

GROUND GAS PROTECTION
GP®5 TECHNICAL DATA SHEET

JUTA | TITANTECH®

GP®5

GP®5 gas barrier is a multi-layer composite of virgin polyethylene (PE) giving exceptional resistance to the passage of ground gas and organic vapours. It also acts as a high performance DPM.

Thickness	0.4 mm
Width	Various m
Length	Various m
Weight	400 g/m²

TITANTECH®
For developers of brownfield and contaminated sites the TITANTECH® family of products represent a major step forward in safeguarding projects against gaseous and chemical contamination.

GP®5 is suitable for the following applications:

- Carbon dioxide and methane affected sites in accordance with BS 8485:2015 + A1:2019 & NHBC
- Radon affected sites in accordance with BRE211:2015
- Damp protection in accordance with Building Regulations Part C
- Low level VOC contaminated sites (site specific assessment required)

Handling

Roll weights can be in excess of 20kg and hence appropriate care and equipment is required for unloading and handling.

Installation

GP®5 should be installed in accordance with the product installation guidelines, and in accordance with BS 8485:2015.

BBA

CE UK CA

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Feature	Characteristics	Test Method	GP®5
Physical Properties	Thickness	EN 1849-2	0.4 mm
	Width	EN 1849-2	Various m
	Length	EN 1849-2	Various m
	Weight	EN 1849-2	400 g/m^2
Hydraulic Press	Resistance to Water Penetration	EN 1928 (A)	Pass
Mechanical Properties	Resistance to Static Load	EN 12730	> 20 kg
	Tensile Strength (MD)	EN 12311-2 (A)	> 300 N/50mm
	Tensile Strength (CMD)	EN 12311-2 (A)	> 300 N/50mm
	Resistance to Tearing (Nail Shank) MD	EN 12310-1	> 230 N
	Resistance to Tearing (Nail Shank) CMD	EN 12310-1	> 230 N
	Impact Resistance	EN 12691-B	500 mm
	Puncture Resistance	ASTM D 4833	> 160 N
	Puncture Resistance	EN 12236	1.60 kN
	Reaction to Fire	EN 13501-1	E
Vapour Permeability	Methane Permeability	BS EN ISO 15105-1	0.12 ml/m^2/day/atm
	Carbon Dioxide Permeability	BS EN ISO 15105-1	1.53 ml/m^2/day/atm
	Hydrogen Permeability	BS EN ISO 15105-1	68.7 ml/m^2/day/atm
	Benzene Permeability	BS EN ISO 15105-2	0.41 ml/m^2/day
	Oxygen Permeability	BS EN ISO 15105-2	<3 ml/m^2/day
	Radon Permeability	K124/02/95	1.0 x 10^{-12} m^2/s
Fuel Vapour Permeability	Petrol	BS EN ISO 15105-2	(ave.) 3.4 x 10^{-13} /mol/(m^2.s.Pa)
	Diesel	BS EN ISO 15105-2	(ave.) 3.4 x 10^{-13} /mol/(m^2.s.Pa)
Durability	Durability Watertightness After Artificial Ageing	EN 1928	Pass
	Durability Watertightness Against Chemicals	EN 1928	Pass
Compliance and Certification	CE Mark - EN 13967:2012		
	NHBC Standards Compliant		
	BS 8485:2015 + A1 2019 Accordant		

JUTA UK

Please contact JUTA UK Directly for more information on GP®5

Storage

Rolls of GP®5 should be stored on stable/level ground and stacked not more than five rolls high, with no other material stacked on top. The rolls can be stored outdoors when packaged, but should be protected from exposure to UV.

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GP® 5

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Jointing and Sealing

It is recommended GP®5 can be heat welded where possible, with welding carried out by competent personnel with suitable qualifications in accordance with best practice, and guidance contained within BS 8485:2015. GP®5 should be overlapped by at least 100mm. If taping joints, only suitable tape must be used, ensuring application with a silicone roller to remove trapped air. JUTA pre-formed details, or self adhesive gas membrane are available for sealing around protuberances.

Accessory Products

- GP® DPC
- GP® Tape
- GP® Self Adhesive Membrane (SAM)
- GP® Primer
- GP® Top Hats and Preformed Corners
- GP® Protection Fleece
- GP® Void Vent (24/40mm)