BUILDING TRUST

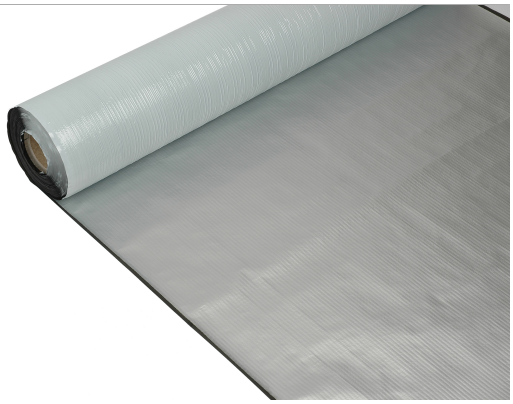
PRODUCT DATA SHEET

Sarnavap®-5000 E SA FR

Self-adhesive, fire-reduced vapour barrier

DESCRIPTION

Sarnavap®-5000 E SA FR is a self-adhesive, multi-layered, fire-reduced vapour barrier. It is manufactured from polymer-modified bitumen with glass-fibre mat reinforcement and an aluminium top foil layer.



USES

Sarnavap®-5000 E SA FR may only be used by experienced professionals.

Sarnavap®-5000 E SA FR is used as a:
- Vapour barrier over metal decks
- Temporary waterproofing layer for a maximum of 1 week (without ponding water)

Please note:
- The Product may only be used by experienced professionals.
- Do not use as a permanent waterproof layer.
- The Product is not suitable for fully adhered roof buildups.

FEATURES

- Fast and easy installation using self-adhesive product
- Temporary waterproof top layer for up to 1 week, without the need for additional weight, ballast or mechanical fastenings
- Good adhesion strength leading to an airtight roof construction
- Good tear resistance to foot traffic during the construction phase
- High water vapour diffusion resistance makes it suitable in combination with all types of membranes
- Can be bonded onto inclined or vertical surfaces
- Can be bonded onto different types of adjoining substrates
- Complies with the requirements of DIN 18234

SUSTAINABILITY

- Contributes towards satisfying Materials and Resources (MR) Credit: Building Product Disclosure and Optimization — Material Ingredients under LEED® v4

CERTIFICATES AND TEST REPORTS

- Certificate of Compliance, Sarnavap®-5000 E SA FR, FM Approvals, No. PR456408
- FM Approved, Sarnavap®-5000 E SA FR
- CE marking and declaration of performance based on EN 13970:2004/A1:2006 Flexible sheets for waterproofing — Bitumen water vapour control layers — Definitions and characteristics

PRODUCT INFORMATION

Composition	Polymer-modified bitumen (self-adhesive) with composite aluminium as top layer		
Packaging	Roll length	40.00 m	
	Roll width	1.08 m or 1.38 m	
	Unit weight	17.20 kg for 1.08 m width or 22.00 kg for 1.38 m width	
	Please contact our customer service, for information of what packaging sizes are sold in Denmark.		
Shelf life	12 months from date of production		
Storage conditions	The 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 the packaging.		
Appearance and colour	Top surface	Aluminium foil with PET film	
Visible defects	No visible defects		(EN 1850-1)
Thickness	0.40 mm (0.30–0.44 mm)		(EN 1849-1)
Mass per area	400 g/m² ± 100 g		(EN 1849-1)

TECHNICAL INFORMATION

Resistance to impact	Hard substrate	≥ 150 mm	(EN 12691)
	Soft substrate	≥ 600 mm	
Tensile strength	≥ 700 N/50 mm		(EN 12311-1)
Tensile strain at break	≥ 2 %		(EN 12311-1)
Tear strength	≥ 100 N		(EN 12310-1)
Joint shear resistance	> 500 N/50 mm		(EN 12317-2)
Foldability at low temperature	-20 °C		(EN 1109)
Watertightness	Pass		(EN 1928)
Water-vapour transmission rate	≥ 1800 m		(EN 1931)
Resistance to alkalinity	Pass		(EN 1847)
Artificial ageing	Pass		(EN 1931; EN 1296)
Reaction to fire	Class E		(EN 13501-1)

APPLICATION INFORMATION

Ambient air temperature	Minimum	+5 °C
Substrate temperature	Minimum	+5 °C

SYSTEM INFORMATION

System structure	The following products may be necessary, depending on the roof design: ▪ Sika® Trocal Cleaner L-100 ▪ Sarna® Cleaner

- Sarnafil® T Prep
- Solvent T-660
- Primer-600

Substrates are primed with Primer-600:

Substrate	Primer-600 consumption
Metal	100 g/m²
Concrete or cementitious	200–400 g/m²
Wood	200 g/m²

Very absorbent substrates may require 2 coats of Primer-600 at 200–500 g/m² per coat.
Note: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply the Product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.

Compatibility

The roof deck substrate can be one of the following materials:
- OSB panels
- Plywood panels
- Sandwich panels
- Timber boards
- Metal decking

The adjoining substrates (such as parapets and chimneys) can be one of the following materials:
- Concrete
- Metal
- OSB panels
- Plywood panels
- Timber boards
- Masonry
- Plasticiser-free synthetics
- Bituminous materials after sand, granules, chippings and surfacing have been removed

For other substrate types, contact Sika Technical Services.

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.

ECOLOGY, HEALTH AND SAFETY

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

SUBSTRATE QUALITY

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

SUBSTRATE PREPARATION

GENERAL
The substrate must be dry, uninterrupted, even, capable to bear loads, free of dust and grease and must not repel adhesives.
Use the appropriate preparation equipment to achieve the required substrate quality.

WOOD
Always prime wood substrates regardless of the fixation method (mechanically fastened or ballasted).
1. Apply Primer-600 at the required consumption, refer to the individual Prodcut Data Sheet.

ADJOINING SUBSTRATES
Any adjoining substrates must be primed prior to the application of the Product.
1. Apply Primer-600 at the required consumption, refer to the individual Prodcut Data Sheet.

APPLICATION

IMPORTANT
Application by trained personnel
The application of this Product must only be carried out by an applicator that is trained or approved by Sika. The applicator must also be experienced in this type of application.
IMPORTANT
Strictly follow installation procedures
Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.
IMPORTANT
Bonding at low temperatures
If the Product is to be applied between +5 °C and +10 °C ambient temperature, heat the seams first using hot-air welding equipment before rolling with a pressure roller. Hot-air welding equipment (for instance Leister Triac) must be set at +300 °C with a speed of 5 m/min.
IMPORTANT
Risk of damage due to ponding water
The Product may be used as temporary waterproofing. This is a provisional and restricted solution intended for a short duration during the construction phase. However, ponding water on the surface of the Product may cause the vapour control layer to leak and is strictly prohibited.
1. Only use the Product as a temporary waterproofing layer for the shortest possible duration, maximum 1 week.
2. Monitor the temporary waterproofing during the construction phase and rework if necessary before continuing construction.
3. Provide a slope of at least 2 % (1.1°) towards the drainage system.
4. Roof drainage lines must be properly connected, adequately sized for the anticipated usage.
5. Do not allow ponding water to collect.
6. If the application temperature is between +5 °C and +10 °C, heat all seams first.

PRIMING
1. Apply Primer-600 to the prepared substrate where required, at the required consumption.

ALIGNMENT
Profiled metal decks:
1. IMPORTANT Do not stretch the Product or install it under tension. Lay the sheets in the direction of the deck ribs. Note Where side or longitudinal overlap seams occur, they must be fully supported by aligning over the full surface of a top rib.

All deck types:
1. IMPORTANT Do not stretch the Product or install it under tension.Unroll a sheet and align in the correct position.
2. Roll out and align subsequent sheets, taking into consideration the overlap seam requirements.

OVERLAP SEAMS

Side or longitudinal	75 mm
End joints or T-joints	75 mm

1. Roll down the Product firmly using a pressure roller or by applying pressure to seal overlap seams.
2. If seams are not immediately closed after unrolling the Product, all seams must be cleaned with Sika® Trocal Cleaner L-100, Sarna® Cleaner or Sarnafil® T Prep. Allow the cleaners to evaporate completely before bonding.

Profiled metal decks:
1. At the end of the rolled sheet, apply an additional 20 cm wide support strip of the Product.
2. Position the Product so it aligns perpendicular to the deck rib direction. This provides continuous support over the ribs allowing the ends of the sheets to be fully bonded.

BONDING
1. Check the alignment of the sheets before bonding and re-align where necessary.
2. At one end of the sheet, peel away part of the release liner from the underside and bond this part to the substrate.
3. Peel away the release liner sideways from the rest of the sheet to allow it to bond to the substrate.
4. Roll the entire surface area of the applied membrane with a heavy roller.
5. At T-joints, mitre the edges of the middle cover sheet at 45° and secure with a 30 cm by 30 cm piece of the membrane.
6. After bonding into position, use a small pressure roller to firmly press together all overlaps, including the sheet bevels.

DETAILING
1. Cut and seal all details such as internal and external corners, upstands, vent pipes and support metalwork effectively.
2. Always attach the Product on the warm side of the thermal insulation.
3. Take the upper edge of the Product up to the top edge or surface of the insulation.

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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