Sika-Trocal®

PRODUCT DATA SHEET

Sikaplan® SGmA-15

POLYMERIC MEMBRANE FOR BALLASTED ROOF WATERPROOFING

PRODUCT DESCRIPTION

Sikaplan® SGmA-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 roofs with ballast (e.g. gravel, concrete slabs, green roof (intensive, extensive), terraces with pedestrian traffic):
- Loose laid with ballast.
- Green roofs.
- Utility roofs.

CHARACTERISTICS / ADVANTAGES

- High dimensional stability due to glass fleece inlay
- High water vapour permeability
- Resistant to all common environmental influences
- Resistant to mechanical influences
- Resistant to micro-organisms
- Resistant to root penetration
- Hot air welding without use of open flames
- Specially formulated for below grade applications, including plaza decks, planters, foundations, balconies, terraces and split slab applications.
- 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.
- Root penetration resistance tested according to FLL-Test Procedure.
- 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	see price list
	Roll length:	15.00 m	20.00 m
	Roll width:	2.00 m	2.00 m
	Roll weight:	57.00 kg	76.00 kg

Appearance / Colour	Surface:	slightly structured	
	Colours:		
	Top surface:	beige	
	Bottom surface:	beige	
Shelf Life	Product does not expire if correctly stored.		
Storage Conditions	Rolls must be stored in a horizontal position on pallet and protected from direct sunlight, rain and snow. Do not stack pallets of rolls during transport or storage.		
Product Declaration	EN 13956		
Visible Defects	Pass		(EN 1850-2)
Length	15.00 / 20.00 m (-0 % / +5 %)		(EN 1848-2)
Width	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 unit area	1.9 kg/m² (-5 % / +10 %)		(EN 1849-2)

TECHNICAL INFORMATION

Resistance to Impact	hard substrate	≥ 600 mm	(EN 12311-2)
	soft substrate	≥ 1000 mm	
Resistance to Static Load	soft substrate	≥ 20 kg	(EN 12730)
	rigid substrate	≥ 20 kg	
Resistance to Root Penetration	Pass		(EN 13948)
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		
Joint Shear Resistance	≥500 N/50 mm		(EN 12317-2)
Foldability at Low Temperature	≤-25 °C		(EN 495-5)
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	Not resistant for permanent exposure to UV irradiation.		
Water Vapour Transimission	μ = 20 000		(EN 1931)
Water Tightness	Pass		(EN 1928)

SYSTEM INFORMATION

System Structure	Ancillary products according to local price list: ▪ Sikaplan® D-18 unreinforced sheet for detailing ▪ Sikaplan® S-15 unreinforced sheet for detailing ▪ Sikaplan® SG-15 or Sikaplan® G-15 roofing sheet for exposed connections and flashings ▪ Moulded corner pieces, prefabricated corners and pipe flashings ▪ Sika-Trocal® Metal Sheet Type S ▪ Sika-Trocal® Cleaner-2000 ▪ 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, XPS, PUR, PIR, PF. 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.
Sikaplan® SGmA-15 must be separated from any incompatible substrates by an effective separation layer to prevent accelerated ageing.

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® SGmA-types for ballasted roof system.

Fixing Method:
Loosely laid and covered with ballast. Mechanical fixing at the roof perimeter to keep membrane in place. The roof waterproofing membrane is installed by loose laying and covered with ballast according to local wind load situation. If ballast weight is insufficient to restrain against wind uplift the membrane may be fixed mechanically in seam
overlap or independent from overlap.

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 works. 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® SGmA-15 system with ballast. The effective width of welded overlap by solvent welding must be 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® Seam Sealant after testing.

LIMITATIONS

Geographical / Climate
The use of Sikaplan®-SGmA 1.5 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

Please note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data and uses.

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 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.

TECHNICAL ENQUIRIES
Tel: 01707 358500
Web: www.sikatrocal.co.uk
Twitter: @SikaTrocal

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

FM 12504 EMS 45308 OHS 585274