



High Performance DPC



Radbar High Performance damp proof course is an engineered tri-polymer that has been developed to give excellent mechanical properties while maintaining outstanding resistance to radon gas and water vapour. Thanks to the product's design it will provide a highly effective barrier for the lifetime of the building.

The prominent key on the DPC creates superior mortar adhesion which is essential when being used in 3+ storey applications. Radbar High Performance DPC is compliant to BS EN 14909:2012 and can be used in both vertical and horizontal applications. The DPC carries British Board of Agreement Certification under certificate number 15/5251, this ensures complete confidence in use and the product has been made to the highest standard. More information can be found on the certificate which can be downloaded at www.capitalvalleyplastics.com.

Physical Properties:

Physical Description	Value
Thickness	600 Micron
Density	0.925 g/cm ³
Colour	Grey
Length	20M
Width	100-1200mm



Advantages

- Outstanding water vapour resistance
- Excellent resistance to radon gas
- Very high puncture and tear resistance
- Superior mortar adhesion
- Part of the Radbar Radon System
- Full range of accessories available
- BBA Certificate No. 15/5251
- Suitable for welding



Storage, handling and protection on site

Radbar High Performance DPC is classified as non-hazardous (code of practice CP101 1973). The membrane is chemically inert and will not react with any acidic or alkaline environment it is laid in. It is not recommended that the DPC is exposed to sunlight for long periods of time. Weathering will not occur when installed, if being stored for a lengthy period, the rolls should be stored undercover, out of direct sunlight on a flat level surface.



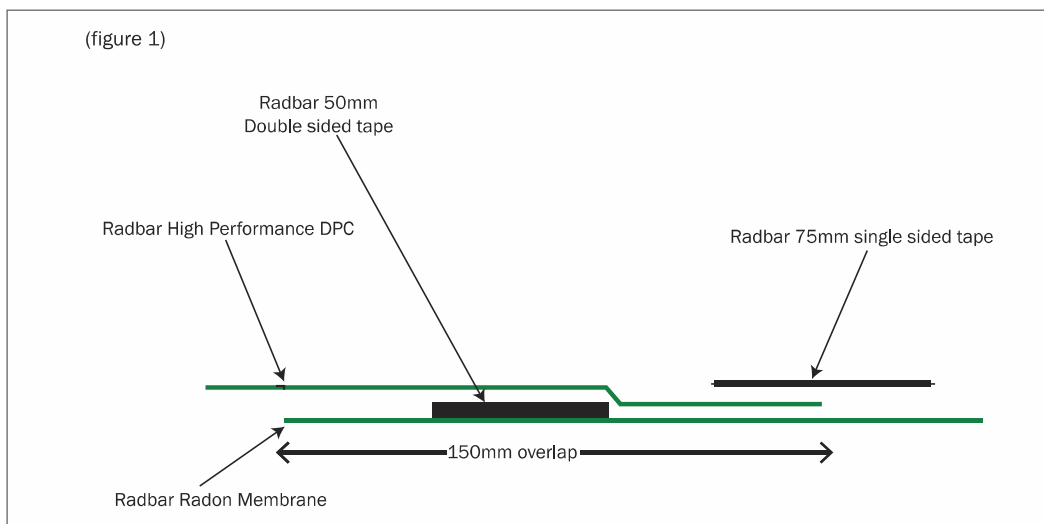
Installation

Radbar High Performance DPC must be installed in accordance with the guidelines laid out in BS 8215:1991, BS 8000:part 3 and BS 5628. Radbar High Performance DPC can be used in most common floor constructions and is installed in a similar manor to standard damp proof membrane. For external walls the DPC should be applied 150mm above the adjoining surface and should be linked to a damp proof membrane or gas barrier in solid floors. The DPC should be applied to a fresh bed of mortar, completely free of projections that may puncture the material or impede the DPC from lying flat.

Jointing of Radbar High Performance DPC

Sheets must be clean and free from dirt and grease before application of Radbar double sided gas tape, and in view of the difficulty of achieving gas tight seals under wet or dirty conditions it is recommended that special care is taken with this aspect of the installation. Unroll one width of the membrane after determining the most effective method of covering the area. Apply the Radbar double sided gas tape about 50mm from the edge, leaving the backing paper on. Lay the next width of membrane overlapping the first by 150mm. Remove the backing paper from the Radbar double sided gas tape and join the top sheet to the bottom sheet by applying pressure with a hand roller. Where the membranes overlap apply the 75mm single sided tape, equidistant on both membranes. See figure 1.

All service entry points must have airtight seals. Top hats and corner pre-forms must be sealed using Radbar Double sided gas tape. (As in figure 1)



Radbar Radon System Components and Accessories

When used in conjunction with other products in the range Radbar High Performance DPC is part of a highly effective complete system to prevent the ingress of Radon gas. These products include but are not limited too:

- Radbar Double sided joint tape
- Radbar Single sided joint tape
- Radbar top hats (110&160mm)
- Radbar Radon membrane
- Radbar Internal/External corners





Radbar High Performance DPC



Radbar High Performance DPC complies with EN 14909:2012 and in addition to this it also acts as an effective barrier against radon gas. Suitable for use in 3+ storey building applications. All results below come from an independent test laboratory.

Length	EN 1848-2	M	-0% / +10%	20
Width	EN 1848-2	mm	-0% / +2.5%	100-1200
Thickness	EN 1849-2	mm	+10% / -10%	0.6
Mass	EN 1849-2	g/M ²	+2% / -2%	552
Tensile strength- MD	EN EN 12311	N/mm ²	≥MLV	24
Tensile strength- CD	EN EN 12311	N/mm ²	≥MLV	22
Tensile Elongation- MD	EN EN 12311	%	≥MLV	398
Tensile Elongation- CD	EN EN 12311	%	≥MLV	446
Joint Strength	EN12317-2	N	≥MLV	520
Watertightness 2kPa	EN 1928	-	Pass/Fail	Pass
Resistance to impact	EN 12691	mm	≥MLV	660
Resistance to static loading	EN12730	Kg	≥MLV	20
Resistance to nail tear- MD	EN 12310-1	N	≥MLV	700
Resistance to nail tear- CD	EN 12310-1	N	≥MLV	750
Durability- heat ageing	EN 1926	-	Pass/Fail	Pass
Durability- Chemical resistance	EN 1847	-	Pass/Fail	Pass
Water vapour permeability	EN 1932	g/m ² /day	≥MLV	0.1
Reaction to Fire	EN 13501-1	Class	TYPE	F
Resistance to low temperature	EN 495-5	-	Pass/Fail	Pass @ -40
Chemical Resistance - Acidic	EN 14414-A	% Elongation	≥MLV	MD - 367 CD - 488
Chemical Resistance - Basic	EN 14414-B	% Elongation	≥MLV	MD - 388 CD - 487
Chemical Resistance - Solvents	EN 14414-C	% Elongation	≥MLV	MD - 388 CD - 518
Resistance to Leaching - Hot Water	EN 14415-A	% Elongation	≥MLV	MD - 377 CD - 404
Resistance to Leaching - Aqueous alkaline	EN 14415-B	% Elongation	≥MLV	MD - 361 CD - 428
Resistance to leaching - Organic Alcohol	EN 14415-C	% Elongation	≥MLV	MD - 388 CD - 449
Radon Permeability *		M ² /S	≥MLV	9.5 x 10 ⁻¹²

* Test result from 360 micron material

As part of EN14414 and EN14415 there were no visual defects to the membrane for all methods A, B and C, the membrane's appearance remained as new.

N.B. The information provided in the datasheet is based on independent laboratory results and correct at the time of production



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