BUILDING TRUST

BUILDING PRODUCT INFORMATION SHEET

SikaProof® A+ 12

FPO sheet membrane for pre-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. It is loose laid onto prepared substrates or formwork before fixing reinforcement and casting concrete. A special hybrid bonding layer on the membrane forms a permanent bond with the fresh concrete. Overlap joints are sealed using 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

Damp-proofing, waterproofing and concrete protection for basements and other below ground concrete structures against ground water ingress. Suitable for use on:

- Reinforced concrete base slabs
- Reinforced concrete walls with single and double-faced formwork
- Extension and reconstruction works
- Prefabricated structures

FEATURES

- Pre-applied: Fixed before placing reinforcement and casting concrete
- Dual bond: Mechanical and adhesive bond with fresh concrete
- High flexibility and crack-bridging capabilities
- No lateral water migration between the concrete structure and the membrane system
- High watertightness tested according to various standards
- Fully and permanently bonded to the reinforced concrete structure
- Resistant to aggressive conditions in natural ground water and soil
- Easy to install with fully adhered joints
- Temporarily resistant to weathering and UV exposure during construction
- Can be combined with other approved Sika® Waterproofing / Joint Sealing Systems

APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance to EN 13967 - Flexible sheets for waterproofing - Damp proofing and basement tanking
- Watertightness of a Surface Sealing System SikaProof® A+ 12 / SikaProof® Tape A+, WISSBAU®, Germany, No. 2018-275-1
- Watertightness of a Surface Sealing System SikaProof® A+ 12 / SikaProof® Sandwich Tape, WISSBAU®, Germany, No. 2018-276-1
- Watertightness of a Surface Sealing System SikaProof® A+ 12 / Thermal Jointing, WISSBAU®, Germany, No. 2019-231-1

PRODUCT INFORMATION

Product identifier	SikaProof® A+ 12	
Place of manufacture	Overseas	
Composition	Membrane Layer	Flexible Polyolefin (FPO)
	Hybrid Layer	Cement modified polymer

Packaging	Product	Roll width	Roll length
	SikaProof® A+ 12	1.00 m	20 m
	SikaProof® A+ 12	2.00 m *	20 m
	* **Sika NZ Approved Contractor Only**		
Shelf life	18 months shelf life from date of production		
Storage conditions	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 packaging.		
Appearance and colour	Light yellow membrane containing a light grey bonding layer		
Effective thickness	Total Thickness (=deff)	1.75 mm (-5/+10 %)	(EN 1849-2)
	Membrane Thickness	1.20 mm	
Mass per area	1.65 kg/m^2 (-5/+10 %)		(EN 1849-2)

TECHNICAL INFORMATION

Resistance to impact	≥ 400 mm		(EN 12691)
Tensile strength	Machine direction	≥ 750 N/50 mm	(EN 12311-2)
	Cross direction	≥ 750 N/50 mm	
Modulus of elasticity in tension	≤ 35 N/mm^2 (-/+10 %)		(EN ISO 527-3)
Elongation	Machine direction	≥ 1100 %	(EN 12311-2 Method A)
	Cross direction	≥ 1100 %	
Adhesion in peel	≥ 100 N/ 50mm	(to concrete after 28 d)	(DIN EN 1372)
Joint shear resistance	≥ 100 N/50 mm		(EN 12317-2)
Service temperature	-10 °C min. / +35 °C max.		
Watertightness	Pass (Method B, 24 h/60 kPa)		(EN 1928)
Resistance to lateral water migration	Pass, up to 7 bar		(ASTM D5385 Modified)
Accelerated ageing in alkaline environment	Pass (28 d/+23 °C)		(EN1847)
	Pass (Method B, 24 h/60 kPa)		(EN1928)
Durability of watertightness against chemicals	Pass (28 d/+23 °C)		(EN 1847)
	Pass (Method B, 24 h)		(EN 1928)
Durability of watertightness against ageing	Pass (12 weeks)		(EN 1847)
	Pass (Method B, 24 h/60 kPa)		(EN 1928)
Reaction to fire	Class E		(EN 13501-1)

SYSTEM INFORMATION

System structure

The following system products must be used:

- SikaProof® A+ 12 sheet membrane
- SikaProof® Tape A+ self-adhesive tape for internal jointing
- SikaProof® Sandwich Tape for internal jointing

Ancillary products:

Accessories and complementary products are available to provide detailing and connection solutions.

APPLICATION INFORMATION

Ambient air temperature	+5 °C min. / +45 °C max
Substrate temperature	+5 °C min. / +60 °C max

MANUFACTURER AND IMPORTER INFORMATION

Manufacturer information	Address	Sika Supply Centre AG Industriestrasse 26 6060, Sarnen Switzerland
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-(a) not less than 50 years E2 External Moisture: Performance clause E2.3.3 F2 Hazardous Building Materials: Performance clause F2.3.1
Building Code compliance statements	Performance B2.3.1 (a) 50 years: The BRANZ appraisal for this product states that, in their opinion, it meets this durability requirement and will remain serviceable for at least 50 years, 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 2011. Performance E2.3.3: The BRANZ Appraisal for this product nzl.sika.com states that it will meet the E2.3.3 weathertightness requirements when installed by a Sika trained applicator in accordance with the BRANZ Appraisal and all relevant Sika technical literature. nzl.sika.com The membrane has a vapour flow resistance of not less than 90 MN s/g and been used successfully in NZ since 2011 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.

FURTHER DOCUMENTATION

- Sika® Method Statement: SikaProof® A+
- Sika® Application Manual: SikaProof® A+
- Sika® Application Manual: SikaProof® A+ Thermal jointing

IMPORTANT CONSIDERATIONS

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 has 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.
- 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 this 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

NOTES ON INSTALLATION

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.

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, 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.

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.

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 (≥ 12–15 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

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.

Sika (NZ) Limited
85-91 Patiki Road
Avondale, Auckland 1026
New Zealand
0800 745 269
www.sika.co.nz