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(Supersedes December 2016)

## AIR-SHIELD™ TMP

Liquid Membrane Thin Film Permeable Air Barrier

### DESCRIPTION

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

### USES

AIR-SHIELD TMP has been specifically formulated to act as an air and liquid moisture barrier, allowing vapor to pass through it. It may be applied to most common surfaces and integrated into various wall systems. AIR-SHIELD TMP is suitable for both new construction and retrofit applications.

### FEATURES/BENEFITS

- High permeability - allows the transmission of moisture vapor through porous building materials.
- Highly flexible - bridges cracks, which may form in the substrate.
- UV resistant - can be left exposed up to six months.
- 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.

### PACKAGING

5 Gallon (18.93 Liter) Pails  
55 Gallon (208.20 Liter) Drums

### COVERAGE

|                           |   |
|---------------------------|---|
| Plywood                   | 100 ft. <sup>2</sup> /gal. (2.45 m <sup>2</sup> /L) |
| Exterior Gypsum Sheathing | 100 ft. <sup>2</sup> /gal. (2.45 m <sup>2</sup> /L) |
| Wet Film Thickness        | 10 - 31 Mils  |
| Cured Film Thickness      | 6 - 18 Mils   |
| CMU Substrate             | 60 ft. <sup>2</sup> /gal. (1.47 m <sup>2</sup> /L)  |
| Wet Film Thickness        | 20 - 41 Mils  |
| Cured Film Thickness      | 12 - 24 Mils  |

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 one year of date of manufacture.

### SPECIFICATIONS

- ASTM E 84, Class A
- ASTM E 2178
- ASTM E 2357
- 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 SCAQMD.

### TECHNICAL DATA

|   |                              |
|---|------------------------------|
| Solids Content, %:                                    | 58                           |
| VOC Content, g/L:                                     | 67                           |
| Color:  | Green                        |
| Flexibility @ -26° C (-15° F), ASTM C 836:            | PASS                         |
| Elongation (ASTM D 412), %:                           | 1000                         |
| Water Vapor Permeance (ASTM E 96, Procedure B) Perms: | >15                          |
| Service Temperature:                                  | Not to exceed 175° F (80° C) |
| Nail Sealability (ASTM D 1970):                       | Pass                         |
| Storage Temperature                                   | 40° - 90° F (4° - 32° C)     |
| Air/Substrate Temperature (At Time of Application):   | 20° F (-6.7° C)              |

### Air Leakage

| Test Method             | ASTM E 2178-01  | ASTM E 2357   |
|-------------------------|---|---|
| Pressure:               | 75 Pa<br>(1.57 lb./ft. <sup>2</sup> )                     | 75 Pa<br>(1.57 lb./ft. <sup>2</sup> )                   |
| ABAA Requirements       | 0.004 cfm/ft. <sup>2</sup><br>(0.02 L/S/M <sup>2</sup> )  | 0.04 cfm/ft. <sup>2</sup><br>(0.2 L/S/M <sup>2</sup> )  |
| AIR-SHIELD TMP Results: | <0.004 cfm/ft. <sup>2</sup><br>(0.02 L/S/M <sup>2</sup> ) | <0.04 cfm/ft. <sup>2</sup><br>(0.2 L/S/M <sup>2</sup> ) |

\*Independent test available upon request

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

**CONTINUED ON REVERSE SIDE...**

**APPLICATION**

**Surface Preparation ...** All surfaces must be clean (free of all coatings and curing compounds), free of frost, structurally sound, and relatively smooth. 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 TMP** available at [www.wrmeadows.com](http://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](http://www.wrmeadows.com).

**Rough Openings ...** Refer to **AIR-SHIELD ROUGH OPENING INSTALLATION GUIDELINES** at [wrmeadows.com](http://wrmeadows.com) for recommendations.

**Concrete Masonry Units ...** Before applying AIR-SHIELD TMP to CMU surfaces, patch all cracks, protrusions, small voids, offsets, details, irregularities, and small deformities with MEADOW-PATCH® 5 or MEADOW-PATCH 20 at least two hours before application. All mortar joints should be full and struck flush with the face of the CMU.

**Temperature/Conditions ...** Apply AIR-SHIELD TMP at air and surface temperatures of 20° F (-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 at 70° (21.1° C):

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

**Roller ...** AIR-SHIELD TMP can be applied directly from the container; a ¾" (19.1 mm) nap roller is recommended. Apply AIR-SHIELD TMP on a vertical surface to achieve a final film thickness of 10 mils wet (6 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 TMP should be stored and maintained at a temperature of 40° F (4.4° C) or higher throughout the entire spray application. The product will become thick and difficult to spray at temperatures below 60° F (15.6° C). 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 TMP on a vertical surface to achieve a final film thickness of 10 mils wet (6 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. Porous substrates, masonry blocks, etc., may require multiple coats to achieve recommended film thickness.

**Cleanup ...** 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 TMP.

**PRECAUTIONS**

**DO NOT FREEZE.** Keep containers tightly sealed. Do not apply AIR-SHIELD TMP if rainfall is forecast or imminent within 12 hours of application.

**HEALTH AND SAFETY**

Direct contact may result in mild irritation to the skin and eyes. 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.

**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 recent data sheet, further LEED information, and SDS, visit [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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