



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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Minnetonka, MN 55343  
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Website: <http://www.tkproduct.com>

## 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 sheeting. TK-AIRMAX 2101 NON-PERMEABLE AIR BARRIER serves as an impermeable barrier coat and is UV resistant for 24 months.

## 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 sheeting 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

## 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 ft<sup>2</sup>/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 ft<sup>2</sup>/gallon. Coverage rate is inversely related to the texture and porosity of the substrate.

### Transition and Control Joints:

Method A) Joints of 1/32 - 3/8" should be filled with a color matched vapor impermeable caulk.

Method B) Joints greater than 3/8" should be covered with a bituthane or butyl self adhering membrane after coating the wall with TK-2101 and allowing it to dry.

### Flanges for Windows and Doors:

Connect TK-AIRMAX 2101 NON-PERMEABLE AIR BARRIER to flanges with a color matched vapor impermeable caulk. Apply primer to the flanges and cover the opening with a butyl bituthane sheet membrane. An alternative for small separations when color match is not an issue: caulk with a compatible butyl non-shrink caulk.

### Large Openings:

Openings greater than 0.40 - 1.0" should first be filled with mortar or a compatible backing material and made even with the substrate. Top coat with 40 - 55 wet mils of TK-AIRMAX 2101 NON-PERMEABLE AIR BARRIER. An alternative recommendation is to cover the opening with a bituthane self adhered 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, rigid insulation and Thermax can be attached once the product has cured for three days.

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**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. TK-HydroMax 2001 Dampproof Coating in its cured state is not toxic.

**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, CO<sub>2</sub>, 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

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**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

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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 <sup>2</sup> (0.0000 cfm/ft <sup>2</sup> ) @ 75 Pa
ASTM E-2178 - Standard Test Method for Air Performance of Building Materials	0.00076 CFM/ft <sup>2</sup> 0.00259 L/(s*m <sup>2</sup> )
ASTM E96-92 - Permeability	0.8 perms (grains/hour ft <sup>2</sup> 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	