



QUICSEAL 104

Flexible Cementitious Waterproofing Membrane

Description

QUICSEAL 104 is a two component, flexible cementitious waterproofing membrane consisting of a synthetic resin mixed with a blend of selected cement and well-graded fillers.

When mixed, QUICSEAL 104 becomes a smooth slurry and is easily applied by brush, roller or suitable spraying equipment.

QUICSEAL 104 can be applied onto damp substrates. The cured membrane is flexible, durable and weather resistant and has excellent adhesion to most building substrates. Its unique chemical structure provides a breathable membrane that is permeable to water vapour and yet impermeable to water. QUICSEAL 104 is capable of bridging hairline cracks.

Typical Uses

- Waterproofing of Basement walls and lift pits
- Waterproofing of potable water tanks, waterproofing of reservoirs, culverts, storm drains, canal, water retaining and water excluding structures.
- Waterproofing of kitchens and toilets
- Waterproofing of balconies and planter boxes
- Protection of concrete structures in marine environment
- Waterproofing of swimming pools and water features
- Waterproofing to precast gable end walls
- Waterproofing to RC flat roof (re-roofing – concealed applications) and gutters.
- Waterproofing to external wall prior to installation of claddings.

Advantages

- Pre-packed – Easy to mix and apply
- Excellent waterproofing qualities – able to withstand high hydrostatic pressure
- Excellent adhesion to concrete, masonry, ceramics, natural and artificial stones, cembboard, steel, galvanized metal, copper, PVC, etc.
- Flexible - able to bridge hairline cracks up to 2mm
- Resistance to frost and thawing salts
- Does not contain chloride or other corrosive salts which cause efflorescence
- Non-toxic – suitable for use in waterproofing of potable water tanks and marine environment
- Able to withstand light foot trafficking
- Can be applied onto damp substrates
- Weathering resistant
- Algae and fungus resistant

Surface Preparation

The substrates must be clean and sound, free of dust and loose particles. Laitance, oil, grease, mould release agents or curing compound must be removed from concrete surfaces by using wire brush, scabbler or other means. Ensure sufficient gradient to allow water to run off.

It is recommended that a cement & sand fillet be formed at all corners to receive the waterproofing membrane.

Prior to the application of the waterproofing membrane, dampen the substrate with water while ensuring that no free water is present on the surface.

In situations where the membrane is left exposed, QUICSEAL 113 Primer C is recommended to consolidate the substrate prior to application of QUICSEAL 104 waterproofing membrane.

Mixing Instructions

Pour Part A (liquid) into a clean container. Slowly add Part B (powder) into the container and mix with a slow speed mechanical mixer until homogenous and lump free. Allow the mix to stand for 5 minutes and re-stir manually before use.

Application

For horizontal and vertical surfaces, a roller, brush or spray gun, may be used to apply the slurry. Care must be taken to ensure that air is not entrapped in the membrane.

Apply the first coat of QUICSEAL 104 and allow it to dry. At the same time, ensure that all joints and corners are properly coated, preferable with a brush. Allow membrane to dry for approximately 2 hours before application of the second coat.



After applying the 2nd coat of waterproofing membrane, allow a minimum curing time interval of 12-72 hours before laying the screed and commencing ponding test. Should ponding test exceed 4 hours, a minimum curing time interval of 72 hours is recommended.

For outdoor applications, QUICSEAL 718 Fibremesh should be incorporated. Apply the first coat of QUICSEAL 104 and immediately incorporate QUICSEAL reinforcing mesh. Apply subsequent coats at right angles to the last coat while ensuring ample coverage at all joints and corners. QUICSEAL 718 Fibremesh is also recommended at joints and corners where movement is expected. A protective screed or coating is required over the membrane for long term durability.

Packing & Coverage

Pack size : 12 kg/set or 36 kg/set
Coverage : 0.85 kg/m²/coat
(Approx. 1.7 kg/m² is required for 2 coat application, depending on site conditions)
Wet film thickness : 0.7 ± 0.1 mm/coat

Test Report

Test Report available upon request

Technical Data

Product Type	Cementitious Modified Co-Polymer
Mix components	Part A : whitish liquid / Part B : greyish powder
Mix Ratio (liquid : powder)	1:1.4
Mixed Density	1550 kg/m ³
Mixed Color	Grey
Pot Life at 35 deg°C	Approx. 1 hour
Tack Free Time	Approx. 2 hours depending on temperature and humidity
UV Resistance	Good
Shore A Hardness (ASTM D2240:2005)	>60
Tensile Strength (ASTM D412:2006ae2)	>1.6 N/mm ²
Elongation at Break (ASTM D412:2006ae2)	>150%
Adhesion to Substrate (ASTM D4541:2009)	>1.20MPa
Crack Bridging (ASTM C836: 1989a)	2mm
Water Penetration Test (DIN 1048 Part 5: 1991)	5 Bar (50m water pressure or 5 kgf/cm ²)
Water Vapour Transmission (ASTM E96:1993)	< 0.33 g/m ² /hour
Special Properties (SS 345: 2001)	Algae and fungus resistant

Storage

The shelf life of QUICSEAL 104 is 12 months when stored unopened in a cool and dry place.

Health & Safety

Gloves and goggles should be worn. Any splashes to the skin or eyes should be washed off with clean water. In the event of prolonged irritation, seek medical advice. Powder products should be handled to minimize dust formation. Use a light mask if excessive dusting is unavoidable.

Important Notes

The information set forth herein is furnished in good faith and is based on technical data that QUICSEAL considers to be reliable. This information is intended for use 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, contact QUICSEAL.

Reference No. 104/150821

QUICSEAL CONSTRUCTION CHEMICALS PTE LTD
www.quicseal.com

QUICSEAL – the professional's choice of quality products and systems for building construction