

# **Method Statement**

Ref. #: DCP00/05-0106-A-2022



# Gripdeck HPW

(Hard wearing polyurethane vehicle decking system)



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# **Section A : General Comments**

#### **General Notes:**

The information below is a detailed overview of the application of DCP's **Gripdeck HPW** car park decking system and should be read in conjunction with the relevant technical data sheet prior to application. All DCP Products should be applied by experienced specialist contractors.

All the points below assume the correct preparation of the relevant surface.

# **High-Temperature Working:**

Application temperature ranges from 5°C to 35°C and relative humidity must not exceed 75%. In addition, do not apply under rain or snow, and avoid dew points conditions during application. The substrate's temperature must be at least 3°C above the measured due point temperature if any.

It is suggested that, for temperatures above 35°C, the following guidelines are adopted as good working practice:

- i. Unmixed materials and equipment should be stored in a cool place and away from direct sunlight.
- ii. Avoid application during the peak temperature of the day.
- iii. Ensure proper and adequate ventilation.
- iv. Plan for enough materials, tools, and labor to ensure a continuous applicant process.

# **Low-Temperature Working:**

It is suggested that, for temperatures below 5°C, the following guidelines are adopted as good working practice:

- i. Unmixed materials should be stored in a warm.
- ii. Cold temperatures will affect the properties of the material.
- iii. Avoid applying the material if the temperature is around 5°C and falling.
- iv. When the temperature is around 5°C it is recommended to store the materials in a heated building and only removed them immediately before use.
- v. Accelerated heating methods are not to be utilized under any circumstances.
- vi. Do not apply under rain or snow, and avoid dew points conditions during application.



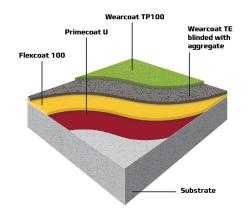
# **System Products:**

**Gripdeck Primecoat U** 

**Gripdeck Flexcoat 100** 

**Gripdeck Wearcoat TE** 

Gripdeck Wearcoat TP100 Anti-slip Aggregate #3



#### **Gripdeck HPW System Specifications:**

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)**

# Anti-slip finish Ramps and turning circles:

- One coat Gripdeck Primecoat U.
- One coat of Gripdeck Flexcoat 100.
- One coat of Gripdeck Wearcoat TE + full blind of Anti-slip Aggregate #3.
- Two coats of **Gripdeck Wearcoat TP100**.

# Anti-slip finish Traffic aisles and parking bays

- One coat Gripdeck Primecoat U.
- One coat Gripdeck Flexcoat 100.
- One coat Gripdeck Wearcoat TE + full blind of Anti-slip Aggregate #3.
- One coat Gripdeck Wearcoat TP100.

# Smooth finish for traffic aisles and parking bays

- One coat Gripdeck Primecoat U.
- One coat Gripdeck Flexcoat 100.
- One coat Gripdeck Wearcoat TE.
- One coat Gripdeck Wearcoat TP100.

Note: Other grades of Anti-slip Aggregates can be used but the finish should be checked and approved by the end-user.



# **Tools and Equipment:**

Application equipment

It is suggested that the following list of equipment are adopted as a minimum requirement

Personal protection : Protective overalls

Goggles or a face mask
Good quality gloves

: Safety shoes : Safety helmet

Preparation equipment : Concrete vacuum (Fig.1)

: Grit blasting machine (Fig.2)

: Brush (Fig.3)

Mixing equipment : Power-whisk fitted in a heavy-duty slow speed

electric drill (Fig.4)

: Empty bucket (25 litre) (Fig.5)
: Lamb's wool roller (Fig.6)

Squeegee (Fig.7)

: Airless spray machine (Fig.8): Rubber spike shoes (Fig.9)



Fig.1: Concrete vacuum



Fig.2: Grit blasting machine



Fig.3: Brush



Fig.4: Power-whisk fitted in a heavy-duty slow speed electric drill



Fig.5: Empty bucket



Fig.6: Lamb's wool roller



Fig.7: Squeegee



Fig.8: Airless spray machine



Fig.9: Rubber spike shoes



#### Section B: Application

**Gripdeck HPW System** is a UV-resistant, waterproofing, and hard-wearing polyurethane traffic coating system. It is specially designed to consist of a waterproofing and crack-bridging intermediate layer that would protect the concrete slab from water in intermediate and exposed car park decks. It has excellent resistance to abrasion and wear and excellent chemical resistance to petrol, diesel, engine oil, brake fluid, and de-icing salts.

#### 1.0 Substrate Preparation

1.1 New concrete or cementitious substrates should be at least 28 days old and/or have moisture content not exceeding 4% or a relative humidity less than 75%. Perform relative humidity test using a hygrometer.



- 1.2 Existing concrete floors, which require refurbishment, must be prepared to ensure a strong adhesive bond between the flooring system and the existing floor.
- 1.3 Concrete floors (new or existing) must be fully cured, must have a minimum compressive strength of 25 N/mm<sup>2</sup>, and achieve a minimum pull-off strength of 1.5 N/mm<sup>2</sup>.
- 1.4 Surface should be dry, clean, and free from any laitance, wax, grease, dirt, and oil. In addition, levelled and free from contamination such as mortar, paint splashes, and curing compounds.
- 1.5 Excess laitance, old coating, or surface treatments are best removed by mechanical grinding, and light sand/grit blasting.
- 1.6 Mechanical treatment should be followed by vacuum cleaning to remove dust debris or chemical method such as Don Acid Etch (only in wellventilated areas).

Note: All preparation equipment should be of a type approved by DCP.

1.7 Oil and grease contamination must be completely removed using degreasing products, torching, or any other suitable method which assures the surface is free from any oil traces.

Note: if the surface is contaminated by oil or grease, it is recommended to consult our technical department to advise on the suitable method for removing the contamination.







- 1.8 All blowholes, cracks and surface undulations should be repaired using proper putty/mortar as recommended, typically **Quickmast 341** should be used. Consult the DCP's Technical Department for specific recommendations.
- 1.9 All repairs should be finished smooth and flush with the concrete substrate.





Repair of pinholes and surface defects

- 1.10 It is essential that the substrate does not suffer from conditions of rising damp.
- 1.11 If any rising damp is expected, alternative preparations must be approved by DCP prior to commencement of work.
- 1.12 The final performance of the system relies upon the performance of sound and level substrates.
- 1.13 Make sure the substrate is flat. A leveling tool should be used to evaluate the flatness of the application area depending on its size.
- 1.14 Apply the product to a small test area before actual application to check for any problems with the surface preparation.



#### Joints and moving cracks:

- > Gripdeck System shouldn't be installed over any non-filled/sealed joints or any moving cracks.
- Open up and clean the existing joints in between the concrete slab and vacuum thoroughly.
- All dust, loose, and friable material must be removed from all joint voids before application of any joint sealant.
- All existing joints such as (expansion, isolation, construction, and control joints) as well as all moving cracks, must be sealed using a sealing compound specifically designed for use in joints
- It is advisable to reflect any existing joints in the same width, direction, and location on the surface of the finish layer.







#### 2.0 Priming

Priming is done to seal the substrate in order to prevent pin holing caused by the release of air from the substrate and ensure good adhesion.

#### **Gripdeck Primecoat U**

- 2.1 Mixing
  - 2.1.1 Stir individual components of the Base and Hardener thoroughly before mixing.
  - 2.1.2 Use a slow-speed drill fitted with a suitable mixing paddle to mix the Base and Hardener components of **Gripdeck Primecoat U.**
  - 2.1.3 Pour the entire content of the Hardener into the base container.
  - 2.1.4 Ensure that the bottom and sides are thoroughly drained.
  - 2.1.5 Start mixing for approximately 2 minutes, scrape down, and re-mix for a further 1 minute until a uniform consistency is achieved.
  - 2.1.6 Allow standing for 1 minute.

#### Notes:

- Slow speed mixer should be only used.
- While mixing, ensure that the mixing blade is kept below the surface of the mix to prevent air entrapment.
- Never mix **Gripdeck Primecoat U** by hand as this could lead to areas of uncured material.
- Under no circumstances should part mix be carried out

# 2.2 Application

2.2.1 Spread the **Gripdeck Primecoat U** onto the prepared surface in one coat by brush or lamb's wool roller at a rate of 0.2 - 0.3 kg/m<sup>2</sup> per coat depending on surface texture and porosity.

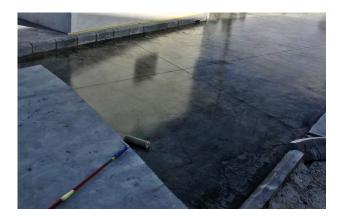




Application of Gripdeck Primecoat U

- 2.2.2 Allow the primer to dry before proceeding to the next stage, do not proceed whilst the primer is 'tacky'.
- 2.2.3 Porous substrates may require a second primer coat if the first coat is directly absorbed into the substrate.
- 2.2.4 The minimum over coating times will vary according to the porosity of the substrate and ambient conditions. However, it is recommended to leave the primer for 12 to 24 hours prior to being over coated.





# 3.0 Application

#### **Gripdeck Flexcoat 100**

#### 3.1 Mixing

- 3.1.1 Stir individual components of the Base and Hardener thoroughly before mixing to disperse any possible settlement.
- 3.1.2 Use slow speed drill fitted with a mixing paddle to mix the Base and Hardener components of **Gripdeck Flexcoat 100.**
- 3.1.3 Pour the entire content of the Hardener into the base container.
- 3.1.4 Ensure that the bottom and sides are thoroughly drained.
- 3.1.5 Start mixing for approximately 3 minutes until a uniform colour and consistency are achieved.

#### Notes:

- Slow speed mixer should be only used.
- While mixing, ensure that the mixing blade is kept below the surface of the mix to prevent air entrapment.
- Never mix **Gripdeck Flexcoat 100** by hand as this could lead to areas of uncured material.
- Under no circumstances should part mix be carried out.
- Each independent area of application should have sufficient materials, equipment, and labour.

#### 3.2 Application

- 3.2.1 Apply mixed **Gripdeck Flexcoat 100** onto the primed surface immediately after mixing in one coat using a brush or squeegee at a rate of 0.65 0.75 kg/m<sup>2</sup>.
- 3.2.2 Allow the applied coat to dry before proceeding to the next stage, do not proceed whilst the coat is 'tacky'.
- 3.2.3 The minimum over coating times will vary according to the porosity of the substrate and ambient conditions. However, it is recommended to leave the coat for 12 to 24 hours to be over coated.

#### **Gripdeck Wearcoat TE**

#### 3.3 Mixing

- 3.3.1 Stir the components of the resin pack before mixing to disperse any possible settlement.
- 3.3.2 Use slow-speed drill fitted with a mixing paddle to mix the Base and Hardener components of **Gripdeck Wearcoat TE.**
- 3.3.3 Transfer the entire contents of both components into a separate mixing container.
- 3.3.4 Start mixing for approximately 3 5 minutes until a uniform colour and consistency are achieved.



#### Notes:

- Slow speed mixer should be only used.
- While mixing, ensure that the mixing blade is kept below the surface of the mix to prevent air entrapment.
- Never mix **Gripdeck Wearcoat TE** by hand as this could lead to areas of uncured material.
- Under no circumstances should part mix be carried out.
- Each independent area of application should have sufficient materials, equipment, and labour.

#### 3.4 Application

# [Smooth finish for traffic aisles and parking bays]

- 3.4.1 Apply mixed **Gripdeck Wearcoat TE** onto the surface immediately after mixing in one coat using a brush, roller, or airless spray machine.
- 3.4.2 **Gripdeck Wearcoat TE** should be applied in one coat at a rate of 0.28 kg/m<sup>2</sup> if a smooth finish is required.
- 3.4.3 Ensure that a continuous coating is obtained.
- 3.4.4 **Gripdeck Wearcoat TE** should become tack-free before it is over-coated with any successive coating. This can be achieved after a minimum of 6 8 hours from the application at 25°C.

#### [Anti-slip finish for traffic aisles, parking bays, ramps and turning circles]

- 3.4.5 Apply mixed **Gripdeck Wearcoat TE** onto the surface immediately after mixing in one coat using a brush, roller, or airless spray machine.
- 3.4.6 **Gripdeck Wearcoat TE** should be applied in one coat at a rate of 0.35 kg/m<sup>2</sup>.
- 3.4.7 Ensure that a continuous coating is obtained.
- 3.4.8 To obtain an anti-slip finish, and whilst **Gripdeck Wearcoat TE** is still wet, broadcast with **Antislip Aggregate #3** at 2.0 3.0 kg/m<sup>2</sup> rate and allow to dry.
- 3.4.9 All excess aggregate shall be removed before applying the final topcoats.
- 3.4.10 **Gripdeck Wearcoat TE** should become tack-free before it is over-coated with **Gripdeck Wearcoat TP100** coat. This can be achieved after a minimum of 6 8 hours from the application at 25°C.



Application of Gripdeck Wearcoat TE using Roller



#### **Gripdeck Wearcoat TP100**

#### 3.5 Mixing

- 3.5.1 Stir individual components of the Base and Hardener thoroughly before mixing to disperse any possible settlement.
- 3.5.2 Use slow speed drill fitted with a mixing paddle to mix the Base and Hardener components of **Gripdeck Wearcoat TP100.**
- 3.5.3 Transfer the entire contents of the Hardener into the base container.
- 3.5.4 Start mixing for approximately 3 minutes until a uniform colour and consistency are achieved.

#### Notes:

- Slow speed mixer should be only used.
- While mixing, ensure that the mixing blade is kept below the surface of the mix to prevent air entrapment.
- Never mix Gripdeck Wearcoat TP100 by hand as this could lead to areas of uncured material.
- Under no circumstances should part mix be carried out.
- Each independent area of application should have sufficient materials, equipment, and labor

# 3.6 Application

#### [Smooth finish and Anti-slip for traffic aisles and parking bays]

- 3.6.1 Apply mixed **Gripdeck Wearcoat TP100** onto the surface immediately after mixing in one coat using a brush, roller, or airless spray machine.
- 3.6.2 **Gripdeck Wearcoat TP100** should be applied in one coat at a rate of 0.25 kg/m² if a smooth finish is required.
- 3.6.3 Ensure that a continuous coating is obtained.
- 3.6.4 **Gripdeck Wearcoat TP100** should become tack-free before it is over-coated with any successive coating. This can be achieved after a minimum of 24 hours from the application at 25°C.

#### [Anti-slip finish for ramps and turning circles]

- 3.6.5 Apply mixed **Gripdeck Wearcoat TP100** onto the surface immediately after mixing in one coat using a brush, roller, or airless spray machine.
- 3.6.6 The first coat of **Gripdeck Wearcoat TP100** should be applied at a rate of 0.25 kg/m<sup>2</sup>.
- 3.6.7 Ensure that a continuous coating is obtained.
- 3.6.8 **Gripdeck Wearcoat TP100** coat should become tack-free before it is over-coated with the second coat. This can be achieved after a minimum of 24 hours from the application at 25°C.
- 3.6.9 A second coat of **Gripdeck Wearcoat TP100** should be applied on ramps and turning circles at a rate of  $0.25 \text{ kg/m}^2$ .



#### 4.0 System Coverage

Application	Antislip Finish		Smooth Finish
	Ramps & turning circles	Traffic aisles & parking bays	Traffic aisles & parking bays
Gripdeck Primecoat U	One coat $0.20-0.30\ kg/m^2/coat,\ depending\ on\ surface\ texture\ and\ porosity$		
Gripdeck Flexcoat 100	One coat 0.65 - 0.75 kg/m²/coat		
Gripdeck Wearcoat TE	One coat 0.35 kg/m²/coat		One coat 0.28 kg/m²/coat
Antislip Aggregate #3	2 - 3 kg/ m²		
Gripdeck Wearcoat TP100	Two coats 0.25 kg/m²/coat	One coat 0.25 kg/m²/coat	One coat 0.25 kg/m²/coat
Total system thickness	1.60 - 1.80 mm	1.50 - 1.70 mm	0.90 - 1.10 mm

# 5.0 Cleaning

Tools and equipment can be cleaned with DCP Solvent when it is wet; dried materials may be removed mechanically.

#### 6.0 Limitations

- 6.1 Do not mix part packs under any condition, as this will change the mixing ratio between both components.
- 6.2 For indoor or outdoor decks, where a waterproofing surface is required, use **Gripdeck HPW system.**
- 6.3 **Gripdeck HPW system** should be protected from contact with water for the first 24 hours after application as discoloration could occur.
- 6.4 Select an appropriate mixing container that will allow proper and efficient mixing.
- 6.5 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.
- 6.6 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.

# **Section C: Cautions**

#### **Health and safety**

Refer to the Material Safety Data Sheet prior using Gripdeck HPW System.

# **Section D: Approval and Variations**

This method statement is offered by DCP as a 'standard proposal' for the application of **Gripdeck HPW System**. It remains the responsibility of the Engineer to determine the correct method for any given application. Where alternative methods are to be used, these must be submitted to DCP for approval, in writing, prior to commencement of any work. DCP will not accept responsibility or liability for variations to the above method statement under any other condition.