



HYDROPRUFE LG

Liquid Gas and Waterproof Membrane

DESCRIPTION

HYDROPRUFE LG is a Type A Waterproof Coating in accordance with BS8102:2022. The coating is an epoxy based liquid gas and waterproof membrane which is suitable for application to a wide variety of substrates, including porous surfaces, steel and concrete to provide water resistance and protection against ground gases including radon, 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.

It is also suitable for application to existing structures, where a waterproof or gas-resistant membrane is required to horizontal surfaces. An additional 3rd application can be applied incorporating slip-resistance to achieve a final wearing surface.

Suitable for application internally to lift pit constructions as an independent waterproof

coating.

ADVANTAGES

- Excellent resistance to methane and carbon dioxide and VOC contaminants.
- Excellent adhesion to damp concrete.
- Strong resistance to negative water pressure
- 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.

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 25MPa. 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 components 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 and the surface should be prepared to achieved a closed, fair-faced finish. Hydroprufe LG should be applied using a suitable brush, roller, or airless spray equipment and where a mechanical key is required, 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.

Curing: Hydroprufe LG will be touch dry after 8hrs at 20°C and hard dry after 24hrs at 20°C. Full cure will be achieved after 7 Days Cure at 20°C.

Equipment Cleaning: Tools and equipment should be cleaned immediately using water.

PACKAGING & COVERAGE

Pack Size: HYDROPRUFE LG is supplied in 5Ltr and 15Ltr units.

Coverage: Coverage will vary depending on substrate quality, therefore consideration for decreased coverage on pile cap applications should be made. Based on a standard quality and porosity of concrete, coverage rates at 1mm thickness are as follows:

- 5Ltr – 4.5m²
- 15Ltr – 13.5m²

STORAGE & SHELF LIFE

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.

PROPERTY	VALUE
Colour	Red (standard), All other colours available.
Pot Life	20-25 mins @ 20oC
Adhesion to Concrete	4 MPa (Concrete Failure)
Flexural Strength	60 MPa
Compressive Strength	>50 MPa
Impact Resistance	>20Nm
Methane Transmission Rate (OTR)/ml.mm/m2. Day.atm ISO15105-1	2.4
Carbon Dioxide Transmission Rate (OTR)/ml.mm/m2.day.atm ISO15105-1	1.4
Co-Efficient of Friction – Static Friction	23.13N
Water Vapour Permeability EN1928	Pass
Negative Water Pressure Resistance	6Bar
VOC Resistance ISO15105-2	Pass