



Planitop 200



Water-repellent cementitious skimming mortar with a fine, natural finish for concrete and plastic, glass and porcelain coatings

WHERE TO USE

Fine-grained, natural-finish skimming layer for internal and external concrete, cementitious and lime-mortar render, old quartz paint, scratch-effect plastic coatings and glass or porcelain mosaics.

Some application examples

- Levelling and finishing concrete walls, cementitious renders or cement lime mortar before painting.
- Smoothing walls, even over existing paint such as washable acrylic paints, quartz paints, textured paints, etc. as long as they are sound, clean and well anchored.
- Smoothing over glass or porcelain mosaics on walls.
- Smoothing gypsum wall-board panels (treated beforehand with **Primer G**).
- Smoothing mineral wood panels (such as Eraclit®).

TECHNICAL CHARACTERISTICS

Planitop 200 is a one-component, fine-grained, water-repellent cementitious skimming mortar available in grey or white, based on special high resistance binders, selected aggregate, special admixtures and synthetic powder polymers prepared according to a formula developed in the MAPEI research laboratories. The special composition of **Planitop 200**, mixed only with water, imparts high bonding strength, easy application with a flat trowel and easy finishing with a metal or sponge float.

Planitop 200 can be applied in a maximum thickness of 3 mm for coat.

For greater thickness but not more than 6 mm, two coats must be applied and a 4x4.5 mm MAPEI **Mapenet 150** (alkali-resistant glass fibre mesh in compliance with ETAG 004) inserted between the first and second coat.

Mapenet 150 must also be used when the surface to be skimmed is made up of different types of material.

In good weather, coloured finishing products from the **Silexcolor**, **Silancolor**, **Quarzolite**, **Elastocolor**, **Colorite** or **Dursilite** ranges may be applied one week after spreading on **Planitop 200**. The latter product may be used for decorating internal or external surfaces as long as they are partially covered and protected from direct exposure to the sun and rain.

Planitop 200 meets the main requirement of 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") and is classified as GP ("General purpose mortar for internal/external render"), category CS IV according to EN 998-1.

RECOMMENDATIONS

- Do not use **Planitop 200** for greater thicknesses (> 6 mm: use **Mapegrout LM2K**, **Mapegrout 430** or **Planitop Smooth & Repair**).

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Applying Planitop 200 on glass mosaic



Applying Planitop 200 on concrete



- Do not apply **Planitop 200** if the temperature is lower than +5°C.
- Do not add cement or other aggregates to **Planitop 200**.
- For the protection of hydraulic structures and surfaces subject to abrasion use **Mapefinish** or **Mapefinish HD**.
- Before applying **Planitop 200** make sure the substrate is sound and free from dust.
- Do not use on very windy days and do not apply **Planitop 200** when the surfaces are exposed to direct sunlight, because rapid drying at may occur.
- If applied in two successive coats, insert **Mapenet 150** between the coats.
- Apply a first protective primer coat (e.g. **Primer G**) over gypsum based renders.
- Do not apply products containing solvents on **Planitop 200**.
- Do not apply on de-humidifying render (use a skimming mortar from the **Mape-Antique** range or a coloured finishing product from the **Silexcolor** or **Silancolor** ranges).

APPLICATION PROCEDURE

Preparing the substrate

Surfaces that need to be treated must be perfectly clean and sound. If the substrate is covered with or old paint, make sure the paint is consistent and well bonded to the substrate. However, it is recommended to prepare the substrate by mechanical means removing any loose parts and existing crumbling finishings, then wash all surfaces that need to be treated with water in order to remove any dust residues that could interfere with bonding. Before applying **Planitop 200** wait until all surface water has disappeared or remove the water with compressed air or dampened cloths.

Absorbent substrates such as renders or concrete must be dampened with water beforehand. Substrates with old paintwork, plastic coatings or glass or porcelain mosaics must be perfectly dry when

applying **Planitop 200**.

If after washing the substrate still remains dusty, apply a protective primer coat from the MAPEI range (refer to the Technical Services Department).

Preparing the mortar

Pour 5-5.75 litres of water into a suitable clean bucket and slowly add, while mechanically stirring, a 25 kg bag of **Planitop 200**. Carefully mix for several minutes making sure to blend in any powder from the sides and bottom of the bucket to ensure a thorough mix. Mix until perfectly homogeneous and completely lump-free. A low speed mechanical stirrer is particularly recommended in order to avoid air entrainment. Avoid preparing the mix manually.

Applying the mortar

Apply a maximum 3 mm thick layer of mortar with a metal trowel.

The surface finishing of **Planitop 200** can be carried out just a few minutes after its application with the same metal trowel or with a traditional dampened sponge float.

Periods of high temperatures in windy environment and on sunny days, it is recommended to mist spray water over the smoothed surface after setting (in other words when finger prints are not left on the surface) and during the following days, when the mortar is completely hard, in order to avoid that a fast drying and hygrometric shrinkage could produce abnormal cracks.

PRECAUTIONS TO BE TAKEN DURING AND AFTER APPLICATION

No particular precautions need to be taken if the temperature is around +20°C. If the temperature is particularly high or low, or if there are strong breezes, follow the normal precautions for cementitious materials. To get the best finish and protection for the substrate, we recommend using a coloured finishing product from the **Silexcolor**, **Silancolor**, **Elastocolor**, **Quarzolite**, **Colorite** or **Dursilite** ranges. The latter product may only be used for decorating internal or external surfaces if they are partially covered and protected.

Cleaning

Due to the high bonding strength of **Planitop 200**, it is recommended to wash working tools before the mortar sets. Once the mortar has set, the product can be cleaned only by mechanical means.

COLOURS

Grey or white.

CONSUMPTION

Approximately 1.3 kg/m² per mm of thickness.

PACKAGING

25 kg bags.

Applying Planitop 200 on ceramic substrate

Planitop 200: water-repellent cementitious skimming mortar with a fine, natural finish for internal and external concrete and render and plastic, glass and porcelain coatings CE certified according to CPD 89/106 in compliance with EN 1504-2 and EN 998-1 standards

TECHNICAL DATA (typical values)

PRODUCT IDENTITY	
Consistency:	powder
Colour:	grey or white
Maximum size of aggregate (EN 1015-1) (mm):	0.4
Bulk density (kg/m ³):	1,300
Dry solids content (%):	100
APPLICATION DATA OF PRODUCT (at +20°C - 50% U.R.)	
Colour of mix:	grey or white
Mixing ratio:	100 parts of Planitop 200 with 20-23 parts of water (5-5.75 litres of water per 25 kg bag)
Consistency of mix:	thixotropic - applicable by trowel
Density of the mix (EN 1015-6) (kg/m ³):	1,600
Maximum applicable thickness (mm):	3
Application temperature range:	from +5°C to +35°C
Pot life of mix:	approximately 1 hour 30 minutes
Setting time: - initial: - end:	> 2 hours < 8 hours
Waiting time before painting with coloured finishing products from Silexcolor, Silancolor, Elastocolor, Quarzolite, Colorite or Dursilite:	7 days

FINAL PERFORMANCE (21% mixing water)

Performance characteristics	Test method	Requirements according to EN 1504-2 coating (C) principles MC and IR	Performance of product
Compressive strength (N/mm ²):	EN 12190	not required	> 5 (after 1 day) > 12 (after 7 days) > 20 (after 28 days)
Flexural strength (N/mm ²):	EN 196/1	not required	> 2.5 (after 1 day) > 4.0 (after 7 days) > 5.0 (after 28 days)
Bond strength on concrete (substrate in MC 0.40) according to EN 1766 (N/mm ²):	EN 1542	For rigid systems with no traffic: ≥ 1.0 with traffic: ≥ 2.0	≥ 2 (after 28 days)
Bond strength on substrate (N/mm ²): - plastic coating: - glass coating: - porcelain coating:	/	not required	≥ 1.5 (*) ≥ 1.0 ≥ 0.8
Thermal compatibility measured as bonding according to EN 1542 (N/mm ²): - freeze-thaw cycles with deicing salts: - thunder-shower cycle:	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/m ² ·h ^{0.5}):	EN 1062/3	W < 0.1	W < 0.1 - Class III (low permeability) according to EN 1062-1
Permeability to water vapour - equivalent air thickness S _D - (m):	EN ISO 7783/1	Class I S _D < 5 m Class II 5 m ≤ S _D ≤ 50 m Class III S _D > 50 m	S _D < 0.5 Class I (permeability to water vapour)
Performance characteristics	Test method	Requirements according to EN 998-1	Performance of product
Compressive strength after 28 days (N/mm ²):	EN 1015-11	CS I (from 0.4 to 2.5)	Category CS IV
		CS II (from 1.5 to 5.0)	
		CS III (from 3.5 to 7.5)	
		CS IV (≥ 6)	
Bond strength to substrate (concrete) (N/mm ²):	EN 1015-12	declared value and failure mode (FP)	≥ 1.5 Failure mode (FP) = B
Capillary action water absorption [kg/(m ² ·min ^{0.5}):	EN 1015-18	W 0 (not specified) W1 (≤ 0.40) W2 (≤ 0.20)	Category W 2
Coefficient of permeability to water vapour (μ):	EN 1015-19	declared value	< 90
Thermal conductivity (λ _{10, dry}) (W/m·K):	EN 1745	chart value	0.48 (P = 50%)
Reaction to fire:	EN 13501-1	Euroclass	E



Application of the second layer of Planitop 200 on a substrate made from different materials with Mapenet 150 embedded between the layers



Floating with Planitop 200

(*) Adhesion may vary according to the type of plastic coating.

Planitop 200



STORAGE

Planitop 200 can be stored for 12 months in its original unopened packaging in a dry place. The product complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH), item 47.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Planitop 200 is irritant, contains cement that on contact with sweat or other body fluids produces an irritant alkaline reaction and allergic reactions to those predisposed. Wear protective gloves and goggles. For further and complete information about the safe use of our product please refer to our latest version of the 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 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

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



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