

## PRODUCT DATA SHEET

# Sarnafil® TG 76-18 FSA

Polymeric membrane for adhered roof waterproofing



## DESCRIPTION

Sarnafil® TG 76-18 FSA is a FPO, multi-layer, self-adhesive, matt finish, weldable sheet membrane with a glass fibre, non-woven reinforcing inlay and polyester fleece backing according to EN 13956. Contains ultra-violet light stabilisers and flame retardants to provide a fast installation, low maintenance and durable membrane.

## USES

Sarnafil® TG 76-18 FSA may only be used by experienced professionals.

- Roof waterproofing membrane for exposed flat roofs on smooth substrates

## CHARACTERISTICS / ADVANTAGES

- Fast installation
- Instant wind uplift resistance through the self-adhesive backing
- Proven performance over decades
- Resistant to permanent UV exposure
- High dimensional stability from glass fibre inlay
- Resistant against impact load and hail
- Resistant to all common environmental influences
- Resistant to micro-organisms
- Hot air weldable
- No open flame equipment required

## SUSTAINABILITY

- Conformity with LEED v4 SSc 5 (Option 1): Heat Island Reduction - Roof (only traffic white)
- 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 SSc 7.2 (Option 1): Heat Island Effect - Roof (only traffic white)
- Conformity with LEED v2009 MRc 4 (Option 2): Recycled Content

## APPROVALS / CERTIFICATES

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

## PRODUCT INFORMATION

<b>Composition</b>	Flexible polyolefins (FPO)	
<b>Packaging</b>	Standard rolls are wrapped individually in a blue PE-foil.	
	Roll length	15,00 m
	Roll width	2,00 m
	Roll weight	69,00 kg
<b>Appearance / Colour</b>	Surface	matt
	Colours	
	Top surface	beige ~RAL 7040 (window grey) ~RAL 9016 (traffic white)
	Bottom surface	black
<b>Shelf life</b>	18 months from date of production	
<b>Storage conditions</b>	Product must be stored in original unopened and undamaged sealed packaging in dry conditions and temperatures between +5 °C and +35 °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.	
<b>Product declaration</b>	EN 13956 - Polymeric sheets for roof waterproofing	
<b>Visible defects</b>	Pass	(EN 1850-2)
<b>Length</b>	15 m (-0 % / +5 %)	(EN 1848-2)
<b>Width</b>	2 m (-0,5 % / +1 %)	(EN 1848-2)
<b>Effective thickness</b>	1,8 mm (-5 % / +10 %)	(EN 1849-2)
<b>Straightness</b>	≤ 30 mm	(EN 1848-2)
<b>Flatness</b>	≤ 10 mm	(EN 1848-2)
<b>Mass per unit area</b>	2,3 kg/m <sup>2</sup> (-5 % / +10 %)	(EN 1849-2)

## TECHNICAL INFORMATION

<b>Resistance to impact</b>	hard substrate	≥ 900 mm	(EN 12691)
	soft substrate	≥ 1500 mm	
<b>Hail resistance</b>	rigid substrates	≥ 25 m/s	(EN 13583)
	flexible substrates	≥ 37 m/s	
<b>Resistance to static loading</b>	soft substrate	≥ 20 kg	(EN 12730)
	rigid substrate	≥ 20 kg	
<b>Tensile strength</b>	longitudinal (md) <sup>1)</sup>	≥ 500 N/50mm	(EN 12311-1)
	transversal (cmd) <sup>2)</sup>	≥ 500 N/50mm	
1) md = machine direction, 2) cmd = cross machine direction			
<b>Elongation</b>	longitudinal (md) <sup>1)</sup>	≥ 2 %	(EN 12311-2)
	transversal (cmd) <sup>2)</sup>	≥ 2 %	
1) md = machine direction, 2) cmd = cross machine direction			
<b>Dimensional stability</b>	longitudinal (md) 1)	≤ 0,2 %	(EN 1107-2)
	transversal (cmd) 2)	≤ 0,1 %	
1) md = machine direction, 2) cmd = cross machine direction			

Joint peel resistance	≥ 300 N/50 mm	(EN 12316-2)
Joint shear resistance	≥ 300 N/50 mm	(EN 12317-2)
Foldability at low temperature	≤ -25 °C	(EN 495-5)
External fire performance	B <sub>ROOF</sub> (t1) < 20°, >20°	(EN 1187) (EN 13501-5)
Reaction to fire	Class E	(EN ISO 11925-2, classification to EN 13501-5)
Effect of liquid chemicals, including water	Resistant to many chemicals. Contact Sika Technical Services for additional information.	
Resistance to UV exposure	Pass (> 5000 h / grade 0)	(EN 1297)
Water vapour transmission	μ = 150 000	(EN 1931)
Watertightness	Pass	(EN 1928)

## SYSTEMS

### 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

Primers:

Substrate	Primer
Sarnatherm PIR GT	Primer 600 / Primer 780
Sarnatherm PIR AL	none
EPS	none
OSB 3 / Plywood	Primer 600 / Primer 780
Concrete	Primer 600 / Primer 780
Mineral wool (Bondrock MV)	Primer 600 / Primer 780
Metal composite panel	none
Metal (Aluminum, galvanized steel)	none
Bitumen sanded/slatted	Primer 600

Ancillary Products:

Prefabricated parts, roof drains, scuppers, walkway pads, decor profiles and protection sheets.

### Compatibility

Sarnatherm PIR GT (e.g. Kingspan TR 27), Sarnatherm PIR AL (e.g. Kingspan TR 26), EPS DAA (≥ 20 kg/m<sup>3</sup> density, compressive strength >100 kPa), EPS S-Therm PLUS, EPS S-Therm ROOF, OSB 3 / Plywood, Concrete, Mineral wool Bondrock MV, Metal composite panel released by TM Roofing (e.g. Brucha Panel), Metal (Aluminum, galvanized steel).

## APPLICATION INFORMATION

Ambient air temperature 5 °C min. / +60 °C max.

Substrate temperature 5 °C min. / +60 °C max.

# 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 PID
- Automatic : Sarnamatic 681
- Semi-automatic: Leister Triac Drive

## SUBSTRATE QUALITY

The supporting structure must be of sufficient structural strength to apply all new and existing layers of the roof build-up and the complete roof system must be designed and secured against wind uplift loadings. The substrate must be uniform, firm, solvent resistant, smooth and free of any sharp protrusion or burrs, clean, dry, free of grease, bitumen, oil, dust and loose surface sand / gravel dressing.

## APPLICATION METHOD / TOOLS

### 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.

### Substrate priming

Prime prepared substrate with appropriate primer

### Fixing Method

Sika ® Method Statement: Fully adhered roof surfaces by integrated self-adhesive film and Sika ® Method Statement: Sarnafil® TG 76-18 FSA

### 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 a 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.

## FURTHER INFORMATION

- Sika ® Method Statement: Sarnafil® TG 76-18 FSA

## IMPORTANT CONSIDERATIONS

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

- Do not apply to wet, damp or unclean surfaces
- Only apply to compatible materials (refer to compatibility section).

- The use of Sarnafil® TG 76-18 FSA 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.

## 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.

## LOCAL RESTRICTIONS

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

## 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).

## 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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