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(Supersedes July 2007)

### 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.

#### FEATURES/BENEFITS

- Fast drying formulation; provides early resistance to rainfall.
- **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.
- **ENVIRONMENTALLY COMPATIBLE** - AIR-SHIELD LM is non-toxic.
- **USER FRIENDLY** – single-component, water-based technology allows for simple, safe application and easy clean up.
- **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 noxious odors.
- Compatible with other asphalt-based emulsion products.

\*Air Leakage (Tested per ASTM E 283 and ASTM E 2178-01)

Pressure		Air Leakage (ABAA requirement)	Results for AIR-SHIELD LM	Air Leakage (ABAA requirement)	Results for AIR-SHIELD LM
Pa	lbs./sq.ft.	L/S/M <sup>2</sup>	L/S/M <sup>2</sup>	cfm/sq. ft.	cfm/sq. ft.
75	1.57	0.02	Less than 0.02	0.004	Less than 0.004

\*Independent tests available upon request.

CONTINUED ON REVERSE SIDE...

#### PACKAGING

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

#### SPECIFICATIONS

- Exceeds Air Barrier Association of America (ABAA) Section 07262 Liquid-Applied Air/Vapor Barrier System.
- Exceeds the requirements of the Massachusetts Commercial Energy Code for Building Envelope Systems.
- Meets CAN/CGSB-51-33, Type I Water Vapor Permeance Requirements
- 2005 National Building Code of Canada

#### SHELF LIFE

Six months in unopened container. Do not store in temperatures over 90° F or below 32° F.

#### PHYSICAL PROPERTIES

% Solids	70
Color	Black
Elongation (ASTM D-412)	1500%
Water Vapor Permeance (45 mil dry film) (ASTM E-96, Procedure B)	0.03 Perms
Service Temperature	-20°F (-29°C) to 140°F (60°C)
Application Temperature	Above 30° F (-1° C)
Storage Temperature	40° F to 90° F (4° C to 30° C)

## 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:*

Prior to the application of AIR-SHIELD LM, joints 1/4" or greater in exterior sheathing panels [drywall, plywood and oriented strand board (OSB) and glass-faced wall boards, such as DensGlass Gold®] should be taped with a minimum 2" wide contractors mesh style wallboard tape, suitable caulk, such as an acrylic latex, or 4" wide strip of AIR-SHIELD self-adhering air/vapor and liquid moisture barrier. (This method requires the use of MEL-PRIME or MEL-PRIME W/B primer prior to installing AIR-SHIELD strip.)

### *Details and Protrusions:*

Before application of AIR-SHIELD LM, apply a 6" (152 mm) minimum wide strip of AIR-SHIELD self-adhering air/vapor and liquid moisture barrier where joints between dissimilar building materials occur, i.e. details around doors and windows, as well as protrusions. Architectural details are available online at [www.wrmeadows.com](http://www.wrmeadows.com), or by calling 1-800-342-5976.

### *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

AIR-SHIELD LM may be applied by spraying or a 3/4" 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 the minimum coverage rate of approximately 20-25 ft<sup>2</sup>/gal. (60 mils wet) (45 mils dry). Note: For roller applications or during periods of extremely hot weather, two coats (30 mils wet) may be necessary if the material begins to slump. Apply second coat after first coat has completely dried, approximately one to two 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.

## CURING & 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

## COVERAGE

<b>Application Rate</b>	20-25 ft <sup>2</sup> /gal.
<b>Wet Film Thickness</b>	60 mil
<b>Cured Film Thickness</b>	45 mil (1.15 mm)

## CLEAN UP

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.

## HEALTH HAZARDS

Keep out of reach of children. Some people may be allergic or sensitive to chemicals contained in this product. Do not swallow. Should adverse effects occur, remove subject from area immediately. Wash contaminated skin with water and introduce fresh air. Refer to Material 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.

## FOR THE MOST CURRENT PRODUCT INFORMATION AND CAD DETAILS, VISIT OUR WEBSITE:

[www.wrmeadows.com](http://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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