AIR-SHIELD™ LM
Liquid Membrane Air/Vapor and Liquid Moisture Barrier

DESCRIPTION
AIR-SHIELD LM is a single-component, liquid-applied, water-based, polymer-modified air/vapor and liquid moisture barrier. AIR-SHIELD LM cures to form a tough, seamless, elastomeric membrane, which exhibits excellent resistance to air and moisture transmission.

USES
AIR-SHIELD LM has been specifically formulated to act as an air/vapor and liquid moisture barrier within the building envelope. It may be applied to most common surfaces and integrated into various wall systems. AIR-SHIELD LM is suitable for both new construction and restoration. Primary applications include cavity wall and masonry wall construction. AIR-SHIELD LM works equally well as an air and/or vapor barrier on precast concrete, cast-in-place concrete, masonry (concrete block), interior and exterior gypsum board, Styrofoam, primed steel, aluminum mill finish, anodized aluminum, primed galvanized metal, drywall, and plywood.

FEATURES/BENEFITS
• Low permeability - prevents the transmission of air and inhibits moisture and vapor from passing through porous building materials.
• Highly flexible - bridges cracks, which may form in the substrate.
• User friendly – single-component, water-based technology allows for simple, safe application and easy cleanup.
• Liquid applied - simplifies detailing and assures a monolithic, seamless membrane when applied to a rough or smooth surface.
• Sprayable - with appropriately configured airless spray equipment - low application costs.
• Excellent adhesion - remains firmly bonded to the substrate, even when applied over damp surfaces.
• VOC content is 0.0 g/L. Produces no harmful odors.
• Compatible with other asphalt-based emulsion products.
• May be applied to “green” concrete.
• Self-sealing – Nails and fasteners can be used without compromising performance.

PACKAGING
5 Gallon (18.93 L) Pails
55 Gallon (208.20 L) Drums**
**Available upon special order only

COVERAGE
Application Rate 20 - 25 ft.²/gal. (0.49 - 0.61 m²/L)
Wet Film Thickness 60 mil (1.5 mm)
Cured Film Thickness 45 mil (1.15 mm)
Coverage dependent on substrate type, weather, and application conditions.

SHELF LIFE
When stored indoors in original, unopened containers at temperatures between 40° - 90° F (4° - 32° C), optimum performance and best use is obtained within six months of date of manufacture.

SPECIFICATIONS
- Exceeds Air Barrier Association of America (ABAA) Section 07262 requirements for fluid-applied air barriers.
- Exceeds ABAA maximum air permeance requirements when tested in accordance with ASTM E 2178.
- Exceeds ABAA maximum assembly air leakage requirements when tested in accordance with ASTM E 2357.
- Exceeds the requirements of the Massachusetts Commercial Energy Code for Building Envelope Systems.
- Complies with all current federal, state, and local maximum allowable VOC requirements, including National EPA VOC Emission Standard for Architectural Coatings, CARB, LADCO, OTC Phase I and II, and SC AQMD.

Air Leakage

<table>
<thead>
<tr>
<th>Test Method</th>
<th>ASTM E 2178-01</th>
<th>ASTM F 2357</th>
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<tbody>
<tr>
<td>Pressure</td>
<td>75 Pa (1.57 lb./ft.²)</td>
<td>75 Pa (1.57 lb./ft.²)</td>
</tr>
<tr>
<td>ABAA Requirements</td>
<td>0.004 cfm/ft.² (0.02 L/S/M²)</td>
<td>0.04 cfm/ft.² (0.2 L/S/M²)</td>
</tr>
<tr>
<td>AIR-SHIELD LM Results</td>
<td>&lt;0.004 cfm/ft.² (0.02 L/S/M²)</td>
<td>&lt;0.04 cfm/ft.² (0.2 L/S/M²)</td>
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*Independent tests available upon request.

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<table>
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<tr>
<th>TECHNICAL DATA</th>
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<tbody>
<tr>
<td>% Solids</td>
<td>70</td>
</tr>
<tr>
<td>VOC Content</td>
<td>0 g/L</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Elongation (ASTM D412)</td>
<td>1500%</td>
</tr>
<tr>
<td>Water Vapor Permeance (ASTM E96, Procedure A)</td>
<td>IBC Class I Vapor Retarder 0.1 Perms</td>
</tr>
<tr>
<td>Service Temperature</td>
<td>-20° - 140° F (-29° C - 60° C)</td>
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<tr>
<td>Application Temperature</td>
<td>&gt;30° F (-1° C)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>40° - 90° F (4° C - 30° C)</td>
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APPLICATION

Surface Preparation ... All surfaces must be clean (free of all coatings and curing compounds), structurally sound, and relatively smooth. Prepare substrate per manufacturer’s instruction prior to application of membrane.

Exterior Sheathing Panels ... Exterior sheathing panels are to be installed and fastened per manufacturer’s recommendation. For detailed application information, see INSTALLATION INSTRUCTIONS: JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING AIR-SHIELD LM available at www.wrmeadows.com. For joint treatment in plywood and OSB sheathing, please see PLYWOOD SHEATHING JOINT DETAIL INSTALLATION GUIDELINES also available at www.wrmeadows.com.

Rough Openings ... Refer to AIR-SHIELD ROUGH OPENINGS INSTALLATION GUIDELINES document available at www.wrmeadows.com for recommendations.

Concrete Masonry Units ... Before applying AIR-SHIELD LM to CMU surfaces, patch all cracks, protrusions, small voids, offsets, details, irregularities, and small deformities with MEADOW-PATCH® 5 or MEADOW-PATCH 20 from W. R. MEADOWS at least two hours before application.

Application Method ... AIR-SHIELD LM may be applied by spraying or a 3/4” (19 mm) minimum nap roller. (For recommendations on spray equipment, consult W. R. MEADOWS technical staff.)

Thoroughly, mechanically mix AIR-SHIELD LM prior to application. AIR-SHIELD LM may be sprayed on at a minimum coverage thickness of 60 mils wet (45 mils dry). Spray using a cross-hatch pattern to lay an even coat. Build 60 mils total wet thickness in multiple coats. Apply the next coat after the first coat has dried (approximately one to two hours). Frequently inspect surface area with a wet mil gauge to ensure consistent thickness. Work material well into any fluted rib forming indentations. Porous masonry block walls may require additional coats to obtain desired thickness. AIR-SHIELD LM may be exposed to open air for 30 – 40 days, depending on specific weather conditions at jobsite.

For roller applications, AIR-SHIELD LM can be applied directly from the container using a ¾” (19.05 mm) nap roller. Apply in two coats, each 30 mils thick, allowing first coat to reach initial set prior to application of second coat.

Curing and Drying ... Allow material to dry at air and surface temperatures of 30° F (-1° C) or higher. Curing times will be affected by relative humidity, temperature, and airflow. The following times are given for average conditions and standard thicknesses. Actual times may differ, depending on specific conditions present on job at time of application. It is recommended that AIR-SHIELD LM be allowed to air dry to a tack-free film before application of specified insulation.

Tack-free film: 1 hour
Full cure: 48 hours

Cleanup ... Uncured AIR-SHIELD LM cleans up easily while wet with water. Cured material is best removed by xylene (xylol) or by mechanical means.

PRECAUTIONS

AIR-SHIELD LM is not designed to perform as a permanently exposed membrane. Keep containers tightly sealed. KEEP FROM FREEZING. Do not apply AIR-SHIELD LM if rainfall is forecast or imminent. Do not apply AIR-SHIELD LM when air, material, and surface temperatures are expected to fall below 30° F (-1° C) within four hours of completed application.

LEED INFORMATION

May help contribute to LEED credits:
- EAp2: Minimum Energy Performance
- EAc2: Optimize Energy Performance
- MRc9: Construction and Demolition Waste Management
- EQc2: Low-Emitting Materials
[For Healthcare and Schools (exterior-applied products) ONLY]

For BIM models, CAD details, must current data sheet, further LEED information, and SDS, visit www.wrmeadows.com.

LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.