

Sikafloor® Marine-18

Adjustable Primary Deck-Covering Mortar

Technical Data

Chemical Base	Polymer-Modified Cement Mortar
Colour	Grey
Cure Mechanism	Hydraulic
Mixing Ratio (with cold, potable water) per 28 kg bag	3.2 to 3.7 L
Density (freshly mixed) (CQP ¹ 599-3)	1.9 g/cm ³ approx
Density (cured ²) (CQP 599-4)	1.8 g/cm ³ approx
Substrate Temperature	5 to 35°C
Application Thickness	5 to 25 mm
Coverage per 28 kg bag (1 mm layer thickness)	17 m ² approx
Working Time ³ (CQP 599-9)	30 minutes approx
Ready for Foot Traffic ³ (CQP 600-3) (dependent upon humidity and ventilation)	24 hours approx
Compressive Strength ⁴ (CQP 599-2)	18 MPa approx
Flexural Strength ⁴ (CQP 599-1)	8 MPa approx
Modulus of Elasticity in Compression ⁴ (CQP 599-6)	2 GPa approx
Linear Shrinkage ⁴ (CQP 599-5)	0.08% approx
Shelf Life (CQP 600-1) Stored in a cool, dry place below 25°C	12 months
¹ CQP = Corporate Quality Procedure; ² After 7 days; ³ 23°C and 50% Relative Humidity; and ⁴ After 28 days.	

Description

Sikafloor® Marine-18 is a normal-weight polymer-modified cementitious mortar used as a primary deck-covering or as a constrained layer in the PK 90 N system. Sikafloor® Marine-18 is manufactured in accordance with ISO 9001 and ISO 14001 Quality Assurance Systems and tested according to the FTP Code system and approved according to the IMO Marine Equipment Directives.

Product Benefits

- Easy-to-apply levelling mortar;
- Low E-Modulus;
- One-component, ready-to-mix;
- Suitable for sloped surfaces;
- Pumpable.

Areas of Application

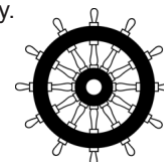
Sikafloor® Marine-18 is applied on interior decks to level surfaces prior to applying deck coverings such as carpets, tiles, parquet, rubber and vinyl. It is suitable for application in dry and wet areas. For wet areas, prior to the application of tiles, the substrate must be treated with a water-resistant membrane (e.g. Sikafloor® Marine Elastic). Before applying vinyl or carpet, it is recommended that a thin, self-levelling layer of mortar, such as Sikafloor® Marine 100, be applied to level the floor. This product is suitable for professional experienced users only. Tests with actual substrates under actual conditions must be performed to ensure adhesion and material compatibility.

Cure Mechanism

Sikafloor® Marine-18 is a hydraulic cement.

Surface Preparation

The surface must be clean and free from dust, grease, oils and other substances which may impair adhesion. Rust must be removed with a steel brush or other appropriate means, followed by vacuum cleaning. The surface must be primed with Sikafloor® Marine Primer-C using a long-haired roller. After the Primer has dried, the Sikafloor® Marine-18 may be applied. For the application of Sikafloor® Marine-18 on aluminium or zinc-rich shop primer-coated decks, a tie-coat of Sika ZP-Primer or other suitable tie-coat is required prior to the application of the Sikafloor® Marine Primer-C. For further information, contact the Technical Services Department of Sika Industry.



Mixing Process	Each bag of Sikafloor® Marine-18 is mixed with approximately 3.2 to a maximum of 3.4 litres of cold potable water. The mixing time is approximately 3 minutes at low speed with a low-speed drill or with a cement mixer for larger amounts, until a homogeneous mortar is obtained. The consistency of the mortar may be adjusted with a maximum of 0.3 litres of potable water. If mixed by hand, ensure that the powder is mixed completely (including bottom and side walls of the pail).
Application	Apply the mortar with a steel board or a straight-edge within 30 minutes of mixing. At temperatures above 35°C, the Working Time will be reduced to 20 minutes or less. For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.
Curing	Following application and during the curing process, the finished areas should be protected from direct heat (e.g. cutting or welding from beneath), sunlight and draft for at least one day. Before covering Sikafloor® Marine-18 with dense materials such as vinyl or epoxy coatings, etc., ensure that the remaining moisture level is below 4%. Test procedure to determine the dryness (according to ASTM D 4263): (i) put a PE-plastic foil 1 m x 1 m on the surface of the applied mortar floor; (ii) tape the perimeter and leave for one day. Curing is complete when there is no water condensation on the foil or visible colour difference between the covered and uncovered surfaces.
Removal	Excess material can best be removed before cure with a trowel wipe. Uncured Sikafloor® Marine-18 may be removed from tools and equipment with water. Once cured, the material can only be removed mechanically. Exposed hands and skin should be washed immediately with water. Use suitable skin-protection hand-cream.
Further Information	Copy of the following publications are available upon request: <i>Material Safety Data Sheet</i> and <i>Sikafloor® Marine-18 Application Guide</i> .
Packaging	28 kg bags
Value Bases	All technical data stated in this Product Data Sheet are laboratory test-based. Current measured values may vary due to factors beyond our influence.
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the current Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data for the appropriate type of substance.

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, within their shelf life. 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 recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet under www.sika.ca.

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