## HIGH PERFORMANCE RADON BLOCKING BARRIER MEMBRANE

Superior vapour barrier and general gas membrane





### **Product Description**

Radon Block<sup>™</sup> is a seven-layer co-extruded barrier made from state-of-the-art polyethylene and EVOH resins to provide unmatched impact strength as well as superior resistance to gas and moisture transmission. Radon Block<sup>™</sup> is a highly resilient underslab / vertical wall barrier designed to restrict naturally occurring gases such as radon and/or methane from migrating through the ground and concrete slab. Radon Block<sup>™</sup> is more than 100 times less permeable than typical high-performance polyethylene vapor retarders against Methane, Radon and other harmful VOCs.

Radon Block<sup>™</sup> is one of the most effective underslab gas barriers in the building industry today, far exceeding ASTM E-1745 (Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs) Class A, B and C requirements. Available in a 20 (Class A) mil thicknesses designed to meet the most stringent requirements. Radon Block<sup>™</sup> is produced within the strict guidelines of our ISO 9001:2008 Certified Management System.

#### Product Use

Radon Block<sup>™</sup> resists gas and moisture migration into the building envelop when properly installed to provide protection from toxic/harmful chemicals. It can be installed as part of a passive or active control system extending across the entire building including floors, walls and crawl spaces. When installed as a passive system it is recommended to also include a ventilated system with sump(s) that could be converted to an active control system with properly designed ventilation fans.

Radon Block<sup>™</sup> works to protect your flooring and other moisture-sensitive furnishings in the building's interior from moisture and water vapor migration, greatly reducing condensation, mold and degradation.



Under-Slab Vapor/Gas Retarder

Product	Part #
Radon Block <sup>™</sup>	RBP 20

#### **APPLICATIONS**

Radon Barrier	Under-Slab Vapor Retarder
Methane Barrier	Foundation Wall Vapor Retarder
VOC Barrier	



## Size & Packaging

Radon Block<sup>™</sup> is available in 10' x 150' rolls to maximize coverage. All rolls are folded on heavy-duty cores for ease in handling and installation. Other custom sizes with factory welded seams are available based on minimum volume requirements. Installation instructions and ASTM E-1745 classifications accompany each roll.

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# **RADONBLOCK™**

SO 9001:2008 CERTIFIED MANAGEMENT SYSTEM		RADON BLOCK <sup>™</sup>	
PROPERTIES	TEST METHOD	IMPERIAL	METRIC
APPEARANCE		White/Gold	
THICKNESS, NOMINAL		20 mil	0.51 mm
WEIGHT		102 lbs/MSF	498 g/m²
CLASSIFICATION	ASTM E 1745	CLASS A, B & C	
TENSILE STRENGTH LBF/IN (N/cm) AVERAGE MD & TD (NEW MATERIAL)	ASTM E 154 Section 9 (D-882)	58 lbf	102 N
IMPACT RESISTANCE	ASTM D 1709	2600 g	
MAXIMUM USE TEMPERATURE		180° F	82° C
MINIMUM USE TEMPERATURE		-70° F	-57° C
PERMEANCE (NEW MATERIAL)	ASTM E 154 Section 7 ASTM E 96 Procedure B	0.0098 Perms grains/(ft²·hr·in·Hg)	0.0064 Perms g/(24hr·m²·mm Hg)
(AFTER CONDITIONING) PERMS (SAME MEASURMENTS AS ABOVE PERFORMANCE)	ASTM E 154 Section 8, E96 Section 11, E96 Section 12, E96 Section 13, E96	0.0079 0.0079 0.0097 0.0113	0.0052 0.0052 0.0064 0.0074
WVTR	ASTM E 96 Procedure B	0.0040 grains/hr-ft²	0.0028 gm/hr-m²
RADON DIFFUSION COEFFICIENT	K124/02/95	< 1.1 x 10 <sup>-13</sup> m <sup>2</sup> /s	
METHANE PERMEANCE	ASTM D 1434	< 1.7 x 10 <sup>-10</sup> m²/d∙atm 0.32 GTR (Gas Transmission Rate) ml/m²∙D∙ATM	

**RADON BLOCK™ Placement:** All instructions on architectural or structural drawings should be reviewed and followed. Detailed installation instructions accompany each roll of RADON BLOCK™ and can also be located at www.ravenefd.com. ASTM E-1643 also provides general installation information for vapor retarders.



RADON BLOCK™ is a seven-layer co-extruded barrier made using high quality virgin-grade polyethylene and EVOH resins to provide unmatched impact strength as well as superior resistance to gas and moisture transmission.





RADON BLOCK<sup>™</sup> is marketed and sold by Radon Environmental, a Canadian environmental health and building sciences company focused on reducing public exposure to radon gas. RADON BLOCK<sup>™</sup> is manufactured by Raven Industries, an innovative provider of high performance plastic films and sheeting to major markets worldwide, with a mission to solve great environmental challenges through the latest plastic technologies. Raven Industries and Radon Environmental are partnered to bring superior radon mitigation technologies to Canada.

Note: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance, odor transmission, longevity as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. RAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.

