

Gripdeck HPU

UV resistant hard-wearing polyurethane traffic coating system



DESCRIPTION

Gripdeck HPU System is a UV resistant, hard-wearing, polyurethane coating system primarily designed for use in car parks. It has excellent resistance to abrasion and wear and excellent chemical resistance to petrol, diesel, engine oil, brake fluid and de-icing salts.

The Gripdeck HPU System consists of the following components:

- » **Gripdeck Primecoat U:** a two component, solvent-free epoxy primer with excellent adhesion to concrete and cementitious substrates.
- » **Antislip Aggregate #3:** a hard-wearing quartz aggregate for producing an anti-slip finish.
- » **Gripdeck Wearcoat TE:** a two component, solvent-free, pigmented wearing course with excellent resistance to abrasion and chemical attack.
- » **Gripdeck Wearcoat TP:** a two component, pigmented wearing course with excellent resistance to abrasion and chemical attack. It is applied as the final coat for areas of the car park that are exposed to UV light. It is specifically formulated for colour stability and will not discolor upon exposure to sunlight or other sources of UV light.

APPLICATIONS

Gripdeck HPU System is designed for application in different areas of car parks, such as:

- » Ramps and turning circles.
- » Traffic aisles and parking bays.
- » Pedestrian walkways.

ADVANTAGES

- » Excellent resistance to petrol, diesel, engine oil and brake fluid.
- » Resistant to de-icing salts.
- » Available in both smooth and aggregate broadcast finishes for different slip resistance requirements.
- » Available in a special UV resistant grade "Gripdeck Wearcoat TP" for outdoor applications.

CHEMICAL RESISTANCE

Gripdeck HPU provides resistance to a wide range of oils, fuels, solvents, acids and bases commonly encountered in car parks. For detailed information, contact DCP's Technical Department.

SYSTEM SPECIFICATION

The combination of products specified depends on the area within the car park to which Gripdeck is being applied, as follows:

Exposed decks (outdoor application)

Ramps and turning circles

- » One coat Gripdeck Primecoat U + full blind of Antislip Aggregates #3.
- » One coat Gripdeck Wearcoat TE.
- » Two coats Gripdeck Wearcoat TP.

Traffic aisles and parking bays

- » One coat Gripdeck Primecoat U + full blind of Antislip Aggregate #3.
- » One coat Gripdeck Wearcoat TE.
- » One coat Gripdeck Wearcoat TP.

Smooth finish for traffic aisles and parking bays

- » One coat Gripdeck Primecoat U.
- » One coat Gripdeck Wearcoat TE.
- » One coat Gripdeck Wearcoat TP.

Notes:

- » *For indoor or outdoor decks, where a waterproofing surface is required, use Gripdeck HPW system.*
- » *Other grades of Anti-slip Aggregates can be used but finish should be checked and approved by end user.*

METHOD OF USE

SUBSTRATE PREPARATION

A minimum compressive strength of 25 N/mm² and a minimum pull-off strength of 1.5 N/mm². The concrete substrate should be below 75% RH and have less than 4% moisture content. Alternatively, consult with DCP's Technical Department.

SURFACE PREPARATION

Concrete surfaces must be degreased using degreasing products, torching or any other suitable method which assures the surface is free from any oil traces. Surfaces should be sound and with no irregularities as they can affect the finish of the applied product.

Concrete surfaces are to be mechanically prepared to remove laitance and achieve a flat surface, grit blasting or surface profiling equipment are preferred. Acid etching can be used after consulting with DCP's Technical Department.

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Surface defects such as voids and blowholes should be repaired before application. Consult DCP's Technical Department for the best repair material.

Surfaces must be free of any dust or loose particles before product application. Use suitable methods like vacuuming or sweeping. If possible, apply the product on a small test area before actual application to check for any problems with the surface preparation.

GRIPDECK PRIMECOAT U

MIXING

Gripdeck Primecoat U comprises two components; a resin and hardener which are supplied pre-weighted 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.

Note: Never mix Gripdeck Primecoat U by hand as this could lead to areas of uncured material.

APPLICATION

Once mixing is complete, spread the Gripdeck Primecoat U onto the prepared surface by brush or lamb's wool roller.

To obtain an anti-slip finish, whilst Gripdeck Primecoat U is still wet, broadcast with Antislip Aggregate #3 according to the table of the coverage rates and allow to dry. All excess aggregates shall be removed before applying the final top coats.

OVERCOATING

Gripdeck Primecoat U may be over-coated as soon as it becomes tack free within 24 hours.

GRIPDECK WEARCOAT TE

MIXING

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

The contents of the resin pack should be thoroughly stirred to disperse any possible settlement. 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 3-5 minutes and until uniform colour and consistency are achieved.

Note: Never mix Gripdeck Wearcoat TE by hand as this could lead to areas of uncured material.

APPLICATION

Once mixed, the material should be immediately applied, ensuring that a continuous coating is obtained. Application can be done using a brush, roller or an airless spray machine.

OVERCOATING

Gripdeck Wearcoat TE should become tack-free before it is over-coated with a coat of Gripdeck Wearcoat TP. This can be achieved after a minimum 6 - 8 hours from application at 25°C.

GRIPDECK WEARCOAT TP

MIXING

Gripdeck Wearcoat TP comprises two components, a resin and a hardener, which are supplied pre-weighted in the correct proportions. Under no circumstances should part mixing be carried out. The contents of each component should be thoroughly stirred separately to disperse any possible settlement.

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents the hardener component into the base component. Using a power whisk attached to a slow speed electric drill, mix for approximately 3 minutes and until uniform colour and consistency are achieved.

Note: Never mix Gripdeck Wearcoat TP by hand as this could lead to areas of uncured material.

APPLICATION

Once mixed, the material should be immediately applied, ensuring that a continuous coating is obtained. Application can be done by brush, roller or airless spray machine.

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OVERCOATING

Gripdeck Wearcoat TP may be over-coated as soon as it becomes tack-free within 24 hours.

LIMITATIONS

- » Gripdeck HPU system should be protected from contact with water for the first 24 hours after application as discoloration could occur.
- » For cold weather working (down to 5°C), it is recommended that materials are stored in a heated building and only removed immediately before use. Accelerated heating methods are not to be utilized under any circumstances.
- » Application to commence while temperature is 5°C and rising. In hot weather working conditions (35°C) and above, it is recommended to keep material in a cool shaded area to ensure ease of application.

CLEANING

Tools should be cleaned with DCP Solvent immediately after use.

PACKAGING

Gripdeck Primecoat U is available in 18 kg packs.
Gripdeck Wearcoat TE is available in 18 kg packs.
Gripdeck Wearcoat TP is available in 18 kg packs.
Antislip Aggregates is available in 25 kg bags.

STORAGE

Gripdeck HPU System has a shelf life of 12 months from date of manufacture if stored in un-opened, undamaged, sealed containers in warehouse conditions below 35°C.

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

CAUTIONS

HEALTH AND SAFETY

Consult the appropriate Material Safety Data Sheet prior to using Gripdeck HPU System.

MORE FROM DON CONSTRUCTION PRODUCTS

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.

TECHNICAL PROPERTIES:	Gripdeck Primecoat U	Gripdeck Wearcoat TE	Gripdeck Wearcoat TP
Colour:	Brownish clear	Variable	Variable
Mixed density:	1.5 ± 0.1 g/cm ³	1.45 ± 0.05 g/cm ³	1.3 ± 0.1 g/cm ³
Volume solids:	100%	100%	55 ± 5%
Pot life @25°C:	60 - 90 min	100 - 140 min	4 - 6 hr
Over-coating time @25°C:	24 hr	6 - 8 hr	24 hr
Full cure @25°C:	7 days	7 days	7 days
Bond strength on C25/30 concrete: ASTM D4541	≥ 2.0 MPa (concrete failure)	≥ 2.0 MPa (concrete failure)	≥ 2.0 MPa (concrete failure)
Shore D hardness: ASTM D2240	Not tested	≥ 80	≥ 50
Taber abrasion: (1000 g, 1000 cycles) ASTM D4060 CS17 wheel	Not tested	≤ 80 milligram	≤ 75 milligram
Tensile strength @ 7 days: ASTM D412	Not tested	≥ 10 MPa	≥ 4.0 MPa

COVERAGE

Application	Antislip Finish		Smooth Finish
	Ramps & turning circles	Traffic aisles & parking bays	Traffic aisles & parking bays
Gripdeck Primecoat U	One coat 0.20 - 0.30 kg/m ² /coat, depending on surface texture and porosity		
Antislip Aggregate #3	1 - 2 kg/ m ²		
Gripdeck Wearcoat TE	1 st coat 0.40 - 0.45 kg/m ² 2 nd coat 0.20 - 0.25 kg/m ²	One coat 0.45 - 0.55 kg/m ²	One coat 0.25 - 0.30 kg/m ²
Gripdeck Wearcoat TP	One coat* 0.15 - 0.25 kg/m ²	One coat 0.15 - 0.25 kg/m ²	One coat 0.15 - 0.20 kg/m ²
Total system thickness:	1.25 - 1.50 mm	1.15 - 1.40 mm	0.45 - 0.55 mm

* Another coat of Gripdeck Wearcoat TP can be applied on ramps and turning circles for extra UV protection.

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.