

PRODUCT DATA SHEET

SIKAPLAN[®] FASTENED ENERGYSMART
ROOF[®] MEMBRANE 45 60 FELTBACK

Sikaplan Fastened EnergySmart Roof Membrane is a highly reflective white, nominal thickness PVC membrane with polyester scrim reinforcement offered in nominal 45 mil and 60 mil thicknesses. It is also available in feltback which is manufactured with a recycled felt backing.

PRODUCT INFORMATION**USES**

Sikaplan Fastened EnergySmart roof membrane is mechanically fastened using various attachment components over various substrates.

AREAS OF APPLICATION

- In-seam disc attachment
- In-seam batten, double-weld attachment
- RhinoBond[®] attachment

FEATURES / BENEFITS

- Highly dimensionally stable
- Heat welded seams

CODES / APPROVALS

- FM Global
- Underwriters Laboratories
- Underwriters Laboratories of Canada
- California Title 24
- USGBC LEED
- Green Globes

PRODUCT DATA

COMPOSITION

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

COLOR

White top surface, dark gray bottom surface

PACKAGING

- Sikaplan Fastened 45 EnergySmart
10 ft x 150 ft rolls, 420 lbs per roll, 8 rolls per pallet
5 ft x 150 ft rolls, 210 lbs per roll, 12 rolls per pallet
- Sikaplan Fastened 60 EnergySmart
10 ft x 100 ft rolls, 350 lbs per roll, 8 rolls per pallet
5 ft x 100 ft rolls, 175 lbs per roll, 12 rolls per pallet
- Sikaplan Fastened 45 EnergySmart Feltback
10 ft x 100 ft rolls, 344 lbs per roll, 9 rolls per pallet
- Sikaplan Fastened 60 EnergySmart Feltback
10 ft x 100 ft rolls, 403 lbs 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

Parameters	ASTM Test Method	ASTM Type III D-4434 Spec. Requirement	Typical Physical Properties*	
			Polyester	Polyester
Reinforcing Material	--	--	Polyester	Polyester
Overall Thickness, mil	D751	45	45 (nominal)	60 (nominal)
Thickness Above Scrim, mil	--	16	20	26
Felt Weight, oz/yd ² (feltback membrane only)	--	--	9	9
Breaking Strength M.D., lbf/in. (KN/m)	D751	200 (35)	230 (40)	303 (53)
Elongation at Break, % M. D. & % C.M.D. ¹	D751	15 & 15	20 & 20	20 & 20
Seam Strength, % of original ²	D751	75	Pass	Pass
Retention of Properties After Heat Aging	D3045	--	--	--
Tensile Strength, % of original	D751	90	Pass	Pass
Elongation, % of original	D751	90	Pass	Pass
Tearing Resistance, lbf (N)	D1004	45 (200)	45 (200)	45 (200)
Low Temperature Bend, -40°F (-40°C)	D2136	Pass	Pass	Pass
Accelerated Weathering Test (Florescent Light UV exposure)	G154	5,000 Hours	10,000 Hours	10,000 Hours
Cracking (7x magnification)	--	None	None	None
Discoloration (by observation)	--	Negligible	Negligible	Negligible
Crazing (7x magnification)	--	None	None	None
Linear Dimensional Change, %	D1204	0.5% max.	0.31	0.24
Weight Change After Immersion in Water, %	D570	± 3.0% max.	2.9	2.5
Static Puncture Resistance, lbf (N)	D5602	33 (147)	Pass	Pass
Dynamic Puncture Resistance, ft-lbf (J)	D5635	14.7 (20)	Pass	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.

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

² Failure occurs through membrane rupture not seam failure.

	INITIAL SOLAR REFLECTANCE	3-YEAR SOLAR REFLECTANCE	INITIAL THERMAL EMITTANCE	3-YEAR THERMAL EMITTANCE	INITIAL SOLAR REFLECTANCE INDEX	3-YEAR SOLAR REFLECTANCE INDEX
Sikaplan Fastened 45 EnergySmart White	0.83	0.64*	0.89	Pending	104	Pending
Sikaplan Fastened 60 EnergySmart White	0.85	0.66*	0.89	Pending	107	Pending

*Derived using the California Title 24 calculation method for aged solar reflectance per Section 110.8(i)2. of the 2013 Building Energy Efficiency Standard, page 102.

SYSTEM INFORMATION

APPLICATION

Sikaplan Fastened EnergySmart Roof Membrane is installed by Sika Corporation Roofing Authorized Applicators. Sikaplan Fastened EnergySmart Roof Membrane is installed on acceptable substrates with approved mechanical fasteners. All seams are hot-air welded for watertight protection. Sikaplan Fastened EnergySmart Roof Membrane can be used for flashings on Sikaplan Fastened EnergySmart Roof Membrane roof projects.

MAINTENANCE

Standard maintenance of roofs 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

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