



DECKSHIELD

▶ Protection systems designed to meet contemporary requirements for upmarket car park environments.

Deckshield Range Technical Profile



Multi-storey car parks have always been many customers' first point of contact with commercial destinations, but it is only recently that developers have made efforts to improve the quality of the car park experience.

Although often underestimated, the correct specification of waterproofing and surfacing materials is critical, within the car park environment, to delivering a long-term, structurally protected and safe facility for car park operators and vehicle owners.

Flowcrete Hong Kong's Deckshield range offers a number of colourful deck coating solutions geared up to provide slip-resistance, durability and an excellent service life as well as stand-up to common car park problems. What's more, Flowcrete's deck coating systems are Singapore Green Label certified.

Application Suitability



Exposed Decks



Instructional Signage



Internal Decks



Demarcation



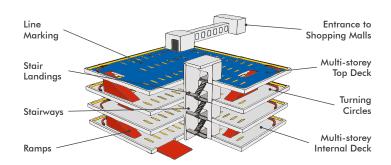
Ramps



Kerbs/Islands

Product Selector

Each parking facility consists of a range of zones or areas and requires a number of surface applications as a result. Flowcrete offers a wide range of flooring products to meet the surface requirements of the entire car park as well as neighbouring zones.



Deckshield ID



Deckshield ID is a Green Label certified polyurethane car park deck coating system for intermediate decks of multi-storey structures.

Deckshield cosmetically enhances and reduces noise, making multi-storey car parks brighter, safer environments to visit.



Environmentally Friendly:

Green Label certified and low in Volatile Organic Compounds (VOCs).



Attractive:

Brightens up dull, dark and musty car park environments.



Resistant:

Excellent resistance to chemicals, fire and has a low slip potential.



Reduces Noise:

Higher textured finishes reduce tyre squeal.



100% UV Light Stable:

Prevents from yellowing effect (with aliphatic Deckshield UV (WB) topcoat).

Chemical Resistance

Petrol	✓
Diesel	✓
Antifreeze	✓
Hydraulic Fluid	✓
Chlorides	✓
Battery Acids	✓

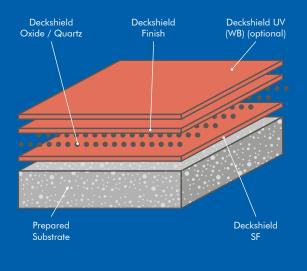
Technical Profile

TEMPERATURE RESISTANCE		
Softens over 70°C, hardens on cooling		
WATER PERMEABILITY		
Karsten Test	Nil (Impermeable)	
RESISTANCE TO CHLORIDE IONS		
DOT BD47/94: Appendix B Method B4,2(d).	No chloride ion penetration after 28 days	
BOND STRENGTH		
ASTM D4541 (Pull-Off Test)	>1.5 MPa*	
FIRE RESISTANCE		
EN 13501-1	B _{FL} - s1	
SLIP RESISTANCE		
BS 7976-2 (typical values for 4-S rubber slider)	Dry>40, Wet depends on specification (in accordance with HSE & UKSRG guidelines)	
ABRASION RESISTANCE		
Taber Abrader	0.1g loss per 1000 cycles (1kg load using CS17 wheels)	
VOC CONTENT		

SPEED OF CURE	10°C	20°C	30°C
Light Traffic	30 hrs	18 hrs	12 hrs
Full Traffic	48 hrs	36 hrs	24 hrs
Full Chemical Cure	12 days	7 days	6 days

Very low <20 g/L

ISO 11890-2



*Assumes concrete compressive strength is greater than 25 $\ensuremath{\text{N}/\text{mm}^2}$

Deckshield IDSD



Deckshield IDSD is a special duty Green Label Certified flexible polyurethane car park deck coating system for intermediate decks.

The hard-wearing finish is low in VOCs and provides a bright, colourful, watertight finish to cosmetically enhance parking environments.



Environmentally Friendly:

Green Label certified and low in Volatile Organic Compounds (VOCs).



Attractive:

Brightens up dull, dark and musty car park environments.



Resistant:

Excellent resistance to chemicals, fire and has a low slip potential.



Hard-wearing:

Provides a durable finish, resistant to abrasion and hair line cracking.



Reduces Noise:

Higher textured finishes reduce tyre squeal.

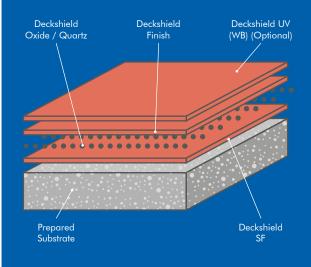
Chemical Resistance

Petrol	✓
Diesel	✓
Antifreeze	✓
Hydraulic Fluid	✓
Chlorides	✓
Battery Acids	✓

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 _{FL} - s1		
SLIP RESISTANCE		
BS 7976-2 (typical values for 4-S rubber slider)		
ABRASION RESISTANCE		
ASTM D4060 0.1g loss per 1000 cycles (1kg load using CS17 wheels)		
VOC CONTENT		
ISO 11890-2	Very low <20 g/L	

SPEED OF CURE	10°C	20°C	30°C
Light Traffic	30 hrs	18 hrs	12 hrs
Full Traffic	48 hrs	36 hrs	24 hrs
Full Chemical Cure	12 days	7 days	6 days



*Assumes concrete compressive strength is greater than 25 $\ensuremath{\text{N}/\text{mm}^2}$

















Deckshield LBD

Flexible polyurethane deck coating Deckshield LBD provides a colourful, hard-wearing, temporary moisture barrier for lower basement decks.

The attractive, highly resistant system, designed to work without the application of a separate damp proof membrane, delivers superior protection against uprising moisture from the substrate below.



Moisture Vapour Resistant:

Tolerates up to 100% relative humidity in the concrete or screed substrate.



Environmentally Friendly:

Low in Volatile Organic Compounds (VOCs) and solvent free.



Attractive:

Brightens up dull, dark and musty car park environments.



Resistant:

Excellent resistance to chemicals, fire and has a low slip potential.



Reduces Noise:

Higher textured finishes reduce tyre squeal.

Chemical Resistance

Petrol	✓
Diesel	✓
Antifreeze	✓
Hydraulic Fluid	✓
Chlorides	✓
Battery Acids	✓

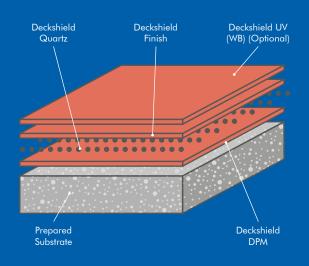
Technical Profile

APPLICATION SUITABILITY ✓ New build ✓ Refurbishment

TEMPERATURE RESISTANCE Tolerant of sustained temperatures up to 70°C WATER PERMEABILITY Karsten Test Nil (Impermeable) **BOND STRENGTH** >1.5 MPa* FIRE RESISTANCE EN 13501-1 B_{FI} - s1 **SLIP RESISTANCE** BS 7976-2 (typical values Dry>40, Wet depends on for 4-S rubber slider) specification (in accordance with HSE & UKSRG guidelines) ABRASION RESISTANCE ASTM D4060

SPEED OF CURE	10°C	20°C	30°C
Light Traffic	30 hrs	18 hrs	12 hrs
Full Traffic	48 hrs	36 hrs	24 hrs
Full Chemical Cure	12 days	7 days	6 days

0.1g loss per 1000 cycles (1kg load using CS17 wheels)



*Assumes concrete compressive strength is greater than 25 $\ensuremath{\text{N}/\text{mm}^2}$

Deckshield ED

Deckshield ED is a polyurethane car park deck coating system providing a colourful crack bridging, waterproof surface for exposed decks.

Deckshield ED cosmetically enhances and reduces noise, making exposed car park decks brighter, safer environments to visit.



Environmentally Friendly:

Low in Volatile Organic Compounds (VOCs) and solvent free.



Attractive:

Brightens up dull, dark and musty car park environments.



Resistant:

Excellent resistance to chemicals, fire and has a low slip potential.



Reduces Noise:

Higher textured finishes reduce tyre squeal.



UV Stable:

100% UV light stable. Prevents from yellowing effect.

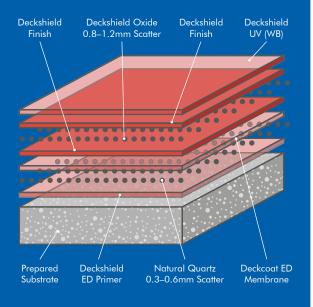
Chemical Resistance

Petrol	✓
Diesel	✓
Antifreeze	✓
Hydraulic Fluid	✓
Chlorides	✓
Battery Acids	✓

Technical Profile

TEMPERATURE RESISTANCE		
Softens over 70°C, hardens on cooling		
WATER PERMEABILITY		
Karsten Test	Nil (Impermeable)	
RESISTANCE TO CHLORIDE IONS		
DOT BD47/94: Appendix B Method B4,2(d).	No chloride ion penetration after 28 days	
BOND STRENGTH		
ASTM D4541 (Pull-Off Test) >1.5 MPa*		
FIRE RESISTANCE		
EN 13501-1	B _{FL} - s1	
SLIP RESISTANCE		
BS 7976-2 (typical values for 4-S rubber slider)	Dry>40, Wet depends on specification (in accordance with HSE & UKSRG guidelines)	
ABRASION RESISTANCE		
Taber Abrader	300mg loss per 1000 cycles	

SPEED OF CURE	10°C	20°C	30°C
Light Traffic	30 hrs	18 hrs	12 hrs
Full Traffic	48 hrs	36 hrs	24 hrs
Full Chemical Cure	12 days	7 days	6 days



^{*}Assumes concrete compressive strength is greater than 25 $\ensuremath{\text{N}/\text{mm}^2}$



Deckshield ID Rapide

Deckshield ID Rapide is a MMA car park deck coating system providing a colourful surface for intermediate decks of multi-storey structures.

Deckshield ID Rapide has been developed to enable very fast track applications, therefore dramatically reducing down time.



Fast Cure:

MMA resin speeds up cure time, reducing construction schedules.



Attractive:

Brightens up dull, dark and musty car park environments.



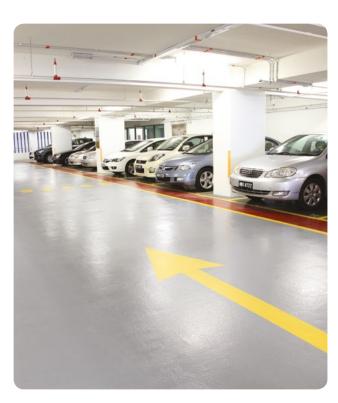
Hard-wearing:

Lengthens the car park's lifecycle and minimises future reinstallation costs.



Resistant:

Excellent resistance to chemicals, fire and has a low slip potential.



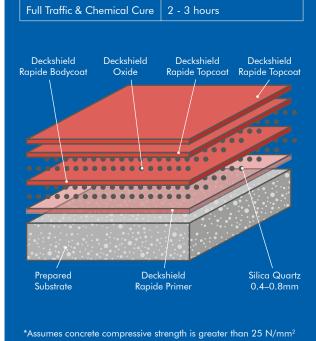
Technical Profile

SPEED OF CURE (PER LAYER)

Full Traffic

TEMPERATURE RESISTANC	Е	
Softens over 70°C, hardens	on cooling	
WATER PERMEABILITY		
Karsten Test Nil (Impermeable)		
RESISTANCE TO CHLORIDE	IONS	
DOT BD47/94: Appendix B Method B4,2(d). No chloride ion penetration after 28 days		
BOND STRENGTH		
ASTM D4541 (Pull-Off Test) >1.5 MPa*		
FIRE RESISTANCE		
EN 13501-1	C _{FL} - s1	
SLIP RESISTANCE		
BS 7976-2 (typical values for 4-S rubber slider)	Dry>40, Wet depends on specification (in accordance with HSE & UKSRG guidelines)	

1 Hour



Chemical Resistance

Petrol	✓
Diesel	✓
Antifreeze	✓
Hydraulic Fluid	✓
Chlorides	✓
Battery Acids	✓

Deckshield ED Rapide

Deckshield ED Rapide is a MMA car park deck coating system providing a colourful watertight, hard-wearing surface for exposed decks.

Deckshield ED Rapide has been developed to enable very fast track applications, therefore dramatically reducing down time.



Fast Cure:

MMA resin speeds up cure time, reducing construction schedules.



Attractive:

Brightens up dull, dark and musty car park environments.



Hard-wearing:

Lengthens the car park's lifecycle and minimises future reinstallation costs.



Resistant:

Excellent resistance to chemicals, fire and has a low slip potential.



Technical Profile

Karsten Test	Nil (Impermeable)
RESISTANCE TO CHLORIDE	IONS
DOT BD47/94: Appendix B Method B4,2(d).	No chloride ion penetration after 28 days
BOND STRENGTH	
ASTM D4541 (Pull-Off Test)	>1.5 MPa*
FIRE RESISTANCE	
EN 13501-1	C _{FL} - s1
SLIP RESISTANCE	
BS 7976-2 (typical values for 4-S rubber slider)	Dry>40, Wet depends on specification (in accordance with HSE & UKSRG guidelines)
ABRASION RESISTANCE (T	OPCOAT)
Taber Abrader	300mg loss per 1000 cycles (1kg load using CS17 wheels
SPEED OF CURE (PER LAYI	 ER)
Full Traffic	1 Hour
Full Traffic & Chemical Cure	2 - 3 hours
Deckshield Deckshield apide Bodycoat Oxide	Deckshield Rapide Topcoat Rapide Topcoa
/ Prepared Flowfast	Silica Quartz Deckshield

Chemical Resistance

Petrol	✓
Diesel	✓
Antifreeze	✓
Hydraulic Fluid	✓
Chlorides	✓
Battery Acids	✓





