



DATA SHEET NO. 5118-050

PRECON_® Pre-Applied/Underslab Waterproofing Membrane

DESCRIPTION

PRECON is a composite sheet membrane comprised of a non-woven fabric, elastomeric membrane, and W. R. MEADOWS' exclusive, patented plasmatic core (U.S. Patent No. 7,179,761). The plasmatic core is a seven-layer matrix designed for toughness and provides the lowest water vapour transmission (WVT) rating on the market. Once concrete is poured against PRECON and the concrete cures, a mechanical bond forms that secures the concrete to the membrane.

USES

PRECON is used as a blindside membrane in vertical applications where access to the positive side is limited. Such applications include soldier pile and lagging, metal sheet piling, caissons, shotcrete and stabilized earth retention walls. The membrane can also be used for horizontal applications for underslab waterproofing and vapourproofing. Applications may include structures under continuous or intermittent hydrostatic pressure. In these situations, contact W. R. MEADOWS Technical Services for verification of installation requirements and applicable installation guidelines. Install PRECON in strict accordance with W. R. MEADOWS installation guidelines and details using all accessory products as specified or required.

FEATURES/BENEFITS

- Provides a waterproof seal between the membrane and poured concrete wall.
- Helps prevent moisture migration into the structure.
- Reduces methane and radon gas intrusion.

PACKAGING

1.2 m (4') wide x 15.2 m (50') long rolls, one roll per carton.

STORAGE AND HANDLING

Store membrane cartons on pallets and cover if left outside. Keep materials away from sparks and flames.

SPECIFICATIONS

ASTM E 1993-98

*Standard Specification for Bituminous Water Vapor Retarders used in Contact with Soil or Granular Fill under Concrete Slabs

APPLICATION

Surface Preparation ... Inspect all surfaces for any conditions detrimental to the proper completion of the work. Surfaces should be structurally sound. Remove debris or any other foreign material that could damage the membrane.

PRECON can be used with a caisson wall shoring system without the use of a drainage board, such as MEL-DRAIN[™] from W. R. MEADOWS. W. R. MEADOWS recommends proper site drainage, but due to certain site conditions this sometimes cannot be done effectively. The decision to remove the drainage board should be at the discretion of the engineer. In situations where a drainage board is not applied, surface preparation is important. The substrate needs to be sound, solid, and smooth. Any gaps or voids >25 mm (1") need to be grouted. When PRECON is used with MEL-DRAIN from W. R. MEADOWS, the system can bridge gaps <50.8 mm (2"). However, gaps >50.8 mm (2") will need to be grouted.

Application Method ... PRECON may be applied at temperatures down to 5° C; however, in less than ideal environments or marginal conditions, consider the use of PRECON LOW TEMP below 16° C. PRECON LOW TEMP can be used in temperatures down to -4° C. MEL-PRIME™ from W. R. MEADOWS should be used to enhance the bond at the selvedge edge when conditions warrant it with both PRECON and PRECON LOW TEMP.

Prior to application of the blindside membrane, attach MEL-DRAIN[™] rolled matrix drainage system from W. R. MEADOWS to lagging or soil retention system.

In vertical applications of PRECON, mechanically attach with fasteners every 305 mm (12") across the top, within 13 mm ($\frac{1}{2}$ ") of the top edge of the membrane. Install the membrane with the fabric side facing toward the concrete pour.

Remove release paper on 152.4 mm (6") overlap. Apply membrane and roll press into place with a tile type roller.

Continued over ...

W. R. MEADOWS OF CANADA

70 Hannant Court, Milton, ON L9T 5C1 21 Streambank Ave., Sherwood Park, AB T8H 1N1 (800) 342-5976 Montreal Sales: (514) 865-5186 Hampshire, IL / Cartersville, GA / York, PA / Fort Worth, TX Benicia, CA / Pomona, CA / Goodyear, AZ / Milton, ON Sherwood Park, AB www.wrmeadows.com End Laps ... Overlap membrane 152.4 mm (6"). Prior to overlap, apply BEM, HYDRALASTIC 836 or *MEL-ROL_® LIQUID MEMBRANE (two-component) from W. R. MEADOWS in area to be lapped. Roll press membrane into BEM, HYDRALASTIC 836, or MEL-ROL LIQUID MEMBRANE. At terminations of membrane, apply BEM, HYDRALASTIC 836, or MEL-ROL LIQUID MEMBRANE 305 mm (12") wide centered over the termination and while still wet, embed 305 mm (12") wide DETAIL FABRIC into the HYDRALASTIC 836, or MEL-ROL LIQUID MEMBRANE and roll press into place. Ensure that DETAIL FABRIC is centered over the termination with 152.4 mm (6") on each side of lap edge. Apply additional HYDRALASTIC 836 on all terminations of DETAIL FABRIC.

Penetrations and Protrusions ... Detail around all horizontal and vertical penetrations using BEM or MEL-ROL LIQUID MEMBRANE (two-component). Apply BEM or MEL-ROL LIQUID MEMBRANE by forming a fillet around the pipe or protrusion, overlapping the fabric side of PRECON and the protrusion a minimum of 64 mm (2.5"). If the gap between the protrusion and the membrane is greater than 13 mm (½"), apply PRECON FABRIC TAPE over uncured BEM or MEL-ROL LIQUID MEMBRANE. All penetration and protrusion surfaces must be clean, rust-free, and sound prior to application of BEM or MEL-ROL LIQUID MEMBRANE.

*MEL-ROL LIQUID MEMBRANE is a two-component material, not to be confused with MEL-ROL LM.

For horizontal applications involving a cluster of penetrations, consider the use of HYDRALASTIC 836. Prior to application of HYDRALASTIC 836, prepare the surfaces of the penetrations as above and provide a block out using 2' x 4' (.6 x 1.2 m) lumber or other in order to create a "pitch pan" area to receive HYDRALASTIC 836.

Patching ... Prior to pouring, inspect membrane for punctures or damage and repair as necessary with HYDRALASTIC 836 and/or DETAIL FABRIC. (BEM or MEL-ROL LIQUID MEMBRANE may be used in place of HYDRALASTIC 836.) In addition, ensure the membrane is free of standing water and has been cleaned of any deleterious materials that will affect the bond of the concrete to the membrane. **Underslab Application** ... Refer to ACI 302.1R: Chapter 4 – Site Preparation and Placing Environment for sub-grade preparation prior to PRECON placement.

PRECAUTIONS

Concrete should be poured within 60 days of membrane installation. For installations below 4° C, contact W. R. MEADOWS technical services. When using bar supports, use those with a flat bottom. In applications under continuous or intermittent hydrostatic pressure, contact W. R. MEADOWS Technical Services for verification of installation requirements and applicable installation guidelines.

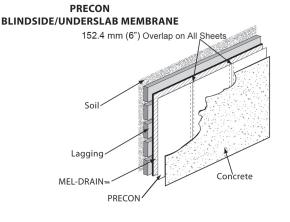
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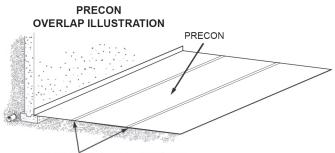
07 13 00 - Sheet Waterproofing

LEED INFORMATION

May help contribute to LEED credits:

- EAp2: Minimum Energy Performance
- EAc2: Optimize Energy Performance
- MRc9: Construction and Demolition Waste Management





152.4 mm (6") Overlap on All Sheets

® SEALTIGHT is a registered trade mark of W. R. Meadows

WARRANTY: W. R. Meadows of Canada warrants that, at the time and place we make shipment, our materials will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES OTHERWARRANTISS OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM OF TRADE OR OTHERWISE. As the exclusive remedy for breach of this Warranty, we will replace defective materials, provided, however, that the buyer examine the materials when received and promptly notify us in writing of any defect before the materials are used or incorporated into a structure. Three (3) months after W. R. Meadows of Canada has shipped the materials, all our Warranty and other duties with respect to the quality of the materials delivered shall conclusively be presumed to have been satisfied, all liability therefore terminates and no action for breach of any such duties may thereafter be commenced. W. R. Meadows of Canada we cannot warrant or in any way guarantee any particular method of use or application or the performance of materials under any particular condition. Neither this Warranty nor our liability may be extended or amended by our salesmen, distributors or representatives, or by our distributor's representatives, or by any sales information or drawings.

Property	Test Method	PRECON Results
Thickness	ASTM D1000	1.85 mm
		(73 mil)
Low Temp	ASTM D1970, 180°	Pass
Flexibility	@ -28.9° C	
Resistance to	ASTM D5385-93	70 m (230')
Hydrostatic Head		
Elongation,	ASTM D412-06	>400%
Polymeric		
Membrane		
Tensile Strength,	ASTM D882	63.4 MPa
Film		(9200 psi)
Crack Cycling	ASTM C836 @	Pass
	-26° C	
Puncture	ASTM E154	>934 N
Resistance		(>210 lb.)
Peel Adhesion to	ASTM D903	1754 N/m
Concrete		(10 lb./in)
Moisture Vapour	ASTM E96B	0.0011 perms
Transmission		(0.007 gram/m ² /24 hr)
		(0.0004 grains/ft. ² /hr)
Resistance to	GSA-PBS 07115 –	No Effect
Fungi in Soil	16 Weeks	
Radon	k124/02/95	<3.0 x 10 ⁻⁹
Transmittance		
(m/s)		
Radon	k124/02/95	<5.6 x 10 ⁻¹²
Coefficient		
(m2/s)		

TECHNICAL DATA

For BIM assemblies, CAD details, most recent data sheet, further LEED information, and SDS, visit www.wrmeadows.com.

2020-04-01



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