**PRODUCT DESCRIPTION**

TK-AIRMAX® 2104 VAPOR PERMEABLE is a high performance, water borne liquid applied air barrier for use on both residential and commercial cavity walls. TK-AIRMAX® 2104 VAPOR PERMEABLE creates a seamless, tough film to act as a solid barrier against air leakage (infiltration/exfiltration), resulting in energy savings while also restricting moisture condensation which could lead to structural damage, mold or mildew.

**Features:**
- Reduces air flow through exterior walls, resulting in energy savings.
- Creates a tough, seamless, elastomeric film with superior water repellency.
- Bridges cracks and moves with the substrate throughout a wide range of temperatures.
- Maintains flexibility throughout multiple weathering cycles - contains no plasticizers and will not become hard or brittle through many years of exposure.
- Forms a film which is repellent to wind driven rain, yet is permeable to water vapor to allow unwanted moisture to escape the occupied area and substrate.
- Excellent resistance to dirt, acid, alkali, airborne pollutants, mildew and degradation from freeze/thaw cycles and 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 interior or exterior concrete, block, plywood, 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. The substrate should be free of screws, sharp protrusions, or other matter that will prevent product adhesion.

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 .033 to .039. Brush and/or roller application will work on smaller jobs or touch ups.

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Weight per gallon:</th>
<th>11.7 lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Solids by Weight:</td>
<td>54% +/- 2%</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>No flash, aqueous system</td>
</tr>
<tr>
<td>Drying Time:</td>
<td>Tack Free Full Cure</td>
</tr>
<tr>
<td></td>
<td>2-4 hours</td>
</tr>
<tr>
<td></td>
<td>24-72 hours (dependent on ambient temperatures &amp; humidity)</td>
</tr>
<tr>
<td>VOC Content:</td>
<td>&lt; 100 g/l</td>
</tr>
</tbody>
</table>

**A.I.M. Category:** Waterproofing Sealers and Treatments
Max VOC 600 g/l

**TESTING DATA**

<table>
<thead>
<tr>
<th>Applicable Standard</th>
<th>ASTM or ABAA requirements</th>
<th>Product Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM E2178: Air Performance of Building Materials</td>
<td>&lt;0.02 L/(s•m²) = 0.004 CFM/ft²</td>
<td>&lt;0.0034 L/(s•m²) = 0.0008 CFM/ft²</td>
</tr>
<tr>
<td>ASTM E2357: Air Leakage of Air Assemblies</td>
<td>&lt;0.20 L/(s•m²) = 0.04 CFM/ft²</td>
<td>0.006 L/(s•m²) = 0.00012 CFM/ft²</td>
</tr>
<tr>
<td>NFPA 285: Fire Propagation Characteristics</td>
<td>Pass/Fail</td>
<td>Pass</td>
</tr>
<tr>
<td>ASTM E84: Surface Burning Characteristics</td>
<td>N/A</td>
<td>Class A, &lt;25 flame spread</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class A, &lt;450 smoke spread</td>
</tr>
<tr>
<td>ASTM E96: Vapor Permeability</td>
<td>(Declared Value)</td>
<td>17.619 Perms</td>
</tr>
<tr>
<td>ASTM C1305: Crack Bridging Ability</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>ASTM D1970: Seal Sealability</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>ASTM D4541: Adhesion Strength</td>
<td>&gt; 110 kPa</td>
<td>970 kPa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>140.7 psi</td>
</tr>
<tr>
<td>ASTM D3274/D3273: Fungus and Mildew Resistance</td>
<td>N/A</td>
<td>Pass</td>
</tr>
<tr>
<td>ASTM E882: Accelerated Weathering</td>
<td>N/A</td>
<td>Pass</td>
</tr>
<tr>
<td>ASTM C666: Freeze/Thaw Resistance</td>
<td>N/A</td>
<td>Pass</td>
</tr>
<tr>
<td>AATCC Test Method 127: Water Resistance</td>
<td>&gt; 55 cm</td>
<td>55 cm</td>
</tr>
</tbody>
</table>

**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® 2104 VAPOR PERMEABLE by spray, brush or roller
directly to the surface.

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® 2104
VAPOR 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® 2104 VAPOR
PERMEABLE and allowing the membrane to dry. On expansion
joints, apply TK-AIRMAX® 2104 VAPOR 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® 2104 VAPOR 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® 2104 VAPOR 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

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• LIMITATIONS
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