PRODUCT DATA

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W. R. MEADOWS SEALTIGHT

NO. 726

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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 surface.

PACKAGING

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

COVERAGE

Plywood	100 ft.^{2}/gal. (2.45 m^2/L)
Exterior Gypsum Sheathing	100 ft.^{2}/gal. (2.45 m^2/L)
Wet Film Thickness	16 Mils
Cured Film Thickness	9 Mils
CMU Substrate	60 ft.^{2}/gal. (1.47 m^2/L)
Wet Film Thickness	37 Mils
Cured Film Thickness	20 Mils

These are theoretical coverage rates and dry film thicknesses. Depending on substrate type, porosity, and environmental conditions, the final coverage and dry film thickness will vary.

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 E84, Class A
- ASTM E2178
- ASTM E2357
- Complies with National EPA VOC Emission Standard for Architectural Coatings, CARB, LADCO, and OTC Phase I and II VOC regulations.

TECHNICAL DATA

Solids Content by weight %:	57
VOC Content, g/L:	133
Color:	Green
Flexibility @ -26° C (-15° F), (ASTM C 836):	PASS
Elongation (ASTM D 412), %:	500
Water Vapor Permeance (ASTM E 96, Procedure B) Perms:	>15
Service Temperature:	Not to exceed 175° F (80° C)

CONTINUED ON REVERSE SIDE

W. R. MEADOWS, INC.
P.O. Box 338 • HAMPSHIRE, IL 60140-0338
Phone: 847/214-2100 • Fax: 847/683-4544
1-800-342-5976
www.wrmeadows.com

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) and Rising
Adhesion to Exterior Gypsum Sheathing, CMU, Concrete or Exterior Grade Plywood (ASTM D4541 modified per ABAA requirements)	>16 PSI (0.11 MPa)

AIR LEAKAGE

Test Method	ASTM E 2178	ASTM E 2357
Pressure	75 Pa (1.57 lb./ft.^{2})	75 Pa (1.57 lb./ft.^{2})
ABAA Requirements	0.004 cfm/ft.^{2} (0.02 L/S/M^2)	0.04 cfm/ft.^{2} (0.2 L/S/M^2)
AIR-SHIELD TMP Results	<0.004 cfm/ft.^{2} (0.02 L/S/M^2)	<0.04 cfm/ft.^{2} (0.2 L/S/M^2)

All technical data is typical information and will vary due to testing methods, site conditions, temperature, curing, procedures, batching, and expected variations in raw materials. Statistical differences in test results should be anticipated. Onsite testing results may not correlate to published laboratory results due to testing variations and limitations.

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

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. All walls to receive AIR-SHIELD TMP must be capped to prevent moisture infiltration from entering the wall during construction.

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.

Rough Openings … Refer to AIR-SHIELD ROUGH OPENING INSTALLATION GUIDELINES available at www.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 from W. R. MEADOWS at least two hours before application. All mortar joints should be full and struck flush with the face of the CMU.

Temperature/Conditions … Curing/drying times are dependent on air temperature, airflow, relative humidity, substrate temperature, wind chill, dew point and etc. For example, as the temperature decreases or the humidity increases, the dry time will increase. If the dew point is within five degrees of the air temperature, drying will be dramatically slowed. If the temperature drops below 40° F (4.5° C), the cure rate, dry time, and rain/snow resistance will be delayed. Protect membrane from rain and washout prior to drying. Exposure to air temperatures/wind chills below 20° F (-6.6° C) during curing may lead to cracking and decrease of performance of AIR-SHIELD TMP.

Typical Dry Times:
Tack-Free Time: 4 hours at 75° F (23.5° C) & 50% RH
Dry Time: 48 hours at 75° F (23.5° C) & 50% RH

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 nominal film thickness of as required in the COVERAGE section for that type of substrate.

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 nominal film thickness as required in the COVERAGE section for that type of substrate.

NOTE: While the proper film thickness may be achieved with a single coat when either roller or spray applied, 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

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 (18.9 L)]. Aromatic solvents, such as xylene or toluene [approximately two gallons (7.6 L)], 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. Maximum UV exposure period for membrane is six months. It is recommended that the roof is installed prior to the application of the AIR-SHIELD TMP. 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 TMP if precipitation is forecast or imminent within 24 hours at 75° F (23.5° C) and 50% RH of application. Slumping may occur when applied over certain transition membranes or sealants. 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. Adhesion of membrane to fire treated wood can sometimes be adversely affected by the treatment. Prior to placement on OSB or treated wood, in-situ adhesion tests should be performed to determine suitability of substrate prior to full installation. If there are variations in the OSB or fire treated wood surface, multiple tests may be required.

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.

For BIM models, CAD details, most recent data sheet, complete LEED information, and SDS, 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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