



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.

Manufactured at our ISO 9001 certified plant in Malaysia, Flowcrete's Deckshield range offers a number of green-labelled, 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



Internal Decks



Ramps



Instructional Signage



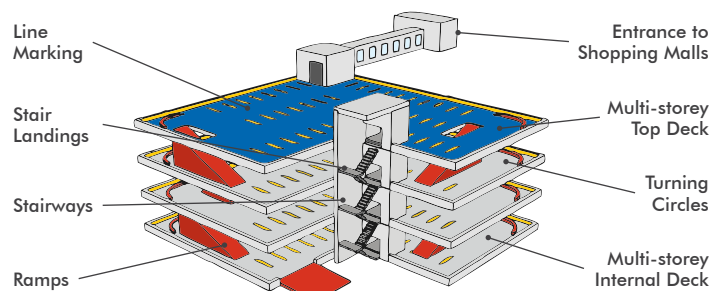
Demarcation



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.

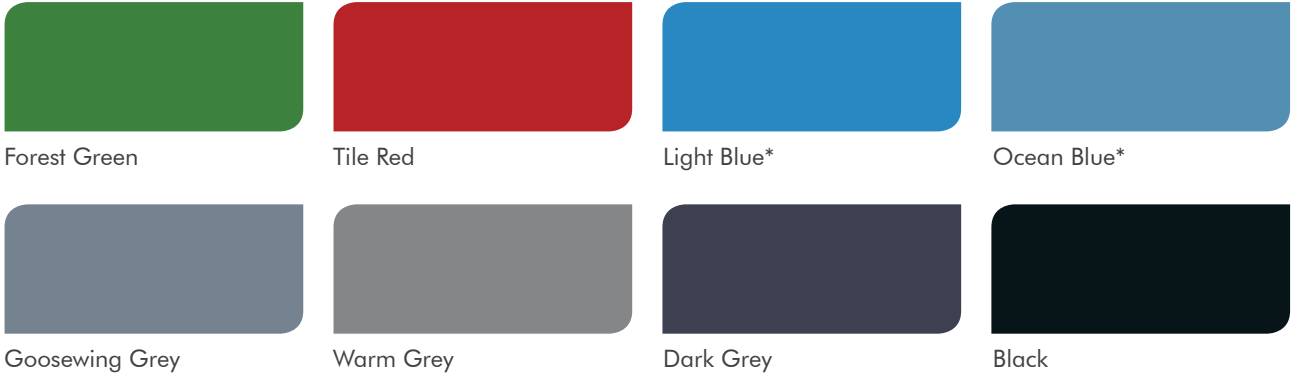


DECKSHIELD

COLOUR CHART

DECKSHIELD
ED / ED RAPIDE,
DECKSHIELD
ID / ID RAPIDE,
DECKSHIELD LBD

High performance, protective car park deck coating systems to transform parking decks.

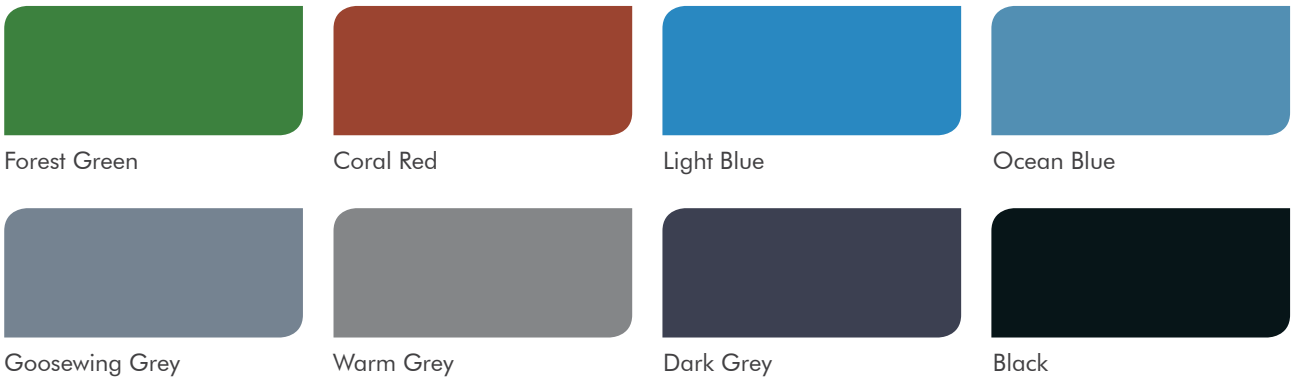


! Deckshield Rapide ID and Deckshield Rapide ED is available for fast track applications. Please contact your local Flowcrete representative for further information. A full technical profile is available at www.flowcreteasia.com

*Switch not available for Deckshield ED Rapide or Deckshield ID Rapide.

DECKCOAT EP,
DECKCOAT EPW

Colourful, watertight coatings for intermediate decks of multi storey structures.



A proprietary linemarking system to use alongside Deckshield car park deck coating systems.

DECKSHIELD
LINEMARKER



**The applied colours may differ slightly from the examples shown above. Contact our customer services for a true colour sample or a special colour match.

Deckshield ID



A Green Label certified polyurethane car park deck coating system for intermediate multi storey decks.

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



Recommended Usage Areas:

Intermediate Decks (both above and below ground level)



Environmentally Friendly:

Green Label Certified 032-089 Environmentally Preferred Coating.



Attractive:

Brightens up dull, dark, musty car parks and suspended floors.



Hard-Wearing:

Hard-wearing & abrasion resistant suitable for regular vehicle traffic.



Slip Resistant:

Textured finish available to prevent slips and trips for car park users.



UV Resistant:

100% UV light stable and does not yellow over time.

Technical Profile

TEMPERATURE RESISTANCE

Softens over 70°C, hardens on cooling

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 dependant on specification

ABRASION RESISTANCE

Taber Abrader (1kg load using CS17 wheels)

0.1 g loss per 1000 cycles

VOC CONTENT

ISO11890-2

Very low <20 g/L

*Assumes concrete compressive strength is greater than 25N/mm²

For a full Technical Profile, contact your local Technical Department.



Deckshield LBD



Deckshield LBD is a polyurethane traffic coating system that incorporates a technically advanced polyurethane based dissipating moisture barrier.

Ensures the controlled dissipation of moisture vapour at the lowest basement car park levels.



Recommended Usage Areas:

Lowest Basement Deck and Ground Level



Moisture Barrier:

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



Attractive:

Brightens up dull, dark, musty car parks and suspended floors.



Hard-Wearing:

Hard-wearing & abrasion resistant suitable for regular vehicle traffic.



Slip Resistant:

Highly textured finish to provide a safe environment for vehicular ramp users.



Chemical Resistant:

Excellent resistance to engine oil, battery acid, hydraulic fluid, fuel, etc.

Technical Profile

FIRE RESISTANCE

EN 13501-1

B_{f1} - s1

SLIP RESISTANCE

Method described in BS 7976-2 (typical values for 4-S rubber slider)

Dry > 40, Wet depends on specification (in accordance with HSE and UKSRG guidelines)

TEMPERATURE RESISTANCE

Softens over 70°C, Hardens on cooling

CHEMICAL RESISTANCE

Contact Technical Department. Resistant to petrol, diesel, antifreeze, hydraulic fluid, chlorides and battery acids.

ABRASION RESISTANCE

ASTM D4060 (1 kg load using CS17 wheels)

0.1g loss per 1000 cycles

WATER PERMEABILITY

Nil - Karsten test (impermeable)

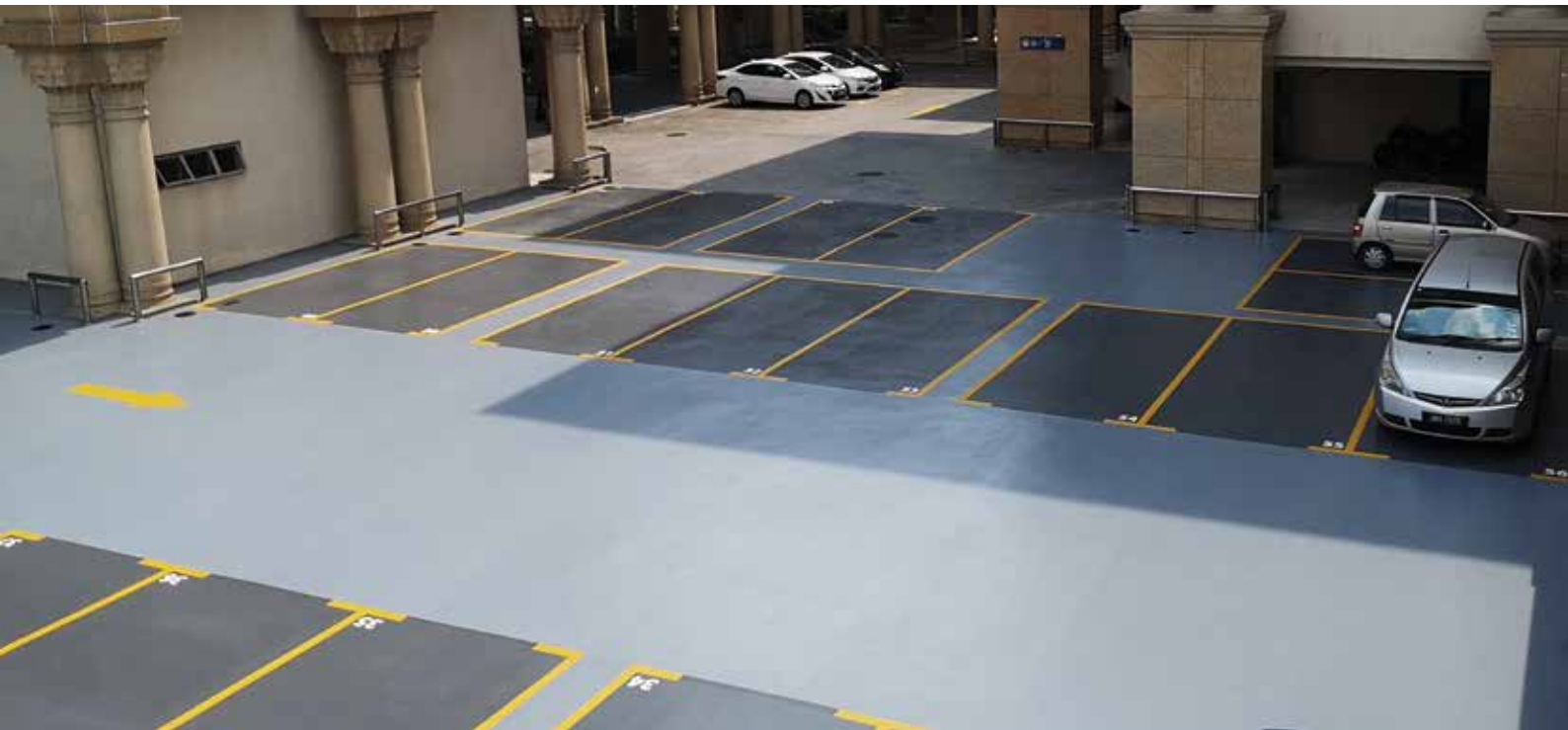
BOND STRENGTH

> 1.5 MPa*

UV LIGHT RESISTANCE (WITH DECKSHIELD UV WB TOPCOAT)

Excellent (non-yellowing)

For a full Technical Profile, contact your local Technical Department.



Deckshield ED

A low VOC, solvent free, flexible polyurethane coating providing a colourful crack bridging surface for intermediate car park decks where internal waterproofing properties are required.

Cosmetically enhances intermediate car park decks, making them brighter and safer places to visit.



Recommended Usage Areas:

Intermediate Decks (above ground level)



Environmentally Friendly:

Solvent free, low in VOCs and environmentally friendly.



Attractive:

Brightens up dull, dark, musty car parks and suspended floors.



UV Resistant:

100% UV light stable and does not yellow over time.



Slip Resistant:

Textured finish available to prevent slips and trips for car park users.



Chemical Resistant:

Excellent chemical resistance to engine oil, battery acid, fuel, etc.

Technical Profile

TEMPERATURE RESISTANCE

Softens over 70°C, hardens on cooling

CAPILLARY ABSORPTION & PERMEABILITY TO WATER

EN 1062-3 $w < 0.1 \text{ kg / m}^2 \times \text{h}^{0.5}$

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) $> 1.5 \text{ MPa}^*$

FIRE RESISTANCE

EN 13501-1 $B_{fl} - s1$

SLIP RESISTANCE

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

ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels) 300 mg loss per 1000 cycles

*Assumes concrete compressive strength is greater than 25N/mm²

** Cure times at temperatures between 0-30°C can be achieved by altering the quantity of catalyst used. For applications falling outside of this temperature range, please contact your local Flowcrete Technical Department.



Deckshield ID Rapide

A methyl methacrylate car park deck coating system providing a colourful surface for intermediate decks.

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



Recommended Usage Areas:

Intermediate Decks (both above and below ground level)



Fast Cure:

Dramatically reduces installations times due to a fast cure formulation.



Attractive:

Brightens up dull, dark, musty car parks and suspended floors.



Fire Resistant:

Provides a safe environment for car parking facilities.



Slip Resistant:

Textured finish available to prevent slips and trips for car park users.



Hard Wearing:

Protects substrates against the demands of heavy multi-flow traffic.

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 C_{fl} - s1

SLIP RESISTANCE

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

*Assumes concrete compressive strength is greater than 25N/mm²

For a full Technical Profile, contact your local Technical Department.



Deckshield ED Rapide

A methyl methacrylate 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.



Recommended Usage Areas:

Top Decks & Roof



Fast Cure:

Dramatically reduces installations times due to a fast cure formulation.



Attractive:

Brightens up dull, dark, musty car parks and suspended floors.



UV Resistant:

100% UV light stable and does not yellow over time.



Slip Resistant:

Textured finish available to prevent slips and trips for car park users.



Hard Wearing:

Protects substrates against the demands of heavy multi-flow traffic.

Technical Profile

WATER PERMEABILITY

Karsten Test	Nil (Impermeable)
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BOND STRENGTH

ASTM D4541 (Pull-Off Test)	> 1.5 MPa*
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FIRE RESISTANCE

EN 13501-1	C _{fl} - s1
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SLIP RESISTANCE

BS 7976-2	Dry >40, Wet dependant on specification
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ABRASION RESISTANCE (TOP COAT)

Taber Abrader (1kg load using CS17 wheels)	300 mg loss per 1000 cycles
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*Assumes concrete compressive strength is greater than 25N/mm²

For a full Technical Profile, contact your local Technical Department.



Deckcoat EP



A Green Label certified epoxy car park deck coating system providing a colourful watertight, surface for intermediate decks of multi storey structures.

Deckcoat EP cosmetically enhances and reduces noise, making multi storey car park decks brighter, safer environments to visit.



Environmentally Friendly:

Green Label certified - 032-089
Environmentally Preferred Coating.



Attractive:

Brightens up dull, dark, musty car parks and suspended floors.



Hard-Wearing:

Hard-wearing & abrasion resistant suitable for regular vehicle traffic.



Slip Resistant:

Textured finish available to prevent slips and trips for car park users.



Fire Resistant:

Provides a safe environment for car parking facilities.

Technical Profile

TEMPERATURE RESISTANCE

Tolerant up to 60°C

WATER PERMEABILITY

Karsten Test Nil (Impermeable)

BOND STRENGTH

ASTM D4541 (Pull-Off Test) > 1.5 MPa*

FIRE RESISTANCE

EN 13501-1 B_{fl} - s1

SLIP RESISTANCE

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

ABRASION RESISTANCE

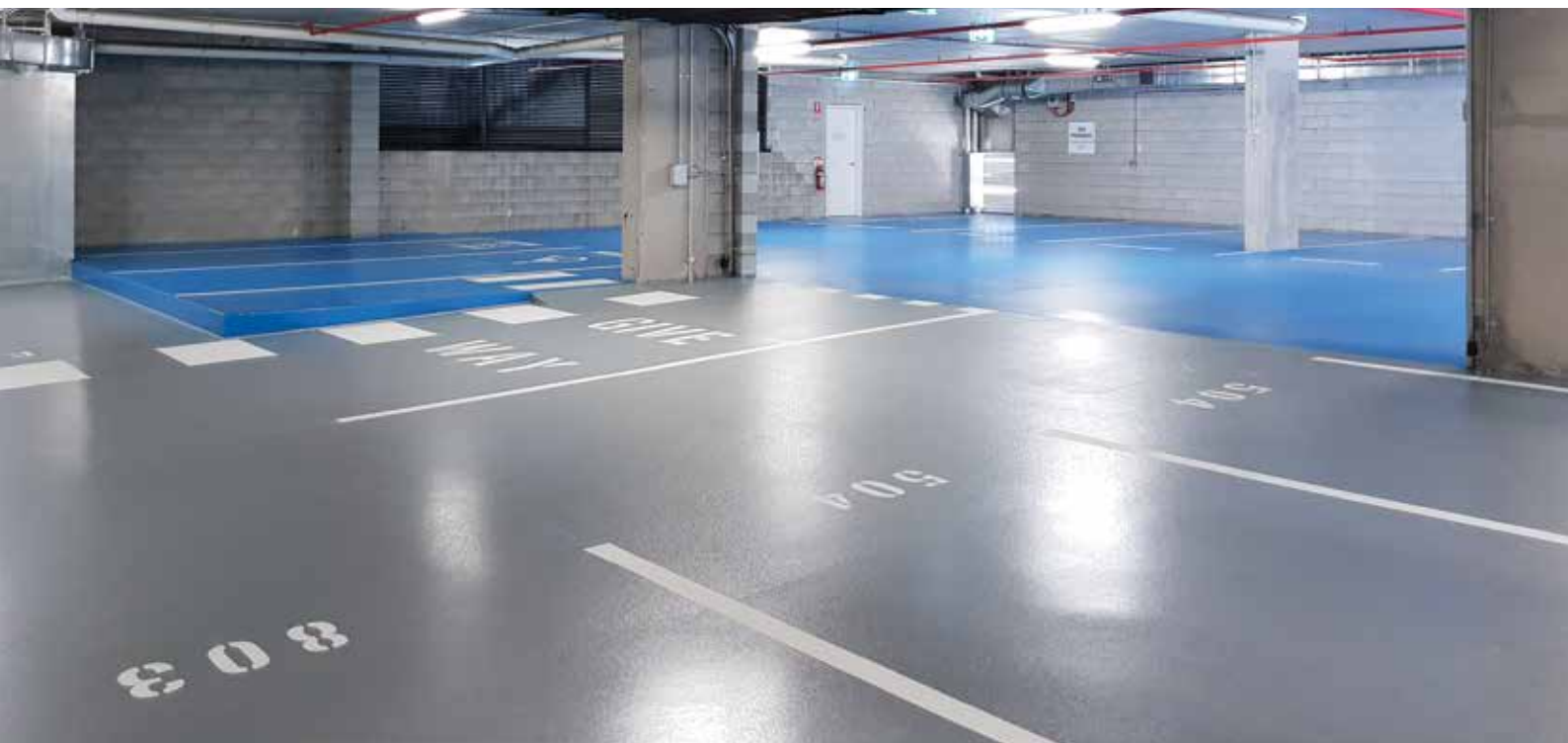
Taber Abrader (1 kg load using CS10 wheels) 80 mg loss per 1000 cycles

SURFACE HARDNESS

Koenig Hardness Test 180 Seconds

*Assumes concrete compressive strength is greater than 25N/mm²

** Cure times at temperatures between 0-30°C can be achieved by altering the quantity of catalyst used. For applications falling outside of this temperature range, please contact your local Flowcrete Technical Department.



Deckcoat EPW



A Green Label certified pigmented, low VOC, water-based epoxy, car park deck coating system specifically designed to withstand the damp environments of basement car parks.

Deckcoat EPW cosmetically enhances and reduces noise making the car park environment a brighter, safer, more welcoming environment to visit.



Environmentally Friendly:

Green Label certified - 032-089 Environmentally Preferred Coating.



Chemical Resistant:

Resistant to chemicals, engine oils and brake fluids.



Economical:

Provides value for money alongside good performance.

Technical Profile*

FIRE RESISTANCE	
EN 13501-1	Bfl - s1
SLIP RESISTANCE**	
Method described in BS 7976-2 (typical values for 4-S rubber slider)	Dry > 40, Wet depends on specification (in accordance with HSE and UKSRG guidelines)
THERMAL RESISTANCE	
Tolerant of temperatures up to 60°C	
WATER PERMEABILITY	
Nil – Karsten test (impermeable)	
SURFACE HARDNESS	
Koenig Hardness Test	180secs.
ABRASION RESISTANCE	
Taber Abrader (1 kg load using CS10 wheels)	80 mg loss per 1000 cycles
CHEMICAL RESISTANCE	
Contact Technical Department	
BOND STRENGTH	
Greater than cohesive strength of 25 N/mm ² concrete. > 1.5 MPa	

*Assumes concrete compressive strength is greater than 25N/mm²

** Cure times at temperatures between 0-30° C can be achieved by altering the quantity of catalyst used. For applications falling outside of this temperature range, please contact your local Flowcrete Technical Department.



Deckshield UV Linemarker

Deckshield UV Linemarker is a UV stable, polyurethane based car park line-marking product.

Used as part of the Deckshield system and in multi-storey car parks to differentiate parking bays and roadways and all other surfaces that require demarcations, signages, directional arrows, and numbering.



Hard-Wearing:

Good abrasion resistant. Suitable for regular vehicle traffic.



Attractive:

Good colour opacity.



UV Stable:

100% UV light stable. Prevents from yellowing effect.

Technical Profile

TEMPERATURE RESISTANCE

Tolerant up to 60°C

BOND STRENGTH

ASTM D4541 (Pull-Off Test) > 1.5 MPa*

FIRE RESISTANCE

EN 13501-1 B_{fi} - s1

SLIP RESISTANCE

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

WATER VAPOUR TRANSMISSION

ASTM E96 3.19 g / m² / 24 hrs

SURFACE HARDNESS

ASTM D 2240 D Shore D 50

*Assumes concrete compressive strength is greater than 25N/mm²

** Cure times at temperatures between 0-30°C can be achieved by altering the quantity of catalyst used. For applications falling outside of this temperature range, please contact your local Flowcrete Technical Department.



Flowcrete

for the world at your feet

Bangladesh | China | Hong Kong | Indonesia | Malaysia | Pakistan | Philippines
Singapore | South Korea | Taiwan | Thailand | Vietnam



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Contact Us

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Our products and services empower teams to develop, design, restore and engineer structures that are more efficient to build and maintain, are virtually impervious to the elements and can provide any look desired.

