

Gripdeck EW System

Solvent free flexible waterproofing polyurethane vehicle decking system



Description

Gripdeck EW System is a hard wearing, solvent free, flexible polyurethane coating system primarily designed for use in car parks. It has excellent resistance to petrol, battery acid, diesel, brake fluid, de-icing salts, etc. Gripdeck EW System is formulated for easy application by squeegee, roller or brush.

The Gripdeck EW System consists of three layers:

Primer

- ▲ Gripdeck Primecoat E or PU (depending on concrete/ substrate age), primers with excellent adhesion to concrete, screed and asphalt substrates.

Waterproofing Intermediate Coat + Anti-slip

- ▲ Gripdeck Flexcoat, an elastomeric crack-bridging membrane.
- ▲ Gripdeck Primecoat PU, PU primer to be applied directly on the Gripdeck Flexcoat with full blind of Antislip Aggregate, a hard-wearing quartz for producing an anti-slip finish.

Topcoat

- ▲ Gripdeck Wearcoat TG, for indoor application, a pigmented wearing course with excellent resistance to abrasion and chemical attack.
- ▲ Gripdeck Wearcoat Plus, for outdoor application, specifically formulated for colour stability and will not discolour on exposure to sunlight or other sources of UV light. It is available in a wide range of colours.

Applications

Gripdeck EW System is designed for use in applications, such as:

- ▲ Car park decks.
- ▲ Car park ramps and turning circles.
- ▲ Traffic aisles and parking bays.

Advantages

- ▲ Seamless and “watertight”.
- ▲ Excellent resistant to petrol, battery acid, diesel and brake fluid.
- ▲ Resistant to de-icing.

- ▲ Available in a special grade “Gripdeck Wearcoat Plus” for outdoor applications.
- ▲ Fire resistant system.
- ▲ Reduces noise.
- ▲ Up to 3.9 mm crack bridging ability for full system.
- ▲ Slip resistant.
- ▲ Suitable for asphalt and concrete substrates.

System Specification

The combination of products specified depends on the area within the car part to which the Gripdeck is being applied.

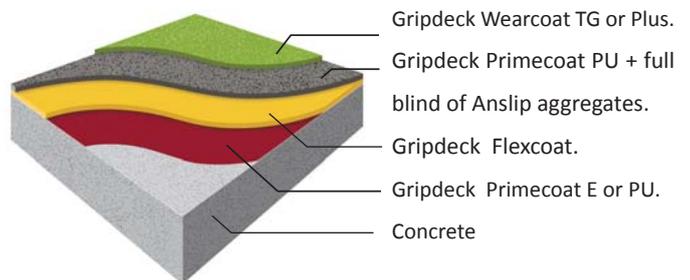
Car parks decks

Ramps and turning circles

- ▲ Gripdeck Primecoat E or PU.
- ▲ Gripdeck Flexcoat to achieve waterproofing properties.
- ▲ Gripdeck Primecoat PU + full blind of Antislip Aggregates #2.
- ▲ 2 coats Gripdeck Wearcoat TG (indoor) or Wearcoat Plus (outdoor).
- ▲ Dry film thickness \approx 2.4 mm for both indoor and outdoor.

Traffic aisles and parking bays

- ▲ Gripdeck Primecoat E or PU.
- ▲ Gripdeck Flexcoat to achieve waterproofing properties.
- ▲ Gripdeck Primecoat PU + full blind of Antislip Aggregates #3.
- ▲ 1 coat Gripdeck Wearcoat TG (indoor) or Wearcoat Plus (outdoor).
- ▲ Dry film thickness \approx 1.9 mm for both indoor and outdoor.



Standards

Gripdeck Flexcoat complies with ASTM C957 (See technical properties).

Gripdeck EW System



Technical Properties @ 25°C:

Crack Bridging: ASTM C957	Passes (full system test)
Abrasion resistance (1000 g, 1000 cycle) weight loss CS17: ASTM C957 (Primecoat E/Flexcoat/Primecoat PU/Wearcoat Plus)	Passes
Weight loss: ASTM C957 (Flexcoat)	Passes
Adhesion peel: ASTM C957 (Primecoat E/Flexcoat)	Passes
Slip resistance – typical figures: BS 7976, Part 2:2002	Coarse Quartz Aggregate blind TRL slider: 84 dry, 72 wet; 4-S slider: 61 dry, 53 wet
External fire exposure roof test: BS 476, Part 3:1958	EXT.F.AA (full system test)

System component	Primecoat E	Primecoat PU	Flexcoat	Wearcoat TG	Wearcoat Plus
Working time:	180 min	40 min	25 min	60 min	20 min
Mix density:	1.1 g/cm ³	1.25 g/cm ³	1.3 g/cm ³	1.6 g/cm ³	1.35 g/cm ³
Volume solids:	100%	100%	100%	100%	100%
Tack-free time:	12 hr	3 hr	5 hr	4 hr	8 hr
Maximum overcoat time:	36 hr	24 hr	24 hr	4 hr	30 hr
Full cure:	7 days	3 days	3 days	7 days	7 days
Adhesion to concrete:	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)
Adhesion to asphalt:	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)
Tensile strength @ 7 days: ASTM D412	Not tested	Not tested	> 6 MPa	> 12 MPa	> 11 MPa
Elongation @ 7 days: ASTM D412	Not tested	Not tested	> 500%	> 65%	> 40%
Shore D hardness @ 7 days: ASTM D2240	Not tested	80	30	75	65
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss CS17 wheel	Not tested	Not tested	Not tested	90 mg	70 mg
Application temperature range:	Do not apply if the ambient or floor temperature is to fall below 5°C during the first 24 hours or if rain or condensation is likely)				

Gripdeck EW System

Method of Use

Gripdeck Primcoat E or PU

Surface Preparation and Priming

To obtain a proper bond the substrate must be structurally sound clean, dry (less than 75% RH measured using a hygrometer, unless it is a suspended deck free to dry from below) and free from dust, laitance, oils, paints or other forms of contamination.

Grit blasting, grinding or scarification can be used to remove laitance and surface contamination. Areas known to have been subject to heavy contamination should be thoroughly inspected before applying Gripdeck Primcoat. This is especially important where deposits of oil or grease have collected. Any irregularities within the substrate should be made good before the application of the Gripdeck Primcoat E or PU. Small defects may be repaired using Gripdeck Primcoat E or PU mixed with dry fine sand. Gripdeck Primcoat E is less sensitive than Gripdeck Primcoat PU for the concrete age. Gripdeck Primcoat E or PU will give good adhesion with concrete substrates if the concrete is with longer age.

If the substrate has a relative humidity reading greater than 75%, 2 coats of Strongcoat DPM should be used, followed by Strongcoat Primer fully blinded with Medium Quartz Aggregate, before coating with Gripdeck Primcoat E or PU.

Mixing

Gripdeck Primcoat E or PU comprises two components; a resin and hardener which are supplied pre-weighed in the correct proportions. Under no circumstances should part mixing be carried out. Taking care to ensure that the bottom and sides are thoroughly drained, pour the contents of the hardener portion into the resin container. Using a power whisk attached to a slow speed electric drill, mix for approximately 2 minutes, scrape down and re-mix for a further 1 minute, avoiding the entraining of excessive air, until a uniform consistency is obtained.

Allow to stand for 1 minute. If the filler is to be used, add this to the mixed material and mix for a further 1 minute.

Note: Never mix Gripdeck Primcoat E or PU by hand as this could lead to areas of uncured material.

Application

Once mixing is complete, spread the Gripdeck Primcoat E or PU onto the floor using a squeegee and/or medium pile roller, ensuring it is worked well into the surface.

Overcoating

Gripdeck Primcoat E or PU may be overcoated as soon as it becomes tack free. If overcoating of the Gripdeck Primcoat E or PU exceeds 30 hours, light scarification of the surface should be undertaken before further applications of any subsequent layer.

Gripdeck Flexcoat

Surface Preparation

All surfaces should be primed with Gripdeck Primcoat E or PU before applying Gripdeck Flexcoat. Application of Gripdeck Flexcoat should be carried out within 30 hours from applying Gripdeck Primcoat E or PU.

Mixing

Gripdeck Flexcoat comprises two components, a resin and hardener which are supplied pre-weighed in the correct proportions. Under no circumstances should part mixing be carried out. Pre-mix the resin component with a power whisk attached to a slow speed electric drill for 1 minute before mixing both components. Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the contents of the resin in to the hardener.

Using a power whisk attached to a slow speed electric drill, mix for approximately 3 minutes, ensuring the mixing head is pushed around the sides and bottom of the mixing container. Transfer the contents into another container, scraping down and re-mixing for a further 2 minutes avoiding the entraining of excessive air until a uniform consistency is obtained.

Note: Never mix Gripdeck Flexcoat by hand as this could lead to areas of uncured material. Select an appropriate mixing container that will allow proper and efficient mixing.

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Application

Immediately after mixing is complete, spread the Gripdeck Flexcoat onto the primed floor using a squeegee and finish using a short or medium pile roller. Gripdeck Flexcoat is not colour stable and changes may be seen following application and before overcoating. This will not affect the properties of the Gripdeck Flexcoat in any way.

Overcoating

Gripdeck Flexcoat may be overcoated as soon as it becomes tack free with a maximum overcoat time of 30 hours. Then apply Gripdeck Primecoat PU and full blind with Antislip Aggregate.

Gripdeck Wearcoat TG or Wearcoat Plus

Surface Preparation

Before applying the final Gripdeck Wearcoat TG or Plus, all surfaces coated with Gripdeck Flexcoat should be primed with Gripdeck Primecoat PU and fully blinded with Antislip Aggregates at the rate of 2 - 3 kg/m² and allow to dry. All excess aggregates shall be removed before applying the topcoat.

Mixing

Gripdeck Wearcoat TG or Plus comprises two components, a resin and hardener, which are supplied pre-weighed in the correct proportions. Under no circumstances should part mixing be carried out.

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of both components into a separate mixing container. Using a power whisk attached to a slow speed electric drill, mix for approximately 3 minutes ensuring the mixing head is pushed around the sides and bottom of the mixing container.

Note: Never mix Gripdeck Wearcoat TG or Plus by hand as this could lead to areas of uncured material. Premixing of the resin component will aid mixing.

Application

On completion of mixing immediately apply the Gripdeck Wearcoat TG or Plus at the required thickness to the blinded Gripdeck Primecoat PU.

Cleaning

Tools should be cleaned with DCP Solvent immediately after use.

Packaging

Gripdeck Primecoat E and PU are available in 5 and 20 kg packs.

Gripdeck Flexcoat, Wearcoat TG and Wearcoat Plus are available in 5 and 15 kg packs.

Antislip Aggregates #2 and #3 are available in 25 kg bags.

Storage

Store in a dry area at temperatures between 8°C and 35°C.

Shelf Life

Gripdeck EW System has a shelf life of 12 months, with the exception of Gripdeck Flexcoat which has a shelf life of 6 months from date of manufacture if stored in unopened, undamaged, sealed containers, stored under good conditions.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

Cautions

Health and Safety

Consult the appropriate Safety Data Sheet prior to using each product.

Gripdeck EW System

Coverage

Application	Indoor	Outdoor	Indoor	Outdoor
	Ramps & turning circles	Ramps & turning circles	Traffic aisles & parking bays	Traffic aisles & parking bays
Gripdeck Primecoat E or PU	One coat 0.25 - 0.30 kg/m ² per coat	One coat 0.25 - 0.30 kg/m ² per coat	One coat 0.25 - 0.30 kg/m ² per coat	One coat 0.25 - 0.30 kg/m ² per coat
Gripdeck Flexcoat	One coat 1.00 kg/m ² per coat	One coat 0.70 kg/m ² per coat	One coat 0.70 kg/m ² per coat	One coat 0.70 kg/m ² per coat
Gripdeck Primecoat PU	One coat 0.30 - 0.40 kg/m ² per coat	One coat 0.30 - 0.40 kg/m ² per coat	One coat 0.30 - 0.40 kg/m ² per coat	One coat 0.30 - 0.40 kg/m ² per coat
Antislip #2 or #3	#2 Aggregate (fully blinded) 2 - 3 kg/m ²	#3 Aggregate (fully blinded) 2 - 3 kg/m ²	#2 Aggregate (fully blinded) 2 - 3 kg/m ²	#3 Aggregate (fully blinded) 2 - 3 kg/m ²
Wearcoat TG	Two coats 0.60 kg/m ² for 1 st coat 0.40 kg/m ² for 2 nd coat		One coat 0.60 kg/m ² per coat	
Wearcoat Plus		Two coats 0.50 kg/m ² for 1 st coat 0.33 kg/m ² for 2 nd coat		One coat 0.50 kg/m ² for 1 st coat
System thickness	2.4 mm	2.4 mm	1.9 mm	1.9 mm

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A wide range of construction chemical products are manufactured by DCP which include:

- ▲ Concrete admixtures.
- ▲ Surface treatments
- ▲ Grouts and anchors.
- ▲ Concrete repair.
- ▲ Flooring systems.
- ▲ Protective coatings.
- ▲ Sealants.
- ▲ Waterproofing.
- ▲ Adhesives.
- ▲ Tile adhesives and grouts.
- ▲ Building products.
- ▲ Structural strengthening.

Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

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