# TK-AIRMAX® 2103 WB NON-PERM RUBBERIZED AIR BARRIER

Division 7 Section: 072726

Meets Federal EPA's VOC Requirements

Complies with California Air Resource Board (CARB), South Coast Air Quality

Management District (SCAQMD) and OTC/LADCO

#### 1. PRODUCT NAME

TK-AIRMAX® 2103 WB NON-PERMEABLE RUBBERIZED AIR BARRIER

# 2. MANUFACTURER

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# 3. PRODUCT DESCRIPTION

TK-AIRMAX® 2103 WB NON-PERMEABLE is a water based, high performance rubberized polymer air/vapor and water barrier used to prevent air and water movement on commercial cavity walls. TK-AIRMAX® 2103 WB NON-PERMEABLE saves energy by prohibiting movement of air through the building envelope, while also restricting moisture condesation 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® 2103 WB 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 sheeting.

# 4. TECHNICAL DATA

# **Composition and Materials:**

TK-AIRMAX® 2103 WB NON-PERMEABLE is a water based single component liquid applied air barrier coating that is elastic and non-breathable.

#### **TYPICAL PROPERTIES**

Non-Volatile Content:	40-41%
VOC Content:	< 100 g/l
Color:	Dark Gray
Flash Point:	No flash Aqueous system
Drying Time: Tack Free: Full Cure:	2-4 hours (recoat immediately) 24 - 72 hours (dependent on ambient temperatures & humidity)

## **RESISTANCE TO:**

Abrasion	Good
Acid	Good
Alkali	Excellent
Humidity	Good
Petroleum Products	Poor
Weather	Good

# **Applicable Standards**

See the chart on the opposite page for a listing of TK-AIRMAX® 2103 WB NON-PERMEABLE'S ASTM/ABAA meeting standards.

-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® 2103 WB 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® 2103 WB NON-PERMEABLE should be applied by spray, brush or roller directly to the clean surface.

# **Exterior Gypsum Sheeting:**

TK-AIRMAX® 2103 WB 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® 2103 WB NON-PERMEABLE by spray, brush or roller.

# Flanges for Window or Doors:

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



Non-Permeable Rubberized Air Barrier

**TK-AIRMAX® 2103** 

# 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® 2103 WB NON-PERMEABLE and allowing the membrane to dry. For expansion joints, apply TK-AIRMAX® 2103 WB NON-PERMEABLE 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 7900 with a working pressure of 3300 psi that delivers 2.1 gallons/minute with a tip size 0.027 to 0.033. Use a 3/8" pressure rated hose. Brush and/or roller will also work for small applications or touch up.

#### **COVERAGE**

One coat is sufficient when applied at 36-40 square feet per gallon, or 40-45 wet mil film. Any area that is thin can be recoated. Total cured coating will be 23-28 dry mil.

#### **LIMITATIONS**

TK-AIRMAX® 2103 WB NON-PERMEABLE should be applied when the air and substrate temperatures are greater than 40 °F, and will remain so through the application of the coating. Keep the product from freezing. This product should not be applied to rigid insulation or over silicone rubber sealants or caulks. TK- 2103 should be fully cured before rigid insulation is installed over the membrane. TK-AIRMAX® 2103 WB NON-PERMEABLE is not resistant to aromatics, ketones or esters type solvents.

## **CLEAN UP OF EQUIPMENT**

Clean all equipment, tools, and spills with soap and water before the material dries.

# PRECAUTIONS

TK-AIRMAX® 2103 WB NON-PERMEABLE contians latex resins and a minimal amount of ammonia. Excessive and prolonged exposure may result in headache, nausea and eye or lung irritation.

# FIRST AID

Ingestion: Induce vomiting and call a physician immediately. Eye Contact: Do not rub

eyes, flush with clean water for 15 minutes. Skin Contact: Remove by washing thoroughly with soap and water. If eye or skin irritation continues, obtain medical assistance.

For further safety controls, Material Safety Data Sheets are available from TK Distributors, the TK office and the TK website. This information should be read before using this product.

#### 6. AVAILABILITY

TK-AIRMAX® 2103 WB NON-PERMEABLE is available through TK Distributors. Contact TK Products for your authorized distributor.

Packaged in 55 gallon drums and 5 gallon pails.

#### MAINTENANCE

Minimal maintenance is required. If weathering does occur to the exposed area, TK-AIRMAX® 2103 WB NON-PERMEABLE 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 of 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

#### **Applicable Standards ASTM and/or ABAA TK-AIRMAX® 2103** Requirements Performance ASTM E2178 - Standard Test Method for Air 0.009 L(s•m²) = $< 0.02 L(s \cdot m^2) =$ Performance of Building 0.004 CFM/ft<sup>2</sup> 0.002 CFM/ft<sup>2</sup> Materials ASTM E2357 - Standard Test Method for $< 0.20 L/(s \cdot m^2) =$ $0.005 L(s \cdot m^2) =$ Determining Air Leakage of Air Assemblies 0.04 CFM/ft<sup>2</sup> 0.0009 CFM/ft<sup>2</sup> 0.1 Perms ASTM E96 - Permeability **Declared Value** ASTM C1305 - Exhibited no cracking or Pass Pass loss of adhesion upon completion of 10 cycles of movement at -15°F ASTM D412 - Tensile Strength and Elonga-N/A 500% ASTM D 3359-93 - Adhesion No peeling ASTM D4541 - Adhesion Strength > 110 kPa 1132 kPa 164.2 psi

#### 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.

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