ULTRAPLAN MARINE 900

One-component, low-density, fibre-reinforced, rapid-hardening, self-levelling cementitious mortar for internal decks on ships

WHERE TO USE

Ultraplan Marine 900 is used to level off internal decks on ships before laying down the floor coverings (tiles, resilients, resin, etc.).
Ultraplan Marine 900 is used in all areas not exposed to water. Apply a single layer from 3 mm to 20 mm thick.

TECHNICAL CHARACTERISTICS

Ultraplan Marine 900 is a grey powder made from a mixture of special rapid-setting and hydrating cement, selected lightweight aggregates, resin, fibres and special admixtures according to a formulation developed by the MAPEI laboratories.
Mix **Ultraplan Marine 900** with water before use. It forms hi-flow, rapid-hardening and drying, self-levelling mortar which is easy to apply with both hand tools and a mortar pump.
The waiting time before laying down the final floor coverings depends on the thickness applied and the environmental conditions (temperature, relative humidity). At a temperature of around +23°C ceramics coatings may be bonded after just 24 hours, while for floor coverings sensitive to moisture (e.g. resilients and natural stone) the waiting time is at least 2 days.
We recommend checking the level of residual moisture in the hardened layer of mortar to make sure it is compatible with the floor covering to be applied.
The steel decks must be treated with **Eco Prim Marine** before applying the mortar to guarantee a good bond.

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.
· Do not use on external surfaces.
· Only apply the product on surfaces treated with **Eco Prim Marine**, which must be dry when the product is applied.
· Do not use the product at temperatures lower than +5°C.
· Do not install **Ultraplan Marine 900** on wooden floorings.

APPLICATION PROCEDURE

Preparation of the bonding surface

Remove all traces of oil, grease, rust, paint, powder, loose material and any other substances which could affect adhesion from the surface.
Apply a thin, even coat of **Eco Prim Marine** on the clean, dry surface with a brush or roller without leaving pools of primer on the surface.
When **Eco Prim Marine** is dry (after approximately 35-40 minutes) apply **Ultraplan Marine 900**.

Preparation of the mix

Pour approx. 5.7-6.0 litres of clean water into a clean container large enough to hold the mix. Pour a 15 kg bag of **Ultraplan Marine 900** into the water while mixing and keep mixing with an electric mixer at low-speed to form a smooth, lump-free, self-levelling mix. Prepare larger quantities of **Ultraplan Marine 900** in a mortar mixer.

Leave the mix to stand for 2-3 minutes, mix again and spread the mortar within its specified open time. The open time of the mortar will be shorter if the temperature is higher than +23°C. It is good practice to only mix quantities of **Ultraplan Marine 900** that will be used within 30-40 minutes.

Application

Spread a single layer of **Ultraplan Marine 900** from 3 to 20 mm thick over **Eco Prim Marine** with a metal trowel. Check the consumption rate of the product during spreading to make sure the thickness required is applied.
Ultraplan Marine 900 may also be applied with a rendering pump.
If a second layer is required we recommend waiting until the first one has set to foot traffic (approximately 3 hours at +23°C and never more than three hours after the set to foot traffic time). If this time limit is exceeded another coat of **Eco Prim Marine** must be applied beforehand to help adhesion.
Various types of floor covering may be bonded to **Ultraplan Marine 900**. Always adhere to the specified drying time of the product:
· **2 days** for resilient and textile floor coverings, stone sensitive to moisture and resin;
· **24 hours at +23°C** for tiled floorings.
These times vary depending on the thickness of mortar applied, the surrounding temperature and the level of humidity in the environment.

CLEANING

Ultraplan Marine 900 may be cleaned from hands, tools and surfaces while still wet with water.

CONSUMPTION

The consumption rate for **Ultraplan Marine 900** is 0.9 kg/m² per mm of thickness.

PACKAGING

Ultraplan Marine 900 is available in 15 kg bags.

STORAGE

Ultraplan Marine 900 remains stable for 12 months if stored in a dry place. If stored for longer periods, it may take **Ultraplan Marine 900** longer to set but without modifying its final characteristics.
This product complies with the prescriptions of Reg. (EC) N. 1907/2006 (REACH) - Annex XVII, article 47.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultraplan Marine 900 contains cement that when in contact with sweat or other body fluids causes irritant alkaline reactions and allergic reactions to those predisposed. It can cause damage to eyes. During use, wear protective gloves and goggles and take the usual precautions for handling chemicals. If the product comes in contact with the 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.

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	fine powder
Colour:	grey
Bulk density (kg/m³):	800
Dry solids content (%):	100
EMICODE:	EC1 R Plus - very low emission

APPLICATION DATA (at +23°C and 50% R.H.)	
Mixing ratio:	38-40 parts of water per 100 parts in weight of **Ultraplan Marine 900**
Applied thickness per layer:	from 3 to 20 mm
Self-levelling:	yes
Density of mix (kg/m³):	1,250
pH of mix:	approx. 11
Application temperature:	from +5°C to +35°C
Workability time:	20-30 mins.
Setting time:	45-60 mins.
Set to foot traffic:	3 hours
Waiting time before bonding flooring:	– 24 hours for ceramics – 2 days for resilients, textiles and natural stone sensitive to moisture
FINAL PERFORMANCE DATA	
Compressive strength (N/mm²): **– after 1 day:** **– after 7 days:** **– after 28 days:**	 8 10 16
Flexural strength (N/mm²): **– after 1 day:** **– after 7 days:** **– after 28 days:**	 2.5 3 4
Taber Test (H22, 500 g, 200 revs):	2.5
Density of hardened product (kg/m³):	850-950
CERTIFICATION AND CLASSIFICATION	
Ris. IMO A 799(19) ris. MSC.61(67) enclosure 1, parts 1 and enclosure 2:	non combustible

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