Technical Data Sheet

TILEGRIP MAX PLUS

High Performance, Fiber Reinforced, Highly Deformable Cementitious Tile Adhesive with Extended Open Time and No Vertical Slip

Description:

TILEGRIP MAX PLUS is a high-performance cement based high polymer modified waterproof, flexible with extended open time and vertical slip resistant powder adhesive, class **C2 TE S2**. It consists of bonding agents, selected fillers and aggregates, polymers and special chemicals. When mixed with water, the product becomes thixotropic, high workable mix. Once dried, it has high adhesive strength and excellent flexibility to accommodate movement.

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

TILEGRIP MAX PLUS adheres perfectly internally and externally to a variety of supports like: concrete, cement boards and cement block, bituminous waterproofing with aggregates, polystyrene isolation boards, and gypsum and cement boards.

Uses:

- Laying ceramic tiles and stones on balconies, terraces exposed to direct sunlight and thermal gradients.
- Laying on marine plywood, old stable wooden floors.
- 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.
- 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 porcelain, marble and stones.
- Wet areas like kitchens and bathrooms.
- 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.
- It can be applied on supports under deformation.
- Installation of floor tiles subjected to heavy traffic.

Advantages:

- Recommended for laying large porcelain and natural stone tiles.
- Easily applied to fix tiles on all types of cementitious substrates.
- Can be applied up to 10mm thick mortar on uneven substrate.
- Compatible with all types of cement substrates.
- High flexibility to accommodate the different deformation between the tile and the substrate.
- High workability with long pot life.
- 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.
- Suitable for hot weather.
- Low viscosity, therefore easily workable.
- Good extended open and adjustability time, facilitating installation.

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

TILEGRIP MAX PLUS

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

Surfaces that could become too hot due to exposure to sunlight, consider shading or cooling down with potable water. Gypsum substrate and anhydrite screeds must be perfectly dry (maximum residual moisture 0.5%), sufficiently hard and free of dust. It is absolutely essential that they are treated with ARMOPRIME AC primer.

Mixing:

Add the contents of TILEGRIP MAX PLUS bag into a container of 6.0 to 6.5 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 MAX 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, makes 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 MAX 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 fixed, 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 $cm^{2,}$ 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 MAX PLUS on metal, wood or non-absorbing surfaces

TECHNICAL PROPERTIES	
Color	Grey, White
Mix Density	1.55 ± 0.03 kg/lit
Open time at 25°C	>30 minutes
Temp. of application	+5°C to 40°C
Adjustable time at 25°C	45 minutes
Adhesive bed thickness	Up to 10 mm
Grouting time	Walls: 12 hrs.
	Floors: 24 hrs.
Grouting of Tile Joint	24 hours
Adhesion strength (EN1348) Initial (28 days) After heat ageing After water immersion After freeze-thaw cycle	 2.0 N/mm² 2.2 N/mm² 1.2 N/mm² 1.1 N/mm²
Flexural Strength	2.1 N/mm²
Deformity (ISO 13007-1, (EN 12004)	S2 – Deformable (>5mm)
Water Resistance	Excellent
Resistance to Alkalis	Excellent
Resistance to Solvent	excellent
Resistance to Oil	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.

TILEGRIP MAX PLUS

Standards:

TILEGRIP MAX PLUS classified as a C2 TE S2 class

- EN 12004, EN 12002
- ISO 13007-1
- ANSI 118.4 – 1992

Packaging:

Available in 20 kg clean recyclable paper bags.

Coverage:

Solid bed	:	1.55 Kg/m^2 per 1mm thickness
4mm notched Trowel	:	3.0 Kg/m^2 on smooth surface
Yield	:	16.7 Ltr. for 20 Kg bag (mixed)

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

Storage:

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

Shelf Life:

TILEGRIP MAX PLUS 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 to MATEX technical department to confirm the compatibility of adhesive with tile.
- It is not recommended to use TILEGRIP MAX PLUS 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 MAX 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 MAX 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.
- Do not use TILEGRIP MAX PLUS with marble or natural stone subject to stains or efflorescence.
- 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 MAX PLUS Material Safety Data Sheet.

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