

SILCOR[®] 580

Two-part, low-odour, heavy-duty-trafficable, polyurethane waterproofing membrane



Product Description

A tough, resilient, polyurethane elastomer-based layer rubber barrier giving long-life waterproof protection. It is a premium grade, low VOC elastomer using the latest technology to provide long-life, protective barriers to prestige construction projects.

Features

- Fast application by “flood coating” using a squeegee, without multi-layering
- Long-life, permanently flexible
- Total adhesion — no water tracking
- Fully monolithic structure
- Resistant to puncture and damage
- Resistant to ponded water
- UV-resistant and non-yellowing system
- Hard-wearing, non-slip surface

Combine with other membrane from GCP Applied Technologies to specify a full waterproof envelope.

Uses

SILCOR[®] 580 and SILCOR Top Coat 80 system are suitable for:

- Exposed roofing, decks and podiums
- Car parks and ramps
- Compactor room floors, plant rooms and wash rooms
- Sport stadium service-ways, plats and vomitories

SILCOR 580 Membrane may be used alone as a protective, impact-resistant, resilient, internal flooring to laboratories, sports centres and gymnasium.

The SILCOR 580 system can be applied to most clean, dry, stable surface including concrete, precast, fibre cement sheet, CFC, precast, concrete masonry, brick, render, metals and plastics.

Preparation

Surfaces must be sound, smooth and free from dust, laitance, loose matter, oil or other contaminants.

Concrete should be cured 28 days and render 7 days.

Use SILCOR LM PU sealant to fill joints, cracks, gaps and form angle fillets to internal corners or penetrations.

Note

Resurfacing of previously painted surfaces will require total removal of existing coatings to expose bare, clean substrate. Machine grinding is the preferred method.

Mix all individual SILCOR 580 components with a clean dry stirrer before use.

Preferred application temperature range is between 5°C and 30°C.

Application

Priming

To inhibit pin-holes and seal dusty, porous surfaces use one coat of SILCOR Primer BS at 0.15 - 0.3 kg/m² and allow to dry.

Use SILCOR Primer BW N105-DT to seal damp or concrete. Roughen PVC or stainless steel before priming with SILCOR Primer BW N105-DT. Recommended moisture content <5% based on ASTM F2659.

Application to highly porous substrates while substrate temperature is increasing may result in concrete outgassing and pinhole formation in primer. This can be reduced or prevented by priming substrates in the late afternoon or evening, when concrete temperature is stable or falling.

Mixing

Measure each individual SILCOR 580 Membrane Polyol and Isocyanate component accurately by weight into a clean container and mix thoroughly with an electric stirrer (300rpm). Preferred material mixing and application condition is 10°C - 30°C and RH < 85%.

Application

SILCOR 580 Membrane

Apply in one coat by 5mm notched trowel/notched squeegee or Two or more coats by roller, allowing to cure 12 to 24 hours between coats. Total Wet Film Thickness (WFT) = 1.8mm/approximately 2.4kg/m²) to give a minimum Wet Film Thickness (WFT) of 1.8mm and minimum required DFT of 1.5mm. Apply SILCOR Top Coat 80 non-slip top coat for a standard, non-slip finish as detailed below.

Where a high rating non-slip finish is required, apply membrane by a two stage process as follows:

Apply first coat by 5mm notched trowel/notched squeegee, as described above. Allow to cure for minimum 12 hours to maximum 24 hours, then apply a second coat at 0.4mm WFT (approximately 0.4 kg/m²). While still wet, broadcast with non-slip aggregate. Allow to cure a minimum 12 hours, remove loose aggregate and apply SILCOR Top Coat 80 as detailed below.

SILCOR Top Coat 80

Apply SILCOR Top Coat 80 by roller or air-less spray system in 2 coats at minimum 0.3kg/m² (minimum 0.15kg/m per coat). Allow 24 hours curing before foot traffic. Allow 5 days curing before allowing vehicle traffic. Where non-slip aggregate broadcast has been employed, top coat requirement will increase significantly (0.6 to 0.9 kg/m²). Contact GCP representative for more details for the non-slip aggregate requirements.



Surfacing

The finished SILCOR 580 Membrane may be subjected to foot traffic 8 hours after installation but 5 days curing should be allowed before vehicles are driven over the surface.

If required for functional or aesthetic reasons, areas of SILCOR 580 membrane may be covered with optional surfacing systems, after full curing.

- **Tiles:** Lay ceramic tiles on mortar bed or apply sand layer before application of suitable adhesive.
- **Landscaping:** Use BITUTHENE[®] Protection Board or HYDRODUCT[®] Drainage Board followed by landscaping.
- **Rigid Surfaces:** Use 0.2mm polyethylene slip-sheet under concrete toppings. Lay paving slabs supported on mortar bed.

Packaging

SILCOR 580

36kg set

Shelf Life

Do not store product exposed to weather and sun. When kept in a cool, dry, protected area, sealed pails have a 12-month shelf life at 25°C, 60% RH, but once opened, may solidify within a few days.

Clean Up

Use methylated spirits before curing. Exercise care when using solvent, review all Safety Data Sheet before use.

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.

Project Specification

GCP Applied Technologies offers a comprehensive package of quality and proven systems to meet different project and application needs. Contact your local GCP representative for further information.

Typical Properties

PROPERTY	TYPICAL VALUE	TEST METHOD
Colour	Grey	
Specific Gravity	1.2 g/mL	
Solids % Vol	> 97	
Cure Time - Ready for Flood Test, Tiling, Topping	48 hours	
Mix Ratio (w/w)	1:1	
Pot Life (20°C)	30 minutes	
Tensile Strength	> 8.8MPa	ASTM D412
Elongation	> 350%	ASTM D412
Shore A Hardness	80 ± 5	ASTM D2240
Chemical Resistance	Excellent	ASTM D543

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