# PLANITOP FAST 330

Quick-setting, fibre-reinforced levelling cementitious mortar, for internal and external floors and walls, applied at thicknesses from 3 to 30 mm to smooth out irregularities







# WHERE TO USE

To smooth irregular internal and external substrates to quickly make them suitable for laying ceramic and stone or for waterproofing with liquid membrane or flexible cementitious systems. Applied at a thickness from 3 to 30 mm.

#### Some application examples

- Levelling reinforced concrete surfaces in swimming pools to make them ready to receive (after just 24 hours at +20°C) Mapelastic Zero, Mapelastic Smart, Monolastic, Mapelastic Turbo and Mapelastic AquaDefense waterproofing systems or, after 4 hours at +20°C, for directly laying all types of ceramics and mosaics.
- Smoothing and levelling clean internal and external substrates made from products normally used in the building industry, such as floor slabs and screeds made using cement or special binders (such as Topcem, Topcem Pronto, Mapecem and Mapecem Pronto) and old ceramic and stone floors in order to quickly prepare them for laying (after just 4 hours at +20°C), ceramic and stone materials which are not sensitive to damp, or for applying waterproofing systems such as Mapelastic Zero, Mapelastic Smart, Monolastic, Mapegum WPS, Mapelastic Turbo, Mapelastic AquaDefense (after just 24 hours at +20°C).
- Repairing or forming slopes on terraces and balconies.

# **TECHNICAL CHARACTERISTICS**

**Planitop Fast 330** is a grey-coloured one-component cementitious mortar with very low emission of volatile organic compounds (EMICODE ECI) made using special cementitious binders, selected aggregates materials, synthetic resins and special additives according to a formula developed in MAPEI's Research & Development laboratories.

When mixed with water, it forms a blend with good workability which may be applied on vertical surfaces by trowel, characterised by its high bonding strength to all substrates normally used in the building industry. **Planitop Fast 330** hardens quickly even when applied in thick layers without shrinking or cracking, and forms a strong layer suitable for laying ceramic, glass mosaic and stone coatings.

**Planitop Fast 330** 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/extarnal render"), category CS IV according to EN 998-1.

### RECOMMENDATIONS

- Do not mix **Planitop Fast 330** with cement or other products and never add water to the mix once it has started to set.
- Protect the surface to avoid the water evaporating too quickly in hot and/or windy weather.
- After applying **Planitop Fast 330**, protect the surface from water for at least 4 hours at +20°C and 24 hours at +5°C, and in all cases, until it has hardened.
- Apply at a temperature between +5°C and +35°C.
- Do not leave bags of **Planitop Fast 330** exposed to the sun for long periods before use.
- Do not use this product on flexible, deformable substrates such as wood and wood conglomerates, metal, rubber, PVC and linoleum.

### APPLICATION PROCEDURE

TECHNICAL INFORMATION FOR THE APPLICATION			
Composition of the mix:	100 kg of <b>Planitop Fast 330</b> 18-20 kg of water		
Thickness of layer:	from 3 to 30 mm		
Application temperature range:	surrounding and substrate temperature from +5°C to +35°C		
Pot life:	approximately 20 min. (at +20°C)		
Waiting time before the installation of ceramic coverings:	4 h at +20°C 24 h at +5°C		

#### Preparation of the substrate

In case of restoration of concrete structures, remove all deteriorated, loose and contaminated concrete to form a sound, rough and strong substrate. Any previous restoration work which is not soundly bonded should be removed by using suitable equipment (jack-hammer, hydro-scarifying, etc...).

Remove traces from previous hydro-scarifying operations and all dust, rust, cement laitance, grease, oil and old paint from the concrete and reinforcement rods by sandblasting or by treating the surface with a high-pressure water jet.

After preparation, for the repair of concrete with a mortar thickness of up to 5 mm, the concrete surface to be repaired must be completely uneven with irregularities at least 5 mm deep, whith the aggregate fraction open and completely exposed and without any traces of laitance so that the mortar adheres and keys correctly to the substrate. For the repair of concrete with a mortar thickness of more than 5 mm, the concrete surface to be repaired must be completely uneven with irregularities at least 5 mm deep, whith the aggregate fraction open and completely exposed and without any traces of laitance so that the mortar adheres and keys correctly to the substrate.

Surfaces exposed to direct sunlight or winds must be wetted beforehand.

Particularly absorbent substrates (such as bricks, lightweight concrete blocks, etc.) must be wetted before applying **Planitop Fast 330**, especially when applied in thin layers.

Gypsum substrates and anhydrite screeds must be perfectly dry, hard enough for the final intended use and free of dust. They must also be treated with **Primer G** or **Eco Prim T Plus**.

Concrete surfaces must be well cured, clean, free of dust and cement laitance and, where necessary, treated with **Eco Prim Grip Plus**.

Smooth substrates and substrates with low or no absorbency, such as ceramics, terrazzo or concrete with a finish of smoothing and levelling compound, must be cleaned, mechanically abraded and treated with **Eco Prim Grip Plus**.

#### Preparation of the mix

Pour a 25 kg bag of **Planitop Fast 330** into a container with 4.5-5 litres of clean water while mixing (18-20 parts of water per 100 parts in weight of **Planitop Fast 330**) and mix with a low-speed mixer to form a smooth, lump-free blend. The blend remains workable for approximately 20 minutes (at +20°C). The product is not compatible for use with rendering machines.

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Instructions for the preparation of the mortar to create samples for Lab testing are contained in the TECHNICAL DATA table.

#### Application of the mix

On walls:

Apply a feather edge layer of **Planitop Fast 330** on the substrate to form a perfectly buttered layer and then immediately apply the product at the thickness required to level and even out the substrate in a single layer (up to a maximum of 3 cm).

If thick layers are required, **Planitop Fast 330** may be applied with a smooth trowel by pressing it down well onto the substrate and then levelling off with a metal straight edge (final finishing with a sponge float). <u>On floors:</u>

Apply the mix with a long metal trowel or a straight edge.

#### Laying coating materials or waterproofing layers

Waterproofing layers of **Mapelastic Zero**, **Mapelastic Smart**, **Monolastic**, **Mapelastic Turbo**, **Mapelastic AquaDefense** and **Mapegum WPS** may be applied after approximately 24 hours at +20°C. Ceramic tiles, stone (not sensitive to moisture) and all types of mosaic may be laid after approximately 4 hours at +20°C and after 24 hours at +5°C.

#### Curing

Protect the surface against water evaporating too quickly, especially during hot and/or windy weather and avoid the mortar coming into contact with water for the first 4 hours at +20°C and for the first 24 hours at +5°C.

# CLEANING

Tools and containers may be cleaned using water while **Planitop Fast 330** is still fresh.

### CONSUMPTION

Approx. 1.55 kg/m<sup>2</sup> per mm of thickness (1 cm thick: 15.5 kg/m<sup>2</sup>).

# PACKAGING

25 kg bags.

# STORAGE

Planitop Fast 330 may be stored up to 12 months in its original packaging.

The special packaging, made from 25 kg vacuum-packed polyethylene bags, offers a better protection from accidental rain. Some characteristics of **Planitop Fast 330** make it particularly sensitive to improper storage conditions; it advisable to stock the product in a dry and covered place at a temperature between +5 and +35°C, in its original unopened packaging.

### 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 according to EN 1504-2: (methods and principles)	Coating (C) - MC and IR principles
Definition according to EN 998-1:	GP



Consistency:	powder
Colour:	grey
Maximum size of aggregate:	1.0 mm
EMICODE:	EC1 - very low emission

TECHNICAL INFORMATION FOR THE PREPARATION OF THE PRODUCT			
Composition of mix:	100 parts by weight of <b>Planitop Fast 330</b> with 19% of		
	water		
Preparation of mix:	mixing of product according to EN 196-1		
Curing conditions:	PCC (according to Annex A – EN 12190) for EN 1504-2		

CHARACTERISTICS OF FRESH MIX (at +20°C - 50% R.H.)			
Colour of mix:	grey		
Consistency of mix:	plastic / trowellable		
Density of mix:	1850 kg/m <sup>3</sup>		

FINAL PERFORMANCE According to curing times defined in test methods				
Performance characteristic	Test method	Requirements EN 1504-2 (C) MC and IR	Requirements EN 998-1 GP – CS IV	Product performance
Compressive strength:	EN 12190	not required	not required	≥ 20 MPa
Adhesion to concrete by pull-off:	EN 1542	for rigid systems without traffic ≥1.0 MPa	not required	≥ 2.0 MPa
Impermeability expressed as coefficient of permeability to water <i>W</i> :	EN 1062-3	W < 0.1 kg/m²·h <sup>0.5</sup>	not required	<b>W &lt; 0.1 kg/m²⋅h<sup>0.5</sup></b> Class W <sub>3</sub> (low permeability to water) according to EN 1062-1
Water-vapour permeability (wet-cup - method B) expressed as equivalent air-layer thickness S:	EN ISO 7783	Class I S < 5 m Class II 5 m ≤ S ≤ 50 m Class III S > 50 m	not required	S < 5 m Class I (permeabe to water vapour)
Compressive strength:	EN 1015-11	not required	CS I (from 0.4 to 2.5 MPa) CS II (from 1.5 to 5.0 MPa) CS III (from 3.5 to 7.5 MPa) CS IV (≥ 6 MPa)	≥ 20 MPa Category CS IV
Adhesion to the substrate:	EN 1015-12	not required	declaed value and failure mode (FP)	≥ 1.5 MPa (FP) = B
Water absorption due to capillary action:	EN 1015-18	not required	$W_{C}$ 0 not specified $W_{C}$ 1 ≤ 0.40 kg/(m <sup>2</sup> ·min <sup>0.5</sup> ) $W_{C}$ 2 ≤ 0.20 kg/(m <sup>2</sup> ·min <sup>0.5</sup> )	Category W <sub>C</sub> 2
Water-vapour permeability coefficient (µ):	EN 1015-19	not required	declared value	µ ≤ 80



Thermal conductivity (λ <sub>10,dry</sub> ):	EN 1745	not required	chart value	0.68 W/m⋅K (P = 50%)
Reaction to fire:	EN 13501-1	Euroclass	Euroclass	A1/A1 <sub>FL</sub>

#### NOTES:

Sample preparation according to EN 1504-2: compacting according to EN 196-1.

### 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** 

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