Sika-Trocal®

PRODUCT DATA SHEET

Sikaplan® SG-15

polymeric membrane for roof waterproofing

PRODUCT DESCRIPTION

Sikaplan® SG-15 is a multi-layer, synthetic roof waterproofing sheet based on premium-quality polyvinyl chloride (PVC) with inlay of glass non-woven according to EN 13956.

USES

Roof waterproofing membrane for exposed flat roofs:
- Mechanically fastened – especially on concave roof structures
- Fully bonded junction areas with contact adhesive Sika-Trocal® C-733.

Roof waterproofing membrane for exposed roof junction zones:
- Roof waterproofing for junctions and flashings, e.g. wall and parapet junctions, roof lights, etc., which are permanently exposed in installations of Sikaplan® SGmA-types roof waterproofing systems with ballast.
- Roof waterproofing for junctions and flashings in installations of Sikaplan® SGK types roof waterproofing systems.

CHARACTERISTICS / ADVANTAGES

- Resistant to permanent UV irradiation
- High dimensional stability due to glass fleece inlay
- High water vapour permeability
- Resistant to all common environmental influences
- Hot air welding without use of open flames
- Recyclable

APPROVALS / STANDARDS

- Polymeric sheets for roof waterproofing according to EN 13956, certified by notified body 1213-CPD-4125 and provided with the CE marking.
- Reaction to fire according to EN 13501-1.
- External fire performance tested according to BS 476 Part 3.
- Official Quality Approvals and Agrement Certificates and approvals.
- Monitoring and assessment by approved laboratories.
- Quality Management system in accordance with EN ISO 9001/14001.
- Production according to responsible Care policy of Chemical Industry.

PRODUCT INFORMATION

Packaging	Packing unit:	see price list
	Roll length:	15.00 m / 20.00 m
	Roll width:	2.00 m / 1.10 m
	Roll weight	57.00 kg / 41.80 kg
Appearance / Colour	Surface:	slightly structured
	Colours:	
	Topsurface:	light grey (nearest RAL 7047) lead grey (nearest RAL 7012)
	Bottom surface:	dark grey
Shelf Life	5 years from date of production in unopened, undamaged and original	

	packaging.	
Storage Conditions	Rolls must be stored between +5 °C and +30 °C in a horizontal position on pallet, protected from direct sunlight, rain and snow. Do not stack pallets of rolls or any other material during transport or storage.	
Product Declaration	EN 13956	
Visible Defects	Pass	(EN 1850-2)
Length	15.00 m / 20.00 mm (-0 % / +5 %)	(EN 1848-2)
Width	2.00 m / 1.10 m (-0.5 % / +1 %)	(EN 1848-2)
Effective Thickness	1.5 mm (-5 % / +10 %)	(EN 1849-2)
Straightness	≤ 30 mm	(EN 18498-2)
Flatness	≤ 10 mm	(EN 1848-2)
Mass per unit area	1.9 kg/m² (-5 % / + 10 %)	(EN 1849-2)

TECHNICAL INFORMATION

Resistance to Impact	hard substrate	≥ 600 mm	(EN 12691)
	soft substrate	≥ 900 mm	
Hail Resistance	rigid substrate	≥ 20 m/s	(EN 13583)
	flexible substrate	≥ 30 m/s	
Tensile Strength	longitudinal (md)[1)]	≥ 9.5 N/mm²	(EN 12311-2)
	transversal (cmd)[2)]	≥ 8.5 N/mm²	
	[1)] md = machine direction [2)] cmd = cross machine direction		
Elongation	longitudinal (md)[1)]	≥ 200 %	(EN 12311-2)
	transversal (cmd)[2)]	≥ 200 %	
	[1)] md = machine direction [2)] cmd = cross machine direction		
Dimensional Stability	longitudinal (md)[1)]	≤ |0.3| %	(EN 1107-2)
	transversal (cmd)[2)]	≤ |0.3| %	
	[1)] md = machine direction [2)] cmd = cross machine direction		
Tear Strength	longitudinal (md)[1)]	≥ 100 N	(EN 12310-2)
	transversal (cmd)[2)]	≥ 100 N	
	[1)] md = machine direction [2)] cmd = cross machine direction		
Joint Peel Resistance	≥ 300 N/50 mm		(EN 12316-2)
Joint Shear Resistance	≥ 500 N/50mm		(EN 12317-2)
Foldability at Low Temperature	≤ -25 °C		(EN 495-5)
External Fire Performance	AC Flat		BS 476-3:2004
Reaction to Fire	Class E		(EN ISO 11925-2, classification to EN 13501-1)
Effect of Liquid Chemicals, Including Water	On request		(EN 1847)
UV Exposure	Pass (> 5 000 h / grade 0)		(En 1297)
Water Vapour Transimission	μ = 20 000		(EN 1931)

Water Tightness	Pass	(EN 1928)

SYSTEM INFORMATION

System Structure	**The following accessories shall be used:** ▪ Moulded corner pieces, prefabricated corners and pipe flashings ▪ Sika-Trocal® Metal Sheet Type S ▪ Sika-Trocal® Cleaner L-100 ▪ Sika-Trocal® Welding Agent ▪ Sika-Trocal® Seam Sealant ▪ Sika-Trocal® C-733 (Contact adhesive)
Compatibility	Not compatible with direct contact to other plastics, e.g. EPS and XPS Not resistant to tar, bitumen, oil and solvent containing materials.

APPLICATION INFORMATION

Ambient Air Temperature	-15 °C min. / +60 °C max. for hot air welding +5 °C min. / +60 °C max. for solvent welding
Substrate Temperature	-25 °C min. / +60 °C max. for hot air welding +5 °C min. / +60 °C max. for solvent welding

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

The substrate surface must be uniform, smooth and free of any sharp protrusions or burrs, etc.

APPLICATION

Installation works must be carried out only by Sika instructed contractors for roofing.

Installation of some ancillary products, e.g. contact adhesives/thinners is limited to temperatures above +5 °C. Please refer to the respective Product Data Sheets.
Special measures may be compulsory for installation below +5 °C ambient temperature due to safety requirements in accordance with national regulations.

APPLICATION METHOD / TOOLS

Installation procedure:
According to the valid installation instructions of manufacturer for Sikaplan® S-types for mechanical fastened system, for Sikaplan® SGmA-types for ballasted system and Sikaplan® SGK-types for adhered system.

Fixing Method:
Loosely laid and mechanically fastened.
The roof waterproofing membrane is installed by loose laying and mechanical fastening in seam overlaps or independent from overlaps.

Fully adhered junction area:
The roof waterproofing membrane is bonded to substrate by contact adhesive Sika-Trocal® C-733. Seam overlaps are welded by hot air or cold welding.

Welding Method:
Overlap seams are welded by electric hot welding equipment, such as manual hot air welding machines and pressure rollers or automatic hot air welding machines with controlled hot air temperature capability of minimum 600 °C.

Recommended type of equipment:
▪ LEISTER TRIAC PID for manual welding
▪ LEISTER VARIMAT for automatic welding
Welding parameters including temperature, machine speed, air flow, pressure and machine settings must be evaluated, adapted and checked on site according to the type of equipment and the climatic situation prior to welding. The effective width of welded overlaps should be minimum 20 mm.

If local weather conditions allow solvent welding of sheet overlaps with Sika-Trocal® Welding Agent, it is permitted for Sikaplan® SG-15 with mechanically fastened system in overlap or independent from seam. The effective width of welded overlap by cold welding should be minimum 30 mm.
The seams must be mechanically tested with screw driver or steel needle to ensure the integrity/completion of the weld. Any imperfections must be rectified by hot air welding.
Solvent welded seam edges must be sealed by Sika-Trocal® liquid PVC type S after testing.

LIMITATIONS

Geographical / Climate
The use of Sikaplan® SG-15 membranes is limited to geographical locations with average monthly minimum temperatures of -25 °C.
Permanent ambient temperature during use is limited to +50 °C.

VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary

due to circumstances beyond our control.

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 exact product data and uses.

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).

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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