

# TK-AIRMAX® 2102

## Non-Permeable Air Barrier

Fluid Applied Air and Vapor Barrier | Division 7: Section 072726

Item No. TK-2102

### PRODUCT DESCRIPTION

TK-AIRMAX® 2102 NON-PERMEABLE is a high performance, liquid applied air/vapor barrier for commercial cavity walls. It prohibits movement of air through the building envelope, resulting in energy savings, while also restricting moisture condensation which could lead to structural damage, mold or mildew.

#### Features:

- Coating dries quickly.
- Provides a continuous air/vapor and water barrier and a continuous water drainage plane flashed to discharge to the exterior of the structure.
- Elastomeric, long-lasting, and suitable for a wide variety of surfaces.
- Minimizes air movement through exterior walls resulting in energy savings.
- Chemically resistant to algae, bacteria, alkalis, acids and degradation from freeze/thaw cycles.
- Provides UV resistance for 12 months.

#### USES:

Suitable for use on commercial cavity walls. May be applied to any properly prepared exterior concrete, block, plywood, green treated wood, OSB board and exterior grade gypsum sheeting.

### APPLICATION PROCEDURES:

#### 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 and frost free surface is required.

*New Concrete preparation* - New concrete should be allowed to cure until free moving or bleed water has completely dissipated. Concrete block and walls that have been laid or poured late in the year should be allowed to gain sufficient strength for proper adhesion with this product.

*Existing Concrete preparation* - Existing concrete surfaces must be thoroughly cleaned prior to application. All previous coatings and foreign materials must be removed.

#### 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 capable of delivering 3 gallons per 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 application will work on smaller jobs or touch ups.

### APPLICATION:

#### Masonry:

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

### TECHNICAL DATA

Composition and Materials:	A rubberized polymer blend
% Solids by Weight:	44-45%
Flash Point:	Flammable, less than 100°F
Drying Time:	
Tack Free	1 hour
Full Cure	24-48 hours (dependent on ambient temperatures & humidity)
VOC Content:	< 600 g/l
A.I.M. Category:	Waterproofing Sealers and Treatments Maximum VOC 600 g/l

### TESTING DATA

Applicable Standard	ASTM or ABAA requirements	Product Performance
<b>ASTM E2178:</b> <i>Air Performance of Building Materials</i>	<0.004 CFM/ft <sup>2</sup>	0.004 CFM/ft <sup>2</sup>
<b>ASTM E2357:</b> <i>Air Leakage of Air Assemblies</i>	<0.20 L/(s·m <sup>2</sup> ) @ 75 Pa	0.004 L/(s·m <sup>2</sup> ) @ 75 Pa 0.0008 CFM/ft <sup>2</sup>
<b>NFPA 285:</b> <i>Fire Propagation Characteristics</i>	Pass/Fail	Pass
<b>ASTM E84:</b> <i>Surface Burning Characteristics</i>	N/A	Class A, <25 flame spread Class A, <450 smoke spread
<b>ASTM E96-00:</b> <i>Water Vapor Transmission/Vapor Permeability</i>	(Declared Value)	Permeance 0.05 Perms V Permeability 0.0015 perm inch
<b>ASTM C1305:</b> <i>Crack Bridging Ability</i>	Pass	Pass - no cracking/loss of adhesion after 10 cycles
<b>ASTM C1306:</b> <i>Hydrostatic Pressure Resistance</i>	N/A	Passed long-term test
<b>ASTM C1522:</b> <i>Extensibility After Heat Aging</i>	N/A	No cracks, tears or holes
<b>ASTM D412:</b> <i>Vulcanized Rubber/ Thermoplastic Elastomers</i>	N/A	637%
<b>ASTM D2939:</b> <i>Resistance to Water</i>	N/A	No blistering or softening
<b>ASTM C836-03:</b> <i>Adhesion Strength</i>	1.0 lbf/inch	11.9 lbf/inch
<b>AATCC Test Method 127:</b> <i>Water Resistance</i>	Pass	Pass

### Exterior Gypsum Sheeting:

Apply by spray, brush or roller directly to exterior sheathing panels (i.e. exterior drywall, oriented strand board (OSB) plywood and glass faced board). Fasten corners and edges with appropriate screws. Fasteners should be driven flush with the panel surface rather than 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™.

### Penetrations:

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

*Larger Joints* - Joints larger than 3/8" should be detailed with TK-CLIMATE FLASH™.

### Flanges for Windows and Doors:

Flanges may be connected using one or a combination of the following: TK-SUPER SEAL PE™ or TK-CLIMATE FLASH™.

\*Details for proper application are available on the TK Products website.

### Large Openings:

Openings greater than 3/8" should be covered with TK-CLIMATE FLASH™ after coating the substrate with TK-AIRMAX® 2102 NON-PERMEABLE and allowing the membrane to dry. On expansion joints, apply TK-AIRMAX® 2102 NON-PERMEABLE directly to the substrate, allow to cure, then apply TK-CLIMATE FLASH™ overtop the cured membrane.

### COVERAGE:

Note that the coverage rate is inversely affected by the texture and porosity of the substrate, therefore substrates that are very porous will result in lower coverage rates (less square foot per gallon coverage). One coat of TK-AIRMAX® 2102 NON-PERMEABLE is sufficient when applied at 36-40 square feet per gallon, or 40-45 wet mil film. Any area that is thin may be recoated. Total cured coating will be 18-24 dry mils.

### CLEAN UP:

Use TK-00 XYLENE to clean tools and equipment. Pump solvent through the spray equipment to remove material residue which can clog the hose and wand assembly.

### LIMITATIONS:

- This product may be applied in temperatures ranging from 0°F to 100°F.
- Do not apply to rigid insulation or over silicone rubber sealants or caulks.
- This product should be fully cured before installation of rigid insulation overtop the membrane.
- This product is not resistant to aromatics, ketones or ester-type solvents.
- If applying by brush or roller, multiple coats may be necessary to achieve proper coverage.

### FIRST AID:

- Consult this product's safety data sheet for additional health and safety information. Safety Data Sheets are available through TK distributors, the TK office and the TK website.

### AVAILABILITY:

TK-AIRMAX® 2102 NON-PERMEABLE is available through TK Distributors. Contact TK Products for the nearest distributor.

Available in Dark Gray color.

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

FOR PROFESSIONAL USE ONLY

**AIRMAX® SYSTEM  
DETAIL ACCESSORY PRODUCTS**

*The following tapes and caulks have been developed as accessory products for the AIRMAX® System*

- CLIMATE FLASH™ Flashing Tape
- SUPER SEAL PE™ Polyether Joint Sealant
- 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.*



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