MAPESCREED 704

Special acrylic-based plasticising and water-reducing admixture for cementitious screeds

CE
EN 934-2
T 3.1-3.2

WHERE TO USE

For internal and external screeds on which ceramic, natural stone, parquet, resilient, carpet, etc. flooring is to be laid.

Some application examples

· Low-shrinkage screeds that must set to foot traffic in 12-24 h.
· Screeds with a high level of mechanical strength after only 7 days.

TECHNICAL CHARACTERISTICS

Mapescreed 704 is a liquid admixture made from acrylic polymers (with no formaldehyde) developed in the MAPEI Research & Development laboratories. When added at a rate of 1-1.5% in weight of the cement to a conventional screed mix (aggregates - cement - water), it improves plasticity and workability, reduces porosity and hygrometric shrinkage, accelerates the development of mechanical strength, improves thermal conductivity and reduces drying times.
This product is very easy to use which makes it ideal for mixing screed using mechanical-computerised mixers, such as modern fixed silos or silos on trucks.

RECOMMENDATIONS

· Do not add **Mapescreed 704** to lime or gypsum-based mortar.
· Do not add to special hydraulic binders such as **Mapecem** or **Topcem**.
· Protect screeds from air currents direct sunlight, freezing weather, rain, etc. for the first 24-48 hours after laying.
· Protect **Mapescreed 704** from frost.

APPLICATION PROCEDURE

Substrate preparation

Any type of substrate is suitable for sand-cement screed mortar containing **Mapescreed 704**. To reduce the risk of rising damp, we recommend isolating the screed with sheets of polyethylene or similar material. If there is a high level of moisture, integrate the isolating system with a waterproof membrane.
Existing cementitious, stone and ceramic substrates must be strong, dry and free of cracks and must have no oil stains or traces of wax, paint or gypsum.
Contact the MAPEI Technical Services Department for further information on any type of substrate.

Preparation of the mix

Blend the cement, aggregates (0/6), water and **Mapescreed 704** mix together in a mixer for around two minutes.
The mix must be applied and floated as soon as possible after mixing and within an hour from the start of preparation.
Special care must be taken on the amount of mixing water added. The mix must have a screed mortar consistency that, when tamped, becomes compact with a smooth, cohesive surface with no bleeding.

MAPEI

Screed mortar may be mixed with the following:
· planetary mixer;
· standard site mixer;
· worm-screw mixer;
· mixer truck;
· automatic pressure pump.

We advise against mixing by hand; this method does not guarantee that the **Mapescreed 704** is evenly dispersed throughout the mix and more water could be required to obtain the consistency required.

Measuring moisture content

Before laying flooring sensitive to moisture, check the level of residual moisture in the screed with an electric or calcium carbide hygrometer.

Preparation of the heating/cooling system

Mechanical system for metering Mapescreed 704

Spreading the mix with Mapescreed 704 admix

CONSUMPTION

1-1.5 kg every 100 kg of cement.

PACKAGING

Mapescreed 704 is available in 10 and 25 kg canisters, 200 litre drums, 1000 litre IBC containers and in bulk quantities.

STORAGE

Mapescreed 704 may be stored for 12 months in a sealed container protected from frost.
If exposed to direct sunlight, the colour of the product may change without altering its performance characteristics.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapescreed 704 is not considered hazardous according to current norms and guidelines regarding the classification of mixtures. It is recommended to wear protective gloves and goggles and to take the usual precautions for handling chemicals.
For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.
PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	liquid
Colour:	amber
Density according to ISO 758 (g/cm³):	1.04 ± 0.02 at +20°C

Main action:	increases workability and/or reduces the amount of mixing water required
Classification according to UNI EN 934-2:	high-efficiency, super-plasticising and water-reducing agent according to tables 3.1 and 3.2
Classification according to ASTM C494:	type F
Water-soluble chloride content according to EN 480-10 (%):	< 0.1 (absent according to UNI EN 934-2)
Alkali content (equivalent Na_2O) according to EN 480-12 (%):	< 2.0
pH according to ISO 4316:	7.0 ± 1
PRODUCT PERFORMANCE	
Set to foot traffic:	after 12-24 hours
Waiting time before commissioning heating system:	15 days

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

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation.
For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com.
ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.