

PRODUCT DATA SHEET

SikaProof® P-12

FULLY BONDED FPO SHEET MEMBRANE WATERPROOFING SYSTEM FOR BASEMENTS AND OTHER BELOW GROUND STRUCTURES

PRODUCT DESCRIPTION

SikaProof® P-12 is a fully and permanently bonded, self-adhesive, post-applied, composite sheet membrane waterproofing system for reinforced concrete structures. It consists of a flexible polyolefin (FPO) based membrane that is pre-coated with an adhesive sealant layer so that the membrane system is self-adhesive. It is cold- and post-applied, without heat or open-flames, by a simple peel and stick process on hardened concrete structures.

USES

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

- On horizontal slabs, decks and podiums
- On vertical walls
- For extensions and reconstruction works
- For precast concrete structures

CHARACTERISTICS / ADVANTAGES

- Cold- applied and self-adhesive (no heat or open flames required)
- Fully and permanently bonded to the reinforced concrete structure
- No lateral water underflow or migration between the concrete structure and the membrane system
- High watertightness tested according different standards
- Easy to install with fully adhered joints (no welding required)
- Temporarily resistant to weathering and UV-light during construction
- Resistant to aging
- Highly flexible with crack-bridging abilities
- Resistant to aggressive mediums in natural ground water and soil
- Can be combined with other approved Sika Waterproofing / Joint Sealing Systems

APPROVALS / STANDARDS

- Product Declaration according to EN 13967:2012 – Flexible sheets for waterproofing (type A&T)
- Function test according to German standards, test lab Wissbau, Essen Germany
- Function test according to ASTM D 5385 modified (resistance to lateral water underflow)

PRODUCT INFORMATION

Chemical Base	Membrane Layer:	Flexible Polyolefin (FPO)		
	Sealant/adhesive:	Polyolefin (PO)		
Packaging	SikaProof® P-12 rolls are wrapped individually in a yellow PE-foil.			
	Roll width:	1 m	Roll length:	20 m
Appearance / Colour	Light yellow sheet membrane with a white release film on the back side			
Shelf Life	12 months shelf life from date of production if stored properly in undamaged, unopened, original sealed packaging. (for expiry date see label)			
Storage Conditions	Dry storage at temperatures from +5°C up to +30°C. Protect from direct sunlight, rain, snow, ice, humidity, etc. Store in a horizontal position. Do not stack pallets of the membrane rolls on top of each other, or under pallets of any other materials during transport or storage.			
Product Declaration	EN 13967:2012, mandatory for European countries			
Visible Defects	Pass			[EN 1850-2]
Effective Thickness	Effective Thickness	Membrane Thickness	Deviation	[EN 1849-2]
	1.20 mm	0.60 mm	(-5 /+10%)	
Straightness	≤50 mm / 10 m			[EN 1848-2]
Mass per unit area	1.20 kg/m ²	(-5 /+10%)		[EN 1849-2]

TECHNICAL INFORMATION

Resistance to Impact	≥200 mm			[EN 12691]
Resistance to Static Load	≥20 kg			[EN 12730] (Method B, 24 h/20 kg)
Resistance to Root Penetration	Pass			[CEN/TS 14416]
Tensile Strength	MD:	≥6.0 N / mm ²		[EN 12311-2]
	CD:	≥6.0 N / mm ²		
Elongation	MD:	≥350 %		[EN 12311-2]
	CD:	≥350 %		
Adhesion in Peel	≥ 100 N/50mm, (on primed concrete)			[EN 1372]
Resistance to Tearing (nail shank)	MD:	≥200 N		[EN 12310-1]
	CD:	≥200 N		
Joint Shear Resistance	≥125 N / 50 mm			EN 12317-2
Reaction to Fire	Class E			[EN 13501-1:2000]
Accelerated Ageing in Alkaline Environment Tensile Strength	Pass			[EN 1847] (28 d/+23 °C)
				[EN 1928 B] (24 h / 60 kPa)
Water Vapour Transimission	0.50 g/m ² x 24h	±20%		[EN 1931]
	sd = 78 m	±20%		(+23°C / 75% r.h.)
Water Tightness	Pass			[EN 1928 B (24 h / 60 kPa)]
Resistance to lateral water migration	Pass, up to 7 bar			[ASTM D 5385 modified]

Durability of Water Tightness against Ageing Pass [EN 1296] (12 weeks)
[EN 1928 B] (24h / 60 kPa)

Durability of Water Tightness against Chemicals Pass [EN 1847] (28 d/+23 °C)
[EN 1928 B] (24h / 60 kPa)

SYSTEM INFORMATION

System Structure

System Components:

SikaProof® Primer-01, solvent-dispersed primer

Accessories:

Ancillary products and accessories are provided for the SikaProof® system to create sealed connections, joints and other detailing solutions. Please refer to the current Method Statement for further more information.

APPLICATION INFORMATION

Ambient Air Temperature +5°C to + 35°C

Substrate Temperature +5°C to + 35°C

Substrate Moisture Content Dry, ≤ 5% moisture content, 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 poor adhesion.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

The reinforced concrete structure must be

- Hardened and of sufficient compressive strength, minimum 25 N/mm²
- Minimal pull off strength, 1.5 N/mm²
- Dry, sound, clean and free of any contaminations (e.g. dust, oil, grease, release agent, etc.)
- Even, level and free from surface defects (e.g. blowholes, voids, honeycombing, cracks, protrusions, etc.)

Substrate Condition / Preparation:

The concrete or other suitable cementitious substrate must meet the defined substrate quality. If the substrate does not fulfil the requirements the surface must be pretreated prior to the application, in order to prevent any subsequent damage to the 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).

For more detailed information and guidance please refer to the current Method Statement for the SikaProof® P membrane system.

APPLICATION METHOD / TOOLS

The installation method for SikaProof® P is state of the art for self-adhesive membrane sheets, by peel & stick, with simple and easy fixing and bonding of the membrane onto the prepared concrete surfaces.

- Substrate preparation
- Substrate priming
- Installation of the membrane system including all details
- Protection of the system

For more detailed information and guidance please refer to the current Method Statement for the SikaProof® P membrane system.

LIMITATIONS

The SikaProof® P membrane system must only be installed by Sika trained and approved contractors and the following notes and limitations have to be observed:

- After completion of the system it is recommended to protect the SikaProof® P membranes immediately to prevent any mechanical damage.
- SikaProof® P-12 membrane sheets are not permanently UV and weather resistant. Therefore they must be not installed on structures permanently exposed to UV light and weathering.
- The membrane system must always be protected from exposure within a defined time period depending on the climate conditions and region. For further detailed informations please refer to the current Method Statement for the SikaProof P system.
- For climate regions central europe the SikaProof® P-12 must be protected at least 30 days after their installation.
- For the optimal durability of the SikaProof® P-12 system, adequate concrete and substrate quality is required, including the use of SikaProof® Primer-01 for the optimum adhesion.
- For the defined Application Conditions and Limitations for the use of SikaProof® Primer-01 please refer to the current Product Data Sheet.
- Additional appropriate Joint Sealing Solution must be used for any required connections, penetrations and joints, such as the SikaSwell®, SikaFuko® and Sika® Waterbars sealing system.

For more detailed informations and guidance please refer to the current Method Statement for the SikaProof P system.

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.

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.



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ECOLOGY, HEALTH AND SAFETY

A Safety Data Sheet following EC- Regulation 1907/2006, Article 31 is not needed to bring the product to the market, to transport or to use it. The product does not damage the environment when used as specified.

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 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)

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.