

PRODUCT DATA SHEET

SikaShield® Titan 180

Premium Polymeric Bitumen membrane with polyester fleece inlay torch applied as roofing colored capping sheet

DESCRIPTION

SikaShield® Titan 180 (Thickness 5.2 mm) is a premium polymeric bitumen membrane reinforced with a polyester fleece with longitudinal thread. The top side is with colored granule granulated and the bottom side with a polyethylene torch-foil. The top side longitudinal overlap area has an onesided PET-foil edge strip.

USES

Roofing and waterproofing membrane

- Pitched and flat roof as cap layer without load
- Particularly suitable for solar roofs und roof renovations

FEATURES

- Plastic behaviour at high temperatures
- Elastic behaviour at low temperatures
- Robust, tear-resistant and stretchable reinforcement
- High dimensional stability
- High break down strength
- High hail resistance
- Individual colour design options
- UV-resistant
- High resistance to weathering and ageing
- Standard requirements are obviously exceeded
- Chemically good compatible

CERTIFICATES AND TEST REPORTS

CE-Marking and Declaration of Performance to

- EN 13707 - Bitumen sheets for roof waterproofing

Classification Report from external fire exposure – Institute for Material Testing, University of Stuttgart

Resistance to hail – IBS Linz, Inspection and Certification Body for Construction Products

PRODUCT INFORMATION

Composition	coating	polymeric bitumen
	reinforcement	polyester fleece
Packaging	single rolls	
Appearance and colour	top	white granule, foil-laminated edge trim
	bottom	foil-laminated
Shelf life	no limitation Technical characteristics can be guaranteed for 24 months if stored properly	

Storage conditions	Store in a vertical position and protect from extreme external influence as such heat, cold, moisture etc.	
Visible defects	free of visible defects	(EN 1805-1)
Length	5 m	(EN 1850-1)
Width	1 m	(EN 1848-1)
Thickness	5.2 mm	(EN 1849-1)
Straightness	< 20 mm / 10 m	(EN 1848-1)
Mass per area	5.9 kg/m ² [± 10%]	(EN 1849-1)

TECHNICAL INFORMATION

Resistance to impact	≥ 2.000 mm	(EN 12691 - A+B)
Hail resistance	HW 5 (7) * HW 5 (6) * * according to system testing	
Resistance to static loading	≥ 20 kg	(EN 12730 - A+B)
Tensile strength	maximum tensile force lengthwise ≥ 1.000 N / 50 mm crosswise ≥ 1.000 N / 50 mm	(EN 12311-1)
Elongation	elongation at maximum tensile force lengthwise ≥ 35 % crosswise ≥ 35 %	(EN 12311-1)
Dimensional stability	≤ 0.1 %	(EN 1107-1)
Tear strength	nail shank lengthwise ≥ 300 N crosswise ≥ 300 N	(EN 12310-1)
Joint peel resistance	peel strength lengthwise ≥ 150 N / 50 mm crosswise ≥ 150 N / 50 mm	(EN 12316-1)
Joint shear resistance	shear resistance lengthwise ≥ 800 N / 50 mm crosswise ≥ 800 N / 50 mm	(EN 12317-1)
External fire performance	B _{roof} (t1) * * according to system testing	(EN 13501-5)
Reaction to fire	class E	(EN 13501-1, EN ISO 11925-2)
Artificial ageing	properties after artificial ageing flexibility at low temperature (EN 1109) - 25 °C flow resistance (EN 1110) + 140 °C	(EN 1296)
Water-vapour transmission rate	s _d = 400 m [± 20%]	(EN 1931 - procedure A+B)
Watertightness	400 kPa	(EN 1928 - procedure B)
Flow resistance	+150 °C	(EN 1110)
Flexibility at low temperature	-30 °C	(EN 1109)

APPLICATION INFORMATION

Ambient air temperature	We recommend a minimum temperature of +5 °C during the application.
Substrate temperature	We recommend a minimum temperature of +5 °C during the application.

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

Fresh air ventilation must be ensured, when working (welding or torching) 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).

APPLICATION INSTRUCTIONS

General provisions on substrate quality:

The substrate must be uniform, firm, smooth and free of any sharp protrusion or burrs, clean, dry, free of grease, oil, dust and loosely adhering particles.

Substrate preparation:

Use the appropriate preparation equipment to achieve the required substrate quality.

General provisions for the application:

Strictly follow installation procedures as defined in method statement, application manuals and working instructions which must always be adjusted to the actual site conditions.

All corresponding processing standards and regulations must be obeyed.

Protection:

The membrane must be protected from damage during any ongoing site activities.

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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