

PRODUCT DATA SHEET

Edition 11.2024/v2

Vapor Retarder SA 31

Description	Vapor Retarder SA 31 is a 0.8 mm (31 mil) 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.
	<p>Uses</p> <ul style="list-style-type: none"> ▪ Vapor retarder / air barrier within Sarnafil® and Sikaplan® insulated roofing systems ▪ Temporary roof protection in areas limited to light construction traffic <p>Areas of application</p> <ul style="list-style-type: none"> ▪ Direct application to steel, concrete, gypsum decks, approved gypsum boards and plywood
Composition	<ul style="list-style-type: none"> ▪ Manufacturing: Self-adhesive SBS modified bitumen with a tri-laminated woven polyethylene facer. The self-adhesive back side is covered by a release liner.
Features / Benefits	<ul style="list-style-type: none"> ▪ 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
Packaging / Storage	<ul style="list-style-type: none"> ▪ Dimensions: 1.14 x 40.8 m (44.8 in x 133.8 ft) roll, 16 rolls per pallet ▪ Shipping weight: 37 kg (81 lb) per roll ▪ Storage conditions: When stored outdoors or on the job site, stack the cartons on pallets at least 100 mm (4 in) above ground level with an opaque protective cover.
Approvals / Standards	<ul style="list-style-type: none"> ▪ FM Global ▪ Underwriters Laboratories ▪ CAN/CSA-A.123.21
Installation	<p>Surface 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. Prepare concrete surfaces to achieve a Concrete Surface Profile CSP 3 - 5 in accordance with the International Concrete Repair Institute (ICRI) Technical Guideline No. 310.2R-2013.</p> <p>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 (consult Product Data Sheet of selected primer before use). 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 76 mm (3 in) on the side lap and 150 mm (6 in) 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.</p> <p>On steel decks: Install a 150 mm x 1.1 m (6 x 42 in) metal plate under the end lap to support the membrane between the steel flutes. Stagger the end laps by at least 300 mm (12 in). Use a minimum 45 kg (100 lb) 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.</p> <p>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 membranes.</p> <p>Coverage: 46.5 m² (500 pi²)</p>

Availability	Vapor Retarder SA 31 is available directly from Sika Canada Authorized Applicators when used within a Sika® Sarnafil® Roofing or Waterproofing System. Contact Sika Canada or visit our website at www.sika.ca for further information.
Warranty	Upon successful completion of the installed roof by the Sika Canada Authorized Applicator, Sika Canada can provide a Warranty to the Building Owner via the Authorized Applicator.
Maintenance	Vapor Retarder SA 31 requires no maintenance. As a prudent preventative measure, Sika Canada recommends that the Owner or that the Owner's designated representative inspect the installed roof system for damage, plugged drains, weathered sealants, etc. at least twice a year and after each storm.
Technical Support	Sika Canada provides technical support. Technical staff is available to advise applicators as to the proper installation method.
Limitations	<ul style="list-style-type: none"> ▪ Install Vapor Retarder SA 31 in temperatures -10 °C (14 °F) 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.

Technical Data	TYPICAL PHYSICAL PROPERTIES*		
	Properties	ASTM Test Method	Typical Results
Thickness, mm (mil)	D5147	0.8 (31)	
Tensile Strength, kN/m (lbf/in) - M.D. / C.D. ¹	D5147	9.5 / 13 (54 / 74)	
Ultimate Elongation, % - M.D. / C.D. ¹	D5147	33 / 25	
Cold Bending	D5147	-50 °C (-58 °F)	
Static Puncture, N (lbf)	D5602	400 (90)	
Tear Resistance, N (lbf) - M.D. / C.D. ¹	D1970	423 / 458 (95 / 103)	
Lap Adhesion, N/m (lbf/ft)	D1876	1000 (68)	
Water Absorption, %	D5147	0.1 (max.)	
Peel Resistance on Steel, N/m (lbf/in)	D903	950 (5.4)	
Water Vapour Permeance, perms (ng/Pa·s·m ²)	E96	0.018 (1.04)	
Air Flow Rate, L/s·m ² (cfm/ft ²)	E2178	< 0.0003 (< 0.00006)	
Air Permeance, L/Pa·m ² ·s	E2178	< 0.000012	

* Physical properties listed above are presented as typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation.
¹ M.D.= Machine Direction, C.D.= Cross Direction

Health and Safety Information For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

The information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions, within their shelflife. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca

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