

# 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<sup>®</sup> 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

Tensile Strength		TYPICAL VALUE	TEST METHOD
Tear Resistance         > 64 N/mm         ISO 34-1           Method B         Adhesion to concrete         ISO 4624           (note 1)         9.9 g/m²/day           Water Vapour         ISO 15106,           Permeability         Part 3           Methane         30.6 ml/m²/day         ISO 15105,           Permeability         (note 3)         Part 1           Shore Hardness         91A, 41D         ASTM 2240           255 mg (note 2)         ASTM D4060	Tensile Strength	18 Mpa	ISO 527
ISO 34-1   Method B	Elongation	> 300 %	> 300 %
Adhesion to concrete       Concrete failure       ISO 4624         Water Vapour       9.9 g/m²/day       ISO 15106,         Permeability       Part 3         Methane       30.6 ml/m²/day       ISO 15105,         Permeability       (note 3)       Part 1         Shore Hardness       91A, 41D       ASTM 2240         255 mg (note 2)       ASTM D4060	Tear Resistance	> 64 N/mm	
Adhesion to concrete         Concrete failure         ISO 4624           (note 1)         9.9 g/m²/day           Water Vapour         ISO 15106,           Permeability         Part 3           Methane         30.6 ml/m²/day         ISO 15105,           Permeability         (note 3)         Part 1           Shore Hardness         91A, 41D         ASTM 2240           255 mg (note 2)         ASTM D4060			ISO 34-1
(note 1)       9.9 g/m²/day     ISO 15106,       Permeability     Part 3       Methane     30.6 ml/m²/day     ISO 15105,       Permeability     (note 3)     Part 1       Shore Hardness     91A, 41D     ASTM 2240       255 mg (note 2)     ASTM D4060			Method B
Water Vapour       9.9 g/m²/day       ISO 15106,         Permeability       Part 3         Methane       30.6 ml/m²/day       ISO 15105,         Permeability       (note 3)       Part 1         Shore Hardness       91A, 41D       ASTM 2240         255 mg (note 2)       ASTM D4060	Adhesion to concrete	Concrete failure	ISO 4624
Water Vapour       ISO 15106,         Permeability       Part 3         Methane       30.6 ml/m²/day       ISO 15105,         Permeability       (note 3)       Part 1         Shore Hardness       91A, 41D       ASTM 2240         255 mg (note 2)       ASTM D4060		(note 1)	
Permeability         Part 3           Methane         30.6 ml/m²/day         ISO 15105,           Permeability         (note 3)         Part 1           Shore Hardness         91A, 41D         ASTM 2240           255 mg (note 2)         ASTM D4060		9.9 g/m²/day	
Methane       30.6 ml/m²/day       ISO 15105,         Permeability       (note 3)       Part 1         Shore Hardness       91A, 41D       ASTM 2240         255 mg (note 2)       ASTM D4060	Water Vapour		ISO 15106,
Permeability         (note 3)         Part 1           Shore Hardness         91A, 41D         ASTM 2240           255 mg (note 2)         ASTM D4060	Permeability		Part 3
Shore Hardness         91A, 41D         ASTM 2240           255 mg (note 2)         ASTM D4060	Methane	30.6 ml/m²/day	ISO 15105,
255 mg (note 2) ASTM D4060	Permeability	(note 3)	Part 1
	Shore Hardness	91A, 41D	ASTM 2240
Abrasion Resistance		255 mg (note 2)	ASTM D4060
	Abrasion Resistance		
(Taber Wear index)	(Taber Wear index)		

#### 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 <sup>®</sup> 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

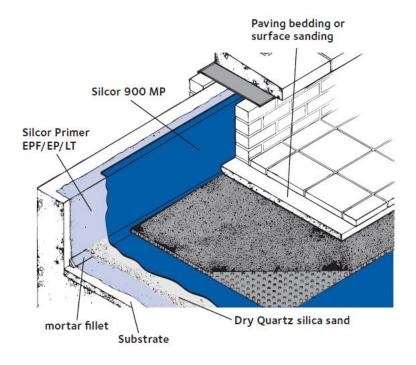
For Silcor 900MP, Silcor Primer EPF, Silcor Primer EP LT and Silcor Primer MT read the product label and Safety Data Sheet (SDS) before use. Users must comply with all risk and safety phrases. SDSs can be obtained from gcpat.com.

# 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
Viscocity - Resin	400-600 cps	Brookfield
	(note 1)	Viscometer
Viscocity – Iso	800-1200 cps	Brookfield
(note 1)	Viscometer	
Solids Content	100 %	ASTM D1644
Specific gravity	1.03 g/cm³ ,	
(Resin, Iso)	1.11 g/cm³ (note 1)	



Coverage Rate	2.2 kg/m²
(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	1941
	factor (µ)	
	Resistance to wind loads	>50 kPa
CE	External fire performance	NPD(1)
0836		
ETA -13/		
0522		
	Reaction to fire	Euroclass E
	Categorisation by working life	W2
		S
	Categorisation by climatic zones	
	Categorisation by imposed loads	P4
	Categorisation by roof slope	S1



Categorisation by surface	TL3
temperature - lowest - highest	TH4
	NPD
Slipperiness	
[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

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