

MAPECEM MARINE 1000

Ready to use, shrinkage compensated, lightweight cementitious screed for levelling off internal decks



WHERE TO USE

Mapecem Marine 1000 is used for levelling off internal decks on ships before installing floor coverings (tiles, resilients, resin, etc.).

TECHNICAL CHARACTERISTICS

Mapecem Marine 1000 is a shrinkage compensated, rapid setting and drying mortar made of a special hydraulic binder and selected-grade aggregates, applied in layers up to 50 mm thick.

RECOMMENDATIONS

- The temperature of the mixing water must be between +5°C and +35°C. When the surrounding temperature is high, up to around +35°C, using cooler mixing water helps with application of the product. The temperature of the water must always be within the limits specified.
- Do not add more water to the mix once it has started to set.
- Do not add lime, cement, gypsum or any other type of substance or compound.
- Do not use on exterior surfaces.
- Only apply the product on surfaces treated with **Eco Prim Marine**, which must be dry when the product is applied.
- Do not apply if the temperature is lower than +5°C.

APPLICATION PROCEDURE

Preparation of the substrate

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

Prepare the surface with a power tools, remove all dust and make sure it is clean and dry, then apply **Eco Prim Marine** by roller and/or brush.

Make sure the product is applied in an even coat: the primer is black to make it easier to apply and to avoid leaving areas without enough product.

It is just as important to avoid applying too much primer: both conditions (layers too thin or too thick) could lead to detachment of the layer of **Mapecem Marine 1000**.

When the **Eco Prim Marine** is dry (approximately 35–40 minutes) apply the **Mapecem Marine 1000**.

Application

Pour a 2.5 kg bag of **Mapecem Marine 1000** into a container with 2.5 litres of clear water while mixing using a low speed electric mixer. Keep mixing until a smooth, compact mix is obtained.

The mix must be applied and floated as soon as possible after mixing and within a maximum of 30 minutes from the start of preparation.

Do not modify the amount of mixing water; the product's final performance properties could be affected.

Environmental conditions affect the setting and drying time of the screed made with **Mapecem Marine 1000**: temperatures above +23°C reduce the workability time of the mortar.

Spread **Mapecem Marine 1000** on the dry layer of **Eco Prim Marine** in a single layer from 5 mm to 50 mm with a float. For levelling the surface, use a straightedge and thickness gauge (or curbs previously made with

Mapecem Marine 1000) of suitable thickness, depending on the thickness to be applied.

When a second coat is required, it is recommended to apply it as soon as the first one is set to foot traffic (approximately 3 hours at +23°C and 50% R.H.). Before applying the second coat, it is necessary to reapply **Eco Prim Marine** as an adhesion promoter, proceeding with the second coat only after the primer has dried (make reference to the Technical Data Sheet of **Eco Prim Marine** for drying times).

Different recoating times (referring to +23°C and 50% R.H. and maximum applicable thickness) must be observed:

- 3 days for resilient, textile, resin and wood coatings
- 1 day for ceramics.

These times vary according to the thickness of the layer of mortar applied and the surrounding temperature and level of humidity. Check the level of residual moisture in the hardened layer to ensure compatibility with the covering or coating to be applied.

In case of recoating with resin flooring, a layer of **Mapedek Epofloor** mixed with 20-30% by weight of quartz (grain size to be selected depending on the thickness to be applied) must be applied in between. **Mapedek Epofloor** must be applied with a smooth steel trowel on a properly prepared surface free from dust.

Then broadcast in excess the surface with quartz with grain size max. 0-0.5 mm on the fresh product.

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

CLEANING

Mapecem Marine 1000, while still fresh, can be removed from tools with water.

CONSUMPTION

1.1 kg/m² per mm of thickness.

PACKAGING

Mapecem Marine 1000 is available in 15 kg bags.

STORAGE

Mapecem Marine 1000 remains stable for 12 months if stored in a dry place. If stored for longer than 12 months, 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 SDS available from our website www.mapei.com.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY



Consistency:	powder
Colour:	grey-brown
Bulk density:	0.8 g/cm ³
Dry solids content (%):	100

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

Mixing ratio:	2.5 liters of water per 15 kg of Mapecem Marine 1000
Thickness per coat:	from 5 to 50 mm
Density of mix:	1.25 g/cm ³
pH of mix:	approx. 11
Application temperature:	from 5°C to 35°C
Workability time:	20-30 minutes
Setting time:	45-60 minutes
Set to light foot traffic:	3 hours
Coating:	- 1 day for ceramic floors - 3 days for resilient, textile, resin and wood (times are based on a thickness of 50 mm)

FINAL PERFORMANCE

Compressive strength (N/mm ²):	
– after 1 day:	12
– after 7 days:	16
– after 28 days:	20
Flexural strength (N/mm ²):	
– after 1 day:	2.5
– after 7 days:	3
– after 28 days:	4
Bulk density after 28 days:	from 0.95 to 1.1 g/cm ³

CERTIFICATIONS AND CLASSIFICATIONS

IMO MED:

Non-combustible material

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.

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

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.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

Mapei S.p.A.

Via Cafiero, 22, 20158, Milano



+39-02-376731



www.mapei.com



mapei@mapei.it

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