



Division of Sierra Corporation
ISO 9001:2008 Certified

TK-AIRMAX® 2101 NON-PERMEABLE AIR BARRIER

Fluid Applied Air and Vapor Barrier

Division 7 Section: 072726

Meets Federal EPA's VOC Requirements

1. PRODUCT NAME

TK-AIRMAX® 2101 NON-PERMEABLE AIR BARRIER

2. MANUFACTURER

TK PRODUCTS
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3. PRODUCT DESCRIPTION

TK-AIRMAX® 2101 NON-PERMEABLE AIR BARRIER is a thermoplastic solution formulated air barrier. Typical applications include single wythe walls, masonry walls, masonry cavity walls, poured walls, precast walls and exterior grade gypsum sheathing. TK-AIRMAX 2101 NON-PERMEABLE AIR BARRIER serves as an impermeable barrier coat and has an unlimited UV resistance.

4. TECHNICAL DATA

TK-AIRMAX® 2101 NON-PERMEABLE AIR BARRIER is a single component, cold applied thermoplastic coating that is designed to prevent the penetration of air and moisture while also protecting interior single wythe walls, concrete, concrete masonry and exterior grade gypsum sheathing surfaces. TK-AIRMAX 2101 NON-PERMEABLE AIR BARRIER is non-breathable and non-elastomeric.

Composition and Materials:

Hydrocarbon Resin / Polystyrene in aromatic hydrocarbon blend solvent.

| | |
|-----------------|----------------------------|
| Solids Content: | 46 - 47% |
| Color: | Pearl Gray |
| Flash Point: | Flammable, less than 100°F |
| Drying Time: | |
| Tack Free: | 1 hour (recoat 2-4 hrs) |
| Full Cure: | 4-8 hours |

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.

5. APPLICATION PROCEDURES AND INSTRUCTIONS

Preparation:

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.

A clean, dry, surface is required. New concrete should be allowed to cure until the surface appears dry. Surface should be frost free. Concrete block laid and walls poured late in the year should be allowed to gain sufficient strength for good adhesion. Existing concrete surfaces must be thoroughly cleaned prior to application. All previous coatings must be removed.

All masonry block and poured concrete voids, form tie holes, cracks, honeycombed areas should be filled and footings cleaned. Mortar smears, dirt and form release agents that will affect adhesion should be removed. TK-AIRMAX 2101 NON-PERMEABLE AIR BARRIER should only be applied directly to a clean dry concrete surface.

Application:

TK-AIRMAX® 2101 NON-PERMEABLE AIR BARRIER should be applied in a single coat and at a rate of 40 - 55 ft²/gallon. The coverage rate is inversely affected by the texture and porosity of the substrate, therefore very porous substrates would result in lower square feet per gallon. The total dry mil thickness should be 11 - 14 mils. The coating should be sprayed and back rolled to achieve a continuous coating at the desired rate of coverage. It is recommended that a Graco 733/833 airless sprayer with a 4,000 p.s.i. stall pressure and a 0.037 reversible tip be used to apply TK-2101. Back roll with a 1/2" - 1" nap roller.

Following application, thoroughly inspect all surfaces for complete and consistent coverage. Material may be reapplied at any

time and as needed for the desired coverage. Allow adequate drying time before resuming work.

Exterior/Interior Walls:

Apply an even coat using a coverage rate of 40 - 55 ft²/gallon. Coverage rate is inversely related to the texture and porosity of the substrate.

Exterior Gypsum Sheeting:

TK-AIRMAX® 2101 NON-PERMEABLE AIR BARRIER 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 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® 2101 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® 2101 NON-PERMEABLE and allowing the membrane to dry. For expansion joints, apply TK-AIRMAX® 2101 NON-PERMEABLE to the substrate, allow to cure, then apply TK

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CLIMATE FLASH™ or TK BUTYL BOND™ over the cured membrane.

Single Wythe System Application:

To successfully complete the air barrier single wythe wall construction, apply TK-290 TRI-SILOXANE to the exterior wall per data specifications. This is in conjunction with application of TK-2101 to the interior of the wall.

Insulation Application:

Spray urethane foam froth packs can be used for large openings near roof decks and other gaps. Spray urethane foam, rigid insulation and Thermax can be attached once the product has cured for three days.

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.

Limitations:

TK-AIRMAX® 2101 NON-PERMEABLE AIR BARRIER can be applied at 0° F to 100° F.

Cleanup of Equipment:

Use TK-00 Solvent. For sprayer, pump the solvent through the spray equipment to remove residue of materials which can clog the hose and wand assembly.

Precautions:

TK-AIRMAX® 2101 NON-PERMEABLE AIR BARRIER contains flammable solvents. Keep away from heat and flame. Prevent build-up of vapors. Use only with adequate ventilation. Do

not breathe 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 or wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Close container after each use. Avoid contact with eyes, skin, and clothing. Wash after handling. KEEP OUT OF REACH OF CHILDREN. Do not allow vapors to penetrate into foodstuffs.

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; for skin, wash thoroughly with soap and water. If swallowed, do not induce vomiting. Call 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 inert absorbent. Dispose of contaminated absorbent, container and unused content in accordance with local, state and federal regulations.

6. AVAILABILITY

TK-AIRMAX® 2101 NON-PERMEABLE AIR BARRIER is available through TK Distributors. Contact TK Products for the nearest distributor.

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

Maintenance

Minimal maintenance is required. If weathering occurs to the exposed area, TK-AIRMAX® 2101 NON-PERMEABLE AIR BARRIER can be reapplied to the affected area.

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:

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FOR INDUSTRIAL USE ONLY

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| Applicable Standards | TK-AIRMAX® 2101 Performance |
|---|--|
| ASTM E2357 - Standard Test Method for Determining Air Leakage of Air Assemblies | 0.005 L/s/m ² (0.0000 cfm/ft ²) @ 75 Pa |
| ASTM E-2178 - Standard Test Method for Air Performance of Building Materials | 0.00076 CFM/ft ² 0.00259 L/(s*m ²) |
| ASTM E96-92 - Permeability | 0.8 perms (grains/hour ft ² in Hg) |
| ASTM D 412-92 - Tensile Strength and Elongation | 881 PSI, 2% |
| ASTM D 3359-93 - Adhesion | 5A - No peeling or removal |
| ASTM D 579-81 - Long Term Moisture | 4.22 WT% |
| ASTM D570-81 - Water Absorption | 0.38 WT% |
| AATCC Test Method 127 - Water Resistance | Meets requirement |
| ASTM D4541-93 - Bond Strength | 340 PSI |
| ASTM D522-88 - Flexibility | |