BUILDING TRUST

PRODUCT DATA SHEET

Sarnafil® TS 77-15 E

Polymeric FPO membrane for mechanically fastened roof waterproofing roof slope ≥ 20°

DESCRIPTION

Sarnafil® TS 77-15 E (thickness 1.5 mm) is a polyester reinforced, multi-layer, roof waterproofing membrane based on flexible polyolefins (FPO) with an inlay of glass non-woven. The membrane is produced with an inlay of glass non-woven for dimensional stability and a polyester reinforcement. (DE/E1 FPO-BV-V-PG-GV-1.5)

USES

Roof waterproofing membrane for mechanically fastened roofs, preferably for roof slopes ≥ 20° and for increased fire protection.

FEATURES

- Increased fire protection
- Proven performance over decades
- Resistant to hail
- Resistant to mechanical impact
- Compatible to old bitumen

CERTIFICATES AND TEST REPORTS

- Polymeric roof waterproofing according to EN 13956, recognized by the certified body 1213-CPD-3915 and provided with the CE-mark
- DIN SPEC 20000-201
- DIN 18531-2
- Behaviour when exposed to fire according to DIN EN 13501-1, Class E
- Approved against external fire exposure according to DIN EN 1187 and classified according to EN 13501-5: $B_{ROOF}(t1)$
- Resistance to flying sparks and radiant heat according to DIN 4102/part 7 (for Sika approved rood build-ups)

PRODUCT INFORMATION

Packaging

Rolls are wrapped individually in a blue PE-foil.
Packaging units and other membrane strips according to the current price list.

Roll length:	20 m	20 m	20 m
Roll width:	2 m	1 m	0.2 m
Roll weight:	72 kg	36 kg	7.2 kg

Appearance and colour

surface:	beige window grey (nearest RAL 7040) other colours according to the current price list
Back side:	black

Shelf life

The product retains its properties when stored properly.

Storage conditions	Store rolls in a horizontal position on pallets. Protect from direct sunlight, rain and snow. Do not stack pallets during transportation or storage.	
Product declaration		(EN 13956/ DIN SPEC 20000-201)
Visible defects	pass	(DIN EN 1850-2)
Length	20 (-0 % / +5 %) m	(DIN EN 1848-2)
Width	2 / 1 / 0.2 (-0.5 % / +1 %) m	(DIN EN 1848-2)
Effective thickness	1.5 (-5 % / +10 %) mm	(DIN EN 1849-2)
Straightness	≤ 30 mm	(DIN EN 1848-2)
Flatness	≤ 10 mm	(DIN EN 1848-2)
Mass per area	1.8 (-5 % / +10 %) kg/m²	(DIN EN 1849-2)

TECHNICAL INFORMATION

Hail resistance	rigid surface flexible surface	≥ 22 m/s ≥ 30 m/s	(DIN EN 13583)
Resistance to static loading	rigid surface soft surface	≥ 20 kg ≥ 20 kg	(DIN EN 12730)
Resistance to static puncture	hard substrate soft substrate	≥ 600 mm (method A) ≥ 900 mm (method B)	(DIN EN 12691)
Tensile strength	longitudinal (md)* transversal (cmd)* *md = machine direction *cmd = cross machine direction	≥ 900 N/50 mm ≥ 800 N/50 mm	(DIN EN 12311-2)
Elongation	longitudinal (md)* transversal (cmd)* *md = machine direction *cmd = cross machine direction	≥ 12 % ≥ 12 %	(DIN EN 12311-2)
Linear dimensional change	longitudinal (md)* transversal (cmd)* *md = machine direction *cmd = cross machine direction	≤ 0.2 % ≤ 0.1 %	(DIN EN 1107-2)
Tear strength	longitudinal (md)* transversal (cmd)* *md = machine direction *cmd = cross machine direction	≥ 300 N ≥ 300 N	(DIN EN 12310-2)
Joint peel resistance	≥ 300 N/50 mm		(DIN EN 12316-2)
Joint shear resistance	≥ 500 N/50 mm tear off outside the joint seam		(DIN EN 12317-2) (DIN SPEC 20000-201 / DIN EN 12317-2)
Foldability at low temperature	≤ -20 °C		(DIN EN 495-5)
External fire performance	Class E		(DIN ISO 11925-2) (classification according DIN EN 13501-1)
Effect of liquid chemicals, including water	on request		(DIN EN 1847)
Exposure to bitumen	pass Method (b)		(DIN EN 1548) (DIN SPEC 20000-201/ DIN EN 1548)

Retention of properties after heat ageing	Part 1 to 4 (for Sika approved roof build-ups) B_{ROOF}(t1) < 20°C, ≥ 20°C Resistance to flying sparks and radiant heat (for Sika approved roof build-ups) Fulfilled for roof slopes < 20°, ≥ 20°	(DIN CEN/TS 1187) (DIN EN 13501-5) (DIN CEN/TS 1187) (DIN EN 4102-7)
Resistance to UV exposure	pass (> 5.000 h) Grad 0	(DIN EN 1297) (DIN SPEC 2000-201/ DIN EN 1297)
Water-vapour transmission rate	μ= 200.000 (±30 %)	(DIN EN 1931)
Watertightness	pass 400 kPa/ 72 h	(DIN EN 1928) (DIN SPEC 20000-201/ DIN EN 1928)

APPLICATION INFORMATION

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

SYSTEM INFORMATION

System structure	System accessories: ▪ Sarnafil® T 66-15 D (membrane for detailing) ▪ Sarnafil® AT FSA P (self-adhered membrane for parapets) ▪ Sarnafil® TS 77stripes ▪ Sarnafil® metal sheets ▪ Sarnabar® fastening system ▪ Sarnafil® prefabricated parts ▪ Sarnafil® T Clean / Sarnafil® T Prep / Sarnafil® Wet task set ▪ SikaRoof® Speed Clean Set ▪ Sarnacol® T 660 ▪ Sarnafil® drains and scuppers
Compatibility	Sarnafil® TS 77-15 E can be laid on all standard thermal insulation materials and leveling layers. An additional separating layer is not required. A fire protection layer is required for direct installation on EPS thermal insulation. Sarnafil® TS 77-15 E is suitable for laying directly on existing, sufficiently cleaned and leveled bitumen waterproofing, e.g. renovation of old flat roofs. Colour changes to the surface are possible when in direct contact with bitumen.

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.

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).

APPLICATION INSTRUCTIONS

The installation of the roof waterproofing should be carried out by Sika® Roofing trained installers.

APPLICATION METHOD / TOOLS

The seams of the roofing membranes are joined using the hot air welding process. The welding process is carried out using automatic welding machines or manual welding equipment. The welding temperature depends on a number of factors, such as the ambient temperature, the weather conditions and the welding speed. Information on the basic setting of hot-air welding equipment can be found in the currently valid installation instructions, which you can request from us.

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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