DECSEAL®

Car Park Deck Waterproofing & Surfacing

Description

DECSEAL® is a rapid curing, liquid applied car park waterproofing and surfacing system based on Stirling Lloyd's, now GCP Applied Technologies, unique ESSELAC® advanced resin technology and extensive experience in the development of high performance car park refurbishment and protection systems. The system is comprised of a tough, waterproofing membrane and a fully compatible, durable slip resistant surface finish available in a range of decorative colours.

The system may be partially or fully reinforced subject to the design of the car park being treated.

Uses

DECSEAL® is designed to protect structures from water penetration and corrosion whilst providing slip resistant properties in a variety of applications including.

- Car Park Decks
- Pedestrian walkways
- Footbridges
- Balconies

Features

- Rapid Cure even at low temperatures
- 100% seamless waterproofing
- Excellent abrasion and chemical resistance
- Lightweight and flexible
- Slip resistant surface
- Fast track and weather tolerant application when compared to PU and Epoxy materials
- Trafficable within one hour
- A choice of aesthetically pleasing colours
- Certified to be in Compliance with EN1504-2

Technical Data

DECSEAL® is CE Marked under EN 1504-2 for which a Declaration of Performance is available on request.

PROPERTY	VALUE
Application Temperature Range[1]	0 to 30°C
Minimum Overcoating Times	
PAR1 Primer[2] 30°C 10°C 0°C	 15 Minutes 30 Minutes 45 Minutes
Membrane 30°C 10°C 0°C	 45 Minutes 90 Minutes 2 Hours
Wearing Course[3] 30°C 10°C 0°C	 20 Minutes 50 Minutes 60 Minutes
Chemical Resistance (Brake Fluid, Hydraulic Fluid, Motor Oil, Diesel, De-Icing Salts, Anti-Freeze)	No Observed Effect
Wheel Tracking Test (Scuffing test after 500 wheel passes requirement for Type 1 Site Category as defined in HD28/94)	Zero Erosion
Skid Resistance Value (TRL Pendulum)	Typically 45 – 60 dependant on substrate profile
System Thickness (Typical) Un-reinforced Reinforced	 3.2mm 4.5mm

Surface Preparation

It should be stressed that the success of any waterproofing system is dependent on the thoroughness of the surface preparation.

All concrete decks must be prepared by suitable mechanical means to provide a sound surface. All laitance should be removed so that the aggregate in the deck slab is visible. Water jetting is not an acceptable method of preparation.

New concrete decks must be a minimum of fourteen days old and constructed in accordance with BS EN1992. The substrate must be clean, dry and structurally sound. It must be free from laitance, oils and other surface contaminants.

Where the use of a non-structural screed or a lightweight concrete substrate is proposed, please seek advice from our Customer Services Department as these materials often have low cohesive strength or retain water in open pores.

Repairs to damaged concrete can be made using our range of METASET® repair and levelling compounds.

For substrates other than concrete or where additives, cement replacement or curing compounds have been used please contact us to discuss.

Application

Primer

Concrete substrates must be primed using PAR1 Primer prior to application of the membrane. Apply using a brush or roller.

Membrane

The DECSEAL® Membrane is metered, mixed and spray applied using plural component spray equipment.

[1] For temperatures outside this application range please contact us to discuss your requirements.
[2] PAR1 Primer is available in Standard & Low Temperature Grades. For further information please see document no. GCP0082 PAR1 DATASHEET.
[3] Wearing Course is supplied in both winter and summer grades. The winter grade is supplied between October 1st and March 31st with additional catalyst to increase the speed of cure at temperatures below 10°C.

Wearing Course

The DECSEAL® Wearing Course is poured onto the membrane and spread out using a notched squeegee. This is then followed over with a medium pile roller to achieve the desired surface finish. DECSEAL® Wearing Course is applied to horizontal surfaces in one coat at a minimum coverage of 1.7kg/m². To the verticals it must be applied in two coats. Each coat on the vertical is applied to give a minimum dry film thickness of 0.5mm.

The system can be trafficked once the wearing course has cured.

It is essential that good air circulation and ventilation be provided during application in enclosed spaces to ensure full cure.

Coverage

PAR1 Primer	0.25kg/m^2 minimum
Membrane	1.8kg/m^2 minimum
Wearing Course: Horizontal Surfaces Vertical Surfaces	 1.7kg/m^2 minimum 0.85kg/m^2/per coat

Colours

DECSEAL® Wearing Course is available in a range of standard colours. Please refer to separate colour chart. Bespoke colours are available subject to an assessment to determine whether the colour requested will remain stable under aged weathering. Bespoke colours are subject to a surcharge and additional production lead-time.

Cleaning

All tools and equipment should be cleaned with acetone before the material is allowed to cure.

Packaging & Storage

PAR1 Primer – Resin[4]	5kg & 20kg kits
BPO Powder Catalyst for use with PAR1 - 100g & 400g bags for the 5kg & 20kg bags respectively	
Membrane	48kg & 400g kits
Wearing Course	27.5kg kits[5]

All components of the DECSEAL® system should be stored in cool, dry, protected conditions, out of direct sunlight and in accordance with the relevant site Health & Safety regulations. Storage temperature must not exceed 25°C. Do not store near naked flames or foodstuffs.

Stored in unopened containers, under the correct conditions, the components have a minimum shelf life of:

- DECSEAL Membrane: 12 months
- DECSEAL Wearing Course: 6 months

If your product is older than the stated shelf life you must contact GCP before use.

Ancillaries

GCP produces a range of products to compliment the DECSEAL® system. These include:

- METASET® - a range of resin based rapid curing levelling and repair compounds
- SAFETRACK® LM - a flexible, bright, abrasion resistant line marking available in a range of colours
- Sealants - a range of flexible sealants for all joints and cracks.
- SENTINEL® - a range of expansion joints

Health & Safety

Please refer to our safety datasheet for further information.

General Information

DECSEAL® is part of a wide range of specialist waterproofing, surfacing and repair materials manufactured and supplied by GCP. If you require any further information on this or any other of our products, please contact our Customer Services Department or visit www.gcpat.com

[4] BPO bags are based on 2% of the kit weight. The amount of BPO addition is varied according to the application temperature. Please see document no. GCP0082 PAR1 DATAHSHEET for further information.

[5] Consists of 25kg of resin and BPO. Required aggregate is ordered separately in 5kg bags in 4 bag tranches

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