

Sikalastic®-152

Rapid curing cement mortar for flexible waterproofing
and concrete protection

Product Description

Sikalastic®-152 is a two component cement based fibre-reinforced mortar, with very low elastic modulus. It is modified with special alkali-resistant polymers, containing fine particle size selected aggregates and additives for waterproofing and protection of concrete subgrades subject to flexural strain.

Approvals

Sikalastic®-152 meets the requirements for the performance characteristics of EN 1504-2, AS4020:2005.

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 subgrades
- Waterproofing of weather exposed surfaces
- Protective, flexible, anti-carbonation coating of concrete surfaces also damaged from plastic and hydraulic shrinkage
- Flexible coating of concrete structures, also subjected to flexural strain
- "Swell consolidation" for mining applications

Characteristics / Advantages

- Flexible waterproofing (AS4020:2005) and concrete protection with one product
- Reliable application including very humid environments
- Non sagging: easy application also on vertical walls
- Fast curing (also at low temperature)
- Crack bridging properties
- Excellent adhesion onto almost all subgrades, such as for instance concrete, cement mortars, stone, ceramics, bricks and wood
- High resistance against carbon dioxide

Construction



Product Data

Appearance/Colour	Grey
Packaging	Ready batched 26.4 kg packs: Comp. A (liquid): 6.4 kg Comp. B (powder): 20 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.
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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 Requirements as per EN 1504-2

	Test Method	Results	Requirements
CO ₂ permeability	EN 1062-6	S _D = 50	S _D ≥ 50 m
Capillar absorption and liquid-water permeability	EN 1062-3	0,010 kg m ⁻² h ^{0.5}	w < 0.1 kg m ⁻² h ^{0.5}
Freeze-thaw cycling (de-icing salt immersion)	EN 13687-1	0.81 N/mm ²	≥ 0.8 N/mm ²
Bond strength	EN 1542	0.83 N/mm ²	≥ 0.8 N/mm ²
Crack bridging	EN 1062-7	> 0.100 mm	Classes
Dangerous substances (Chromium VI)	EN 196-10	< 0.0002%	< 0.0002%
Reaction to fire	EN 13501-1	A2	Euroclass

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, and 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, to remove all previous coatings. Wire-brushing, sanding may be used 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 a correct waterproofing in swimming pools, basins, tanks, sub-basement rooms, is useful to create corner fillets between floor and wall using SikaTop or Sika Monotop mortars. Voids in concrete casting, pipes, lights and installations must be sealed with suitable means.

Subgrade must be left naturally dry or humid. Don't dampen before application. Avoid stagnant water or condensation 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.

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.

Maximum recommended thickness for each coat is 2 mm. For waterproofing and concrete protection, the proper application thickness is at least 4 mm, applied in 2 layers.

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.

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:

	+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

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 direct contact with chlorinated swimming pool water using opportune tile line;
- 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
- Standard concrete curing practices are recommended.
- When over-coating with solvent based paints, always carry out preliminary trails to ensure that the solvent does not affect the integrity of the waterproofing layer.

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.



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