Sikalastic®-152
Rapid curing cement mortar for flexible waterproofing and concrete protection

Product Description
Sikalastic-152 is a two component fibre-reinforced mortar, with very low elastic modulus, based on cement modified with special alkali-resistant polymers, containing fine particle size selected aggregates and adequate additives for waterproofing and protection of concrete substrates subject to flexural strain. Sikalastic-152 is particularly advisable for application in humid environments or low temperature conditions.

Uses
- Concrete surface protection, in accordance with the following EN 1504-9 Principles: 1: protection against ingress (coating); 2: moisture control (coating); 8: increase of resistivity (coating)
- Waterproofing and protection of hydraulic structures such as: basins, tanks, swimming pools, concrete piping, bridges and canals
- 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
- Waterproofing of terraces and balconies with concrete or old tiles substrates
- Waterproofing of weather exposed surfaces
- Protective, flexible, anti-carbonation coating of concrete surfaces also damaged from plastic and hydraulic shrinkage
- Flexible coating over concrete or plywood structures, also subjected to flexural strain
- For use under pedestals/chairs when installing a tile or timber system

Characteristics / Advantages
- Flexible waterproofing and concrete protection with one product
- Reliable application also in very humid environment
- Applicable also on lightly humid substrates
- Non sagging: easy application also on vertical walls
- Fast curing (also at low temperature)
- Crack bridging properties
- Excellent adhesion onto almost all substrates, such as for instance concrete, cement mortars, stone, ceramics, bricks and wood
- High resistance against de-icing salts and carbon dioxide

Tests / Approvals / Standards
Sikalastic-152 meets the requirements for the performance characteristics of EN 1504-2.

Product Data
Appearance/Colour
Grey

Packaging
Ready batched 33kg packs:
Comp. A (liquid): 8kg
Comp. B (powder): 25kg

Storage Conditions / Shelf-Life
Twelve (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 aggregates, microsilica and fibres.

Density

~ 1.8 kg/l

Grading

D_{max}: 0.5 mm (EN 12192-1)

Mechanical / Physical Properties

Requirements

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Test Method</th>
<th>Results</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO₂ permeability</td>
<td>EN 1062-6</td>
<td>S₀ = 50</td>
<td>S₀ ≥ 50 m</td>
</tr>
<tr>
<td>Capillary absorption and</td>
<td>EN 1062-3</td>
<td>0.010 kg m⁻² h⁻⁰.⁵</td>
<td>w &lt; 0.1 kg m⁻² h⁻⁰.⁵</td>
</tr>
<tr>
<td>liquid-water permeability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freeze-thaw cycling (de-icing salt</td>
<td>EN 13687-1</td>
<td>0.81 N/mm²</td>
<td>≥ 0.8 N/mm²</td>
</tr>
<tr>
<td>immersion)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bond strength</td>
<td>EN 1542</td>
<td>0.83 N/mm²</td>
<td>≥ 0.8 N/mm²</td>
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<tr>
<td>Crack bridging</td>
<td>EN 1062-7</td>
<td>&gt; 0.100 mm</td>
<td>Classes</td>
</tr>
<tr>
<td>Dangerous substances (Chromium VI)</td>
<td>EN 196-10</td>
<td>&lt; 0.0002%</td>
<td>&lt; 0.0002%</td>
</tr>
<tr>
<td>Reaction to fire</td>
<td>EN 13501-1</td>
<td>A²</td>
<td>Euroclass</td>
</tr>
</tbody>
</table>

System Information

Application Details

Consumption / Dosage

As a guide, 1.8 kg/m²/mm.

Substrate Quality

The substrate must be structurally sound and free from dust, dirt, loose material, surface contamination as oil or grease, cement laitance.

Substrate Preparation

The substrate should be prepared by suitable mechanical preparation techniques, such as high water pressure or grit blasting, water jetting to remove all previous coatings, wire-brushing, sanding on ceramic tiles. Non impact/vibrating cleaning methods are preferred.

Damaged, delaminated or weak concrete must be repaired using SikaTop or Sika MonoTop mortars.

For correct waterproofing of swimming pools, basins, tanks, sub-basement rooms, is useful to use corner fillets between floor and wall using SikaTop or Sika MonoTop mortars. Interruptions in concrete casting, pipes, lights and installations must be sealed with Sika SealTape-S.

Substrate must be left naturally dry or humid, as it is. Don't dampen before application. Avoid stagnant water or condensate before application.

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 = 6.4 : 20

Mixing

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 3-4 minutes, until the proper lump-free consistency is reached.

Do not add any additional water or other ingredients; each packaging unit must be entirely mixed, to avoid faulty particle size distribution of aggregates contained in the powder component.
Application Method / Tools

Apply Sikalastic-152 by means of a trowel or brush onto the substrate, exerting a good pressure.

Sikalastic-152 can be applied by brush for detailing or vertical surfaces.

Sikalastic-152 is to be applied in two coats to minimum thickness of 2mm where waterproofing is available.

Apply the first coat of Sikalastic-152 using a notched (3x3mm) 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.

The maximum recommended thickness for each coat is 2mm. The final total application thickness should not exceed 4mm.

In highly stressed areas a special alkali-resistant glass fibre fabric (150 - 160 g/m² and 0.47mm 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.

Corresponding to possible floor joints and other critical zones (for instance interface with vertical surfaces), the waterproofing layer can be reinforced with Sika Seal Tape S. It must be applied on fresh first layer and then covered by second layer. To achieve a smooth surface, do not sand or grind the material until it has fully hardened, as this may damage the waterproofing capability. Wait until fully hard and then remove any irregularities in the top surface by grinding as required. Application of ceramic tiles on Sikalastic-152: Ceramic tiles and vitreous tile mosaics can be applied over Sikalastic-152 using a suitable cement tile adhesive (e.g. cement based tile adhesive complying with C2 class as per EN 12004 - cement medium-elasticity adhesive). Tile joint shall be filled with the relevant Sika Ceram tile grout.

Potlife

~ 1 hours @ +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 / Overcoating

Immersion:
Sikalastic-152 must be properly hardened before over coating or contact with water. The following waiting times can be used as a guide:

<table>
<thead>
<tr>
<th>Condition</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>

Waiting times may vary depending on humidity of environment and subgrade.

Notes on Application/ Limitations

- Protect from rain until at least 24 - 48 hours from application. Avoid application in, and protect freshly applied material from direct sunlight and/or strong winds.
- Avoid direct contact with chlorinated swimming pool water by applying a suitable swimming pool render, or tiles.
- Sikalastic-152 is not a vapour barrier, and may transmit vapour tensions to over-applied coatings.
- Avoid application in, and protect freshly applied material from: direct sunlight and/or strong wind.
- 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.
- Don’t use the product in full sun exposure or in the presence of strong wind, or when it may rain.

Note: PS3 may only be issued by a current Sika Approved Applicator.

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 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.

CE Labelling

The harmonized European Standard EN 1504-2, “Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 2: Surface protection systems for concrete” gives specifications for products and systems used as methods for the various principles presented under EN 1504-9.

Products which fall under this specification have to be CE labelled as per Annex ZA1, according to the scope and relevant clauses there indicated, and fulfil the requirements of the given mandate of the Construction Products Directive (89/106): Here below indicated are the minimum performance requirements set by the standard. For the specific performance results of the product to the specific tests, please see the actual values above in the PDS.

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide permeability</td>
<td>SD &gt; 50m</td>
</tr>
<tr>
<td>Water vapour permeability</td>
<td>Class I</td>
</tr>
<tr>
<td>Capillary absorption and liquid water permeability</td>
<td>w &lt; 0.1kg</td>
</tr>
<tr>
<td>Thermal shock resistance (freeze-thaw cycling with de-icing salts immersion)</td>
<td>≥ 0.8 N/mm²</td>
</tr>
<tr>
<td>Bond strength</td>
<td>≥ 0.8 N/mm²</td>
</tr>
<tr>
<td>Crack bridging</td>
<td>Class A1</td>
</tr>
<tr>
<td>Dangerous substances (Chromium VI)</td>
<td>&lt; 0.0002%</td>
</tr>
<tr>
<td>Reaction to fire</td>
<td>Euroclass</td>
</tr>
</tbody>
</table>

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08
1305 - CPD - 0807
EN 1504-2
Surface protection system - Coating

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