BUILDING TRUST

PRODUCT DATA SHEET

Sarnafil® TG 66-15

Polymeric membrane for ballasted roof waterproofing

DESCRIPTION

Sarnafil® TG 66-15 is a multi-layer, synthetic roof waterproofing sheet based on flexible polyolefins (FPO), with an inlay of glass non-woven according to EN 13956. Sarnafil® TG 66-15 is a hot air weldable, UV-resistant roof membrane, designed for use in all global climatic conditions. Thickness 1,5mm.

USES

Sarnafil® TG 66-15 may only be used by experienced professionals.
Waterproofing membrane for:
- Loosely laid, exposed roofs
- Ballasted roofs with different ballast materials, Green roofs, Utility roofs, Inverted roofs
- Junctions and flashings on all types of Sarnafil® TG 66, TS 77 and TG 76 Felt waterproofing systems

CHARACTERISTICS / ADVANTAGES

- Proven performance over decades
- Resistant to micro-organisms
- Resistant to root penetration
- High dimensional stability from glass fleece inlay
- Compatible with old bitumen
- Resistant to permanent UV exposure
- Resistant against impact load and hail
- Resistant to all common environmental influences
- Resistant to mechanical influences
- Hot air weldable
- No open flame equipment required

SUSTAINABILITY

- Conformity with LEED v4 MRc 2 (Option 1): Building Product Disclosure and Optimization – Environmental Product Declarations
- Conformity with LEED v4 MRc 3 (Option 2): Building Product Disclosure and Optimization - Sourcing of Raw Materials
- Conformity with LEED v4 MRc 4 (Option 2): Building Product Disclosure and Optimization - Material Ingredients
- Conformity with LEED v2009 MRc 4 (Option 2): Recycled Content
- BRE Environmental Product Declaration (EPD)

APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance to EN 13956 - Polymeric sheets for roof waterproofing

PRODUCT INFORMATION

Composition	Flexible polyolefins (FPO)		
Packaging	Standard rolls are wrapped individually in a blue PE-foil.		
	Roll length	20,00 m	
	Roll width	2,00 m	
	Roll weight	60,00 kg	
Appearance / Colour	Surface	matt	
	Colours		
	Top surface	beige grey (nearest RAL 7040)	
	Bottom surface	black	
	Top surface in other colours available on request, subject to minimum order quantities. Please contact our customer service, for information of which colors are sold in Denmark.		
Shelf life	5 years from date of production.		
Storage conditions	Product must be stored in original unopened and undamaged sealed 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 m (-0 % / +5 %)		(EN 1848-2)
Width	2 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	1,36 kg/m² (-5 % / +10 %)		(EN 1849-2)

TECHNICAL INFORMATION

Resistance to impact	hard substrate	≥ 800 mm	(EN 12691)
	soft substrate	≥ 1000 mm	
Resistance to static loading	soft substrate	≥ 20 kg	(EN 12730)
	rigid substrate	≥ 20 kg	
Resistance to root penetration	Pass		(EN 13948)
Tensile strength	longitudinal (md)[1)]	≥ 9 N/mm²	(EN 12311-2)
	transversal (cmd)[2)]	≥ 7 N/mm²	
	[1)] md = machine direction [2)] cmd = cross machine direction		
Elongation	longitudinal (md)[1)]	≥ 550 %	(EN 12311-2)
	transversal (cmd)[2)]	≥ 550 %	
	[1)] md = machine direction [2)] cmd = cross machine direction		

Dimensional stability	longitudinal (md)[1] ≤ |0,2| % transversal (cmd)[2] ≤ |0,1| % [1] md = machine direction [2] cmd = cross machine direction	(EN 1107-2)
Joint shear resistance	≥ 500 N/50 mm	(EN 12317-2)
Foldability at low temperature	≤ -45 °C	(EN 495-5)
Reaction to fire	Class E	(EN ISO 11925-2, classification to EN 13501-1)
Effect of liquid chemicals, including water	Resistant to many chemicals. Contact Sika Technical Services for additional information.	
Exposure to bitumen	Pass[3] [3] Sarnafil® T is compatible to old bitumen	(EN 1548)
Resistance to UV exposure	Pass (> 5000 h / grade 0)	(EN 1297)
Water-vapour transmission rate	μ = 190'000	(EN 1931)
Watertightness	Pass	(EN 1928)

SYSTEM INFORMATION

System structure	The following products must be considered for use depending on roof design: ▪ Sarnafil® T 66-15 D Sheet for detailing ▪ Sarnafil® T Metal Sheet ▪ Sarnabar ▪ Sarnafil® T Welding Cord ▪ Sarnafil® T Prep / Sarnafil® T Wet Task Set ▪ Sarnacol® T 660 ▪ Solvent T 660 ▪ Sarnafil® T Clean Ancillary Products: Prefabricated parts, roof drains, scuppers, Protection sheets and separation layers. Please contact Sale regarding availability.
Compatibility	Sarnafil® TG 66-15 can be installed on all thermal insulation types and levelling layers suitable for roofing. No additional separation layer is required. Sarnafil® TG 66-15 is suitable for installation directly on top of existing, clean, level bituminous roofing, e.g. re-roofing over old flat roofs. Discolouration of the membrane surface may occur if in direct contact with bitumen.

APPLICATION INFORMATION

Ambient air temperature	-20 °C min. / +60 °C max.
Substrate temperature	-30 °C min. / +60 °C max.

BASIS OF PRODUCT DATA

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.

FURTHER INFORMATION

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 Sarnafil® TG 66-15 is prevented from direct contact with incompatible materials (refer to compatibility section)
- The use of Sarnafil® TG 66-15 membrane is limited to geographical locations with average monthly minimum temperatures of - 50 °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 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)

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.
Recommended type of equipment:
- Manual: Leister Triac
- Automatic : Sarnamatic 681
- Semi-automatic: Leister Triac Drive

SUBSTRATE QUALITY

The substrate surface must be uniform, smooth and free of any sharp protrusions or burrs, etc.
Sarnafil® TG 66-15 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.

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.
Fixing method
The roof waterproofing membrane is installed by loose laying and covered with the appropriate roof material according to the roof design and the local wind loading conditions. Mechanical fixing along the roof perimeter with Sarnabar® including S-Welding Cord must be used to keep membrane in place.
Fully bonded roof junctions and flashings
The membrane is bonded to the substrate and flashing by using Sarnacol® T 660 contact adhesive. Refer to Product Data Sheet.
Hot welding overlap seams
Overlap seams must be welded by electric hot welding equipment. 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 conditions prior to welding. The effective width of welded overlaps by hot air must be minimum 20 mm.
Testing overlap seams
The seams must be mechanically tested with screwdriver or steel needle to ensure the integrity/completion of the weld. Any imperfections must be rectified by hot air welding.

LOCAL RESTRICTIONS

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

LEGAL NOTES

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data

sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

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