BUILDING TRUST

PRODUCT DATA SHEET

Sikaplan® SGK-18

Polymeric PVC membrane for adhered roof waterproofing

DESCRIPTION

Sikaplan® SGK-18 is a multi-layer, polyvinyl chloride, weldable, (PVC) roof waterproofing sheet membrane which is fully bonded using SikaRoof® C-300 adhesive. It contains an inlay of glass non-woven and polyester fleece backing.
(DE/E1 PVC-P-NB-E-GV-K-PV-1,8)

USES

Roof waterproofing membrane for:
- Fully bonded, exposed roofs

FEATURES

- Long service life
- High resistance to impact from hail
- High resistance to mechanical impact
- Excellent flexibility at low temperatures
- Polyester fleece backing ensures optimal adhesive bond to the substrate
- The bottom-side fleece backing acts as a parting layer for application over bitumen-based surfaces

CERTIFICATES AND TEST REPORTS

- Polymeric waterproofing sheet according to DIN EN 13956, recognized by the certification body 1213-CPD-4125 and provided with the CE mark
- DIN/TS 20000-201
- DIN 18531-2
- Behaviour when exposed to fire in accordance to DIN EN 13501-5: BROOF(t1)
- Resistance to flying sparks and radiant heat in accordance to DIN 4102-7 (for Sika tested roof build-ups)

PRODUCT INFORMATION

Packaging	Rolls are individually wrapped in yellow PE foil. Packaging unit: see current price and product range overview.	
	Roll length:	15,00 m
	Roll width:	2,00 m
	Roll weight:	75,00 kg
Appearance and colour	Top surface:	Light grey
	Bottom surface:	Polyester fleece
Shelf life	The product retains its properties in unopened and undamaged original packaging.	
Storage conditions	The Product must be stored in original unopened and undamaged 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.	

Product declaration	DIN EN 13956/ DIN/TS 20000-201	
Visible defects	Pass	(DIN EN 1850-2)
Length	15,00 m (-0 % / +5 %)	(DIN EN 1848-2)
Width	2,00 m (-0,5 % / +1 %)	(DIN EN 1848-2)
Effective thickness	1,80 mm (-5 % / +10 %)	(DIN EN 1849-2)
Straightness	≤ 30 mm	(DIN EN 1848-2)
Flatness	≤ 10 mm	(DIN EN 1848-2)
Mass per unit area	2,50 kg/m² (-5 % / +10 %)	(DIN EN 1849-2)

TECHNICAL INFORMATION

Resistance to impact	hard substrate soft substrate	≥ 800 mm ≥ 1.500 mm	(DIN EN 12691)
Hail resistance	hard substrate soft substrate	≥ 25 m/s ≥ 32 m/s	(DIN EN13583)
Tensile strength	longitudinal (md)1) transversal (cmd)2) 1) md = machine direction 2) cmd = cross machine direction	≥ 600 N/50 mm ≥ 600 N/50 mm	(DIN EN 12311-2)
Elongation	longitudinal (md)1) transversal (cmd)2) 1) md = machine direction 2) cmd = cross machine direction	≥ 50 % ≥ 50 %	(DIN EN 12311-2)
Dimensional stability	longitudinal (md)1) transversal (cmd)2) 1) md = machine direction 2) cmd = cross machine direction	≤ 0,3 % ≤ 0,3 %	(DIN EN 1107-2)
Tear strength	longitudinal (md)1) transversal (cmd)2) 1) md = machine direction 2) cmd = cross machine direction	≥ 150 N ≥ 150 N	(DIN EN 12310-2)
Joint peel resistance	≥ 300 N / 50 mm		(DIN EN 12316-2)
Joint shear resistance	≥ 500 N / 50 mm no failure of the joint		(DIN EN 12317-2) (DIN/TS 20000-201/ DIN EN 12317-2)
Foldability at low temperature	≤ -25 °C		(DIN EN 495-5)
External fire performance	B_{ROOF}(t1) < 20° Resistance to flying sparks and radiant heat (for Sika tested roof build-ups) for roof pitch ≤ 20°, > 20°		(DIN CEN/TS 1187) (EN 13501-5) (DIN CEN/TS 1187) (DIN 4102-7)
Reaction to fire	Class E		(EN ISO 11925-2) (classification to EN 13501-1)
Effect of liquid chemicals, including water	On request		(DIN EN 1847)
Resistance to UV exposure	Pass (> 5.000 h) Class 0		(DIN EN 1297) (DIN/TS 20000-201/ DIN EN 1297)

Water-vapour transmission rate	μ= 20.000 (±30 %)	(DIN EN 1931)
Watertightness	Pass 400 kPa/72h	(DIN EN 1928) (DIN/TS 20000-201/ DIN EN 1928)

APPLICATION INFORMATION

Ambient air temperature	-15 °C min. / +60 °C max.
Substrate temperature	-25 °C min. / +60 °C max.

SYSTEM INFORMATION

System structure	System accessories: ▪ Sikaplan® D-15, un-reinforced sheet for detailing ▪ Moulded corner pieces, prefabricated corners and pipe flashing ▪ Sikaplan® metal sheet ▪ Sarnafast® mechanical fastening system ▪ SikaRoof® Cleaner L-100 ▪ SikaRoof® C-733 (Contact adhesive) Wide range of accessories is available e.g. prefabricated parts, roof drains, scuppers.
Compatibility	Not compatible with direct contact to other plastics, e.g. EPS, XPS, PUR, PIR, PF. Not resistant to tar, bitumen, oil and solvent containing materials.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

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

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

SUBSTRATE QUALITY

The bonding substrate must be able to withstand the wind uplift loads acting on the flat roof waterproofing membrane.

Substrates:

- OSB-Boards
- Mineral fibre insulation boards
- PUR/PIR insulation boards*
- EPS insulation boards

*For bonding to aluminium-faced PU insulation boards, please consult Sika Technical Services.

APPLICATION METHOD / TOOLS

The seams of the roofing membranes are welded using a hot-air welding process. Welding is carried out with automatic welding machines or hand-held hot-air welding equipment. The welding temperature depends on various factors, including ambient temperature, weather conditions, and welding speed. Information on the basic settings of hot-air welding equipment is provided in the currently valid installation instructions, available upon request.

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.

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