BUILDING TRUST

PRODUCT DATA SHEET

SikaShield® AL-E sk/Safeguard

Self-adhesive elastomeric bitumen vapour control layer with safety seam

DESCRIPTION

SikaShield® AL-E sk/Safeguard (thickness 2.5 mm) is a self-adhesive elastomeric bitumen vapour control layer reinforced with a polyester-aluminium laminate and a combi reinforcement glass fleece/mesh lath.
The top side is finely granulated with quartz sand and the bottom side is laminated with a silicone peel-off film one-sided perforated. The top side longitudinal overlap area has an one-sided PET-foil edge strip and the opposite underside a safety seam foil strip.

USES

Vapour control layer for flat roofs on concrete, steel profiled ceilings and wooden substrates

FEATURES

- Elastic behaviour at low temperatures
- Fire load reduced (≤ 66.3 MJ/m²)
- Robust, tear-resistant reinforcement
- Vapour & radon barrier
- High adhesive power of the self-adhesive layer
- Variable self-adhesive layer
- Safety seam
- Chemically good compatible
- Suitable as a temporary seal (max. 6 months)

CERTIFICATES AND TEST REPORTS

CE-Marking and declaration of performance to EN 13970 - Bitumen vapour control layers

PRODUCT INFORMATION

Composition	coating	self-adhesive elastomeric bitumen
	reinforcement	polyester-aluminiumlaminate + combi reinforcement glass fleece/mesh lath
Packaging	single rolls	
Appearance and colour	top	fine granule, foil-laminated edge trim
	bottom	silicone peel-off film onesided perforated
Shelf life	12 months if stored properly	
Storage conditions	Store vertical and protected from extreme external influence such as heat, cold, moisture etc.	
Visible defects	free of visible defects	(EN 1850-1)
Length	10 m	(EN 1848-1)
Width	1.08 m	(EN 1848-1)

Thickness	2.5 mm	(EN 1849-1)
Straightness	< 20 mm / 10 m	(EN 1848-1)
Mass per unit area	2.9 kg/m² [± 10%]	(EN 1849-1)

TECHNICAL INFORMATION

Tensile strength	**maximum tensile force**		(EN 12311-1)
	lengthwise	≥ 1.000 N / 50 mm	
	crosswise	≥ 1.000 N / 50 mm	
Elongation	**elongation at maximum tensile force**		(EN 12311-1)
	lengthwise	≥ 3 %	
	crosswise	≥ 3 %	
Tear strength	**nail shank**		(EN 12310-1)
	lengthwise	≥ 150 N	
	crosswise	≥ 150 N	
Reaction to fire	class E		(EN 13501-1, ES ISO 11925-2)
Water-vapour transmission rate	s_d = 1.500 m [± 10%]		(EN 1931 - procedure A)
Watertightness	60 kPa		(EN 1928 - procedure B)
Flow resistance	+90 °C		(EN 1110)
Flexibility at low temperature	-25 °C		(EN 1109)

APPLICATION INFORMATION

Ambient air temperature	In order to ensure save self-adhesion of the membrane, we recommend a minimum temperature of +10°C during the application. If necessary, the self-adhesive membrane shall additionally be activated by welding or torching.
Substrate temperature	In order to ensure save self-adhesion of the membrane, we recommend a minimum temperature of +10°C during the application. If necessary, the self adhesive membrane shall additionally be activated by welding or torching.

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

The manufacturer's specifications in this PDS may differ from the requirements of standards and regulations. We recommend agreeing these deviations with the contract partner.
On trapezoidal steel sheet substrates:
Bonding over the entire surface on the upper chords, completely remove the release film from the underside. Observe the instructions for substrate preparation.
On wood-based materials and glued solid wood panels:
Apply adhesive to the entire surface of the substrate and completely remove the backing film from the underside. Follow the instructions for substrate preparation.
On wooden formwork:
The product is not suitable for direct bonding to wooden formwork. Therefore, do not remove the backing film on the underside. If necessary, secure mechanically with plate screws or roofing nails.

FURTHER INFORMATION
The product is suitable as a temporary waterproofing solution for a maximum of 6 months. In principle, when using a temporary waterproofing solution, it is important to ensure that it is securely attached to the substrate and to carefully execute and check the overlap seam. During use as a temporary waterproofing solution, the membrane must be protected from direct mechanical and static loads, e.g., frequent foot traffic and/or loads, etc. After a prolonged period of inactivity, the vapor barrier layer must be checked to ensure it is functioning properly and, if necessary, repaired before further roofing work is continued.

Please note that a temporary waterproofing has lower performance characteristics than a properly dimensioned waterproofing.

SUBSTRATE PREPARATION
Concrete:
Prime dry and prepared substrate with Primer-600.
Trapezoidal steel sheet:
For bonded roof structures, prime the upper chords with Primer-600.
Wood-based materials and glued solid wood panels:
The moisture-related changes in length of wood-based materials must be taken into account during installation in accordance with DIN 18531-1. When bonding to wood-based panels, the panel joints must therefore be covered with a decoupling strip ≥ 50 mm (e.g. Sarnatape 60) at intervals of max. 5 m in the longitudinal direction and max. 10 m in the transverse direction.

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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