BUILDING TRUST

PRODUCT DATA SHEET

SikaProof®-808

Fully bonded FPO sheet membrane for below ground waterproofing

DESCRIPTION

SikaProof®-808 is a fully-bonded FPO sheet membrane for external below-ground waterproofing of reinforced concrete structures. The membrane can be pre-applied for example below a base slab or on a wall with lost formwork, or post-applied with the SikaProof® Adhesive-02 onto existing reinforced concrete structures. A special hybrid bonding layer on the membrane forms a permanent dual bond with the concrete structure to prevent lateral water migration between membrane and concrete. Overlap joints are sealed using cold-applied tapes or by thermal jointing.

USES

SikaProof®-808 is used for:
- Damp-proofing, waterproofing and concrete protection

SikaProof®-808 is used on the following structures:
- Precast reinforced concrete structures
- Cast-in-place reinforced concrete structures
- Existing reinforced concrete structures

CHARACTERISTICS / ADVANTAGES

- Can be used as a pre and post-applied system
- A+ Technology: Dual bond (mechanical and chemical) with concrete structure
- High flexibility and crack-bridging capabilities
- No lateral water underflow between concrete structure and waterproofing system
- Easy to install with fully adhered joints
- Overlap joints are sealed using thermal jointing or cold-applied tapes

ENVIRONMENTAL INFORMATION

- Specific Environmental Product Declaration (EPD) in accordance with EN 15804. EPD independently verified by BRE Global
- Contributes towards satisfying Materials and Resources (MR) Credit: Building product disclosure and optimization — Environmental Product Declarations under LEED® v4
- Contributes towards satisfying Materials and Resources (MR) Credit: Building Product Disclosure and Optimization — Material Ingredients under LEED® v4

APPROVALS / STANDARDS

- CE marking and declaration of performance based on EN 13967:2012 Flexible sheets for waterproofing — Plastic and rubber damp proof sheets including plastic and rubber basement tanking sheet — Definitions and characteristics
- General testing ASTM, Admaterials Technologies, Test report No. T20-16252
- Watertightness functional test PG FBB Part 1, WISSBAU, Test report No. 2021-083-1
- Watertightness functional test PG FBB Part 1, WISSBAU, Test report No. 2020-378-1

PRODUCT INFORMATION

Chemical Base	Membrane Layer	FPO	
	Bonding Layer	Cement modified polymer (A+ Technology)	
Packaging	Roll width	1.00 m or 2.00 m	
	Roll length	25 m	
	Refer to the current price list for available packaging variations.		
Colour	Colour	Light grey	
Shelf Life	24 months from date of production		
Storage Conditions	The Product must be stored in original unopened and undamaged sealed packaging in dry conditions and temperatures between +5 °C and +30 °C. Store in a horizontal position. Do not stack pallets of the rolls on top of each other, or under pallets of any other materials during transport or storage. Always refer to the packaging.		
Effective Thickness	Total thickness	(1.00 +0.10 / -0.05) mm	(EN 1849-2)
	Thickness waterproofing layer	0.8 mm	
Mass per Unit Area	(1.00 +0.10 / -0.05) kg/m²		(EN 1849-2)
Colour	Surface texture	Rough surface on A+ bonding layer	

TECHNICAL INFORMATION

Resistance to Impact	Method A, Hard support	≥ 800 mm	(EN 12691)
	Method B, Soft support	≥ 800 mm	
Resistance to Static Puncture	≥ 500 N		(ASTM E0154)
Tensile Strength	Longitudinal (MD)	≥ 400 N/50mm	(EN 12311-2)
	Transversal (CMD)	≥ 400 N/50mm	
	Longitudinal (MD) Method A	≥10 MPa	(ASTM D412)
	Transversal (CMD) Method A	≥10 MPa	
Resistance to Tear (nail shank)	Longitudinal (MD)	≥ 300 N	(EN 12310-1)
	Transversal (CMD)	≥ 300 N	
Joint Shear Resistance	≥ 100 N/50 mm		(EN 12317-2)
Crack Bridging Ability	No cracks occurred after 100 cycles at 3.2mm width		(ASTM C1305)
Foldability at Low Temperature	No cracks at -29 °C		(ASTM D1970)
Reaction to Fire	Class E		(EN 13501-1)
Exposure to Bitumen	28 days, +70 °C	Pass	(EN 1548)
	Method A (24 hours, 60 kPa)	Pass	(EN 1928)
Water Vapour Transimission	0.05 (g/m²/24h)		(ASTM E96)
Water Tightness	Method B, 24 hours at 60 kPa	Pass	(EN 1928)

Durability of Water Thightness Against Ageing	Aged 12 weeks at +70 °C, tested 24 hours at 60 kPa	Pass	(EN 1928; EN 1296)
Durability of Water Tightness Against Chemicals	Calcium hydroxide, aged 28 days at +23 °C, tested 24 hours at 60 kPa	Pass	(EN 1928; EN 1847)
Service Temperature	Maximum	+35 °C	
	Minimum	-10 °C	
Adhesion in Peel	≥ 60 N / 50 mm with 90° angle after 28 days		(ASTM D903)
Resistance to Lateral Water Migration	Up to 7 bar (71 m)	Pass	(ASTM D5385 / D5385M)
Elongation at maximum tensile force	Longitudinal (MD)	≥ 500 %	(EN 12311-2)
	Transversal (CMD)	≥ 500 %	
	Longitudinal (MD)	≥ 500 %	(ASTM D412)
	Transversal (CMD)	≥ 500 %	

APPLICATION INFORMATION

Ambient Air Temperature	Maximum	+45 °C
	Minimum	+5 °C
Substrate Temperature	Maximum	+60 °C
	Minimum	+5 °C

SYSTEM INFORMATION

System Structure

The following products are part of the pre-applied system:
- SikaProof®-808 sheet membrane
- SikaProof® Tape A+ N for detailing and for internal jointing
- SikaProof® Sandwich Tape

The following products are part of the post-applied system:
- SikaProof®-808 sheet membrane
- SikaProof® Primer-02
- SikaProof® Adhesive-02
- SikaProof® ExTape-100

Complementary products are available for detailing and joint solutions.

BASIS OF PRODUCT DATA

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.

FURTHER DOCUMENTS

Refer to the following Sika® Method Statement:
Method Statement SikaProof-808 / -810

ECOLOGY, HEALTH AND SAFETY

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the product data sheet. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0,1 % (w/w).

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Preconditions
The substrate is sufficiently stable to avoid movement during the construction works.
The substrate surface must be smooth, uniform and clean.

1. IMPORTANT The substrate may be damp or slightly wet but avoid ponding water. Apply a Geotextile ≥ 300 g/m² to protect the Product from sharp aggregates on the blinding concrete surface.

APPLICATION

IMPORTANT
Application by trained personnel
The application of this Product must only be carried out by an applicator that is trained or approved by Sika. The applicator must also be experienced in this type of application.
IMPORTANT
Reduced Product performance due to application in unsuitable weather conditions

1. Do not install the membrane during continuous or prolonged rain, snowfall or sandstorms.

IMPORTANT
Risk of leaks due to insufficient sealing of penetrations and construction joints

1. Use additional Sika joint sealing solutions for connections around penetrations and for construction joints.

IMPORTANT
Reduced system performance due to permanent UV exposure

1. The membrane must not be exposed to direct sunlight for more than 60 days.
2. Proper concrete installation – mix design and workmanship – is required to achieve optimum bond of the membrane system to the concrete.

Reference must be made to Method Statement SikaProof-808 / -810

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.

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.

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