

PRODUCT DATA SHEET

Vapor Retarder TA 138

Torch applied SBS modified bitumen polyester reinforced vapor retarder

PRODUCT DESCRIPTION

Vapor Retarder TA 138 is a 138 mil (3.5 mm) thick torch applied SBS modified bitumen polyester reinforced vapor retarder for use within Sarnafil® and Sikaplan® roofing systems. Vapor Retarder TA 138 can also be used as temporary roof protection. It can be left exposed for up to six (6) months.

USES

- Vapor retarder within Sarnafil and Sikaplan insulated roofing systems
- Temporary roof protection

AREAS OF APPLICATION

- Direct application to concrete deck and approved primed gypsum boards

CHARACTERISTICS / ADVANTAGES

- Robust vapor retarder with durable weathering surface that allows for exposure for up to six (6) months
- Torch application allows for installation without low temperature restrictions
- Fine mineral aggregate (sand) topside accepts approved urethane adhesives for insulation or membrane attachment

APPROVALS / STANDARDS

- FM Global
- Underwriters Laboratories
- Florida Building Code
- Meets ASTM D6164, Type I, Grade S
- Tested according to ASTM E108
- Tested according to ANSI/FM 4474 for wind uplift
- Tested according to Miami-Dade TAS 114 for wind uplift

PRODUCT INFORMATION

Chemical Base	SBS polymer modified bitumen with a non-woven polyester mat reinforcement and fine mineral aggregate (sand) topside and polyolefin burn-off film underside	
Packaging	39.4" (1 m) x 32.8 ft (10 m) roll, 95 lbs (43.1 kg) per roll 25 rolls per pallet	
Shelf Life	N/A	
Storage Conditions	Store rolls on end and maintain in an upright position to prevent damage. Store rolls in a clean dry location and cover as necessary to protect rolls from environmental damage such as extreme cold, heat, or moisture.	
Thickness	138 mils (3.5 mm)	(ASTM D-5147)
Mass per Unit Area	85 lb/100ft ² (4188 g/m ²)	(ASTM D-5147)

TECHNICAL INFORMATION

Tensile Strength	Peak load @ 0°F (-18°C)		(ASTM D-5147)
	Machine Direction	Cross Machine Direction	
	115 lbf/in (20.1 kN/m)	90 lbf/in (15.8 kN/m)	
	Peak load @ 73.4°F (23°C)		
	Machine Direction	Cross Machine Direction	
	85 lbf/in (14.9 kN/m)	65 lbf/in (11.4 kN/m)	
Elongation	Elongation at peak load @ 0°F (-18°C)		(ASTM D-5147)
	Machine Direction	Cross Machine Direction	
	35 %	40 %	
	Elongation at peak load @ 73.4°F (23°C)		
	Machine Direction	Cross Machine Direction	
	55 %	60 %	
	Ultimate elongation @ 73.4°F (23°C)		
	Machine Direction	Cross Machine Direction	
	65 %	80 %	
Dimensional Stability	Machine Direction	Cross Machine Direction	(ASTM D-5147)
	< 0.5 %	< 0.5 %	
Tear Strength	Machine Direction	Cross Machine Direction	(ASTM D-5147) at 73.4°F (23°C)
	125 lbf (556 N)	85 lbf (378 N)	
Low Temperature Bend	Machine Direction	Cross Machine Direction	(ASTM D-5147)
	-15°F (-26°C)	-15°F (-26°C)	
Water Vapor Transmission	0.006 perm (0.320 ng/(Pa·s·m ²))		(ASTM E-96)
Service Temperature	Compound stability		(ASTM D-5147)
	Machine Direction	Cross Machine Direction	
	250°F (121°C)	250°F (121°C)	

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 in compliance with Sika requirements, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator.

LIMITATIONS

- Do not install Vapor Retarder TA 138 when it is raining, snowing, or on wet/humid surfaces.
- Do not torch apply Vapor Retarder TA 138 to combustible substrates or substrates with a combustible backing. Use Vapor Retarder SA 106 in such locations.
- Protect Vapor Retarder TA 138 from potential damage caused by construction traffic and other jobsite activities.

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

SUBSTRATE PREPARATION

All surfaces must be clean, sound, dry, and free of loose materials and laitance, 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 must 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 to structural concrete surfaces and approved primed gypsum boards require priming with Vapor Retarder Primer TA or Vapor Retarder Primer BE. See Vapor Retarder Primer TA or Vapor Retarder Primer BE product data sheet for additional information.

APPLICATION

Torch applied products should only be installed by trained personnel. It is imperative that the NRCA safety guidelines, as outlined in their Certified Roofing Torch Applicator Program (CERTA) and good industry practices be followed.

Chalk a line on the deck to align the first sheet. Unroll Vapor Retarder TA 138 and allow the sheet to relax. Align the side lap with the chalk line. Back roll the sheet halfway. Begin torching the bottom side of Vapor Retarder TA 138. As the bitumen begins to soften pull the roll forward with a metal pole. When heated properly there should be a bleed out of approximately ½" (1.3 cm). Back roll the other half of the roll and repeat the process.

Kick out the next roll and align the side lap. Side laps must be a minimum of 3" (7.6 cm). End laps should be a minimum of 6" (15.2 cm). Stagger adjacent end laps a minimum of 12" (30.5 cm). Cut the lower outside corner of the end lap at a 45° angle to minimize material build-up where it will be covered by the next roll.

When heating the membrane move the torch in an 'L' pattern to ensure heating of the lap area on the bottom sheet. Proper heating will create approximately a ½" (1.3 cm) bleed out. Walk in the seam area or use a weighted roller to ensure proper adhesion and bleed out. Ensure that all laps are firmly and smoothly adhered without wrinkles, voids or fishmouths.

Check the seams with the edge of a trowel. Any loose areas should be lifted with the trowel, reheated and pushed back down to achieve the necessary bleed out. Apply Sika's Mastic to seal around penetrations. 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 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.**

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Product Data Sheet

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