

# PLANITOP 110

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** 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** 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** bonds extremely well to all concrete surfaces, and forms a compact, strongly adhered dust-free layer when cured.

## RECOMMENDATIONS

- Do not use **Planitop 110** 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** at temperatures lower than +5°C
- Do not add cement or aggregate to **Planitop 110**
- 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 water jetting. Remove any excess surface water using oil-free compressed air or a sponge if needed.

### Preparing the mortar

Pour into a rust-free mixing vessel 6 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, 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** 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

Depends upon the surface substrate conditions. However as a guide approx. 1.2 kg/m<sup>2</sup> per mm of thickness.

## YIELD

15.3 liters/20 kg.

## PACKAGING

20 kg bags.

## STORAGE

When stored in dry conditions in the original unopened bags **Planitop 110** 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** contains cement that when in contact with sweat or other body fluids causes an irritant alkaline reaction and allergic reactions to those predisposed. It may cause damage to the eyes. In case of contact with eyes or skin wash immediately with plenty of water and seek medical attention. During use wear protective gloves and goggles and take usual precautions for the handling of chemicals.

For further and complete information about the safe use of our product please refer to the latest version of our Safety Data Sheet.

TECHNICAL DATA (typical values)	
PRODUCT IDENTIFICATION	
Class according to EN 1504-3	R2
Type:	PCC
Consistency:	powder
Colour:	grey
Maximum size of aggregate (mm):	0.1
Bulk density (kg/m <sup>3</sup> ):	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 with 30 parts of water (approx. 6 liters of water per 20 kg bag)
Consistency of mix:	thixotropic - trowellable
Density of mix (kg/m <sup>3</sup> ):	1700

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 <b>Planitop 110</b> ; 7 days on surfaces repaired with mortar from the <b>Mapegrout</b> range followed by a finishing layer with <b>Planitop 110</b>	
<b>FINAL PERFORMANCE</b>		
Performance characteristic	Test method	Performance of product
Compressive strength (MPa):	EN 12190	> 13 (after 7 days) > 18 (after 28 days)
Flexural strength (MPa):	EN 196/1	> 3.0 (after 7 days) > 4.0 (after 28 days)
Bond to concrete (MC 0.40-type concrete) according to EN 1766 (MPa):	EN 1542	≥ 0.60 (after 28 days)
Reaction to fire:	Euroclass according to class declared by manufacturer	E

## IMPORTANT NOTES

Whilst we try to ensure that any advice, recommendations or information given 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 or responsibility accepted other than, that the product supplied by us will meet our written specification. The installer should ensure that our latest product data and safety information sheets have been consulted prior to use.

Please refer to the current version of the Technical Data Sheet, available from our website [www.mapei.com](http://www.mapei.com).

## LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into other project-related documents, but 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.com](http://www.mapei.com).

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All relevant references for the product are available upon request and from [www.mapei.com](http://www.mapei.com).

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