AIR-SHIELD™ LMP
Liquid Membrane Vapour Permeable Air Barrier

DESCRIPTION
AIR-SHIELD LMP is a water-based air/liquid moisture barrier that cures to form a tough, seamless, elastomeric membrane. AIR-SHIELD LMP exhibits excellent resistance to air leakage. When properly applied as a drainage plane, AIR-SHIELD LMP prohibits liquid water intrusion into the substrate.

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

FEATURES/BENEFITS
- Non-asphaltic – designed to meet stringent fire code requirements.
- High permeability – allows the transmission of moisture vapour through porous building materials.
- Highly flexible – bridges cracks, which may form in the substrate.
- UV resistant – grey can be left exposed up to six months. Black membrane can be exposed for an indefinite period and is ideal for exposed applications, such as beneath rain screen panels.
- 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.
- Self-sealing – Nails and fasteners can be used without compromising performance.
- Low VOC content.

PACKAGING
18.9 L (5 U.S. Gal.) Pails
208.2 L (55 U.S. Gal.) Drums

COVERAGE
Application Rate: 0.6 m²/L (25 ft²/gal.)
Wet Film Thickness: 60 mil (1.5 mm)
Cured Film Thickness: 30 mil (0.8 mm)

SHELF LIFE
When stored indoors in original, unopened containers at temperatures between 4° - 32° C, shelf life is one year from date of manufacture.

SPECIFICATIONS
- Exceeds National Air Barrier Association (NABA) requirements for fluid-applied air barriers.
- Exceeds NABA maximum assembly air permeance requirements when tested in accordance with ASTM E 2357.
- Exceeds NABA maximum material air leakage requirements when tested in accordance with ASTM E 2178.
- Complies with Canada VOC Concentration Limits for Architectural Coatings Regulations.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Solids Content, %</td>
<td>58</td>
</tr>
<tr>
<td>Colour</td>
<td>Grey</td>
</tr>
<tr>
<td>(Black – special order only)</td>
<td></td>
</tr>
<tr>
<td>Flexibility @ -26° C (ASTM C386)</td>
<td>PASS</td>
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<tr>
<td>Elongation (ASTM D412) %</td>
<td>1300</td>
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<tr>
<td>Water Vapour Permeance</td>
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<td>(ASTM E 96, Procedure B) Perms</td>
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<tr>
<td>Service Temperature</td>
<td>Not to exceed 80° C</td>
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<tr>
<td>Nail Sealability (ASTM D1970)</td>
<td>Pass</td>
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<tr>
<td>Storage Temperature</td>
<td>4° - 32° C</td>
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<tr>
<td>Air/Storage Temperature</td>
<td>&gt;-6.7° C</td>
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<tr>
<td>(At Time of Application)</td>
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Air Leakage

<table>
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<tr>
<th>Test Method</th>
<th>ASTM E2178</th>
<th>ASTM E2357</th>
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<tbody>
<tr>
<td>Pressure</td>
<td>75 Pa</td>
<td>75 Pa</td>
</tr>
<tr>
<td>Result</td>
<td>&lt;0.02 L/S/m²</td>
<td>&lt;0.02 L/S/m²</td>
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</table>

AIR-SHIELD LMP conforms with ASTM E 84, Class A.

AIR-SHIELD LMP may be used in NFPA 285 complying wall assemblies. Contact W. R. MEADOWS for further information.

Continued Over …
APPLICATION

Surface Preparation … All surfaces must be clean (free of all coatings and curing compounds), free of frost, structurally sound, and relatively smooth. AIR-SHIELD LMP can be applied to “green” or damp concrete if there is no liquid water on the surface. Prepare substrate per manufacturer’s instruction prior to membrane application.

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 FLUID APPLIED MEMBRANES 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.


Concrete Masonry Units … Before applying AIR-SHIELD LMP 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.

Appearance … AIR-SHIELD LMP (grey) will dry grey in colour. AIR-SHIELD LMP (black) appears dark grey in the container, but the dried film will be black.

Temperature/Conditions … Apply AIR-SHIELD LMP at air and surface temperatures of -6.7° C and higher. Curing/drying times are dependent on air temperature, airflow, relative humidity, substrate temperature, etc., specific to each individual application. Typical results are:

- Tack-Free Time: 2 hours
- Full Cure: 48 hours

Roller … AIR-SHIELD LMP can be applied directly from the container; a 19.1 mm (3/4”) nap roller is recommended. Apply AIR-SHIELD LMP on a vertical surface, in multiple coats if necessary, to achieve a final film thickness of 60 mils wet (30 mils dry). NOTE: While the proper film thickness may be achieved with a single coat, multiple coats may be necessary if the material slumps due to temperature and/or substrate conditions. Allow each previous coat to dry (approximately one hour) prior to applying the next coat.

Sprayer … AIR-SHIELD LMP should be stored and maintained at a temperature of 15.6° C or higher throughout the entire spray application. Note: Use of Graco HydraxMax 350 or Graco GH633 is recommended for optimum performance. A Graco heavy duty texture gun with either a 0.051” (Graco GHD 551), 0.035” (Graco GHD 535), or 0.037” (Graco GHD 537) spray tip is recommended. If cratering occurs, the GHD 535 or 537 is recommended for a smoother finish.

Spray AIR-SHIELD LMP on a vertical surface, in multiple coats if necessary, to achieve a final film thickness of 60 mils wet (30 mils dry). NOTE: While the proper film thickness may be achieved with a single coat, multiple coats may be necessary if the material slumps due to temperature and/or substrate conditions. Allow each previous coat to dry (approximately one hour) prior to applying the next coat.

Film Thickness … Frequently inspect the surface with a wet film gauge to verify that proper film thickness is achieved, and that the film thickness is uniform over the entire surface. Porous substrates, masonry blocks, etc., may require multiple coats to achieve recommended film thickness.

Clean Up … Material should not be left in the pump, lines, or gun when finished spraying. After spraying, flush water through the system until pump and hose are clear (approximately five gallons). Aromatic solvents, such as xylene or toluene (approximately two gallons), can be used for final flushing after water is flushed through the pump and lines. Water should be flushed through the machine to remove any solvent prior to spraying of AIR-SHIELD LMP.

PRECAUTIONS

DO NOT FREEZE. Keep containers tightly sealed. Maximum UV exposure period for grey membrane is six months, unlimited for black. Do not apply AIR-SHIELD LMP if rainfall or snow is forecast or imminent within 12 hours of application.

HEALTH AND SAFETY

Direct contact may result in mild irritation to the eyes and skin. Should adverse effects occur, remove subject from area immediately. If irritation occurs and persists, move victim from exposure source and treat symptomatically. Flush affected areas with mild soap and water. Refer to Safety Data Sheet for complete health and safety information.

TECHNICAL ASSISTANCE

Please contact W. R. MEADOWS for specific details and/or data not outlined in this literature. Technical assistance, from design to product application, is available upon request.

MASTERFORMAT NUMBER AND TITLE

07 27 26 - Fluid-Applied Membrane Air Barriers

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, most current data sheet, further LEED information, and SDS, visit www.wrmeadows.com.

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