MAPESTONE PFS 2 VISCO

Low viscosity ready-mixed grout for architectural slab, block-paved road surfaces and to provide better anchorage to the stone



PRODUCT DESCRIPTION

Mapestone PFS 2 Visco is a ready-mixed grout for stone surfaces used by vehicles. **Mapestone PFS 2 Visco** is an integral part of the Mapestone system which is used to create highly durable architectural road surfaces.

WHERE TO USE

Mapestone PFS 2 Visco is used to grout slabs and blocks of stone and slabs of concrete. **Mapestone PFS 2 Visco** has a low level of viscosity which allows it to grout gaps and joints and flow easily into all the contact surfaces between the screed and stone blocks and slabs. In so doing it eliminates any air pockets that form under the blocks and slabs when they are being laid, thereby improving adhesion between the stone and the bedding mortar.

TECHNICAL CHARACTERISTICS

Mapestone PFS 2 Visco is a ready-mixed, powdered cementitious mortar made from selected aggregates in a granulometric curve (maximum diameter 2 mm) and special additives. Joints grouted with **Mapestone PFS 2 Visco** have much better performance characteristics than traditional systems and are resistant to freeze/thaw cycles and the aggressive action of de-icing salts.
Mapestone PFS 2 Visco reaches a high level of strength with excellent resistance to abrasion.
Mapestone PFS 2 Visco is supplied ready to use and just needs to be mixed with water, which makes it particularly easy to use. This prevents errors caused by mixing the wrong amount of binders or aggregates. Thereby achieving the required final performance characteristics of the grout.

RECOMMENDATIONS

- Only apply **Mapestone PFS 2 Visco** if the ambient, substrate, and stone temperatures are between +5°C and +45°C.
- Never add other binders or aggregates.
- Mix **Mapestone PFS 2 Visco** mechanically (such as with a vertical concrete mixer, a mixing drill, or in a bucket with a worm-screw mixing attachment) with the recommended amount of water (approximately 3-3.5 litres per bag) for at least 3 minutes. Mixing by hand is not recommended.
- We recommend applying **Mapestone PFS 2 Visco** the same day as installing the stone (using the “fresh on fresh” technique) before the bedding mortar has completely set.
- To guarantee the durability of the flooring, use **Mapestone TFB 60** pre-blended mortar to make the installation screed for the stone.
- We recommend including expansion joints, where possible, along curbs, pavements, around manholes and drains, along the lines of changes in slope, and along rainwater run-off troughs. A maximum pitch area of 40 m^2 is recommended.

MAPEI®

APPLICATION PROCEDURE

Preparation of the substrate

To guarantee the durability of the flooring, the substrate on which it is installed must be designed and prepared according to the stresses and loads the flooring will have to withstand (e.g. a concrete floor slab with electro-welded reinforcement mesh). If existing joints have to be re-grouted, a design engineer must first ensure that the cause of deterioration (e.g. subsidence in the substrate, of the installation mortar, poor quality of the existing grouting) has been eliminated before grouting.

Preparation of the joints

· Before pouring the grout, the stones must be wet and the joints must be clean and free of stagnant water and any uneven areas.
· Completely fill all the joints between the stone. The size of the joints depends on the size of the stone and must be at least 25 mm deep.

Preparation of the mix

· Mix the **Mapestone PFS 2 Visco** pre-blended grout with 3 to 3.5 litres of water per bag (according to the surrounding temperature) in a vertical concrete mixer, with a mixing drill or in a bucket with a worm-screw mixing attachment for at least 3 minutes until it forms a fluid, well-blended slurry.
· Never mix the product by hand.
· Apply the mortar within 40 minutes of mixing at +20°C. At higher temperatures, workability times are considerably reduced.

Application of the mix

· Apply the mix at a temperature of between +5°C and +45°C.
· Grout the joints the same day as installing the stone (using the “fresh on fresh” technique) before the installation screed has been completely set.
· Spread the slurry over the damp stone with the aid of a rubber rake or pour it directly into the joints using a suitable container. Joints deeper than 25 mm may be filled in a single application.
· Clean the stone using conventional techniques before **Mapestone PFS 2 Visco** has completely hardened: residues of mortar may be removed by hosing it down with sawdust and water or with power cleaners.
· Protect the grout for at least 12 hours after application from:
– high temperatures, for example with jute sacks/ wet hessian;
– rain and freezing weather, for example with non-woven fabric or sawdust under thick nylon sheets.

The grout sets to foot traffic after 12-24 hours and to vehicle traffic after just 7 days at +20°C. If the temperature is lower than +15°C, the set-to-foot traffic and set-to-vehicle traffic times are considerably longer.

Cleaning

Clean tools and stones with water before the product has completely hardened.



Mix Mapestone PFS 2 Visco only using a mixing attachment or cement mixer





CONSUMPTION

The consumption of **Mapestone PFS 2 Visco** for installing architectonic stone flooring depends on the shape and thickness of the stone and the width and depth of the joints.

PACKAGING

Mapestone PFS 2 Visco is supplied in 25 kg bags.

STORAGE

Mapestone PFS 2 Visco remains stable for 12 months if stored in a dry place protected from damp.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instruction on the safe use of our products can be found on the latest version of the Safety Data Sheet available on our website www.mapei.ae.

TECHNICAL DATA (typical values)

PRODUCT IDENTIFICATION	
Consistency:	Powder
Colour:	110 MANHATTAN 112 MEDIUM GREY 113 CEMENT GREY 141 CARAMEL 143 TERRACOTTA 295 DARK GREY 299 LIMESTONE
Maximum grain size:	2 mm
pH value:	approx. 12 at +23°C in a saturated solution
Bulk density (kg/m³):	approx. 1750
Modulus of elasticity:	approx. 30 GPa

APPLICATION DATA (at +20°C and 50% R.H.)	
Mixing ratio:	3-3.5 litres per bag according to the surrounding temperature
Bulk density of blend (kg/m³):	2200
Mixing time:	minimum 3 min
Application temperature range:	from +5°C to +45°C

MECHANICAL RESISTANCES according to EN 1015-11		
Strength	**Compressive Strength (MPa)**	**Flexural Strength (MPa)**
– after 1 day:	15	3
– after 7 days:	45	5
– after 28 days:	>55	>6

IMPORTANT NOTES

Whilst we try to ensure that any advice, recommendations or information given in our literature is accurate and correct, we have no control over the circumstances in which our product is used. It is therefore important that installers satisfy themselves that the product and conditions are suitable for the envisaged application. No warranty can be given or responsibility accepted other than, that the product supplied by us will meet our written specification. The installer should ensure that our latest product data and safety information sheets have been consulted prior to use.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.ae.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into other project-related documents, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation. The most up-to-date TDS can be downloaded from our website www.mapei.ae.

ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

All relevant references for the product are available upon request and from www.mapei.com.

1171-10-2022 (UAE)

Any reproduction of texts, photos and illustrations published here is prohibited and subject to prosecution.