# PLANEX HR MAXI

Rapid-drying, moisture resistant, self-levelling smoothing compound for layers 2 to 20 mm thick











# **CLASSIFICATION ACCORDING TO EN 13813**

Smoothing layers of **Planex HR Maxi** applied according to the specifications in this Technical Data Sheet are classified as CT-C30-F6-A1<sub>F1</sub> in compliance with EN 13813 Standards.

## WHERE TO USE

**Planex HR Maxi** is suitable for internal and external applications and is used to level off new and existing substrates and remove differences in thickness from 2 to 20 mm to make them suitable for laying all types of floor covering, including resilient and textile.

In the absence of special aesthetic requirements, **Planex HR Maxi** can be left exposed as a finished floor and can be walked on (even outdoors). In case of transit of trolleys or vehicles **Planex HR Maxi** must be covered with suitable flooring. **Planex HR Maxi** is particularly recommended for use in areas where high resistance to static and dynamic loads is required.

Thanks to its special formulation and good resistance to moisture, **Planex HR Maxi** may also be used for external applications or on substrates that are not completely dry or which have a high level of residual moisture.

### Some application examples

- · Smoothing over concrete floors and cementitious screeds or made from **Topcem**, **Mapecem**, **Mapecem Pronto** or **Topcem Pronto**.
- · Smoothing over anhydrite substrates.
- · Smoothing over heated floors.
- · Smoothing over existing concrete, terrazzo, ceramic, natural stone and magnesite floors.
- · Smoothing over concrete and cementitious-based substrates before bonding non-welded resilient floor tiles with reactive adhesive in areas that need to be washed or rinsed frequently.
- · Smoothing over concrete substrates with rising damp before placing PVC isolating sheets on which resilient flooring for sporting and non-sporting use is to be laid.

# **TECHNICAL CHARACTERISTICS**

**Planex HR Maxi** is a grey coloured powder made from special rapid-hydrating and rapid-setting cement, selected silica sand, resins and special admixtures according to a formulation developed in the MAPEI research laboratories. When **Planex HR Maxi** is mixed with water, it forms a rapid-drying, free-flowing, self-levelling mortar with good workability that adheres very strongly to the substrate.

**Planex HR Maxi** is applied in layers from 2 to 20 mm thick per layer. It does not shrink or crack and reaches a high level of compressive and flexural strength and resistance to indentation and abrasion.

**Planex HR Maxi** dries very quickly: for example, ceramic may be bonded after around 3 hours and resilient and textile floor covering may be bonded after 24-72 hours, depending on the thickness of the layer of mortar.

## RECOMMENDATIONS



- · Do not add water to the mix once it starts to set.
- $\cdot$  Do not add lime, cement or gypsum to the mix.
- · If another layer of **Planex HR Maxi** needs to be applied after the first one has completely dried out, apply a coat of primer such as **Primer G** or **Eco Prim T Plus** diluted 1:1 by volume with water.
- · Do not use Planex HR Maxi on metal, wood that is not highly stable, rubber, PVC or linoleum.
- · Do not use **Planex HR Maxi** if the temperature is lower than +5°C.
- · Do not apply Planex HR Maxi in layers less than 3 mm thick when laying parquet.

## **APPLICATION PROCEDURE**

#### Preparation of the substrate

Substrates must comply with the specifications contained in the applicable standards for each country. Substrates must be sound and free of all traces of dust, loose or detached parts, varnish, wax, oil, rust and gypsum. Cementitious-based surfaces that are not sufficiently sound must be removed or, where possible, consolidated with a suitable MAPEI system (such as **Prosfas, Eco Prim PU1K** or **Primer MF**).

Repair any cracks present in the substrate with **Eporip** or **Eporip SCR**.

Treat dusty or particularly porous internal cementitious substrates with a suitable primer such as **Primer G** (1 part of **Primer G** with 1-2 part of water in volume), **Eco Prim T Plus** (1 part of **Eco Prim T Plus** with 3 parts of water by volume) or **Livigum** (1 part of **Livigum** with 5 parts of water by volume) to hold the dust and even out the absorbency of the substrate.

The same substrates, if external must be treated with a suitable epoxy-based primer such as, **Primer MF**, **Primer SN** or **Mapecoat TNS Primer EP/W**. Immediately after the application of **Primer MF**, **Primer SN** or **Mapecoat TNS Primer EP/W**, the surface must be broadcasted with dry quartz sand (grain size ≥ 1.2 mm).

The remains of sand which are not well bonded must be removed before applying Planex HR Maxi.

Anhydrite screeds may only be levelled off with **Planex HR Maxi** after sanding the surface and applying a coat of a suitable primer (such as **Primer G** or **Eco Prim T Plus** applied neat or diluted 1:1 with water).

Prime existing ceramic and natural stone surfaces with a coat of **Eco Prim T Plus** or **Eco Prim Grip** after cleaning the surface with a suitable detergent and, if required, abrading the surface mechanically.

## Preparation of the mix

Pour a 25 kg bag of **Planex HR Maxi** into a container with 4.75-5 litres of clean water while mixing and keep mixing mix with an electric mixer at low-speed to form a smooth, lump-free, self-levelling mix. If a mix with lower self-levelling properties is required in order to create a slope, the mixing water may be reduced to 3.75 litres per 25 kg bag. Leave to stand for 2 to 3 minutes and then mix again for a short time. The product is now ready for use. Each batch of **Planex HR Maxi** must be applied within 20-30 minutes of mixing at +23°C.

#### Spreading the mix

Spread a layer of **Planex HR Maxi** from 2 to 20 mm thick with a large metal spreader or rake, holding the spreader at a slight angle to obtain the thickness required.

If a second layer is required, we recommend applying it as soon as the first one sets to foot traffic (approx. 1 hour at +23°C); if the first layer has completely dry and hardened, we recommend applying a suitable primer beforehand. Surfaces smoothed over with **Planex HR Maxi** may be sanded and are ready to bond ceramic flooring after 3 hours, stone flooring after 24 hours and resilient, textile and wooden flooring after 24-72 hours at +23°C (waiting times may vary depending on the surrounding temperature and level of humidity).





# **CLEANING**

Remove **Planex HR Maxi** from tools and surfaces while still wet with water. Once hardened, cleaning must be carried out mechanically.



# **CONSUMPTION**

The consumption rate of Planex HR Maxi is 1.7 kg/m<sup>2</sup> per mm of thickness.

# **PACKAGING**

Planex HR Maxi is available in 25 kg bags.

## **STORAGE**

**Planex HR Maxi** remains stable for 12 months if stored in a dry place. If stored for longer periods it may take **Planex HR Maxi** longer to set but without affecting its final characteristics.

## 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.

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TECHNICAL DATA (typical values) Complies with the following standards: – EN 13813 CT-C30-F6-A1 <sub>FL</sub> – French: superior quality skimming compound (P3) according to UPEC classification	
PRODUCT IDENTITY	
Consistency:	fine powder
Colour:	grey
Bulk density (kg/m³):	1350
Dry solids content (%):	100
EMICODE:	EC1 Plus - very low emission
APPLICATION DATA (at +23°C and 50% R.H.)	
Mixing ratio:	19-20 parts of water per 100 parts by weight of <b>Planex HR Maxi</b>
Applied thickness per layer:	2 to 20 mm
Self-levelling:	yes
Density of mix (kg/m³):	2,100
pH of mix:	approx. 12
Application temperature:	from +5°C to +35°C
Workability time:	20-30 mins.
Setting time:	50-90 mins.
Set to foot traffic:	3-4 hours



Waiting time before bonding flooring: - ceramic: - stone: - resilient and textile: - parquet:	3 hours 24 hours 24/72 hours 24/72 hours
FINAL PERFORMANCE	
Compressive strength (N/mm²): – after 28 days:	30
Flexural strength (N/mm²): – after 28 days:	6.5

# **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
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