BUILDING TRUST

PRODUCT DATA SHEET

Sikalastic®-770 BC

Polyurea cold liquid applied membrane for roof waterproofing

DESCRIPTION

Sikalastic®-770 BC is a two-component polyurea-based, highly elastic and fast curing cold applied membrane for waterproofing. Sikalastic®-770 BC rapidly cures and it forms a durable, seamless waterproofing membrane with excellent adhesion to a wide range of substrates.
Sikalastic

USES

Designed for the following waterproofing application:
- Roof waterproofing for new constructions and refurbishment projects
- Waterproofing of roofs, balconies and terraces

FEATURES

- Seamless membrane
- Fast curing
- Self levelling
- High elasticity and flexibility
- Excellent mechanical properties
- Resistance to root penetration
- Cold applied by notched trowel, roller, brush or airless spray

CERTIFICATES AND TEST REPORTS

- CE Marking and Declaration of Performance to European Technical Assessment (ETA) No 24/0043 based on ETAG 005 Part 6 – Liquid-applied roof waterproofing using kits based on polyurethane.
- Test report - Resistance to root penetration according to CEN/TS 14416

PRODUCT INFORMATION

Composition	Aromatic poluyrea		
Packaging	**Set A+B metal pails**	**Comp. A**	**Comp. B**
	25,2 kg	22,5 kg	2,7 kg
	16,8 kg	15,0 kg	1,8 kg
Colour	Standard colour: Grey (white upon request)		
Shelf life	12 months from date of production		
Storage conditions	The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +25 °C. Always refer to packaging. Refer to the current Safety Data Sheet for information on safe handling and storage		
Density	~1.35 kg/lt (at +20 °C)	~1.35 kg/lt (at +20 °C)	
Flash point	+42 °C (closed cup)	(ASTM D93)	

Viscosity	1500 – 2500 mPa·s (at +25 °C)	(ASTM D2196-86)

TECHNICAL INFORMATION

Shore A hardness	70	(STM D2240 / DIN 53505 / ISO R868)
Tensile strength	>8 N/mm²	(ASTM D412 / EN ISO-527-3
Tensile strain at break	~500 % (at +23 °C)	(ASTM D412 / EN ISO-527-3)
Resistance to thermal shock	up to +200 °C (short-term)	
Service temperature	Minimum	-20 °C
	Maximum	+90 °C

APPLICATION INFORMATION

Consumption	Sikalastic®-770 BC is applied in 1 or 2 coats. Appox. 1,5 - 2,0 kg/m² depending on the system configuration.	
Ambient air temperature	Minimum	+5 °C
	+5 °C	+35 °C
Relative air humidity	≤ 85 % r.h.	
Dew point	Beware of condensation. The substrate and uncured membrane must be at least 3 °C above dew point to reduce the risk of condensation or blooming of the membrane finish.	
Substrate temperature	Minimum	+5 °C
	Maximum	+35 °C
Substrate moisture content	≤ 4 % pbw moisture content. The folllowing test methods can be used: ▪ Sika®-Tramex meter ▪ CM - measurement ▪ Oven-dry-method No rising moisture according to ASTM (Polyethylene-sheet).	
Substrates	**Substrate**	**Primer**
	Concrete, Ceramic tiles (unglazed) and wood	Sikalastic®-1 C Primer PU, Sika® Bonding Primer, Sika® Concrete Primer or Sikalastic® Primer MP
	Bituminous felt & coating	Sikalastic® Metal Primer N
	Metals ferrous or galvanised metals, lead, copper, aluminium, brass or stainless steel	Sikalastic® Metal Primer N
	Existing Sikalastic® membrane	Sika® Reactivation Primer, Sikalastic®-1 C Primer PU or Sika® Concrete Primer
	Note: For the consumption rates and waiting time / overcoating please refer to the PDS of the appropriate primer. Other substrates must be tested for their compatibility. If in doubt, apply a test area first.	
Pot Life	~30 min (at +20 °C)	
Tack free time	3 hours (at +25 °C & 55 % r.h.)	

Waiting time to overcoating

Minimum	Maximum
2 hours	24 hours

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

SYSTEM INFORMATION

System structure

Layer	Product	Consumption
Primer	Refer to below primer table	Refer to PDS of the primer
Base coat	Sikalastic®-770 BC	≥ 0.8 kg/m²
Reinforcement (optional)	Sikalastic® Fleece	–
Second Coat	Sikalastic®-770 BC	≥ 0.8 kg/m²
Top coat	Sikalastic®-670 TC / Sikalastic®-701	≥ 0.3 kg/m²

Note: Sikalastic®-670 TC / Sikalastic®-701 is not required to not exposed roofs.
Note: For the consumption rates and waiting time / overcoating please refer to the PDS of the appropriate product.
Note: It always recommended to apply a top coat, in order to increase system perfomance.

BASIS OF PRODUCT DATA

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

IMPORTANT CONSIDERATIONS

Installation work must only be carried out by Sika trained and approved contractors, experienced in this type of application.

- Do not use Sikalastic®-770 BC for indoor applications
- Do not apply Sikalastic®-770 BC on substrates with rising moisture.
- Do not dilute Sikalastic®-770 BC with any solvent.
- Do not apply Sikalastic®-770 BC close to the air intake vent of a running air conditioning unit. Switch-off units and seal intakes before applying.
- On substrates likely to exhibit outgassing, apply Sikalastic®-770 BCduring falling ambient and substrate temperature. If applied during rising temperatures “pin holing” may occur from rising air.
- Do not apply Sikalastic®-770 BC directly on Sikalastic® Insulation boards. Instead use Sikalastic® Carrier between Sikalastic® Insulation board and Sikalastic®-770 BC.
- Areas with high movement, irregular substrates, or timber based roof decks require a complete layer of Sikalastic® Fleece.
- Volatile bituminous materials may stain and/or soften below the coating.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

REGULATION (EC) NO 1907/2006 - REACH

APPLICATION INSTRUCTIONS

EQUIPMENT

Substrate preparation equipment

- Abrasive blast cleaning / planing / scarifying or grinding equipment

High pressure power washer

- Mixing Equipment
- Electric single paddle mixer

Application Equipment

- Brush
- Roller
- Trowel
- Airless spray

SUBSTRATE QUALITY

Concrete substrates must be sound and of sufficient compressive strength (≥ 25 N/mm²) with a minimum pull off strength of 1.5 N/mm²

SUBSTRATE PREPARATION

The surface must be of sufficient structural strength, clean, dry and free of dirt, oil, grease and other contamination.
Depending on the material the substrate must be primed and mechanically cleaned. Grinding may be necessary to level the surface.
Refer to the Sika Method Statement: Sikalastic®-770 BC
Suitable substrates are such as: concrete, bituminous

membrane and coating, metal, unglazed ceramic tiles and wooden.

MIXING

Prior to mixing all parts, mix separately Part A using an electric single or double paddle mixer and stirrer (300–400 rpm) or other similar equipment. When all of part B has been added to part A, mix continuously for 3 minutes until a uniform mix has been achieved. To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix. Over mixing must be avoided to minimise air entrainment.

APPLICATION

Prior to application, confirm substrate moisture content, r.h. and dew point.
Prior the application of Sikalastic®-770 BC the priming coat must have cured, tack-free. For the Waiting Time / Overcoating please refer to the PDS of the appropriate primer.

No-Reinforced Roof Waterproofing:
Sikalastic®-770 BC is applied in one with trowel - airless or two coats with roll. Prior to the application of a 2nd coat the indicated waiting time of overcoating shall be allowed. Roof coatings may need partial reinforcement over areas of stress or predictable movement e.g. joints, overlaps, detailing, crack bridging etc. Use Sika® Joint Tape SA or sections of Sikalastic® Fleece.
For joints with moderate movement e.g. Metal Sheet use Sika® Flexitape Heavy incorporating bond-break or Sika® Joint Tape SA .

Reinforced Roof Waterproofing:
Sikalastic®-770 BC is applied in combination with Sikalastic® Fleece. Over coating of bitumen membrane has to be full reinforced.
1.Apply the first coat, for correct consumption refer to the table of the relevant system of Sikalastic®-770 BC. Work only so far in advance that the material stays liquid.
2.Roll in the Sikalastic® Fleece and ensure that there are no bubbles or creases. Overlapping must be a minimum 5 cm and ensure overlaps are sufficiently wet to bond.
3.The roller may require only a little extra material to keep wetted but no further significant material needs to be added at this stage.
4. After the coat is dry enough to walk on, seal the roof area with second coat of Sikalastic®-770 BC at a minimum consumption of the revelant system.
Note: The applicator must wait 2 - 6 hours between coats. If the overcoating time is exceeded, more than 3 days, Sika® Reactivation Primer, Sika® Concrete Primer or Sikalastic®-1 C Primer PU must be applied at a consumption rate of ~100 g/m2.

CLEANING OF EQUIPMENT

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

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 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.

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