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>Solids Content, %</th>
<th>58</th>
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<tbody>
<tr>
<td>Colour</td>
<td>Grey (Black – special order only)</td>
</tr>
<tr>
<td>Flexibility @ -26° C (ASTM C836)</td>
<td>PASS</td>
</tr>
<tr>
<td>Elongation (ASTM D412)</td>
<td>1300</td>
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<tr>
<td>Water Vapour Permeance (ASTM E 96, Procedure B) Perms</td>
<td>12</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 (At Time of Application)</td>
<td>&gt;-6.7° C</td>
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</table>

Air Leakage

<table>
<thead>
<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>
</tr>
</tbody>
</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 INSTALLATION GUIDELINES also available at www.wrmeadows.com.

Rough Openings ... Refer to INSTALLATION GUIDELINES: AIR-SHIELD ROUGH OPENINGS 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 ... Drying (curing) times are dependent on air temperature, airflow, relative humidity, substrate temperature, wind chill, dew point, etc. For example, as the temperature decreases or the humidity increases, the dry time will increase. If the temperature drops below 4.5° C, dry time (cure rate) and resistance to precipitation and dew will be delayed. Protect membrane from precipitation and washout prior to drying. Exposure to air temperatures/wind chills below -6.6° C during drying may lead to cracking and decrease of performance of AIR-SHIELD LMP.

Typical Dry Times:
- Tack-Free Time: 4 hours at 23.5° C & 50% RH
- Dry Time: 48 hours at 23.5° C & 50% RH

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 HydraMax 350 or Graco GH833 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 gray membrane is six months; unlimited for black. It is recommended that the roof is installed prior to the application of the AIR-SHIELD LMP. This will help avoid water from getting behind the backup wall or filling the CMU block, which can potentially lead to jobsite concerns. Do not apply AIR-SHIELD LMP if precipitation is forecast or imminent within 24 hours at 23.5° C and 50% RH of application. Adhesion of membrane on oriented strand board (OSB) can sometimes be affected by the level of surface texture or the presence of wax that is part of the binder used to bond together the wood strands. Prior to placement on OSB, in-situ adhesion tests should be performed to determine suitability of substrate prior to full installation. If there are variations in the OSB surface, multiple tests may be required.

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.

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WARRANTY: W. R. Meadows of Canada warrants that, at the time and place we make shipment, our materials will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM OF TRADE OR OTHERWISE. As the exclusive remedy for breach of this Warranty, we will replace defective materials, provided, however, that the buyer examine the materials when received and promptly notify us in writing of any defect before the materials are used or incorporated into a structure. Three (3) months after W. R. Meadows of Canada has shipped the materials, all our Warranty and other duties with respect to the quality of the materials delivered shall conclusively be presumed to have been satisfied, all liability therefore terminates and no action for breach of any such duties may thereafter be commenced. W. R. Meadows of Canada shall in no event be liable for consequential damages. Unless otherwise agreed to in writing, no warranty is made with respect to materials not manufactured by W. R. Meadows of Canada. We cannot warrant or in any way guarantee any particular method of use or application or the performance of materials under any particular condition. Neither this Warranty nor our liability may be extended or amended by our salesmen, distributors or representatives, or by our distributor's representatives, or by any sales information or drawings.
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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