

Sikalastic®-152

Fibre-reinforced cementitious mortar for flexible waterproofing and concrete protection

Product Description	Sikalastic®-152 is a 2-component, crack-bridging, fibre-reinforced cementitious mortar, with low elastic modulus with special additives for waterproofing and protection of concrete subgrades subject to flexural strain.
Uses	<ul style="list-style-type: none">■ Flexible waterproofing and protection of hydraulic structures such as basins, tanks, concrete piping, bridges and canals■ Waterproofing of bathrooms, shower, terraces, balconies, swimming pools before the application of ceramic tiles bonded with adhesives■ Waterproofing and protection of outer walls to be buried into the ground■ Inside waterproofing of light counter pressure water of walls and floors in basements■ Protective, anti-carbonation coating of concrete surfaces
Characteristics / Advantages	<ul style="list-style-type: none">■ Flexible waterproofing and concrete protection in one product■ Very good crack-bridging abilities, also at low temperature■ Resistance against de-icing salts and carbon dioxide■ Reliable application also in very humid environment■ All components ready delivered, no additional mixing water required■ Applicable also on lightly humid subgrades■ Non sagging: easy application also on vertical walls■ Excellent adhesion onto lots of subgrades such as concrete, cement mortars, stone, masonry
Tests	EN 14891:2012; EN 1504-2:2004
Product Data	
Form	
Appearance / Colours	Grey
Packaging	Ready batched 33 kg units: Comp. A (liquid): 8 kg Comp. B (powder): 25 kg
Storage	
Storage Conditions / Shelf Life	12 months from the date of production, if stored properly in undamaged original sealed packaging, in dry and cool conditions.



Technical Data

Chemical Base Cement modified with polymers, selected alkali-resistant aggregates, microsilica and fibres.

Density ~ 1.8 kg/l (fresh)

Grading D_{max} : ~ 0.5 mm

Mechanical / Physical Properties

Resistance against positive water pressure 1.5 bar EN 14891 A.7

Capillary absorption $0.01 \text{ kg/m}^2 \cdot \text{h}^{0.5}$ EN 1062-3

Water vapour permeability Class I (permeable) EN ISO 7783

Crack bridging ability (both without reinforcement mesh) ~ 1.20 mm (23°C)
~ 0.90 mm (-10°C) EN 1062-7

Adhesion on concrete ~ 1.5 N/mm²

Requirements

Requirements as per EN 1504-2:2004

	Test Method	Result	Requirement
CO ₂ permeability	EN 1062-6		$S_D \geq 50 \text{ m}$
Water vapour Permeability	EN ISO 7783		Class I $S_D < 5\text{m}$ (permeable) Class II $5\text{m} < S_D < 50\text{m}$ Class III $S_D > 50\text{m}$ (not permeable)
Capillary absorption and liquid- water permeability	EN 1062-3		$w < 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$
Freeze-thaw cycling (de-icing salt immersion)	EN 13687-1		$\geq 0.8 \text{ N/mm}^2$
Bond strength	EN 1542		$\geq 0.8 \text{ N/mm}^2$
Crack bridging	EN 1062-7		Class A3 (+23°C)
Dangerous substances (Chromium VI)	EN 196-10		< 0.0002%
Reaction to fire after application	EN 13501-1		Euroclasse A2

values obtained with a total consumption of 5.4 kg/m² in two layers

Requirements as per EN 14891:2012

	Test method	Result	Requirements
Waterproofing (1.5 bar for 7 days)	A.7		no penetration
Initial tensile adhesion strength	A.6.2		$\geq 0.5 \text{ N/mm}^2$
Tensile adhesion strength after water contact	A.6.3		$\geq 0.5 \text{ N/mm}^2$
Tensile adhesion strength after heat ageing	A.6.5		$\geq 0.5 \text{ N/mm}^2$
Tensile adhesion strength after freeze-thaw cycles	A.6.6		$\geq 0.5 \text{ N/mm}^2$
Tensile adhesion strength after contact with lime water	A.6.9		$\geq 0.5 \text{ N/mm}^2$
Tensile adhesion strength after contact with chlorinated water	A.6.7		$\geq 0.5 \text{ N/mm}^2$
Crack bridging ability standard conditions (+23°C)	A.8.2		$\geq 0.75 \text{ N/mm}^2$
Crack bridging ability at very low temperature (-20°C) with reinforcement mesh	A.8.3		$\geq 0.75 \text{ N/mm}^2$

Values obtained with a total consumption of 5.4 kg/m² in two layers

System Information

Application details

Consumption / Dosage This depends on the substrate roughness; as a guide, ~ 1.8 kg/m²/mm.

Total layer thickness 3 mm with constant thickness, applied in minimum 2 layers (maximum recommended thickness per layer is 2 mm)

Substrate Quality Substrates must be structurally sound, clean, dry and free of all contaminants such as dirt, oil, grease, cement laitance, coatings and other surface treatments etc.

Substrate Preparation Clean surfaces by blast cleaning, high-pressure water-jetting (400 bar), wire-brushing, grinding etc., in order to remove all previous coatings, any traces of grease, rust, release agents, cement laitance and any other material which could reduce adhesion. All dust deposits from this preparation must also be removed i.e. by vacuum.

Repair concrete substrates, if necessary, with an appropriate cementitious mortar from the SikaTop® or Sika MonoTop® range of repair materials.

The substrate must be adequately dampened before application. The surface shall not be moist to the touch and shall not be the dark matt (saturated surface dry) appearance.

Special Requirements All connections between the substrate and pipe entries, plant and equipment, light switches etc., must be sealed and watertight. Joints in concrete, pipes, anywhere else in the structure must also be sealed and made watertight.

Use covered details at the floor/wall junctions.

Application Conditions / Limitations

Substrate Temperature +5°C min. / +35°C max.

Ambient Temperature +5°C min. / +35°C max.

Application Instructions

Mixing Ratio Comp. A : Comp. B = 8 : 25 (weight)

Mixing	<p>Sikalastic®-152 can be mixed with a low speed (~ 500 r.p.m.) electric drill mixer. Shake carefully Comp. A before using. Then pour ~ ½ Comp. A into a suitable mixing container and add Comp. B slowly while mixing. When homogeneous, add the remaining amount of Comp. A, and mix thoroughly at least for 3 minutes, until the proper lump-free consistency is reached.</p> <p>Do not add any additional water or other ingredients; each packaging unit must be entirely mixed.</p>															
Application Method / Tools	<p>Apply Sikalastic®-152 by means of a trowel onto the substrate, exerting a good pressure.</p> <p>Apply the first coat of Sikalastic®-152 using a notched (3x3 mm) trowel, with firm even pressure onto the substrate in order to achieve a regular, consistent thickness. As soon as the first layer has hardened, apply the second coat of Sikalastic®-152 by trowel, taking care to achieve a uniform and continuous layer, which totally covers the first one.</p> <p>In highly stressed areas a special alkali-resistant glass fibre fabric (150 - 160 g/m² and 0.47 mm thick) shall be placed into the first fresh mortar layer. It shall be well trimmed and fully embedded into the mortar avoiding the formation of voids in the coating.</p> <p>Sikalastic®-152 cannot be smoothed using float or sponge trowel. It is possible to smooth the surface as soon as the curing of the product is complete by light abrasion techniques.</p>															
Pot Life	~ 1 hour @ +20°C															
Cleaning of Tools	Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.															
Waiting Time / Overcoatng	<p>Immersion:</p> <p>Sikalastic®-152 must be properly hardened before over coating or contact with water. The following waiting times can be used as a guide:</p> <table border="1"> <thead> <tr> <th></th> <th>+20°C</th> <th>+10°C</th> </tr> </thead> <tbody> <tr> <td>Horizontal lining with tiles</td> <td>~ 2 days</td> <td>~ 7 days</td> </tr> <tr> <td>Vertical lining with tiles</td> <td>~ 2 days</td> <td>~ 3 days</td> </tr> <tr> <td>Coating by emulsion coat</td> <td>~ 2 days</td> <td>~ 3 days</td> </tr> <tr> <td>Immersion in water</td> <td>~ 2 days</td> <td>~ 7 days</td> </tr> </tbody> </table> <p>Waiting times may vary depending on humidity of environment and subgrade.</p>		+20°C	+10°C	Horizontal lining with tiles	~ 2 days	~ 7 days	Vertical lining with tiles	~ 2 days	~ 3 days	Coating by emulsion coat	~ 2 days	~ 3 days	Immersion in water	~ 2 days	~ 7 days
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Notes on Application / Limits	<p>Protect from rain until at least 24 - 48 hours after application</p> <p>Avoid direct contact with chlorinated swimming pool water</p> <p>Sikalastic®-152 is not a vapour barrier, and may transmit vapour tensions to over-applied coatings</p> <p>The hardening process is slower when there is a high environmental humidity level, e.g. in closed or inadequately ventilated rooms and basements. Ventilation methods are recommended</p> <p>Do not use the product in full sun exposure or in the presence of strong wind, or when it may rain</p> <p>When over-coating with solvent paints always carry out preliminary trials to ensure the solvent does not affect the integrity of the waterproofing layer</p> <p>Sikalastic®-152 is not suitable for vehicular traffic. Pedestrian walk is allowed, but only if protected by suitable tiling.</p> <p>Reinforcing mesh is needed to guarantee the crack bridging ability at low temperature.</p>															
Value Base	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.															
Local restrictions	Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.															

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

Legal Notes

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.



SIKA LIMITED

Head Office · Watchmead · Welwyn Garden City · Hertfordshire · AL7 1BQ · United Kingdom
Phone: +44 1 707 394444 · Fax: +44 1 707 329129 · www.sika.co.uk

