

# Concrete Deck Waterproofing - Membranes

## Silcor™ 900HA

Fast-cure, hand-applied liquid waterproofing membrane for decks, terraces, walkways, roofs

### Description

Silcor™ 900HA is two component, hand-applied seamless liquid waterproofing that cures to form high-strength, flexible, and fully-bonded waterproof protection.

Unlike conventional liquid membranes, Silcor 900HA is extremely durable with excellent wear and chemical resistance.

### Principal Applications

New and remedial waterproofing for:

- Podium and plaza decks
- Balconies and terraces
- Walkways and foot bridges
- High-foot traffic areas
- Concrete roof decks
- Green / Planted roofs
- Water features / Planters
- Service reservoir roofs
- Secondary containment

### System Components

- **Silcor 900HA** – seamless waterproofing membrane for horizontal surfaces and upstands up to 300 mm.
- **Silcor P10 Epoxy Primer** – two-component epoxy primer.
- **Silcor P20 PU Primer** – two-component polyurethane primer.
- **Dry Quartz Silica Sand** – Fine dry silica quartz sand for use with primers. Contact Grace for specification.
- **Hydroduct® (optional)** – geocomposite drainage/irrigation sheet.
- **Hydroduct® Root Barrier (optional)**.

### Advantages

- **Seamless** – continuous waterproofing integrity with easy detailing.
- **Fast cure** – quick self-curing system for rapid installation and return to service.
- **Fully bonded** - eliminates water migration to prevent water tracking between membrane and substrate.
- **Non-flammable** – 100% solids, solvent free
- **Low Odour** – zero VOC
- **Elastomeric** - accommodates movements and bridges concrete shrinkage cracks.
- **Superior Performance** – high strength, elongation, and tear resistant properties.
- **Self-protected** – tough with excellent wear and abrasion resistance.
- **Chemical Resistance** – excellent fuel and chemical protection.

### Design

Silcor 900HA waterproof membrane system is suitable for use with concrete, bituminous, and steel surfaces. Roof decks should be designed in accordance with relevant standards.

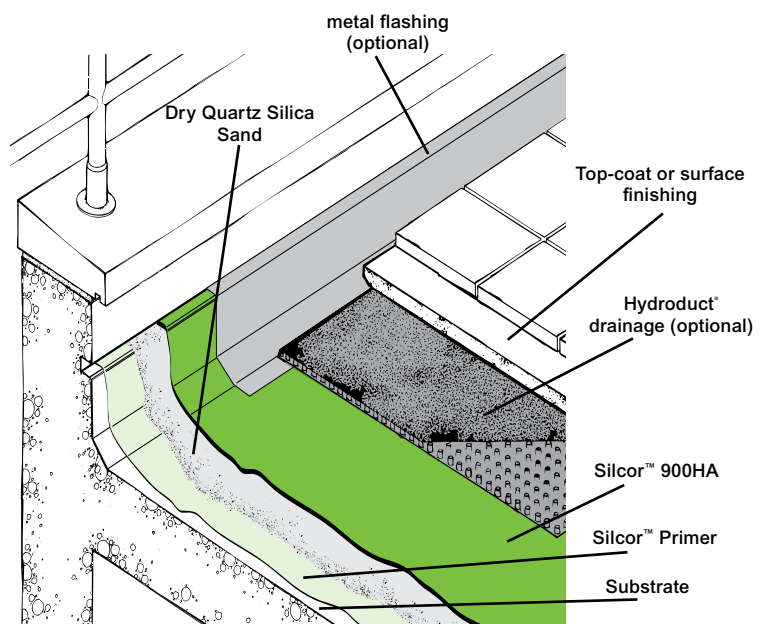
### Compatibility/Adhesion

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 Grace.

### Installation

Silcor 900HA waterproof membrane system is applied only by experienced, trained contractors. Contact Grace for further details.

- Silcor 900HA should only be applied to correctly prepared, primed, and sand blinded surfaces in dry atmospheric conditions. Surfaces should be clean, dry, and free of contaminants and loose particles.
- Ambient application temperature must be between +5°C and 30°C. Substrate temperature should exceed the dew point temperature by a minimum of 3°C.



Details shown are typical illustrations only and not working drawings. For assistance with working drawings and additional technical advice please contact Grace Technical Services

## Physical Properties

	Typical Value	Test Method
Resistance to hydrostatic head over 3.2 mm post formed crack	> 70 m	ASTM D5385
Tensile Strength	10 MPa	ASTM D412
Elongation	450 %	ASTM D412
Tear Strength	> 40 kN/m	ASTM D624
Adhesion to concrete	Concrete failure (note 2)	ASTM D4541
Adhesion to steel	> 4.0 MPa (note 2)	ASTM D4541
Shore Hardness	75 A	ASTM D2240

### Footnotes:

1. Measured at 23°C
2. Tested on prepared, primed, and sand blinded concrete or steel

## Liquid Properties

	Typical Value	Test Method
Viscosity - Resin	550 mPa.s (note 1)	Brookfield Viscometer
Viscosity - Iso	8,000 mPa.s (note 1)	Brookfield Viscometer
Solids Content	100 %	ASTM D1644
Specific gravity (Resin, Iso) <sup>1</sup>	1.2 g/cm <sup>3</sup> , 1.2 g/cm <sup>3</sup>	
Coverage Rate (2 mm thickness)	2.4 kg/m <sup>2</sup>	Internal
Pot Life	up to 8 minutes (note 2)	Internal
Working Time	up to 15 minutes (note 2)	Internal
Tack-Free Time	30 minutes (note 2)	Internal

### Footnotes:

1. Measured at 23°C
2. Temperature Dependent

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.

## Supply

	Unit of Sale
Silcor™ 900HA (Resin)	0.96 kg
Silcor™ 900HA (Iso)	9.04 kg
<b>Ancillary Products</b>	
Silcor P10 Epoxy Primer (Part A)	6.89 kg
Silcor P10 Epoxy Primer (Part B)	3.11 kg
Silcor P20 PU Primer (Resin)	7.04 kg
Silcor P20 PU Primer (Iso)	2.96 kg

## Chemical Resistance

Silcor 900HA is resistant to a wide range of chemicals. Contact Grace for specific details and recommendations.

## Warranties

Grace Construction Products and trained contractors will provide warranties for individual projects. Contact Grace for further details.

## Limitations

- Silcor 900HA should not be left as a permanently exposed wearing surface unless it is protected by a UV protective top-coat or wear coating. Contact Grace for further details.
- Silcor 900HA should be stored between 5°C and 25°C prior to application.

## Health and Safety

For Silcor 900HA, Silcor P10 Epoxy Primer and, Silcor P20 PU Primer read the product label and Material Safety Data Sheet (MSDS) before use. Users must comply with all risk and safety phrases. MSDS's can be obtained from Grace Construction Products.

## NBS Specification Clause

Refer to Clause J31/130.

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