

PRODUCT DATA SHEET

Sikaplan® Fastened-60 EnergySmart

Sikaplan Fastened Roof Membrane is a PVC thermoplastic membrane

PRODUCT DESCRIPTION

Sikaplan® Fastened-60 EnergySmart Roof Membrane is a PVC thermoplastic membrane produced with a polyester scrim reinforcement.

USES

Sikaplan Fastened is mechanically attached using various attachment components over approved substrates.

AREAS OF APPLICATION

- In-seam disc systems
- In-seam batten, double-weld systems
- RhinoBond® 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

APPROVALS / STANDARDS

- 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

PRODUCT INFORMATION

| | | |
|------------------------------|---|---|
| Chemical Base | 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 | 60 mil (1.5 mm) Membrane 10 ft x 100 ft (3 m x 30 m) roll, 343 lbs (156 kg) per roll, 8 rolls per pallet 5 ft x 100 ft (1.5 m x 30 m) roll, 172 lbs (78 kg) per roll, 12 rolls per pallet | |
| Appearance / Color | <ul style="list-style-type: none"> ▪ Top: White, Reflective Gray, and Tan ▪ Bottom: Gray | |
| 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 | 60 mil (1.5 mm), nominal 45 mil | (ASTM D-751) (ASTM Type III D-4434 Spec. Requirement) |
| Thickness Above Scrim | 24 mil 16 mil | (ASTM D-7635) (ASTM Type III D-4434 Spec. Requirement) |

TECHNICAL INFORMATION

| | | |
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| Resistance to Static Puncture | Pass 33 lbf (15 kg) | (ASTM D-5602) (ASTM Type III D-4434 Spec. Requirement) |
| Resistance to Dynamic Puncture | Pass 14.7 ft-lbf (20 J) | (ASTM D-5635) (ASTM Type III D-4434 Spec. Requirement) |
| Tensile Strength | 303 lbf (1348 N) 200 lbf (890 N) | (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 | 45 lbf (200 N) 45 lbf (200 N) | (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 Bend | Pass Pass -40°F (-40°C) | (ASTM D-2136) (ASTM Type III D-4434 Spec. Requirement) |

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| 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 | | |
| UV Exposure | 10,000 hours | (ASTM G-154) | |
| | 5,000 hours | (ASTM Type III D-4434 Spec. Requirement) | |
| | Cracking (7x magnification) | None | |
| | Discoloration (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 Colors | Initial Solar Reflectance¹ | 3-Year Solar Reflectance¹ |
| | EnergySmart White | 0.85 | 0.75 |
| | EnergySmart Reflective Gray | 0.73 | 0.66 |
| | EnergySmart Tan | 0.72 | 0.65 |
| | ¹ Solar Reflectance testing according to ASTM C-1549. | | |
| Thermal Emittance | EnergySmart Colors | Initial Thermal Emittance¹ | 3-Year Thermal Emittance¹ |
| | EnergySmart White | 0.89 | 0.90 |
| | EnergySmart Reflective Gray | 0.89 | 0.88 |
| | EnergySmart Tan | 0.89 | 0.88 |
| | ¹ Thermal Emittance testing according to ASTM C-1371, Slide Method. | | |
| Solar Reflectance Index | EnergySmart Colors | Initial Solar Reflectance Index¹ | 3-Year Solar Reflectance Index¹ |
| | EnergySmart White | 107 | 93 |
| | EnergySmart Reflective Gray | 90 | 80 |
| | EnergySmart Tan | 88 | 78 |
| | ¹ Solar Reflectance Index calculated according to ASTM E-1980. | | |

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, 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 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. Sikaplan Fastened can be used for flashings on Sikaplan Fastened roof projects.

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.

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 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.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

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Product Data Sheet

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