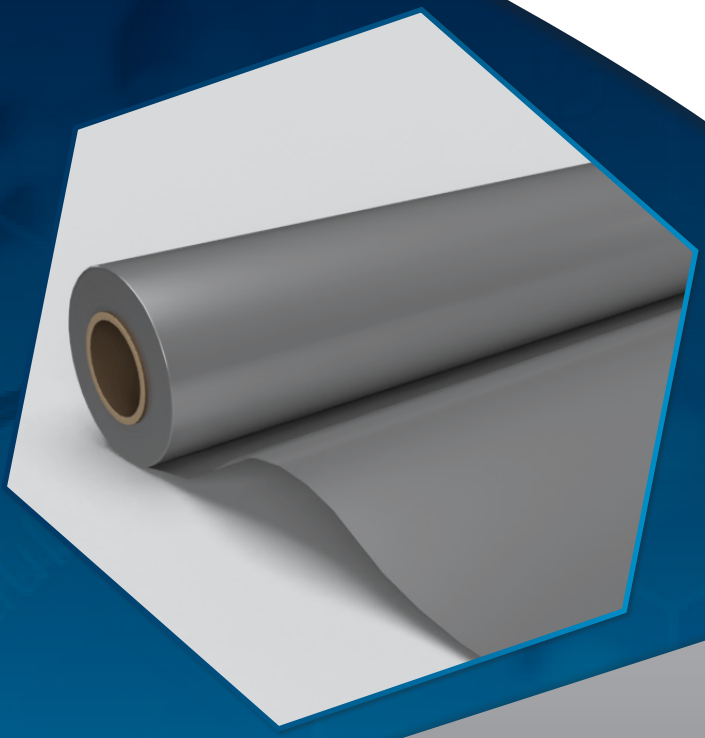
RHINOPLAST EVOLUTION

HYDROCARBON GAS BARRIER



Coverage - 100m²

400mu Thickness

Silver Colour

Rhinoplast Evolution is a high specification co-extruded multi-layer barrier specifically developed for use on construction sites contaminated by Volatile Organic Compounds, Hydrocarbons and other ground gasses such as Methane, Radon and CO2.

The product is 14 layers and contains 2 layers of gas barrier polymer (EVOH) to offer exceptional performance and prevent the ingress of dangerous gasses into buildings. It is manufactured using the latest co-extrusion technology and cannot delaminate. The product will also act as a damp-proof membrane.

The membrane is manufactured using High Performance engineering Polymers to give exceptional strength and does not require reinforcement. It can be installed by the use of sealing tapes or can easily be welded.

A NEW GENERATION OF GAS BARRIER

- Advanced Fourteen Layer Barrier
- Two layers of Ethylene Vinyl Alcohol Co-Polymer (EVOH)
- Outstanding Gas Resistance
- Conforms with BS8485:2015 + A1:2019 (Table 7)
- Conforms to the specification requirements of NHBC Amber 1 & Amber 2 applications
- Suitable for all characteristic Gas Situation (CS) ground gas regimes
- Excellent Welding Characteristics

Web: www.pbpltd.co.uk | Tel: 01709728150

Principal Building Products Ltd, Barbot Hall Ind Est. Mangham Road, Rotherham. S614RJ

Technical Data

Material Properties	Test Method	Value	
Thickness (µm)	N/A	400µm	+/- 6%
Width (mm)	N/A	1.65m	+6mm/-0mm
Length (mm)	N/A	61m	+6mm/-0mm
Repeat Tolerance (mm)	N/A	n/a	
Dynamic C.O.F	BS 2782-824A	0.4 +/- 0.1	
Tensile break force (%)	ASTM D882 / DIN 53455	MD >160	TD >175
Tensile strength @ break (%) MPA	ASTM D882 / DIN 53455	MD >16	TD >16
Elongation Break (%)	ASTM D882 / DIN 53455	MD >500	TD >550
Slow Puncture deflection (mm)	3mm radius	> 3	
Slow Puncture force (N)	3mm radius	> 30	
Density (nominal) (g/cm^3)	-	0.957 g/cm^3	
Unit Weight (g/m^2)	-	382.8	
Sealing Range	RFM 8	110°C - 150°C	

Barrier Properties*	Test Method	Value
OTR	ASTM F 1927, 20 °C 60% RH	Less than 0.75 cc
WVTR	ASTM F 1249, 38 °C 90% RH	Less than 2.0g

Methane Transmission Data

Test	Standard	Unit	Result
Determination of gas transmission rate* Test gas: Methane (CH_4) Gas permeability at 23 °C / 0 % r.H. Gas permeability at 23 °C / 0 % r.H.	ISO 15105-1 10.2007	 $cm^3/(m^2d.bar)$ $ml/(m^2d.atm)$	 ≤ 0,09 ≤ 0,09

* This test was performed in an external laboratory

BS8485:2015+A1:2019

Meets all the following criteria:

- Sufficiently impervious to the gases with a methane gas transmission rate <40.0 ml/day/ m^2/atm (average) for sheet and joints (tested in accordance with BS ISO 15105-1 manometric method)
- Sufficiently durable to remain serviceable for the anticipated life of the building and duration of gas emissions
- Sufficiently strong to withstand in-service stresses (e.g settlement if placed below floor slab)
- Sufficiently strong to withstand the installation process and following trades until covered (e.g penetration from steel fibres in fibres reinforced concrete, penetration of reinforcement ties, tearing due to working above it, dropping tools, etc)
- Capable, after installation, of providing a complete barrier to the entry of the relevant gas