



PRODUCT DATA SHEET

Vapor Retarder SA 31

Vapor Retarder SA 31 is a self-adhesive vapor retarder/air barrier

PRODUCT DESCRIPTION

Vapor Retarder SA 31 is a 31 mil (0.8 mm) thick self-adhesive vapor retarder/air barrier for use within Sarnafil® and Sikaplan® insulated roofing systems. Vapor Retarder SA 31 can also serve as temporary roof protection in areas limited to light construction traffic. It can be left exposed for up to two (2) months.

USES

- Vapor retarder/air barrier within Sarnafil and Sikaplan insulated roofing systems
- Temporary roof protection in areas limited to light construction traffic

AREAS OF APPLICATION

- Direct application to steel, concrete, gypsum decks, approved gypsum boards, and plywood

CHARACTERISTICS / ADVANTAGES

- Roll width specifically designed to allow the side lap to align with the top flutes of most structural steel decks, reducing waste and maximizing coverage
- Polyethylene facer accepts approved urethane adhesives for insulation attachment

APPROVALS / STANDARDS

- FM Global
- Underwriters Laboratories
- Meets 2012 IECC Air Barrier requirements, Materials (Section C402.4.1.2.1)

PRODUCT INFORMATION

Chemical Base	Self-adhesive SBS modified bitumen with a tri-laminated woven polyethylene facer. The self-adhesive back side is covered by a release liner.	
Packaging	44.8" (1.14 m) x 133.8 ft (40.8 m) roll, 81 lbs (37 kg) per roll 16 rolls per pallet	
Shelf Life	N/A	
Storage Conditions	When stored outdoors or on the job site, stack the cartons on pallets at least 4" (10.2 cm) above ground level with an opaque protective cover.	
Effective Thickness	31 mil (0.8 mm)	(ASTM D-5147)

TECHNICAL INFORMATION

Resistance to Static Puncture	90 lbf (400 N)	(ASTM D-5602)
Tensile Strength	<u>Machine Direction</u> 54 lbf/in (9.5 kN/m)	<u>Cross Machine Direction</u> 74 lbf/in (13 kN/m) (ASTM D-5147)
Elongation at Break	<u>Machine Direction</u> 33%	<u>Cross Machine Direction</u> 25% (ASTM D-5147)
Tear Strength	<u>Machine Direction</u> 95 lbf/in (423 kN/m)	<u>Cross Machine Direction</u> 103 lbf/in (458 kN/m) (ASTM D-5147)
Seam Strength	68 lbf/ft (1000 N/m)	(ASTM D-1876)
Adhesion in peel	5.4 lbf/in (950 N/m)	(ASTM D-903)
Low Temperature Bend	-58°F (-50°C)	(ASTM D-5147)
Water Vapor Transmission	0.018 perm (1.04 ng/(Pa·s·m ²))	(ASTM E-96)
Water Absorption	0.1% max.	(ASTM D-5147)
Permeability to air	<0.000012 L/(Pa·m ² ·s)	(ASTM E-2178)
Air flow rate	<0.00006 cfm/ft ² (<0.0003 L/(s·m ²))	(ASTM E-2178)

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

All surfaces must be clean, sound, dry, and free of loose materials or contaminants such as water, frost, ice, oil and grease that would interfere with proper adhesion and compromise the performance of the product. In accordance with the ICRI Technical Guideline No. 310.2R-2013, newly poured concrete surfaces may be finished by forming, wood float, steel or power trowel, or broom finished to meet the equivalency of a CSP type surface between a rating of 2 – 5.

APPLICATION

Vapor Retarder Primer SB, Vapor Retarder Primer VC or Vapor Retarder Primer WB is required on all substrates

except for steel. Shake or stir primer before applying. Primers can be rolled, brushed or sprayed. Let the primer dry completely.

Begin the installation at the low point of the roof. Unroll Vapor Retarder SA 31 onto the substrate for alignment. Overlap each sheet by 3" (7.6 cm) on the side lap and 6" (15.2 cm) on the end laps.

Once the roll is aligned, peel back a portion of the release liner and press Vapor Retarder SA 31 onto the substrate. When securely adhered, remove the remaining release liner from the roll.

On steel decks install a 6" x 42" (15.2 cm x 1.1 m) metal plate under the end lap to support the membrane between the steel flutes. Stagger the end laps by at least 12" (30.5 cm).

Use a minimum 100 lb (45 kg) steel roller to press the Vapor Retarder SA 31 onto the substrate including the laps. Use the roller to push out any air bubbles out to

the edge of the membrane. Do not cut the membrane to remove a bubble.

Apply Sika's Mastic to seal around penetrations, T-joints, 90° angle transitions, fishmouths or other openings. Use a trowel to mound Sika's Mastic around the penetrations to seal the opening. Do not apply Sika's Mastic where it may come into direct contact with the Sarnafil or Sikaplan membrane.

MAINTENANCE

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

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.

LIMITATIONS

- Install Vapor Retarder SA 31 in temperatures 14°F (-10°C) and above.
- Do not install Vapor Retarder SA 31 when it is raining, snowing, or on wet/humid surfaces.
- Protect Vapor Retarder SA 31 from potential damage caused by construction traffic and other jobsite activities.

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.

OTHER RESTRICTIONS

See Legal Disclaimer.

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.

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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