

UC Leveller

Fast hardening levelling smoothing compound for thicknesses from 3 mm to 15 mm: especially recommended for pumping

WHERE TO USE

UC Leveller is used for levelling and smoothing of new or existing substrates and it readies them for receiving any type of textile flooring in areas where resistance to heavy loads and traffic is needed along with an especially smooth surface.

UC Leveller can be used in interiors in thicknesses from 3 to 15 mm only.

Because of its levelling properties and easy pumpability, **UC Leveller** increases daily productivity and reduces considerably the cost of substrate preparation.

Some application examples

- Smoothing concrete slabs and cement-based screeds.
- Smoothing anhydrite screeds.
- Smoothing for under-floor heating installations.
- Smoothing over existing ceramic tile, terrazzo, natural stone and magnesite floors.

TECHNICAL CHARACTERISTICS

UC Leveller is a grey powder composed of special fast-setting and hydrating cements, specially graded silica sand, resins and special additives prepared according to a formula developed in the MAPEI research laboratories.

When mixed with water **UC Leveller** becomes a fluid, easy to work mix that has excellent self-levelling

properties and cures rapidly. **UC Leveller** is easily applied with a pump even at distances of over 100 m.

UC Leveller is strong enough to withstand wheelchair traffic. Each coat of **UC Leveller** can be applied in thicknesses of up to 15 mm without significant shrinkage that might cause cracks or crazing. Once completely dry **UC Leveller** has excellent compressive and flexural strength as well as resistance to impact and abrasion.

Flooring can be installed once **UC Leveller** has dried, after 24 to 48 hours, depending on the thickness, temperature and moisture of the environment.

RECOMMENDATIONS

- Do not add more water to the mix once it has begun to set.
- Do not add lime, cement or gypsum to the mix.
- Do not use for smoothing in exteriors or for substrates subject to rising damp.
- Do not apply another coat of **UC Leveller** once the previous one has completely dried without first applying a primer of 1 part by weight of **Primer G** diluted with 3 parts water by weight.
- Do not use **UC Leveller** at temperatures below +5°C and above +30°C.
- Do not use for levelling over wood substrates. Use **Fiberplan** or **Nivorapid** mixed with **Latex Plus**.

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	fine powder
Colour:	grey
Bulk density (kg/m³):	1.25
Dry solid content (%):	100
Storage:	12 months in a dry place in original sealed packaging
Health hazard according to EC 99/45:	irritant. Before using refer to the "Safety instructions for the preparation and application" paragraph and the information on the packing and Safety Data Sheet
Customs class:	3824 50 90
COMPOSITION AND PROPERTIES OF THE MIXTURE at +23°C and 50% R.H.	
Mixing ratio:	17-19 parts water to 100 parts UC Leveller by weight
Thickness per coat (mm):	from 3 to 15 mm
Self-levelling:	good
Density of the mix (kg/m³):	2.10
pH of mix:	> 12
Application temperature range:	from +5°C to +30°C
Setting time:	2-4 hours
Ready for traffic:	12 hours
Waiting time before installing flooring:	24 hours
FINAL PERFORMANCE DATA	
Compressive strength (EN 196) (N/mm²):	
- after 1 day:	14
- after 3 days:	16
- after 7 days:	20
- after 28 days:	30
Flexural strength (EN 196) (N/mm²):	
- after 1 day:	3.5
- after 3 days:	4.0
- after 7 days:	5.0
- after 28 days:	8.5

- Do not apply **UC Leveller** in thicknesses less than 3 mm.

APPLICATION PROCEDURE

Preparing the substrate

Substrates must be solid and free of dirt, loose materials, paint, wax, oils, rust, traces of gypsum or other materials which may interfere with bonding. Absorbent substrates which are not sufficiently solid must be removed or wherever possible consolidated with **Profas** or **Primer EP**. Cracks or crazing in cement substrates must be repaired with **Eporip**. Concrete substrates must first be treated with **Primer G** (1 part **Primer G** to 3 parts water) to prevent potential debonding and to make the substrate uniformly absorbent. Anhydrite screeds can be levelled with **UC Leveller**, only after first being sanded and then given a coat of **Primer S**, **Mapeprim SP** or **Primer G**. Existing flooring, such as ceramic tile or natural stone, must be carefully cleaned to eliminate all traces of wax and then treated with a coat of **Mapeprim SP**. Magnesite substrates must be primed with **Mapeprim SP**.

Preparing the mix

Pour a 20 kg bag of **UC Leveller** into a receptacle containing approx. 3.5 litres of clean water while mixing continuously at low speed with an electric mixer until a homogenous lump free mix is obtained. Larger quantities can be mixed in a mortar mixer. Let the mix sit for a few minutes and then mix again briefly. The mix is now ready to be applied. The mixed batch of **UC Leveller** must be used within 20 to 30 minutes (at a temperature of +23°C).

Spreading the mix

Spread **UC Leveller** in a single coat from 3 to 15 mm thick with a large metal trowel or float, tilting the trowel slightly to obtain the desired thickness. **UC Leveller** can also be applied with a pump. When a second coat is required, it is recommended to apply it as soon as the previous coat can be walked on (approx. 3 hours at +23°C).

Installing the flooring

Once **UC Leveller** dries, textile floor covering can be installed over it. All of the many

MAPEI adhesive products are designed to be applied over **UC Leveller**. Waiting time before installation can vary according to the ambient temperature and humidity, and the thickness, and type of flooring to be installed.

Cleaning

While **UC Leveller** is still wet, hands and tools can be cleaned with water.

CONSUMPTION

1.6 kg/m² per mm of thickness.

PACKAGING

UC Leveller is available in 20 kg bags.

STORAGE

12 months in original sealed packaging. Over longer periods the product may set less rapidly without changing its final performance results.

SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

UC Leveller contains cement that in contact with sweat or other bodily fluids produces an irritant alkaline reaction and allergies to those predisposed. Use protective gloves and goggles. For further information consult the Safety Data Sheet.

FOR PROFESSIONALS.

WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

**All relevant references
of the product are available
upon request**



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