# Sikagard® 520

# Liquid Applied Vapor Permeable Air Barrier

Description	Sikagard 520 Liquid Applied 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 asphalt-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.
Where to Use	To be used in conjunction with SikaMultiSeal® 515 Self-Adhered Transition Seam Tape and Sikaflex® 110 Liquid Seam Sealant. Acceptable substrates are above grade exterior wall substrates including precast concrete, cast-in place concrete, concrete block, primed steel, aluminum mill finish, anodized aluminum, galvanized metal, gypsum board and wood.
Advantages	<ul> <li>Low odor, low VOC.</li> <li>Seamless, elastomeric membrane for above grade wall applications.</li> <li>Easy to install, cost effective brush, roller or spray application using common spray equipment.</li> <li>Passes ASTM E 2357.</li> <li>UV Stable for 6 month exposure.</li> <li>Water vapor permeance allows wall assemblies to dry out.</li> <li>Excellent adhesion to common construction surfaces.</li> <li>Meets industry performance standards to control air movement.</li> </ul>
Coverage	Apply at a rate of 3.75 gallons per 100 ft <sup>2</sup> (26.5 feet per gallon) to achieve a uniform wet film thickness of 60 mils.
Packaging	5 gallon pails, 55 gallon drums

### Typical Data (Material and curing conditions @ 74°F (22°C) and 40% R.H.)

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

Self Life: 1 yea

**Storage:** Store in original containers. Store at temperatures above 40°F (4°C), do not

allow product to freeze.

**Properties:** Air Permeance ASTM E2178 (SCFM/ ft2): 0.0014

30 mil dry thickness @ ÄP = 0.3 in water

ASTM 2357 System Air Leakage: Pass
WVP ASTM E 96B: 12.6 perms
Crack Bridging/Freeze-Thaw: ICC-ES AC212 Pass
Water Resistance AATCC 127: Pass
Fastener Sealability D1970: Pass

**Dry Time:** Sets to Touch: 4 – 6 hours

Recoat: 24 hours

**Exposure:** 6 months VOC: g/L < 10

Tensile /Elongation: @ 73F ASTM D 2370 Sag/Flow ASTM D4586: None @ 240°F Weight per Gallon: 8.6 lbs Solids by Weight: 59 % +/- 2% Solids by Volume: 58% +/- 2% Vehicle Base: Modified Asphalt Solvent: Mineral Spirits Clean up: Mineral Spirits



# Construction

# How to Use

## 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 7 days before Sikagard 520 Liquid Applied Vapor Permeable Air Barrier is applied. Acceptable substrates are precast concrete, cast-in place concrete, concrete block, primed steel, aluminum mill finish, anodized aluminum, galvanized metal, 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 (3 mm) deep x 3/4 inch (19 mm) wide cap bead application of Sikaflex 110 Liquid Seam Sealant. Joints between panels of exterior grade gypsum or plywood wider than 1/4 inch shall be sealed with a strip of SikaMultiSeal 515 Self-Adhered Transition Seam Tape aligned over the joint and applied to a substrate primed with Sikagard 510 Transition Seam Tape Primer. Apply sufficient pressure to self-adhered transition 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 110 Liquid Seam Sealant. 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 1/2 inch should be repointed.

Transition joints between two dissimilar materials at beams, columns, window and door frames, etc., should be sealed with a strip of SikaMultiSeal 515 Self-Adhered Transition Seam Tape aligned over the joint and applied to a substrate primed with Sikagard 510 Transition Seam Tape Primer. Apply sufficient pressure to self-adhered transition seam tape to ensure adhesion to substrate. Provide minimum of 2 1/2 inches (63 mm) of bearing on each adjacent surface. Apply Sikaflex 110 Liquid Seam Sealant along terminations of self-adhered transition seam tape to window and door frame openings or provide mechanical attachment. 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.

### **Application**

Sikagard 520 Liquid Applied 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 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 inside and outside corners, wall openings and mechanical penetrations with SikaMultiSeal 515 Self-Adhered Transition Seam Tape. Apply liquid air barrier membrane to fully cover transition seam tape 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 SikaMultiSeal 515 Self-Adhered Transition Seam 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.

Protect wall areas covered with Sikagard 520 Liquid Applied Vapor Permeable Air Barrier from damage due to construction activities, high wind conditions, and extended exposure to inclement weather. Review condition of Sikagard 520 Liquid Applied 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.



Limitations	Apply at temperatures over 40°F (4°C). Contact between Sikagard 520 Liquid Applied Vapor Permeable Air Barrier Membrane with Sarnafil Roofing Systems is strictly prohibited Do not apply when rain is forecast within the next 12 hours. Limit exposure to no greater than 6 months.
Caution	<b>CAUTION: IRRITANT.</b> Contains Asphalt (CAS: 8052-42-4). May cause eye/skin/respiratory irritation. May cause gastrointestinal disturbance if swallowed.
	WARNING. This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.
First Aid	Eyes – Hold eyelids apart and flush thoroughly with water for 15 minutes. Skin – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. Inhalation – Remove to fresh air. Ingestion – Do not induce vomiting. Dilute with water. Contact physician. In all cases contact a physician immediately if symptoms persist.
Handling and Storage	Avoid direct contact. Wear personal protective equipment (chemical resistant goggles/gloves/clothing) to prevent direct contact with skin and eyes. Use only in well ventilated areas. Open doors and windows during use. Use a properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and launder before reuse.
Cleanup	Use personal protective equipment (chemical resistant gloves/goggles/clothing). Without direct contact, sweep up spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable local, state, and federal regulations.

KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at www.sikausa.com or by calling 800-933-7452.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Technical Data Sheet, product label and Material Safety Data Sheet which are available online at <a href="www.sikausa.com">www.sikausa.com</a> or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.

LIMITED WARRANTY: 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 Technical Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NOOTHERWARRANTIES EXPRESSORIMPLIED SHALL APPLYINCLUDING ANYWARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SIKASHALL NOTBELIABLE UNDERANYLEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKASHALL NOTBERESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Visit our website at www.sikausa.com

1-800-933-SIKA NATIONWIDE Regional Information and Sales Centers. For the location of your nearest Sika sales office, contact your regional center.

Sika Corporation 201 Polito Avenue Lyndhurst, NJ 07071 Phone: 800-933-7452 Fax: 201-933-6225

Sika Canada Inc. 601 Delmar Avenue Pointe Claire Quebec H9R 4A9 Phone: 514-697-2610 Fax: 514-694-2792

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

RESPONSIBLE CARE





