



New Guard Coatings Group

A global reputation to protect.

The information herewith is given with the best of New Guard Coatings Group knowledge.

Rights are reserved to change and update the data without notice.

This information is not exhaustive and it is the user's responsibility to ensure that this data sheet is the most current by contacting their local New Guard Coatings Group branch prior to using the coating/product.

www.newguardcoatings.com

NORTH • SOUTH EAST • MIDLANDS • NORTH WEST • HULL • SCOTLAND

PLANITOP 217

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



WHERE TO USE

Coarse-grained, natural-finish skim coat on internal and external concrete, cementitious and lime-mortar render, old quartz paint and scratch-effect plastic coatings.

Some application examples

- Levelling and finishing masonry and concrete walls, cementitious and lime-cement render before painting.
- Smoothing the surface of walls, including walls painted with washable acrylic or quartz-based paint, plastic coating, etc., as long as they are sound, clean and well-bonded.
- Skimming plasterboard panels (if gypsum-based skimming mortar has been applied between the panels, treat beforehand with **Primer G**).
- Skimming mineral wood panels (such as Eraclit®).

TECHNICAL CHARACTERISTICS

Planitop 217 is a one-component, water-repellent, normal-hardening, coarse-grained, powdered cementitious skimming mortar available in grey and white, made from special, high-strength binders, selected aggregates, special additives and synthetic polymers according to a formula developed in the MAPEI research laboratories. When **Planitop 217** is mixed with just water, its special composition forms highly-adhesive mortar with high plasticity, which makes it easier to spread with a smooth trowel and facilitates finishing operations with a metal or sponge float.

Planitop 217 may be applied at a maximum thickness of 3 mm per coat. Apply thicker layers up to a maximum of 6 mm in two coats, and place **Mapenet 150** alkaline-resistant glass fibre mesh (in conformity to ETAG 004 guidelines) with a mesh size of 4 x 4.5 mm 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, apply coloured finishing products from the **Silexcolor**, **Silancolor**, **Quarzolite**, **Elastocolor**, **Colorite** or **Dursilite** ranges 1 week after applying **Planitop 217**. 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 217 conforms to the principles defined in 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 apply on glass mosaic (use **Planitop 200** or **Planitop 207**).
- Do not use **Planitop 217** for thick layers (for layers > 6 mm use: **Mapegrout LM2K**, **Mapegrout 430** or **Planitop Smooth & Repair**).
- Do not apply **Planitop 217** if the temperature is below +5°C.
- Do not add cement or aggregates to **Planitop 217**.
- To protect hydraulic structures or surfaces subject to abrasion, use **Mapefinish** or **Mapefinish HD**.
- Before applying, make sure the substrate is solid and that there are no traces of dust.
- Do not use **Planitop 217** if there are strong winds or on surfaces exposed to direct sunlight.

- If two layers are applied one after the other insert **Mapenet 150**.
- Apply a coat of suitable primer on gypsum-based substrates (such as **Primer G**).
- Do not apply products containing solvents over **Planitop 217**.
- 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

TECHNICAL INFORMATION FOR THE APPLICATION

Mixing ratio:	100 parts of Planitop 217 with 19-22 parts of water (4.75-5.5 l of water each 25 kg bag)
Maximum thickness of application:	3 mm
Application temperature range:	Temperatura ambiente e substrato da +5°C a +35°C
Pot life of mix:	approx. 1h
Waiting time before painting with coloured finishes from Silexcolor, Silancolor, Elastocolor, Quarzolite, Colorite or Dursilite ranges:	7 days

Preparation of the substrate

Surfaces must be perfectly clean and solid. Old paintwork must be sound and well-bonded to the substrate. We recommend, therefore, that substrates are prepared carefully by mechanically removing all loose or detached areas of existing finish, and then cleaning the surface where the mortar is to be applied with high pressure water to remove any traces of dust which could impede adhesion. Before applying **Planitop 217**, wait until the film of surface water has evaporated or dry it off with compressed air or dry rags.

Absorbent substrates, such as render and concrete, must be dampened beforehand with water, while substrates with old paintwork must be perfectly dry when applying **Planitop 217**.

If the substrate is powdery after cleaning, which indicates a lack of surface cohesion, apply a primer from the MAPEI range to consolidate the surface (please contact the Technical Services Department).

Preparation of the mortar

Pour 4.75-5.5 litres of water into a suitable clean container and slowly add the contents of a 25 kg bag of **Planitop 217** while mixing. Mix thoroughly for several minutes, making sure that there are no traces of powder 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.

Avoid mixing the product manually.

Instructions for the preparation of skimcoat for Lab testing specimens can be found in the TECHNICAL DATA section.

Application of the mortar

Spread the mortar on the surface prepared as described above in coats up to 3 mm thick using a smooth metal trowel. Finish off the surface of **Planitop 217** using the same trowel or a traditional damp sponge float a few minutes after application.

During hot or windy weather, or in particularly hot areas, spray water on the surface of the smoothing compound when it starts to set (that is, when it may be pressed lightly without leaving fingerprints) and over the next few days when the mortar has completely hardened, to avoid quick drying and hygrometric shrinkage which may cause cracks to form.



Removing all the plastic covering that has not adhered



Application of Planitop 217



Floating the surface of Planitop 217

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 winds, 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

Because of the high adhesion of **Planitop 217**, we recommend cleaning tools with water before the mortar starts to set. Once the mortar has set, tools must be cleaned mechanically.

COLOUR

Grey or white.

CONSUMPTION

Approximately 1.3 kg/m² per mm of thickness.

PACKAGING

25 kg bags.

STORAGE

Planitop 217 may be stored for up to 12 months in its original packaging in a dry place.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website www.mapei.com.
PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Identification to EN 1504-2 (methods and principles):	Coating (C) – principles MC and IR
Type according to EN 998-1:	GP
Consistency:	powder
Colour:	Grey or white
Maximum size of aggregate:	1.0 mm

TECHNICAL INFORMATION OF THE PREPARATION OF THE PRODUCT

Mixing ratio:	100 parts of Planitop 217 with 19 parts of water (4.75 l of water each 25 kg bag).
Preparation of the mix:	Mixing of product according to EN 196-1
Conditions of curing:	PCC (according to Annex A – EN 12190) for EN 1504-2

CHARACTERISTICS OF THE FRESH MIX (at +20°C - 50% R.H.)

Colour of mix:	Grey or white
Consistency of mix:	thixotropic - trowellable
Density of mix:	1650 kg/m ³

Hardening time	
Initial hardening:	> 3h
Final hardening:	< 8h

FINAL PERFORMANCES

According to curing times defined in test methods

(Compaction of samples 40x40x160mm according to EN 196-1 for tests compliant to EN 12190)

Performance characteristic	Test method	Requirements EN 1504-2 (C) MC e IR	Requirements EN 998-1 GP – CS IV	Performance of product
Compressive strength:				
1 day	EN 12190	Not required	Not required	> 2 MPa
7 days				> 8 MPa
28 days				> 16 MPa
Flexural strength:				
1 day	EN 196-1	Not required	Not required	> 2 MPa
7 days				> 3 MPa
28 days				> 4 MPa
Adhesion to concrete by pull-off:	EN 1542	For rigid systems without traffic \geq 1.0 MPa	Not required	\geq 1.0 MPa
Thermal compatibility – freeze- thaw cycling with de-icing salt (50 cycles) after thunder-shower cycling (10 cycles):	EN 13687-1 EN 13687-2	For rigid systems without traffic \geq 1.0 MPa	Not required	\geq 1.0 MPa
Impermeability expressed as coefficient of permeability to water W:	EN 1062-3	$W < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$	Not required	$W < 0,1$ $\text{kg/m}^2 \cdot \text{h}^{0.5}$ Class W₃ (low permeability to water) according to EN 1062-1
Permeability to water vapour (wet-cup – method B) expressed as equivalent air thickness S:	EN ISO 7783	Class I ($S < 5 \text{ m}$) Class II ($5 \text{ m} \leq S \leq 50 \text{ m}$) Class III ($S > 50 \text{ m}$)	Not required	$S < 0.5 \text{ m}$ Class I (permeable to water vapour)
Compressive strength:	EN 1015-11	Not required	CS I (0.4 to 2.5 MPa) CS II (1.5 to 5.0 MPa) CS III (3.5 to 7.5 MPa) CS IV ($\geq 6 \text{ MPa}$)	Category CS IV
Adhesion to substrate:	EN 1015-12	Not required	Declared value and failure pattern (FP)	$\geq 1.0 \text{ MPa}$ Failure pattern (FP) = B
Adhesion to substrate: (flexible coatings):	-	Not required	Not required	$\geq 1.0 \text{ MPa}^*$
Water absorption due to capillary action:	EN 1015-18	Not required	$W_C 0$ not specified $W_C 1 \leq 0.40$ $\text{kg}/(\text{m}^2 \cdot \text{min}^{0.5})$ $W_C 2 \leq 0.20$ $\text{kg}/(\text{m}^2 \cdot \text{min}^{0.5})$	Category W_C 2
Coefficient of permeability to water vapour (μ):	EN 1015-19	Not required	Declared value	$\mu \leq 30$
Thermal conductivity ($\lambda_{10, \text{dry}}$):	EN 1745	Not required	Chart value	0.68 W/m·K (P = 50%)
Reaction to fire:	EN 13501-1	Euroclass	Euroclass	E

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

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 force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website www.mapei.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

1109-9-2022-en

Any reproduction of texts, photos and illustrations published here is prohibited and subject to prosecution

