BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor® Marine-109

Lightweight self-leveling primary deck covering mortar for interior decks

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base		Polymer modified cement mortar
Colour		Grey
Cure mechanism		Hydraulic
Density	mixed cured	1.1 kg/l 0.9 kg/l
Mixing ratio	per 15 kg bag	6 litres
Application temperature		10 – 30 °C
Application thickness		3 – 50 mm
Coverage	per 15 kg bag a layer thickness 1 mm	16.7 m^2
Working time (CQP599-9)		45 minutes
Ready to walk on (CQP600-3)	depending on humidity and ventilation	3 hours [A]
Tensile strength (CQP036-2)		1.3 MPa
Compressive strength (CQP599-2)		20 MPa [B]
Flexural strength (CQP599-1)		6 MPa [B]
Modulus of elasticity in compression (CQP599-6 / EN 13412)		5 GPa [B]
Linear shrinkage (CQP599-5)		0.04 % [B]
Shelf life		9 months [C]

CQP = Corporate Quality Procedure [A] 23 °C / 50 % r.h. [B] after 28 days [C] stored in a dry, cool place below 25 °C

DESCRIPTION

Sikafloor® Marine-109 is a 1-component light weight and self-leveling mortar based on polymer modified cement.
Sikafloor® Marine-109 is tested according to FTP Code system and approved according to the IMO Marine Equipment Directives.

PRODUCT BENEFITS

- Light weight leveling mortar
- Layer-thickness up to 50 mm
- High strength
- Fast curing
- Easily applicable
- Can be pumped

AREAS OF APPLICATION

Sikafloor® Marine-109 can be applied on interior decks, to level the surface prior to application of deck finishing such as: ceramic tiles, natural stone tiles, parquet flooring, PVC, rubber and textile coverings as well as reaction resin coatings. It is suitable for application in wet and dry accommodation areas except for galleys, scullery etc.
This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed ensuring adhesion and material compatibility.

CURE MECHANISM
Sikafloor® Marine-109 cures by way of hydraulic curing.

METHOD OF APPLICATION
Surface Preparation
For leveling applications, the surface has to be clean, free from dust, grease, oils and other substances, which may impair adhesion. Rust has to be removed with a steel brush or other appropriate means, followed by vacuum cleaning.
The surface has to be primed with a suitable primer (advice on specific primer is available in Application Manual of Sikafloor® Marine Self-leveling Mortars). After drying of the primer, Sikafloor® Marine-109 may be applied.
Sikafloor® Marine-109 applications on aluminium or zinc rich shop primer coated decks, require a tie coat of SikaCor® ZP Primer or another suitable tie coat prior the priming step.

Mixing process
One bag of Sikafloor® Marine-109 is mixed with 6 liters of cold potable water.
Using a clean receptacle, add Sikafloor® Marine-109 to cold clean water to form a homogeneous mixture, the additive is added last. The mixing time with a drilling machine and proper mixing paddles is approx. 3 minutes at 400 rpm. Ensure the powder is mixed completely (scrap around bottom and side walls of the receptacle).
Ensure a homogenous mortar is obtained before application.

Application
Apply the mortar with a steel board or a straight edge.
Sikafloor® Marine-109 has to be applied within 20 minutes after mixing.
At temperatures above 30 °C the open time will be reduced to 10 minutes or less. If applied in thickness less than 3 mm the self-levelling capability will be reduced.
For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

Curing
After application, the finished areas have to be protected against direct heat (e.g. cutting or welding from beneath), sunlight and draught during the curing process for at least 12 hours.
Before Sikafloor® Marine-109 is covered with dense materials such as vinyl, etc., ensure that the remaining moisture level is below 4 %.
Test procedure to determine the dryness (according ASTM D 4263): put a PE-plastic foil 1 m x 1 m on the surface of the applied mortar floor, tape the perimeter and leave for one day. The curing is complete if there is no water condensation on the foil or a visible color difference between covered and uncovered surface.

Removal
Excess material can best be removed before curing with a trowel wipe.
Fresh Sikafloor® Marine-109 may be removed from tools and equipment with water.
Once cured, the material can only be removed mechanically.
Hands and exposed skin have to be washed immediately with water.
Use a suitable skin protection hand cream.

Application Limits
For applications on slooping surfaces > 1 % contact the Technical Department of Sika Industry.

FURTHER INFORMATION
The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.
Copies of the following publications are available on request:
- Safety Data Sheet
- Application Manual
  Sikafloor® Marine Self-leveling Mortars

PACKAGING INFORMATION
Bag	15 kg

BASIS OF PRODUCT DATA
All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

HEALTH AND SAFETY INFORMATION
User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

DISCLAIMER
The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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