# PLANITOP 110 ME

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




IN COMPLIANCE WITH EUROPEAN STANDARD EN 1504-3 R1 MAPEI REPAIR MORTAR

## 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, firmly 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**

## APPLICATION PROCEDURE

| TECHNICAL INFORMATION FOR THE APPLICATION | |
|---|---|
| **Composition of mix:** | 100 kg of **Planitop 110 ME**<br>30-31 kg water |
| **Maximum application thickness:** | 2 mm |
| **Application temperature range:** | Substrate and surrounding temperature from +5°C to +40°C |

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| | |
|---|---|
| **Pot life of mix:** | approx. 1 h (at +20°C) |
| **Surface drying time:** | approx. 30 min. (at +20°C) |
| **Waiting time before applying coating:** | 3 days on surfaces smoothed over using **Planitop 110 ME**; 7 days on surfaces repaired with mortar from the **Mapegrout** range followed by a finishing layer with **Planitop 110 ME** |

### Preparation of the substrate

The surface to be re-profiled must be thoroughly clean and sound. Remove dust, loose particles, and any traces of form release agents using high-pressure water jetting. Saturate the substrate with potable-grade water and remove excess water with compressed air or sponge, leaving the substrate saturated surface dry (SSD).

### Preparation of the mortar

Pour into a rust-free mixing vessel 6.0-6.2 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 and 500 rpm. Mix for 1 to 2 minutes, 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.
Instructions for the preparation of the mortar to create samples for Lab testing are contained in the TECHNICAL DATA table.

### Application procedure

Apply the mortar to the surface with a trowel to a maximum thickness of 1 to 2 mm per coat, making sure the surface is uniformly covered. It can also be applied up to 3 mm thickness for small patch filling. The surface finishing can be carried out with a flat metal trowel or sponge after approx. 30 minutes at +20°C.

### 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

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

## YIELD

15.3 liters/20 kg.

## PACKAGING

**Planitop 110 ME** is supplied in 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

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:** | grey |
| **Maximum size of aggregate:** | 0.1 mm |

| TECHNICAL INFORMATION FOR THE PREPARATION OF THE PRODUCT | |
|---|---|
| **Composition of mix:** | 100 parts by weight of **Planitop 110 ME** with 30-31% water |
| **Preparation of mix:** | Product mixing according to EN 196-1 |
| **Curing conditions:** | PCC (according to Annex A – EN 12190) |

| CHARACTERISTICS OF FRESH MIX (at +20°C - 50% R.H.) | |
|---|---|
| **Colour of mix:** | grey |
| **Consistency of mix:** | thixotropic - trowellable |
| **Density of mix:** | 1700 kg/m$^3$ |

| FINAL PERFORMANCES (31% mixing water) | | |
|---|---|---|
| **Performance characteristic** | **Test method** | **Product performance** |
| **Compressive strength** (after 28 days)**:** | EN 12190 | > 11 MPa |
| **Flexural strength** (after 28 days)**:** | EN 196-1 | > 3 MPa |
| **Concrete adhesion by pull-off:** | EN 1542 | 1.0 MPa |
| **Reaction to fire:** | EN 13501-1 | E |

*NOTES: Preparation of samples: compaction according to EN 196-1.*

## 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.*
*The values declared in the TECHNICAL DATA table (typical values) were obtained in compliance with test methods and curing cycles defined in the technical standards referenced therein. Therefore, please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.*

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

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*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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