

Single-component, normal setting cementitious mortar for smoothing concrete surfaces

WHERE TO USE

Protection, smoothing and levelling of concrete surface imperfections up to 2 mm in a single application.

Some application examples

- Smoothing surface imperfections and blemishes in concrete before coating.
- Filling of blow holes and surface imperfections in pre-cast units.
- Minor honeycombs up to a maximum of 3 mm depth.
- Smoothing irregular surfaces of cement-based renders that have good mechanical strength.

TECHNICAL CHARACTERISTICS

Planitop 110 ME is a powdered, single-component cement-based mortar with selected fine aggregates, special additives and synthetic polymers manufactured according to a formula developed in the MAPEI Research Laboratories.

When mixed with water, **Planitop 110 ME** forms a paste that is easy to apply on vertical surfaces in thicknesses up to 2 mm in a single application. As a result of its formulation **Planitop 110 ME** bonds extremely well to all concrete surfaces, and forms a compact, strongly adhered dust free layer when cured.

RECOMMENDATIONS

- Do not use Planitop 110 ME for single applications greater than 2 mm in one layer in large areas.
 For larger repairs please consult your local MAPEI technical representative for advice on suitable products from the MAPEI repair range.
- Do not use Planitop 110 ME at temperatures lower than +5°C.
- Do not add cement or aggregate to Planitop 110 ME.
- For the protection of hydraulic projects and surfaces subject to abrasion, use **Mapefinish**.

HOW TO USE Substrate preparation

The surface which is to be re-profiled must be thoroughly clean and sound. Remove dust, loose particles and any traces of form release agents using high pressure waterjetting. Remove any excess surface water using oil free compressed air or a sponge if needed.

Preparing the mortar

Pour in to a rust-free mixing vessel 6.2-6.4 liters of water needed to obtain the paste consistency required for the application. Use a slow speed heavy duty drill with an appropriate mixing attachment and mix at a low speed between 300 rpm and 500 rpm. Mix for 1 to 2 minutes,



TECHNICAL DATA (typical values) PRODUCT IDENTITY Class according to EN 1504-3: R2 PCC Type: Consistency: powder Colour: grey Maximum size of aggregate (mm): 0.1 Bulk density (kg/m³): 1200 Dry solids content (%): 100 Chloride ions content - EN 1015-17 (%) - minimum requirement < 0.05%: ≤ 0.05 APPLICATION DATA (at +20°C - 50% U.R.) Colour of mix: grey Mixing ratio: 100 parts of Planitop 110 ME with 31-32 parts of water (approx. 6.2-6.4 liters of water per 20 kg bag) Consistency of mix: thixotropic - trowellable Density of mix (kg/m³): 1600 Application temperature range: from +5°C to +40°C Pot life of mix: approx. 1 hour Surface drying time: approx. 30 minutes Waiting time before applying coatings: 3 days on surfaces smoothed over using Planitop 110 ME; 7 days on surfaces repaired with mortar from the ${\bf Mapegrout}$ range followed by a finishing layer with Planitop 110 MEFINAL PERFORMANCES (31% mixing water) Performance characteristic Test method Performance of product EN 12190 > 20 (after 28 days) Compressive strength (MPa): Flexural strength (MPa): EN 196/1 > 5 (after 28 days) Bond to concrete (MC 0.40-type concrete) EN 1542 ≥ 0.7 (after 28 days) according to EN 1766 (MPa): Euroclass Reaction to fire: according to class declared Е by manufacturer

then check to make sure the mix is well blended, scraping any unmixed powder from the bottom and the sides of the mixing vessel. Allow the paste to settle then mix again for another 1 to 2 minutes. Avoid mixing manually as this may adversely affect several of the mortar's characteristics, including mechanical strength, shrinkage, impermeability etc.

Application procedure

Apply the mortar to the surface with a trowel to a maximum thickness of 1 to 2 mm per layer.

Smoothing **Planitop 110 ME** can be done with a flat trowel or wet sponge float.

Cleaning

Mortar that has not yet hardened can be removed from tools with water. After setting, cleaning is very difficult and can only be done mechanically.

CONSUMPTION

1.3 kg/m² per mm of thickness (depending on the substrate conditions).

YIELD

15.3 liters/20 kg.

PACKAGING

20 kg bags.

STORAGE

When stored in dry conditions in the original unopened bags **Planitop 110 ME** has a shelf life of 12 months. If stored at high temperature and or high humidity conditions, the shelf life may be reduced.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Planitop 110 ME is irritant, it contains cement that when in contact with sweat or other body fluids causes irritant alkaline reaction and allergic reactions to those predisposed. It is recommended to use protective gloves and goggles and to take the usual precautions for the handling of chemicals. In case of contact with eyes or skin wash immediately with plenty of water and seek medical attention.

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.

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 applications; 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

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



