



DATA SHEET NO. 7100-312

PREMOULDED MEMBRANE® VAPOR SEAL WITH PLASMATIC® CORE Vapourproofing/Waterproofing Membrane

DESCRIPTION

PREMOULDED MEMBRANE VAPOR SEAL WITH PLASMATIC CORE (PMPC) is a patented seven-ply, weather-coated, permanently bonded, semi-flexible vapourproofing/waterproofing membrane. It is composed of an exclusive PLASMATIC CORE suspended mid-point between two layers of a homogeneous, bituminous material, and then sealed under heat and pressure between liners of asphalt-impregnated felt and a glass-mat liner. An asphalt weather coat is applied to the glass-mat liner and covered with a polyethylene anti-stick sheet.

PMPC provides a positive, easy-to-install, economical, true vapourproofing and waterproofing system for horizontal applications. Properly applied, it stops moisture migration in footings, concrete floors, and structural slabs. PREMOULDED MEMBRANE VAPOUR SEAL WITH PLASMATIC CORE is both waterproof and vapourproof.

It offers a perm rating of less than 0.002 perms, the lowest in the industry. The product is the ultimate when a true vapour seal is required. Among its unique features is the built-in protection course, which resists jobsite puncturing and the abrasive action of concrete placement. PMPC conforms to ASTM E1993. The exclusive PLASMATIC CORE adds flexibility, greater tensile strength, puncture resistance, and excellent handling characteristics, in addition to providing unequalled vapor barrier properties. PMPC helps meet and maintain the maximum slab moisture transfer rate of 1.45 kg/100 m²/24 hours (3 lb./1000 ft.²/24 hours), allowed by the flooring industry specifications.

Representative United States patent: USPN 7,179,761. (See also www.wrmeadows.com/patents for further patent/intellectual property information.)

USES

PMPC, when properly applied, is designed to stop moisture migration (liquid or vapour) in footings, concrete floor slabs, and structural slabs, which greatly reduces fungus, mildew, and mould. It is especially useful under slabs overlaid with wood, tile, epoxy, and urethane coatings, carpeting, and resilient or seamless flooring systems, since it helps prevent warping and buckling caused by moisture migration. PMPC also greatly reduces radon gas from entering the structure.

FEATURES/BENEFITS

- Offers a virtually impermeable vapourproofing system with a perm rating of less than 0.002 perms, the lowest in the industry.
- Provides excellent tensile strength and puncture resistance.
- Helps prevent warping, buckling, or delamination of subsequent flooring systems.
- Conforms to ASTM E 1993 specification.
- Greatly reduces fungus, mildew, and mold
- Greatly reduces radon gas from entering the structure.
- Helps meet and maintain the maximum slab moisture transfer rate of 1.45 kg/100 m²/24 hours (3 lb./1000 ft.²/24 hours), as allowed by the flooring industry specifications

SPECIFICATIONS

ASTM E 1993*

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

PACKAGING

WIDTH	LENGTH	WEIGHT
Sheets 1.22 m (48")	2.44 m (8')	27.22 kg/9.29 m ² (60 lbs./100 ft. ²)

STORAGE

Handling of PMPC is not critical because of its strength; however, it is advisable to stack the material on smooth ground or a wood platform in storage or at the excavation site. This will eliminate the possibility of the material deforming or warping.

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TECHNICAL DATA

PROPERTY	TEST METHOD	TYPICAL TEST RESULTS
Thickness:	ASTM D5147	100 - 140 mils (2.5 - 3.6 mm)
Tensile Strength:	ASTM E154	24.5 Kn/m (140 lbf/in.)
Puncture Resistance:	ASTM E154	556 N (125 lbf.)
	ASTM D1709	734 Grams
Water Vapor Permeance:	ASTM E154	0.000 perms (0.000 grains/h-ft. ² -in Hg.) (0.0000 ng/Pa-s-m ²)
Permeance after Wetting, Drying and Soaking:	ASTM E154	0.01 perms (grains/h-ft ² -in Hg.)
Permeance after Soil Organism Exposure:	ASTM E154	0.115 perms (grains/h-ft ² -in Hg.)

All technical data is typical information, but may vary due to testing methods, conditions, and operators.

APPLICATION

Minimum application temperature is 4.4° C.

Cutting ... PMPC can be cut with a roofer's or linoleum knife, using a straight edge.

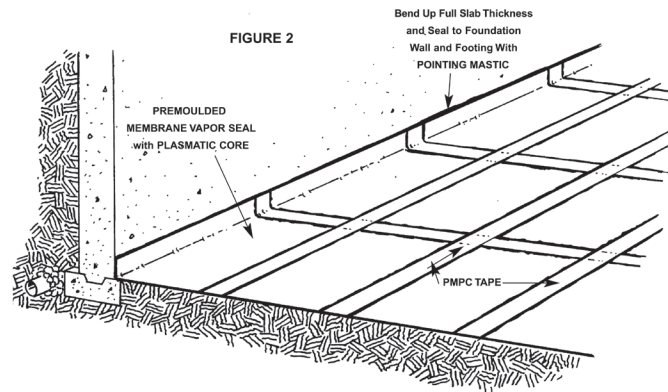
Bending ... Normally to facilitate bending at a change in plane, such as at corners or footings, a 2x4 can be used to make the bend. In cold weather conditions, lightly heat the bending area and make the bend.

Pointing ... Pointing with POINTING MASTIC from W. R. MEADOWS should be done wherever an edge is exposed to prevent water from traveling under a sheet.

Horizontal Installation (On- or Below-Grade) ... By installing PMPC on the ground prior to placing the concrete floor, moisture will be prevented from coming through the floor slab. For sub-grade preparation prior to placement of PMPC, please see ACI 302.1R-04: Chapter 4, Section 4.1.4 – Base Material.

Above-Grade ... In addition to the horizontal on- or below-grade application, PMPC can be placed on the intermediate structural slab, forming a "sandwich slab" installation. As a result, moisture is prevented from filtering downward from mechanical floors dedicated to heating and air conditioning equipment. This helps prevent damage to lower floor levels.

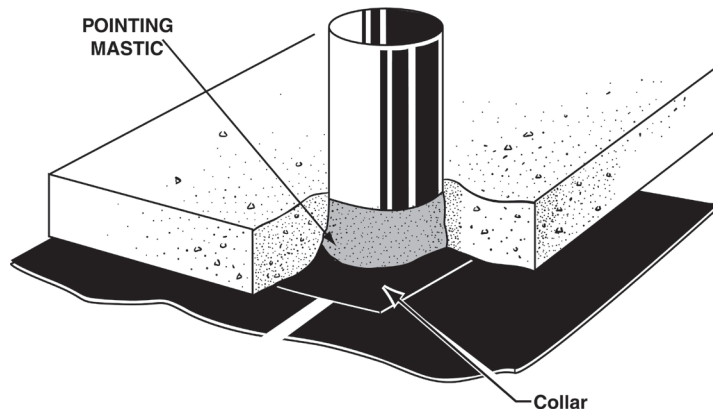
Application Method (Butt-Joint Method) ... After the sheets are tightly butted together, remove the polyfilm from the joint area. After removal of the polyfilm, center PMPC TAPE from W. R. MEADOWS over the "butt joints" and roll down with pressure for a positive seal.



SEALING PROCEDURES

All protrusions through the concrete slab, such as sewer pipes, water pipes, and utility inlets, must have a positive seal between the protrusion and PMPC. Place a collar of PMPC at least 30.48 cm (12") larger than the protrusion around the protrusion. Seal in place with PMPC TAPE and point around the protrusion with POINTING MASTIC.

PROTRUSION DETAIL



ACCESSORIES

MEL-PRIME™ ... Joints in concrete surfaces should be addressed with MEL-PRIME. MEL-PRIME is available in solvent- and water-based formulations. Packaging: 3.79 L (1 Gal.) Units, 18.9 L (5 Gal.) Pails

POINTING MASTIC ... Used for sealing top horizontal terminations or slab protrusions. Packaging: 18.9 L (5 U.S. Gal.) Pails, 857.65 mL (29 oz.) Cartridges.

PMPC TAPE ... A sturdy, self-adhering, reinforced tape of polymeric membrane that requires no additional adhesive. Tape is also made using the patented core material giving it superior WVT properties. Provides a simple, easy, and economical method of effectively sealing horizontal and vertical butt joints. Each strip is nominally 152.4 mm (6") wide and 15.24 m (50') long. Has quick-strip release paper for ease of handling and application. Packaging: 6 rolls per carton.

COVERAGE

ADHESIVE	JOINT METHOD	PER 1000 FT. ² (92.9 m ²) OF MEMBRANE (APPROX.)
PMPC TAPE**	Butt-Joints/Overlap	126.8 m (416 linear ft.)
POINTING MASTIC***	Detail Strip Edge Terminations	161.0 m/L (2000 linear ft./gal.)
**Water Vapour Perm Rating is 0.0011		
***3.18 mm x 25.4 mm x 60.96 m (1/8" x 1" x 200 LF)		

PRECAUTIONS

PMPC does not negate the need for relief of hydrostatic heads. A complete drain tile system should be placed on the exterior of the footing and, in severe cases, on the interior of the footing as well. If applied to concrete surfaces, repair any spalled areas, fill all voids, and remove sharp protrusions.

Adhesive coverage ratios must be adjusted to compensate for surface irregularities and additional coats may be required to provide proper adhesion. For maximum concrete performance and durability, the floor slab concrete design should provide for the lowest possible slump and yet assure complete hydration of the concrete. Refer to Safety Data Sheet for complete health and safety information.

MASTERFORMAT NUMBER AND TITLE

07 26 16 – Below-Grade Vapour Retarders

25-09-19



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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 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 shall in no event be liable for consequential damages. Unless otherwise agreed to in writing, no warranty is made with respect to materials not manufactured by 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.