

# SILCOR® 900HA

## Fast-cure, hand-applied liquid waterproofing membrane

### Product Description

Silcor® 900HA is a two component, hand-applied seamless liquid waterproofing that is typically foot-trafficable after 2 hours of application. Silcor® 900HA forms a fully-bonded waterproof membrane that is extremely durable with excellent wear, chemical resistance and physical properties.

### Principal Applications

New and remedial waterproofing for elevated decks including:

- Parking and plaza decks
- Podiums and terraces
- Split slabs and wet rooms
- Balconies
- Green roofs
- Water features / Planters
- IRMA

### System Components

- **Silcor® 900HA** – seamless waterproofing membrane
- **Silcor® Primer EPF** – two-component epoxy primer (for substrate application temperatures 40°F–80°F)
- **Silcor® Primer EPS** – two-component epoxy primer (for substrate application temperatures 65°F – 105°F)

#### • Dry Quartz Silica Sand

- 16/30 mesh for broadcast into primer (optional)
- 20/40 mesh for patching and repair

#### • Bituthene® Liquid Membrane – two component elastomeric liquid applied detailing accessory

#### • Preprufe® Tape – reinforced pressure sensitive tapes for detailing

### Intended Use

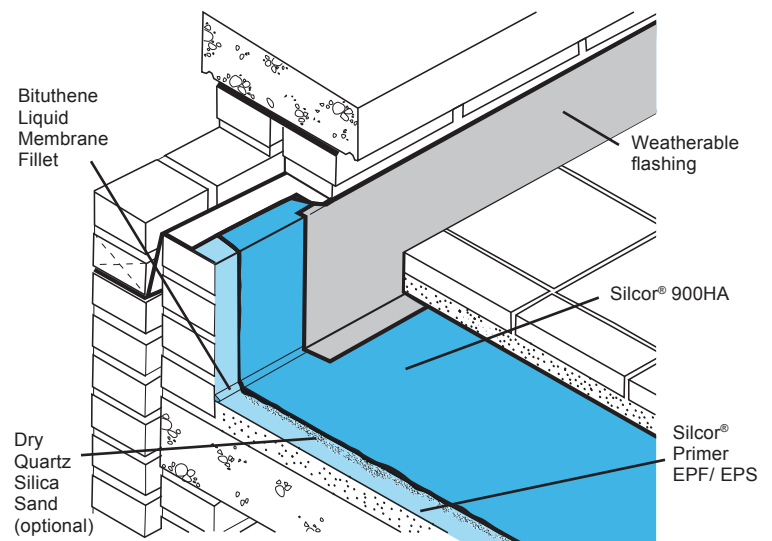
Silcor® 900HA hand-applied waterproofing system is designed for use as a fully adhered waterproofing layer on new and existing elevated structural decks.

### Installation

Silcor® 900HA liquid waterproofing should only be applied by experienced, trained contractors. Effective liquid waterproofing application requires adequate surface preparation of the substrate. Failure to properly prepare the substrate will negatively impact the waterproofing performance.

### Product Advantages

- **Fast cure** – quick self-curing system for rapid installation and return to service
- **Fully bonded** – water cannot track beneath the membrane
- **Non-flammable** – 100% solids, solvent free
- **Low Odor**
- **Elastomeric** – accommodates minor structural movements and bridges concrete shrinkage cracks
- **Durable** – tough with excellent wear and damage resistance
- **Excellent Chemical Resistance**
- **Seamless** – continuous waterproofing integrity with easy detailing



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

**1. Surface Preparation** – All grease, curing agents oil or other contaminants that can affect adhesion of the membrane to the surface need to be removed prior to application. Grease, dirt and grime can be removed using high pressure water cleaning provided sufficient time is allowed for the residual humidity and water to dissipate. Sandblasting is not effective on contaminated concrete. After cleaning, the surface needs to be prepared to open the pores and make the surface ready to accept the primer. The preferred and most common method is sand or grit blasting. Surface preparation for specific substrates is discussed below.

Concrete must be allowed to cure for at least 28 days. Concrete moisture content must be less than 5% prior to application of the Silcor primers. Moisture content must be checked using appropriate meters and test methods.

**2. Priming** – Priming should be completed prior to applying Silcor 900HA.

- Add the complete B-component to the A-component to assure correct mixing ratio.
- Mix with a slow turning mixer (less than 300 rpm) for 3 minutes in order to obtain a homogeneous mixture.
- Apply primers to the surface by brush or roller immediately after mixing.
- Pour the primer onto the surface in a zigzag trail.
- After pouring onto the surface, the primer is evenly distributed onto the surface with foam rubber squeegees and rolled using Perlon rollers.
- The primer should be evenly distributed at 10 mils thickness with complete coverage of the surface.
- If the surface is very porous and absorbs primer to the extent that open surface remains, additional primer should be added in this area within the pot life or recoat time of the primer.
- The Silcor membrane should be applied within 24 hours. This window is influenced by ambient temperature and humidity. When this time is exceeded before the membrane is applied, re-apply a new layer of the Silcor Primer.
- The Silcor membrane application window using Silcor Primers can be extended by broadcasting dry quartz silica sand into the primed surface. Broadcast sand to full saturation. Use sand of 16/30 mesh for coating thickness of up to 80 mils. For larger coating thicknesses larger grain sizes can be used. Remove surplus sand and partially bonded particles with a scrubber after the primer is dry to the touch.

For complete descriptions and instructions on Silcor Primers, consult the separate technical data sheets.

**3. Mixing** – Mixing should be with a minimum 1000 W, variable speed drill and a 3-4 inch diameter helical blade mixing paddle.

Shake the Part A container well before opening. Add the entire contents of the Part A container to the B component and mix for at least one minute, until a uniform color is obtained. The mixed product should have a uniform color, free from streaks. Scrape any material from the side and bottom of the container to ensure thorough mixing.

## Product Information

	Approx. Unit Size
Silcor® 900HA (Resin)	2.2 lb bottle – approx 0.2 gal
Silcor® 900HA (Iso)	19.8 lb pail – approx. 2.2 gal
Storage	Store between 40°F – 80°F
Shelf life	12 months

\*Approximate Values

## Properties

	Typical Value	Test Method
Resistance to hydrostatic head over post formed crack head	> 230 ft	ASTM D5385
Tensile Strength	1450 psi	ASTM D412
Elongation	450 %	ASTM D412
Tear Strength	> 228 lb/in	ASTM D624 C
Adhesion to concrete	>300 psi or Concrete failure <sup>1</sup>	ASTM D4541
Shore Hardness	75 A	ASTM D2240
Low temperature crack bridging	Pass	ASTM C836
Abrasion resistance (Taber Wear Index)	186 mg <sup>2</sup>	ASTM D4060
Solids Content	100 %	ASTM D1644
Density (Resin, Iso) <sup>1</sup>	9.5 lb/gal 8.9 lb/gal	ASTM D4541
Coverage Rate (80 mil thickness)	16.4 ft <sup>2</sup> /gal 40 ft <sup>2</sup> /kit	Internal
Pot Life	up to 8 minutes <sup>3</sup>	Internal
Working Time	up to 15 minutes <sup>3</sup>	Internal
Tack-Free Time	30 minutes <sup>3</sup>	Internal

### Footnote:

1. Tested on prepared, primed, and sand blinded concrete.

2. H18/1000 cycles/1000g

3. At 73°F.

**4. Application** – Substrate application temperature must be between 40°F and 120°F. Substrate temperature should exceed the dew point temperature by a minimum of 5 °F. Once A and B components are mixed, pour the mixture out of the pail onto the substrate immediately and spread with a notched trowel or squeegee. Do not over-work the liquid as it is self leveling, surface imperfections such as pinholes and bubbles can be removed with a nylon spiked roller within the working time of the liquid membrane. Minimum required application thickness is 80 mils which should be verified using a wet film thickness gauge during application of the membrane.

Refer to the Silcor® Application Manual for more detailed installation instructions.

## Detailing

For complete detailing instructions, refer to Silcor® 900HA standard details.

## Chemical Resistance

Silcor® 900HA has excellent chemical resistance. Consult your local GCP representative for specific details and recommendations.

## Limitations

Apply Silcor® 900HA directly to structural surfaces. Do not apply Silcor® 900HA over lightweight insulating concrete. Insulation, if used, must be installed over the membrane.

## Health and Safety

For Silcor® 900HA, Silcor® Primer EPF, Silcor® Primer EPS and Bituthene® Liquid Membrane read the product label and Safety Data Sheet (SDS) before use. SDS's can be obtained from GCP Applied Technologies.

[gcpat.com](http://gcpat.com) | For technical assistance call toll free: 1-866-333-3726

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GCP Applied Technologies Inc., 62 Whittemore Avenue, Cambridge, MA 02140 USA.

In Canada, GCP Canada Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6.

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