BUILDING TRUST

PRODUCT DATA SHEET

Vapor Retarder TA 138

VAPOR RETARDER TA 138 IS A 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® insulated roofing systems. Vapor Retarder TA 138 can also serve 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 decks

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

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	Bottom coating thickness ≥ 40 mil (1.0 mm)	
Effective Thickness	138 mil (3.5 mm)	(ASTM D-5147)
	Thickness at salvage 130 mil (3.3 mm) 114 mil (2.9 mm) minimum	(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		
	Machine Direction	**Cross Machine Direction**	(ASTM D-5147)
	240°F (116°C)	240°F (116°C)	

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Concrete surface must be clean, smooth, sound, fully dry, and free of loose materials, debris or contaminants such as water, moisture, 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 to CSP 5 in accordance with the International Concrete Repair Institute (ICRI) Technical Guideline No. 310.2R-2013.

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.
Prime concrete surface with Vapor Retarder Primer TA. Concrete surfaces must be dry before installation. Shake or stir primer before applying.
Primer can be rolled, brushed or sprayed. Let the primer dry completely. After the primer has dried completely, install Vapor Retarder TA 138 in a shingle fashion starting at the low point of the deck so the laps shed water.
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 a minimum 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 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

- 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 damaged 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.

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Sarnafil
100 Dan Road
Canton, MA 02021
Phone: +1 800-451-2504
Fax: +1 781-828-5365
usa.sarnafil.sika.com
webmaster.sarnafil@us.sika.com

Sika Mexicana S.A. de C.V.
Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537