

# TILEGRIP FLEX

**High Performance, Fibre Reinforced, Cementitious  
Tile Adhesive with Extended Open Time and No Vertical Slip**

## Description:

TILEGRIP FLEX is a cement based high polymer modified waterproof, flexible powder adhesive. Class C2TE. It consists of bonding agents, selected fillers and aggregates, polymers and special chemicals. When mixed with water, the product becomes thixotropic, high workable mortar. Once dried, it has high adhesive strength and excellent flexibility to accommodate movement.

TILEGRIP FLEX is suitable for fixing large sizes of tiles vertically and horizontally and for tile on tiles application.

TILEGRIP FLEX adheres perfectly internally and externally to a variety of supports like: concrete, cement boards and cement block, polystyrene isolation boards, and gypsum and cement boards.

## Uses:

- Tile over tile application for maintenance and renovation works.
- Restaurants and shops with high foot traffic and extensive cleaning.
- Walls and floors of showers, bathrooms and kitchens.
- Swimming pools and water features.
- External application of ceramics marble and stones (when mixed with ELASTOGRIP).
- Wet areas like kitchens and bathrooms.
- Can be used as adhesive for insulation material such as expanded polystyrene, cellular polyurethane.
- Bonding tiles to floor subject to heavy stress.
- Ideal for fixing non-porous tiles on top of non-porous substrate, if when mixed with ELASTOGRIP as replacement of gauged water.
- Can be applied on supports under minor deformations

## Advantages:

- It can be used for all kinds of residential and commercial buildings.
- High bond to substrates.
- Easily applied to fix tiles on floor.
- Compatible with all types of cement substrates.

- High workability and engineered pot life.
- Waterproofing features with high elasticity.
- Non-sag properties, suitable for natural stone application on facades.
- Excellent to weather effects.
- Suitable for hot weather.
- Highly thixotropic. TILEGRIP FLEX can be applied on a vertical surface without sagging or letting the tiles slip, even when heavy tiles are used.
- Hardens without appreciable shrinkage.
- Extended open time.

## 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 blocks substrates are fully cured to avoid possible shrinkage movements.

Wet the surface before application to reach a saturated surface dry condition in order to gain best features of the product.

### Mixing:

Add the contents of TILEGRIP FLEX bag into a container of 4.6-5.0 liters of clean water. Mix with a suitable paddle fitted to a slow speed drill (200-300 rpm) until a uniform, lump free consistency mix is achieved. Allow the mix to rest for about 5 minutes and then remix before application.

### Application:

With a notched trowel, spread the mixed TILEGRIP FLEX 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.

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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 FLEX.

Porosity of tiles and substrates have significant effect on adhesive strength of tiles. Porous tiles absorb the gauging water of the adhesive preventing full reaction of mix to harden properly. Consult with **MATEX** technical department and tile manufacturer

Remove excess of the adhesive mortar with damp cloth before it dries. Joints color grouting can be performed after 12 hours of tiling of walls and 24 hours of tiling of floors.

Prepare enough material that can be tiled during the open time of the mix. Spreading large areas may result to drying the adhesive before tiles can be fix, which will cause poor adhesion.

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

## Standards:

- EN 12004 – C2TE
- ISO 13007- C2TE
- ANSI 118.4 – 1992

TILEGRIP FLEX mixed with ELASTOGRIP:

- EN 12004 – C2TES1
- ISO 13007 – C2TES1

| TECHNICAL PROPERTIES     |                                       |
|--------------------------|---------------------------------------|
| Color                    | Grey, White                           |
| Wet Density              | 1.50 ± 0.03 kg/lit                    |
| Open time at 25°C        | >30 minutes                           |
| pH of mix                | 13                                    |
| Mixing Ratio (by weight) | 100 parts powder<br>22-25 parts water |
| Adhesive bed thick       | Up to 10 mm                           |

|                            |                       |
|----------------------------|-----------------------|
| Adjustable time at 20°C    | 50 minutes            |
| Grouting time              | Walls: 12 hrs.        |
|                            | Floors: 24 hrs.       |
| Adhesion strength (EN1348) |                       |
| Initial (28 days)          | 1.8 N/mm <sup>2</sup> |
| After heat ageing          | 1.7 N/mm <sup>2</sup> |
| After water immersion      | 1.2 N/mm <sup>2</sup> |
| After freeze-thaw cycle    | 1.2 N/mm <sup>2</sup> |
| Flexural Strength          | 2.1 N/mm <sup>2</sup> |
| Resistance to Alkalis      | excellent             |
| Resistance to Solvent      | excellent             |
| Resistance to Oil          | excellent             |
| Water Resistance           | Excellent             |
| Service Temperature        | -30 °C to +90 °C      |
| VOC                        | 1 g/Ltr               |

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

## Coverage:

The consumption depends on the surface profile and tile size.

Yield : 17.0 Ltr. for 20 Kg bag (mixed)

As general guide the average consumption notched trowel application is as follows:

Small Tiles : 2.0 kg/m<sup>2</sup>  
 Medium Tiles : 3.0 kg/m<sup>2</sup>  
 Large Tiles : 5.0 kg/m<sup>2</sup>

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

**NOTE:** TILEGRIP FLEX mixed with ELASTOGRIP further enhance flexibility, deformability on adhesion characteristics, for very large size and extra weather conditions.

## Packaging:

TILEGRIP FLEX is available in 20 kg recyclable paper bags.

## Storage:

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

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## Shelf Life:

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

## Cleaning:

Clean tools with water prior to product hardening. Hardened materials can only be removed mechanically.

## Recommendation:

- It is always recommended to submit tile sample for MATEX technical department to confirm the compatibility of adhesive with tile.
- It is not recommended to use TILEGRIP FLEX on wooden, PVC, metal, rubber substrates
- Do not apply the product on surfaces subject to excessive movements or vibration
- 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 FLEX 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 FLEX 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.
- Do not use Grey color TILEGRIP FLEX with marble or natural stone subject to stains or efflorescence. Backside waterproofing might be needed.
- TILEGRIP FLEX is not recommended on:
  - Concrete subject to excessive shrinkage
  - Substrates subject to excessive movement or vibration.

- For application on 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 FLEX Material Safety Data Sheet.

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