ULTRAPLAN MAXI

Ultra-fast hardening self-levelling smoothing compound for thicknesses from 3 to 40 mm





BENEFITS AND FEATURES

- Excellent self-levelling properties and surface finish
- High adhesion to substrate
- High compressive and flexural strength and abrasion resistance
- Ceramic coverings can be installed after 3 hours and resilient and wood flooring after 12 hours
- EMICODE EC1 Plus (very low emissions of VOC)

CLASSIFICATION ACCORDING TO EN 13813

Floors levelled with **Ultraplan Maxi** in accordance with the specifications described in this technical data sheet are classified as CT-C35-F7-A2fl according to EN 13813.

WHERE TO USE

Ultraplan Maxi 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 Maxi** is especially suitable for areas subject to wheeled service loads, such as chairs and trolleys and for use with underfloor heating/cooling systems.
Ultraplan Maxi is for interior use only.
Typical applications would include use in hospitals, hotels, theatres, schools, and shopping centres.

Some application examples

- Levelling screeds prior to laying ceramic or natural stone tiles or resilient floors such as PVC, linoleum, rubber, cork, textile and non-wooven flooring as well as wood flooring
- Levelling concrete slabs and cementitious screeds or **Mapecem**, **Mapecem Pronto**, **Topcem,** or **Topcem Pronto**-based screeds
- Levelling anhydrite substrates
- Levelling underfloor heating/cooling systems prior to laying subsequent finishes
- Levelling existing concrete pavements, terrazzo, ceramic, natural stone and magnesite floors

TECHNICAL CHARACTERISTICS

Ultraplan Maxi is a grey powder consisting of special cement with rapid setting and hydration together with selected graded silica sand, resins, and special additives, prepared according to a formula developed in the MAPEI Research Laboratories.
Mixed with water, **Ultraplan Maxi** becomes a highly fluid and easily workable mortar, with perfect self-levelling capacity, high adhesion to the substrate, and ultra-rapid drying.
Ultraplan Maxi can be applied with an automatic pressure pump at distances over 100 m.
Ultraplan Maxi can be spread in thicknesses up to 40 mm per layer without shrinkage, cracking, or crazing, and develops very high compressive and flexural strength, as well as resistance to indentation and abrasion.
Ultraplan Maxi is ready to receive the flooring as soon as it has dried: the time required depends on the thickness of the levelling layer, the ambient temperature, relative humidity and the absorption of the substrate.

RECOMMENDATIONS

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

APPLICATION PROCEDURE

Preparation of the substrate

Substrates must be dry, sound, and free from laitance, dust, loose parts, paint, wax, oil, rust, curing compounds, and traces of 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**).
Cracks must be repaired with **Eporip**.
Prime existing ceramic and natural stone surfaces with a coat of **Eco Prim T Plus ME** or **Eco Prim Grip Plus** after cleaning the surface with a suitable detergent and, if required, abrading the surface mechanically.

Preparation of the mix

Slowly pour a 25 kg bag of **Ultraplan Maxi** into a rust-free bucket containing 4.5-4.75 litres of clean water and mix with a low-speed electric mixer to obtain a homogeneous, self-levelling, lump-free mix.
Larger quantities of **Ultraplan Maxi** can be prepared in suitable mixers.
Allow the mixed **Ultraplan Maxi** to stand for 2-3 minutes, after which, the mix should be restirred, and then it is ready for use.
The amount of **Ultraplan Maxi** mixed at any time must be used within 30-40 minutes (at a temperature of +23°C).
When working in high ambient temperatures, established hot weather practices such as; shading of stored material, use of shading, avoiding application during the hottest time of the day, and use of cool water when mixing should be observed.
During and immediately after the application of the material, protection from the effects of excessive winds and drafts (wind-tunnel effect) is necessary to prevent rapid drying shrinkage through uncontrolled drying out of the mixed material.

Application of the mix

Apply **Ultraplan Maxi** in a single layer from 3 to 40 mm with a large metal trowel or squeegee.
Ultraplan Maxi can also be applied with an automatic pressure pump. Due to its remarkable self-levelling characteristics, **Ultraplan Maxi** immediately eliminates small imperfections (trowel marks, etc.).
When laying underfloor heating systems, follow the regulations for substrate preparation and the heating start-up procedure.

On large surfaces, follow all movement joints present in the substrate and form control joints for every 50 m² approx.

CLEANING

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

CONSUMPTION

1.7 kg/m² per mm of thickness.

PACKAGING

Ultraplan Maxi is available in 25 kg bags

STORAGE

Unopened packs of **Ultraplan Maxi**, stored in a dry place, are stable for at least 12 months. Longer storage (over 12 months) could result in a slower setting time of **Ultraplan Maxi**. 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 in the latest version of the Safety Data Sheet, available from our website www.mapei.ae.

TECHNICAL DATA (typical values)

PRODUCT IDENTIFICATION	
Consistency:	fine powder
Colour:	grey
Bulk density:	1300 kg/m³
Dry solids content:	100%
EMICODE:	EC1 Plus - very low emission

APPLICATION DATA (at +23°C - 50% R.H.)	
Mixing ratio:	approx. 18-19 parts of water per 100 parts by weight of **Ultraplan Maxi**
Thickness per layer:	from 3 to 40 mm
Self-levelling:	Yes
Density of the mix:	2050 kg/m³
pH of mix:	approx. 12
Application temperature range:	from +5°C to +40°C
Pot life:	30-40 minutes
Setting time:	50-70 minutes

Set to light foot traffic:	after 3-12 hours
Waiting time before application of the covering:	
– ceramic tiles:	3-12 h
– resilient and wood flooring:	12-72 h

FINAL PERFORMANCE (at +23°C)	
Compressive strength ((N/mm²):	
– after 1 day:	20.0
– after 3 days:	25.0
– after 7 days:	27.0
– after 28 days:	35.0
Flexural strength (N/mm²):	
– after 1 day:	3.5
– after 3 days:	4.5
– after 7 days:	5.0
– after 28 days:	8.0
Resistance to Taber Abraser (Abrading wheel - 500 g - 200 rmp) expressed in weight loss:	
– after 7 days:	1.5 g
– after 28 days:	1.2 g
Brinell hardness:	
– after 1 day:	70
– after 3 days:	80
– after 7 days:	90
– after 28 days:	100

IMPORTANT NOTES

While we try to ensure that any advice, recommendations, or information in our literature is accurate and correct, we have no control over the circumstances in which our product is used. It is, therefore, important that installers satisfy themselves that the product and conditions are suitable for the envisaged application. No warranty can be given, nor can responsibility be accepted, other than the product we supply will meet our written specifications. The installer should ensure that our latest product data and safety information sheets have been consulted before use.
Please refer to the current version of the Technical Data Sheet, available on our website www.mapei.ae.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into other project-related documents. 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.ae.
ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDE THE RESPONSIBILITY OF MAPEI.

All relevant product references are available upon request and at www.mapei.com.

Mapei Construction Chemicals L.L.C

Dubai Investment Park 2, P.O. Box: 73869, Dubai, United Arab Emirates

+971 4 815 6666 www.mapei.ae info@mapei.ae

510-8-2026 (UAE)

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