PRODUCT DATA SHEET

Pro Liquid Gas Barrier



Description

Pro Liquid Gas Barrier ("LGB") is a multi-use synthetic rubber-based gas protection and waterproofing system.

Pro LGB offers a simple, continuous passive gas prevention barrier against the ingress of methane, carbon dioxide, radon, ground gas, VOC, air and moisture into buildings. Pro LGB also acts as a waterproofing membrane complying with the requirement C2 and C4 schedule 1 of the Building Regulations 1991 for England and Wales.

Pro LGB is an elastic, UV-resistant, single component system supplied in black. This non-hazardous product can be applied direct from its packaging using a roller, brush or airless spray. Pro LGB can be applied to damp or dry substrates and dries in approximately 1 hour to form a tough semi-gloss finish.

Features

- Methane, Carbon Dioxide and hydrocarbon vapour suppression
- Dual use – damp or waterproof gas barrier
- Excellent bonding strength
- Good resistance to Alkali and brine solution
- Resistant to weak mineral acids
- Damp surface tolerant
- Quick drying

Specification

- BS 8485:2015+A1:2019 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings
- BS 8102:2022 Type C Drained Protection
- NBS Specification J30 Liquid Applied Tanking/Damp Proofing

Associated Products

- Koster NB 1
- Delta AT 800
- Pro M1
- Pro R1
- Gas Over Tape 150

Product Details

DMS 405

Coverage

For a dry film thickness of 0.6mm then apply at 0.85kg/m2 per coat (1.7kg/m2 per 2-coat system). For the application of a dry film thickness of >0.3mm in a single coat it is recommended that the membrane is applied by airless spray. Using airless spray, a single application dry coat thickness up to 1mm may be attained.

The product can be applied as a single coat in certain applications but two coats is universally recommended. Recommended coating thickness is 300µm (0.3mm) per coat and 600µm (0.6mm) for the overall membrane thickness for best performance. Thicker applied coatings will require greater drying time. Performance is improved where the second coat is applied at right angles to the first but it is not essential to do so.

Leave 90-120 minutes before overcoating with the second coat, a touch dry test on the first coat will indicate readiness. It is recommended that the second coat is applied within 24 hours of the first coat. Full cure of the membrane is 48 hours after the second coat application.

Pro Liquid Gas Barrier

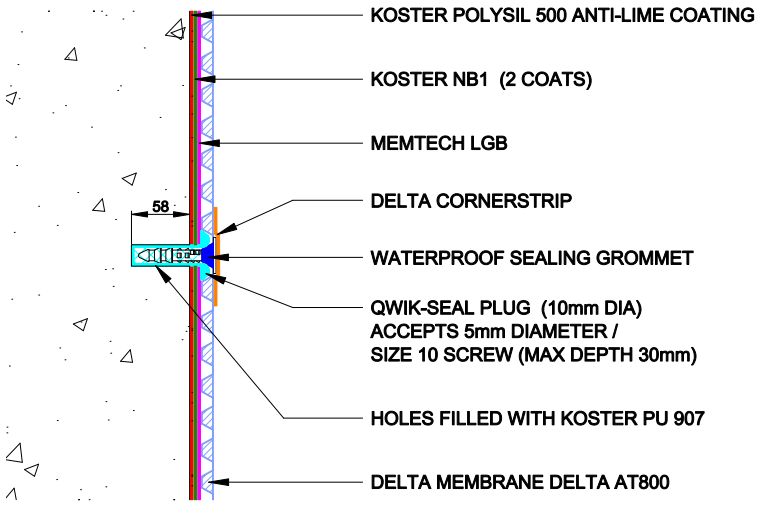
Technical Data

Pro Liquid Gas Barrier			
Feature	**Characteristics**	**Test Method**	**Pro Liquid Gas Barrier**
Physical Properties	Density Form Supplied Pack Size Colour Shelf Life Odour Drying Time	- - - - - - -	1.5-1.6 g/cm³ at 20°C Viscous Liquid 8kg/15kg (Bespoke sizes available on request) Black 24 months (unopened) Latex (Vanilla) 1 hour at 20°C
Permeability*	Water Vapour Permeability Methane Permeability Carbon Dioxide Permeability Radon Permeability	- EN ISO 15105-1 EN ISO 15105-1 K124/02/95	<0.5 g/m²/day <28.8ml/m²/day/atm <267ml/m²/day/atm <9.5x10¹² m²/s
Hydraulic Properties	Water Tightness (60 kPa)	EN 1928	PASS (Watertight at 0.6mm thick)
Properties	Adhesion to concrete Elongation Dry Film Thickness (DFT)	ASTM D2370	>1.1 N/mm² >100% 600-1000µm (2-coats) 600µm - Brush/roller application 1000µm - Airless spray application

*Permeability values based on min. 0.6mm thick.

Property	Specification
Pack Size	8kg, 15kg, Bespoke sizes available on request
Colour	Black
Form	Viscous liquid
Density	1.5-1.6g/cm³ at 20°C
Shelf Life	24 months (unopened)
Odour	Latex (Vanilla)
Water Vapour Permeability	<0.5g/m²/day
Methane Permeability	<28.8ml/m²/day/atm (ISO 15105-1)
Radon Permeability	<9.5x10¹² m²/s
Carbon Dioxide Permeability	<267ml/m²/day/atm (ISO 15105-1)
Drying Time	1 hour at 20°C
Adhesion to Concrete	>1.1N/mm²
Elongation ASTM D2370	>100%
Dry Film Thickness (DFT)	600-1000µm (2-coats) 600µm - brush/roller application 1000µm - airless spray application

Technical Drawing - DGS-549-1



Application

All surfaces should be smooth, clean, dry, sound and free from frost, oil, grease, condensation and other contamination. Remove any organic growth with a fungicidal wash as may be necessary.

Non-structural cracks, less than 0.5mm, must be filled. Structural cracks must be first repaired and filled. Fill holes and re-point flush to the finish using a cementitious repair mortar.

Newly laid concrete should have a clean textured surface, internal angles should be filleted with a 45° fillet using a suitable cementitious mortar.

For expansion joints, ensure that the product is applied well into the rebate before the expansion media is applied. Other gas membranes must be exposed and lapped with where present.

The minimum ambient temperature for application is 5°C, it is not recommended to apply the product at temperatures below this as specified drying times will not be achieved.

No priming is necessary with this product. To assure that the product fully wets out the substrate the surface may be dampened. There should not be any standing water or soaking.

Product is recommended to be brush, roller or airless spray applied, avoid pouring directly onto a horizontal surface. This may cause puddling during application and increase drying time. Stir the product well for 2 minutes before use.

Should the product require thinning, it is recommended to thin 5% by volume of water initially and evaluate the resulting viscosity. The product should not need to be thinned in normal conditions of storage and use.

Considerations

It is always advisable to check product compatibility and adhesion by testing on a sample area before starting any sizeable project. Do not apply if rain is forecast before product can fully dry.

Exercise caution on coating thickness, exceeding recommended coverage rates increases probability of cracking and splitting.

Do not apply this product over bituminous surfaces.

Spray: For further application information please consult the Technical Department.

For cleaning tools use water immediately after use

Concrete Roofing Applications

Blistering may occur if application is not undertaken as recommended. Blistering results from heat from the sun causing a vapour pressure build below the membrane. This is more likely to occur if the concrete surface is wet so it is recommended for this particular application that the substrate is dry. Ensuring a good bond to the substrate is essential; vigorously brush the first coat into the concrete using a stiff bristled broom. So far as possible avoid application of the membrane on a day with strong, direct sunlight (overcast but dry is ideal). To enhance bonding it may be necessary to prime the roof with a slurry of screeding latex and cement if the original surface condition is poor.

Storage

- Store in cool, dry conditions in the original manufacturer packaging. The product has a 18-month shelf life provided the container is unopened. If opened the product should be used within 1 month and sealed air-tight between uses. Longer storage times may result in fillers falling to the base of the container, rigorous and thorough stirring is recommended prior to application.

Packaging/Handling

- Supplied in 15 kg tins

Installation

It is essential that ground gas protection systems are installed correctly, meeting all applicable building standards and regulations. Installation of ground gas protection systems should be carried out by technicians who hold a valid NVQ Qualification in ground gas installation. All ground gas protection systems should be verified by an independent verification company and not the membrane manufacturer, installer or client. All joints should be heat welded where practical and possible.

Other Information

All data and information contained in these Product/Technical Data Sheets is up-to-date and correct as at the date of issue. The information given is suggested as guidance and should only be used for evaluating your specific application. Delta Membrane Systems Limited cannot control or anticipate the conditions under which this product may be used, each user should review the information in specific context of the planned use. The information contained in these Product/Technical Data Sheets should not be considered a warranty, expressed, or implied, including but not limited to a warranty of merchantability or fitness for a particular purpose. In no event shall Delta Membrane Systems Limited be liable for any incidental or consequential damages resulting from the use, misuse, or inability to use the product. This exclusion applies regardless of whether such damages are sought based on breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory. When in doubt, contact Delta's Technical Team on 01992 523 523.