

## PRODUCT DATA SHEET

# Sikaplan® Fastened-60 Feltback EnergySmart

60 mil thick PVC thermoplastic membrane with felt backing

### PRODUCT DESCRIPTION

Sikaplan® Fastened-60 Feltback EnergySmart EnergySmart Roof Membrane is a PVC thermoplastic membrane produced with a polyester scrim reinforcement and a 9 oz. or 3 oz. recycled felt backing. Sikaplan Fastened-60 Feltback EnergySmart utilizes the Pro-Weld™ visual indicator to provide real-time feedback that the proper seam welding temperature and speed settings are being used during installation.

### USES

Mechanically attached using various attachment components over approved substrates. Sikaplan Fastened-60 Feltback EnergySmart with 9 oz. felt backing can also be used in adhered applications to approved substrate.

### AREAS OF APPLICATION

- In-seam disc systems
- In-seam batten, double-weld systems
- Adhered systems
- New construction and reroofing

### 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 (3 oz.)
- Felt backing eliminates the need to install a coverboard (3 oz.)
- Pro-Weld visual welding temperature indicator<sup>1</sup>

<sup>1</sup> White membrane only

### APPROVALS / STANDARDS

- FM Global
- Underwriters Laboratories
- Underwriters Laboratories of Canada
- ICC Code Compliance – ESR 1157
- Miami-Dade County
- Florida Building Code
- California Title 24
- LEED/Green Globes

#### Product Data Sheet

Sikaplan® Fastened-60 Feltback EnergySmart

January 2024, Version 10.01

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## PRODUCT INFORMATION

<b>Chemical Base</b>	Thermoplastic PVC membrane containing ultraviolet light stabilizers, flame retardant and polyester scrim reinforcement with a unique lacquer coating on the top surface.	
<b>Recycled Content</b>	9% Pre-consumer, 1% Post-consumer	
<b>Reinforcing Material</b>	Polyester	
<b>Packaging</b>	<b>60 mil (1.5 mm) Membrane 3oz. Feltback:</b> 10 ft x 100 ft (3 m x 30 m) feltback roll, 371 lbs (168 kg) per roll, 9 rolls per pallet  <b>60 mil (1.5 mm) Membrane 9oz. Feltback:</b> 10 ft x 100 ft (3 m x 30 m) feltback roll, 388 lbs (176 kg) per roll, 9 rolls per pallet	
<b>Shelf Life</b>	N/A	
<b>Storage Conditions</b>	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. Refer to Technical Bulletin 24-02 for additional storage information for rolls utilizing the Pro-Weld visual welding temperature indicator.	
<b>Appearance / Color</b>	<ul style="list-style-type: none"><li>▪ Top: White<sup>1</sup>, Reflective Gray<sup>2</sup>, or Tan<sup>2</sup></li><li>▪ Bottom: Gray</li></ul> <p><sup>1</sup> Available in 3 oz. and 9 oz. feltback <sup>2</sup> Available in 9 oz. feltback</p>	
<b>Overall Thickness</b>	60 mil (1.5 mm), nominal 45 mil	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
<b>Thickness Above Scrim</b>	24 mil 16 mil	(ASTM D-7635) (ASTM Type III D-4434 Spec. Requirement)
<b>Felt Weight</b>	3 oz/yd <sup>2</sup> 9 oz/yd <sup>2</sup>	

## TECHNICAL INFORMATION

<b>Resistance to Static Puncture</b>	Pass 33 lbf (15 kg)	(ASTM D-5602) (ASTM Type III D-4434 Spec. Requirement)
<b>Resistance to Dynamic Puncture</b>	Pass 14.7 ft-lbf (20 J)	(ASTM D-5635) (ASTM Type III D-4434 Spec. Requirement)
<b>Tensile Strength</b>	303 lbf (1348 N) 200 lbf (890 N)	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
<b>Elongation at Break</b>	20 & 20% MD & CMD <sup>1</sup> 15 & 15% MD & CMD <sup>1</sup>	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
	<sup>1</sup> MD = Machine Direction, CMD = Cross Machine Direction.	
<b>Tear Strength</b>	45 lbf (200 N) 45 lbf (200 N)	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
<b>Seam Strength</b>	Pass 75% of original <sup>1</sup>	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
	<sup>1</sup> Failure occurs through membrane rupture not seam failure.	

<b>Linear Dimensional Change</b>	0.24% 0.5%	(ASTM D-1204) (ASTM Type III D-4434 Spec. Requirement)
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<b>Solar Reflectance</b>	<b>EnergySmart Colors</b>	<b>Initial Solar Reflectance<sup>1</sup></b>	<b>3-Year Solar Reflectance<sup>1</sup></b>
	EnergySmart White	0.85	0.75
	EnergySmart Reflective Gray	0.73	0.66
	EnergySmart Tan	0.72	0.65

<sup>1</sup> Solar Reflectance testing according to ASTM C-1549.

<b>Solar Reflectance Index</b>	<b>EnergySmart Colors</b>	<b>Initial Solar Reflectance Index<sup>1</sup></b>	<b>3-Year Solar Reflectance Index<sup>1</sup></b>
	EnergySmart White	106	93
	EnergySmart Reflective Gray	89	80
	EnergySmart Tan	89	78

<sup>1</sup> Solar Reflectance Index calculated according to ASTM E-1980.

<b>Thermal Emittance</b>	<b>EnergySmart Colors</b>	<b>Initial Thermal Emittance<sup>1</sup></b>	<b>3-Year Thermal Emittance<sup>1</sup></b>
	EnergySmart White	0.89	0.90
	EnergySmart Reflective Gray	0.89	0.88
	EnergySmart Tan	0.89	0.88

<sup>1</sup> Thermal Emittance testing according to ASTM C-1371, Slide Method.

<b>Low Temperature Bend</b>	Pass Pass -40°F (-40°C)	(ASTM D-2136) (ASTM Type III D-4434 Spec. Requirement)
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<b>Weight Change after Immersion in Water</b>	2.5% ± 3.0%	(ASTM D-570) (ASTM Type III D-4434 Spec. Requirement)
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<b>UV Exposure</b>	Pass 5,000 hours	(ASTM G-154) (ASTM Type III D-4434 Spec. Requirement)
	Cracking (7x magnification)	None
	Crazing (7x magnification)	None

<b>Retention of Properties after Heat Ageing</b>	Breaking Strength, % of original: Pass Elongation, % of original: Pass Breaking Strength, % of original: 90 Elongation, % of original: 90	(ASTM D-751) (ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
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## 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 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.

## ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

## APPLICATION INSTRUCTIONS

### APPLICATION

Sikaplan Fastened-60 Feltback EnergySmart is installed on acceptable substrates 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. Refer to Technical Bulletin 24-02 for Pro-Weld visual welding temperature indicator application information.

### MAINTENANCE

Standard maintenance of Sikaplan systems 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.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product’s shelf life. User determines suitability of product for intended use and assumes all risks. User’s and/or buyer’s sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

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