



APPLICATION MANUAL

Sikafloor® Marine VEM with constrained mortars

Sikafloor® Marine-18
Sikafloor® Marine-118 FC
Sikafloor® Marine-190

NOVEMBER.2020 / VERSION 02 / SIKA SERVICES AG



HEALTH AND SAFETY EQUIPMENT

Use protection gear according to the most current Safety Data Sheet.

REQUIREMENTS (PRECONDITIONS AND ACTIONS)

The following requirements are essential and mandatory to create acoustic floors meeting the corresponding sound test reports and certificates such as IMO approvals.

- Use this application manual in conjunction with the current Product Data Sheet.
- Application may only be performed by trained professional flooring contractors.
- On zinc-rich primed metal or bare aluminum decks it is required to apply the SikaCor® ZP Primer prior any application.
- The area must be protected from weather conditions.
- Ensure that access to the area is restricted to the installation team.
- Ambient and substrate temperature needs to be between 5 °C and 30 °C.
- Do not apply Sikafloor® Marine products if the relative humidity is above 80 %.

SYSTEM BUILD UP / COVERAGE

Product	Sikafloor® Marine VEM			Constrained mortars with Sikafloor® Marine		
				-18	-118 FC	-190
Thickness	1 mm	1.5 mm	2 mm	10 mm		
Weight per m ²	1.3 kg/m ²	2 kg/m ²	2.6 kg/m ²	18 kg/m ²	18 kg/m ²	18 kg/m ²

For the constrained mortar layers always consider that the practical consumption is related to the application and the complexity of the area (pipe penetrations, columns, etc.). Always consider that the practical consumption is related to application, deck deviations (tolerances), etc. It is recommended to add 10 % to the theoretical consumption to cover the mentioned factors.

ADDITIONAL INFORMATION

For most current versions of IMO approvals and other Marine certificates contact your local Sika representative.

The individual Product Data Sheet shall prevail over this "Application Manual".

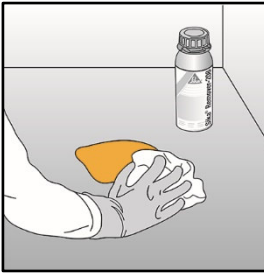
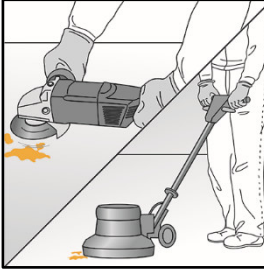

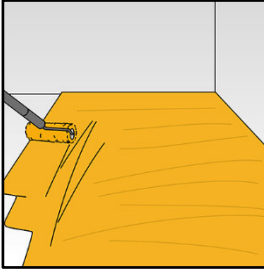
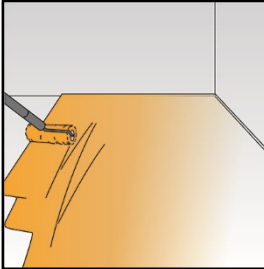
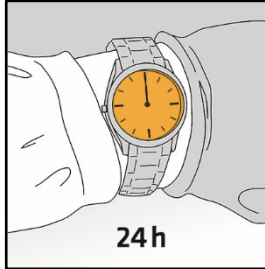
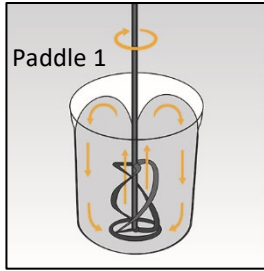
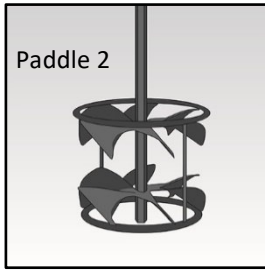
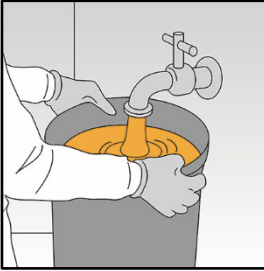
All conditions stated in the individual Product Data Sheet regarding application, storage, etc. shall continue to apply.

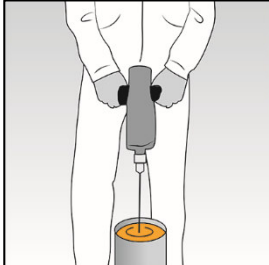
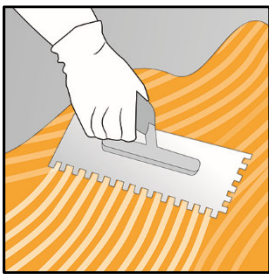
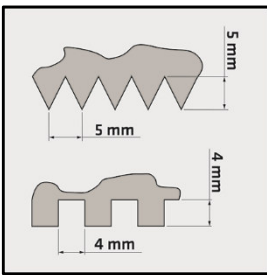
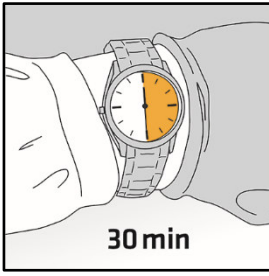
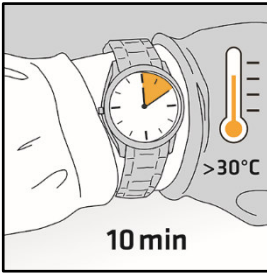
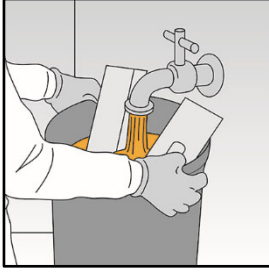
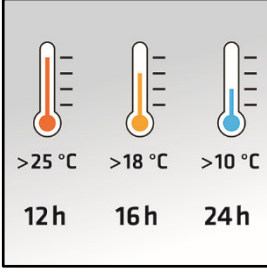
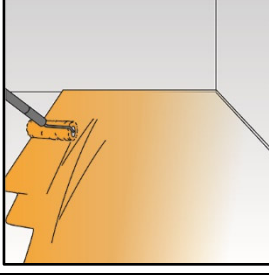
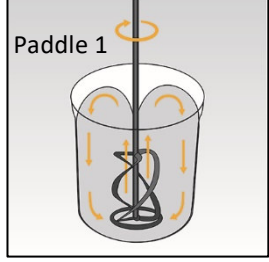
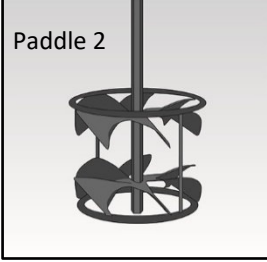
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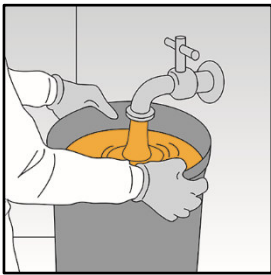
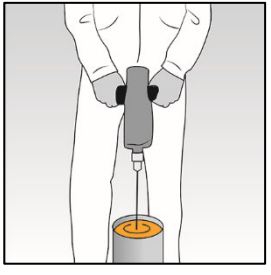

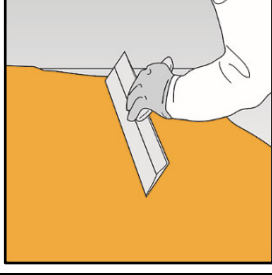
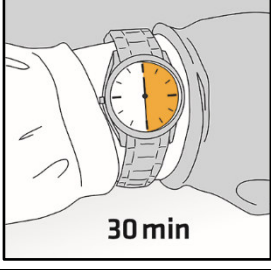
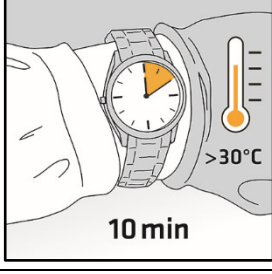
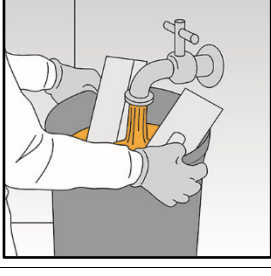
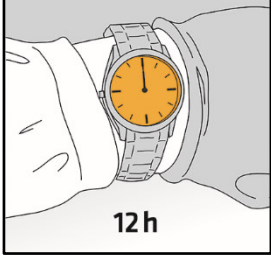
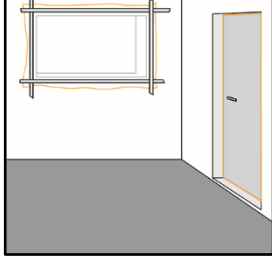
Sikafloor® Marine-VEM-with-constrained-layers
AM Sikafloor® Marine-VEM-mortars -CORP-en-11-2020-V2
Validity until November 2025, unless superseded

Sika Services AG
CH-8048 Zurich
www.sika.com/industry

APPLICATION STEPS

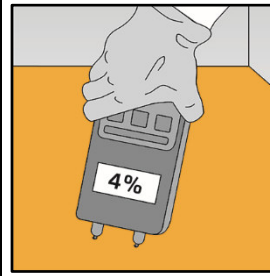
<h1>1</h1>	<p>If substrate is contaminated such as oil, grease etc. remove contaminates from metal surfaces with solvents such as Sika® Remover-208 or water-based cleaners.</p> <p>Note: Replace dirty rag frequently and dispose of it according to national regulations.</p>												
<h1>2</h1>	<p>Remove rust, loose paint and particles with a rotating grinder or a handheld grinder from the substrate.</p> <p>Sweep bigger particles with a broom and dust with a vacuum cleaner.</p>												
<h1>3</h1>	<p>Only in case of zinc-rich primed metal or bare aluminum substrates: Apply SikaCor® ZP Primer with a long hair roller cross rolled and let it dry.</p> <p>Flash off time SikaCor® ZP Primer (80µm dry film)</p> <p>10° C -5 hours 20° C -3 hours 30° C -2 hours</p> <p>Note: Consumption about 200 – 250 g/m²</p>												
<h1>4</h1>	<p>Apply Sikafloor® Marine Primer C with a long hair roller and let it dry until milky bluish aspect has changed to transparent.</p> <p>Note: Consumption about 75 – 100 g/m²</p> <p>IMPORTANT: The maximum waiting time is 24 hours.</p>		 <p>24 h</p>										
<h1>5</h1>	<table border="1" data-bbox="276 1332 930 1507"> <thead> <tr> <th>Mixing paddle type 1</th> <th>Mixing paddle type 2</th> </tr> </thead> <tbody> <tr> <td>10-15 Kg; Ø 100mm</td> <td>5-15 Kg; Ø 90mm</td> </tr> <tr> <td>15-25 Kg; Ø 120mm</td> <td>15-30 Kg; Ø 120mm</td> </tr> <tr> <td>20-40 Kg; Ø 140mm</td> <td>30-50 Kg; Ø 150mm</td> </tr> <tr> <td>30-60 Kg; Ø 160mm</td> <td></td> </tr> </tbody> </table> <p>Mixer Type and diameter required to mix the defined volume</p> <p>Use the remaining water to adjust the consistency</p>	Mixing paddle type 1	Mixing paddle type 2	10-15 Kg; Ø 100mm	5-15 Kg; Ø 90mm	15-25 Kg; Ø 120mm	15-30 Kg; Ø 120mm	20-40 Kg; Ø 140mm	30-50 Kg; Ø 150mm	30-60 Kg; Ø 160mm		<p>Paddle 1</p> 	<p>Paddle 2</p> 
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<h1>6</h1>	<p>Put the lower amount of the cold potable water in a bucket and add one bag of Sikafloor® Marine VEM.</p> <p>Note: 16 kg bag ⇒ 5.3 – 5.8 liter of potable water</p>												

7	<p>Put the lower amount of the cold potable water in a bucket and add one bag of Sikafloor® Marine VEM. Mix with mixing paddles in top down direction (approx. 400 rpm) for about 5 minutes, wait for 5 minutes and start mixing again until a homogeneous mortar is obtained.</p>												
8	<p>Apply the Sikafloor® Marine VEM with an appropriate notched trowel (square 4 x 4 mm or in triangular shape 5 x 5 mm). Ensure that the final layer is between 1 and 2 mm thick.</p>												
9	<p>Make sure to complete the application within the working time of 30 minutes.</p> <p>IMPORTANT: In case of temperature above 30 °C the working time will be reduced to 10 minutes or less.</p>	 <p>30 min</p>	 <p>10 min</p> <p>>30°C</p>										
10	<p>After finishing application clean tools with water immediately after use.</p> <p>Note: Harden material can only be removed mechanically.</p> <p>IMPORTANT: Let the Sikafloor® Marine VEM cure according to the times mentioned on illustration 2. Ensure the floor is cured before continuing with next step.</p>		 <p>>25 °C >18 °C >10 °C</p> <p>12h 16h 24h</p>										
11	<p>Apply Sikafloor® Marine Primer C on the cured Sikafloor® Marine VEM with a long hair roller and let it dry until milky bluish aspect has changed to transparent.</p> <p>Note: Consumption about 75 – 100 g/m²</p> <p>IMPORTANT: The maximum waiting time is 24 hours.</p>												
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13	Put the lower amount of cold potable water in a bucket and add one bag of the selected Sikafloor® Marine product.									
	<table border="1"> <thead> <tr> <th>Sikafloor® Product</th> <th>Potable water amount in liters</th> </tr> </thead> <tbody> <tr> <td>Sikafloor® Marine-18</td> <td>2.7 – 3.3 l / 25 kg bag</td> </tr> <tr> <td>Sikafloor® Marine-118 FC</td> <td>5.3 – 6.0 l / 25 kg bag</td> </tr> <tr> <td>Sikafloor® Marine-190</td> <td>5.3 – 5.8 l / 25 kg bag</td> </tr> </tbody> </table>	Sikafloor® Product	Potable water amount in liters	Sikafloor® Marine-18	2.7 – 3.3 l / 25 kg bag	Sikafloor® Marine-118 FC	5.3 – 6.0 l / 25 kg bag	Sikafloor® Marine-190	5.3 – 5.8 l / 25 kg bag	
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Sikafloor® Marine-190	5.3 – 5.8 l / 25 kg bag									
14	Mix with mixing paddle (approx. 400 rpm) for about 5 minutes until a homogeneous mortar is obtained. Use the remaining water to adjust the consistency.									
15	Apply the Sikafloor® Marine constrained mortars with a trowel or a straight edge. Sikafloor® Marine-118 FC and -190 can be applied with a pin rake and spike rolled.									
16	Make sure to complete the application within the working time of 30 minutes.									
	IMPORTANT: In case of temperature above 30 °C the working time will be reduced to 10 minutes or less.	30 min	10 min							
17	After finishing application clean tools with water immediately after use.									
	Note: Harden material can only be removed mechanically.									
18	Allow the floor to cure for at least 12 hours.									
	Protect the applied floor against freezing, direct heat / sunshine and draught. IMPORTANT: Do not walk on it during the curing period.	12 h								

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Ensure that the Sikafloor® Marine product is fully dry (water content max 4 %) before any subsequent application of vinyl's, coatings etc.



IMPORTANT: For further build-up of the floor system, consult the corresponding “Additional Product Information” (API) regarding surface quality and required steps.

Disclaimer

The information contained herein and any other advice 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. The information only applies to the application(s) and product(s) expressly referred to herein. In case of changes in the parameters of the application, such as changes in substrates etc., or in case of a different application, consult Sika's Technical Service prior to using Sika products. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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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