# ULTRAPLAN RENOVATION

Fast drying fibre-reinforced self-levelling compound for thicknesses from 3 to 40 mm





### **CLASSIFICATION ACCORDING TO EN 13813**

**Ultraplan Renovation** smoothing compound as described in this data sheet is classified as CT-C25-F6-A1<sub>FL</sub> according to European Norm EN 13813.

### WHERE TO USE

**Ultraplan Renovation** is used in interiors for levelling and smoothing differences in thicknesses from 3 to 40 mm on new or existing substrates, preparing them to receive all kinds of flooring where high resistance to loads and traffic is required. **Ultraplan Renovation** is especially suitable for areas subject to wheeled chairs and for use with underfloor heating systems.

#### Some application examples

- Levelling concrete slabs and cementious screeds or Mapecem, Mapecem Pronto, Topcem or Topcem Pronto based screeds.
- Levelling anhydrite substrates.
- Levelling underfloor heating systems.
- Levelling old and new wooden substrates: timber floors, chip-board panels, floor boards, plywood, parquet.
- Levelling existing concrete pavements, terrazzo, ceramic and natural stone floors.

### **TECHNICAL CHARACTERISTICS**

**Ultraplan Renovation** is a grey powder consisting of special cements with rapid setting and hydration, synthetic fibres, together with selected graded silica sand, resins and special admixtures, prepared according to a formula developed in MAPEI Research Laboratories.

When mixed with water **Ultraplan Renovation** becomes a highly fluid and easily workable mortar, with perfect self-levelling capacity, high adhesion to the substrate and ultra-rapid drying.

**Ultraplan Renovation** can be applied with an automatic pressure pump at distances over 100 m. **Ultraplan Renovation** can be spread in thicknesses up to 40 mm in a single application without shrinkage, cracking or crazing, and develops very high compressive and flexural strength, as well as resistance to indentation and abrasion.

**Ultraplan Renovation** is ready to receive the flooring as soon as it has dried: the time required depends on the thickness of the levelling layer, the environmental temperature and relative humidity and on the absorption of the substrate.



### RECOMMENDATIONS

- Do not add more water to a mix which has already begun to set.
- Do not add lime, cement or gypsum to the mix.
- Do not use for exterior levelling works.
- Do not use on substrates subject to continuous rising damp.
- Do not use as an unbonded screed. **Ultraplan Renovation** must always be anchored onto a solid substrate.
- Do not use on metal surfaces.
- Do not apply **Ultraplan Renovation** at temperatures below +5°C.

### **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 PU 1K** or **Primer MF**). Repair any cracks present in the substrate with **Eporip** or **Eporip SCR**.

Treat dusty or particularly porous concrete surfaces with a suitable primer such as **Primer G** (diluted 1:1 with water) or **Eco Prim T Plus** (diluted up to 1:4 with water) to hold the dust and even out the absorbency of the substrate.

Anhydrite screeds may only be levelled off with **Ultraplan Renovation** after sanding the surface and applying a suitable primer(such as **Primer G** undiluted or **Eco Prim T Plus** diluted up to 1:2 with water).

Prime existing ceramic and natural stone surfaces with a coat of **Eco Prim T Plus** or **Eco Prim Grip Plus** after cleaning the surface with a suitable detergent and, if required, abrading the surface mechanically. Wooden substrates must be clean and perfectly fixed; any paints, oil or waxes must be removed and open joints have to be sealed with **Planipatch** or **Planipatch Xtra** mixed with **Latex Plus** prior to the application of **Ultraplan Renovation**.

#### Preparation of the mix

Pour a 25 kg bag of **Ultraplan Renovation** into a bucket containing 4.25-4.50 l of clean water and mix with a low speed electric mixer to obtain a homogeneous, self-levelling, lump free mix.

Larger quantities of **Ultraplan Renovation** can be prepared in suitable mixers.

After 2-3 minutes of **Ultraplan Renovation** slackening, the mix should be restirred and then it is ready for use. The amount of **Ultraplan Renovation** mixed at any time must be used within 30-40 minutes (at a temperature of +23°C).

#### Application of the mix

Apply **Ultraplan Renovation** in a single coat from 3 to 40 mm with a large metal trowel or squeegee. **Ultraplan Renovation** can also be applied with an automatic pressure pump.

Due to its remarkable self-levelling characteristics, **Ultraplan Renovation** immediately eliminates small imperfections (trowel marks, etc.).

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.

In case of underfloor heating systems follow the regulations for the preparation of the substrate and the heating start-up procedure.

Surfaces smoothed over with **Ultraplan Renovation** may be sanded and are ready to bond ceramic flooring after 3-12 hours, stone flooring after 24-48 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

When fresh, Ultraplan Renovation can be removed from tools and hands with water.



### CONSUMPTION

1.8 kg/m² per mm of thickness.

### PACKAGING

Ultraplan Renovation is available in 25 kg bags.

### STORAGE

**Ultraplan Renovation**, stored in a dry place, is stable for at least 12 months. A longer storage (over 12 months) could determine a slower setting time of **Ultraplan Renovation**. However, the performances of the levelling layer at longer ages are not significantly modified.

### 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)**

Conformity with: – European EN 13813 CT-C25-F6-A1 <sub>FL</sub> PRODUCT IDENTITY		
Consistency:	fine powder	
Colour:	grey	
Bulk density:	1,400 kg/m³	
EMICODE:	EC1 Plus - very low emission	

APPLICATION DATA (at +23°C - 50% R.H.)	
Mixing ratio:	17-18 parts of water per 100 parts by weight of <b>Ultraplan Renovation</b>
Applicable thickness per coat:	from 3 to 40 mm
Self-levelling:	yes
Density of mix:	2,100 kg/m³
pH of mix:	approx. 12
Application temperature range:	from +5°C to +35°C
Workability time:	30-40 min
Setting time:	50-90 min
Set to light foot traffic:	3-6 h



Time befo	re laying	flooring:
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ceramic tiles: 3-12 h resilient and wooden floors: 24-72 h stone: 24-48 h

FINAL PERFORMANCE	
Compressive strength: – after 1 day: – after 3 days: – after 7 days: – after 28 days:	15 N/mm <sup>2</sup> 20 N/mm <sup>2</sup> 25 N/mm <sup>2</sup> 28 N/mm <sup>2</sup>
Flexural strength: – after 1 day: – after 3 days: – after 7 days: – after 28 days:	3 N/mm <sup>2</sup> 4 N/mm <sup>2</sup> 4.5 N/mm <sup>2</sup> 6 N/mm <sup>2</sup>
Resistance to abrasion Taber Abrasimeter (Abrading wheel H22 - 500 g - 200 rmp) expressed in weight loss: – after 28 days:	2.5 g

# 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.

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