

## PRODUCT DATA SHEET

# Sarnavap<sup>®</sup>-5000 E SA FR

Self-adhesive fire reduced vapour barrier

### PRODUCT DESCRIPTION

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

### USES

Sarnavap<sup>®</sup>-5000 E SA FR installation works to be carried out only by Sika Approved Contractors. Please observe information given by Product Data Sheets.

- As a vapour barrier over metal decks in combination with mechanically fastened roof construction
- Temporary waterproofing layer for up to 4 weeks

### CHARACTERISTICS / ADVANTAGES

- Ease and speed of installation from self-adhesive properties
- Temporary waterproof top layer for up to 4 weeks, without the requirement for additional weight/ballast and/or mechanical fastenings

- Good adhesion/bonding strength leading to an air tight roof construction
- Good tear resistance to foot traffic during roof build up activities
- High water vapour 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



### ENVIRONMENTAL INFORMATION

- Conformity with LEED v4 MRc 4 (Option 2): Building Product Disclosure and Optimization - Material Ingredients

### APPROVALS / STANDARDS

- FM Approved
- CE Marking and Declaration of Performance to EN 13970 - Bitumen water vapour control layers

## PRODUCT INFORMATION

<b>Chemical Base</b>	Polymer modified bitumen (self-adhesive) with composite aluminium top layer		
<b>Packaging</b>	Roll Size		
	Width	1,08 m	1,38 m
	Length	40,00 m	40,00 m
	Weight	17,20 kg	22,00 kg
	Refer to current price list for packaging variations.		
<b>Appearance / Colour</b>	Surface: Aluminium foil with PET film		
<b>Shelf Life</b>	12 months from date of production		
<b>Storage Conditions</b>	Product must be stored in original unopened and undamaged packaging in dry conditions and temperatures between + 5 °C and + 30 °C. 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 13970: Bitumen water vapour control layers		
<b>Visible Defects</b>	Pass		(EN1850-1)
<b>Length</b>	40,00 m (+2 %)		(EN 1848-1)
<b>Width</b>	1,08 / 1,38 m (±1 %)		(EN 1848-1)
<b>Effective Thickness</b>	0,40 mm (0,30–0,44 mm)		(EN 1849-1)
<b>Straightness</b>	Pass		(EN 1848-1)
<b>Mass per unit area</b>	400 g/m <sup>2</sup> (±100 g)		(EN 1849-1)

## TECHNICAL INFORMATION

<b>Resistance to Impact</b>	hard substrate	≥ 150 mm	(EN 12691)
	soft substrate	≥ 600 mm	
<b>Tensile Strength</b>	≥ 700 N/50 mm		(EN 12311-1)
<b>Elongation at Break</b>	≥ 2 %		(EN 12311-1)
<b>Tear Strength</b>	≥ 100 N		(EN 12310-1)
<b>Joint Shear Resistance</b>	≥ 500 N/50 mm		(EN 12317-2)
<b>Foldability at Low Temperature</b>	-20 °C		(EN 1109)
<b>Reaction to Fire</b>	Class E	(EN ISO 11952-2: 2002, classification to EN 13501-1)	
<b>Resistance to Alkalinity</b>	Pass		(EN 1847)
<b>Artificial Ageing</b>	Pass		(EN1296/EN1931)
<b>Water Vapour Transimission</b>	≥ 1800 m		(EN 1931)
<b>Water Tightness</b>	Pass		(EN 1928)

## SYSTEM INFORMATION

### System Structure

The following products must be considered for use depending on roof design:

- Sika® Trocal Cleaner L-100
- Sarna Cleaner
- Sarnafil® T Prep
- Solvent T-660
- Primer-600

Priming for metal decking and adjoining substrates:

<u>Substrate</u>	<u>Primer</u>
Metal decking	None
Adjoining substrates: Plywood, OSB, metal / steel, plasticiser-free synthetics, bituminous materials	None
Vertical areas / upstands and flashings	Primer-600

Porous substrates may require 2 coats of Primer-600: ~200 g/m<sup>2</sup> / coat

### Compatibility

The adjoining substrates can be one of the following materials: Concrete, Oriented Strand Boards (OSB), plywood panels, timber boards, masonry, wood, plasticiser-free synthetics (except for rigid polystyrene), bituminous materials (after sand, granules, chippings and surfacing have been removed).

## APPLICATION INFORMATION

<b>Ambient Air Temperature</b>	+5 °C min.
<b>Substrate Temperature</b>	+5 °C min.

## VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## LIMITATIONS

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

- Sarnavap®-5000 E SA FR may only be used in combination with mechanically fastened roof assembly.
- Do not use as permanent waterproofing.

## ECOLOGY, HEALTH AND SAFETY

Fresh air ventilation must be ensured, when working (welding) in closed rooms.

### REGULATION (EC) NO 1907/2006 - REACH

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 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 and 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 / gravel dressing.

### SUBSTRATE PREPARATION

- Use the appropriate preparation equipment to achieve the required substrate quality.
- If dust exists on the surface, it must be completely removed before application of the product by suitable dust extraction equipment.

### APPLICATION

Strictly follow installation procedures as defined in

method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

#### Priming

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

#### Alignment

Profiled metal decks:

The sheets must be laid in the direction of the deck ribs. Where side/longitudinal overlap seams occur, they must be fully supported by aligning over the full surface of a top rib.

#### Overlap seams

Side/longitudinal: 75 mm

End / T-joints: 75 mm

- To achieve effectively sealed overlap seams, they must be rolled down firmly with a pressure roller or by applying pressure.
- If seams are not immediately closed after unrolling the Sarnavap®-5000 E SA FR, all seams must be cleaned with cleaner Sika® Trocal Cleaner L-100, Sarna Cleaner or Sarnafil® T Prep. Allow the cleaners to evaporate completely before bonding.

Profiled metal decks:

- At the end of the rolled sheet, an additional 20 cm wide Sarnavap®-5000 E SA FR support strip must be applied.
- It must be positioned so it aligns perpendicular to the deck rib direction. This provides a continuous support over the ribs allowing the ends of the sheets to be fully bonded.

#### Bonding

**Important:** If Sarnavap®-5000 E SA FR 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 (e.g. Leister Triac. ) must be set at ~+300 °C with a speed of ~5 m/min.

1. Check the alignment of the sheets before bonding.
2. Re-align where necessary.
3. At one end of the sheet, peel away part of the release liner from the underside and bond this part to the substrate.
4. Peel away the release liner sideways from the rest of the Sarnavap®-5000 E SA FR sheet to allow it to bond to the substrate.
5. Roll the entire surface area of the applied membrane with a suitable heavy roller.
6. At T-joints, the edges of the middle cover sheet must be mitred at 45°.
7. After bonding into position, use a small pressure roller to firmly press together, all overlaps including the sheet bevels.

#### Detailing

- All details such as internal and external corners, upstands, vent pipes, support metalwork etc. must be

cut and sealed effectively.

- Sarnavap®-5000 E SA FR must always be attached on the warm side of the thermal insulation.
- The upper edge of the Sarnavap®-5000 E SA FR must be taken up to the top edge / surface of the insulation.

#### Temporary waterproofing

- If Sarnavap®-5000 E SA FR is to provide a temporary waterproofing layer during construction (up to 4 weeks), a slope of at least 2 % (~1,1°) must be provided to ensure drainage with no standing water.
- Roof drainage lines must be adequately sized.

## 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.

### SIKA IRELAND LIMITED

Ballymun Industrial Estate  
Ballymun  
Dublin 11, Ireland  
Tel: +353 1 862 0709  
Web: [www.sika.ie](http://www.sika.ie)  
Twitter: @Sikalreland



**Product Data Sheet**  
Sarnavap®-5000 E SA FR  
January 2021, Version 02.01  
020945051000000015

Sarnavap-5000ESAFR-en-IE-(01-2021)-2-1.pdf

