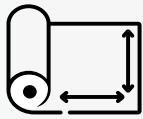
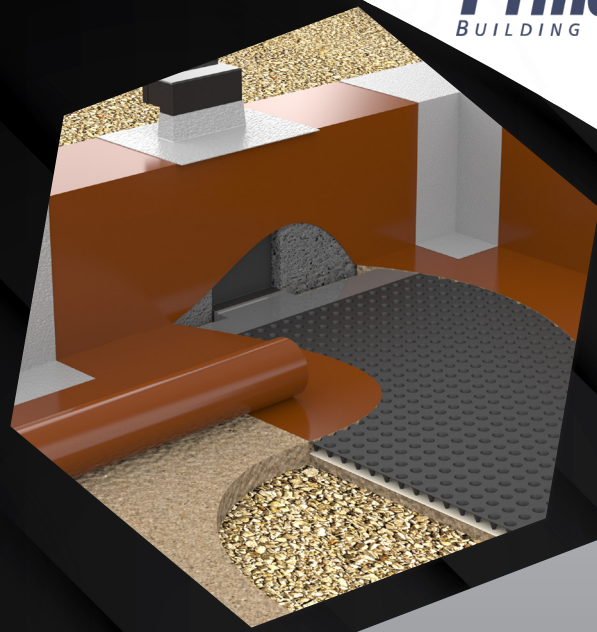
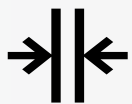


RHINOPLAST EVOLUTION

HD GAS BARRIER



Roll Size: 1.65m x 30.5m
Coverage - 50m²



600µm Thickness



Brown Colour



Rhinoplast Evolution HD Gas Barrier is our highest specification chemically resistant co-extruded multi-layer membrane engineered to provide exceptional protection on construction sites contaminated by volatile organic compounds, hydrocarbons, and ground gases such as methane, radon, and CO₂. Additionally, this high-performance membrane doubles as a damp proof membrane resistant to water moisture.

This innovative gas membrane is designed for loose-laid applications, making it perfect for full 'line out' installations or in combination with our Evolution GAS DPC. It can be positioned above or below concrete ground floor slabs, above precast suspended segmental ground floor systems (such as beam and block floors), or within the ground beneath floor constructions. The system is adaptable with venting layers and can be securely installed using sealing tapes or welded for VOC applications. A range of preformed accessories ensures seamless integration into any project.

Developed with the latest co-extrusion technology, Rhinoplast Evolution HD uses virgin-grade high-performance engineering polymers, forming a fourteen-layer barrier that includes two layers of gas vapour resistant barrier polymer EVOH, encased in high-density polyethylene (HDPE) outer layers, achieving an overall thickness of 0.6mm. This innovative construction provides outstanding robustness and performance without the need for aluminium foil or reinforcement allowing it to be installed in direct contact with concrete without risk of corrosion while ensuring the highest level of protection against harmful gas ingress.

A NEW GENERATION OF GAS BARRIER

- ✓ Produced from Virgin Grade Polymers
- ✓ Advanced Fourteen Layer Barrier
- ✓ Dual EVOH vapour resistant Layers encapsulated with chemically resistant High-Density Polyethylene (HDPE) outer layers
- ✓ Single wound to provide a flat, even surface
- ✓ CE Marked for Waterproofing to EN 13967:2012+A1:2017
- ✓ BS8485:2015 + A1:2019 Compliant: Meets methane gas transmission rate specifications.
- ✓ Follows NHBC Foundation's NF94 guidance for use in Type A, Type B and Type C membrane locations
- ✓ Incorporates performance guidance outlined in CIRIA C748
- ✓ Fully compliant with BRE BR 211:2023
- ✓ Conforms to the specification requirements of NHBC Amber 1 & Amber 2 applications
- ✓ Suitable for all characteristic Gas Situation (CS) ground gas regimes
- ✓ Suitable for fully welded systems
- ✓ Integrated Components, Tapes, Protection fleece and DPC's available

Technical Data

Material Properties			Test Method	Value	
Product ID			Rhinoplast Evolution HD		
Thickness			EN 1849-2	0.6mm - 600µm	
Material (main elements)			High Density Polyethylene/ Ethylene Vinyl Alcohol	HDPE/EVOH	
Colours				Brown	
Width			EN 1848-2	1650mm	
Length			EN 1848-2	30.5m	
Area/roll			1.65m x 30.5m	50m ²	
Mass			EN 1849-2	610g.m ²	
Reaction to fire			EN ISO 11925-2/EN 13501-1	E	
Water tightness @ 60kPa 24h & 400kPa 72h			EN 1928 – Method B	Watertight/Pass	
Resistance to impact			EN 12691 – Method B 600mm drop	Watertight/Pass	
Resistance to static loading			EN 12730	20kg (Pass)	
Durability against thermal ageing @ 60kPa			EN 1296/DIN EN1928	Watertight/Pass	
Durability against chemicals @ 60kPa			EN 1847/DIN EN 1928	Watertight/Pass	
Durability against alkaline environment @ @ 60kPa			EN 1847/DIN EN 1928	Watertight/Pass	
Durability against sulphurous acid @ 60kPa			EN 1847/DIN EN 1928	Watertight/Pass	
Compatibility with bitumen @ 60kPa			EN 1548/DIN EN 1928	Watertight/Pass	
3mm Puncture Force			ASTM D2582 Method	84 N	
3mm Puncture Deflection			ASTM D2582 Method	5.9mm	
Tensile strength		MD	CMD	EN 12311-2	22.7 N/mm ² 22.1 N/mm ²
Elongation		MD	CMD	EN12311-2	376% 533%
Tear Resistance (Nail Shank)		MD	CMD	DIN EN 12310-1	660 N 605 N
Shear resistance of tapped joint seam – 50mm double sided / 75mm Reinforced fleece single sided			EN 12317-2	271 N/50mm	
Shear strength of welded joints			BS EN 12317-2	360N	
Water vapour permeability			EN 1931 – Method B	0.042g/m ² /day	
Oxygen transmission rate			ASTM F 1927, 20°C 60% RH	<0.75cc/m ² /day	
Methane permeability			ISO 15105-1	≤0.09 ml/m ² /day.atm	
Radon permeability			SP Method 3873	<1.8·10 ⁻¹³ m ² /s	
Carbon Dioxide transmission			ISO 15105-1	0.37 ml/m ² ·d·atm	
Transmission rate of volatile liquid – Diesel			ISO 6179 Method B	0.99 g·m ² ·h	
Transmission rate of volatile liquid – Petrol			ISO 6179 Method B	2.341 g·m ² ·h	

C748:2014 - Permeation vapour tests – 100% concentration

Material Properties	Test Method – Annex B	Value
Benzene transmission rate	EN ISO 15105-2	0.0003 mg·m ² ·d ⁻¹
Toluene transmission rate	EN ISO 15105-2	0.0004 mg·m ² ·d ⁻¹
Ethyl Benzene transmission rate	EN ISO 15105-2	0.0009 mg·m ² ·d ⁻¹
Xylene transmission rate	EN ISO 15105-2	0.0005 mg·m ² ·d ⁻¹
Hexane transmission rate	EN ISO 15105-2	0.0004 mg·m ² ·d ⁻¹
Tetrachloroethene (PCE) transmission rate	EN ISO 15105-2	0.0007 mg·m ² ·d ⁻¹
Trichloroethene (TCE) transmission rate	EN ISO 15105-2	>7.5661 mg·m ² ·d ⁻¹
Naphthalene transmission rate	EN ISO 15105-2	0.0006 mg·m ² ·d ⁻¹

C748:2014 - Chemical immersion resistance testing

Material Properties	Test Method	Tensile Strength retained		Result
		MD	CMD	
Benzene	EN ISO 14414	101%	97%	Pass
Toluene	EN ISO 14414	103%	100%	Pass
Ethyl Benzene	EN ISO 14414	104%	102%	Pass
Xylene	EN ISO 14414	104%	98%	Pass
Hexane	EN ISO 14414	104%	100%	Pass
Tetrachloroethene (PCE)	EN ISO 14414	105%	102%	Pass
Trichloroethylene (TCE)	EN ISO 14414	102%	99%	Pass
Naphthalene	EN ISO 14414	102%	98%	Pass
Sulfuric Acid (10% solution)	EN ISO 14414 A	91%	101%	Pass
Calcium Hydroxide	EN ISO 14414 B	94%	101%	Pass
Solvents (35% Diesel, 35% Paraffin, 30% Oil)	EN ISO 14414 C	102%	97%	Pass
Synthetic Leachate (Acids, Chlorides, Sulphates & Phosphates)	EN ISO 14414 D	104%	102%	Pass



BS8485:2015+A1:2019

Meets all the following criteria:

- Sufficiently impervious to the gases with a methane gas transmission rate <40.0 ml/day/m²/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

Download a copy of our Gas barrier Solutions Brochure

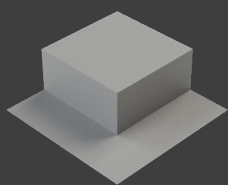


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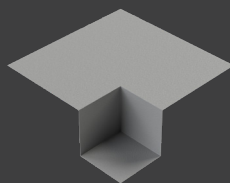
Product Range Accessories

- Our Technical Department is available to advise on individual projects and to prepare or assist in the preparation of schedules and issue drawings.

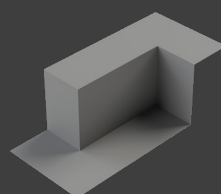
Description	Roll width	Length	Thickness	M ² /roll
Rhinoplast Evolution HD VOC/Methane Gas Barrier	1.65m	30.5m	0.6mm	50m ²
Rhinoplast GR Single Sided Detail Lap Tape	75mm	20m		
Rhinoplast LT Jointstrip Double Sided Tape	50mm	15m		
Rhinoplast Gas Resistant Detailing Strip	300mm	20m		
Rhinoplast Butyl Joint Tape	100mm	15m	1.5mm	
Rhinoplast Evolution GAS DPC 300mm – 1200mm	300mm – 1200mm	20m	0.5mm	various
Preformed Accessories				
Description	Size variation - Diameter			
Top Hat Pipe Collar	Ø110mm	Ø135mm	Ø160mm	
Telescopic Vent Top Hat	Sized for cavity wall			
Overall Cavity Wall Options – 300mm/325mm/350mm/375mm	Size variation - Rise			
Gas Barrier Internal 90° Corner	150mm	225mm	300mm	
Gas Barrier External 90° Corner	150mm	225mm	300mm	
Gas Barrier Step Door Cloak Pair	150mm	225mm	300mm	
Membrane Protection				
Protection Board	1m	2m	3mm	
GEO Protect Fleece 300gsm	2m	50m	1.7mm	



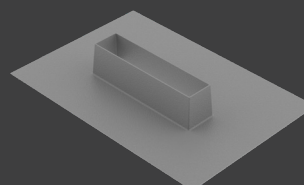
External Corner



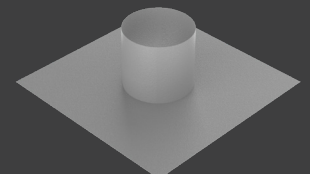
Internal Corner



Step Door Cloak



Telescopic Vent Top hat



Soil Pipe Top Hat