

PRODUCT DATA SHEET

SikaProof® A+ 12

FPO sheet membrane for pre and post-applied fully bonded below ground waterproofing

DESCRIPTION

SikaProof® A+ 12 is a polyolefin (FPO) based sheet membrane for below ground waterproofing of reinforced concrete structures. A special hybrid bonding layer on the membrane forms a full and permanent dual bond with the concrete structure. The membrane can be pre or post-applied. Joints are sealed with cold-applied tapes or by thermal jointing using appropriate heating equipment. The total thickness is 1.75 mm with a membrane thickness of 1.20 mm.

USES

SikaProof® A+ 12 may only be used by experienced professionals.

The Product is used for:

- Damp-proofing, waterproofing and concrete protection for basements and other below ground concrete structures.

Suitable for use on:

- Precast reinforced concrete structures
- Cast-in-situ reinforced concrete structures
- Existing reinforced concrete structures

CHARACTERISTICS / ADVANTAGES

- Dual bond: full and permanent mechanical and chemical bond with the concrete structure
- Can be used as a pre and post-applied system
- Joints can be sealed using thermal jointing

- No lateral water migration between concrete and membrane
- Fast and easy installation
- High flexibility and crack-bridging capabilities
- High watertightness tested according to various standards
- Good resistance to aggressive conditions in natural ground water and soil
- Temporarily resistant to weathering and UV exposure
- Can be combined with other approved Sika® waterproofing and joint sealing systems

ENVIRONMENTAL INFORMATION

- Sikaproof A+ is listed on the Eco-Product Directory as environmentally friendly product choice for green building initiatives. (Application No : PL-00996-2021)
- Environmental Product Declaration (EPD) in accordance with EN 15804. EPD independently verified by BRE Global

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
- Watertightness functional test PG FBB Part 1, WISS-BAU, Test report No. 2019-231-1
- Watertightness functional test PG FBB Part 1, WISS-BAU, Test report No. 2018-275-1
- Watertightness functional test PG FBB Part 1, WISS-BAU, Test report No. 2018-276-1

PRODUCT INFORMATION

Chemical Base

Membrane Layer
Hybrid Layer

Flexible Polyolefin (FPO)
Cement modified polymer

Packaging	Roll width	Roll length	
	1.00 m or 2.00 m	20 m	
Refer to the current price list for available packaging variations.			
Shelf Life	18 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 on top of each other.		
Appearance / Colour	Membrane layer	Light yellow	
	Bonding layer	Grey	
Effective Thickness	Total Thickness (=deff)	(1.75 +0.18 / -0.09) mm	(EN 1849-2)
	Membrane Thickness	(1.20 +0.12 / -0.06) mm	
Mass per Unit Area	(1.65 +0.17 / -0.09) kg/m²		(EN 1849-2)

TECHNICAL INFORMATION

Resistance to Impact	≥ 400 mm		(EN 12691)
Tensile Strength	Longitudinal (MD) Method A	≥750 N / 50mm	(EN 12311-2)
	Transversal (CMD) Method A	≥750 N / 50mm	
Elongation at break	Longitudinal (MD) Method A	≥1100 %	(EN 12311-2)
	Transversal (CMD) Method A	≥1100 %	
Adhesion in Peel	≥100 N/ 50 mm to concrete after 28 days		(DIN EN 1372)
Joint Shear Resistance	≥100 N / 50mm		(EN 12317-2)
Service Temperature	Maximum	+35 °C	
	Minimum	-10 °C	
Water Tightness	Method B 24 h 60 kPa	Pass	(EN 1928)
Resistance to Lateral Water Migration	Up to 7 bar	Pass	(ASTM D5385 / D5385M)
Accelerated Ageing in Alkaline Environment Tensile Strength	28 d +23 °C	Pass	(EN 1847)
	Method B 24 h 60 kPa	Pass	(EN 1928)
Durability of Water Tightness Against Chemicals	28 d +23 °C	Pass	(EN 1847)
	Method B 24 h	Pass	(EN 1928)
Durability of Water Tightness Against Ageing	12 Weeks	Pass	(EN 1847)
	Method B 24 h 60 kPa	Pass	(EN 1928)
Reaction to Fire	Class E		(EN 13501-1)

SYSTEM INFORMATION

System Structure	The following products are part of the pre-applied system: <ul style="list-style-type: none"> ▪ SikaProof® A+ 12 ▪ SikaProof® Tape A+ ▪ SikaProof® Sandwich Tape
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The following products are part of the post-applied system:

- SikaProof® Primer-02
- SikaProof® Adhesive-02
- SikaProof® A+ 12
- SikaProof® ExTape-100

Complementary products are available for detailing and joint solutions.

APPLICATION INFORMATION

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

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.

LIMITATIONS

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

- Reference must also be made to the Sika® Method Statement: SikaProof® A+ System for more detailed information.
- Do not install SikaProof® A+ 12 membrane during continuous or prolonged rain, snowfall or sandstorm.
- The substrate application surface must be clean with no standing water.
- If SikaProof® A+ 12 is to be applied under wet conditions or temperatures below +5 °C. Exceptions are possible under special circumstances with appropriate precautions. Contact Sika® Technical Services for more information.
- Additional Sika® Joint Sealing Solutions (minimum SikaSwell®) must be used for connections, around penetrations and for construction and expansion joints.
- Concrete must be placed within 90 days after membrane system installation. Alternatively, concrete must be placed within 30 days after installation when using SikaProof® Tape-150 A.
- Adequate concrete quality (mix design and workmanship) is required to achieve optimum adhesion of the membrane system to the concrete.
- SikaProof® A+ 12 membrane is not permanently UV and weather resistant. Therefore, the membrane system must not be installed on structures where it will be permanently exposed to UV light.
- After formwork removal, the membrane system (membrane side) must be protected with appropriate protection sheets as soon as possible or at the latest before backfilling or within 90 days after installation.
- To ensure the most suitable type of membrane is selected for the project, refer to section 'Project Design' of the 'Sika® Method Statement: SikaProof® A+ System' or contact Sika® Technical Services for more information.

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

IMPORTANT

Strictly follow installation procedures

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

EQUIPMENT

- Tape measure
- Marking pen
- Razor knife
- Scissors
- Pressure roller
- Clean lint-free cloth
- Metal straight edge for cutting
- Protective sheet for cutting

SUBSTRATE QUALITY

SikaProof® A+ 12 membrane must be applied on a sufficiently stable substrate to avoid movement during the construction works. Substrate surface must be smooth, uniform and clean. Large gaps and voids ($\geq 12\text{--}15\text{ mm}$) must be filled before membrane installation.

Substrate can be damp or slightly wet, ponding water must be avoided. Suitable membrane fixing substrates include:

- Concrete blinding
- Formwork
- Rigid thermal insulation
- Plywood sheets / forms

APPLICATION METHOD / TOOLS

Installation procedure

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

Installation method - General

After substrate conditions have been fulfilled, the waterproofing membrane is installed by loose laying onto horizontal / inclined substrates or fastening onto vertical substrates. Overlap and transverse joints are sealed using self-adhesive tapes or thermally jointed using appropriate heating equipment.

Overlap and transverse joints

All overlap and transverse joints must be bonded and sealed either with cold applied SikaProof® Tape A+ or SikaProof® Sandwich Tape. Alternatively, all overlap and transverse joints can be bonded and sealed with SikaProof® Tape-150 A. Further, all overlap and transverse joints can be thermally jointed with appropriate hot air heating equipment.

Installation method - Detailing

Form all details and connections using the appropriate SikaProof® ancillary products outlined in the Sika® Method Statement: SikaProof® A+.

Construction and expansion joints

For sealing these types of joints, use additional Sika® Joint Solutions.

Inspection and quality control of installation

A final inspection before placing concrete must be carried out to ensure the complete membrane system has been correctly installed, any damage repaired, and the surface of the hybrid-bonding layer is clean.

Concrete placement

Place concrete directly onto or against the membrane within 90 days after installation. Alternatively, concrete must be placed within 30 days after installation when using SikaProof® Tape-150 A.

Formwork removal

After removing the formwork, all penetrations such as shuttering anchors, any membrane damage and construction joints must be sealed using the appropriate SikaProof® A+ 12 ancillary products or complementary Sika Waterproofing Systems.

Backfilling protection

After formwork removal and before backfilling. SikaProof® A+ 12 system must be protected with an appropriate protection sheet as soon as possible or at the latest within 90 days.

APPLICATION

IMPORTANT

Exposure to UV or weathering

The Product is not resistant to permanent UV exposure or weathering.

1. Protect as soon as possible but not later than 90 days after application

For information on application, refer to the following Sika® method statement:

- Sika Method Statement: SikaProof A+

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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Product Data Sheet

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