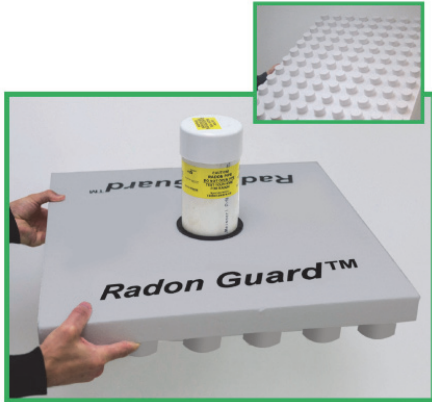


Product Information Bulletin 294

Radon Guard Insulation - Sub-Slab Depressurization Panel

Product Information Bulletin

Radon Guard® Insulation - Sub-Slab Depressurization Panel



Radon Guard® insulation is patented sub-slab depressurization panel. The interconnected channels on the underside of the panel direct soil gas movement between the ground and the air barrier system to a vent pipe in slab on ground applications as required by National Building Code of Canada 2010, Section 9.13.4. The vent pipe is required to connect to a radon gas mitigation system as per applicable code.

CCMC Evaluation Report 13698-R confirms that **Radon Guard** Insulation is a code compliant replacement for a 100 mm thick layer of clean granular fill material as required by code.

Radon Guard insulation material properties below as per CAN/ULC-S701, Type 2 are adequate for typical residential basement slab loads. See Plasti-Fab PIB 300 for information on allowable loads for various **Radon Guard** insulation types. Contact a Plasti-Fab technical sales representative for additional assistance.

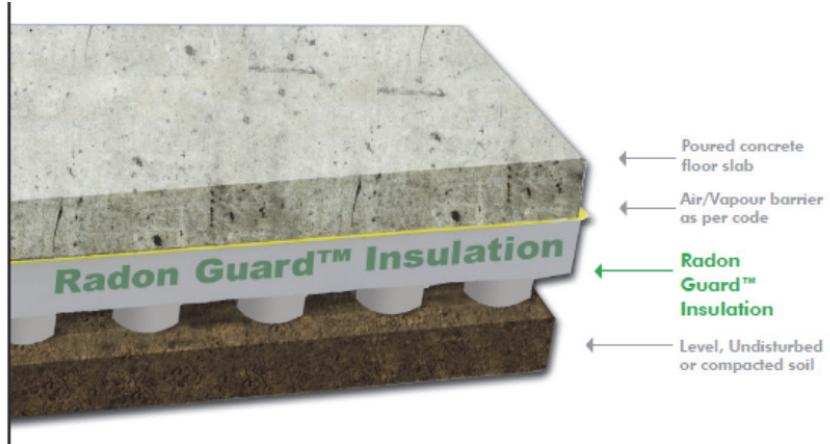
CAN/ULC-S701 Material Properties ¹	Test Method	Units	Values
Thermal Resistance <i>Minimum RSI per 25 mm (R per inch)</i>	ASTM C518	m ² ·°C/W (ft ² ·h·°F/BTU)	0.70 (4.04)
Compressive Resistance <i>Minimum @ 10% Deformation</i>	ASTM D1621	kPa (psi)	110 (16)
Flexural Strength <i>Minimum</i>	ASTM C203	kPa (psi)	240 (35)
Water Vapour Permeance <i>Maximum</i>	ASTM E96	ng/(Pa·s·m ²) (Perms)	200 (3.5)
Water Absorption <i>Maximum</i>	ASTM D2842	% By volume	4.0
Dimensional Stability <i>Maximum, 7 Days @ 70 ± 2°C (158 ± 4°F)</i>	ASTM D2126	% Linear Change	1.5
Limiting Oxygen Index <i>Minimum</i>	ASTM D2863	%	24

¹ CAN/ULC-S701, **Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering** is the National Standard of Canada for moulded expanded polystyrene (EPS) insulation. Material properties are certified under a listing and certification program monitored by Intertek Testing Services.

How does Radon Guard insulation work?

Radon Guard insulation panels are installed with the interconnected channels facing down. This creates a space for radon gas to move to the vent pipe. The radon gas can then be removed when the vent pipe is attached to a mitigation system.

The table below provides dimensions and RSI (R-value) for standard Radon Guard insulation panels available.



Radon Guard Insulation Overall Panel Dimensions		RSI	R-value
millimeters	inches	m ² ·°C/W	ft ² ·h·°F/BTU
914 x 1219 x 89	36 x 48 x 3.5	1.4	8.1
914 x 1219 x 102	36 x 48 x 4.0	1.8	10.1
914 x 1219 x 114	36 x 48 x 4.5	2.1	12.1
914 x 1219 x 127	36 x 48 x 5.0	2.5	14.1
914 x 1219 x 140	36 x 48 x 5.5	2.8	16.2

Note: **Radon Guard** insulation thickness includes 38 mm (1 ½”) high interconnected channels on the underside of panel.