

Silcor[®] VR 80

Primer for electrical insulation and waterproofing elastomeric polyurethane and polyurea membranes

Product Description

A two-component, solvent-free primer, recommended for use with concrete.

- Fast-cure
- Excellent penetration and adhesion to substrate
- Simple and easy application
- Good bonding with concrete. Recommended moisture content is <5% based on ASTM F2659.

Application

The surfaces of new concrete should be lightly blast abraded or mechanically abraded to remove laitance. Dust and debris created from blasting or sanding should be removed by sweeping or vacuum cleaner. Surface must be clean, sound, smooth and free from dust, laitance, loose matter, oil or other contaminants.

Pour the hardener into the resin and mix thoroughly for 5 minutes until the colour is uniform using a low speed drill at 200 to 300 rpm. Do not mix more than is required because the material will gel and harden. Heat is generated when the resin and hardener reacts and temperatures will increase over time. Apply soon after mixing. Never mix more than one batch at a time in a single container as this may cause a premature exothermic reaction with production of intense heat and smoke.

Apply Silcor[®] VR 80 by roller or rubber squeegee. Application temperatures must be between 10°C and 40°C with <85% relative humidity, and at least 3°C above the dew-point temperature.

Application onto highly porous substrates while substrate temperature is increasing may result in concrete outgassing and pinhole formation in the applied primer. This can be reduced or prevented by priming substrates in the late afternoon or evening, when concrete temperature is stable or falling. Applicator procedures and schedule need to be adjusted to suit local conditions.

Blisters can be formed due to trapped moisture within the substrate outgasses which pushes through the wet freshly applied coating before any film is formed and will be trapped during the curing process as well.

More coats of SILCOR VR 80 may be required depending on the substrate porosity and conditions, similar with any PU/PUA primer application. Localised-formed blisters would have to be removed and recoat to the required thickness.

Coverage

Generally 0.60kg/m² dependent on substrate condition, application technique and weather.

More is required for porous concrete, minimum 0.6mm dry-film thickness. It is recommended to apply 1 coat of a minimum thickness of 0.6mm by rubber squeegee on horizontal substrate and at least 2 coats of maximum thickness of 0.3mm each coat on vertical substrate by roller.

Packaging

30Kg set with 20Kg Base + 10Kg Hardener

Typical Properties

PROPERTY	TYPICAL VALUE
Colour	Yellow/Orange
Mixing Ratio (Base: Hardener)	2:1 (Weight Ratio)
Pot Life	50 - 55 mins @ 25 °C

	Required time @20 °C
Tack-free Time	2 hours
Initial Cure	4.5 hours
Interlayer coating time	≤ 8 hours
Overcoat Time	Up to 24 hours

Shelf Life and Storage

All products should be stored internally, in original packaging at temperatures between 5 °C and 25 °C, relative humidity below 60%. Protect products from all sources of heat, moisture, frost and direct sunlight. Shelf life 6 months maximum.

Health and Safety

Read and understand the product label and Safety Data Sheet (SDS) for each system component. All users should acquaint themselves with this information prior to working with the products and follow the precautionary statements. SDSs can be obtained by contacting your local GCP representative or office and in some cases from our web site at gcpat.com.

gcpat.com | For technical information: asia.enq@gcpat.com

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