Version 02/2016 (12/2016)

# Sikafloor® Marine VEM

# Self-Smoothing Visco-Elastic Damping Mortar

### **Technical Data**

Chemical Base	Polymer-Modified Cement Mortar
Colour	Grey
Cure Mechanism	Hydraulic
Mixing Ratio (with cold, potable water) per 16 kg bag	5.3 to 5.8 L
Density (freshly mixed) (CQP¹ 599-3)	1.45 g/cm <sup>3</sup>
Density (cured²) (CQP 599-4)	1.3 g/cm <sup>3</sup>
Substrate Temperature	5 to 35°C
Application Thickness	2 mm
Coverage per 16 kg bag (2 mm layer thickness)	6.0 m <sup>2</sup>
Working Time <sup>3</sup> (CQP 599-9)	20 minutes
Ready for Foot Traffic³ (CQP 600-3) (dependent upon humidity and ventilation)	12 hours
Tensile Strength <sup>4</sup> (CQP 036-2/ISO527)	0.6 N/mm² (90 psi)
Elongation at Break4 (CQP 036-1/ISO 527)	55%
Shore A (CQP 023-1)	75
Shelf Life (CQP 600-1) Stored in a cool, dry place below 25°C	12 months
<sup>1</sup> CQP = Corporate Quality Procedure; <sup>2</sup> After 7 days; <sup>3</sup> 23°C and 50% Relative Humidity; and <sup>4</sup> After 28 days.	

### Description

Sikafloor® Marine VEM is a one-component, self-smoothing damping mortar based on polymer-modified cement. Sikafloor® Marine VEM 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 Visco-elastic mortar;
  - Isocyanate-free;
  - High damping factor
  - One-component, ready-to-mix;
  - Pumpable:
  - Environmentally-friendly.

### Areas of **Application**

Sikafloor® Marine VEM is applied on interior decks in combination with Sikafloor® Marine-18. 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 VEM 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 VEM may be applied. For the application of Sikafloor® Marine VEM on aluminium or zinc-rich shop primer-coated decks, a tie-coat of Sika ZP-Primer or other suitable tiecoat 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 VEM is mixed with approximately 5.3 to a maximum of 5.8 litres of cold potable water. The mixing time is approximately 5 minutes at low speed with a low-speed drill or with a cement mixer for larger amounts, until a homogeneous mortar is obtained. 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 20 minutes of mixing. At temperatures above 35°C, the Working Time will be reduced to 10 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 12 hours. Before covering Sikafloor® Marine VEM with Sikafloor® Marine-18 or Sikafloor® Marine-118 FC, a coat of Sikafloor® Marine Primer C is necessary. 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 VEM 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.	
Application Limits	Do not apply Sikafloor® Marine VEM on sloping surfaces (>3 %). For applications on sloping surfaces above 3 %, contact the Technical Departmet of Sika Canada Industry.	
Further Information	Copy of the following publications are available upon request: Material Safety Data Sheet and Sikafloor® Marine VEM Application Guide.	
Packaging	16 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 Saf	ety For information and advice on the safe handling storage and disposal of chemic	

Information

Health and Safety 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



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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