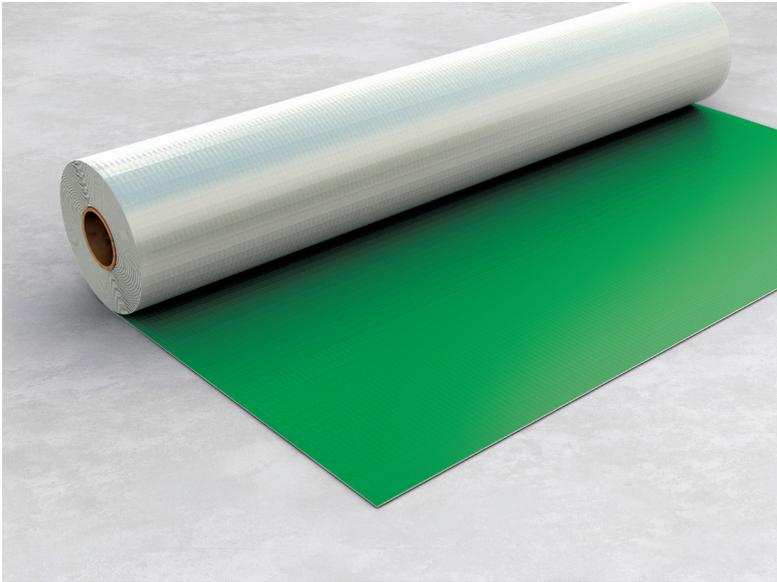


# Tri-Gas Membrane Data Sheet



The Cordek Tri-Gas Membrane is a high performance gas membrane for use in situations where resistance to methane, carbon dioxide and/or radon gas(es) is required. It is generally used within construction applications, predominantly within the foundation design. The multilayer 0.4mm thick membrane includes an ultralow permeability aluminium foil core encapsulated between a number of additional LDPE layers and a reinforcing grid to form a single sheet membrane.

## Key Features

- Excellent resistance properties with low permeability to ground gases including methane, carbon dioxide and radon
- Provides additional damp proofing protection to the structure (no requirement for a separate DPM)
- Reinforced membrane construction with excellent resistance to both puncturing and tearing
- Complies with relevant industry codes and guidance including CIRIA and BS 8485:2015 + A1:2019

## Installation

In line with industry good practice, it is recommended that the Cordek Tri-Gas membrane is jointed using conventional thermal (hot air/wedge) welding equipment or the Cordek jointing tape system, to provide adequate protection against ground gas and moisture ingress.

All laps and junctions within the membrane should be overlapped by a minimum of 150mm. 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.

The membrane should be installed upon a suitably prepared level surface consisting of either Cordek's ventilation product Ventform, a well compacted sand layer or concrete blinding of a minimum 50mm depth. Surfaces should be swept clean and free from any sharp edges or protrusions.

## Protection & Repair

Following installation, the Cordek Tri-Gas 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.

Once the membrane is installed, the installer and specifier should determine if there is a need for any additional protection prior to the positioning of reinforcement and pouring of concrete. If additional protection is required, then the Cordek Correx protection system should be used directly above the membrane.

If there is damage to the membrane, then it should be repaired by means of patching. Pinholes and small holes should also be repaired by patching. The patch should be made of the same

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



## Product Data

	Detail	Test Method	Tri-Gas	Units
Mechanical	Colour	-	Green / Silver	-
	Weight	EN 1849-2	370	gsm
	Tensile Strength	EN 12311-1/2	MD 370 / XD 347	N/mm
	Nail Tear Resistance	EN 12310-1	MD 295 / XD 341	Newtons
	Elongation	EN 12311-2	MD 22 / XD 16	%
Resistance	Conformance	BS8485:2015 + A1:2019	-	-
	Temperature Range	-	-40 to +70	°C
	Methane Gas Permeability	EN ISO 15105-1 ASTM D1434	0.041	ml/day/m <sup>2</sup> /atm
	CO <sub>2</sub> Gas Permeability	EN ISO 15105-1 ASTM D1434	0.195	ml/day/m <sup>2</sup> /atm
	Water Vapour Resistance	EN 1931 / EN 12572 (c)	0.01	gsm/day
Physical	Roll Width	-	2.0	metres
	Roll Length	-	50	metres
	Roll Weight	-	38	kg
	Pallet Quantity	-	33	rolls
Other	National Building Specifications	-	F30,360,J40,140,145,146,P30,525 & 530	

barrier membrane and should extend at least 150mm outside the damaged area in order to ensure complete cover. The patch should be prepared and either welded using a hot air gun or the Cordek jointing tape system to the main section of membrane.

## Storage & Handling

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

The membrane should be stored undercover so as to be protected from puncture, dirt, grease, moisture, sunlight and excessive heat. Damaged material shall be quarantined and stored separately for repair or replacement. The rolls shall 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 six rolls high. The bottom rolls need to be chocked to prevent them from rolling.

Storage between 5°C to 30°C at 40-65% humidity under non-condensing conditions is recommended.

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