Silcor® 560

Fast-cure, polyurethane waterproofing membrane

Product Description

A high performance, low odour, one-part, fast-curing, high solids, pure polyurethane elastomer waterproof membrane. It is specially formulated for easy roller application of all permanently flexible, tough, high build, long-life waterproof barriers.

Features

- Easy, fast, high build, one-coat application with brush or roller is possible.
- Simple, seamless, fast-cure membrane.
- Excellent chemical resistance, suitable for acid sulphate soils.
- Waterproof — resists ponded water.
- Permanently flexible — total adhesion.
- Root penetration resistance — DIN4062 compliance.
- Systems for Total Project Specification.

Silcor® 560 is a pure polyurethane elastomer. It does not contain bitumen or tar and will not bleed or stain. It is engineered to allow high build application without multi-layering and/or reinforcing mat. Design a Total Waterproofing Envelope package with waterproofing systems from GCP Applied Technologies.

Uses

- Wet Areas — bathrooms, shower trays, laundries, toilets, spas.
- External (non-exposed) — balconies, roof-decks, sill or window flashings, podiums, planters.
- External (exposed) — non-traficcable areas, e.g. wall, planters.
- Tanking — retaining walls, landscaped areas, ponds, water features, non-potable water storage.
- It can be applied to most stable surfaces — block, brick, concrete, render, timber, CFC, GRC, ALC, etc.
- Vertical and horizontal application.

Preparation

Surfaces must be sound, smooth and free from dust, laitance, loose matter, oil or other contaminants. Concrete Finish — light steel trowel finish to provide low porosity, well densified surface without burnishing. Ensures minimal preparation work with high primer penetration and minimal outgassing from concrete pores.
Concrete should be cured 28 days and rendered 7 days. Concrete curing agent & form release used should be compatible with GCP products.
Use Silcor LM PU sealant to fill joints, cracks, gaps and form angle fillets to internal corners or penetrations.
Bond Breaker

Install Silcor LM PU sealant as bond breaker. Allow all detailing work to skin cure before proceeding with general membrane installation.

Application

Primer

To inhibit pin-holes and seal dusty, porous surfaces use one coat of Silcor Primer BS at 0.15 - 0.3 kg/m² depends on the substrate condition and allow to dry.

Use Silcor Primer BW N105-DT to seal damp 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.

Application of Continuous Membrane

Before application, fully mix with a low speed mixer or drill with paddle until homogeneous and ensure material on bottom and sides of mixing container is fully mixed in. Mixing by hand is not allowed.

Apply Silcor 560 membrane liberally by brush, squeegee roller in two coats. Apply minimum 1.8 kg/m² to achieve 1mm DFT (Dry Film Thickness) 1.2mm WFT (Wet Film Thickness) per coat. Apply the second coat when the first coat is tack free. If the second coat is applied more than 24 hours, it is required to clean the first coat by xylene. Test WFT during application using a Wet Film Thickness Gauge.

Do not use on trafficable areas.

Required minimum thickness is dependent on installation area, type of use of the area, topping or membrane protection being employed and will be specified in the GCP project specification or architect’s specification. Refer to the Theoretic Coverage table for details of minimum thickness requirement.
Typical Properties

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>TYPICAL VALUE</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Black</td>
<td>-</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.45g / ml</td>
<td>-</td>
</tr>
<tr>
<td>Solid % Vol</td>
<td>91 ± 3</td>
<td>-</td>
</tr>
<tr>
<td>Cure Time - Ready for Flood Test, Tiling, Topping</td>
<td>48 hours</td>
<td>-</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>&gt; 2.0MPa</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Elongation</td>
<td>&gt; 550%</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Shore A Hardness</td>
<td>60 ± 5</td>
<td>ASTM D2240</td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>Excellent</td>
<td>ASTM C543</td>
</tr>
</tbody>
</table>

Surfacing

Allow product to cure overnight before foot traffic. Protect installed membrane from damage. If surface retains any tacky feel, access is achieved by a light broadcast of fine sand. Remove any loose materials before over-coating.

The following surfacing systems may be used after Silcor 560 membrane has fully cured.

- Exposed Areas -- Use Silcor Top Coat 80 (non-slip or sheen finish) to provide UV stable protective finish.
- Tiles -- Lay ceramic tiles on mortar bed or apply sand layer before application of suitable adhesive.
- Rigid Surfaces -- Use 0.2mm polyethylene slip-sheet under concrete toppings. Lay paving slabs supported on mortar bed.
- Tanking -- Cover with Bituthene® Protection Board or Hydroduct® Drainage Board from GCP Applied Technologies, followed by backfill or landscaping.
- Decorative Finishes -- Use Silcor Primer BW N105-DT to seal surface, then apply any exterior quality acrylic paint.

Theoretic Coverage

12m² / pail in 1mm thickness (DFT)

<table>
<thead>
<tr>
<th>Area</th>
<th>Thickness (DFT) recommendation*</th>
<th>Coverage @ 25ºC, 60% RH</th>
</tr>
</thead>
<tbody>
<tr>
<td>External</td>
<td>1.2 - 1.5mm</td>
<td>2.1 - 2.6kg / m²</td>
</tr>
<tr>
<td>Internal-floors</td>
<td>1.2 - 1.5mm</td>
<td>2.1 - 2.6kg / m²</td>
</tr>
<tr>
<td>Internal-walls</td>
<td>0.3 - 0.5mm</td>
<td>0.5 - 0.9kg / m²</td>
</tr>
</tbody>
</table>

* Thickness should be determined by specifier
Packaging

22kg pails

Clean Up

Use methylated spirits before curing. Exercise care when using solvent. Review all Material Safety Data Sheet (MSDS) before use.

Shelf Life

Do not store product exposed to weather and sun. When kept in a cool, dry, protected area, sealed pails have a 6-month shelf life at 25°C, 60% RH, but once opened may solidify within a few days.

Health and Safety

In case of spills and accidents, refer to the MSDS of the products or when in doubt contact your local GCP representative.
Always wear protective clothing, gloves and protective goggles when handling chemical products.
For full information, consult the relevant MSDS.

Project Specification

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