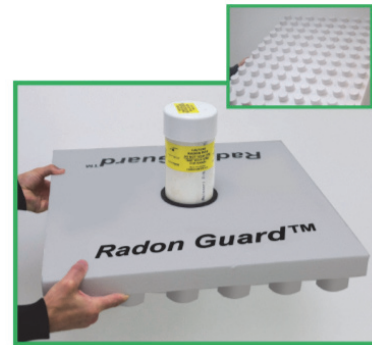
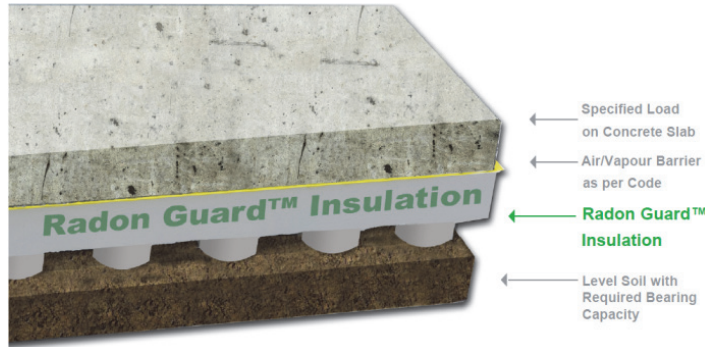


Product Information Bulletin 300

Radon Guard Insulation Specified Load Data

Product Information Bulletin

Radon Guard® Insulation Specified Load Data



Radon Guard® insulation¹ is a patented sub-slab depressurization panel with a pattern of circular legs on the underside that allows for soil gas removal, insulation and a capillary break between the ground and the air barrier system.² This bulletin provides guidance on recommended **PlastiSpan**® insulation types based upon total specified loads calculated using Limit States Design as per National Building Code of Canada (NBCC) 2010 and 2015.

Radon Guard insulation can be manufactured using a variety of **PlastiSpan** insulation types to meet total specified loads for building applications. Designers can compare total specified loads (i.e. total specified live plus dead loads) determined using Limit States Design as per NBCC requirements to factored resistance values provided in Table 1 below for **Radon Guard** insulation manufactured from the **PlastiSpan** insulation types as noted. Minimum soil bearing capacity required to support loads transferred through legs on the underside of **Radon Guard** insulation panels is also provided.

Table 1 – Radon Guard Insulation Factored Resistance

PlastiSpan Insulation Type ³	Factored Resistance		Minimum Soil Bearing Capacity		Typical Building Application
	psf	kPa	psf	kPa	
PlastiSpan HD	235	11	940	45	Residential to Heavy Commercial/Industrial
PlastiSpan 25	313	15	1,253	60	
PlastiSpan 40	522	25	2,089	100	

¹ See Plasti-Fab Product Information Bulletin No. 294 for additional information on **Radon Guard** insulation and PIB No. 358 for recommended installation instructions.

² See Plasti-Fab PIB No. 301 for Evaluation Report CCMC 13698-R confirming Radon Guard™ Insulation compliance with National Building Code (NBC) of Canada 2010 and 2015, Article 9.13.4.3. as alternative solution (replacement) for prescriptive clean granular material.

³ See Plasti-Fab Product Information Bulletin No. 339 for complete material property data on the **PlastiSpan** insulation types listed in Table 1.

The table below provides RSI (R-value) for **Radon Guard** insulation panels made from the **PlastiSpan** insulation types as per Table 1.

Table 2 - PlastiSpan Insulation - RSI (R-value)

Radon Guard Insulation Overall Panel Dimensions	RSI - m ² .°C/W (R-value - ft ² .h.°F/BTU)		
	PlastiSpan HD	PlastiSpan 25	PlastiSpan 40
millimeters (inches)			
914 x 1219 x 89 (36 x 48 x 3.5)	1.4 (8.1)	1.5 (8.5)	1.5 (8.6)
914 x 1219 x 102 (36 x 48 x 4.0)	1.8 (10.1)	1.9 (10.7)	1.9 (10.8)
914 x 1219 x 114 (36 x 48 x 4.5)	2.1 (12.1)	2.3 (12.8)	2.3 (12.9)
914 x 1219 x 127 (36 x 48 x 5.0)	2.5 (14.1)	2.6 (14.9)	2.7 (15.0)
914 x 1219 x 140 (36 x 48 x 5.5)	2.8 (16.2)	3.0 (17.1)	3.0 (17.2)

Note: **Radon Guard** insulation overall thickness dimension includes 38 mm (1 1/2") high interconnected channels on the underside of panel.