



QUICSEAL 103 ECO

ACRYLFLEX



ONE-COMPONENT



LIQUID-FORM



SINGAPORE GREEN BUILDING PRODUCT LEADER SGBC

SGBP 4515/1

Description

QUICSEAL 103 ECO ACRYLFLEX is a single component, ready-to-use, environmentally friendly water-based liquid applied acrylic waterproof membrane. QUICSEAL 103 ECO comprises of special blend of polymers, fillers and additives to provide excellent UV resistance, as well as providing long term waterproofing protection.

QUICSEAL 103 ECO cures to form a tough, seamless, elastomeric waterproofing membrane with excellent adhesion to most substrates.

Uses

Waterproofing of:-

- concrete, metal, wood or clay-tiled roofs
- pitched and RC flat roof with sufficient gradient to allow easy run-off
- concealing hairline cracks and shrinkage cracks less than 0.4 mm width
- external wall (seepage repair)
- protection of concrete against deterioration from effects of the UV rays
- expansion joints used in conjunction with QUICSEAL 209

Advantages

- Single component - ready to use
- Can be applied by brush, roller or spray
- Being elastomeric, it exhibits excellent recovery characteristics
- Seamless membrane
- Able to bridge cracks
- Suitable for exposed applications
- Can be painted over with good quality acrylic paint.
- Good hiding power – opaque



QUICSEAL 103 ECO for RC Flat roof



QUICSEAL 103 ECO for external wall waterproofing



QUICSEAL 103 ECO for upgrading tiled roof (before and after effect)

Technical Data

Product Type	Water-based Acrylic
Colour	Grey and White
Elongation at break	> 300%
Tensile Strength (ASTM D412-1992)	> 2.0 N/mm ²
Adhesion (ASTM D4541-1985)	> 1.5 N/mm ² on steel > 1.0 N/mm ² on concrete
Shore hardness (ASTM D2240-1991)	> 79
Flexibility over 1 mm mandrel	No crack at -20°C
Flash point	Non-flammable (waterbased)
Specific gravity	1.3 + 0.05
Drying time	2 hours at 30°C, 65%RH on concrete
Wet film thickness per coat	0.4mm
Minimum dry film thickness with reinforcing mesh	0.8mm
Water permeability (ASTM E96:1995)	< 24 g/m ² / day
Recovery	95% at 100% elongation
Crack bridging properties (ASTM C836: 89a) (adopted)	Able to bridge crack up to 2mm
UV resistance	Excellent
Chemical resistance	resistant to most household chemicals, except for bleaches and hydrogen peroxide. Partially soluble in aromatic solvent but recovers on drying.
Service Temperature	-20°C to 90°C

Surface Preparation

The substrates must be clean and sound, free of dust and loose particles. Laitance, oil, grease, mould release agents or any foreign contaminants which may inhibit adhesion must be removed from concrete surfaces by using wire brush, scabblers or other means. Where moss, algae or similar growths have occurred, treatment with suitable chemicals should be carried after the initial cleaning process followed by further washing. Top up ponding areas with QUICSEAL 510 non-shrink grout.

It is essential to provide a continuous coating of QUICSEAL 103 ECO. Therefore, surfaces with blowholes or large cracks should first be filled with QUICSEAL 516 Waterplug or QUICSEAL 304 Epoxy Putty, (refer to separate data sheet for further details).

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

On Reinforced Concrete roof

Ensure that the substrate is fully cured and sound. Newly cast screed must be cured for 28 days to allow the shrinkage and thermal cracks to form and be treated before application of QUICSEAL 103 ECO. There should be sufficient gradient to allow water to run off. Prior to the application of QUICSEAL 103 ECO, prime substrate with 1 coat of QUICSEAL 103 ECO Primer. Where movement is expected, QUICSEAL reinforcing mesh is recommended to embed within the membrane. Where expansion joints are encountered, reinforce QUICSEAL 103 ECO with QUICSEAL 209 Expansion Strip.

Existing Coatings

Where application over existing sound coatings is required, trials should be conducted to ensure compatibility and retention of the bond between the underlying coating and the substrate. For further advice, consult the local QUICSEAL representative.

Application

Stir QUICSEAL 103 ECO manually before application.

On Reinforced Concrete roof

QUICSEAL 103 ECO can be applied with roller, brush or spray equipment. Apply first coat of QUICSEAL 103 ECO and whilst the membrane is still wet, immediately unroll the reinforcing mesh. Apply second coat of QUICSEAL 103 ECO over the reinforcing mesh at coverage of 0.55 kg/m² and roll over to ensure good wetting between the mesh and QUICSEAL 103 ECO. Allow the second coat to dry for a minimum of 1-2 hours before continuing with the subsequent coat of QUICSEAL 103 ECO. Apply the third coat of QUICSEAL 103 ECO at right angles to the last coat to achieve a total dry film thickness of 1.2 mm and allow to dry.





On Wall Application

Apply two coats of QUICSEAL 103 ECO in the same manner as above, excluding reinforcing mesh. Where expansion joints are encountered, reinforce QUICSEAL 103 ECO with QUICSEAL 209 Expansion Strip.



Limitations

QUICSEAL 103 ECO is not recommended for areas where constant ponding or water-immersion is expected. Contact QUICSEAL Technical Department for further advice.

Packing

Pack size : 5 kg pail and 20 kg pail
 Coverage : 0.55kg/m²/coat

Cleaning

Due to high adhesion strength of this product even on metals, it is advisable to wash tools with water before the product sets. After setting, cleaning can only be achieved by mechanical means.

Storage

The shelf life of QUICSEAL 103 ECO is 12 months when stored unopened in a cool and dry place.

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 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, contact QUICSEAL

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