

# Deckshield ID (1.5mm)

A flexible polyurethane deck coating system that transforms intermediate decks of multi-storey parking structures.

Typically used to cosmetically enhance, protect and brighten internal car parks and stadiums.





# Slip Resistant:

Textured aggregates provide a non slip surface underfoot.



#### **Durable:**

Hard wearing, durable and abrasion resistant protective coating.



#### Low Maintenance:

Seamless, hygienic finish, which requires low maintenance.



#### **Reduces Noise:**

Minimises unwanted noise from tyre squeal.

## **Technical Profile**

| lechnical Frome  | Technical Protile  |      |      |
|--|--|------|------|
| FIRE RESISTANCE - AS/ISO 9239.1                        |  |      |      |
| CHF Value  | - kW/m²  |      |      |
| Smoke Value  | 4% (Mean)  |      |      |
| SLIP RESISTANCE*                                       |  |      |      |
| Method described in<br>AS4586-2013                     | d in P5 (Based on 36 Mesh White Aluminium Oxide Aggregate) |      |      |
| TEMPERATURE RESISTANCE                                 |  |      |      |
| Softens over 65°C, Hardens on                          | cooling  |      |      |
| WATER PERMEABILITY                                     |  |      |      |
| Karsten Test   | Nil (Impermeable)  |      |      |
| BOND STRENGTH**  |  |      |      |
| ASTM D4541 (Pull-Off Test)                             | >1.5MPa*   |      |      |
| ABRASION RESISTANCE                                    |  |      |      |
| Taber Abrader ASTM D4060<br>1kg load using CS17 wheels | 0.1g loss per 1000 cycles                                  |      |      |
| VOC CONTENT  |  |      |      |
| ASTM D2369-10:2015                                     | < 140 g/L  |      |      |
| *[Low VOC version only]                                |  |      |      |
| UV RESISTANCE  |  |      |      |
| Excellent (Non-Yellowing)                              |  |      |      |
| CHEMICAL RESISTANCE                                    |  |      |      |
| Contact Technical Department                           |  |      |      |
| CHLORIDE ION RESISTANCE                                |  |      |      |
| IDOT BD47/94: Appendix B<br>Method B4, 2 (d)           | Result: No Chloride ion penetration in 28 days.            |      |      |
| SPEED OF CURE***                                       | 10°C   | 20°C | 30°C |
| Foot Traffic   | 48 h   | 24 h | 18 h |
| Vehicular Traffic                                      | 96 h   | 72 h | 48 h |



Full Chemical Cure



12 d



6 d

Bluebell Li

7 d



Serpentin



Pastel Grey

Light Grey

rey Bridge Grey



Dark Grey





Straw Mushroom

The applied colours may differ from the examples shown. For a full colour chart and samples, contact your local Flowcrete office.

## Coving

Coving can form an integral part of the flooring system. It creates a sealed finish between the floor and wall joint. Please refer to Flowtex F1 Coving Mortar for further information.

## **Substrate Requirements**

Concrete or screed substrate should be a minimum of 25 N/mm², free from laitance, dust and other contamination. Substrate should be dry to 75% RH as per ASTM F2170 (AS1884:2012). Slab on ground concrete must have an effective damp proof membrane in place.

### **Installation Service**

The installation should be carried out by a qualified contractor with a documented quality assurance scheme. For details of our recommended contractors, contact your local Flowcrete office. Detailed application instructions are available upon request.

#### **Environmental Considerations**

The finished system is assessed as non-hazardous to health and the environment. The long service life and seamless surface reduce the need for repairs and maintenance. Environmental and health considerations are controlled during manufacture of the products by Flowcrete staff.

# Aftercare, Cleaning & Maintenance

Clean regularly using a single or double headed rotary scrubber drier in conjunction with a mildly alkaline detergent. Please refer to Flowcrete's Cleaning & Maintenance Guide for further information.

#### Warranty

Flowcrete products are guaranteed against defective materials and manufacture and are sold subject to our standard 'Warranty, Terms and Conditions of Sale', copies of which can be obtained on request. Warranty does not cover suitability, fit for purpose or any consequential or related damages. Please review warranty in detail before installing the products.

## **Safety Precautions**

Wear appropriate Personal Protective Equipment (PPE) including masks, gloves, eye protection and protective clothing during mixing and application. Ensure the working area is well ventilated and follow the appropriate Health and Safety guidelines applicable to the location where the application is undertaken.

#### **Important**

This specification assumes a concrete compressive strength greater than 25 N/mm², application and curing temperatures of 5–35°C, the presence of an effective damp proof membrane below substrate and concrete moisture content less than 75% RH. If moisture content is above 75% RH, please contact Flowcrete Australia.

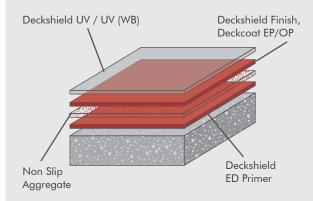
This specification must be read in conjunction with relevant product technical data sheets and the application of all materials is to be strictly in accordance with manufacturer's instructions.

# **Model Specification**

| System       | Deckshield ID                |
|--------------|------------------------------|
| Finish       | Gloss                        |
| Thickness    | 1.5mm                        |
| Manufacturer | Tremco CPG Australia Pty Ltd |
| Contact      | + 61 7 3205 7115             |

Preparatory work and application in accordance with manufacturer's instructions.

## System Design



## **Products Included In This System**

| Layer 1 | Deckshield ED Primer *If required for porous surfaces only. |
|---------|---|
| Layer 2 | Deckshield ED Primer  |
|         | 24-36 Mesh Aggregate  |
| Layer 3 | Deckshield Finish, Deckcoat EP<br>/ OP                      |
| Layer 4 | Deckshield UV / UV (WB)                                     |

#### **Manufacturer Details**

| Manufacturer | Tremco CPG Australia Pty Ltd |
|--------------|------------------------------|
| Address      | 63 Radley Street             |
| Suburb       | Virginia                     |
| State        | QLD                          |
| Postcode     | 4014                         |
| Telephone    | +61 7 3205 7115              |
| Email        | australia@flowcrete.com      |

#### **Outline for Installation**

| Mechanically Prepare Substrate   |                         |  |
|--|-------------------------|--|
| Apply Deckshield ED Primer *Apply a Second Coat If Required for Porous Surfaces Only | @ 0.25kg/m <sup>2</sup> |  |
| Apply Deckshield ED Primer   | @ 0.25kg/m <sup>2</sup> |  |
| Apply 24-36 Mesh Aggregate   | @ 2kg/m <sup>2</sup>    |  |
| Apply Deckshield Finish, Deckcoat EP/OP  | @ 0.55kg/m <sup>2</sup> |  |
| Apply Deckshield UV / UV (WB)  | @ 0.15kg/m <sup>2</sup> |  |

#### Storage

| Time        | 12 Months in Unopened Packs. If longer than 12 Months consult Flowcrete.  |
|-------------|---|
| Temperature | Storage temperature between 5°C and 35°C.   |
| Protection  | Should be stored inside and protected from frost, weather, moisture, direct sunlight and contamination ingress. |

## **Material Set-Up**

Before commencing work ensure that your material is set-up by separating all components (e.g. Base A, Hardener B, Filler C etc.) to ensure that all material is correct. Check product labels and ensure there are equal amounts of product.

# Site Set-Up

Before commencing work ensure that your site is set-up. Mark the floor according to the specification with masking tape or similar to clearly identify what area (m²) each unit will cover. If this is not achieved (greater or less consumption than the specified amount) immediately stop and contact Flowcrete.

Email: australia@flowcrete.com

# **Application Equipment**

The use of correct application equipment is critical as incorrect application tools can result in poor finishing and incorrect material consumption. Always test the application equipment prior to commencing work.

The following equipment is recommended for this application.



# **Surface Preparation**

Concrete should be finished by steel trowel. Surface preparation is to be completed by totally enclosed light shot blasting (please note this may leave track and blast lines which will not be covered) or diamond grinding. All cementitious laitance must be removed to expose a sound substrate and provide a dry, dust free, open textured surface. All hard to reach areas and areas around the perimeter must be prepared using hand held preparation equipment.

Any damaged areas must be repaired with Flowtex F1 mortar. Consult Flowcrete prior to using an alternative repair mortar. Any rough or uneven areas must be made smooth with Flowcoat SC (Universal Resin Base A, Universal Hardener B, Sand/Silica Flour).

Consult Flowcrete prior to using an alternative epoxy scratch coat.

Please note porous concrete may require sealing prior to the application of the Deckshield ED Primer layer. Please consult with Flowcrete Technical Department for further information.

## **Application Temperature**

The recommended material and substrate temperature is 5 - 35°C, but no less than 5°C. The temperature of the substrate should exceed the "dew point" by 3°C during application and hardening.

## **Application / Pot Life**

Ready-mixed product should be used within 20 minutes at a temperature of 20°C. At higher temperatures (or if left in bucket) the application time is shorter.

Temperatures should not fall below 5°C in the 24hrs after application.

Decant mixed product into smaller quantities if applying small/detailed areas.

# Application of Deckshield ED Primer

The substrate must be surface dry before the application of Deckshield ED Primer. Deckshield ED Primer must be applied within 24 hours at 20°C if sealing coat for porous concrete has been required.

#### 1. Mixing

Pack components are pre-weighed for optimum performance. We recommend that you do not split or proportion packs, however, if required this must be completed by weight using digital scales.

Stir Base A to re-disperse any settlement. Add Hardener B to the Base A container, and drain thoroughly.

Mix with a slow speed drill and helical spinner head for 90 seconds, taking care not to entrain air. Add Filler C to Base A container and mix for further 45 seconds until uniform. Add between 2 - 7% (depending on conditions) Xylene and mix for a further 30 seconds.

#### 2. Application

Immediately after mixing, apply the Deckshield ED Primer by squeegee and/or roller. Whilst Deckshield ED Primer is wet, fully broadcast 24-36 Mesh Aggregate until refusal. N.B. Different mesh size will deliver different slip ratings.

Allow to cure. Lightly scrape the surface to remove any loosely bonded aggregate, sweep and vacuum remaining aggregate.

# Application of Deckshield Finish or Deckcoat EP/OP

\* Please select desired product based on consultation with Flowcrete Technical Department.

The previous layer must be surface dry before the application of Deckshield Finish or Deckcoat EP/OP.

#### 1. Mixing

Pack components are pre-weighed for optimum performance. We recommend that you do not split or proportion packs, however, if required this must be completed by weight using digital scales.

Stir Base A to re-disperse any settlement.
Add Pigment (if supplied separately) and mix until uniform. Add Hardener B to the Base A container, and drain thoroughly. Mix with a slow speed drill and helical spinner head for 90 seconds, taking care not to entrain air. Add between 2 - 7% (depending on conditions) Xylene and mix for a further 30 seconds.

#### 2. Application

Immediately after mixing, apply the Deckshield Finish or Deckcoat EP/OP by squeegee and roller. Whilst wet lightly broadcoast the surface with aluminium oxide.

Allow to cure.

# Application of Deckshield UV / UV (WB)

The substrate must be surface dry before the application of Deckshield UV / UV (WB). Deckshield UV / UV (WB) must be applied within 24 hours at 20°C following the application of Deckshield Finish or Deckcoat EP/OP.

#### 1. Mixing

Pack components are pre-weighed for optimum performance.

We recommend that you do not split or proportion packs, however, if required this must be completed by weight using digital scales.

Stir Base A to re-disperse any settlement.

Add Pigment (if supplied separately) and mix until uniform. Add Hardener B to the Base A container, and drain thoroughly. Mix with a slow speed drill and helical spinner head for 90 seconds, taking care not to entrain air.

#### 2. Application

Immediately after mixing, apply the Deckshield UV / UV (WB) by roller only, ensuring an even film is achieved, taking care not to over apply. Allow to cure.

# **Trafficking**

Allow to cure for a minimum of 24 hours at temperatures no less than 20°C before foot traffic and 72 hours before vehicular traffic.

#### Note

When printed or saved externally, this document is uncontrolled and therefore may not be the latest version.

Any recommendation or suggestion relating to the use of the products made by Tremco CPG Australia Pty Ltd., whether in its technical literature, or in response to a specific enquiry, or otherwise, is based upon data believed to be reliable, however the products and information are intended for use by Customers having requisite skill and know-how in the industry and therefore it is for the

Customer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that the Customer has done so at its sole discretion and risk.

#### **Additional Notes**

- 1. Maximum overcoat time is 24 hours at 20°C.
- 2. The product has reached full cure after 7 days at 20°C.
- 3. The applied colours may differ from the examples shown.
- 4. Light and vibrant colours may require additional coats to achieve desired results.
- 5. Flowcrete assumes no responsibility for the application of incorrect colour.
- 6. It is recommended that top coat colours match base coat colours to achieve desired results.
- 7. This system should be installed at 3°C above the dew point.
- 8. A low temperature/high humidity environment can cause blooming issues.
- 9. Do not allow water to come in contact with the floor for 24 hours at 20°C.
- 10. Please ensure application temperature and RH limits are followed.
- 11. Wind or strong airflow may cause quick curing and drying of the system.
- 12. Ensure wind or strong airflow is eliminated during application, however adequate safety ventilation should still be followed.
- 13. Direct heat during application of the system can cause flash curing and potential delamination.

  Ensure you do not apply this system to substrates with temperatures exceeding 35°C.
- 14. The specific slip test rating (P0-P5 range) noted in this document is based on the system design, products listed, coverage rates and specific aggregate outlined in this document. This slip test rating can and will change if the standard specification details or installation methods are altered in any way. The specific slip rating (P0-P5 range) noted in this document is based on 96 Rubber slide testing on level non-inclined surfaces. Applicators should refer to methods outlined in AS4586-2013 and SA HB 198:2014