SERVIDEK®

Easy to use, cold applied, liquid waterproofing for trafficable podium decks and terraces.

Product Description

SERVIDEK®is a unique two component polymer modified bitumen, liquid waterproofing membrane. Cold applied by squeegee or trowel, the mixed liquid cures chemically to form a seamless, elastomeric waterproofing membrane for podium decks and terraces.

An appropriate protection sheet must be laid into "wet" SERVIDEK®liquid membrane to allow for foot traffic and to provide protection from either hot and cold applied finishes.

Advantages

- Damp surface tolerant - up to 15% damp surface tolerance enabling application in a wide weather window
- No priming - SERVIDEK® waterproofing is applied directly to clean substrates
- Elastomeric - will accept cracking in substrates caused by deflection or shrinkage
- Low temperature performance - adhesion and flexibility properties maintained in -40°C service conditions
- Critical path - finishes can be installed 4 hours after waterproofing installation
- Simple application by squeegee/trowel - no specialist application equipment
- Proven performance - over 25 years track record
- Hot asphalt can be applied as a finish when protected with GCP Applied Technologies' SERVIPAK® boards. See SERVIDEK® /SERVIPAK® System TDS for details.
- European Technical Approval (ETA) – CE marked with independently audited factory production control (when used together with GCP's SERVIPAK® protection)

Principal Applications

New and remedial buried waterproofing of:

- Podium Decks
- Car park roofs
- Terraces
- Balconies

Design

SERVIDEK®is satisfactory for use on trafficked decks subject to vehicular and pedestrian traffic when protected with an appropriate protection membrane.The system must be overlaid with a suitable wearing course, e.g. concrete, paving slabs, block pavers, gravel, etc. Full thickness overlays can be laid up to 30 days after the waterproofing is installed.

SERVIDEK®can be used on concrete or steel substrates without primer.

Installation

General

SERVIDEK®application ambient temperature range is between +4 °C and rising and maximum +35 °C. Substrate temperature should exceed the dew point by a minimum 3 °C. Application outside this temperature range could result in shortened working life and more difficult application.

The application should not be made if rain or frost is imminent or in conditions where it is likely to freeze before the liquid membrane cures.

Application Equipment

- Broom or airline
- Sharp knife
- Chalk and string line
- 38 mm x 150 mm timber
- Rubber bladed squeegee
- Steel or rubber trowel
- Heavy hand roller

Surface Preparation

Concrete Surfaces

Shall be levelled and screeded to form a uniform surface. On hardening and after bleed water evaporation, the concrete should be trowelled to produce a hard dense surface free of screed marks and exposed aggregate. Finally, lightly texture the surface with a wooden float or equivalent.

Maximum deviation in surface profile shall be 10mm over a 3m gauge length and any abrupt irregularities over 3 mm shall be removed or filled with high strength repair mortar.

The concrete deck should be clean, and free from ice, frost, laitance, loose aggregate, oil, grease, moss, algae growth, dust and any other contaminants that could decrease adhesion between the concrete and SERVIDEK®.

Damp surfaces are acceptable but any surface water, up to max 15%, should be removed by sweeping or with air lances.

Green/fresh concrete - apply to green concrete only when necessary. If concrete curing compounds/membranes that could impair waterproof membrane adhesion have been used, test a sample of SERVIDEK®for adhesion to determine if removal is necessary. Exposure time limit for protection layer should be confirmed with the manufacturer. It is best practice to install finishes within 30 days.

Steel Surfaces

Remove all rust, scale, oil, grease and other contaminants from steel surfaces by grit blasting. Where required, steel surfaces may be primed with a zinc/epoxy corrosion inhibitor. Contact GCP Technical Services for further details.

Mixing SERVIDEK®

DO NOT DIRECTLY HEAT, POWER MIX OR USE PART MIXES.

When the ambient temperature is below +10 °C, storage at +20 °C for several hours will ease mixing and application.

Mix both of the components throughly before adding them together. After mixing, pour all of the Part B (small tub) into the Part A and stir with a timber 'paddle' in a folding motion until a consistent colour, free from streaks, is obtained. Ideally this should take no longer than two minutes. Mix and use one unit at a time, applying the SERVIDEK® immediately once mixed. Pot life is approximately 20 minutes at +20 °C.

Application of SERVIDEK®

Pour the mixed SERVIDEK®on to the deck surface and spread with a squeegee at a rate of 10-12 m^2/22.5 lit unit, depending on substrate surface and temperature.

Day Joints

Always leave a 50 mm leading edge of SERVIDEK®compound to enable subsequent overlapping. Seal the exposed edges of protection with SERVIDEK®compound. Commence work the following day by ensuring the 50 mm leading edge is clean and dry, then overlap with fresh SERVIDEK®compound.

Protection/membranes must be laid while the SERVIDEK®compound is still wet and laid progressively to minimise applicator trafficking until the SERVIDEK®has cured. The protection must be overlapped to ensure continuous protection to the SERVIDEK®. Where gaps occur between protection/membranes, these must be filled with SERVIDEK® prior to sealing all overlaps.

Where protection abut the parapet, pipe bays or abutments they should be pre-measured, and accurately cut to size by incising with a sharp knife and breaking on edge. The joints between the protection/membranes should be dry.

It is advisable to seal the exposed edge of the protection at the end of each working period to prevent the ingress of moisture overnight, by tooling the SERVIDEK®compound against the exposed edge.

Minimum cure time for SERVIDEK®is 4 hours, after which deck finishes should be applied as soon as possible. It is good practice to ensure that the protection/membranes are fully bonded to the SERVIDEK®by firmly rolling with a heavy hand roller before final application of deck finishes.

Repairs To Damaged SERVIDEK®

Minor repairs:

Eg. stone penetration through membrane and protection.

Cut a section of new protection a minimum of 50 mm beyond the damaged area. Using this section as a template, position over the damaged area and cut around the template through the protection. Remove the damaged protection/membrane and debris or damaged section of membrane. Mix and apply fresh SERVIDEK®and reinstate the new section of protection. Apply SERVIDEK®to lap the protection repair patch. A heated spatula/trowel can be used to remove the damaged board.

Major repairs:

Repeat the procedure for minor repairs, ensuring a minimum 50 mm SERVIDEK®to SERVIDEK®lap is achieved before replacement boards are laid.

Where extensive damage or contamination has occurred it is necessary to remove all damaged SERVIDEK®and protection from the deck by heating and scraping off.

Apply fresh SERVIDEK®and protection/membrane as detailed above for minor repairs.

Supply

SERVIDEK®	22.5 litre pack (Part A & B combined)
Coverage	10-12 m^2 per mixed pack
Palletisation	Part A - 18 x 20.47 kg buckets per pallet Part B - 72 x 4.5 kg buckets per pallet
Storage	Under cover in original sealed containers above +5°C and below +27°C
Shelf life	12 months

Physical Properties

PROPERTY	TYPICAL VALUE	TEST METHOD
Capacity to bridge cracks (fatigue resistance) at -30°C	Pass	EN 14224: 2010
Water-tightness	Pass	EN 14694: 2005
Adhesion to damp, 7 day old concrete	No significant change vs. dry, 28 day old concrete control	EN 13596: 2004
SERVIDEK® - Materials in contact (Change in mass)	Water (WA) –1% Alkali (Al) –1.3%	EN 14223
SERVIDEK® - Materials in contact (Resistance to static loading)	Water (WA) L_4 Alkali (Al) L_4	EOTA TR 007

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.

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gcpat.uk/solutions/products/liquid-waterproofing-1