BUILDING TRUST

BUILDING PRODUCT INFORMATION SHEET

Sikalastic®-152

Cementitious flexible fibre-reinforced mortar for waterproofing and concrete protection

DESCRIPTION

Sikalastic®-152 is a 2-part, cementitious, polymer modified, flexible, crack-bridging, fibre-reinforced mortar for waterproofing and concrete protection. It can be applied onto many types of construction substrates.

USES

- Flexible waterproofing and protection of structures retaining or exposed to water such as tanks, concrete pipes, bridges etc.
- Protective, anti-carbonation coating for concrete surfaces
- Waterproofing of bathrooms, showers, wet rooms, terraces, balconies and swimming pools before the application of ceramic tiles bonded with cementitious adhesives
- Waterproofing and protection of concrete structures
- Internal waterproofing of basement walls and floors exposed to low water pressure
- Protection of concrete structures against the effects of de-icing salts and freeze-thaw

FEATURES

- Flexible waterproofing and concrete protection in one product
- Good crack-bridging abilities at low temperatures
- Resistant against de-icing salts and carbon dioxide
- 2-part, including liquid polymer, no additional mixing water required
- Can be applied onto slightly humid substrates
- Non sagging: Easy application also on vertical walls
- Good adhesion onto various substrates such as concrete, cementitious renders, stone, masonry

APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance to EN 14891 – Liquid applied water impermeable products for use beneath ceramic tiling bonded with adhesives
- CE Marking and Declaration of Performance to EN 1504-2 - Surface protection systems for concrete - Coating

LIMITATIONS OF USE

This product is a waterproofing membrane system for use behind impervious wall finishes and under trafficable floor finishes on external decks and balconies, and internal wet areas. Any finishes installed over this system, are not the responsibility of Sika

PRODUCT INFORMATION

Product identifier	Sikalastic®-152	
Place of manufacture	Overseas	
Product declaration	EN 14891: Liquid applied water impermeable products for use beneath ceramic tiling bonded with adhesives EN 1504-2: Surface protection systems for concrete - Coating	
Composition	Cement modified with polymers, selected alkali-resistant aggregates, microsilica and fibres.	
Packaging	Ready batched 33 kg units:	
	Part A (Liquid)	8 kg
	Part B (Powder)	25 kg

Shelf life	12 months from date of production
Storage conditions	Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to packaging.
Appearance and colour	Grey
Maximum grain size	D_{max}: ~0,5 mm

TECHNICAL INFORMATION

Crack bridging ability

~1,25 mm (+23 °C) Class A4 (EN 1062-7)

~0,90 mm (-10 °C) Class A3

(Values without reinforcement mesh)

	Test method	**Requirement**
Crack bridging ability standard conditions (+23 °C)	A.8,2	≥ 0,75 / 1,08 mm
Crack bridging ability at low temperature (-20 °C) [1]	A.8,3	≥ 0,75 / 1,04 mm

[1] Embedded with glass fibre fabric mesh (150–160 g/m² and 0,47 mm thickness).

Tensile adhesion strength

~1,5 MPa (EN 1542)

(EN 14891)

	Test Method	**Result**
Initial	A.6,2	~2,0 MPa
After water contact	A.6,3	~1,3 MPa
After heat ageing	A.6,5	~3,0 MPa
After freeze-thaw cycles	A.6,6	~1,3 MPa
After contact with lime water	A.6,9	~1,6 MPa
After contact with chlorinated water	A.6,7	~1,6 MPa

Classification

~1,2 mm (+23 °C) Class A3 (EN 1062-7)

~0,90 mm (-10 °C) Class A3

Note: All values out reinforcement mesh

Capillary absorption	~0,005 kg/m²·h^{0,5}		(EN 1062-3)
Water penetration under pressure	No penetration after 7 days at 1,5 bar		
Water penetration under negative pressure	No penetration after 72hours at 2,5 bar		(UNI 8298/8)
Permeability to water vapour	Class I (permeable)	S_D< 5 m	(EN ISO 7783-1)
Permeability to carbon dioxide	S_D ≥ 50 m		(EN 1062-6)
Behaviour after artificial weathering	After 2000 hrs, no blistering, cracking or flaking. Slight color change.		(EN 1062-11)
Freeze thaw de-icing salt resistance	≥ 0,8 N/mm²		(EN 13687-1)
Reaction to fire	Euroclass A2		(EN 13501-1)

APPLICATION INFORMATION

Mixing ratio	Part A : Part B = 8 : 25 (by weight)
Fresh mortar density	~1,8 kg/l
Consumption	~1,8 kg/m^2/mm This figure is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.
Layer thickness	~3 mm applied in a minimum of 2 layers (maximum recommended layer thickness is 2 mm)
Ambient air temperature	+ 5 °C min. / + 35 °C max.
Substrate temperature	+ 5 °C min. / + 35 °C max.
Pot Life	~1 hour at +20 °C
Waiting time to overcoating	Sikalastic®-152 must be fully hardened before overcoating or in contact with water.

	+20 °C	+10 °C
Horizontal covering by tiles	~2 days	~7 days
Vertical covering by tiles	~2 days	~3 days
Protective coating	~2 days	~3 days
Water Immersion	~2 days	~7 days

Times are approximate and will be affected by changing ambient conditions particularly temperature, relative humidity and ventilation.

MANUFACTURER AND IMPORTER INFORMATION

Manufacturer information	Address	Sika Italia S.p.a, Via Luigi Einaudi 6, 20068 Peschiera Borromeo, Milan, Italy
Importer information	Address	Sika (NZ) Limited 85-91 Patiki Road Avondale, Auckland 1026 New Zealand
	Phone number	0800 745 269
	Website	https://nzl.sika.com/
	Email address	info@nz.sika.com
	NZBN	9429000018791

BUILDING CODE INFORMATION

Building Code clauses	B2 Durability: Performance clause B2.3.1 - (b) 15 years E2 External Moisture: Performance clause E2.3.1 and E2.3.2 E3 Internal Moisture: Performance Clauses E3.3.3, E3.3.4, E3.3.5, E3.3.6 F2 Hazardous Building Materials: Performance clause F2.3.1
Building Code compliance statements	Performance B2.3.1 (b) 15 years: The BRANZ appraisal for this product states that, in their opinion, it achieves this durability requirement, when installed and maintained in accordance with the BRANZ Appraisal and relevant Sika technical literature. nzl.sika.com. According to Sika's "Service Improvement" records, maintained within its ISO9001:2015 Quality Management System, this product has performed successfully since it was introduced in 2009.

Performance E2.3.1 and E2.3.2: The BRANZ Appraisal for this product states that it meets the E2.3.1 and E2.3.2 weathertightness requirements when installed in accordance with the BRANZ Appraisal and relevant Sika technical literature nzl.sika.com

Performance E3.3.3, E3.3.4, E3.3.5, E3.3.6: This product has been BRANZ appraised. It meets the NZ Building Code E3 Internal Moisture requirements when designed and installed in accordance with the requirements of E3/AS1, E3/AS2-Internal Wet Area Membrane Systems (WMA Code of Practice for Internal Wet Membrane Systems (2020)), the appropriate BRANZ Appraisal (Sikalastic 152, Sikalastic 220W, Sika AquaBlok) and relevant Sika technical literature (Code of Practice, BRANZ appraisals and Sika literature available at nzl.sika.com)

Performance F2.3.1. The BRANZ Appraisal for this product nzl.sika.com states that, in their opinion, it meets this requirement and does not present a health hazard to people. Refer to the product safety data sheet nzl.sika.com for further information if required

BASIS OF PRODUCT DATA

All technical data in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

- Protect freshly applied material from rain until at least 24–48 hours after application.
- Avoid direct contact with chlorinated swimming pool water.
- The product is not a vapour barrier and may transmit vapour to applied coatings and cause blistering.
- The hardening process is slower when there is a high environmental humidity level, e.g. in closed or inadequately ventilated rooms and basements. Controlled ventilation methods are recommended.
- Avoid application during direct sun and/or strong wind exposure.
- When over-coating with solvent paints always carry out preliminary trials to ensure the solvent does not affect the integrity of the waterproofing layer.
- The product is not suitable for vehicular traffic. Pedestrian traffic is allowed, but only if protected by suitable tiling.
- Reinforcement mesh improves crack bridging ability at low temperatures.
- The surface of the product 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.

ECOLOGY, HEALTH AND SAFETY

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

APPLICATION INSTRUCTIONS

DESIGN REQUIREMENTS

This product is part of a system that includes primers, reinforcing tapes and other associated products. For full design information refer to the BRANZ Appraisal and the relevant Sika product data sheets for further support

The substrate that the membrane will be applied to must be in accordance with the NZBC to a relevant standard, such as NZS3101 for concrete, NZS 4230 or NZS 4229 for concrete masonry and NZS 3604 for timber framed Buildings.

In accordance with E3/AS1 and E3/AS2 membrane systems must be specified by the tile manufacturer (supplier) as being suitable for the tiles and the environment. And the system must be designed in accordance with the Waterproofing Membrane Association Code of Practice for Internal Wet Area Membranes - Feb 2020 and relevant Sika technical literature available at nzl.sika.com

INSTALLATION REQUIREMENTS

For compliance with Clause E3/AS2 the membrane system must be installed by, or under the supervision of, an installer certified by Sika and in accordance with the Waterproofing Membrane Association Code of Practice for Internal Wet Area Membranes - Feb 2020, and the relevant Sika technical literature (available at nzl.sika.com)

SUBSTRATE QUALITY

- All connections between the substrate and pipe entries, plant and equipment, light switches etc. must be sealed and made watertight before applying Sikalastic®-152.
- Any joints which are present in the structure must also be sealed and made watertight. Use coving details at the floor/wall junctions.
- Repair concrete substrates if necessary, with an appropriate cementitious mortar from the SikaTop® or Sika MonoTop® range of repair materials.
- The concrete substrate must be thoroughly clean, loose material, surface contamination, cement laitance, coatings and material which can reduce adhesion or prevent suction or wetting by the mortar.

- Surfaces should be prepared by acceptable preparation equipment such as blast cleaning, high-pressure water-jetting (400 bar), wire-brushing, grinding etc. to an open texture to achieve the required adhesion value for the waterproofing or protection system.
- All dust, loose and friable material must be completely removed from all surfaces before application, preferably by industrial vacuuming equipment.
- Do not dampen substrate before application.

MIXING

Important: Do not add any additional water or other constituents.

1. Shake carefully Part. A before mixing.
2. Pour ~½ of Part. A into a suitable mixing container.
3. Add Part. B slowly while mixing with a low speed (~ 500 rpm) electric single paddle mixer or other suitable equipment until a consistent mix has been achieved.
4. Add the remaining amount of Part. A.
5. Mix thoroughly for at least 3 minutes to achieve a smooth consistent mix.

APPLICATION

Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

Important: Before application remove excess water, e.g. with a clean sponge.

Important: In natural damp environments, it is not necessary to dampen the substrate before application.

Important: Avoid standing water or condensation during application.

General

Sikalastic®-152 must be applied to the full surface area at the required layer thickness.

Hand Application

Apply mixed material with firm even pressure onto the prepared substrate using a notched (3 x 3 mm) trowel. As soon as the first layer has hardened, apply the second coat by flat edged trowel.

Sprayed Application - Wet Spray

The wet mixed Sikalastic®-152 must be placed into the spraying equipment and applied onto the prepared substrate. As soon as the first layer has hardened, spray apply the second coat.

Glass fibre fabric embedment

In highly stressed areas a special alkali-resistant glass fibre fabric (150–160 g/m^2) must be placed into the first fresh mortar layer. Trim the fabric and fully embed into the mortar layer avoiding the formation of voids.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

MAINTENANCE REQUIREMENTS

No maintenance of the Sika membrane system will be required, provided that significant substrate movement does not occur within the impervious wall / floor lining or finish that has been applied over the top. Regular checks of the wall / floor finish must be made to ensure that it is sound and will not allow moisture to penetrate it. Any cracks or damage must be repaired immediately, in consultation with the supplier of the lining system

For maintenance of impervious wall and floor lining systems that have been installed to enable compliance with Clause E3/AS1, refer to the supplier of the system installed

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

The building product/building product line is not subject to warning or ban under section 26 of the Building Act 2004.

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