

#### **BUILDING TRUST**

# PRODUCT DATA SHEET

# Sikagard®-535

Liquid Applied Acrylic Vapor Permeable Air Barrier

#### PRODUCT DESCRIPTION

Sikagard®-535 Liquid Applied Acrylic Vapor Permeable Air Barrier is a low VOC, single-component liquid applied, elastomeric membrane designed to provide a vapor permeable air and water barrier when applied to above grade wall assemblies. It is acrylic-based and cures to a tough monolithic rubber-like membrane that resists air leakage and water penetration when applied to plywood and gypsum sheathing, concrete and concrete masonry units.

#### **USES**

To be used in conjunction with SikaMembran® 540, Sikaflex® 102 EverFlash and Sikaflex® 11FC. Acceptable substrates are above grade exterior wall substrates including precast concrete, Cast-In-Place concrete, concrete block, gypsum board and wood.

## **CHARACTERISTICS / ADVANTAGES**

- Evaluated by the Air Barrier Association of America
- Passes ASTM E 2178
- Passes ASTM E 2357
- Passes ASTM E 331
- Non-sag (thixotropic) consistency, allowing waste-free application of sufficient quantities and assuring deep penetration
- Low odor, low VOC.
- Seamless, elastomeric membrane for above grade wall applications.
- Easy to install, cost effective brush, roller or spray application using commom spray equipment.
- UV Stable for 12 month exposure. Longer exposure is possible for rainscreen applications. Contact Sika Technical Serives for details.
- Some tinting is possible if required for rainscreen applications. Contact Sika Technical Services for details.
- Water vapor permeance allows wall assemblies to dry out.
- Excellent adhesion to common construction surfaces.
- Meets industry performance standards to control air movement.
- Evaluated for use in NFPA 285 assemblies.

#### PRODUCT INFORMATION

	Weight per Gallon: 11.5 lbs
Solid content by weight	62%
Storage Conditions	Store in original containers. Store dry at 40°F - 90°F (4°C - 35°C)
Shelf Life	2 years in unopened containers.
Packaging	5 gallon pail, 55 gallon drum

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Solid content by volume	55%	
Volatile organic compound (VOC) content	g/L < 80	
TECHNICAL INFORMATION		
Elongation at Break	100%	(ASTM D-412)
Crack Bridging Ability	Pass ABAA 5.3	(C-1305)
Tensile Adhesion Strength	175 psi Pull Adhesion: Pass ABAA 5.3	(ASTM D-412) (ASTM D-4541)
Static Air Pressure Difference	Structural failure of wall at 95 psf	(ASTM E-330)
Water Penetration under Pressure	Pass at 15 psf Water Resistance: Pass ABAA 5.3	(ASTM E-331) (AATCC 127)
Permeability to Water Vapor	6 perms	(ASTM E-96B)
Air Permeance	@16 mils wet: <0.0004 cfm/s•ft² pressure differential of 1.57 lb/ft2 (Pass ABAA 5.3) or <0.002 L/ s•ft²	(ASTM E- 2178)
Air Leakage Rate	<0.004 cfm/s•ft² pressure differential of 1.57 lb/ft2 (Pass ABAA 6.0) or <0.02 L/ s•ft²	(ASTM E- 2357)
Water Resistance	Pass ABAA 5.3	(AATCC-127)
Reaction to Fire	Flame Spread: 5 Smoke Development Index: 5 Class Rating: A	(ASTM E-84)
APPLICATION INFORMATION		
Coverage	Apply at a rate of 40 sf per gallon to achieve a uniform wet film t	hickness of

Coverage	Apply at a rate of 40 sf per gallon to achieve a uniform wet film thickness of 40 mils.
Set Time	Sets to Touch: 6-12 hours
Waiting / Recoat Times	Recoat: 6-12 hours Exposure: 12 months

#### **APPLICATION INSTRUCTIONS**

#### SURFACE PREPARATION

Surfaces must be sound, clean, dry and free of frost, dirt, dust, loose concrete, grease, oil, contaminants or other foreign matter that may adversely affect the adhesion of the liquid applied vapor permeable air and water barrier membrane. Surfaces should be sound, free of voids, gaps, breaks and spalled areas. New concrete should be cured for a minimum of 14 days before Sikagard® 535 Liquid Applied Acrylic Vapor Permeable Air Barrier is applied. Acceptable substrates are precast concrete, cast-in place concrete, concrete block, gypsum board and wood. Joints between panels of exterior grade gypsum and plywood up to 1/4 inch (6 mm) wide shall

be treated with a 1/16 inch (1.6 mm) deep x 3/4 inch (19 mm) wide cap bead application of Sikaflex® 11FC. Joints between panels of exterior grade gypsum or plywood wider than 1/4 inch (6 mm) shall be sealed with a strip of SikaMembran® 540 tape aligned over the joint and applied to the substrate. Priming is generally not required for SikaMembran® 540. Apply sufficient pressure to the seam tape to ensure adhesion to substrate. Strike masonry mortar joints full flush. Cracks in masonry and concrete up to 1/4 inch (6 mm) wide shall be sealed with a cap bead application of Sikaflex® 11FC. Cracks in masonry and concrete up to 1/8 inch (3 mm) wide may be filled with a trowel application of liquid air barrier membrane and allowed to cure overnight prior to field application of the liquid air barrier membrane to surface. Cracks wider than 1/4 inch

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should be repointed. Transition joints between dissimilar materials at beams, columns, window and door frames, etc., should be sealed with a strip of SikaMembran 540® Tape aligned over the joint and applied to the substrate. Apply sufficient pressure to self- adhered transition seam tape to ensure adhesion to the substrate. Provide minimum of 2 1/2 inches (63 mm) of membrane bearing on each adjacent surface. Mechanical fasteners used to secure sheathing boards or penetrate sheathing boards prior to membrane application shall be set flush with sheathing board and fastened into solid backing. Thinning of the liquid membrane is not permitted.

#### **MIXING**

Stir liquid membrane thoroughly prior to application. For best results use a slow-speed drill (400-60 rpm) with a jiffy paddle.

#### **APPLICATION**

Sikagard®-535 Liquid Applied Acrylic Vapor Permeable Air Barrier may be applied by brush, roller or spray. Application by conventional air assisted spray equipment in a single or dual-coat application is the preferred method. Apply liquid air barrier membrane in a continuous, monolithic application pattern to achieve a uniform coating of permeable air and water barrier membrane. Monitor applications to measure wet mil thickness and avoid creating sags or runs. Pretreat outside corners, wall openings and mechanical penetrations with Sika- Membran® 540 tape. Apply liquid air barrier membrane to fully cover transition membrane applications.

Tie-in to structural beams, columns, floor slabs and intermittent floors, parapet curbs, foundation walls, roofing systems and at the interface of dissimilar materials with SikaMembran 540® tape and or approved flashing membrane.

Mark areas off and ensure that the appropriate volume has been applied over each area. During spraying, the product should be applied in horizontal strokes, then vertical strokes in a cross-hatch method to ensure even application. Spray applications must be immediately backrolled. Protect wall areas covered with Sikagard® 535 Liquid Applied Acrylic Vapor Permeable Air Barrier from damage due to construction activities, high wind conditions, and extended exposure to inclement weather.

Review condition of Sikagard® 535 Liquid Applied Acrylic Vapor Permeable Air Barrier prior to installation of cladding. Repair, or remove and replace damaged sections with new membrane. Recommend to cap and protect exposed back-up walls against wet weather conditions during and after application of membrane, including wall openings and construction activity above completed water-resistive vapor permeable air barrier installations.

#### **MAINTENANCE**

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#### **CLEANING**

Clean up: warm soapy water

### **AVAILABILITY/WARRANTY**

Vehicle Base: Acrylic Solvent: Water

#### **LIMITATIONS**

- Minimum age of Sika mortar prior to application is three days, depending on curing and drying conditions (moisture content must be below 5%)
- Sikagard® 535 should not be applied at relative humidity greater than 90%, or if rain is forecast within the specified rain resistance period (approximately 4 hours at 68F/75% RH).
- When over-coating existing coatings, compatibility and adhesion testing is recommended.
- Do not store Sikagard® 535 in direct sunlight for prolonged periods.
- Strong winds can cause shrinkage if material is applied at lower temperatures.
- Not recommended for roofing.

#### **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.

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