



SOLCOURSE GR DPC

Gas Resistant Tri-polymer DPC

Solcourse GR DPC is a specially engineered tri-polymer material that provides a highly effective barrier against Radon, Carbon Dioxide, Methane, Hydrocarbon gases and Water Vapours.

- Complies to BS 8485: 2015 and CE Marked.
- Outstanding water vapour resistance
- Gas Resistant to Radon, CO2 and Methane gases
- Very high strength, puncture and tear resistant
- Flexible at low temperatures and good mortar resistance
- Suitable for site welding
- Suitable for use on NHBC Amber 1 and 2 sites



SOLCOURSE - DPC / DPM System

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Product Description

Solcourse GR DPC's tri-polymer structure delivers excellent mechanical properties while maintaining outstanding resistance to Radon, Carbon Dioxide and Methane gases as well as water vapour. This design feature will also provide a highly effective barrier for the lifetime of the building. Solcourse GR DPC is fully compliant to BS 8485:2015 and ISO 15105-1 test standard.

The prominent key on the Solcourse GR DPC creates superior mortar adhesion which is essential when being used in 3+ storey applications. Solcourse GR DPC is compliant to BS EN 14909:2012 and can be used in both vertical and horizontal applications.

As part of the extensive testing Solcourse GR DPC has undergone, it was subjected to accelerated life immersion tests. These tests, EN 14414 and EN 14415, require the membrane to be subjected to a range of challenging chemicals at 50 C and then retested to establish any affects these chemicals have had on the integrity of the membrane. Full results can be found on the technical data sheet.

Physical Properties

Thickness	800 Micron
Density	0.925 g/CM3
Colour	Black
Length	20m
Width	100-1200mm

Installation

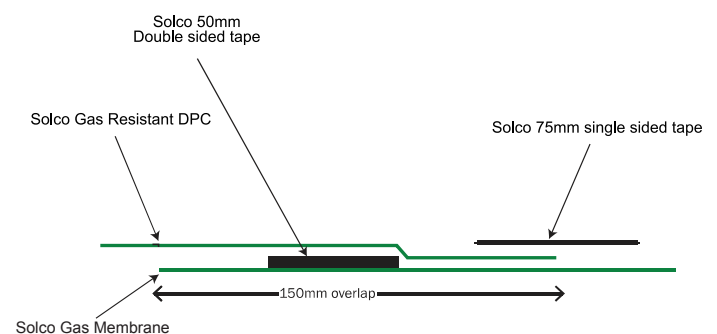
Solcourse GR DPC must be installed in accordance with the guidelines laid out in BS 8215:1991, BS 8000: part 3 and BS 5628. It can be used in most common floor constructions and is installed in a similar manor to standard damp proof membrane. For external walls the DPC should be applied 150mm above the adjoining surface and should be linked to a damp-proof membrane or gas barrier in solid floors. Solcourse GR 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

Sheets must be clean and free from dirt and grease before application of Solco double sided butyl 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 Solco double sided butyl 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 Solco double sided butyl 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 Solco double sided butyl tape. As an alternative to using jointing tapes the DPC can be welded providing this is done to a high standard by trained installers.

(figure 1)



Storage & Protection

Solcourse GR 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 and out of direct sunlight on a flat level surface.

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Solcourse System Components

When used in conjunction with other products in the Solco range Solcourse GR DPC is part of a highly effective complete gas system. These products include

- Solco Double Sided Butyl Tape
- Solco Foil Backed Jointing Tape
- Solco Top Hats
- Solco Gas Sumps
- Solco Int / Ext corners
- Solco DPC Fixing Stips
- Solco Joint support System

Technical Performance & Test Data

Length	EN 1848-2	M	-0% / +10%	20
Width	EN 1848-2	M	-0% / +2.5%	300-1200
Thickness	EN 1849-2	mm	+10% / -10%	0.8
Mass	EN 1849-2	g/M ²	+2% / -2%	730
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	0.09
Reaction to Fire	EN 13501-1	Class	TYPE	F
Resistance to low temperature	EN 495-5	-	Pass/Fail	Pass @ -40
Methane permeability	ISO 15105-1	ml (m ² /day/atm)	≥MLV	33.9
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

