

PRODUCT DATA SHEET

SikaProof® P-12

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

PRODUCT 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 structure by a simple peel and stick process by using SikaProof® Primer-01 as a system primer.

USES

SikaProof® P-12 may only be used by experienced professionals.

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

- Vertical reinforced concrete walls
- Extensions and reconstruction works
- Prefabricated structures

CHARACTERISTICS / ADVANTAGES

- Will restrict the ingress of radon into buildings from naturally occurring sources
- 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
- 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 Water-

proofing / Joint Sealing Systems

ENVIRONMENTAL INFORMATION

- BRE Environmental Product Declaration (EPD) available

APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 13967 - Flexible sheets for waterproofing – Damp proofing and basement tanking
- Agreement 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

Chemical Base	Membrane Layer: Sealant/adhesive:	Flexible Polyolefin (FPO) Polyolefin (PO)
Packaging	Rolls wrapped individually in a yellow PE-film.	
	Roll width	Roll length
	1,00 m	20 m
Appearance / Colour	Light yellow sheet membrane with a white release film on the adhesive side.	
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.	
Effective Thickness	Total Thickness (= deff) Membrane Thickness	1,20 mm (-5 /+10 %) 0,60 mm
		(EN 1849-2)
Mass per unit area	1,20 kg/m ²	(-5 /+10%)
		[EN 1849-2]

TECHNICAL INFORMATION

Resistance to Impact	≥ 200mm	[EN 12691, Method A]
Resistance to Static Load	≥ 20kg	[EN 12730, Method B]
Resistance to Root Penetration	Pass	[CEN/TS 14416]
Tensile Strength	Machine direction: Cross direction:	≥ 6,0 N/mm ² ≥ 6,0 N/mm ²
		[EN 12311-2]
Tensile Modulus of Elasticity	≤ 35 N/mm ²	(+/- 10%)
		[EN ISO 527-3]
Elongation	Machine direction: Cross direction:	≥ 350 % ≥ 350 %
		[EN 12311-2]
Adhesion in peel	≥ 100 N/50mm (on primed concrete)	[EN 1372]
Resistance to Tearing (nail shank)	Machine direction: Cross direction:	≥ 200 N ≥ 200 N
		[EN 12310-1]
Joint Shear Resistance	≥ 125 N/50mm	[EN 12317-2]
Crack Bridging Ability	Class A 5, no cracks	(DIN EN 1062-7)
Foldability at Low Temperature	- 30 °C	(EN 1109)
Reaction to Fire	Class E	[EN 13501-1]
Accelerated Ageing in Alkaline Environment Tensile Strength	Pass (28 d/+23 °C) Pass (Method B, 24 h / 60 kPa)	(EN 1847) (EN 1928)
Water Vapour Transimission	0.50 g/m ² x 24h μ = 58'000 sd = 78 m	[EN 1931] (+23 °C/ 75 % r.h.) (+/- 20 %)
Water Tightness	Pass (Method B, 24h/60kPa)	Pass (Method B, 24h/60kPa)
		(EN 1928)

Resistance to lateral water migration	Pass, up to 7 bar	[ASTM D 5385 modified]
Durability of Water Tightness against Ageing	Pass (12 weeks)	(EN 1296)
	Pass (Method B, 24 h / 60 kPa)	(EN 1928)
Durability of Water Tightness against Chemicals	Pass (28 d/+23 °C)	(EN 1847)
	Pass (Method B, 24 h / 60 kPa)	(EN 1928)
Permeability to radon	$(2,0 \pm 0,3) \times 10^{-12} \text{ m}^2/\text{s}$	(Certificate E-214/2011)
Service Temperature	-10 °C min. / +35 °C max	

SYSTEM INFORMATION

System Structure	The following system components must be used: <ul style="list-style-type: none"> ▪ SikaProof® P-12 sheet membrane ▪ SikaProof® Primer-01 Ancillary products: <ul style="list-style-type: none"> ▪ Accessories and complementary products are available to provide detailing and connection solutions. 	
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APPLICATION INFORMATION

Ambient Air Temperature	+ 5 °C min. / + 35 °C max.	
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	
Dew Point	The substrate temperature must be at least 3°C above the dew point to reduce the risk of condensation and reduced adhesion.	

VALUE BASE

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 'Method Statement - SikaProof® P ' for more detailed information.
- Do not install SikaProof® P-12 membranes during continuous or prolonged rain and snowfall.
- For the optimum fully bond 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

REGULATION (EC) NO 1907/2006 - REACH

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

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 METHOD / TOOLS

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 following 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

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.

SIKA LIMITED

Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
Tel: 01707 394444
Web: www.sika.co.uk
Twitter: @SikaLimited



Product Data Sheet

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