



# TK-AIRMAX® 2103

## Water Based Non-Permeable Rubberized Air Barrier

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

Item No. TK-2103

### PRODUCT DESCRIPTION

TK-AIRMAX® 2103 WATER BASED NON-PERMEABLE is a high performance water based, rubberized air/vapor barrier for both commercial and residential 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 or ultraviolet rays.
- Provides UV resistance for 12 months.

#### USES:

Suitable for use on commercial and residential 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 7900 with a working pressure of 3300 psi, capable of delivering 2.1 gallons per minute. Use a 3/8" pressure rated hose with a tip size of .027 to .033. 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® 2103 WATER BASED NON-PERMEABLE by spray, brush or roller directly to the surface.

### TECHNICAL DATA

% Solids by Weight:	40-41%
Flash Point:	No flash, aqueous system
Drying Time:	2-4 hours 24-72 hours (dependent on ambient temperatures & humidity)
Tack Free Full Cure	
VOC Content:	< 100 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>	<0.02 L/(s•m <sup>2</sup> ) = 0.004 CFM/ft <sup>2</sup>	<0.009 L/(s•m <sup>2</sup> ) = 0.002 CFM/ft <sup>2</sup>
<b>ASTM E2357:</b> <i>Air Leakage of Air Assemblies</i>	<0.20 L/(s•m <sup>2</sup> ) = 0.04 CFM/ft <sup>2</sup>	0.005 L/(s•m <sup>2</sup> ) = 0.0009 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:</b> <i>Vapor Permeability</i>	(Declared Value)	0.1 Perms
<b>ASTM C1305:</b> <i>Crack Bridging Ability</i>	Pass	Pass - no cracking/loss of adhesion after 10 cycles
<b>ASTM D412:</b> <i>Vulcanized Rubber/ Thermoplastic Elastomers</i>	N/A	500%
<b>ASTM D3359-93:</b> <i>Measuring Adhesion by Tape</i>	N/A	No peeling

#### 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™. 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® 2103 WATER BASED 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® 2103 WATER BASED NON-PERMEABLE and allowing the membrane to dry. On expansion joints, apply TK-AIRMAX® 2103 WATER BASED 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® 2103 WATER BASED 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:

Equipment may be cleaned with a solution of mild detergent and water.

### LIMITATIONS:

- Do not apply when ambient or substrate temperature is below 40°F or is expected to fall below 40°F within the cure time of the coating.
- Do not apply if precipitation is expected within the cure time of the coating.
- Cure times are significantly extended by low temperatures and/or high humidity. In ideal conditions (70°F/50% relative humidity), cure time is approximately 24 hours.
- Do not apply to wet, damp or frosty substrates.
- Maximum allowable moisture content of the substrate is 17%.
- This product should not be applied over silicone rubber sealants or caulks.
- This product should be fully cured before rigid insulation is installed over the membrane.
- This product is not resistant to aromatic, ketone or ester-type solvents.

### 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® 2103 WATER BASED 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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