

PRODUCT DATA SHEET

Sika® BlackSeal® Elastic

BRANZ APPRAISED LIQUID APPLIED FLEXIBLE BITUMEN WATERPROOFING MEMBRANE



PRODUCT DESCRIPTION

Sika BlackSeal Elastic is a BRANZ appraised water based bitumen emulsion modified with a styrene acrylic copolymer.

USES

Sika BlackSeal Elastic has been formulated for use as a waterproof membrane behind retaining walls and as a damp-proof membrane for underground structures. Sika BlackSeal Elastic will cover concrete, concrete block and brick-work, wood and metal.

CHARACTERISTICS / ADVANTAGES

- BRANZ Appraised certificate No.770 [2012]
- Meets Clause B2 Durability, not less than 50 years, E2 External Moisture and F2 Hazardous Building Materials
- Appraised as an **Alternative Solution** in terms of the New Zealand Building Code
- Improved moisture vapour flow resistance of >300 MN s/g. This is three times the 90 MN s/g required for a water vapour barrier as per NZBC E2AS1 (dependant on temperature and humidity)
- Fast cure, recoat in 4 hours
- Complies with AS/NZS 4020, tested for use in contact with drinking water (potable water)
- Can be mixed with sand and cement to create waterproof screeds and mortars
- Water based, free from solvents
- Simple to apply by brush or roller
- Excellent adhesion to concrete and masonry
- Very low water permeability
- Can be applied to green concrete
- Resistant to ground salts

TESTS	Exceeds the moisture vapour permeability requirements of NZS 3604: 2011. Sika BlackSeal Elastic has been appraised by BRANZ as a damp-proof membrane behind concrete masonry basement walls, and insitu or precast concrete where the membrane is protected against damage, where drainage has been placed, and installation has been completed by a Licensed Building Practitioner trained and approved by Sika (NZ) Limited. Go to learnhow.sika.co.nz to obtain your application certificate. Refer to BRANZ Appraisal No. 770 (2012).
APPROVAL / STANDARDS	
PRODUCT DATA	
FORM	COLOUR Blue/Grey when wet. Black when dry FORM Thixotropic liquid PACKAGING Sika BlackSeal Elastic is supplied in 4 litre and 20 litre containers
STORAGE	STORAGE CONDITIONS / SHELF-LIFE Shelf life is Twelve (12) months when stored in original containers in a dry place below 35°C and away from frost.
TECHNICAL DATA	SOLIDS CONTENT 60% POLYMER CONTENT 45% DENSITY 1.03kg/litre TENSILE STRENGTH 250kN/m ² ELONGATION >1950% WATER VAPOUR TRANSMISSION 340MN/s/g ADHESION TO CONCRETE 100% SAG INDEX 1.5mm LOW TEMPERATURE FLEXIBILITY No cracking at 1°C APPLICATION TEMPERATURE RANGE +10°C to +30°C DRYING TIME Touch dry in 1 to 2 hours. Recoat time = minimum 4 hours, or longer in cold temperatures. COVERAGE Minimum application rate is 1 litre per m ² (in addition to the primer coat). Ideally this should be applied as two full undiluted coats at a coverage rate of approximately 2m ² / litre / coat, depending on the nature of the surface being treated.

APPLICATION CONDITIONS

PREPARATIONS

- Clean down surface to be treated removing all dust, grease, laitance and foreign matter.
- Remove any form release agent residues and curing compounds by high pressure waterblasting, grit blasting or mechanical wire brushing.
- Grind back smooth any dags, sharp edges or ridges. Any surface irregularities should be filled using Sika Repair & Grout, Sika MonoTop repair mortars or Sikadur-41 epoxy repair mortar.
- Form a cove where required in internal corners.
- Stir Sika BlackSeal Elastic thoroughly before use.

CONTROL JOINTS

Movement control joints in concrete or concrete masonry should be sealed with Sika BlackSeal-1 prior to applying Sika BlackSeal Elastic. Refer to the Sika BlackSeal -1 datasheet for details on joint sizes and application methods. For high movement joints refer to the Sika technical department.

PRIMING

Porous surfaces:

A primer coat of 1 part clean water to 1 part Sika BlackSeal Elastic should be used. Add water slowly and mix thoroughly.

Metal and timber surfaces:

One coat of BlackSeal Primer.

APPLICATION

- Apply Sika BlackSeal Elastic using a Sika BlackSeal Elastic application brush or with a coarse whitewash brush or broom. Soak brushes in water before use and periodically during application.
- Two full undiluted coats of Sika BlackSeal Elastic are recommended for best results. Allow each coat to dry a minimum of 4 hours before re-coating, or longer in cold temperatures.

CURING

Allow each coat to dry a minimum of 4 hours before recoating. Full cure may take 24 hours or more depending on conditions. Cold temperatures will slow cure time, higher temperatures may speed up cure times.

PROTECTION

- Sika BlackSeal Elastic must be protected immediately after curing by using a suitable protection sheet such as BlackSeal Protection Sheet.
- Backfilling should commence within 48 hours of application of the membrane to ensure Sika BlackSeal Elastic is not left exposed to sunlight or UV radiation.
- The membrane must be terminated at ground level and protected

MORTARS

- Sika BlackSeal Elastic can be mixed with a sand and cement mix, or a pre-bagged mortar to form a mortar, screed, or render, with waterproofing properties.
- To create a mortar, add Sika BlackSeal to a pre-formed sand/cement mix. 3 parts sand to 1 part cement should be mixed with water to form a working mortar before Sika BlackSeal Elastic is added.
- Adding a greater amount of Sika BlackSeal Elastic will result in a more waterproof and flexible finish (use 3 parts mortar to 1 part Sika BlackSeal Elastic as a starting point).
- This application can be used when forming fillets at junctions, levelling floors and walls, filling voids or forming low build waterproof screeds.

IMPORTANT NOTES LIMITATIONS

- Do not expose to sunlight.
- Do not overcoat with paints as staining will occur, and if exposed to sunlight the paint film will crack.
- Sika BlackSeal Elastic is recommended for use only as described in the "Uses" section of this data sheet.

NOTES

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 INSTRUCTIONS

PROTECTIVE MEASURES

- To avoid rare allergic reactions, we recommend the use of protective gloves. Change soiled work clothes and wash hands before breaks and after finishing work.
- Local regulations as well as health and safety advice on packaging labels must be observed.
- For further information refer to the Sika Safety Data Sheet which is available on request.
- If in doubt always follow the directions given on the pack or label.

IMPORTANT NOTES

- Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.
- Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the safety data sheet.

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.

FOR MORE SIKA® BLACKSEAL® ELASTIC INFORMATION:



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