

QUICSEAL 119

Product name

Aquapoxy

Epoxy Membrane for Negative Pressure Applications

Product Description

QUICSEAL 119 is a two component, water based, epoxy polyamide membrane/barrier coating that has been specifically designed for use in negative water pressure applications.

Typical Uses

QUICSEAL 119 is suited for use in as a waterproof & vapour barrier in a wide spectrum of applications such as:

Flooring applications

- As a low water vapour transmission coating & damp proof membrane to prevent rising damp in floors. Used as a system together with QUICSEAL self levelling underlayments to protect vinyl and other resilient flooring finishes.

As a primer / barrier cum sealing coat

- over rain affected or wet concrete prior to installation of QUICSEAL 109 (self adhesive membrane), QUICSEAL 184/ 184R or bitumen modified polyurethane membranes.
- for waterproofing membranes onto damp substrates and as the waterproofing system under vinyl and other resilient floor finishes.
- Over freshly laid, damp concrete or efflorescence producing concrete prior to overcoating with conventional building paints.

· As a waterproofing membrane

- to resist positive and negative hydrostatic pressure. Prevents water seepage or damp penetration through the interior of walls and floors, in below grade surfaces such as basements, tunnels, lift wells, retaining walls and car parks.
- in tanking applications, including potable water containment.

Advantages

- Withstands 250kPa hydrostatic pressure (25 metre head of water); when primed the cured membrane will withstand 400kPa pressure (40 metre head of water).
- Can be readily applied to damp surfaces (in saturated surface dry condition).
- · Can be applied to freshly laid hardened (green) concrete
- Conforms to requirements of the Australian Building Code as a waterproofing membrane;
 AS 4020 and BS 6920 for use in contact with potable water.
- No maximum recoat time required (note: surface must be clean & contaminant free)
- · Versatile in use
 - Can be over-coated using almost any decorative or industrial finishing paint.
 - Excellent adhesion to most substrates including brick, masonry, concrete, stone & timber
- Environmentally friendly
- safe to use in sensitive locations (e.g. around food or habitable areas)
- Easy clean-up using water. Non-flammable & negligible odour
- Prevents rising damp and the formation of efflorescence.

Limitations

The product should be applied whilst the surface temperature is between +10 to 35° C. The product will cease to cure below 10° C, but will recommence curing when the temperature rises above 10° C; curing time will also be adversely affected in situations where relative humidity is > 85%.

In enclosed areas, ventilation must be provided during the curing cycle to enable adequate evaporation of the water.

Care should be taken when sandwiching adhesives between QUICSEAL 119 and floor coverings to ensure the water vapour transmission of the covering is sufficient to allow the solvent to escape.

QUICSEAL 119 is not classified as trafficable membrane.

Application Instructions

Surface Preparation

All surfaces to be treated must be structurally sound; and existing coatings, adhesives, efflorescence etc should be removed to achieve maximum bond strength and resistance to hydrostatic pressure. Surfaces must be cleaned from dirt, grease, oil and all other surface contaminants. Concrete floors should be lightly sand blasted to remove surface laitance.

Holes, non-structural cracks or other surface deformities should be filled with QUICSEAL 119 epoxy mortar and allowed to cure for 2- 3 hours before coating is applied. Prime with 10% diluted QUICSEAL 119 or use a slurry bonding coat; the slurry coat is prepared by mixing equal volumes of QUICSEAL 119 and cement with a small quantity of sand to form a thick brushable consistency. A high strength concrete repair mortar is prepared by mixing equal volumes of QUICSEAL 119 with cement and then adding 2 to 3 volumes of sand to achieve the desired consistency. Work the prime coat or slurry bonding coat into the substrate and apply the repair mortar whilst the slurry coating remains wet.

Priming

When QUICSEAL 119 is to be applied to dry concrete, the surface must be dampened with water before application, followed by priming with QUICSEAL 119 diluted with 10% clean water. It is critical to obtain a dry film thickness (D.F.T.) of 300 microns and priming with diluted QUICSEAL 119 can assist to achieve this; QUICSEAL 119 will not perform as defined above unless a minimum D.F.T. of 300 microns is obtained in the final membrane.

Mixing & Installation

Stir the Components A & B of QUICSEAL 119 individually to ensure uniformity prior to mixing together. Once premixed, add the full contents of both components (in the ratio of 1:1 by volume) in a large 30 litre bucket and mechanically mix until a homogenous blend is obtained.

Apply QUICSEAL 119 onto the prepared surface at spread rate of 0.3 litre per m² per coat.

At up-stands and direction changes, pretreat the surface by first priming the concrete, followed by applying the first layer of QUICSEAL 119. Whilst the coating is still wet, immediately embed the QUICSEAL Fabric (190mm width) into QUICSEAL 119 by pressing strongly & evenly down into the membrane using a steel roller. Allow an approximate time interval of 4 hours before applying the second coat of QUICSEAL 119.

For floors- Spread the material using a squeegee to achieve the correct coverage and then finish using a long nap roller.

For walls- Apply the product by brush, roller or spray taking care to achieve the required coverage.

For floor/wall up-stands-i.e. walls, columns, ducts, pipework etc Incorporate QUICSEAL fabric fibre reinforcing mesh into QUICSEAL 119.

Note: All upstands and direction changes must be treated before the main application area commences.

Care must be taken to work the QUICSEAL 119 into the surface to fill voids and avoid pin holing. A minimum of two coats is recommended and care should be taken to ensure uniformity of material and the required coverage is maintained. When finishing it is necessary to ensure that the required dry film thickness is achieved.

The coverage rate for all surfaces should be a total of $3m^2$ per litre per coat to achieve optimum properties. In the event that this coverage rate is not achieved in two coats, urther coats should be applied.

Wash all equipment in water or water/detergent immediately upon completion of work.

Subsequent finishes

A range of subsequent finishes can be applied over QUICSEAL 119; follow the following recommended curing times prior to application.

Product	Curing Period	Primer Required
Solvented Epoxy	Apply after 4 days	No.
Solvent free Epoxy	Apply after 3 days	No.
Polyurethane	Apply after 7 days	No.
MMA	Apply after 7 days	No.
Cementitious SLC	Apply after 1 day	Yes
Decorative coatings	Apply after 2 days	No, if aqueous

In the presence of water pressure add 1 day to curing times. Epoxy or polyurethane screeds will require a solvent free epoxy primer to be installed prior to installation. Care is necessary to ensure the QUICSEAL 119 waterproofing membrane is not damaged in any way during the application of subsequent finishes.

Coverage and Thickness

QUICSEAL 119 must be applied at a rate of 0.66/ m² per litre in 2 coats to achieve min DFT of 300 microns for it to function as an effective waterproofing membrane,

Technical Data

Mixing ratio 1:1 Part A: Part B by volume

Standard colour Grey

(Colours upon request, min. quantities apply)

Finish Smooth, dense, semi-gloss

Resistance to hydrostatic Resistant to 250kPa

(ASTM C1306.95) (25m head pressure of water)

Water vapourtransmission rate 10.5 gm/sq mtr/24 hrs

(ASTM E96 Section 12)

Permeance film approx. 3.2 x 10 -8 g/Pasm²

Tensile bond strength > 5 MPa (depending on strength of substrate)

Pot Life 1.5 hrs @ 25°C; 0.5 hrs @ 40°C Drying Time 5.5 hrs @ 25°C; 3.5 hrs @ 40°C

Specific Gravity 1.30

Wet Film Thickness 300 microns per coat

Health & Safety

UN Number: N/A non flammable and non explosive. Non toxic, irritating or flammable vapour when used according to the instructions. May be irritating and cause sensation by skin contact and be irritating to the eyes on contact. Wear suitable gloves and eye/face protection during mixing and application, avoid contact with skin and eyes. In the event of contact, wash immediately with soap and water.

Packaging

20 litre set

Important Notes

The information set forth herein is furnished free of charge in good faith and is based on technical data that QUICSEAL considers to be reliable. This information is intended for used by persons having technical skill and at their own discretion and risk. Information contained in this product sheet conforms to the standard detail recommendations and specifications for the installation of QUICSEAL products as of the date of publication of this document. QUICSEAL makes no other warranties and assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To ensure that you are using the latest, most complete information, please contact QUICSEAL

Reference No. QS119/100113

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