

SILCOR[®] 900MP

Rapid-set, spray-applied, liquid waterproofing membrane for roofs, podium decks, terraces etc.

Product Description

SILCOR[®] 900MP is a premium performance two-component spray-applied seamless waterproofing membrane that rapidly cures to form a high-strength, elastomeric, and fully-bonded waterproof membrane. Unlike conventional liquid membranes, Silcor 900MP is extremely durable with excellent wear and chemical resistance and does not normally require additional protection against mechanical damage.

Principal Applications

New and remedial waterproofing for:

- Roofs
- Podium decks
- Terraces
- Walkways and foot bridges
- Balconies
- Green/ Planted roofs
- Water features/ planters

System Components

- SILCOR[®] 900MP – premium performance two component, spray-applied seamless waterproofing membrane.
- SILCOR[®] Primer EP LT – three-component epoxy primer fast curing at low temperatures for use 0 °C - 20 °C.
- SILCOR[®] Primer EPF – two-component epoxy primer for concrete substrates.
- SILCOR[®] Primer MT – two-component phosphate/epoxy primer for metal substrates.
- SILCOR[®] Primer PU 30 - 1 component polyurethane primer for bitumen sheets (mineralised face).
- Dry Quartz Silica Sand – fine dry silica quartz sand for use with primers. Contact GCP for specification.
- HYDRODUCT[®] 200/ 650 (optional) – geocomposite drainage/ irrigation sheet.
- HYDRODUCT[®] Root Barrier (optional)

Design

Silcor 900MP spray-applied roof waterproofing system is satisfactory for use as a fully adhered waterproofing layer on new and existing flat (including those with zero pitch) and sloping protected roof specifications e.g. inverted roofs, terraces, podium decks and covered walkways for pedestrian access.

Compatibility/Adhesion

Concrete and steel surfaces must be suitably prepared to accept primers and membranes to ensure adequate adhesion. Mechanical preparation recommended. For further details concerning surface preparation guidelines and primer choice, contact GCP.

Installation

Silcor 900MP liquid waterproofing is applied only by experienced, trained contractors. Contact GCP for further details. Silcor 900MP should only be applied to correctly prepared and primed surfaces in dry conditions. Surfaces should be clean, dry, and free of contaminants and loose particles. Consult GCP for surface preparation guidance and the requirement for mechanical preparation of specific substrates.

Physical properties

| | TYPICAL VALUE | TEST METHOD |
|---|----------------------------------|----------------------|
| Tensile Strength | 18 Mpa | ISO 527 |
| Elongation | > 300 % | > 300 % |
| Tear Resistance | > 64 N/mm | ISO 34-1 Method B |
| Adhesion to concrete | Concrete failure (note 1) | ISO 4624 |
| Water Vapour | 9.9 g/m ² /day | ISO 15106, |
| Permeability | | Part 3 |
| Methane | 30.6 ml/m ² /day | ISO 15105, |
| Permeability | (note 3) | Part 1 |
| Shore Hardness | 91A, 41D | ASTM 2240 |
| Abrasion Resistance (Taber Wear index) | 255 mg (note 2) | ASTM D4060 |

Footnotes:

1. Tested on prepared, primed, and sand blinded concrete or steel
2. H18/1000 cycles/1000g
3. As a comparison. BRE Report 212 minimum standard 300 µm pe (200-300 ml/m²/day)

Supply

| | UNIT OF SALE |
|---------------------------------|--------------------------|
| Silcor 900MP (Resin) | 205 kg |
| Silcor 900MP (Iso) | 225 kg |
| Silcor Primer EPF (Part A) | 3.20 kg |
| Silcor Primer EPF (Part B) | 1.80 kg |
| Silcor Primer EP LT (Part A) | 3.16 kg |
| Silcor Primer EP LT (Part B) | 0.72 kg |
| Silcor Primer EP LT (Part C) | 1.12 kg |
| Silcor Primer MT (Part A) | 6.2 kg |
| Silcor Primer MT (Part B) | 0.9 kg |
| Storage | Store between 5°C & 25°C |
| Shelf life | 12 months |
| Ancillary Products | |
| Silcor [®] Top Coat 50 | Optional UV |
| Hydroduct 200 / 650 | protective coating |
| | Optional drainage |
| | geocomposite sheets |

- Ambient application temperature must be between 5°C and +40°C. Substrate temperature should exceed the dew point temperature by a minimum of 3°C.
- Relative humidity should be less than 90%.

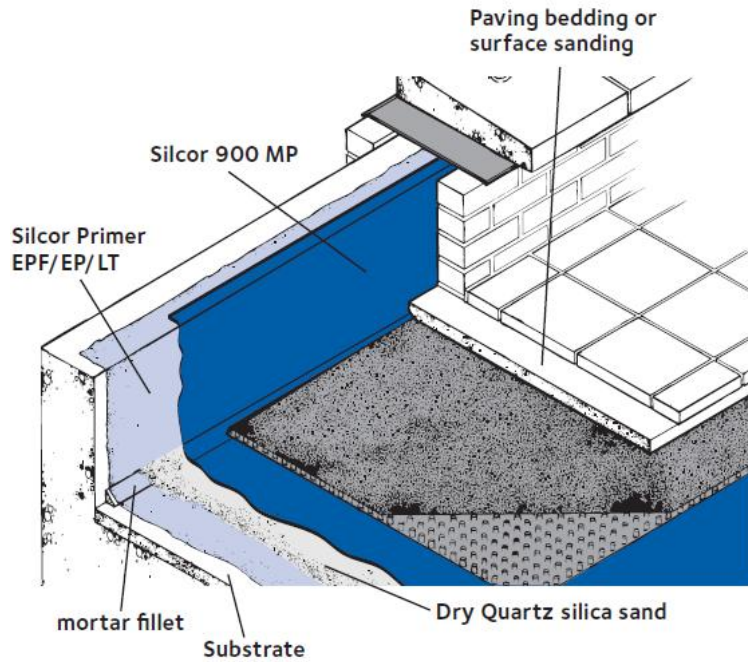
Health and Safety

For Silcor 900MP, Silcor Primer EPF, Silcor Primer EP LT and Silcor Primer MT read the product label and Safety Data Sheet (SDS) before use. Users must comply with all risk and safety phrases. SDSs can be obtained from gcpat.com.

Product Advantages

- **Seamless** – continuous waterproofing integrity.
- **Rapid-set** – will accept foot traffic after 5 mins.
- **Robust** – no protection needed
- **Productivity** – spray-applied for maximum coverage per day.
- **Fully bonded** – eliminates water migration to prevent water tracking.

- Elastomeric – accommodates movements and bridges concrete shrinkage cracks.
- Durable – tough with excellent wear and damage resistance.
- Chemical Resistance – excellent fuel and chemical resistance.
- BBA Certificate
- European Technical Approval



Details shown are typical illustrations only and not working drawings. For assistance with working drawings and additional technical advice please contact GCP or visit us online at gcpat.com

Liquid properties

| | TYPICAL VALUE | TEST METHOD |
|-------------------|---------------------------------|-------------|
| Viscosity – Resin | 400-600 cps | Brookfield |
| | (note 1) | Viscometer |
| | | Brookfield |
| Viscosity – Iso | 800-1200 cps | |
| (note 1) | Viscometer | |
| Solids Content | 100 % | ASTM D1644 |
| Specific gravity | 1.03 g/cm ³ , | |
| (Resin, Iso) | 1.11 g/cm ³ (note 1) | |

2.2 kg/m²

Coverage Rate

(2 mm thickness)

Trafficable (foot traffic)

2 mins

Footnotes:

1. Measured at 25°C

All declared values shown in this data sheet are based on test results determined under laboratory conditions and with the product sample taken directly from stock in its original packing without any alteration or modification of its component parts.

European Technical Approval ETAG005 Levels of performance

| CHARACTERISTIC | LEVEL OF PERFORMANCE |
|--|----------------------|
| Minimum thickness | 2.0 mm |
| Water vapour resistance factor (μ) | 1941 |
| Resistance to wind loads | >50 kPa |
| External fire performance | NPD(1) |
| CE | |
| 0836 | |
| ETA -13/ | |
| 0522 | |
| Reaction to fire | Euroclass E |
| Categorisation by working life | W2 |
| Categorisation by climatic zones | S |
| Categorisation by imposed loads | P4 |
| Categorisation by roof slope | S1 |

| | |
|----------------------------------|-----|
| Categorisation by surface | TL3 |
| temperature – lowest – highest | TH4 |
| Slipperiness | NPD |
| [Slope (°)/friction coefficient] | |

Footnotes:

1. External fire performance is dependent on the protection layer used in the roof specification. Deemed-to-satisfy inorganic coverings are listed in the Annex of Commission Decision 2000/553/EC.

Chemical Resistance

Silcor 900MP offers protection to a wide range of chemicals. Contact GCP for specific details and recommended applications.

Warranties

GCP and trained contractors can provide warranties for individual projects. Contact GCP for further details.

NBS Specification Clause

Refer to Clause J30/130 and J31/130.

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

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

SILCOR and HYDRODUCT are trademarks, which may be registered in the United States and/or other countries, of GCP Applied Technologies Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2020 GCP Applied Technologies Inc. All rights reserved.

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Alpharetta, GA 30009, USA

GCP Applied Technologies (Thailand) Limited., 848 Moo 2, Bangpoo Industrial Estate (North), Phraksa Mai, Muang Samutprakarn, Samutprakarn 10280, Thailand

This document is only current as of the last updated date stated below and is valid only for use in Thailand. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on www.th.gcpat.com. Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2023-07-07

th.gcpat.com/solutions/products/silcor-liquid-waterproofing/silcor-900mp