

Gas Resistant Self Adhesive Membrane Data Sheet



The Cordek Gas Resistant Self Adhesive Membrane is generally used within foundation construction, predominantly to prevent the transmission of ground gases in both horizontal and vertical applications. It is manufactured using an aluminium/polythene laminate coated on one surface, with an additional layer of self-adhesive polymer modified bitumen.

Key Features

- Membrane incorporates an aluminium foil core to provide resistance to the passage of methane, carbon dioxide and radon gases
- Provides additional waterproofing protection to the structure as part of an overall waterproofing system
- Excellent adhesion properties to primed surfaces
- Can be installed in both vertical and horizontal applications, above and below ground.

Installation

In order to provide a robust installation, all surfaces should be free from dust, debris, frost or condensation. The substrate that the membrane is being applied to should be primed prior to installation.

Once the primer is suitably dry, the release paper on the rear side of the membrane should be peeled back to expose the adhesive bitumen layer on the underside of the membrane. This should be applied to the primed substrate, utilising a hot air welder where possible to aid adhesion.

For further information on the full range of VOC & Ground Gas Protection, please contact the Cordek technical team on 01403 799600, techsupport@cordek.com or consult our website at www.cordek.com.

The membrane should be rolled onto the surface so that any trapped air is removed to ensure a suitable bond.

All laps and junctions within the membrane should be overlapped by a minimum of 150mm. It is recommended that any penetrations within the membrane should be effectively sealed using the appropriate accessories and recommended details – please contact the Cordek technical team for further advice.

For further information on the installation of the Cordek Gas Resistant Self Adhesive Membrane please refer to the separate installation guide, available from Cordek's technical team upon request.

Protection & Repair

All installed areas of the Cordek Gas Resistant Self Adhesive Membrane should be inspected for defects, holes, blisters, un-dispersed raw materials, and any sign of contamination by foreign matter prior to covering. The surface of the membrane should be clean at the time of inspection and free from debris.



Following installation of the membrane, the installer and specifier should assess the requirement for additional protection prior to the positioning of reinforcement and placement of concrete/backfill. If it is felt that additional protection is required, then the Cordek Correx protection system should be used directly above the membrane.

If the membrane is damaged, it should be repaired by means of patching. The patch should be made of the same barrier membrane and should extend at least 150mm outside the damaged area in order to ensure that the damaged area is covered completely. The patch should be prepared and placed over the damaged section, ideally with the use of a hot air gun, to ensure adhesion between both surfaces. Pressure should then be applied to the patch by means of a hand roller.

Storage & Handling

Care should be taken when moving, transporting or handling to avoid damage, puncturing or tearing, which can affect the performance of the membrane.

The membrane should be stored undercover to protect from puncture, dirt, grease, moisture, sunlight and excessive heat. Damaged material should be quarantined and stored separately for repair or replacement. The rolls should be stored on a prepared smooth dry surface (or fully boarded wooden pallets; note that slatted pallets with sharp corners will damage the rolls) and stacked no more than two rolls high. The bottom rolls need to be chocked to prevent them from rolling. Storage between 5°C to 30°C at 40 to 65% humidity under non-condensing conditions is recommended.

Product Data

Typical Properties:

Property	Test Method	Units	Data
DIMENSIONS			
Backing Thickness	-	mm	0.125
Backing Type	-	-	Aluminium Polythene Laminate
Adhesive Thickness	-	mm	0.98
Total Thickness	-	mm	1.15
Width	-	mm	1000
Length	-	m	20
Weight, approx.	-	kg/m ²	1.2
MECHANICAL PROPERTIES			
Membrane Strength	ASTM D1000	N/mm	3.0
Elongation	ASTM D1000	%	40
Puncture Resistance	ASTM E154	N	250
Adhesion (180° Peel)	ASTM D1000	N/mm	2.0
FUNCTIONAL DATA			
Water Vapour Transmission	ASTM E96	g/m ² /24h	<0.1
Methane Gas Permeability	-	ml/m ² /24 hrs	<0.03
Radon Diffusion	-	m ² /s	5.0 X 10 ⁻¹⁴
Dimensional Stability	MOAT 27 5.1.6 (80°C)	%	
Longitudinal			0.0
Lateral			0.0

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