



Mapedrain Mortar

Pre-blended, pozzolanic drainage mortar for screeds for laying conventional paving slabs



WHERE TO USE

- External drainage mortar beds for laying conventional paved floors made of porphyry cubes.
- External drainage screeds.

Some application examples

- Drainage mortar beds at least 2 cm thick (4 cm for vehicular traffic), for external laying of all types of traditional paved floors made of blocks in porphyry subject to low to medium intensity stresses (drives, pavements and terraces for residential use laid directly on the ground, courtyards and entrance areas for pedestrian use and/or subject to occasional vehicular traffic and public pedestrian zones, including those exposed to adverse weather conditions).
- Floating drainage screeds where adhesive is to be used (for example **Elastorapid** or **Granirapid**) for laying ceramic and stone material on balconies and terraces.

TECHNICAL CHARACTERISTICS

Mapedrain Mortar is a ready-to-use pozzolanic mortar, made up of special hydraulic binders, admixtures and single-sized, selected aggregates.

Its special composition and grain size, with no fine particles, makes **Mapedrain Mortar** ideal for making highly-permeable floor-laying beds and screeds without capillary action. The risk of deterioration due to the formation of surface efflorescence and freeze/thaw cycles is drastically reduced.

Mapedrain Mortar is easy to prepare, by simply adding water. This means that human error due to incorrect dosage of the binder and in the choice of inert material

is avoided, errors which could compromise the final characteristics of the screed when it has set.

Mapedrain Mortar is the ideal solution where finding good quality inert material of the correct grade is difficult, or in the case of installations in areas, such as historical town centres, where transportation and preparation of the blend with traditional binders becomes problematic.

RECOMMENDATIONS

- Do not mix **Mapedrain Mortar** with other binders (e.g. cement, lime, gypsum, **Mapecem**, **Topcem**, **Mapedrain Binder**, etc) or inert materials.
- Use the right amount of water when mixing **Mapedrain Mortar**.
- Do not add water and do not remix **Mapedrain Mortar** once it has started to set.
- Do not use **Mapedrain Mortar** for laying paved floors subject to intense traffic and heavy stresses.
- Use the product at temperatures between +5°C and +30°C.
- Do not wet the surface of fresh screeds made using **Mapedrain Mortar**.

APPLICATION PROCEDURE

Preparation of the substrate

Preparation of the mix

Pour 6-7 % of **Mapedrain Mortar** into a container with clean water while mixing (1.5-1.8 litres of water for every 25 kg of powder). Continue mixing with a low-speed mixer until a homogenous mix is formed. Use the mix within 3-4 hours of its preparation.

Mapedrain Mortar



Evening off the
substrate made with
Mapedrain Mortar

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Consistency:	powder
Colour:	grey
Solid residue (%):	100
Storage:	12 months
Hazard classification according to EC 1999/45:	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
Customs class:	3824 50 90

APPLICATION DATA (at +23°C - 50% R.H.)

Mixing ratio:	1.5-1.8 litres of water for every 25 kg of Mapedrain Mortar , or 6-7 parts of water every 100 parts of powder
Thickness: – as an adherent drainage laying bed: – on waterproofing or "sliding" layers:	at least 20 mm at least 50 mm
Pot life:	3-4 hours
Application temperature range:	from +5°C to +30°C
Set to light foot traffic:	approx. 24 hours
Ready for use:	7 days for light traffic 28 days for final service use
Waiting time before laying: – traditional floors: – laying with adhesive:	immediate 24 hours
Grouting: – traditional floors: – laying with adhesive (Elastorapid or Granirapid):	after 24 hours after 3 hours
Compressive strength according to EN 196 (N/mm²) after 28 days:	approx. 10
Resistance to temperature:	from -50°C to +120°C
Pressure-free permeability for a 3 cm-thick layer (l/m²/h):	> 500

Application of the product

- **as a drainage laying bed**

Apply a layer at least 2 cm thick of **Mapedrain Mortar** on the substrate, which has been previously wetted.

Lay the porphyry blocks or stone slabs on the bed of mortar while it is still fresh, and beat them down well into the mortar.

The joints must be grouted with a suitable drainage grout, such as **Mapedrain 1K Grout** or **Mapedrain 3K Grout**, after at least 24 hours.

- **as a drainage screed**

The drainage screed, which must be at least 5 cm thick, must be laid on a waterproofing and/or drainage layer with a suitable slope (at least 2%).

Create control joints in the screed by making cuts about 1/3 down into the thickness, to divide the screed in bays with a maximum area of 4x4 m, which will then be followed through in the finishing material. Cover the screed with a sheet to protect it from rain, freezing weather and direct sunlight until the floor is laid.

The tiles or stone material must be laid under normal temperature and humidity conditions at least 24 hours after making the drainage screed. Use a quick-setting adhesive, such as **Granirapid** or **Elastorapid**. Remove any excess adhesive which has spread into the joints, to avoid compromising the drainage properties of the system. The joints must be grouted with a suitable drainage grout, such as **Mapedrain 1K Grout** or **Mapedrain 3K Grout**.

CONSUMPTION

14 kg/m² per cm of thickness.

Cleaning

Tools may be cleaned with water if the

product is still fresh. Once hardened, it must be removed mechanically.

PACKAGING

25 kg sacks.

STORAGE

Mapedrain Mortar remains stable for at least 12 months if stored in a dry place.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

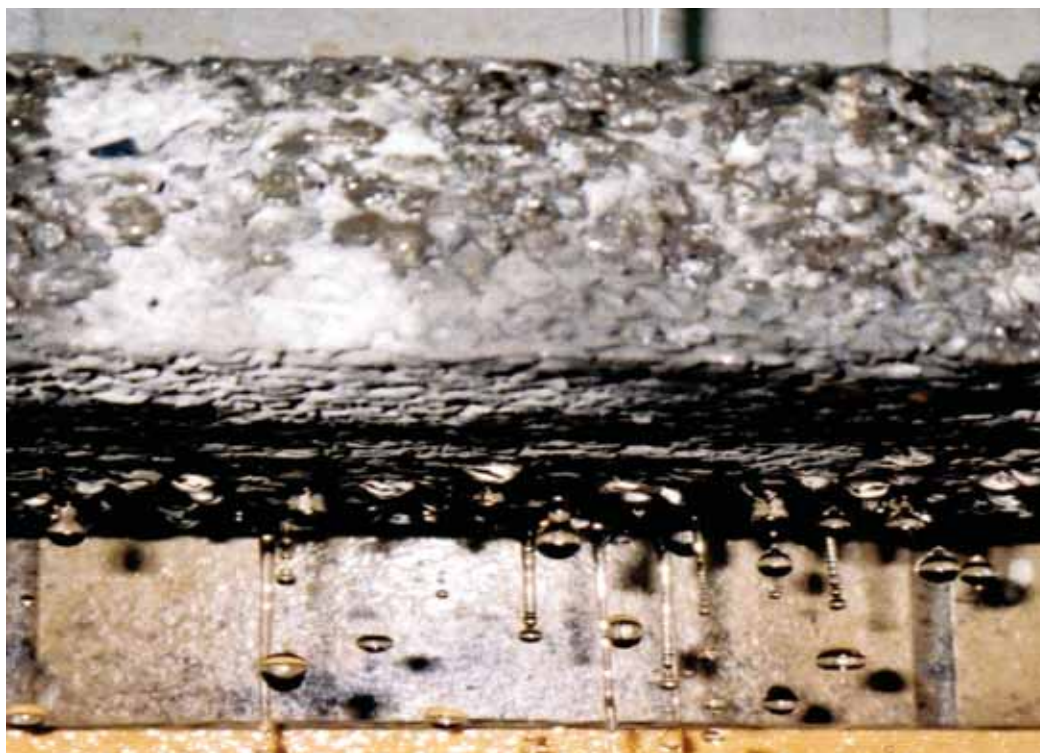
Mapedrain Mortar contains cement that, when in contact with sweat or other bodily fluids, produces an irritant alkaline reaction. Wear protective clothing, gloves and eye/face protection. For further information refer to the Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

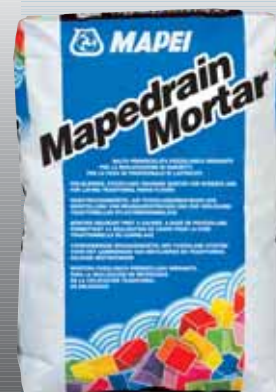
WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

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



Picture taken in laboratory: draining effect of a Mapedrain Mortar's sample



**Mapedrain
Mortar**