MAPESTONE TFB 60

Pre-blended bedding mortar for architectonic stone flooring with high compressive strength





ADVANTAGES

- Resistant to freezing weather, de-icing salts, acid, sea-spray, and high temperature variations
- Ideal for vehicle traffic, including intense, heavy traffic
- Durable and strong
- Complete system with the installation of products of the Mapestone PFS range
- Quick setting and quickly ready for use
- Maximum practicality: pre-blended, ready-to-use product. Just add water and mix with a power mixer for 3 minutes

WHERE TO USE

Mapestone TFB 60 is used to make the installation of bedding mortar for natural stone architectural flooring suitable for vehicular use for squares, roads, pavements, parking lots, pedestrian crossings, roundabouts and speed humps.

Mapestone TFB 60 is suitable for installing:
– small blocks
– thin section bricks/brick slips
– cobblestones
– slabs
– blocks



An example of a road hump at a pedestrian crossing



An example of a traffic roundabout



An example of a street for vehicular use



An example of a road with a central reservation in cobblestones

TECHNICAL CHARACTERISTICS

Mapestone TFB 60 is a pre-blended mortar made from special binders, selected aggregates in a granulometric curve (maximum size of inert 5 mm), and specific additives.
Installation screeds made from **Mapestone TFB 60** are resistant to freezing weather and de-icing salts and are very strong.
Mapestone TFB 60 is easy to use in that it only needs to be mixed with water. This means that dosing errors for the binder and the choice of aggregates by the user are avoided errors, which would otherwise compromise the final and initial characteristics of the hardened screed.
Mapestone TFB 60 may be prepared in either a plastic or "no-slump" consistency, depending on the type of material to be laid.

RECOMMENDATIONS

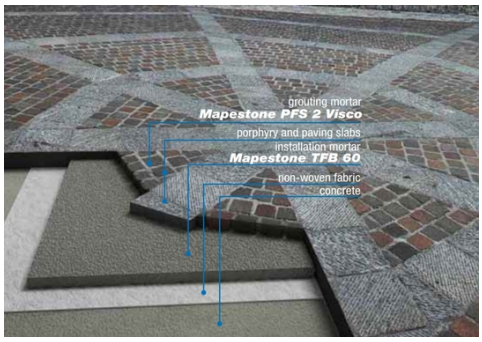
- Only apply **Mapestone TFB 60** if the temperature of the surrounding air, the substrate and the stone is between +5°C and +45°C
- Workability of **Mapestone TFB 60** is reduced at high application temperatures
- Mix **Mapestone TFB 60** with the amount of water required for the type of stone to be laid
- For installation layers thicker than 7 cm, it is necessary to add 4-8 mm sized gravel (20-25%) in order to give structure to the screed and to allow proper hydration during the wetting/tamping process.
- Tamp the surface before **Mapestone TFB 60** starts to set to prevent compromising the mechanical characteristics and durability of the bedding mortar.
- Grout the stone with **Mapestone PFS 2 Visco** pre-blended grout to ensure the durability of the bedding mortar.
- 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 30 m^2 is recommended

HOW TO USE

To ensure 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).

- Disconnect the substrate (e.g. a reinforced concrete floor slab with fibres or with electro-welded reinforcement mesh) from the flooring, by using non-woven fabric or PVC sheet before setting up the installation screed.
- Form the expansion joints if required.
- Mix **Mapestone TFB 60** with the amount of water required, according to the type of flooring to be installed, using a mechanical mixer (e.g. in a bucket with a worm-screw mixing attachment):
  – to lay slabs and bricks, mix **Mapestone TFB 60** with water to obtain a plastic consistency (approximately 9%). The same consistency may also be used for laying straight rows of small blocks.
  – to lay small blocks, thin section bricks/ brick slips, and cobblestones, mix **Mapestone TFB 60** with water to obtain a "no-slump" consistency (approximately 7%).
- Spread on a 5-7 cm thick layer of **Mapestone TFB 60** in small areas at a time.
- Make sure that the consistency of the mortar remains the same in order to maintain its characteristics.
- If the flooring is made from slabs, before laying the stone on the fresh **Mapestone TFB 60** installation layer, apply a layer of bonding slurry made from 1 kg of **Planicrete**, 1 kg of water, and 3 to 4 kg of cement on the back of the slabs.
- Lay the stone in the pattern required with a 5 to 15 mm gap around each piece.
- When laying stone on **Mapestone TFB 60** with a "no-slump" consistency, wet the flooring with water to hydrate the installation layer and tamp the surface of the stone.
- Before pouring the grouting mortar into the joints, sprinkle the surface of the stone with water, clean the joints and remove any freestanding water and uneven or loose areas.

To form monolithic flooring, we recommend grouting the joints with **Mapestone PFS 2 Visco** immediately after installing the stone (using the "fresh on fresh" technique) before the installation layer has completely set. Once grouting has been completed, protect the flooring for at least 12 hours after application subject to the surrounding conditions (high temperatures, rain, low temperatures, etc.) with a suitable protective or anti-evaporation system, to prevent it from drying out too quickly and to keep the product at the correct temperature.
Flooring made using the **Mapestone System** 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.



An example of small porphyry blocks and natural stone slabs installed using the Mapestone System



An example of an expansion joint



Mapestone TFB 60 mixed to a "no-slump" consistency

CONSUMPTION

The consumption of **Mapestone TFB 60** is approximately 20 kg/m² per cm of thickness.

CLEANING

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

PACKAGING

Mapestone TFB 60 is supplied in 25 kg bags.

STORAGE

Mapestone TFB 60 remains stable for 12 months if stored in a dry place protected from damp.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

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

TECHNICAL DATA (typical values)

PRODUCT IDENTIFICATION	
Type:	powder
Colour:	grey
Maximum size of aggregate:	5 mm
pH value:	approximately 12 at +20°C in saturated solution

APPLICATION DATA (at +20°C - 50% R.H.)	
Mixing water:	7-9%
Bulk density of fresh blend (kg/m³):	2200 (according to degree of tamping)
Mixing time:	3 minutes per bag
Application temperature:	from +5°C to +45°C
Application thickness:	minimum 40 mm

FINAL PERFORMANCE		
Performance characteristic	**Test method**	**Product performance**
Compressive strength (MPa): - 1 day - 7 days - 28 days	EN 13892/1-2	 25 45 60
Flexural strength (MPa): - 1 day - 7 days - 28 days	EN 13892/1-2	 4 6 >8



An example of a plazza

IMPORTANT NOTES

While we try to ensure that any advice, recommendations, or information 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, nor can responsibility be accepted other than the product we supply will meet our written specifications. The installer should ensure that our latest product data and safety information sheets have been consulted before 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. 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.

Mapei Construction Chemicals L.L.C

Dubai Investment Park 2, P.O. Box: 73869, Dubai, United Arab Emirates

+971 4 815 6666 www.mapei.ae info@mapei.ae

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