

## PRODUCT DATA SHEET

# SikaShield® E54 PF 2.2 mm

86 mil thick elastomeric bituminous membrane surfaced with PE foil

### PRODUCT DESCRIPTION

SikaShield® E54 PF 2.2 mm is a 86 mil thick SBS modified bituminous waterproofing membrane. It is reinforced with a non-woven polyester fabric dimensionally stabilised with glass fibre and is flexible at 5°F (-15°C). The top surface is coated with a polyethylene foil, which ensures the bond of the overlying layer. The underside of the product has a fleece for an optimum adhesion by cold or hot applications.

### USES

The Product is used as a waterproofing membrane for:

- Flat and sloped roofs
- Inverted roofs
- New construction and refurbishment projects
- Single slab or prefabricated
- Stressed skin structures

The Product is used as a:

- Base sheet in multi-layer systems

Please note:

- The Product is not suitable for roofs permanently exposed to UV radiation.

### CHARACTERISTICS / ADVANTAGES

- Easy to install by cold and hot methods
- Fully bonded
- High durability
- Good mechanical properties (tensile, tear, shear)

### APPROVALS / STANDARDS

- CE marking and declaration of performance based on EN 13707:2004+A2:2009 Flexible sheets for waterproofing — Reinforced bitumen sheets for roof waterproofing — Definitions and characteristics

## PRODUCT INFORMATION

<b>Chemical Base</b>	SBS modified bitumen		
<b>Reinforcing Material</b>	non-woven spunbond polyester fabric stabilized with glass fiber		
<b>Packaging</b>	Roll width	39.4" (1.0 m)	(EN 1848-1)
	Roll length	32.8 ft (10.0 m)	
<b>Shelf Life</b>	36 months from date of production		
<b>Storage Conditions</b>	The Product must be stored in original unopened and undamaged packaging in dry conditions and temperatures between 41°F (5°C) and 95°F (35°C). Store in a vertical 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 packaging.		
<b>Top surface</b>	Polyethylene foil		
<b>Bottom Surface</b>	Fleece		
<b>Effective Thickness</b>	86 mil (2.2 mm) (EN 1849-1)		

## TECHNICAL INFORMATION

<b>Tensile Strength</b>	Longitudinal (MD)	45.68 lbf/in (400 N/50 mm)	(EN 12311-1)
	Transversal (CMD)	34.26 lbf/in (300 N/50 mm)	
<b>Elongation at maximum tensile force</b>	Longitudinal (MD)	35 % ± 15 %	(EN 12311-1)
	Transversal (CMD)	40 % ± 15 %	
<b>Resistance to Tearing (nail shank)</b>	Longitudinal (MD)	31.47 lbf (140 N)	(EN 12310-1)
	Transversal (CMD)	31.47 lbf (140 N)	
<b>Low Temperature Bend</b>	≤5°F (-15°C)		(EN 1109)
<b>Water Tightness</b>	Method B: 24 hours at 60 kPa	Pass	(EN 1928)
<b>Reaction to Fire</b>	Class A		(ASTM E108)

## APPLICATION INFORMATION

<b>Ambient Air Temperature</b>	Minimum	41°F (5°C)
	Maximum	86°F (30°C)
<b>Relative Air Humidity</b>		
<b>Substrate Temperature</b>	Minimum	41°F (5°C)
	Maximum	86°F (30°C)

## BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

## AVAILABILITY/WARRANTY

### AVAILABILITY

From Sika Corporation – Roofing Authorized Applicators

for use within Sarnafil or Sikaplan systems.

### WARRANTY

Upon successful completion of the installed roof by the Sika Authorized Applicator in compliance with Sika requirements, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator.

### LIMITATIONS

- At low temperatures, the membrane becomes less

flexible. Be careful when unrolling to avoid damaging the membrane.

- Footwear with spikes or sharp protrusions may puncture the membrane. Use footwear with a flat profile when walking over the membrane.
- When applying the membranes at temperatures lower than 41°F (5°C), use heating equipment to ensure that the substrate temperature is within the given temperature range.
- For slopes with an inclination greater than 15 %, multi-layered roofs must be carefully designed and, if necessary, integrated with mechanical fastenings.
- If a seasonal symbol is printed on the roll's label, it is advisable to use the membrane during the indicated season.
- When laying the membrane at high temperatures, the integral adhesive will become 'tacky' and may restrict laying operations.

## ENVIRONMENTAL, 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

### SUBSTRATE QUALITY

#### SYSTEM DESIGN

Consider the following when designing the system:

- The supporting structure must be of sufficient structural strength to support all new and existing layers of the system build-up.
- If used as a roof system, the complete system must be designed to withstand and be secured against wind uplift loadings.

#### SUBSTRATE CONDITION

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

### APPLICATION

#### ALIGNMENT

To avoid coinciding joints, lay the membranes parallel to one another. When applying on another bituminous

membrane, make sure to straddle the overlaps of the previous layer.

1. Unroll the membrane.
2. Align the membrane.
3. Re-roll the membrane before application.

#### COLD OR HOT ADHESION

1. Apply the membrane onto the cold or hot adhesive before its cured/dried.
2. Roll the surface of the applied membrane with a roller from the center to the edge to remove any air bubbles.
3. Seal the overlaps with hot asphalt or by heat (torching or welding).

#### *Suitable substrates for torching*

- Concrete
- Bituminous membranes with a smooth surface
- Coatings (check the compatibility)
- Brick masonry
- Cementitious screeds

#### DETAILING

Use a sharp knife to cut in all details such as internal and external corners, upstands, vent pipes, drains, support metalwork etc.

Refer to the relevant method statement for further information on detailing.

#### MEMBRANE OVERLAPS

1. Overlap the membranes by a minimum of 4" (100 mm) on the sides and 6" (150 mm) on each end or as specified by the supplier.
2. At the end overlap, cut off a corner measuring 4" (100 mm) per side at an angle of 45°.

## MAINTENANCE

Standard maintenance of SikaShield system should include regular inspections of flashings, drains and terminations sealants at least twice a year and after each storm.

## OTHER RESTRICTIONS

See Legal Disclaimer.

## LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at [usa.sika.com](http://usa.sika.com) or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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### Product Data Sheet

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