



## INDUSTRIAL FLOORING

- Durable workhorse surfaces suited to use in a wide range of demanding industrial plants and process environments.

[www.flowcreteasia.com](http://www.flowcreteasia.com)

# Industrial Flooring Technical Profile

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Flowcrete's Industrial Flooring range has been developed to deliver the ultimate in durability and resistance for hard-wearing surfaces that stand the test of time.

Reliable formulations stand up to heavy forklift, pallet truck and pedestrian traffic, whilst boasting impressive resistance levels against aggressive chemicals, cleaning agents and spillages across a number of production areas, including those subject to extreme temperature change or chemical attack.

Manufactured at our ISO 9001 certified Plant in Malaysia, Flowcrete's Industrial flooring range offers everything from textured finishes for slip resistance to UV stability to maintain colour vibrancy. Some ranges like our Flowshield range are even available in an antistatic grade for the protection of sensitive electronic equipment, resulting in a range of flooring solutions perfect for a variety of heavy duty industrial environments. To broaden our offerings, other ranges like Flowfresh is recognised by HACCP International and Green Label Singapore, makes the choice flooring for the pharmaceutical industry, clean rooms, and food processing plants in the region.



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## Application Suitability



Manufacturing



Automotive



Electronic



Pharmaceutical



Aerospace



Food & Drink Processing



# COLOUR CHART STANDARD COLOURS

## Flowcoat HS / CR, Flowshield SL / CR, Flowshield SK / SK1000



Sand Chilli Red Steel Blue Mid Blue Light Green Dark Green



Sage Grey Mist Grey Steel Grey Charcoal

## Flowcoat HTS



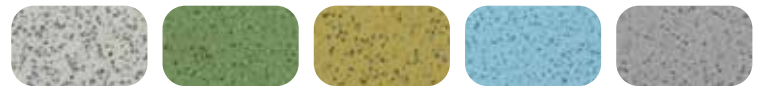
Light Green Dark Green Mid Blue Steel Blue Chilli Red Light Grey Steel Grey Charcoal

## Flowchem VE GL



Green Charcoal Steel Grey Light Grey

## Flowshield Quartz



Off White Pastel Green Cream Light Blue Goosewing Grey

## Flowfresh SRQ



Light Grey Mid Grey Dark Grey Brown Yellow Red Light Blue Green

## Flowfresh MF / SL



Warm Buff Clay Coral Red Shamrock Green Ash Grey Pewter Grey

## Flowfresh RT / SR



Warm Buff Clay Coral Red Shamrock Green Ash Grey Pewter Grey

## Flowseal EPW



Sand Tile Red Steel Blue Mid Blue Light Green Dark Green



Sage Grey Mist Grey Steel Grey Charcoal

# COLOUR CHART STANDARD COLOURS

## Flowchem VE GL



Green Charcoal Steel Grey Light Grey

## Flowseal EPW Wall



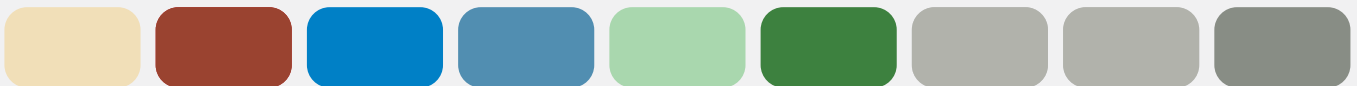
White Oyster Silver Grey Dolphin Grey Sky Blue Pale Green

## Flowfresh ESD SL / MF



Warm Buff Coral Red Clay Shamrock Green Pewter Grey

## Flowseal Conductive/Dissipative



Sand Tile Red Steel Blue Mid Blue Light Green Dark Green Sage Grey Mist Grey Steel Grey

## Flowshield ESD Conductive/Dissipative



Sand Chilli Red Steel Blue Mid Blue Light Green Dark Green Sage Grey Mist Grey Steel Grey

## Flowshield ESD BVG



Ivory Metal Grey Light Grey Carbon Grey Mint Green Olive Green

\*\*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.









## Polygiene® Antimicrobial Effectiveness

Salmonella Typhi	✓
MRSA	✓
Enterococcus Faecalis	✓
E-coli	✓
Staphylococcus Aureus	✓
Listeria	✓
Streptococcus Pyogenes	✓
C.difficile	✓
Pseudomonas Aeruginosa	✓
Proteus Vulgaris	✓
Campila Bacta	✓



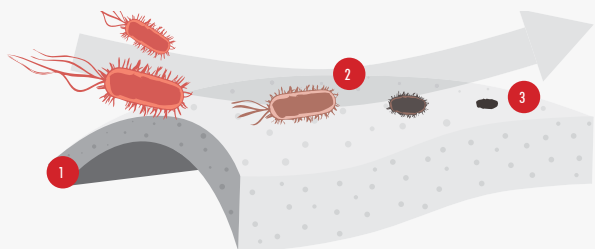
## HACCP International Certified Hygienic Flooring

A food processing floor is subject to constant traffic, impact damage due to equipment handling and often subject to attack from chemicals and corrosive ingredients.

Resin flooring systems ensure a non-porous, smooth and seamless surface where there is nowhere for bacteria or mould spores to grow.

Flowcrete's HACCP International certified and ISO 22196 compliant polyurethane flooring materials offer enhanced protection with the inclusion of Polygiene®, a silver-ion antimicrobial agent, designed to protect the surface from degradation caused by microbial growth.

### How Does Polygiene® Work?



- 1 The silver ions are homogeneously distributed throughout the floor.
- 2 The silver ions migrate to the surface.
- 3 They protect the surface from degradation caused by microbial growth.

# Flowfresh MF (3–4mm)



A pigmented, antimicrobial, polyurethane floor finish applied in a smooth matt finish.

Provides a hygienic floor finish for dry or semi-wet F&B processing areas.



Contains Polygiene®, an antimicrobial additive that inhibits bacteria growth.



Certified as food-safe for use in wet and dry food handling areas.



Protects against a majority of acids used in manufacturing processes.



A hard-wearing & abrasion resistant finish to protect the substrate below.



Very good thermal shock properties and resistant to extreme temperatures.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1	B <sub>fl</sub> - s1
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### 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)
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### IMPACT RESISTANCE

EN ISO 6272	15Nm
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### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### VAPOUR PERMEABILITY

ASTM E96:90	5g/m <sup>2</sup> /24hrs (at 4mm thick)
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### TEMPERATURE RESISTANCE

From -5°C to 70°C (at 3mm)	From -15°C to 90°C (at 4mm)
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### CHEMICAL RESISTANCE

Contact Technical Department  
Excellent resistance to sugars and most acids (organic and inorganic)

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels)	0.1g loss per 1000 cycles
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### COMPRESSIVE STRENGTH

EN 13892-2	> 50 N/mm <sup>2</sup>
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### FLEXURAL STRENGTH

EN 13892-2	> 20 N/mm <sup>2</sup>
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### TENSILE STRENGTH

BS 6319	7 N/mm <sup>2</sup>
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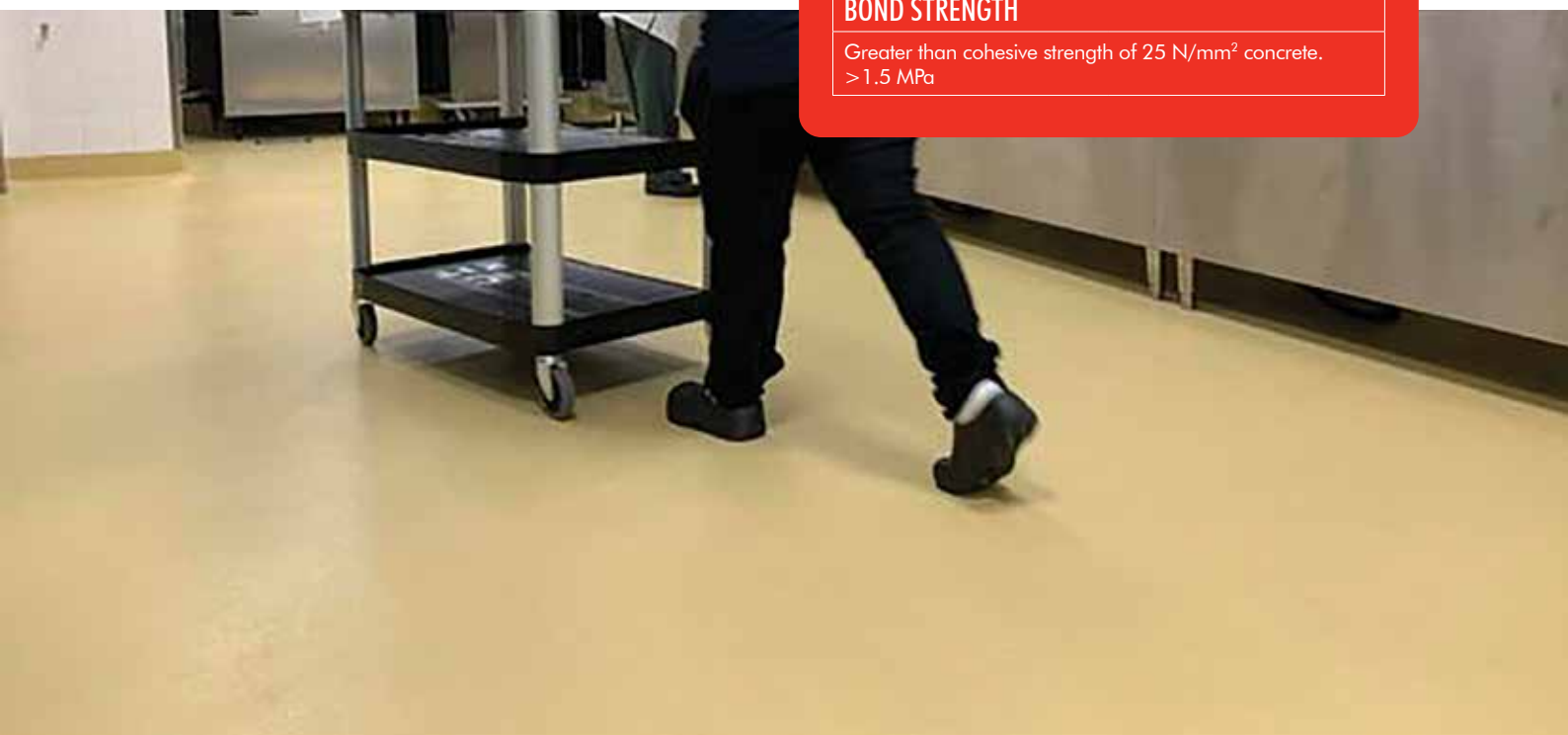
### COEFFICIENT OF THERMAL EXPANSION

ASTM C531	5.70 x 10 <sup>-5</sup> °C <sup>-1</sup>
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### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

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



# Flowfresh RT

(RT: 6–9mm)



A heavy duty, hygienic PU screed providing a highly durable, lightly textured finish that incorporates an antimicrobial additive.

Provides a hygienic floor finish for heavy duty wet processing areas in F&B facilities.



Contains an antimicrobial additive and is HACCP International Certified.



Resistant to extreme temperatures, from -45°C to 120°C (at 9mm).



Lightly textured finish provides a safe environment for workers.



A hard-wearing & abrasion resistant finish to protect the substrate below.



Protects against a majority of acids used in manufacturing processes.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>fl</sub> - 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)

### IMPACT RESISTANCE

EN ISO 6272

20Nm

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### VAPOUR PERMEABILITY

ASTM E96:90

3g/m<sup>2</sup>/24hrs (at 9mm thick)

### TEMPERATURE RESISTANCE

From -25°C to 100°C (at 6mm)

From -45°C to 120°C (at 9mm)

### CHEMICAL RESISTANCE

Contact Technical Department  
Excellent resistance to sugars and most acids (organic and inorganic)

### ABRASION RESISTANCE

Taber Abrader  
(1 kg load using CS17 wheels)

0.12g loss per 1000 cycles

### COMPRESSIVE STRENGTH

EN 13892-2

> 50 N/mm<sup>2</sup>

### FLEXURAL STRENGTH

EN 13892-2

> 20 N/mm<sup>2</sup>

### TENSILE STRENGTH

BS 6319

> 10 N/mm<sup>2</sup>

### COEFFICIENT OF THERMAL EXPANSION

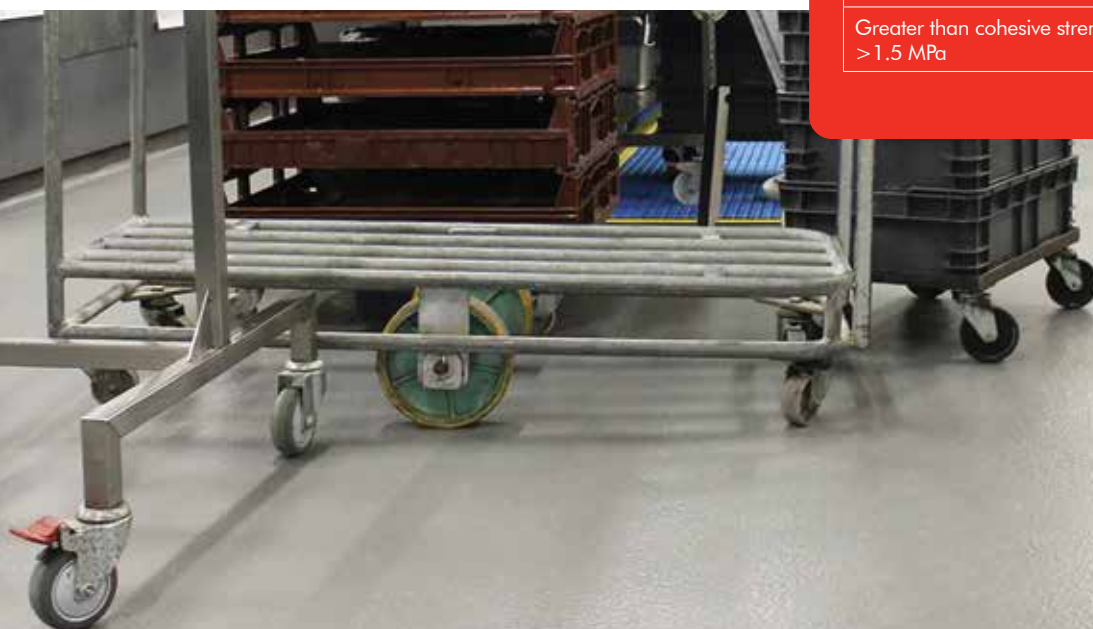
ASTM C531

3.74 x 10<sup>-5</sup> °C<sup>-1</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

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





# Flowfresh SR

(SR: 3–4mm)



A heavy duty, chemical resistant, antimicrobial polyurethane resin floor system with a positively textured finish.

Provides a hygienic floor finish for wet processing areas in F&B facilities.



Contains an antimicrobial additive and is HACCP International Certified.



Very good thermal shock properties and resistant to extreme temperatures.



Textured finish provides a safe environment for workers.



A hard-wearing & abrasion resistant finish to protect the substrate below.



Protects against a majority of acids used in manufacturing processes.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>fl</sub> - 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)

### IMPACT RESISTANCE

EN ISO 6272

15Nm

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### VAPOUR PERMEABILITY

ASTM E96:90

5g/m<sup>2</sup>/24hrs (at 4mm thick)

### TEMPERATURE RESISTANCE

From -15°C to 90°C

### CHEMICAL RESISTANCE

Contact Technical Department  
Excellent resistance to sugars and most acids (organic and inorganic)

### ABRASION RESISTANCE

Taber Abrader  
(1 kg load using CS17 wheels)

0.1g loss per 1000 cycles

### COMPRESSIVE STRENGTH

EN 13892-2

> 50 N/mm<sup>2</sup>

### FLEXURAL STRENGTH

EN 13892-2

> 20 N/mm<sup>2</sup>

### TENSILE STRENGTH

BS 6319

7 N/mm<sup>2</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

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



# Flowfresh SRQ

(Thickness dependent on specification)



An antimicrobial polyurethane resin floor screed system with an attractive positively textured, coloured quartz finish.

Provides a hygienic floor finish for wet processing areas in F&B facilities.



Contains an antimicrobial additive and is HACCP International Certified.



A decorative, speckled floor finish that is available in a range of colours.



Textured finish provides a safe environment for workers.



A hard-wearing & abrasion resistant finish to protect the substrate below.



Protects against a majority of acids used in manufacturing processes.

## Technical Profile

### FIRE RESISTANCE

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

### 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)

### IMPACT RESISTANCE

EN ISO 6272 15Nm

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### VAPOUR PERMEABILITY

ASTM E96:90 5g/m<sup>2</sup>/24hrs (at 4mm thick)

### TEMPERATURE RESISTANCE

90°C (continues exposure), 110°C (intermittent spills)<sup>†</sup>

<sup>†</sup> Applicable for thickness ≥ 6mm

### CHEMICAL RESISTANCE

Contact Technical Department  
Excellent resistance to sugars and most acids (organic and inorganic)

### ABRASION RESISTANCE

Taber Abrader  
(1 kg load using CS17 wheels)

0.12g loss per 1000 cycles

### COMPRESSIVE STRENGTH

EN 13892-2 > 50 N/mm<sup>2</sup>

### FLEXURAL STRENGTH

EN 13892-2 > 20 N/mm<sup>2</sup>

### TENSILE STRENGTH

BS 6319 > 10 N/mm<sup>2</sup>

### TOXICITY (WHEN CURED)

Taint free to sensitive foodstuffs.

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

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



# Flowseal EPW

(Floor Sealer)

A pigmented, water-based, epoxy floor sealer with a satin finish that provides a seamless, easy to clean, non-dusting environment.

Suitable for light industrial areas, storerooms and areas of pedestrian traffic.



The seamless finish allows the system to be cleaned easily.



Solvent free, low in VOCs and environmentally friendly.



Vapour permeable and can be applied to damp substrates.



Seals dusty concrete providing a cleaner working environment.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>fl</sub>-s1

### SLIP RESISTANCE

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

Tolerant up to 60°C

### VAPOUR PERMEABILITY

ASTM:E96:90

20 g / m<sup>2</sup> / mm / 24 hr

### SURFACE HARDNESS

Koenig Hardness Test

182 secs.

### CHEMICAL RESISTANCE

Contact Technical Department

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





# Flowcoat HS

(Thickness dependent on specification)

A solvent free, high performance epoxy coating which is suitable for factories, warehouses, plants and warehouses.

Can be used as a hard wearing, coloured floor coating for industrial facilities.



Protects against a range of chemicals used in manufacturing processes.



Solvent free, low in VOCs and environmentally friendly.



The seamless and gloss finish allows the system to be cleaned easily.



Hard-wearing & abrasion resistant suitable for medium to heavy traffic.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>fl</sub> - 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 up to 60°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### CHEMICAL RESISTANCE

Contact technical department

### SURFACE HARDNESS

Koenig Hardness Test

180 secs.

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS10 wheels)

80 mg loss per 1000 cycles

### COMPRESSIVE STRENGTH

BS 6319

> 60 N/mm<sup>2</sup>

### FLEXURAL STRENGTH

BS 6319

> 40 N/mm<sup>2</sup>

### TENSILE STRENGTH

BS 6319

> 15 N/mm<sup>2</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

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



# Flowcoat CR

(Thickness dependent on specification)

A solvent free, chemical resistant epoxy coating system designed for use in processing & storage areas subject to chemical spillages.

Graded aggregate can be used to create a slip resistant profile if required.



Protects against a range of chemicals used in manufacturing processes.



Solvent free, low in VOCs and environmentally friendly.



The seamless and gloss finish allows the system to be cleaned easily.



Hard-wearing & abrasion resistant suitable for medium to heavy traffic.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>fl</sub> - 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 up to 60°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### CHEMICAL RESISTANCE

Contact technical department

### SURFACE HARDNESS

Koenig Hardness Test

180 secs.

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS10 wheels)

80 mg loss per 1000 cycles

### COMPRESSIVE STRENGTH

BS 6319

> 60 N/mm<sup>2</sup>

### FLEXURAL STRENGTH

BS 6319

> 40 N/mm<sup>2</sup>

### TENSILE STRENGTH

BS 6319

> 15 N/mm<sup>2</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

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



# Flowcoat HTS

(Thickness dependent on specification)

A high performance, UV light stable, pigmented hybrid PU coating system with very high abrasion resistance.

Designed for environments with heavy traffic where abrasion resistance is essential.



Provides a high strength coating for high traffic isles and warehouses.



Protects against a range of chemicals used in processing areas.



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



The seamless and semi-gloss finish allows the system to be cleaned easily.



Improved slip resistance compared to smooth coating systems.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>fl</sub> - 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 up to 70°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### CHEMICAL RESISTANCE

Contact technical department

### SURFACE HARDNESS

Koenig Hardness Test

180 secs.

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS10 wheels)

40 mg loss per 1000 cycles

BS 8204-2

Grade AR2 Medium Duty Industrial and Commercial

### TENSILE STRENGTH

BS 6319

> 15 N/mm<sup>2</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

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





# Flowshield SL

(2–3mm)



A high-gloss, self-smoothing epoxy floor finish that is compliant with CSM® (Cleanroom Suitable Materials) requirements.

Typical uses include cleanrooms, laboratories, warehouses and storage areas.



Qualified under CSM test parameters for the 2 categories shown below.



Meets the requirements set out by the USDA and FDA.



The seamless and high-gloss finish allows the system to be cleaned easily.



Hard-wearing & abrasion resistant suitable for medium to heavy traffic.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>fi</sub> - 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 up to 60°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels)

90 mg loss per 1000 cycles

### COMPRESSIVE STRENGTH

EN 13892-2

> 50 N/mm<sup>2</sup>

### FLEXURAL STRENGTH

EN 13892-2

> 30 N/mm<sup>2</sup>

### TENSILE STRENGTH

BS 6319

25 N/mm<sup>2</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete. > 1.5 MPa

### BIOLOGICAL RESISTANCE

ISO 846

Excellent

TVOC (AT 23°C)

ISO 14644-8

ISO-ACC<sub>m</sub> Class -8.7

### CLEANROOM AIR CLEANLINESS

ISO 14644-1

ISO-Class 4

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



# Flowshield CR

(2–3mm)



A highly chemical resistant, self-smoothing epoxy resin floor finish suitable for dry process areas subject to chemical spillages.

Typical uses include chemical storage areas, laboratories, warehouses and printing plants.



Protects against a range of chemicals used in manufacturing processes.



Meets the requirements set out by the USDA and FDA.



The seamless and high-gloss finish allows the system to be cleaned easily.



Hard-wearing & abrasion resistant suitable for medium to heavy traffic.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>fl</sub> - 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 up to 60°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### CHEMICAL RESISTANCE

Contact technical department

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels)

90 mg loss per 1000 cycles

### COMPRESSIVE STRENGTH

BS 6319

> 60 N/mm<sup>2</sup>

### FLEXURAL STRENGTH

BS 6319

> 40 N/mm<sup>2</sup>

### TENSILE STRENGTH

BS 6319

> 25 N/mm<sup>2</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

### TOXICITY

Taint free to sensitive foodstuffs

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



# Flowshield SK/SK1000

A solvent free, self-smoothing epoxy floor system with excellent resistance to Skydrol® and hydraulic fluids.

Typical uses are aircraft hangers, aircraft parking areas and workshops.



Resistant to typical chemicals found in aircraft service environments.



Solvent free, low in VOCs and environmentally friendly.



The seamless and gloss finish allows the system to be cleaned easily.



Hard-wearing & abrasion resistant suitable for aircraft trafficked areas.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>fl</sub>-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 up to 60°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### SURFACE HARDNESS

Koenig Hardness Test

180 seconds

### CHEMICAL RESISTANCE

Contact technical department

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels)

90 mg loss per 1000 cycles

### COMPRESSIVE STRENGTH

EN 13892-2

>50 N/mm<sup>2</sup>

### FLEXURAL STRENGTH

EN 13892-2

>40 N/mm<sup>2</sup>

### TENSILE STRENGTH

BS6319

>25 N/mm<sup>2</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete. >1.5 MPa

### TOXICITY

Taint free to sensitive foodstuffs

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





# Flowshield Quartz

(2–3mm)

**A decorative, hard wearing, self smoothing epoxy resin floor system.**

Flowshield Quartz delivers an attractive aesthetic alongside superior performance benefits in a single application.



Speckled finish disguises visible surface scratches.



A decorative, speckled floor finish that is available in a range of colours.



Solvent free, low in VOCs and environmentally friendly.



Protects against a range of chemicals used in processing areas.



Hard-wearing & abrasion resistant suitable for medium to heavy traffic.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

E<sub>fl</sub> - 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 up to 60°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### VAPOUR PERMEABILITY

4 gms/m<sup>2</sup>/mm/24 hours

### SURFACE HARDNESS

Koenig Hardness Test

180 seconds

### CHEMICAL RESISTANCE

Contact technical department

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels)

90 mg loss per 1000 cycles

### COMPRESSIVE STRENGTH

BS 6319

> 55 N/mm<sup>2</sup>

### FLEXURAL STRENGTH

BS 6319

> 20 N/mm<sup>2</sup>

### TENSILE STRENGTH

BS 6319

> 10 N/mm<sup>2</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete. > 1.5 MPa

### TOXICITY

Taint free to sensitive foodstuffs

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



# Flowtex PT

(4–6mm)



032-089-4132  
Environmentally Preferred Paints &  
Surface Coatings

A power trowelled, heavy duty, epoxy screed suitable to receive a variety of chemical resistant and hard-wearing floor finishes.

A heavy duty underlayment for areas subject to high traffic, impact and chemical spills.



Offers excellent protection against dropped items and heavy loads.



Protects against a range of chemicals used in manufacturing processes.



Solvent free, low in VOCs and environmentally friendly.



Power trowel application produces an extremely dense, flat screed finish.



Highly effective moisture dissipating system (based on 5mm thickness).

## Technical Profile

### IMPACT RESISTANCE

ISO6272

1 kg weight > 1.8m  
2 kg weight > 1.5m

### THERMAL RESISTANCE

Tolerant up to 60°C

### CHEMICAL RESISTANCE

Contact technical department

### COMPRESSIVE STRENGTH

EN 13892-2

> 60 N/mm<sup>2</sup>

### FLEXURAL STRENGTH

EN 13892-2

> 20 N/mm<sup>2</sup>

### TENSILE STRENGTH

BS 6319

10 N/mm<sup>2</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

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



# Flowtex AOS

A 5mm anti-osmosis, heavy duty epoxy screed underlayment suitable to receive variety of resin floor toppings.

Allows installation of moisture sensitive floor finishes onto concrete and cementitious screeds.



Resistant to osmotic pressure caused by substrates with high moisture content.



Solvent free, low in VOCs and environmentally friendly.



Offers excellent protection against dropped items and heavy loads.



Application produces an extremely dense, flat screed finish.



The seamless finish allows the system to be cleaned easily.

## Technical Profile

### IMPACT RESISTANCE

ISO6272	1 kg weight > 1.8m 2kg weight > 1.5m
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### THERMAL RESISTANCE

Tolerant up to 60°C

### CHEMICAL RESISTANCE

Contact technical department

### COMPRESSIVE STRENGTH

BS 6319	>50 N/mm <sup>2</sup>
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### FLEXURAL STRENGTH

BS 6319	25 N/mm <sup>2</sup>
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### TENSILE STRENGTH

BS 6319	10 N/mm <sup>2</sup>
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### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
>1.5 MPa

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





# Flowcem

Flowcem is a three-component, technically advanced self-smoothing, epoxy-cement composite. It is applied to function as a temporary moisture barrier (min 2mm thickness) under subsequent flooring finishes.

As a temporary moisture barrier to be overlaid with resin flooring finishes on substrates with high residual moisture content.



Tolerates up to 100% relative humidity in concrete or a sand-cement screed.



Chemically & mechanically bonds to concrete forming a monolithic structure.



Self-smoothing consistency allows it to be applied easily and quickly.



Low odour during application for greater client satisfaction.

## Technical Profile

### THERMAL RESISTANCE

Tolerant up to 60°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### COMPRESSIVE STRENGTH

BS 6319 >40 N/mm<sup>2</sup>

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
>1.5 MPa



# Flowchem VE GL

(1.5–3mm)

A roller or spray applied vinyl ester resin based fiberglass-reinforced lining system offering excellent chemical and thermal resistance.

Flowchem VE GL is used to protect concrete and steel structures from various mechanical stresses.



Resistant to extreme temperatures of up to 165°C.



Protects against a wide range of aggressive chemicals.



Fast track cure times reduce construction program times.



Extremely hard-wearing & abrasion resistant suitable for heavy traffic.



Tailored specification to meet specific chemical & temperature requirements.

## Technical Profile

### TEMPERATURE RESISTANCE

Tolerant up to 165°C

### SLIP RESISTANCE

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

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

### BARCOL HARDNESS

ASTM 2583

>30

### E-MODULUS

ASTM D-695

3.1 GPa

### VOLUME SHRINKAGE

ASTM D2566

7.5–9.8%

### FLEXURAL STRENGTH

ASTM D-790

117–150 MPa\*

### TENSILE STRENGTH

ASTM D-638

75–96 MPa\*

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



# Flowseal EPW Wall

(0.2mm)



A pigmented, water-based epoxy, hygienic wall sealer that is compliant to CSM® (Cleanroom Suitable Materials) requirements.

Suitable for walls in F&B processing plants, pharmaceutical cleanrooms, and hospitals.



Qualified under CSM test parameters for outgassing VOC behaviour.



The seamless finish allows the surface to be cleaned easily.



Low odour during application for greater client satisfaction.



Vapour permeable and can be applied to damp substrates.



Brightens and enhances the appearance of working environments.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1 B<sub>fl</sub> - s1

### THERMAL RESISTANCE

Tolerant up to 60°C

### VAPOUR PERMEABILITY

ASTM: E96:90 20g/m<sup>2</sup>/mm/24hr

### CHEMICAL RESISTANCE

Contact technical department

### TVOC (AT 23°C)

ISO 14644-8 ISO-ACC<sub>m</sub> Class >-9.6

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







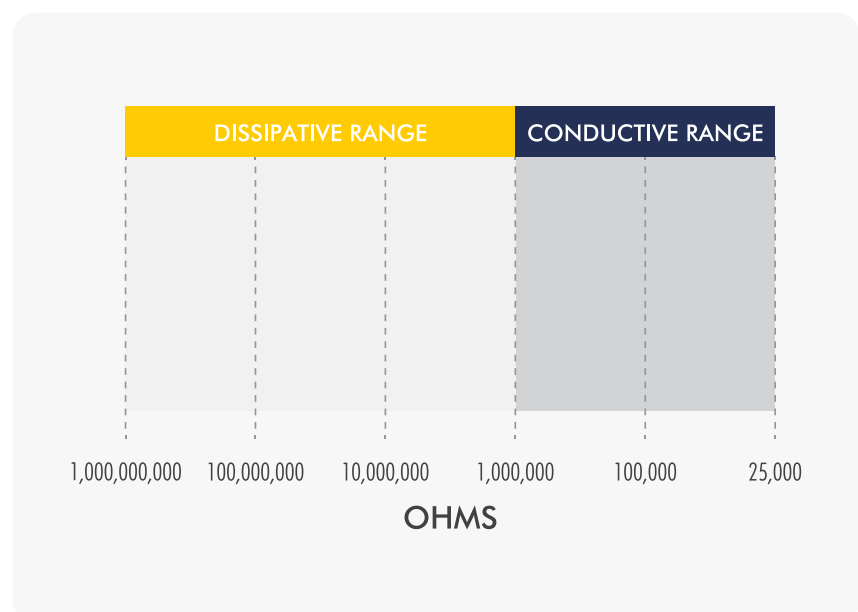
## What is ESD Flooring?

**Electrostatic Discharge (ESD)** refers to the rapid, spontaneous transfer of electrostatic charge induced by a high electrostatic field.

Charge can build-up while simply walking across the floor of a processing environment.

Without flooring materials equipped with adequate protection, that charge can be passed to sensitive electronic components, causing irreversible damage.

Systems are categorised as Conductive or Dissipative, determined using various testing methods.



# Flowfresh ESD SL

(2mm)



An antistatic, chemical resistant, polyurethane resin floor system with a smooth matt coloured finish with antimicrobial properties.

Provides a hygienic, antistatic floor finish with exceptional chemical resistance.



Meets the BS 2050 specification for electrical resistance



Contains Polygiene® - Antimicrobial protection



Protects against a majority of acids used in manufacturing processes



A hard-wearing & abrasion resistant finish to protect the substrate below



Low odour during application and non-tainting once cured

## Technical Profile\*

### FIRE RESISTANCE

EN 13501-1	B <sub>fl</sub> - s1
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### 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)
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### IMPACT RESISTANCE

BS8204 Part 1 Cat: A (<0.5mm) ISO6272	1kg weight > 1.8m 2kg weight > 1.5m
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WATER PERMEABILITY	Nil – Karsten test (impermeable)
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### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels)	0.1g loss per 1000 cycles
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### COMPRESSIVE STRENGTH

EN 13892-2	> 50 N/mm <sup>2</sup>
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### FLEXURAL STRENGTH

EN 13892-2	20 N/mm <sup>2</sup>
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### TENSILE STRENGTH

BS 6319	> 10 N/mm <sup>2</sup>
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### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

### TOXICITY (WHEN CURED)

Taint free to sensitive foodstuffs

### ELECTRICAL RESISTANCE

BS 2050	5 x 10 <sup>4</sup> – 1 x 10 <sup>8</sup> Ohms
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### COEFFICIENT OF THERMAL EXPANSION

ASTM C531	5.70 x 10 <sup>-5</sup> °C <sup>-1</sup>
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For a full Technical Profile, contact your local Technical Department.



# Flowfresh ESD MF

(3mm)



An antistatic, chemical resistant, polyurethane resin floor system with a smooth matt coloured finish with antimicrobial properties.

Provides a hygienic, antistatic floor finish with exceptional chemical resistance.



Meets the BS 2050 specification for electrical resistance



Contains Polygiene® - Antimicrobial protection



Protects against a majority of acids used in manufacturing processes



A hard-wearing & abrasion resistant finish to protect the substrate below



Low odour during application and non-tainting once cured

## Technical Profile

### FIRE RESISTANCE

EN 13501-1	B <sub>fl</sub> - s1
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### 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)
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### IMPACT RESISTANCE

EN ISO 6272	15Nm
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WATER PERMEABILITY	Nil – Karsten test (impermeable)
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VAPOUR PERMEABILITY	ASTM E96:90 5g/m <sup>2</sup> /24hrs
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### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels)	0.1g loss per 1000 cycles
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### COMPRESSIVE STRENGTH

EN 13892-2	> 50 N/mm <sup>2</sup>
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### FLEXURAL STRENGTH

EN 13892-2	20 N/mm <sup>2</sup>
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### TENSILE STRENGTH

BS 6319	12 N/mm <sup>2</sup>
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### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete. > 1.5 MPa

### TOXICITY (WHEN CURED)

Taint free to sensitive foodstuffs

### ELECTRICAL RESISTANCE

BS 2050	5 x 10 <sup>4</sup> – 1 x 10 <sup>8</sup> Ohms
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### COEFFICIENT OF THERMAL EXPANSION

ASTM C531	5.70 x 10 <sup>-5</sup> °C <sup>-1</sup>
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# Flowseal ESD Conductive

A conductive, water-based epoxy floor coating that complies with a variety of electrical resistance requirements.

Suitable for use in light traffic environments where conductive ESD standards are required.



Meets ASTM F150 Conductive, and IEC 61340-5-1



Seamless finish provides a surface that is easy to clean and maintain



Solvent free, low in VOCs and environmentally friendly

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>fl</sub> - 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

Tolerant up to 70°C

### CHEMICAL RESISTANCE

Contact Technical Department

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS10 wheels)

0.15g loss per 1000 cycles

### ELECTRICAL RESISTANCE

IEC 61340-5-1

5x10<sup>4</sup> to 1x10<sup>9</sup>Ω

ASTM F150

2.5x10<sup>4</sup> to 1x10<sup>9</sup>Ω

### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete. > 1.5 MPa

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



# Flowseal ESD Dissipative

A conductive, water-based epoxy floor coating that complies with a variety of electrical resistance requirements.

Suitable for use in light traffic environments where conductive ESD standards are required.



Meets ASTM F150 Conductive, and IEC 61340-5-1



Seamless finish provides a surface that is easy to clean and maintain



Solvent free, low in VOCs and environmentally friendly

## Technical Profile

FIRE RESISTANCE	
EN 13501-1	B <sub>fl</sub> - 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	
Tolerant up to 70°C	
CHEMICAL RESISTANCE	
Contact Technical Department	
ABRASION RESISTANCE	
Taber Abrader (1 kg load using CS10 wheels)	0.15g loss per 1000 cycles
ELECTRICAL RESISTANCE	
IEC 61340-5-1	5x10 <sup>4</sup> to 1x10 <sup>9</sup> Ω
ASTM F150	2.5x10 <sup>4</sup> to 1x10 <sup>9</sup> Ω
BOND STRENGTH	
Greater than cohesive strength of 25 N/mm <sup>2</sup> concrete. > 1.5 MPa	

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



# Flowshield ESD Conductive



032-089-4116  
Environmentally Preferred Paints &  
Surface Coatings

An antistatic, self-smoothing epoxy floor coating that complies with a variety of electrical dissipation requirements.

For use in medium to heavy duty traffic areas where dissipative ESD standards are required.



Meets ASTM F150 Conductive, IEC 61340-5-1 requirements.



Protects against a majority of acids used in manufacturing processes.



Hard-wearing & abrasion resistant suitable for medium to heavy traffic.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1	B <sub>fl</sub> - s1
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### 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)
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### THERMAL RESISTANCE

Softens over 60°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels)	80 mg loss per 1000 cycles
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### COMPRESSIVE STRENGTH

EN 13892-2	60 N/mm <sup>2</sup>
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### FLEXURAL STRENGTH

EN 13892-2	40 N/mm <sup>2</sup>
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### TENSILE STRENGTH

BS 6319	25 N/mm <sup>2</sup>
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### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

### ELECTRICAL RESISTANCE

ASTM F150	1.0 x 10 <sup>6</sup> – 1.0 x 10 <sup>9</sup> Ω
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For a full Technical Profile, contact your local Technical Department.





# Flowshield ESD Dissipative



032-089-4116  
Environmentally Preferred Paints &  
Surface Coatings

An antistatic, self-smoothing epoxy floor coating that complies with a variety of electrical dissipation requirements.

For use in medium to heavy duty traffic areas where dissipative ESD standards are required.



Complies with ANSI/ESD S7.1 and ASTM F150 Dissipative requirements.



Protects against a majority of acids used in manufacturing processes.



Hard-wearing & abrasion resistant suitable for medium to heavy traffic.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1	B <sub>fl</sub> - s1
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### 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)
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### THERMAL RESISTANCE

Softens over 60°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels)	80 mg loss per 1000 cycles
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### COMPRESSIVE STRENGTH

EN 13892-2	60 N/mm <sup>2</sup>
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### FLEXURAL STRENGTH

EN 13892-2	40 N/mm <sup>2</sup>
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### TENSILE STRENGTH

BS 6319	25 N/mm <sup>2</sup>
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### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete.  
> 1.5 MPa

### ELECTRICAL RESISTANCE

ASTM F150	1.0 x 10 <sup>6</sup> – 1.0 x 10 <sup>9</sup> Ω
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For a full Technical Profile, contact your local Technical Department.



# Flowshield ESD BVG

A fibre-free antistatic, self-smoothing epoxy floor coating based on nano technology that complies with a variety of electrical conductivity requirements.

For use in medium to heavy duty traffic areas where conductive ESD standards are required.



Meets ANSI/ESD S2020, IEC 61340-5-1 & IEC 61340-4-5 requirements.



Solvent free and low odour during and after application.



Protects against a majority of chemicals used in manufacturing processes.



Hard-wearing & abrasion resistant suitable for medium to heavy traffic.

## Technical Profile

### FIRE RESISTANCE

EN 13501-1	B <sub>fl</sub> - s1
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### 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)
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### THERMAL RESISTANCE

Tolerant up to 60°C

### WATER PERMEABILITY

Nil – Karsten test (impermeable)

### ABRASION RESISTANCE

Taber Abrader (1 kg load using CS17 wheels)	80 mg loss per 1000 cycles
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### COMPRESSIVE STRENGTH

EN 13892-2	60 N/mm <sup>2</sup>
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### FLEXURAL STRENGTH

EN 13892-2	40 N/mm <sup>2</sup>
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### TENSILE STRENGTH

BS 6319	25 N/mm <sup>2</sup>
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### BOND STRENGTH

Greater than cohesive strength of 25 N/mm<sup>2</sup> concrete. > 1.5 MPa

### ELECTRICAL RESISTANCE

IEC 61340-5-1	< 10 <sup>9</sup> Ω
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### BODY VOLTAGE GENERATION (BVG)

IEC 61340-4-5	< 100V
ANSI/ESD S2020	< 100V

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





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



[www.flowcreteasia.com](http://www.flowcreteasia.com)



[asia@flowcrete.com](mailto:asia@flowcrete.com)



Contact Us

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