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Planex HR

**Rapid-drying
moisture-resistant
self-levelling smoothing
compound for layers
1 to 10 mm thick**



CLASSIFICATION ACCORDING TO EN 13813

Smoothing layers of **Planex HR** applied according to the specifications in this Technical Data Sheet are classified as CT-C25-F6-A1_{fl}-s1 in compliance with EN 13813 Standards.

WHERE TO USE

Planex HR is suitable for both interior and exterior applications to level new and existing substrates and to remove differences in thicknesses from 1 to 10 mm prior to installing all types of floor coverings, including but not limited to: ceramic, stone, timber, carpet, vinyl and LVT planks.

Planex HR 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** 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 heated screeds made from **Mapecem**, **Mapecem Pronto** or **Topcem Pronto**.
- Smoothing over heated floors.
- Smoothing over existing concrete, terrazzo, ceramic, natural stone and magnesite floors.

- Smoothing over concrete and cement-based substrates before bonding non-welded resilient floor tiles with reactive adhesives in areas that need to be washed or rinsed frequently.
- Smoothing over concrete substrates with rising damp before placing PVC isolating sheets (such as **Mapelay**) on which resilient flooring for sporting and non-sporting use is to be installed.

TECHNICAL CHARACTERISTICS

Planex HR 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** 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 is applied in layers from 1 to 10 mm thick per layer. It does not shrink or crack and reaches a high level of compressive and flexural strength and resistance to fingerprints and abrasion.

Planex HR dries quickly: ceramics may be bonded after around 3 hours and resilient and textile floor covering may be bonded after 24-48 hours, depending on the thickness of the layer of mortar installed.



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Application of Planex HR on existing ceramic tiles in damp surroundings



Application of Planex HR with a metal trowel

RECOMMENDATIONS

- Do not add water to the mix once it starts to set.
- Do not add lime, cement or gypsum to the mix.
- Do not use **Planex HR** on metal or timber that is not highly stable, rubber, PVC or linoleum.
- Do not use **Planex HR** if the temperature is lower than +5°C.
- Do not apply **Planex HR** in layers less than 3 mm thick when laying timber flooring.

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.

Cement based surfaces that are not sufficiently sound must be removed or, where possible, consolidated with a suitable MAPEI system (such as **Mapeproof 1K Turbo** or **Primer MF**).

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

Where required, check the humidity content with a carbide hygrometer or an electric moisture meter to ensure compliance with Australian Standards before commencing work. If required to protect the floor covering, apply a suitable moisture vapour barrier as per applicable products TDS.

Concrete or cementitious surfaces must comply with a minimum surface rating of CSP 3. Treat dry concrete surfaces with a suitable primer such as **Eco Prim T Plus** (1 part of **Eco Prim T Plus** with 2 parts of water in volume) to hold the dust and even out the absorbency of the substrate. For damp substrates, treat as per external priming section

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.

External priming

For priming the above substrates in an external application, use **Primer MF**, **Planiseal MR** or **Primer SN**. As soon as the epoxy has been applied, fully broadcast with **Quartz 0.9 AU** whilst fresh. Once the epoxy has cured, remove excess sand and vacuum clean. Do not install externally if rain is expected within 48 hours and do not apply over surface water.

Preparation of the mix

Pour a 20 kg bag of **Planex HR** into a mixing bucket containing 3.8 - 4.0 litres of clean water.

Mix with an electric mixer at low-speed (300RPM) to obtain a smooth, lump-free mix.

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** must be applied within 20-30 minutes of mixing at +23°C.

Spreading the mix

Spread a layer of **Planex HR** from 1 to 10 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 dried and hardened, we recommend applying a suitable primer beforehand.

Surfaces smoothed over with **Planex HR** 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 24-48 hours at +23°C (waiting times may vary depending on the surrounding temperature and level of humidity).

For all other forms of substrates and for further Surface Preparation information, please refer to **MAPEI's Surface Preparation Requirements brochure - Floor Covering Installation Systems** available on our website www.mapei.com.au or alternatively email technical-au@mapei.com.au and request a copy.

Cleaning

Remove **Planex HR** from hands, tools and surfaces while still wet with water.

Once hardened, cleaning must be carried out mechanically.

CONSUMPTION

The consumption rate of **Planex HR** is 1.7 kg/m² per mm of thickness.

PACKAGING

Planex HR is available in 20 kg bags.

STORAGE

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

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

For further and complete information about the safe use of our product please refer to the latest version of our Safety Data Sheet available for download from our website at www.mapei.com.au.

TECHNICAL DATA (typical values)

Complies with the following standards:

– EN 13813 CT-C25-F6-A1ff-s1

PRODUCT IDENTITY

Consistency:	fine powder
Colour:	grey
Bulk density (kg/m ³):	1,350
Dry solids content (%):	100
Green Star™:	very low VOC content g/l and contributes valuable points towards Green Star™ credits

APPLICATION DATA (at +23°C and 50% R.H.)

Mixing ratio:	19-20 parts of water per 100 parts in weight of Planex HR
Applied thickness per layer:	1-10 mm
Self-levelling:	yes
Density of mix (kg/m ³):	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 24/48 hours 24/48 hours

FINAL PERFORMANCE

Compressive strength (N/mm ²): – after 28 days:	25
Flexural strength (N/mm ²): – after 28 days:	6.5

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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.au.

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.au.

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



This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.

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

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