PRODUCT DATA

CSI Code: 07 27 13

NO. 718-A

NOVEMBER 2006

AIR-SHIELD™ XLT

Self-Adhering Air Barrier and Flashing Membrane

DESCRIPTION

AIR-SHIELD XLT Extra Low Temp Self-Adhering Air Barrier and Flashing Membrane is part of a total W. R. MEADOWS system to complete the building envelope. It is a roll-type product that is nominally 40 mils thick, and is ideal for cold weather applications. The membrane's controlled thickness is fabricated from cross-laminated polyethylene bonded to specially modified asphalt.

This unique, self-adhesive membrane, protected by a special release paper, is strong and durable. It remains flexible when surface mounted and will adhere to most primed surfaces at minimum temperatures of 0° F (-18° C). The membrane provides excellent protection as a tough barrier or flashing that won't shrink, sag, dry out, crack or rot. It offers excellent resistance to punctures during installation. The self-healing characteristics of AIR-SHIELD XLT facilitate recovery if minimal damage is sustained under normal use applications, i.e. when penetrated with self-tapping screws or nails.

PACKAGING

AIR-SHIELD XLTis packaged in rolls measuring 38 1/2" (.97 m) x 75' (22.86 m). AIR-SHIELD XLT can also be cut to desired width.

Optional sizes include:
4" x 75', 6" x 75', 9" x 75', 12" x 75', 16" x 75' 18" x 75', 20" x 75' and 24" x 75'.

STORAGE

AIR-SHIELD XLT should be stored palletized and protected from rain and/or physical damage. Do not store at temperatures above 90º F (32.2º C) for extended periods of time. Do not leave membrane exposed to direct sunlight. Do not double-deck pallets. Store away from sparks or flames. Outdoors, store AIR-SHIELD XLT on pallets and completely cover.

USES

AIR-SHIELD XLT is designed for a variety of uses.

Besides its air/vapor barrier capabilities, AIR-SHIELD XLT is ideal for numerous concealed flashing applications including parapet, thru-wall at-the-roof, head, window sill, thru-wall at-the-floor, spandrel, doorjamb and frame, foundation and expansion joint. In addition, it is used to protect seams around windows, doors, construction joints and penetrations, etc.

Primary applications include cavity wall and masonry wall construction. AIR-SHIELD XLT works equally well as an air and/or vapor barrier on precast concrete, cast in place concrete, masonry (concrete block), interior and exterior gypsum board, Styrofoam, primed steel, aluminum mill finish, anodized aluminum, primed galvanized metal, drywall and plywood.

SPECIFICATIONS

- Exceeds the requirements of the Massachusetts Commercial Energy Code For Building Envelope Systems.
- Meets CAN/CGSB-51-33, Type I Water Vapor Permeance Requirements.
- 1995 National Building Code of Canada

MAINTAIN ENERGY EFFICIENCY

AIR-SHIELD XLT provides an effective barrier to air exfiltration and infiltration, reducing condensation within the wall assembly and increasing the efficiency of a building's mechanical system. Wet insulating materials lose much of their "R" factor performance characteristics, reducing the energy efficiency of the structure. W. R. MEADOWS' thermal and moisture protection products play a key role in *maintaining* the structure's energy efficiency and aiding in the integrity of other structural systems, such as insulation.

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

TECHNICAL DATA

Test	Results
Color:	White
Thickness:	40 mils. (1mm)
Pliability @ -25° F (-32° C)	No effect
Tensile Strength Film ASTM D 412 modified (MD): ASTM D 882 (MD): lb/in.	 4,000 psi (27.6 Mpa) 23.5 lb/in. (4.1 N/mm)
Elongation Film: ASTM D 412 modified (MD, %): ASTM D 882, (MD, %):	 400 (Typical) 400 Min.
Puncture Resistance: ASTM E 154	 40 lbf (178 N) Min.
Water Vapor Permeance (free film) ASTM E-96, Procedure B	 0.035 Perms
Water Absorption (% by weight): ASTM D 1970 ASTM D 570-81	 0.25 Max 0.1 Max.
Application Temperature:	0° F (-18° C) Min.
Low Temperature Flexibility @ -22° F (-30° C) (CGSB 37-gp-56m)	PASS
Service Temperature	-40° F to 158° F
Lap Peel Strength @ 39° F (4° C) (ASTM D 903, 180 Bend)	10 lbf/in width (1.75 N/mm)

FEATURES/BENEFITS

- LOW PERMEABILITY - prevents the transmission of air and inhibits moisture vapor through porous building materials.
- Superior adhesion, even down to 0º F(-18º C).
- Cross laminated polyethylene film has excellent tensile strength, elongation and tear resistance.
- Modified membrane is flexible at low temperatures.
- Rugged membrane can actually fold to shape during application as a thru-wall flashing.
- Excellent adhesion to prepared substrates of precast concrete, cast-in-place concrete, masonry (concrete block), interior and exterior gypsum board, Styrofoam, primed steel, aluminum mill finish, anodized aluminum, primed galvanized metal, drywall and plywood.
- Self-healing characteristics facilitate recovery if minimal damage is sustained under normal use applications.
- No flame required.

Air Leakage (Tested per ASTM E 283)

Pressure		Air Leakage (National Building Code of Canada Requirement)	Air Leakage (National Building Code of Canada Requirement)	Results for AIR-SHIELD XLT
Pa	lbs./sq.ft.	$L/S/M^2$	cfm/sq.ft.	
75	**1.57**	**0.02**	**0.004**	**Meets**

Air Leakage (Tested per ASTM E 283)

Pressure		Air Leakage (National Building Code of Canada Requirement)	Air Leakage (National Building Code of Canada Requirement)	Results for AIR-SHIELD XLT
Pa	lbs./sq.ft.	$L/S/M^2$	cfm/sq.ft.	
75	**1.57**	**0.02**	**0.004**	**Less than 0.004**

APPLICATION

Surface Preparation … All surfaces to be protected must be clean, dry, frost-free and smooth. Remove any sharp protrusions and repair all defects.

All surfaces to receive AIR-SHIELD XLT must be clean of oil, dust and excess mortar. Strike masonry joints flush. Concrete surfaces must be smooth and without large voids, spalled areas or sharp protrusions. Concrete must be cured a minimum of 14 days and must be dry before AIR-SHIELD XLT is applied. Where curing compounds are used, they must be clear resin based, without oil, wax or pigments.

Priming … All surfaces to which AIR-SHIELD XLT is to be applied must be primed. MEL-PRIME™ W/B can be used when temperatures are above 40º F (4º C). Use MEL-PRIME Solvent Base or Solvent-based VOC Primer in colder weather and at higher application temperatures for maximum adhesion. Primer may be applied with a roller to an area that is to be covered the same day. Uncovered areas must be re-primed the next day. See primer container for complete application, drying information and precautions.

Application Method … AIR-SHIELD XLT can be applied at minimum temperatures of 0º F (-18º C). Apply membrane to primed surface by removing the release paper and rolling the membrane firmly into place. Remove the release paper only as the membrane is being applied. Ensure the membrane is fully adhered and remove all wrinkles and/or fish mouths. Cut the membrane with a utility knife to detail around protrusions and masonry reinforcing. Seal all end laps and protrusions with POINTING MASTIC. Overlap subsequent courses of membrane a minimum of tw inches. Vertical terminations of AIR-SHIELD XLT should either be tied into the wall system or mechanically fastened with TERMINATION BAR. AIR-SHIELD XLT is not designed for permanent exposure. Good construction practices call for application of insulation as soon as possible to protect the air barrier and/or flashing.

When used as a flexible wall flashing, AIR-SHIELD XLT should be recessed 1/2" (13 mm) from the face of the masonry. Flashing should not be permanently exposed to sunlight. Do not allow the rubberized asphalt surface of the flashing membrane to come in contact with sealants containing solvents, creosote, uncured coal tar products, EPDM or PVC components.

Clean U p… Tools, etc., can be cleaned with mineral spirits, paint thinner or aromatic solvent.

COVERAGE

Coverage is approximately 240 sq. ft. (22.3 sq. m). (Net coverage when lapped 2 inches, 228 sq. ft. [21.1 sq. m.]).

SAFETY & TOXICITY

No adverse effects expected with normal product use. Cotton work gloves and safety glasses are recommended. Refer to Material Safety Data Sheet for complete health and safety information.

BELOW-GRADE PROTECTION:

W. R. MEADOWS offers the following moisture and vaporproofing products, providing the specifying authority a single source system for the entire building envelope:

PREMOULDED MEMBRANE® VAPOR SEAL with PLASMATIC CORE® (PMPC) for horizontal vaporproofing applications. (Refer to Data Sheet No. 711).

MEL-ROL® Waterproofing Membrane (Refer to Data Sheet No. 717).

MEL-PRIME W/B Primer (Refer to Data Sheet No. 715) for basic above and below-grade priming requirements.

MEL-DRAIN™ Rolled Matrix Drainage System (Refer to Data Sheet No. 719) is designed to protect vaporproofing and waterproofing membranes in either horizontal or vertical applications.

Application Tools


Utility Knife


Roller


Paint Roller


Caulking Gun


Manual Sprayer

ACCESSORIES

MEL-PRIME W/B PRIMER … Prepares concrete surfaces for AIR-SHIELD XLT membrane application. Ready to use, requires no additional mixing. MEL-PRIME W/B emits no unpleasant odors and works with all waterproofing membranes from W. R. MEADOWS. Can be applied easily by manual spraying or with a roller. VOC compliant. MEL-PRIME W/B is ideal for use at temperatures of 40° F (4° C) and above.

Coverage: 250 to 350 sq. ft./gal. (6.14 to 8.6 sq. m/L)

Packaging: 1 Gallon (3.79 Liter) Units, 4/Carton and 5 Gallon (18.93 Liter) Pails

MEL-PRIME SOLVENT BASE VOC or MEL-PRIME SOLVENT BASE PRIMERS …These primers can be used at temperatures down to 0° F (-18° C) and above.

Coverage: 250 to 300 sq. ft./gal. (6.14 to 7.4 sq. m/L)

Packaging: 1 Gallon (3.79 Liter) Units and 5 Gallon (18.93 Liter) Pails

TERMINATION BAR … As an option, TERMINATION BAR may be used to mechanically fasten the membrane.

Packaging: (25) 10' pieces per 20 lb. Carton (250 lineal feet)

POINTING MASTIC …Used for sealing top edges of TERMINATION BAR.

Coverage: Approximately 200 lineal ft. (61 m) per gallon (3.79 L), when used as directed.

Packaging: 5 Gallon (18.93 Liter) Pails or 29 oz. (857.65 ml) cartridges, 12/Carton

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

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.