

Ultra-fast hardening self-levelling compound with very low VOC (volatile organic compound)

WHERE TO USE

Ultraplan Eco 3210 is used for interior levelling and removing differences in thickness from 3 to 10 mm of new or existing substrates, preparing them to receive any kind of flooring where excellent resistance to loads and traffic is needed.

Ultraplan Eco 3210 is particularly suitable for areas subject to wheeled traffic.

Ultraplan Eco 3210 is for interior use only.

Ultraplan Eco 3210 is suitable for screeds incorporating under floor heating systems and can be used as a self-leveller over electrical under floor heating systems.

Some application examples

- Levelling concrete slabs, sand cement screed,
 Mapecem and Mapecem Pronto, Topcem or
 Topcem Pronto, and anhydrite screeds containing underfloor heating.
- Levelling existing cement, terrazzo, ceramic and natural stone floors.

TECHNICAL CHARACTERISTICS

Ultraplan Eco 3210 is a grey powder consisting of special cements with rapid setting and hydration together with graded silica sand, resins and special additives, according to a formula developed in the MAPEI Research and Development Laboratories.

Mixed with water **Ultraplan Eco 3210** becomes a highly fluid and easily workable mortar, which is self-levelling, with high adhesion to the substrate and dries ultra-quickly.

Ultraplan Eco 3210 can be applied with an automatic pressure pump for distances over 100 m.

Ultraplan Eco 3210 can be spread in thicknesses up to 10 mm per coat without shrinkage, cracking or crazing, and develops very high compressive and flexural strength, as well as resistance to indentation and abrasion.

Ultraplan Eco 3210 is ready to receive flooring after approximately 12 hours, regardless of the thickness.

It is recommended to wait 24 hours before installing wooden flooring.

RECOMMENDATIONS

- Do not add water to a mix which has already started to set.
- Do not add lime, cement or gypsum to the mix.
- Do not use Ultraplan Eco 3210 for exterior levelling work.
- Do not use **Ultraplan Eco 3210** on substrates subject to continuous rising damp.



TECHNICAL DATA (typical values)	Certified by the TFI German Institute, Certif. N° 99369
PRODUCT IDENTITY	
Consistency:	fine powder
Colour:	grey
Bulk density (kg/m³):	1300
Dry solids content (%):	100
APPLICATION DATA (at +23°C - 50% R.H.)	
Mixing ratio:	4.8 to 5 litres of water per 20 kg bag
Thickness per coat:	3 mm to 10 mm
Self levelling:	yes
Density of the mix (kg/m³):	2000
pH of mix:	approx. 12
Application temperature range:	from +5°C to +30°C
Open time:	20-30 minutes
Setting time:	45-60 minutes
Set to light foot traffic:	3 hours
Time before laying flooring:	12 hours (24 hours for wood flooring)
FINAL PERFORMANCE DATA	
Compressive strength (N/mm²): - after 1 day: - after 3 days: - after 7 days: - after 28 days:	12.0 17.0 20.0 26.0
Flexural strength (N/mm²): - after 1 day: - after 3 days: - after 7 days: - after 28 days:	3.0 4.0 5.0 7.0
Resistance to abrasion Taber Abrasimer (Abrading wheel H22 - 500 g - 200 revolutions) expressed as weight loss (g): - after 7 days: - after 28 days:	2.8 2.3
Brinell hardness: - after 1 day: - after 3 days: - after 7 days: - after 28 days:	55 70 80 100

- If a further coat of Ultraplan Eco 3210 needs to be applied once the preceding one is completely dry, first apply Eco Prim T.
- Do not apply Ultraplan Eco 3210 at temperatures below +5°C.

APPLICATION PROCEDURE Preparing the substrate

Substrates must be completely dry, solid, free from dust, loose areas, paint, wax, oil, rust and traces of gypsum.

Cement based surfaces not sufficiently solid must be removed or, where possible, reinforced with **Prosfas** or **Mapeproof ESM**.

Fissures in concrete substrates must be repaired with **Eporip**.

Cementitious subfloors must be treated with a coat of **Eco Prim T** diluted with water 1:2.

Anhydrite screeds can be levelled with **Ultraplan Eco 3210**, but must first be abraded to remove any surface laitance and then primed with a coat of **Eco Prim T** (diluted with water 1:2), before the application of **Ultraplan Eco 3210**.

Ceramic and natural stone substrates must be cleaned with detergents and abraded and then primed with **Eco Prim Grip**.

Preparing the mix

Pour a 20 kg bag of **Ultraplan Eco 3210** into a bucket containing 4.8 to 5 litres of clean water and mix with a low speed electric mixer to obtain an homogeneous lump free mix.

Larger quantities can be prepared in on-site mixers.

After 2-3 minutes of slackening, restir the mix. The mix is then ready for use.

The quantity of **Ultraplan Eco 3210** mixed at any time must be used within 20-30 minutes (at +23°C).

Spreading the mix

Apply **Ultraplan Eco 3210** in a single coat from 3 to 10 mm with a large metal trowel or rake keeping the trowel slightly inclined to obtain the desired thickness.

Ultraplan Eco 3210 can also be applied with an automatic pressure pump.

Due to its exceptional self levelling properties **Ultraplan Eco 3210** immediately loses small imperfections (trowel marks, etc.).

When a second coat of **Ultraplan Eco 3210** is required, it is recommended to apply it as soon as the first one is set to light foot traffic (approximately 3 hours at +23°C).

Ultraplan Eco 3210 is suitable to receive

resilient, carpet, and ceramic floor coverings fixed after 12 hours at +23°C (the time can vary, depending on the room temperature and humidity). When installing wood flooring or natural stone, wait 24 hours.

Check the humidity content with a carbide hygrometer or an electric moisture meter, keeping in mind that the latter only gives indicative values.

Cleaning

While still wet, **Ultraplan Eco 3210** can be removed from tools with water.

CONSUMPTION

1.6 kg/m² per mm of thickness.

PACKAGING

Ultraplan Eco 3210 is available in 20 kg bags.

STORAGE

Ultraplan Eco 3210 stored in a dry place is stable for at least 12 months. However, with time it could undergo a slower setting time but the final characteristics do not alter. The product complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH) - All. XVII, item 47.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultraplan Eco 3210 contains cement that when in contact with sweat or other body fluids causes irritant alkaline reaction and allergic reactions to those predisposed. It can cause damage to eyes. It is recommended to use protective gloves and goggles and to take the usual precautions for handling chemical products. In case of contact with eyes or skin wash immediately with plenty of water and seek medical attention.

For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

N.B.

Whilst we try to ensure that any advice, recommendations or information given 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 the end users satisfy themselves that the product and conditions are suitable for the envisaged application.

No warranty can be given or responsibility accepted other than, that the product supplied by us will meet our written specification.

End users should ensure that our latest product data and safety information sheets have been consulted prior to use.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.co.uk





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.co.uk

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.



Our Commitment To The Environment
MAPEI products assist Project Designers
and Contractors create innovative LEED
(The Leadership in Energy and Environmental
Design) certified projects, in
compliance with the U.S. Green
Building Council.

All relevant references for the product are available upon request and from www.mapei.co.uk

