

HYDROPRUFE LG

Liquid Gas Membrane

DESCRIPTION

HYDROPRUFE LG is an epoxy based liquid gas membrane which is suitable for application to porous substrates to provide resistance to ground gases including methane and carbon dioxide. It is supplied as two-component pack, consisting of a base component and a curing agent suitable for mixing on site. When applied to the substrate it will also act as an adhesion promoter. The liquid applied membrane cures to form a resilient gas and VOC barrier, which is also resistant to water and ground moisture.

USES

HYDROPRUFE LG is suitable for application to structures including concrete and masonry to provide a seamless gas resistant membrane. It is particularly suitable for applications where it is not practicable to install a sheet gas membrane system, for example pile cap applications.

ADVANTAGES

- Excellent resistance to methane and carbon dioxide and VOC contaminants
- Excellent adhesion to damp concrete
- Low viscosity for easy application
- Ease of application to complex structures
- Solvent free and low odour
- Test data confirming acceptability for use with pile caps

Property	Value
Colour	Red / Clear
Pot Life	50 mins @ 20°C
Adhesive Bond to Damp Concrete	>3.5MPa (Concrete Failure)
Viscosity	480 CPS @ 20°C
Flexural Strength	60 MPa
Water Absorption	<0.3% after 7 days
Methane Transmission Rate (OTR)/ml.mm/m2.day.atm	2.4
Carbon Dioxide Transmission Rate (OTR)/ml.mm/m2.day.atm	1.4

ORGANIC VAPOUR TRANSMISSION RATE

Vapour Tested	Gas Transmission Rate (GTR). Liquid mg/(m ² .day)
Vinyl Chloride	0.283
Ethyl Benzene	0.376
Trichloroethene	5.44
Xylene	0.376
Naphthalene	0.013
Benzene	0.117
Toluene	0.326
Hexane	0.242
Tetrachloroethene	1.91

PROCEDURE

Surface Preparation: Substrates to which the HYDROPRUFE LG is to be applied should be thoroughly cleaned and free from all loose material. Surface laitance should be removed by high-pressure jet-washing or mechanical abrasion where required. This will ensure that an adequate key is provided for the applied coating. All standing water must be removed prior to application. Whilst the coating is suitable for application to damp substrates the concrete should be given 2-3 hours to dry following jet-washing preparation.

Any excessive substrate defects should be repaired using a suitable PREMCRETE repair product. The concrete sub-base should have a minimum compressive strength of 25 MPa.

The prepared substrate should be free from any live water ingress and if the substrate is very porous, such as concrete blockwork, a light dampening is recommended. A fine spray misting of water or a flick over with a slurry brush will be sufficient.

Mixing: The contents of the curing agent component should be poured into the base component tin and mixed thoroughly using a slow speed drill and paddle mixer until a homogeneous mix is achieved, which is uniform in colour and consistency. Special care should be taken to ensure that packs are not part mixed.

Application: Horizontal substrates, such as pile caps, require a single 1 coat application at a minimum WFT (Wet Film Thickness) of 1mm. Vertical substrates should have two coats applied. Hydroprufe LG should be applied using a suitable brush, roller, or airless spray equipment and where a mechanical key is required to promote adhesion to subsequently cast concrete, then a quartz aggregate should be broadcast into the wet coating. Once the coating has dried, then the excess aggregate should be swept or blown from the surface.

Equipment Cleaning: Tools and equipment should be cleaned immediately using PREMCRETE CLEANING SOLVENT.

Curing: Hydroprufe LG will be touch dry after 6 hrs at 20°C and hard dry after 16 hrs at 20°C.

PACKAGING & COVERAGE

Pack Size: HYDROPRUFE LG is supplied in 5 Kg and 20 Kg units.

Coverage: Coverage will vary depending on substrate quality, therefore consideration for decreased coverage on pile cap applications should be made. Based on standard quality and porosity of concrete coverage rates are as follows:

Pack Size	Single Coat Coverage (horizontal pile cap application)	Two Coat Coverage (vertical prepared concrete substrate)
5 Kg	6M2	8M2
20 Kg	24M2	32M2

STORAGE

HYDROPRUFE LG should be stored in dry conditions at temperatures between 10°C and 30°C. When stored in unopened containers the product will have a shelf life of 12 months.

HEALTH & SAFETY

See separate material safety datasheet.