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AIR-SHIELD™ LM (ALL SEASON) (Supersedes November 2009)

Single-Component, Liquid-Applied, Polymer-Modified,
Air/Vapor and Liquid Moisture Barrier

DESCRIPTION

AIR-SHIELD LM (ALL SEASON) is a single-component, liquid-applied, polymer-modified air/vapor and liquid moisture barrier. AIR-SHIELD LM (ALL SEASON) cures to form a tough, seamless, elastomeric membrane, which exhibits excellent resistance to air and moisture transmission. VOC content = 400 g/L.

USES

AIR-SHIELD LM (ALL SEASON) has been specifically formulated to act as an air/vapor barrier within the building envelope. It may be applied to most common surfaces and integrated into various wall systems. The material is suitable for application on new construction and restoration projects.

FEATURES/BENEFITS

- Low permeability - inhibits both air and moisture vapor transmission through porous building materials.
- All weather application - can be applied at temperatures down to 10° F.
- Highly flexible - bridges minor cracks, which may form in the substrate.
- 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.
- Low VOC - <400 g/L.

*Air Leakage (Tested per ASTM E 2178-01)

Pressure		Air Leakage (ABAA requirement)	Results for AIR-SHIELD LM (ALL SEASON)	Air Leakage (ABAA requirement)	Results for AIR-SHIELD LM (ALL SEASON)
Pa	lb./ ft. ²	L/sM ²	L/sM ²	cfm/ ft. ²	cfm/ ft. ²
75	1.57	0.02	< 0.02	0.004	< 0.004

*Independent tests available upon request.

CONTINUED ON REVERSE SIDE...

TECHNICAL DATA

Solids, %	65	WRM Test Method
Color	Black	Visual
Flexibility @ -20° F 2" mandrel	PASS	ASTM D 146
Elongation	>1000%	ASTM D 412
Water Vapor Permeance	0.06 Perms	ASTM D 96 (Procedure B)
Service Temperature	-40° to 140° F (-40° to 60° C)	
Application Temperature	Above 10° F (-12° C)	
Storage Temperature	60 - 100° F	
Flash Point	103° F	ASTM D 93

APPLICATION

Surface Preparation ... All surfaces must be clean, dry, and structurally sound. Surfaces must be free of any curing compounds, coatings, release agents, and frost.

Concrete must be a minimum of 14 days old prior to application of AIR-SHIELD LM (ALL SEASON). Do not apply to fresh or "green" concrete.

Do not apply to polystyrene insulation boards.

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.

Details and Protrusions ... Before application of AIR-SHIELD LM (ALL SEASON), apply a 6" (152 mm) minimum wide strip (lapped 3" on each side) of AIR-SHIELD where joints between dissimilar building materials occur (i.e., details around doors and windows, as well as protrusions). Architectural details are available at www.wrmeadows.com or by calling 1-800-342-5976.

Concrete Masonry Units ... Before applying AIR-SHIELD LM (ALL SEASON) 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.

SPRAYER APPLICATION

Store material at room temperature or warm material to a minimum of 60° F prior to application. It may be applied by spraying or by using a 3/4" minimum nap roller. (For recommendations on spray equipment, consult W. R. MEADOWS technical staff.)

AIR-SHIELD LM (ALL SEASON) must be a minimum of 60° F (15° C) prior to spraying. Product will become very thick and difficult to spray at lower temperatures. AIR-SHIELD LM (ALL SEASON) must be stored in a heated trailer and/or passed through a heat exchanger for successful spraying.

Equipment ... AIR-SHIELD LM (ALL SEASON) is most effectively and efficiently applied by using either the Graco HydraMax 350 or GH 833 Big Rig sprayer.

The Graco heavy duty texture gun with the 0.035" (GHD 535) heavy duty switch tip is recommended for best results.

For detailed information on spray equipment recommendations, use, and cleanup, please refer to W. R. MEADOWS technical bulletin #05-724-A, available on the building envelope page of www.wrmeadows.com or in the softbound catalog.

AIR-SHIELD LM (ALL SEASON) may be sprayed on at the minimum coverage rate of approximately 17 -20 ft.²/gal. to achieve 80 mils wet (2.03 mm) wet, 45 mils (1.14 mm) dry. Two coats may be required to achieve desired thickness in hot weather. Note: Roller applications may require two coats (each 40 mils wet) to obtain the proper thickness. Apply second coat after first coat has dried, approximately 1 - 2 hours after first coat. 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.

Drying Time ... Allow material to dry at air and surface temperatures of 10° F (-12° C) or higher. The following times are given for typical conditions and standard thickness. Actual times may differ depending on specific conditions present on job at time of application, such as temperature, humidity, airflow, etc. AIR-SHIELD LM (ALL SEASON) should be allowed to air dry at least 48 hours before application of specified insulation. Beads of POINTING MASTIC from W. R. MEADOWS can be used to secure the insulation to the wall. Polystyrene insulation boards can only be applied if the membrane is thoroughly cured (72 hrs. minimum), and there is no danger of residual solvent degrading the boards.

Tack-free film: 2 hours (typical)

Full cure: 48 hours (typical)

Cleanup ... Material should not be left in the pump, lines or gun when finished spraying. Aromatic solvents, such as xylene and toluene, should be flushed through the sprayer until the pump and hose run clear.

CAUTION: A final flush of the spraying equipment, with water, must be completed to remove any traces of solvent prior to spraying a water-based product. The presence of any residual solvent will cause the water-based product to solidify and clog the pump and hose.

PRECAUTIONS

Do not apply indoors. Use with adequate ventilation. No open flames. **Do not apply to polystyrene insulation boards, as the solvent will attack the boards.** Do not apply if rainfall is forecast or imminent within two hours. AIR-SHIELD LM (ALL SEASON) is not designed to perform as a permanently exposed membrane. Membrane should be covered within 30 days after application to avoid degradation caused by UV exposure. Keep containers tightly sealed.

HEALTH AND SAFETY

EXTERIOR USE ONLY. AVOID IGNITION SOURCES. AVOID PROLONGED BREATHING OF VAPORS. Use proper personal protective equipment, including chemical resistant gloves and eye and respiratory protection. Keep out of reach of children. Do not swallow. Should adverse effects occur, remove subject from area immediately. Refer to Material Safety Data Sheet for complete health and safety information. Flash point is 103° F (39° C).

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.

LEED INFORMATION

May help contribute to LEED credits:

- EA Credit 1: Optimize Energy Performance
- IEQ Credit 3.1: Construction Indoor Air Quality Management Plan: During Construction
- IEQ Credit 7.1: Thermal Comfort - Design
- MR Credit 2: Construction Waste Management
- MR Credit 5: Regional Materials

For CAD details, most current data sheet, further LEED information, and MSDS, 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

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