

SOLSHEET GR SAM

Gas Resistant Self Adhesive Membrane

SOLSHEET Gas Resistant Self Adhesive Membrane is a preformed waterproofing and gas proofing system, compatible with concrete, smooth brickwork and blockwork or screeded substrates.

- Excellent resistance to chlorides, sulphates, alkalis and acids.
- Can also be used as a gas resistant DPM - resistant to Radon, Methane and CO₂ gases, as well as Hydrocarbon vapours.
- Cross-laminated film – provides dimensional stability, high tear strength, puncture and impact resistance.
- Flexible - will accommodate minor settlement and shrinkage.
- Meets the requirements of BS 8485:2015 and EN ISO 15105-1.
- Polymer modified bitumen coating - resistant to UV.
- Cold applied – no heating required on site.
- Full design and on-site technical support.
- **BBA Approved & CE Marked.**

SOLCO



Product Details	
Thickness	1.5mm ± 0.2
Widths (m)	≥ 1.0m
Length (m)	20m
Roll Weight	32kg
Colour	Black
Coverage	18.9m ² (inc. Standard Laps)



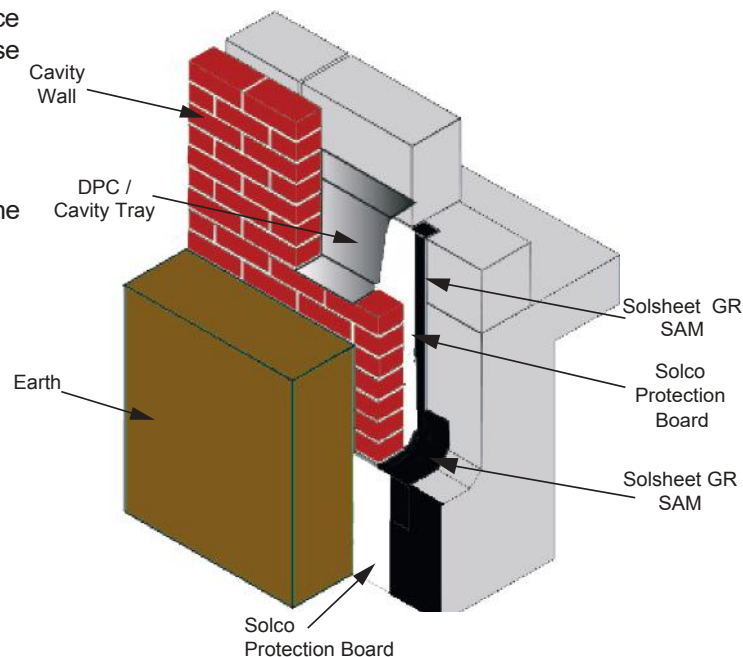
SOLSHEET - Waterproofing Systems

Last Issue Date: 01.01.19
Rev 3

SOLSHEET Gas Resistant Self Adhesive Membrane is a 1.5mm thick, cross-laminated, polythene membrane coated on the lower surface with a layer of polymer-modified bitumen - protected by a layer of release film.

Resistance to gas is achieved with a SBS polymer-modified bitumen compound reinforced with HDPE, laminated with a 50 micron thick aluminium film. The membrane has a thin thermally bonded polyethylene protective film on the upper side and a release film on the lower.

SOLSHEET Gas Resistant Self Adhesive Membrane conforms to the requirements of BS 8485 and BS 8102. Substrates should be primed with SOLSEAL Bitumen Primer prior to application. SOLSHEET Gas Resistant Self Adhesive Membrane can be used with Solcourse GR DPC and other Solshield Gas Membranes



Typical Detail

Please contact our Technical department for project specific application details

Technical Data	Value	Test Method
Watertightness	Pass (10kPa)	EN 1928:2000 (B)
Longitudinal tensile strength	300 ± 70 N/50 mm	UNE-EN 12311-1
Transversal tensile strength	300 ± 70 N/50 mm	UNE-EN 12311-1
Peeling Strength	4 N/mm	UNE-EN 12316
Elongation (L x T)	10 ± 5 %	UNE-EN 12311-1
Resistance to root penetration	Pass	prEN 13984
Resistance to static loading	≥ 5 Kg	UNE-EN 12730
Resistance to impact	NPD	EN 12691:2006
Longitudinal resistance to tearing (nail shank)	180 ± 50 N	UNE-EN 12310-1
Transversal resistance to tearing (nail shank)	140 ± 70 N	UNE-EN 12310-1
Flexibility at low temperature	< -15	UNE-EN 1109
Humidity resistance factor	115.000	EN 1931
Softening point	110°C	UNE-EN 1427
Penetration at 25°C	70 dmm	UNE-EN 1426

Technical Data	Value	Test Method
Water Vapour Transmission	<0.1 g/m ² /day	EN 1931
Methane Gas Permeability	<2.90 ml/m ² /day	EN ISO 15105-1
Radon Gas Permeability	< 50 Bq/m ³	(²²² Rn) (CSI)
Heat resistance at elevated temperature	>90 °C	UN-EN 1110
Dimensional stability at elevated temperature (longitudinal)	< 1.0 %	UNE-EN 1107-1
Dimensional stability at elevated temperature (transversal)	< 1.0 %	UNE-EN 1107-1

Self Adhesive Membrane Installation Guide

The installation and repair should be subject to third-party independent validation, in accordance with BS 8485 : 2015.

Surface Preparation: Applied To Concrete, Masonry, Steel & Timber

All surfaces should be smooth, clean and dry. Loosely adhering material and sharp protrusions should be removed by mechanical means. Concrete or renders should be allowed to dry before applying Solsheet membrane.

Priming:

All vertical surfaces should be primed using **Solseal HP Emulsion/Primer**. Horizontal surfaces do not require priming where the membrane is covered with a screed, floor slab etc. Priming should be carried out as follows:

1. Roll can well before use.
2. Apply at the rate of approximately 6m²/L. Only prime the area which is to be covered with Solsheet within the next 4 hours. Allow to dry for at least 1 hour until touch dry. Keep free from dust.
3. On very porous surfaces, use two coats of primer.

Application:

Waterproofing of Basements, Ground Floors, Reservoirs & Retaining Walls.

Internal angles must always be provided with an adequate sand cement fillet. After priming as previously described a 300mm wide reinforcing strip of Solsheet must be applied with 150mm on either side of the centre of the fillet.

External angles or corners must be provided with a 25mm x 25mm splay and this covered with a 300mm wide strip of **Solsheet XL**, applied equidistant from the centre of the splay.

Horizontal membrane:

This should preferably be laid prior to the application of the vertical membrane, adequately protected from damage by a minimum 25mm screed or protection board, with the membrane bonded to the vertical surface at least 200mm above the top of the screed so that the vertical Solsheet can be overlaid. If it is not possible to apply the screed over the DPM before the application of the vertical membrane, full and adequate protection must be given to the horizontal membrane to prevent damage.

Vertical membrane:

Cut off the appropriate length of membrane, then starting at the top of the area to be waterproofed, peel off at least 200mm of release sheet and bond the Solsheet firmly to the surface, tucking the end of the material into the appropriate DPC or chase. Gradually peel off the remainder of the release sheet downwards, at the same time rolling the material against the surface until the bottom of the wall is reached. At the base, the vertical membrane must overlap the horizontal membrane by at least 100mm. All subsequent sheets must overlap the preceding sheet by 50mm at the edges and by 100mm at ends. Overlaps must be thoroughly rolled to ensure adequate bonding.

Backfilling:

On vertical applications where an abrasive backfill is to be used the Solsheet membrane should be protected by a concrete outer skin, brick skin or Solsheet protection board, the latter being held in place by Solco 50mm Butyl tape.

Precautions:

Solsheet and Solsheet Primer must not be applied when the surface temperature of the substrate falls below 5°C. When a brick-skin is applied to the face of the vertical Solsheet, care must be taken not to damage the membrane and a gap of 40mm should be left which is filled with sand/cement mortar as work proceeds. Only sufficient Solsheet should be laid which can be protected as work proceeds. When areas of Solsheet are left exposed for any length of time ensure that all edges are held in place by battens.

Storage & Handling on site

SOLSHEET Self Adhesive Membrane 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 membrane. It is not recommended for use when exposed to sunlight and general outdoor weather conditions for long periods of time. Weathering will not occur when installed. Rolls should be stored undercover. Quality control during the laying of the membrane is extremely important the membrane should be protected either through the use of temporary boarding over its whole area or the immediate laying of the concrete slab.

Rolls should be stored in dry conditions under cover, on their end. The temperature must be maintained at between 5°C and 30°C.

Repair

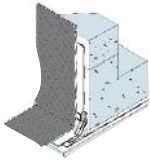
Damage to the products can be adequately repaired by patching prior to the application of protection or backfilling.

Solsheet Waterproof System Ancillaries



Solseal HP Emulsion/Primer is a quick drying liquid applied, low viscosity bitumen solution used to prime and seal porous substrates and promotes the adhesion of bituminous waterproofing systems prior to application of Solsheet Membranes.

Technical Data	
Packaging	5, 25 & 205 Litres
Coverage	10m ² /L



Solco HD Bitumen Protection Board is a tough, reinforced flexible bitumen modified board for the protection of adhesive waterproofing membrane and other types of waterproofing membranes against damage by abrasive backfill materials and poured concrete.

Technical Data	
Sheet Size	1.0m x 2.0m
Thickness	3mm / 6mm
Weight	8kg / 16kg



Solco XL Jointing / Reinforcing Tape is a self adhesive tape used as reinforcing / over-banding tape for securing waterproofing membranes at overlaps, edge and corner details and is available as standard or as a Gas Resistant XL Tape.

Technical Data	
Roll Width(s)	100 / 150 / 300mm
Roll Length	20m
Thickness	1.5mm

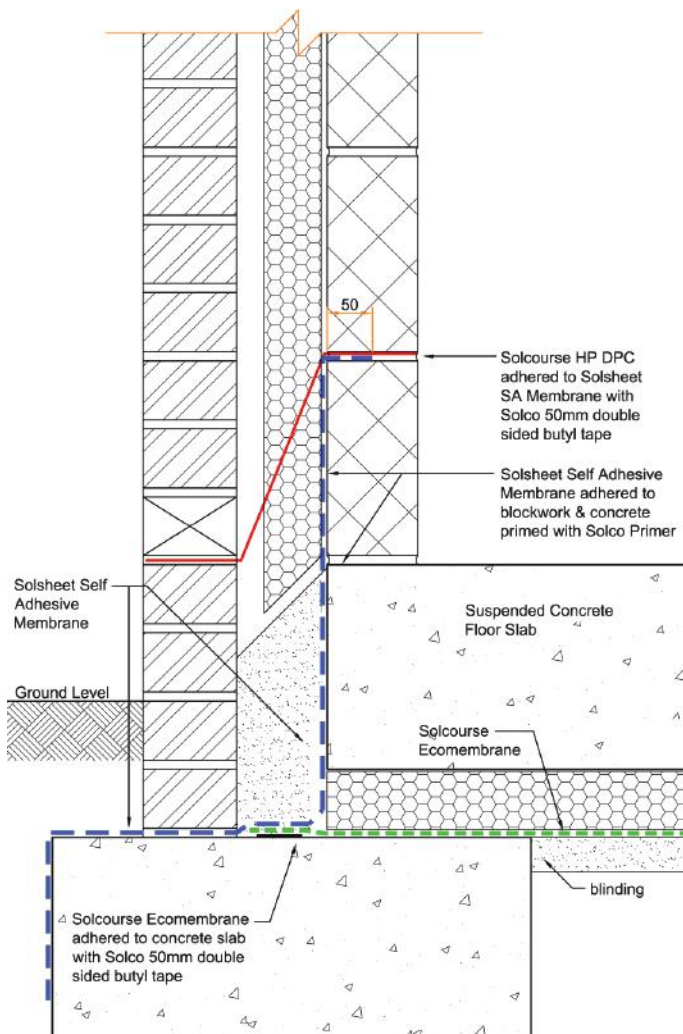


Solco Butyl Tape is a black double sided synthetic rubber based high performance butyl mastic tape. It can be used for bonding waterproofing and gas protection membranes at overlaps and for bonding membranes to DPCs, and fixing of other accessories such as top hats.

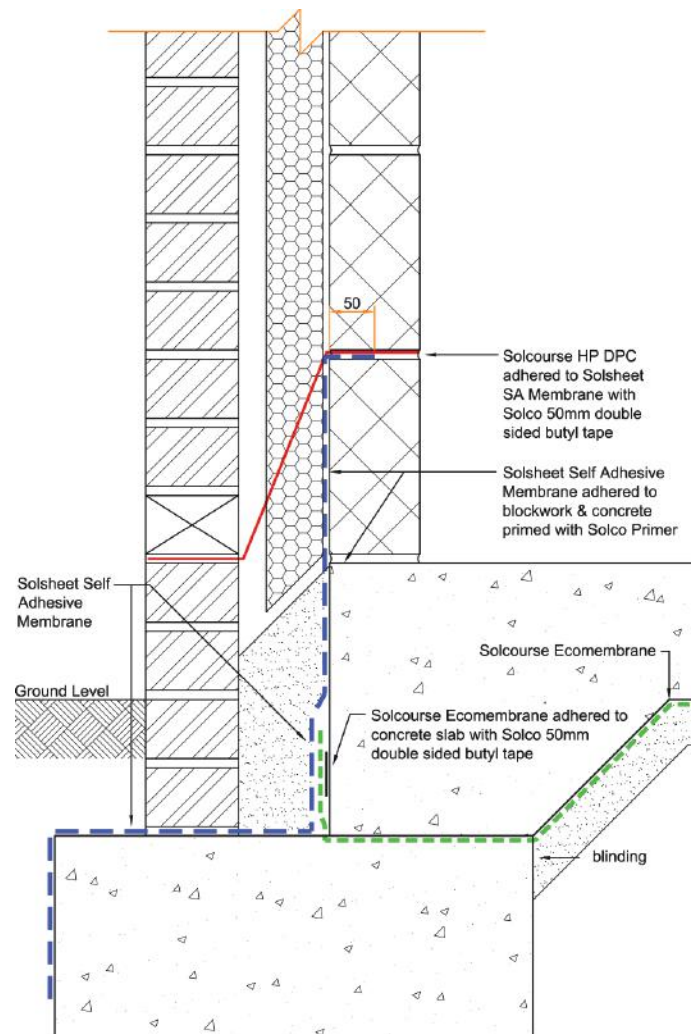
Technical Data	
Roll Width	50 / 100mm
Roll Length	10m

SOLSHEET - Waterproofing Systems

Last Issue Date: 01.01.19
Rev 3



**Typical Slab Edge Detail (Suspended)
Standard Construction**



**Typical Slab Edge Detail (Ground Bearing)
Standard Construction**

Please contact our Technical department for project specific application details