BUILDING TRUST

PRODUCT DATA SHEET

Sikaplan® VG-15

Polymeric PVC membrane for mechanically fastened roof waterproofing

DESCRIPTION

Sikaplan® VG-15 (thickness 1,5 mm) is a polyester reinforced, multi-layer, synthetic roof waterproofing sheet based on polyvinyl chloride (PVC).
DE/E1 PVC-P-NB-V-PG-1,5

USES

Waterproofing membrane for:
- Mechanically fastened roofing systems

FEATURES

- increased fire protection
- Resistant to UV exposure
- Resistant to permanent wind exposure
- High water vapour permeability
- Recyclable

CERTIFICATES AND TEST REPORTS

- Polymeric waterproofing sheet according to DIN EN 13956, recognized by the certification body 1213-CPD-4125/4127 and provided with the CE mark
- DIN SPEC 20000-201
- DIN 18531-2
- Behaviour when exposed to fire in accordance to DIN EN 13501-5: BROOF(t1), BROOF(t3)
- Resistance to flying sparks and radiant heat in accordance to DIN 4102-7 (for Sika tested roof build-ups)

PRODUCT INFORMATION

Composition	Polyvinyl chloride (PVC)		
Packaging	Roll length	20,00 m	20,00 m
	Roll width	1,54 m	2,00 m
	Roll weight	55,44 kg	72,00 kg
Appearance and colour	Surface	matt	
	Colours		
	Top surface	light grey (nearest RAL 7047)	
	Bottom surface	dark grey	
	Top surface of sheet in other colours available on request, subject to minimum order quantities.		
Shelf life	The product retains its properties in unopened and undamaged original packaging.		

Storage conditions	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	EN 13956 - Polymeric sheets for roof waterproofing	
Visible defects	Pass	(EN 1850-2)
Length	20,00 m (-0 % / +5 %)	(EN 1848-2)
Width	1,54 m / 2,00 m (-0,5 % / +1 %)	(EN 1848-2)
Effective thickness	1,5 mm (-5 % / +10 %)	(EN 1849-2)
Straightness	≤ 30 mm	(EN 1848-2)
Flatness	≤ 10 mm	(EN 1848-2)
Mass per area	1,8 kg/m² (-5 % / +10 %)	(EN 1849-2)

TECHNICAL INFORMATION

Resistance to impact	hard substrate	≥ 400 mm	(EN 12691)
	soft substrate	≥ 700 mm	
Hail resistance	rigid substrate	≥ 21 m/s	(EN 13583)
	flexible substrate	≥ 26 m/s	
Tensile strength	longitudinal (md)[1]	≥ 1000 N/50mm	(EN 12311-2)
	transversal (cmd)[2]	≥ 900 N/50mm	
	[1] md = machine direction [2] cmd = cross machine direction		
Elongation	longitudinal (md)[1]	≥ 15 %	(EN 12311-2)
	transversal (cmd)[2]	≥ 15 %	
	[1] md = machine direction [2] cmd = cross machine direction		
Dimensional stability	longitudinal (md)[1]	≤ |0,5| %	(EN 1107-2)
	transversal (cmd)[2]	≤ |0,5| %	
	[1] md = machine direction [2] cmd = cross machine direction		
Tear strength	longitudinal (md)[1]	≥ 150 N	(EN 12310-2)
	transversal (cmd)[2]	≥ 150 N	
	[1] md = machine direction [2] cmd = cross machine direction		
Joint peel resistance	Failure mode: C, no failure of the joint		(EN 12316-2)
Joint shear resistance	≥ 600 N/50 mm		(EN 12317-2)
Foldability at low temperature	≤ -25 °C		(EN 495-5)
External fire performance	B_{ROOF}(t1) < 20° / > 20° B_{ROOF}(t3) < 10° / < 70° Resistance to flying sparks and radiant heat (for Sika tested roof build-ups) for roof pitch ≤ 20°, > 20°		(EN 13501-5) (EN 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		(EN 1847)

Resistance to UV exposure	Pass (> 5 000 h / grade 0)	(EN 1297)
Water-vapour transmission rate	μ = 20 000	(EN 1931)
Watertightness	Pass	(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 ▪ Sarnafast® mechanical fastening system ▪ Sikaplan® metal sheet ▪ SikaRoof® Cleaner-2000 ▪ SikaRoof® Cleaner L-100 ▪ SikaRoof® C-733 (Contact adhesive) Wide range of accessories is available e.g. prefabricated parts, roof drains, scuppers, walkway pads and decor profiles.
Compatibility	Not compatible in direct contact with bitumen, tar, fat, oil, solvent containing materials and other plastic materials, e.g. expanded polystyrene (EPS), extruded polystyrene (XPS), polyurethane (PUR), polyisocyanurate (PIR) or phenolic foam (PF). These materials could adversely affect the product properties.Not compatible with direct contact to other plastics, e.g. EPS, XPS, PUR, PIR or PF. Not resistant to tar, bitumen, oil and solvent containing materials. These materials could adversely affect the product properties.

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.

FURTHER DOCUMENTATION

Installation
- Application Manual

IMPORTANT CONSIDERATIONS

Installation work must only be carried out by Sika® trained and approved contractors, experienced in this type of application.
- Ensure Sikaplan® VG-15 is prevented from direct contact with incompatible materials (refer to compatibility section).
- Sikaplan® VG-15 must be installed by loose laying and without stretching or installing under tension.
- The use of Sikaplan® VG-15 membrane is limited to geographical locations with average monthly minimum temperatures of -25 °C. Permanent ambient temperature during use is limited to +50 °C.
- The use of some ancillary products such as adhesives, cleaners and solvents is limited to temperatures above +5 °C. Observe temperature limitations in the appropriate Product Data Sheets.
- Special measures may be compulsory for installation below +5 °C ambient temperature due to safety requirements in accordance with national regulations.

ECOLOGY, HEALTH AND SAFETY

Fresh air ventilation must be ensured, when working (welding) in closed rooms.

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

Hot welding overlap seams
Electric hot air welding equipment, such as hand held manual hot air welding equipment and pressure rollers or automatic hot air welding machines with controlled hot air temperature capability of a minimum 600 °C.
The seams of the roofing membranes are hot-air welded. The welding temperature depends on a number of factors such as the ambient temperature, weather conditions and welding speed. Instructions on the basic setting of hot air welding devices can be found in the currently valid instruction manual, which you can request from us.

SUBSTRATE QUALITY

The substrate surface must be uniform, smooth and free of any sharp protrusions or burrs, etc. Sikaplan® VG-15 must be separated from any incompatible substrates / materials by an effective separation layer to prevent accelerated ageing. The supporting layer must be compatible to the membrane, solvent resistant, clean, dry and free of grease and dust. Metal sheets must be degreased with SikaRoof® Cleaner-2000 before adhesive is applied.

APPLICATION

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.

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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