

PRODUCT DATA SHEET

Sikaplan® Fastened-60 3 oz. Feltback EnergySmart

PVC THERMOPLASTIC MEMBRANE WITH FELT BACKING

PRODUCT DESCRIPTION

Sikaplan® Fastened-60 3 oz. Feltback EnergySmart Roof Membrane is a highly reflective, PVC thermoplastic membrane produced with a polyester scrim reinforcement offered in 1.5 mm (60 mil) thickness and incorporates a 88.7 mL (3 oz.) felt.

WHERE TO USE

Mechanically attached using various attachment components.

AREAS OF APPLICATION

- In-seam disc systems
- In-seam batten, double-weld system
- Single-ply recovers

CHARACTERISTICS / ADVANTAGES



- Highly reflective
- Excellent tear strength resistance
- Factory applied lacquer coating to reduce dirt pick up
- Hot-air welded seams for long-term performance
- Cost effective option for single-ply recovers
- Felt backing eliminates the need to install a coverboard

APPROVALS / CERTIFICATES

- FM Global
- Underwriters Laboratories
- Underwriters Laboratories of Canada
- ICC Code Compliance – ESR 1157
- Miami-Dade County
- Florida Building Code
- ENERGY STAR®
- California Title 24
- LEED/Green Globes
- CSA-A123.21

PRODUCT INFORMATION

Composition / Manufacturing	Thermoplastic PVC membrane containing ultraviolet light stabilizers, flame retardant and polyester scrim reinforcement with a unique lacquer coating on the top surface.	
Recycled content	9% Pre-consumer, 1% Post-consumer	
Reinforcing Material	Polyester	
Packaging	1.5 mm (60 mil) Membrane 88.7 mL (3 oz.) Feltback: 3 m x 30 m (10 ft x 100 ft) roll, 168 kg (371 lbs) per roll, 9 rolls per pallet	
Appearance / Colour	▪ Top: White ▪ Bottom: Grey	
Shelf Life	N/A	
Storage Conditions	Store rolls on pallets and fully protected from the weather with clean canvas tarpaulins. Unvented polyethylene tarpaulins are not accepted due to the accumulation of moisture beneath the tarpaulin in certain weather conditions that may affect the ease of membrane weldability.	
Overall Thickness	1.5 mm (60 mil), nominal 1.1 mm (45 mil)	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
Thickness Above Scrim	0.6 mm (24 mil) 0.4 mm (16 mil)	(ASTM D-7635) (ASTM Type III D-4434 Spec. Requirement)
Felt Weight	71 g/m ² (3 oz/yd ²)	

TECHNICAL INFORMATION

Resistance to Static Puncture	Pass 15 kg (33 lbf)	(ASTM D-5602) (ASTM Type III D-4434 Spec. Requirement)
Resistance to Dynamic Puncture	Pass 20 J (14.7 ft-lbf)	(ASTM D-5635) (ASTM Type III D-4434 Spec. Requirement)
Tensile Strength	1348 N (303 lbf) 890 N (200 lbf)	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
Elongation at Break	20 & 20% MD & CMD ¹ 15 & 15% MD & CMD ¹	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
	¹ MD = Machine Direction, CMD = Cross Machine Direction	
Linear Dimensional Change	0.24% 0.5%	(ASTM D-1204) (ASTM Type III D-4434 Spec. Requirement)
Tear Strength	200 N (45 lbf) 200 N (45 lbf)	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
Seam Strength	Pass 75% of original ²	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
	² Failure occurs through membrane rupture not seam failure	
Low Temperature Flexibility	Pass Pass -40°C (-40°F)	(ASTM D-2136) (ASTM Type III D-4434 Spec. Requirement)

Retention of Properties after Heat Ageing	Tensile Strength, % of original: Pass	(ASTM D-3045)	
	Elongation, % of original: Pass	(ASTM D-751)	
	Tensile Strength, % of original: 90	(ASTM Type III D-4434 Spec. Requirement)	
	Elongation, % of original: 90		
Resistance to UV Exposure	10,000 hours	(ASTM G-154)	
	5,000 hours	(ASTM Type III D-4434 Spec. Requirement)	
	Cracking (7x magnification)	None	
	Discolouration (by observation)	Negligible	
	Crazing (7x magnification)	None	
Weight Change after Immersion in Water	2.5%	(ASTM D-570)	
	± 3.0%	(ASTM Type III D-4434 Spec. Requirement)	
Solar Reflectance	EnergySmart Colours	Initial Solar Reflectance¹	3-Year Solar Reflectance¹
	EnergySmart White	0.85	0.75
¹ Solar Reflectance testing according to ASTM C-1549.			
Thermal Emittance	EnergySmart Colours	Initial Thermal Emittance¹	3-Year Thermal Emittance¹
	EnergySmart White	0.89	0.90
¹ Thermal Emittance testing according to ASTM C-1371, Slide Method.			
Solar Reflectance Index	EnergySmart Colours	Initial Thermal Reflectance Index¹	3-Year Solar Reflectance Index¹
	EnergySmart White	107	93
¹ Solar Reflectance Index calculated according to ASTM E-1980.			

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

OTHER DOCUMENTS

AVAILABILITY

Sikaplan® Fastened-60 3 oz. Feltback EnergySmart is available directly from Sika Canada Authorized Applicators when used within a Sika® Sarnafil® Roofing or Waterproofing System. Contact Sika Canada or visit our website at www.sika.ca for further information.

WARRANTY

Upon successful completion of the installed roof by the Sika Authorized Applicator, Sika Canada will provide a warranty to the Building Owner via the Sika Authorized Applicator.

LIMITATIONS

Ambient Air Temperature: -20 °C (-4 °F) min. / +60 °C (140 °F) max. during application.
 Substrate Temperature: -30 °C (-22 °F) min. / +60 °C (140 °F) max. during application.
 Not to be applied directly to polystyrene products. Sarnafil® membranes are incompatible with asphalt, coal tar, heavy oils, roofing cements, creosote and some preservative materials.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

APPLICATION

Sikaplan® Fastened-60 3 oz. Feltback EnergySmart is installed and fastened to the roof deck using the approved attachment method. The membrane is heat-welded together by trained mechanics using hot-air welding equipment.

MAINTENANCE

Standard maintenance of Sikaplan® systems should include regular inspections of flashings, drains and termination sealants at least twice a year and after each storm.

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 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

Sika Canada Inc.

Head Office
601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9
1-800-933-SIKA
www.sika.ca

Other locations

Boisbriand (Quebec)
Brantford; Cambridge;
Sudbury; Toronto (Ontario)
Edmonton (Alberta)
Surrey (British Columbia)

Product Data Sheet

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EnergySmart
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