

## Solcourse GR DPC

### Description:

Solcourse Gas Resistant DPC is a flexible sheet comprising a mixture of three thermoplastic polymers and other additives, extruded into a sheet form with an embossed surface to assist mortar adhesion. Solcourse GR DPC provides 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+A1:2019 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 effects these chemicals have had on the integrity of the membrane.

### Installation:

Solcourse 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 manner to standard DPMs.

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 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.

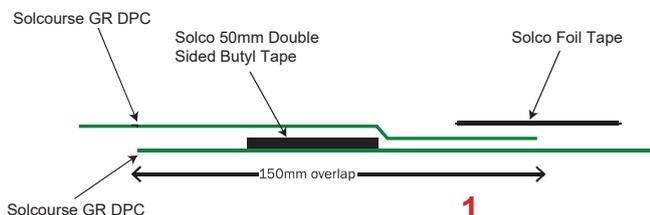
### Jointing:

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+A1:2019 and ISO 15105-1 test standard.

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All service entry points must have airtight seals. Top hats and corner pre-forms must be sealed using Solco D/S 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.



- Complies to BS 8485:2015+A1:2019.
- CE Marked.
- Outstanding water vapour resistance.
- Gas Resistant to Rn, CO<sub>2</sub>, and CH<sub>4</sub> gases.
- Very high strength, puncture and tear resistance.
- Flexible at low temperatures and good mortar resistance.
- Suitable for site welding.
- Suitable for use on NHBC Amber 1 and 2 sites.

#### Roll Sizes

100mm to 1200mm x 20m



Solco, Unit 51, Portmanmoor Road Industrial Estate, Ocean Park, Cardiff, CF24 5HB

## Technical Data:

Property	Test Method	Value
Thickness	EN 1849-2	0.80mm
Mass	EN 1849-2	0.77 kg/m <sup>2</sup>
Tensile Strength - MD	EN 12311	24 N/mm <sup>2</sup>
Tensile Strength - CD	EN 12311	22 N/mm <sup>2</sup>
Tensile Elongation - MD	EN 12311	398%
Tensile Elongation - CD	EN 12311	446%
Joint Strength	EN 12317-2	520 N
Watertightness at 2 kPa	EN 1928	Pass
Resistance to Impact	EN 12691	660mm
Resistance to Static Loading	EN 12730	20kg
Resistance to Nail Tear - MD	EN 12310-1	725 N
Resistance to Nail Tear - CD	EN 12310-1	750 N
Durability - Heat Ageing	EN 1926	Pass
Durability - Chemical Resistance	EN 1847	Pass
Water Vapour Permeability	EN 1932	0.09 g/m <sup>2</sup> /day
Reaction to Fire	EN 13501-1	F
Resistance to Low Temperature	EN 495-5	Pass (At -20°C)
Methane Permeability	EN 15105-1	33.9 ml (m <sup>2</sup> /day/atm)
Radon Permeability*		6x10 <sup>-12</sup> m <sup>2</sup> /s
Chemical Resistance - Acidic	EN 14414-A	MD - 367% CD - 488%
Chemical Resistance - Basic	EN 14414-B	MD - 388% CD - 487%
Chemical Resistance - Solvents	EN 14414-C	MD - 388% CD - 518%
Resistance to Leaching - Hot Water	EN 14415-A	MD - 377% CD - 404%
Resistance to Leaching - Aqueous Alkaline	EN 14415-B	MD - 361% CD - 428%
Resistance to Leaching - Organic Material	EN 14415-C	MD - 338% CD - 449%
Water Vapour Transmittance	EN 14415-C	0.1 g/m <sup>2</sup> /day

Characteristic Shear Strength	
Pre-Compression (N.mm <sup>-2</sup> )	Characteristic Shear Strength (N.mm <sup>-2</sup> )
0.2	0.14
0.6	0.34
1.0	0.52

## Storage & Handling on Site:

Solcourse GR DPC is classified as non-hazardous (code of practice CP102 1973). The product is chemically inert and any acids or alkalis present in the subsoil will not affect the product. It is not recommended for use when exposed to sunlight and general outdoor weather conditions for long periods of time, and weathering will not occur when installed. Rolls should be stored on end and under cover and on a flat, level surface. Contact with organic solvents must be avoided.

The product is handled and cut using the same techniques as traditional DPCs. It retains sufficient flexibility when used at the lowest temperatures at which walls are normally built and does not become tacky in warm, ambient weather conditions. However, if stored at low temperatures, Solcourse GR DPC should be left in a warm place before use to improve handling.

Difficulties may occur when forming certain details, particularly when bending the product through two angles at the same time. In such cases, care must be taken to achieve a satisfactory seal, and, where necessary, preformed cloaks should be used. Care should be taken at temperatures below 5°C to avoid the risk of condensation on jointed surfaces, which may affect the efficiency of the self-adhesive tapes.

### Solcourse GR DPC System Accessories

Solco Top Hats	Form an effective seal where a pipe, duct, or service penetrates Solco membranes.	Units
Solco Double Sided Butyl Tape	A double-sided synthetic butyl mastic tape, used for securing joints and laps in DPC's, Cavity trays & pre-formed Cloaks.	Rolls
Solco Foil Tape	A single-sided tape for securing laps & joints.	Rolls
Solco Venting Accessories	Allows the effective venting of gas from beneath a building.	Units
Solco Int / Ext Corners	Preformed units that ensure protection at corners.	Units
Solco DPC Fixing Strips	Used to surface fix Solcourse DPC cavity trays and preformed cloak units to the inner leaf.	Packs
Solco DPC Fixing Strips (Masonry)	Used for surface fixing Solcourse high performance DPC systems to any solid internal substrate such as brick, stone, and concrete.	Packs
Solco DPC Fixing Strips (Insulation)	Used for surface fixing to the rigid insulation of composite inner skins.	Packs
Solco HP Insulation Fixing	For applications requiring high pull out resistance, or for fixing to poor quality base materials.	Packs
Solco Insulation Panel Fixing	Recommended for securing rigid insulation, EPS, High-Density Rockwool and Composites, to solid base materials.	Packs
Solco Insulation Retaining Washers	Used in conjunction with screws to secure insulation to timber, sheet steel, and other non-standard base materials.	Packs
Solco DPC Blanking Plug	Offers a solution to the problem of sealing holes drilled in bricks and mortar for the installation of DPC Chemicals.	Packs
Solco Soft Washer Fixing	For securing Solco drainage & waterproof applications to concrete etc by hand nailing or shot-firing.	Packs
Solco Membrane Fixing Plugs	Used in damp proofing applications to secure the specialist membranes to the base material - usually brickwork and concrete.	Packs
Solco DPC Joint Support System	Polypropylene Support Boards used in conjunction with Solco Butyl DPC Jointing Tape.	System