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SOLSHIELD Radon Gas Barrier



- BBA Agrément Certificate 12/4945
- CE Marked
- Complies with relevant codes of practice such as current BRE and CIRIA
- Suitable to protect against the ingress of Radon & Carbon Dioxide (CO₂)
- High resistance to puncture.
- Also acts as a damp proof membrane

Description

SOLSHIELD Radon Gas Barrier is a very effective gas barrier for the protection of buildings and occupiers from the ingress of gas and moisture. The building regulations require that proper precautions be taken to prevent danger to health and safety when building on gas contaminated land. When installed SOLSHIELD Radon Gas Barrier is an effective solution to the problem and can be laid with confidence. It's distinctive Green colour ensures that material can easily be identified. Typical areas where the membrane may be used are, coalfields, contaminated industrial sites, landfill & brown field sites.

Installation

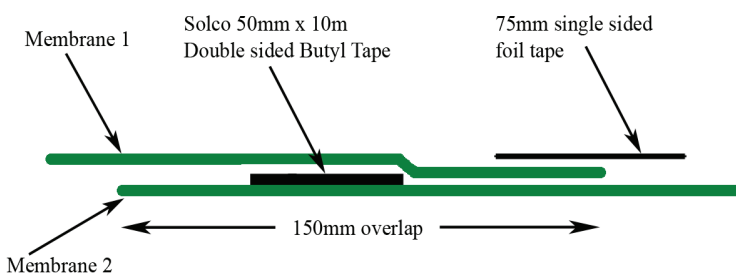
SOLSHIELD Radon Gas Barrier must be laid in accordance with the Building Research establishment BRE No.414. "Protective measures for commercial or residential application on gas contaminated land" and can be used in most common floor constructions. SOLSHIELD Radon Gas Barrier is installed in a similar way to damp proof membranes, but with much greater attention to joint sealing of the gas resisting membrane, under wall sealing and workmanship.

Where there is risk of hydrostatic pressure this product is not intended for use. The membrane should be laid on a smooth surface or sand blinding to prevent the membrane from puncture. The membrane must be free from grease and dirt. SOLSHIELD Radon Gas Barrier should be protected as soon as possible once installed.

Jointing Solshield Radon Gas Barrier

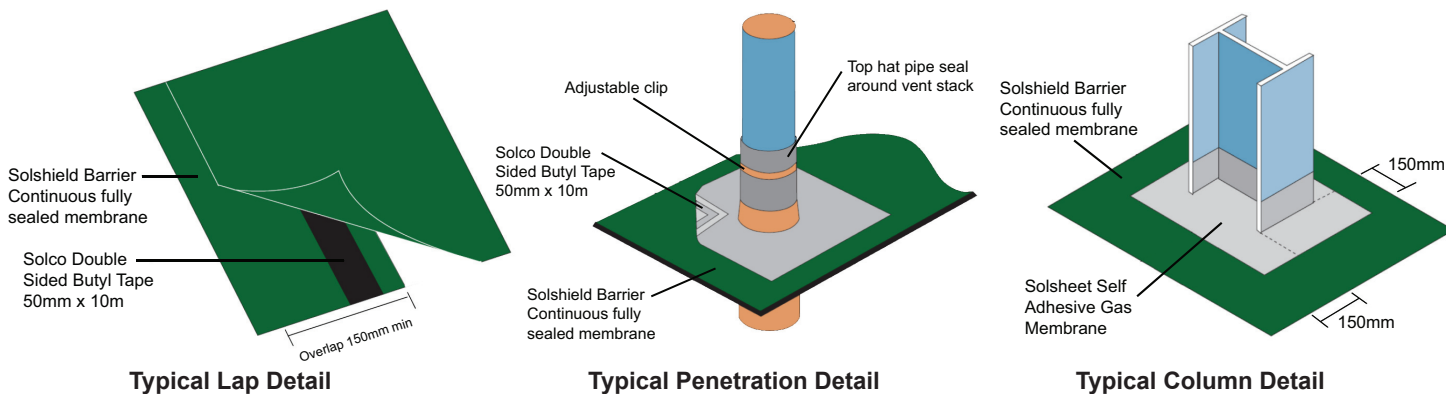
Unroll one width of the membrane after determining the most effective method of covering the area. Apply the double sided butyl tape about 50mm from the edge, leaving the backing paper on. Lay the next width of membrane overlapping the first by 150mm. Remove the backing paper from the double sided butyl 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 foil tape, equidistant on both membranes (see detail below). All service entry points must have airtight seals Top hats and corner pre-forms must be sealed using double sided butyl tape and Sealant. (As shown overleaf)



Technical Data	
Thickness	300mu
Width (m)	4 metres - 0 + 2.5%
Length (m)	25 metres - 0 + 10%
Roll Weight	27.6kg
Colour	Green
Radon Gas Permeability (Rn-222) <small>Tested on 300 micron Material</small>	
Radon Permeability (m ² .S ⁻¹)	6 ±15%
Radon Transmittance (10 ⁻⁹ M/S-1)	5 ±15%
Technical Performance	
BS 3177 1959 (1995)	Water Vapour Resistance (MNsg ⁻³) 708
BS EN ISO (1997)	Mass (g/cm ²) 368
Elongation (BS 2782 1976 (1996) Method 320A)	Unaged: Long 600% Trans 600%
Tear Strength (N) (MOAT 27 : 5.4.1 BS 747)	>118

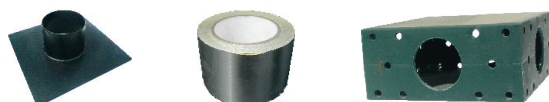
Typical Jointing Details for Solshield Radon Gas Barrier



Storage & Handling on site

SOLSHIELD Radon Gas Barrier 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.

Gas System Accessories



Product	Description	Sizes	Application	Supply
Solco Foil Backed Jointing Tape	Single sided tape for securing laps & joints	75mm x 50m	Securing Laps & Joints	Rolls
Solco Double sided Butyl Jointing Tape	Butyl Adhesive Tape	50mm x 10m	Butyl based double sided tape for joints and laps	Rolls
Solco Top Hat Units	Polymeric	Various	For sealing around penetrations through gas membrane	Each
Solcourse Gas Resistant DPC	A flexible polyethylene DPC with an aluminium foil	300mm - 1000mm	To prevent the transmission of Radon, CO ₂ & Methane Gas	20m Rolls
Solco Gas Sump Units	Part of the Radon Protection System	430 x 430 x 220mm	Radon Sumps are used in full protection areas, where sub floor depressurisation may be required.	Each
Solco XL Jointing Tape	Reinforcing Tape	100, 150 & 300mm wide	overband tape self-adhesive	20m Rolls
Solco Primer	Primer for SA Membrane	5L & 25L	Surface Primer	Drums
Solco Protection Boards	Bitumen / Polymeric	3mm thick	For heavy duty use	2m x 1m
Solco Corrugated Board	Plastic Corrugated	2mm thick	For light duty use	2m x 1m

Solsheet Self Adhesive Gas Membrane



Solsheet Self Adhesive Gas Membrane is designed to prevent the transmission of carbon dioxide, radon and methane gases in tanking applications or where hydrostatic pressure is present. This is in addition to the products usage as a damp proof membrane.

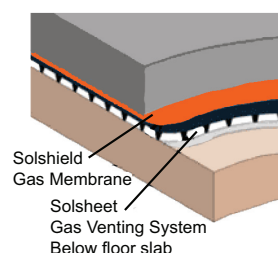
The product is a tough, durable, selfadhesive sheet with an overall thickness of 1.5 mm. Resistance to gas is achieved by an integral aluminium film. Solsheet Self Adhesive Membrane should be used along with the Solsheet Primer Solution, providing the optimum surface to receive the Self Adhesive Membrane.

Product	Sizes	Supply
Solsheet SA Gas Membrane	1.05mm x 19.05m	20m ² Rolls
Solsheet SA Membrane	1.05mm x 19.05m	20m ² Rolls

A full range of Self Adhesive Membrane System Components are available.

Solshield Gas Venting

Gas Venting System is a single cusped geocomposite comprising of a pre-formed HDPE core with a bonded non-woven needle punched geotextile filter fabric, specifically designed as a primary venting layer.



The venting system should be used on any site where a sub-slab gas venting system is required in a building development. As the primary part of any gas venting system, it needs to be connected to the required amount of air inlets and outlets. The gas system is sufficiently able to vent harmful gases from the underside of a building, when used in conjunction with an appropriate gas resistant membrane.

Product	Sizes	Supply
Soldrain Gas Vent	12mm & 25mm x 1m x 50m	Rolls

A full range of Gas Venting System Components are available.