



PRODUCTS

Division of Sierra Corporation
ISO 9001:2008 Certified



TK-AIRMAX® 2102 VOC NON-PERMEABLE AIR BARRIER

Division 7 Section: 072726

Meets Federal EPA's VOC Requirements

1. PRODUCT NAME

TK-AIRMAX® 2102 VOC
NON-PERMEABLE AIR BARRIER

2. MANUFACTURER

TK PRODUCTS
DIVISION OF SIERRA CORPORATION
11400 West 47th Street
Minnetonka, MN 55343
952-938-7223
952-938-8084 (FAX)
E-mail: tksales@tkproduct.com
Website: <http://www.tkproduct.com>

3. PRODUCT DESCRIPTION

TK-AIRMAX® 2102 VOC NON-PERMEABLE is a high performance, long-lasting rubberized polymer air/vapor and water barrier used to prevent air and water movement on commercial cavity walls. TK-AIRMAX® 2102 VOC NON-PERMEABLE saves energy by prohibiting movement of air through the building envelope, while also restricting moisture condensation which could lead to structural damage, mold and mildew.

The coating dries quickly to provide a continuous water drainage plane that is flashed to discharge any incidental condensation or water penetration to the exterior of the structure, ensuring that the interior stay clean and dry. It is chemically resistant to algae, bacteria, alkalis, acids and degradation from freeze/thaw or ultraviolet rays.

TK-AIRMAX® 2102 VOC NON-PERMEABLE has a U.V. resistance of 12 months. It can be sprayed, rolled, or brushed to give a continuous film.

AIRMAX™ SYSTEM

DETAIL ACCESSORY PRODUCTS

The following tapes and caulks have been developed as complimentary accessory products to the AIRMAX™ SYSTEM:

- Climate Flash™ - Flashing Tape
- Super Seal PE™ - Polyether Joint Sealant
- Butyl Bond™ - Poly Butyl Tape
- SS Flashing™ - Stainless Steel Flashing
- TWF-18™ - Stainless Steel Thru Wall Flashing

Please visit the TK Products website for more information or to access technical data sheets for these products.

Basic Uses:

For application to any properly prepared exterior concrete, block, plywood, green treated wood, OSB board and exterior grade gypsum sheathing.

4. TECHNICAL DATA

Composition and Materials:

A rubberized polymer blend. TK-AIRMAX® 2102 VOC NON-PERMEABLE is a single component liquid applied air barrier coating that is elastic and nonbreathable.

TYPICAL PROPERTIES

Non-Volatile Content:	48 - 50%
VOC Content:	< 400 g/l
Color:	Dark Gray
Flash Point:	Flammable less than 100°F
Drying Time:	
Tack Free:	1 hour (recoat immediately)
Full Cure:	24 - 48 hours (dependent on ambient temperatures & humidity)

Applicable Standards

See the chart on the opposite page for a listing of TK-AIRMAX® 2102 VOC NON-PERMEABLE's ASTM/ABAA meeting standards.

-USDA authorization for use in meat, poultry and food processing plants.

-A.I.M. Category: Waterproofing Sealer and Treatment - maximum VOC 600 g/l.

-A.I.M. Definition: A coating formulated and recommended for application to a porous substrate for the primary purpose of preventing the penetration of water and air.

5. APPLICATION PROCEDURES AND INSTRUCTIONS

Before buying and using this product, read completely this product's label, technical data sheet and Material Safety Data Sheet (MSDS); available where product is purchased.

PREPARATION:

A clean, dry, and frost-free surface is required when applying TK-AIRMAX® 2102 VOC NON-PERMEABLE. New concrete should be allowed to cure until free moving or bleed water are no longer present. Concrete block or walls laid or poured late in the year should be allowed to gain sufficient strength for good adhesion.

Material is ready for use and requires no mixing unless signs of separation are

observed. It is unlawful to further reduce with non-exempt solvents.

Masonry:

CMU mortar must be tooled at a minimum. Any voids, form tie holes and honey combed areas should be filled and repaired. Use a brush to remove loose mortar, smears and dirt that will affect adhesion. Remove mortar droppings from form ties and anchors. TK-AIRMAX® 2102 VOC NON-PERMEABLE should be applied by spray, brush or roller directly to the clean surface.

Exterior Gypsum Sheeting:

TK-AIRMAX® 2102 VOC NON-PERMEABLE may be applied by spray, brush or roller directly to exterior sheathing panels, i.e. exterior drywall, orientated strand board (OSB), plywood, and glass faced board. Fasten corners and edges with appropriate screws. Fasteners should be driven flush with the panel surface (not countersunk). It is recommended that all joints and seams be pre or post caulked with TK SUPER SEAL PE™ or taped with TK CLIMATE FLASH™ or TK BUTYL BOND™. All gypsum corners need to be taped with TK CLIMATE FLASH™ or TK BUTYL BOND™.

Penetrations:

Transition and Control Joints: Joints between 1/32" - 3/8" should be pre or post filled with TK SUPER SEAL PE™. Allow caulking membrane to cure before applying TK-AIRMAX® 2102 VOC NON-PERMEABLE by spray, brush or roller.

Larger Joints: Joints larger than 3/8" should be detailed with TK CLIMATE FLASH™ or TK BUTYL BOND™.

Flanges for Window or Doors:

Flanges may be connected using one or a combination of the following products: SUPER SEAL PE™, CLIMATE FLASH™, BUTYL BOND™ or SS FLASHING™. Details for proper application are available from the TK Products website.

Large Openings:

Openings greater than 3/8" should be detailed to cover the opening with TK CLIMATE FLASH™ or TK BUTYL BOND™ after coating the substrate with TK-AIRMAX® 2102 VOC NON-PERMEABLE and allowing the membrane to dry. For expansion joints,

TK-AIRMAX® 2102 VOC
Non-Permeable Air Barrier

3
PRODUCTS



3
PRODUCTS

TK-AIRMAX® 2102 VOC
Non-Permeable Air Barrier

apply TK-AIRMAX® 2102 VOC to the substrate, allow to cure, then apply TK CLIMATE FLASH™, or TK BUTYL BOND™ over the cured membrane.

Equipment:

A typical sprayer is a Graco 733, 833, or a pneumatic airless sprayer with a working pressure of 3500 psi and a 45:1 lower unit that delivers 3 gallons/minute. Use a combination of a 1/2" and 3/8" pressure rated hose with a tip size of .035 to .039. Brush and/or roller will also work for small applications or touch up.

Coverage:

The coverage rate of TK-AIRMAX® 2102 VOC NON-PERMEABLE is inversely affected by the texture and porosity of the substrate. One coat is sufficient when applied at 36-40 ft²/gallon, or 40-45 wet mil film. Any area that is thin can be recoated. Total cured coating will be 22-25 dry mil.

Limitations:

TK-AIRMAX® 2102 VOC NON-PERMEABLE can only be applied at temperatures between 0°F and 100°F. This product should not be applied to rigid insulation or over silicone rubber sealants or caulks. TK-AIRMAX® 2102 VOC NON-PERMEABLE should be fully cured before rigid insulation is installed over the membrane. TK-2102 VOC is not resistant to aromatics, ketones or esters type solvents.

Cleanup of Equipment:

Use TK-00 SOLVENT. Pump solvent through spray equipment to remove residue of materials which can clog the hose and wand assembly.

Precautions:

TK-AIRMAX® 2102 VOC NON-PERMEABLE contains aromatic hydrocarbon. Keep away from heat and flame. Prevent build-up of vapors

and use only with adequate ventilation. Do not inhale vapor or spray mist. If you experience eye watering, headaches or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, increase fresh air entry or wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Any person using a respirator must be trained on proper respirator use. Close container after each use. Avoid contact with eyes, skin, and clothing. Wash after handling. KEEP OUT OF REACH OF CHILDREN. In its cured state TK-AIRMAX® 2102 VOC NON-PERMEABLE is non-toxic, inert and environmentally-friendly.

First Aid:

If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention immediately. If skin contact occurs, wash thoroughly with soap and water. If swallowed, do not induce vomiting and call a physician immediately.

In Case of Fire:

Use foam, CO2, dry chemical. Do not use water spray. Generic Name: Petroleum Distillates.

Spills or Leaks:

Contain spilled material and remove with an inert absorbent. Dispose of contaminated absorbent, container and unused content in accordance with local, state and federal regulations.

6. AVAILABILITY

TK-AIRMAX® 2102 VOC NON-PERMEABLE is available through TK distributors. Contact TK Products for your authorized distributor.

Packaged in 55-gallon drums and 5-gallon pails.

7. CONDITIONS OF SALE/ LIMITED WARRANTY

TK Products, division of the Sierra Corporation, warrants that its products conform to the label descriptions, are free from manufacturing defects, and are fit for the ordinary purposes for which such goods are used. Inasmuch as the use of TK Products' product by others and other factors affecting product performance are beyond TK Products' control, TK Products does not guarantee the results to be obtained. There are no warranties except as stated herein, either express or implied, including implied warranties of merchantability or fitness for a particular purpose. SHOULD ANY TK PRODUCTS' PRODUCT FAIL TO GIVE SATISFACTORY RESULTS, TK PRODUCTS WILL REPLACE THE PRODUCT, OR AT ITS OPTION, REFUND THE PURCHASE PRICE. THIS IS THE SOLE AND EXCLUSIVE REMEDY FOR ANY FAILURE OF TK PRODUCTS' PRODUCTS TO PERFORM AS WARRANTED AND SHALL ALSO CONSTITUTE LIQUIDATED DAMAGES IN CASE OF LOSS. UNDER NO CIRCUMSTANCES SHALL THE BUYER BE ENTITLED TO ANY OTHER REMEDY OR DAMAGES. REMEDIES FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE SPECIFICALLY EXCLUDED. TK Products does not authorize any person to assume for it any other liability in connection with the sale or use of its products unless specifically authorized by TK Products in writing.

8. TECHNICAL SERVICES

The TK office offers assistance with specifications, performance test data and field services.

9. FILING SYSTEMS

Information Handling Services
PO Box 1213
Englewood, CO 80150
Information Marketing Services
13271 Northend
Oak Park, MI 48237

TK DISCLAIMER:

Every effort has been made to ensure the accuracy of the above information and to avoid infringement of any patent or copyright. The information is based on field tests by government and private agencies, as well as lab tests, and on technical data from raw material manufacturers. The person(s) specifying or requesting the use of these products is responsible for assuring their suitability for a specific use, as well as the proper application of the products. Where there is any question as to the suitability of a particular product, a small test patch is recommended. See also CONDITIONS OF SALE/ LIMITED WARRANTY (Section 7) above.

FOR INDUSTRIAL USE ONLY

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Applicable Standards	ASTM and/or ABAA Requirements	TK-2102 AIRMAX® NP VOC Performance
ASTM E-2178 - Standard Test Method for Air Performance of Building Materials	<0.004 CFM/ft ²	0.0004 CFM/ft ²
ASTM E-2357 - Standard Test Method for Determining Air Leakage of Air Assemblies	<0.20 L/(s m ²) @ 75 Pa	0.004 L/(s m ²) @ 75 Pa 0.0008 CFM/ft ²
ASTM E 96-00 - Water Vapor Transmission and Vapor Permeability Test, Procedure B	Declared Value	Permeance 0.05 Perms V. Permeability 0.0015 perm inch
ASTM C1305 - Exhibited no cracking or loss of adhesion upon completion of 10 cycles of movement at -15°F	Pass	Pass
ASTM C1306 - Hydrostatic Pressure Resistance	N/A	Passed long-term test
ASTM C1522 - Extensibility After Heat Aging	N/A	No cracks, tears or holes observed after extending the membrane
ASTM D412 - Vulcanized Rubber and Thermoplastic Elastomers - Tension	N/A	637%
ASTM D2939 - Resistance to Water	N/A	No blistering or softening
ASTM C836-03 - Sec. 6.10: Optional Test for Adhesion in Peel - Average Adhesion Strength	1.0 lbf/inch	11.9 lbf/inch
AATCC Test Method 127 - Water Resistance	Pass	Meets requirement
ASTM D1970 - Self Sealability	Pass	Pass
ASTM D4541 - Tensile Stress at Maximum Load	Declared Value	81.6 psi