

ULTRAPLAN MARINE FIRE

Self-levelling, fibre-reinforced cementitious mortar for soundproof floating floor systems and for levelling off areas of internal decks with intense traffic



WHERE TO USE

Ultraplan Marine Fire is used on internal decks to make soundproof floating floors and before installing floor coverings (tiles, resilient flooring, resin flooring, etc.).

Ultraplan Marine Fire is also used to level off internal decks not exposed to water that are subjected to high levels of mechanical stress.

Ultraplan Marine Fire is applied in single layer from 3 to 30 mm thick.

TECHNICAL CHARACTERISTICS

Ultraplan Marine Fire is a grey-coloured powder made of a mixture of special rapid-hydrating cement, selected aggregates, resin, fibres and special additives according to a formulation developed in the MAPEI laboratories. Mix **Ultraplan Marine Fire** with water prior to application. It forms a hi-flow, rapid-hardening and drying, self-levelling mortar which is easy to apply with both hand tools and a mortar pump.

RECOMMENDATIONS

- Do not add water to the mix once it starts to set.
- Do not add lime, cement, gypsum or any other type of substance or compound.
- Do not use for external applications.
- Do not use the product at temperatures lower than +5°C.

APPLICATION PROCEDURE

Preparation of the substrate

Remove from the surface all traces of oil, grease, rust, paint, powder, crumbling material and any other compounds or substances which could affect adhesion.

Apply **Eco Prim Marine** on the clean, dry, de-dusted surface with a brush or roller. Pay close attention to the uniformity of the layer applied: the primer is black to make it easier to apply and to avoid areas with an insufficient amount of product. It is equally important not to apply too much primer: both conditions (too thin or too thick a film) may cause the **Ultraplan Marine Fire** layer to detach.

When **Eco Prim Marine** is dry (approximately 35–40 minutes) apply **Ultraplan Marine Fire**.

Application

Pour approximately 4.5-5.0 litres of clean water into a clean container large enough to hold the mix. Pour the contents of a 25 kg bag of **Ultraplan Marine Fire** into the water while mixing and keep mixing with an electric mixer at low-speed to form a smooth, lump-free, self-levelling compound. Prepare larger quantities of **Ultraplan Marine Fire** in a mortar mixer.

Leave the mix to stand for 2–3 minutes, mix again for a few seconds and spread the mortar. Leave the mix to stand for 2–3 minutes, mix again and spread the mortar within its specified workability time. The workability time of the mortar will be shorter if the temperature is higher than +23°C. In such cases, prepare quantities of **Ultraplan Marine Fire** that will be applied within 30–40 minutes.

Spread a single layer of **Ultraplan Marine Fire** from 3 to 30 mm thick with a metal trowel or a spreader. Check the consumption rate of the product during spreading to make sure the thickness required is applied.

Ultraplan Marine Fire may also be applied with a mortar pump.

For layers thicker than 30 mm, or if a second layer is required, we recommend applying it as soon as the first layer sets to foot traffic. If this time limit is exceeded, apply a coat of **Eco Prim Marine** before the second layer to promote adhesion.

Various types of floor covering may be applied to **Ultraplan Marine Fire**. Always adhere to the specified recoating time of the product (at +23°C and 50% R.H, referred to the maximum applicable thickness) :

- 3 days for resilient, textile, resin-based and wood coverings
- 1 day for ceramic coverings

These times vary, depending on the thickness of mortar applied, the environment temperature and humidity. It is recommended to check the level of residual moisture in the hardened layer of mortar to make sure it is compatible with the floor coating or dressing to be applied.

In case of resin floor coverings, a layer of **Mapedek Epofloor** mixed with 20-30% by weight of quartz (particle size depending on the desired thickness) must be applied with a smooth steel trowel on a duly prepared and dust-free surface. Then sprinkle quartz with a particle size of no more than 0-0.5 mm onto the product while it is still fresh to saturation.

If the mortar needs to be applied over several days, it is necessary to create suitable joints with a two-component epoxy product (i.e. **Mapedek Epofloor**).

CLEANING

Remove **Ultraplan Marine Fire** from hands and tools while still wet with water.

CONSUMPTION

The consumption rate for **Ultraplan Marine Fire** is 1.7 kg/m² per mm of thickness.

PACKAGING

Ultraplan Marine Fire is available in 25 kg bags.

STORAGE

Ultraplan Marine Fire remains stable for 12 months if stored in a dry place. If stored for longer periods it may take longer to set but without affecting its final characteristics.

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)

PRODUCT IDENTITY

Consistency:	fine powder
Colour:	grey
Density:	1.3 g/cm ³
Dry solids content:	100%

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

Mixing ratio:	18-20 parts of water per 100 parts in weight of Ultraplan Marine Fire (4.5-5.0 litres of water for 25kg of ultraplan marine fire)
Applied thickness per layer:	from 3 to 30 mm
Density of the mix:	2.05 g/cm ³
pH of mix:	approx. 12
Application temperature:	from +5°C to +35°C
Workability time:	30-40 minutes
Setting time:	50-70 minutes
Set to foot traffic:	3 hours
Recoating time:	– 1 day for ceramic floors – 3 days for resilient, textile, resin-based and wood floor covering (for a thickness of 30mm)

FINAL PERFORMANCE

Compressive strength:	
– after 1 day:	20 N/mm ²
– after 7 days:	27 N/mm ²
– after 28 days:	35 N/mm ²
Flexural strength:	
– after 1 day:	3.5 N/mm ²
– after 7 days:	5.0 N/mm ²
– after 28 days:	8.0 N/mm ²
Taber Test (H22 - 500 g - 200 revs):	1.2 g
Density of product after 28 days:	1.85 g/cm ³

CERTIFICATION

IMO MED:	non-combustible materials
EMICODE:	EC1 Plus - very low emission

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

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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.

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