BUILDING TRUST

BUILDING PRODUCT INFORMATION SHEET

SikaProof® P-12

FPO self adhesive sheet membrane for post-applied fully bonded below ground waterproofing

DESCRIPTION

SikaProof® P-12 is a flexible polyolefin (FPO) self-adhesive sheet membrane for post-applied fully bonded below ground waterproofing of existing reinforced concrete structures. Membrane thickness 1.2 mm. SikaProof® P-12 is pre-coated with an adhesive sealant layer and is cold applied onto primed concrete structures by a simple peel and stick process by using SikaProof® Primer-01 as a system primer.

USES

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

- Horizontal reinforced concrete slabs, decks and podiums
- Vertical reinforced concrete walls
- Extensions and reconstruction works
- Prefabricated structures

FEATURES

- Post-self-adhered, fully bonded on existing concrete structures
- No lateral water underflow between the concrete structure and the membrane system
- High flexibility and crack-bridging properties
- Validated high watertightness
- Easy to install with fully adhered joints (no welding required)
- Cold applied (no heat or open flames)
- Temporarily resistant to weathering and UV-light during construction
- Highly durable and resistant to aging
- Resistant to aggressive elements in natural ground water and soil
- Can be combined with other approved Sika Waterproofing / Joint Sealing Systems

SUSTAINABILITY

BRE Environmental Product Declaration (EPD) available

APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance to EN 13967 - Flexible sheets for waterproofing – Damp proofing and basement tanking
- Agrement Certificate, SikaProof® P,BBA,Certificate No.13-5075
- Test Report, Functionality, SikaProof P-12, WISSBAU, No. 2013-253
- abP Approval, SikaProof P-12, Report No. MPANRW-2211463-1

PRODUCT INFORMATION

Product identifier	SikaProof® P-12	
Place of manufacture	Overseas	
Composition	Membrane Layer:	Flexible Polyolefin (FPO)
	Sealant/adhesive:	Polyolefin (PO)
Packaging	Rolls wrapped individually in a yellow PE-film.	
	Roll width	Roll length
	1.00 m	20 m

Shelf life	12 months 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 sheet membrane with a white release film on the adhesive side.		
Visible defects	Pass		[EN 1850-2]
Effective thickness	Total Thickness (= deff)		1.20 mm (-5 /+10 %)
	Membrane Thickness		0.60 mm
Straightness	≤ 50mm/ 10 m		[EN 1848-2]
Mass per area	1.20 kg/m²		(-5 /+10%)

TECHNICAL INFORMATION

Resistance to impact	≥ 200 mm		[EN 12691, Method A]
Resistance to static loading	≥ 20 kg		[EN 12730, Method B]
Resistance to root penetration	Pass		[CEN/TS 14416]
Tensile strength	Machine direction:	≥ 6,0 N/mm²	[EN 12311-2]
	Cross direction:	≥ 6,0 N/mm²	
Modulus of elasticity in tension	≤ 35 N/mm2	(+/- 10%)	[EN ISO 527-3]
Crack bridging ability	Class A 5, no cracks		(DIN EN 1062-7)
Adhesion in peel	≥ 100 N/50mm (on primed concrete)		[EN 1372]
Resistance to tear	Machine direction:	≥ 200 N	[EN 12317-2]
	Cross direction:	≥ 200 N	
Joint shear resistance	≥ 125 N/50mm		[EN 12317-2]
Service temperature	-10 °C min. / +35 °C max		
Foldability at low temperature	- 30 °C		(EN 1109)
Watertightness	Pass (Method B, 24h/60kPa)		Pass (Method B, 24h/60kPa)
Resistance to lateral water migration	Pass, up to 7 bar		[ASTM D 5385 modified]
Water-vapour transmission rate	0.50 g/m² x 24h		[EN 1931] (+23°C/ 75 % r.h.)
	μ = 58'000	(+/- 20 %)	
	sd = 78 m		
Accelerated ageing in alkaline environment	Pass (28 d/+23 °C)		(EN 1847)
	Pass (Method B, 24 h / 60 kPa)		(EN 1928)
Durability of watertightness against chemicals	Pass (28 d/+23 °C)		(EN 1847)
	Pass (Method B, 24 h / 60 kPa)		(EN 1928)
Durability of watertightness against ageing	Pass (12 weeks)		(EN 1296)
	Pass (Method B, 24 h / 60 kPa)		(EN 1928)
Reaction to fire	Class E		[EN 13501-1]

Elongation	Machine direction:	≥ 350 %	[EN 12311-2]
	Cross direction:	≥ 350 %	

SYSTEM INFORMATION

System structure

The following system components must be used:

- SikaProof® P-12 sheet membrane
- SikaProof® Primer-01

Ancillary products:

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

APPLICATION INFORMATION

Ambient air temperature	+ 5 °C min. / + 35 °C max.
Dew point	The substrate temperature must be at least 3°C above the dew point to reduce the risk of condensation and reduced adhesion.
Substrate temperature	Substrate bonding surface: minimal +5 °C (Refer to important considerations for more information)
Substrate moisture content	≤ 6 % parts by weight. No rising moisture

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: This product has been evaluated in accordance with B2/VM1. It meets this durability requirement and will remain serviceable for 50 years, or more, when installed and maintained in accordance with the 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 2015.

Performance E2.3.3: This product will meet the E2.3.3 weathertightness requirements. The membrane has a vapour flow resistance of 348MNs/g and has been tested and certified by the British Board of Agreement (BBA - Certificate 13/5075)) as being fit for purpose as a below ground, externally applied, tanking membrane.

Performance F2.3.1: This product meets this requirement when used and applied in accordance with Sika's installation instructions and does not present a health hazard to people occupying or using the building. Refer to the Sika Product Technical Data sheet and 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

Method Statement - SikaProof® P

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 'Method Statement - SikaProof® P' for more detailed information.
- Do not install SikaProof® P-12 membranes during continuous or prolonged rain and snowfall.
- For optimum, full adhesion of the SikaProof® P-12 membrane, an adequate concrete and substrate quality including the use of SikaProof® Primer-01 is required.
- If SikaProof® P-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.
- After the installation is completed, it is recommended to protect the SikaProof® P-12 membrane immediately to prevent any mechanical damage.
- The SikaProof® P-12 membrane is not permanently UV and weather resistant. Therefore the membrane system must not be installed on structures permanently exposed to UV light and weathering.
- The membrane must be protected with appropriate protection sheets as soon as possible, or at the latest before backfilling, or within 90 days after installation.
- SikaProof® P-12 is not designed for use on structures exposed to direct traffic impact.
- Additional Sika® Joint Sealing Solutions (minimum SikaSwell®) must be used for connections, around penetrations and for construction and expansion joints.
- Do not use SikaProof® P-12 for applications in hot climates.
- To ensure the most suitable type of membrane is selected for the project, refer to section 'Project Design' of the 'Method Statement - SikaProof® P 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

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

Concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm2) with a minimum tensile adhesion strength of 1.5 N/mm2.

Substrate must be even, level, clean, dry and free of all contaminants such as dirt, oil, grease and surface treatments.

Weak cementitious substrates must be removed and surface defects such as blow holes and voids must be fully exposed and repaired accordingly.

APPLICATION

Substrate preparation

If the substrate does not fulfil the requirements the surface must be pre-treated prior to the application, in order to prevent any subsequent damage to the waterproofing membrane sheets. The use of SikaProof® Primer-01 is required to ensure an optimal, durable bond to the substrate (this primer is a defined system component).

Installation procedure

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

Installation method - General

After substrate conditions and priming have been fulfilled, the waterproofing membrane is installed by peel & stick method onto horizontal / inclined / vertical hardened concrete substrates. The membrane sheets are overlapped with the subsequent sheet. No heat or open flames are required for installing any part of the membrane system.

T-joints, transitions and corners

All T-joints and transitions must be sealed additionally with a strip or patch of SikaProof® ExTape-150.

Detailing

Form all details and connections using the appropriate SikaProof® ancillary products outlined in the 'Method Statement - SikaProof® P'

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 protecting and backfilling must be carried out to ensure the complete membrane system has been correctly installed, and any damage repaired.

Backfilling protection

After installation is completed SikaProof® P-12 system must be protected with an appropriate protection sheet as soon as possible, or at the latest within 90 days, or before backfilling.

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.

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