



PRODUCT DATA SHEET

SIKAPLAN[®] ADHERED ENERGYSMART ROOF[®] MEMBRANE

 60 FELTBACK



Sikaplan Adhered EnergySmart Roof Membrane is a highly reflective, thermoplastic PVC membrane, with an integral fiberglass mat reinforcement offered in 60 mil (1.5 mm) thickness. It is also available in 60 mil (1.5 mm) feltback which is manufactured with a recycled felt backing.

PRODUCT INFORMATION

USES

Sikaplan Adhered EnergySmart Roof Membrane is adhered to approved substrates.

AREAS OF APPLICATION

- Adhered roof systems
- Adhered roof flashings
- New construction and reroofing

FEATURES / BENEFITS

- Integral fiberglass mat reinforcement for excellent dimensional stability
- Heat welded seams for strength and security

TESTS

CODES / APPROVALS

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

PRODUCT DATA

FORM

COMPOSITION

Thermoplastic PVC membrane containing ultraviolet light stabilizers, flame retardant and fiberglass reinforcement with a unique lacquer coating on the top surface.

COLOR

Top: White, Reflective Gray, and Tan

Bottom: Dark Gray

PACKAGING

- **60 mil (1.5 mm) Membrane**

- Bareback: 10 ft x 100 ft (3 m x 30 m) roll, 348 lbs (158 kg) per roll, 8 rolls per pallet

- 5 ft x 100 ft (1.5 m x 30 m) roll, 174 lbs (79 kg) per roll, 12 rolls per pallet

- Feltback: 10 ft x 100 ft (3 m x 30 m) rolls, 401 lbs (182 kg) per roll, 9 rolls per pallet

STORAGE

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.

TECHNICAL DATA
TYPICAL PHYSICAL PROPERTIES*

Properties	ASTM Test Method	ASTM Type II D4434 Spec. Requirement	Typical Results
Reinforcing Material	--	--	Fiberglass
Nominal Thickness, mil	D751	45	60
Thickness Over Scrim, mil	--	16	24
Felt Weight, oz/sq yd (feltback membrane only)	--	--	9
Breaking Strength, lbf (N) M.D. ¹	D751	55 (245)	64 (285)
Breaking Strength, lbf (N) C.M.D. ¹	D751	55 (245)	62 (276)
Elongation at Break, % M. D. ¹ & % C.M.D. ¹	D751	250 & 220	250 & 220
Seam Strength, % of original ²	D751	75	Pass
Retention of Properties After Heat Aging	D3045	--	--
Tensile Strength, % of original	D751	90	Pass
Elongation, % of original	D751	90	Pass
Tearing Resistance, lbf (N)	D1004	10 (45)	15 (67)
Low Temperature Bend, -40°F (-40°C)	D2136	Pass	Pass
Accelerated Weathering Test (Florescent Light UV exposure)	G154	5,000 Hours	10,000 Hours
Cracking (7x magnification)	--	None	None
Discoloration (by observation)	--	Negligible	Negligible
Crazing (7x magnification)	--	None	None
Linear Dimensional Change, %	D1204	0.1 max.	-0.02
Weight Change After Immersion in Water, %	D570	± 3.0 max.	2.4
Static Puncture Resistance, lbf (kg)	D5602	33 (15)	Pass
Dynamic Puncture Resistance, ft-lbf (J)	D5635	7.3 (10)	Pass
Recycled Content	--	--	9% Pre-consumer, 1% Post-consumer

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

¹M.D. = Machine Direction, C.M.D. = Cross Machine Direction.

²Failure occurs through membrane rupture not seam failure.

EnergySmart Colors	INITIAL SOLAR REFLECTANCE ¹	3-YEAR SOLAR REFLECTANCE ¹	INITIAL THERMAL EMITTANCE ²	3-YEAR THERMAL EMITTANCE ²	INITIAL SOLAR REFLECTANCE INDEX	3-YEAR SOLAR REFLECTANCE INDEX
Sikaplan Adhered EnergySmart White - 60 mil	0.85	0.73	0.89	0.89	107	90
Sikaplan Adhered EnergySmart Reflective Gray - 60 mil	0.73	0.65 ³	0.89	0.88 ³	90	78 ³
Sikaplan Adhered EnergySmart Tan - 60 mil	0.72	0.65 ³	0.89	0.88 ³	88	78 ³

¹ Solar Reflectance testing according to ASTM C1549.

² Thermal Emittance testing according to ASTM C1371, Slide Method.

³CRRC Rapid Ratings: These are interim laboratory-aged values that simulate weathered values. These values will be replaced with the measured three-year aged values upon completion of the weathering process. SRI values calculated using Rapid Ratings may change once the aged rating replaces the interim rating.

SYSTEM INFORMATION

APPLICATION INSTRUCTIONS

APPLICATION

Sikaplan Adhered EnergySmart Roof Membrane is installed after proper preparation of the approved substrate. The membrane is unrolled into approved Sikaplan or Sarnacol adhesive in accordance with Sika's technical requirements and then pressed into place with a minimum 100 lb (45 kg) steel roller. Sikaplan Adhered EnergySmart Roof Membrane seams are heat-welded together by trained operators using hot-air welding equipment. Different Sarnacol adhesives require different application methods. Please consult Sika's Specifications or Applicator Handbook for detailed installation procedures.

AVAILABILITY

From Sika Corporation – Roofing Authorized Applicators when used within Sikaplan roofing systems.

MAINTENANCE

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

WARRANTY

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

LEGAL NOTES

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at usa.sarnafil.sika.com or by calling 800-451-2504.

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