CAR PARK REFURBISHMENT

- A wide range of protective repair solutions including traffic deck systems, concrete repair materials, and crack injection resins as well as architectural wall coatings and waterproofing products.

www.flowcreteasia.com
Protect, Repair & Transform Car Parking Facilities

Today, far from the grey utilitarian structures of the past, multi-storey car parks are increasingly being recognised as pillars of the urban landscape offering vehicle owners a safe and welcoming environment to park as well as boasting a well-designed layout and high-end build quality.

From basement to rooftop decks, larger and brighter parking bays provide an increased sense of safety and security for vehicle owners alongside clear navigational markings and preferential parking areas for hybrid or electric vehicles.

Flowcrete Asia offers specification professionals working on the design of new-build or refurbishment car park structures a range of deck coating solutions, repair materials and wall coating solutions to choose from. Such car park renovation projects can benefit from utilising Flowcrete Asia’s extensive range of repair products to transform old parking areas direct from one supplier, with one point of contact and under one manufacturer’s warranty.

A Complete Repair & Protection Package

- **Architectural Wall Coatings**
- **Liquid Applied Waterproofing**
- **Ramps & Turning Circles**
- **Structural & Surface Repair**
- **Traffic Deck Systems**
## Refurbishment Solution Products

<table>
<thead>
<tr>
<th>Traffic Deck Systems</th>
<th>Columns</th>
<th>Facades</th>
<th>Joints</th>
<th>Top Decks</th>
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<th>External Drop Off Zones</th>
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<td>Drop Off &amp; Landscaping Areas</td>
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Deckshield ID

A Green Label certified, low VOC, solvent free, flexible polyurethane car park deck coating system available in a range of colours.

Deckshield ID provides a colourful watertight, hard wearing surface for intermediate decks of multi-storey, basement and other trafficable suspended floors.

<table>
<thead>
<tr>
<th>Environmentally Friendly:</th>
<th>Attractive:</th>
<th>Resistant:</th>
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<tbody>
<tr>
<td>Green Label Certified and low in Volatile Organic Compounds (VOCs).</td>
<td>Brightens up dull, dark and musty car park environments.</td>
<td>Excellent resistance to chemicals exposure, fire and slip / skid risks.</td>
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**Chemical Resistance**

<table>
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<tr>
<th>Chemical</th>
<th>Compatibility</th>
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<tr>
<td>Petrol</td>
<td>✓</td>
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<tr>
<td>Diesel</td>
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<tr>
<td>Antifreeze</td>
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<tr>
<td>Hydraulic Fluid</td>
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<tr>
<td>Chlorides</td>
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<tr>
<td>Battery Acid</td>
<td>✓</td>
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<tr>
<td>Battery Acid</td>
<td>✓</td>
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</table>

Technical Profile

**TEMPERATURE RESISTANCE**
Softens over 70°C, hardens on cooling

**WATER PERMEABILITY**
Karsten Test Nil (Impermeable)

**BOND STRENGTH**
> 1.5 MPa*

**FIRE RESISTANCE**
EN 13501-1 B_s1

**SLIP RESISTANCE**
BS 7976-2 Dry >40, Wet dependant on specification

**ABRASION RESISTANCE**
ASTM D4060 (1kg load using CS17 wheels) 0.1g loss per 1000 cycles

**SPEED OF CURE**

<table>
<thead>
<tr>
<th>Traffic Level</th>
<th>10°C</th>
<th>20°C</th>
<th>30°C</th>
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<tbody>
<tr>
<td>Light Traffic</td>
<td>30 hrs</td>
<td>18 hrs</td>
<td>12 hrs</td>
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<tr>
<td>Full Traffic</td>
<td>48 hrs</td>
<td>36 hrs</td>
<td>24 hrs</td>
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<tr>
<td>Full Chemical Cure</td>
<td>12 days</td>
<td>7 days</td>
<td>6 days</td>
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*Assumes concrete compressive strength is greater than 25 N/mm²

Chemical Resistance

- Petrol
- Diesel
- Antifreeze
- Hydraulic Fluid
- Chlorides
- Battery Acid
- Battery Acid

UV LIGHT RESISTANCE
Excellent (include Deckshield UV WB topcoat)

For applications falling outside of this temperature range, please contact your local Flowcrete Technical Department.

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

Whether your parking facility is precast, cast-in-place or post-tensioned construction, Flowcrete offers complete solutions for concrete repair and protection.

As unique as your repair or project demand may be, our systems will protect your investment from the expensive and damaging effects caused by a multitude of external aggressors.

New construction and repair applications include traffic deck coatings, penetrants and overlays, stairwell repair and coatings, joint sealants, surface repair and corrosion protection in commercial, retail, institutional and residential parking facilities.

Potential Causes of Damage to Car Parking Structures

✓ Water leakage through cracks and joints
✓ Chloride ingress
✓ Pollution
✓ Freeze thaw cycling
✓ Wearing from repetitive traffic patterns
✓ Typical mechanical movement that causes spalling, reinforcement corrosion and other distress
Traffic Coating Systems

Deckshield ID
A low VOC, solvent free, flexible polyurethane car park traffic coating for multi-storey car park projects. Provides a colourful, water-tight surface for intermediate decks of multi-storey, basement and other trafficable suspended floors.

Deckshield ED
A polyurethane car park coating system that incorporates a technically advanced polyurethane based temporary moisture barrier. Ensures the controlled dissipation of moisture vapour which is suitable at the lowest basement car park levels.

Deckshield ID Rapide
An MMA car park deck coating system providing a colourful water-tight, hard wearing surface for intermediate decks of multi-storey, basement and other trafficable suspended floors. Developed to enable very fast track applications, therefore dramatically reducing program time.

Deckshield ED Rapide
An MMA car park deck coating system providing a colourful water-tight, hard wearing surface for exposed decks. Developed to enable very fast track applications.

Deckshield IDSD
A Green Label certified, low VOC, solvent free, flexible polyurethane car park deck coating system providing a colourful water-tight, hard wearing surface for car park ramps and other areas where high vehicular traffic is expected.

Surface Repair

Versaspeed
A low shrinkage, high early strength, versatile, single-component, rapid-setting repair mortar for horizontal, and form and pour repair projects. Open to standard tire traffic after 2 hours, and a traffic coating may be applied after 4 hours.

Flowtex F1 Mortar
A three component epoxy mortar/screed that can be used to repair damaged floors, joint arises or as a thin layer topping underlayment for Flowcrete epoxy resin finishes.

Flowscreed Mortar
A single component, quick drying, cement based screed used to repair floors. Used for fast track refurbishment projects prior to the installation of a Flowcrete flooring system.

Waterproofing

Eucoflex PU 100
A high build, water based, liquid applied PU elastomeric waterproofing membrane that has excellent cold flexibility, elongation and recovery properties. Used to refurbish old waterproofing systems including torch-on membranes.

Eucoproof 3000 TA & 4000 TA
Torch applied bituminous waterproofing membranes, manufactured from mixture of bitumen and selected APP (Atactic Poly Propylene) polymers blended together to obtain excellent heat & UV resistance and waterproofing properties.

Epoxy Coatings

Flowcoat SF41 (3 mm Composite)
A solvent free, chemical resistant, high-build epoxy resin coating system. Different grades of slip resistance may be achieved by inclusion of graded aggregate between coats.

Internal Wall

Flowseal EPW Wall
A pigmented, water-based epoxy wall sealer that brightens dull concrete surfaces. Flowseal EPW Wall provides a solvent free protective coating for the concrete that acts as a barrier to the ingress of chlorides and carbon dioxide.
**External Wall Sealer**

**Euco-Guard 100**
A siloxane-based water and chloride repellent for concrete & masonry structures that reacts chemically with the concrete to provide a highly effective chloride screen and water barrier. Can be used on both new and old concrete surfaces.

**Weather-Guard**
A siloxane penetrating water repellent sealer that protects concrete and masonry surfaces from the effects of exterior exposure and weathering.

**Sealants & Joint Fillers**

**Eucolastic 1NS**
A single-component, polyurethane hybrid sealant for dynamic joints, offering persistent adhesion once fully cured and protects against stand-alone polyurethane sealants.

**Eucolastic 1SL**
A single-component, low-modulus, moisture-cure, self-leveling, polyurethane joint sealant, formulated to be extremely durable in dynamic joints. It provides superior wear resistance to rubber tires and pedestrians in high traffic areas.

**Tammsflex NS / Tammsflex SL**
Two-part, elastomeric, polysulphide caulking and sealing compounds that will withstand repeated expansion and contraction and remain resilient through daily and seasonal cyclic changes in temperature. Excellent chemical, solvent and water resistance and will withstand joint movement of up to +/-25%.

**Euco QWIKjoint UVR**
A UV resistant polyurea floor joint filler which is primarily used for filling construction and control joints in concrete floors. Euco Qwikjoint UVR supports and protects joint edges from heavy loads and wheel traffic, reducing spalling of the joint edges.

**Crack Injection**

**Dural 452 LV**
A two-component, 100% solids, moisture insensitive, high strength epoxy adhesive and binder for numerous applications. This high modulus, low viscosity epoxy resin is the perfect solution for general bonding applications and for injecting cracks in concrete and a variety of other substrates.

**Dural 452 MV**
A two-component, 100% solids, moisture insensitive, high strength epoxy adhesive and binder for numerous applications. This high modulus, medium viscosity epoxy resin is the perfect solution for bonding new, plastic concrete to existing concrete slabs and steel.

**Dural 452 Gel**
A two-component, 100% solids, DOT non-corrosive, moisture insensitive, high strength epoxy adhesive and binder for numerous applications. This high modulus, structural gel is perfect for bonding applications that require a non-sag adhesive.

**Dural Aqua-Dam**
A hydrophobic polyurethane grout that is injected in concrete and other sound substrates to stop water from entering into occupied or unwanted places. Dural Aqua-Dam forms a water tight seal within the substrate that remains even after the water has subsided.

**Drop off & Landscaping Areas**

**Increte Renovate**
A two-component, polymer-modified cementitious coating used to resurface concrete. Renovate is designed for application by roller or pump-sprayer, and it is ideal for revitalising stamped concrete. The original stamped pattern of the concrete is not affected by Renovate.
Flowcrete

World leader in seamless resin flooring solutions and other specialist coatings.

Africap

South Africa +27 31 701 0017 southafrica@flowcrete.com

Asia Pacific (APAC)

Australia +61 7 3205 7115 australia@flowcrete.com
Bangladesh +603 6277 9575 bangladesh@flowcrete.com
Hong Kong +852 2795 0478 hongkong@flowcrete.com
Indonesia +62 21 252 3201 indonesia@flowcrete.com
Korea +60 3 6277 9575 korea@flowcrete.com
Malaysia +60 3 6277 9575 asia@flowcrete.com
New Zealand +64 7 541 1221 newzealand@flowcrete.com
Pakistan +60 3 6277 9575 pakistan@flowcrete.com
Philippines +63 2 834 6506 philippines@flowcrete.com
Singapore +65 6848 7166 singapore@flowcrete.com
Taiwan +60 3 6277 9575 taiwan@flowcrete.com
Thailand +66 2539 3424 thailand@flowcrete.com
Vietnam +84 28 6287 0846 vietnam@flowcrete.com

Europe & Middle East (EME)

Bulgaria +359 898 61 58 31 bulgaria@flowcrete.com
Denmark +46 435 40 01 10 denmark@flowcrete.com
France +33 1 60 61 74 42 france@flowcrete.com
Italy +39 339 4853258 italy@flowcrete.com
Norway +47 6486 0830 norway@flowcrete.com
Poland +48 22 879 8907 poland@flowcrete.com
Romania +40 766 596 991 romania@flowcrete.com
Russia +7 916 931 3513 russia@flowcrete.com
Spain +34 937 07 0872 spain@flowcrete.com
Sweden +46 435 40 01 10 sweden@flowcrete.com
Turkey +90 212 2946570 turkey@flowcrete.com
UAE +971 4 347 0460 uae@flowcrete.com
UK +44 (0) 1270 753 000 uk@flowcrete.com

India

India +91 44 40176600 india@flowcrete.com

North America

Canada +1 877-210-2444 canada@flowcrete.com
Mexico +55 44 40 94 00 mexico@flowcrete.com
USA +1 513-943-4225 americas@flowcrete.com

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