealed with MEGASEAL PU-polyurethane sealant.

During summer season, cover the working area to prevent direct sun effect and keep tools in shade. Do not apply TILEGRIP FX PLUS on metal, wood or non-absorbing surfaces

## Standards:

- EN 12004 – C2FTS2
- DIN 18156 – 2<sup>nd</sup> part
- ANSI A 118.4 – 1992

TECHNICAL PROPERTIES	
Appearance	Powder
Color	Grey or White
Density	1.60 ± 0.03 kg/lit
Pot of life	45 minutes
Application temp	+5°C to +35 °C
Adjustment Time	15 minutes
Grouting joints	3-4 hours
Set to foot traffic	3-4 hours
Ready for use	24 hours (3 days for wet areas)
Tensile Adhesion Strength (EN 1348)	
-Initial (28 days)	>2.0 N / mm <sup>2</sup>
-after heat ageing	2.0 N / mm <sup>2</sup>
-after water immersion	1.2 N / mm <sup>2</sup>
-after freeze/thaw cycles	1.3 N / mm <sup>2</sup>
Adhesion after 8 hours	0.8 N / mm <sup>2</sup>
Deformability according to EN 12004	S2 deformable (>5mm)
Resistance to Solvent	Excellent

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Resistance to Alkalis	Excellent
Service Temperature	-30 °C to +80 °C

\*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

## Coverage:

Solid bed	: 1.60 Kg/m <sup>2</sup> per 1mm thickness
4mm notched Trowel	: 3 Kg/m <sup>2</sup> on smooth surface at 4 mm thickness
Yield	: 16 Ltr. for 20 Kg bag (mixed)

\*Consumption will vary according to the type of tiles and support conditions.

## Packaging:

TILEGRIP FX PLUS is supplied in 20kg clean, recyclable bags.

## Storage:

Store in original packing in dry conditions away from direct sunlight and high humidity levels

## Shelf Life:

TILEGRIP FX PLUS can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

## Cleaning:

Tools and equipment should be cleaned with water immediately after use. Hardened materials should be mechanically removed.

## Recommendation:

Do not use TILEGRIP FX PLUS in the following cases:

- On metal, rubber, PVC and linoleum surfaces;
- On walls and floors subject to extreme flexing or vibration (wood, fiber-cement boards, etc);
- For bonding insulating panels of expanded polystyrene with protective film.
- Do not add water to the mix once it starts to set.
- It is not needed to wet the tiles before installation. In case of dusty tiles, it is recommended to wash them.

- The open time of TILEGRIP FX PLUS in normal conditions is 30 minutes. Unfavorable weather conditions (direct sunlight, drying wind, high temperature high absorbent substrate), could drastically reduce this time. Therefore, one must constantly check that the adhesive has not formed a superficial skin and is still "fresh". Where there is a formation of a superficial skin, the adhesive must be reworked with the notched trowel. Wetting the adhesive after it has produced the skin is not recommended because the water forms an anti-adhesive film instead of dissolving it.
- Tiles installed with TILEGRIP FX PLUS must not be subject to running water or rain for at least 24 hours and must be protected from direct sunlight for at least 5 days after installation. Swimming pools and basins can be filled after 14 days.
- For application on precast concrete or substrate subject to excessive vibration, seek the advice of MATEX technical department

## Health and Safety:

Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapor or spray mist.

## FIRST AID:

Eyes:	In the event of accidental splashes, flush with warm water and seek medical advice.
Skin:	Wash skin thoroughly with soap and water
Inhalation:	Remove to fresh air, keep patient rested
Ingestion:	Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to TILEGRIP FX PLUS Material Safety Data Sheet.

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