# PLANITOP FINE FINISH

Ultra fine textured skimming mortar for concrete; recommended for exposed finish surfaces









Ultra fine textured skimming compound for internal and external surfaces of porous or uneven concrete structures.

#### Some application examples

- · Levelling surface defects in cast concrete, such as gravel clusters and second pours.
- · Smoothing and finishing concrete walls before painting.
- · Skimming precast concrete elements and members such as buffer panels, beams and pillars.

## TECHNICAL CHARACTERISTICS

Planitop Fine Finish is a light grey coloured one-component, rapid-hardening, ultra fine-textured cementitious skimming mortar made from special binders, selected aggregates, special admixtures and synthetic polymers according to a formula developed in the MAPEI research laboratories. Thanks to its special composition, when Planitop Fine Finish is mixed with water it forms a mortar with good adhesion which is easy to apply with a spreader and makes finishing operations with a sponge float easier. Planitop Fine Finish may be used to skim surfaces down to a feather edge without the need for a bonding promoter, or may be applied in layers up to 3 mm thick. In good weather, coloured finishing products from the Elastocolor or Colorite lines may be applied one week after applying Planitop Fine Finish. If you would like to protect the substrate and create a finish that evens out the colour without hiding the structure of the surface, apply Colorite Beton semi-opaque paint that allows the formwork effect or exposed finish to remain visible. Planitop Fine Finish complies with the principles defined by EN 1504-9 ("Products and systems for protecting and repairing concrete structures: definitions, requirements, quality control and conformity assessment. General principles for the use of products and systems") and the minimum requirements of EN 1504-2 coating (C) according to principles MC and IR ("Concrete surface protection systems").

## **RECOMMENDATIONS**

- · Do not mix **Planitop Fine Finish** with more than the recommended amount of water and never add more water once it has started to set.
- · Do not apply **Planitop Fine Finish** if the temperature is lower than +5°C.
- · Do not add lime, cement or gypsum to **Planitop Fine Finish**.
- · Use Mapefinish or Mapefinish HD to protect hydraulic structures or surfaces subjected to abrasion.
- · Before applying **Planitop Fine Finish**, make sure the substrate is sound and that there are no traces of dust.
- · Do not use or apply **Planitop Fine Finish** if there are strong winds or on surfaces exposed to direct sunlight.
- · Do not apply on substrates with rising damp.

#### APPLICATION PROCEDURE

Preparation of the substrate



Surfaces must be perfectly clean and sound. Prepare substrates by removing all loose or detached areas of existing finish with power tools and then clean the surfaces where the mortar is to be applied with water to remove all traces of dust, otherwise the mortar will not adhere correctly. Wait until any excess water has evaporated off before applying **Planitop Fine Finish**. If necessary, use compressed air or a sponge to help remove any free-standing water. The substrate must be saturated with water but have a dry surface (s.s.d. condition). Never apply **Planitop Fine Finish** on substrates with surface water.

If the substrate is still powdery after cleaning it means there is a lack of surface cohesion; apply a primer from the MAPEI range to consolidate the surface (consult the Technical Services Department).

#### Preparation of the mortar

Pour 8.0-8.4 litres of water into a suitable clean container and slowly add a 20 kg bag of **Planitop Fine Finish** while mixing. Carefully mix the mortar for several minutes, making sure none of the powder has stuck to the sides or bottom of the container.

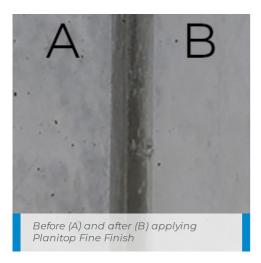
Keep mixing until thoroughly blended (completely lump-free). A mechanical mixer at low speed is recommended for this operation to prevent entraining too much air into the mix.

Mixing by hand is not recommended.

#### Application of the mortar

Spread a layer of mortar up to 3 mm thick on the prepared surface with a rubber or smooth metal spreader. Finish off the surface of **Planitop Fine Finish** with the same spreader or a damp sponge float a few minutes after application.

During sunny or windy weather, or in particularly hot areas, spray water on the surface of the skim coat when it starts to set (when it is touch dry). Keep spraying water for the next few days until the mortar has completely hardened to prevent quick drying and hygrometric shrinkage causing the formation of cracks.



# PRECAUTIONS TO BE TAKEN DURING AND AFTER APPLICATION

No particular precautions need to be taken if the temperature is around +20°C.

In hot weather store the product in a cool area. Do not leave exposed to direct sunlight and use cold water for mixing. In cold weather store the product in a closed area at a temperature of +20°C and protect from frost. Use lukewarm water for mixing.

After application, especially in hot or windy weather, protect the surface of the mortar to prevent the water evaporating off too quickly, otherwise plastic shrinkage cracks may form.

# **CLEANING**

Wash mortar from tools with water before it hardens. Once hardened, cleaning is much more difficult and it must be removed mechanically.

# **CONSUMPTION**

Approximately 1.2 kg/m<sup>2</sup> per mm of thickness.

# **PACKAGING**

20 kg bags.

## **STORAGE**



**Planitop Fine Finish** may be stored for 12 months in its original packaging in a dry place. If stored for longer periods it may take longer to set, but this will have no effect on its final characteristics. This product conforms to the prescriptions of Reg. (EC) N. 1907/2006 (REACH) - Annex XVII, item 47.

### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Planitop Fine Finish contains cement that when in contact with sweat or other body fluids causes irritant alkaline reactions and allergic reactions to those predisposed. It may damage the eyes. When applying the product it is recommend to use protective gloves and goggles and to take the usual precautions for handling chemicals. If the product comes in contact with the 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.

Planitop Fine Finish: ultra fine textured skimming com in compliance with EN 1504-2	pound for concrete; recommended for exposed finish surfaces	
TECHNICAL DATA (typical values)		
PRODUCT IDENTITY		
Consistency:	fine powder	
Colour:	light grey	
Maximum size of aggregate (mm):	0.2	
Bulk density (kg/m³):	700	
Dry solids content (%):	100	
APPLICATION DATA (at +23°C and 50% R.H.)		
Colour of mix:	light grey	
Mixing ratio:	100 parts of <b>Planitop Fine Finish</b> with 40-42 parts of water (8.0-8.4 litres of water per 20 kg bag)	
Consistency of mix:	thixotropic-trowellable	
Density of mix (EN 1015-6) (kg/m³):	1,600	
pH of mix:	approx. 12	
Maximum applicable thickness (mm):	3	
Application temperature:	+5°C to +35°C	
Pot life of mix:	approx. 45 minutes	
Setting time: - start: - finish:	approx. 50 minutes approx. 70 minutes	
Minimum waiting time before painting with coloured finishing products from the Elastocolor or Colorite lines:	7 days	
FINAL PERFORMANCE (41% mixing water - 3 mm thic	k laver)	



Performance characteristic	Test method	Requirements according to EN 1504-2 coating (C) principles MC and IR	Performance of product
Compressive strength (MPa):	EN 12190	not required	5 (after 1 day) 8 (after 7 days) 12 (after 28 days)
Flexural strength (MPa):	EN 196/1	not required	2 (after 1 day) 3 (after 7 days) 3.5 (after 28 days)
Adhesion to concrete (substrate in MC 0.40 type concrete) according to EN 1766 (MPa):	EN 1542	For rigid systems with no traffic: ≥ 1.0 with traffic: ≥ 2.0	≥1 (after 28 days)
Thermal compatibility measured as adhesion according to EN 1542 (MPa):  – freeze-thaw cycles with de-icing salts:  – storm cycles:	EN 13687/1 EN 13687/2	For rigid systems with no traffic: ≥ 1.0 with traffic: ≥ 2.0	≥1 ≥1
Impermeability expressed as coefficient of permeability to free water (kg/m²·h <sup>0.5</sup> ):	EN 1062/3	W < 0.1	W < 0.1 - Class III (low permeability) according to EN 1062-1
Permeability to water vapour – equivalent thickness of air S <sub>D</sub> (m):	EN ISO 7783/1	Class I $S_D < 5$ m Class II 5 m $\leq S_D \leq 50$ m Class III $S_D > 50$ m	S <sub>D</sub> < 0.5 Class I (permeable to water vapour)
Reaction to fire:	EN 13501-1	Euroclass	A2 - s1, d0

#### **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.



