



FLOWFRESH

► HACCP International certified antimicrobial cementitious polyurethane floor coating systems, ideal for use in areas where hygiene is critical.

www.flowcreteasia.com

Flowfresh Range Technical Profile





Flowfresh represents a new generation of performance antimicrobial flooring based on the use of silver, in partnership with Polygiene®, that kills up to 99.9% of bacteria on contact.

Silver is a natural element known for its ability to purify and protect from bacterial infections – and provides an attractive, environmentally friendly alternative to chemically manufactured antimicrobials.

HACCP International certified as safe for use in food processing environments, Flowfresh offers total protection. A continuous migration of silver ions are delivered to the contact surface from where they attack gram positive and gram negative bacteria and viruses. This technology remains active for the lifetime of the floor, even when damaged or worn unlike coatings or surface treatments.

Flowfresh meets the ISO 22196 standard of evaluating the antimicrobial activity of antimicrobial treated plastics and other non-porous surfaces.



Application Suitability

Meat

& Fish



Food & Beverage



Bakeries &

Confectionery



Food Preparation & Kitchens



Hospitals &

Healthcare

WED

Pharmaceutical Environments

Resistance Chart

| BACTERIAL RESISTANCE | | CHEMICAL RESISTANCE* | | | | | |
|----------------------|----------|------------------------|----------|-----------------------|----------|-----------------|---|
| SARS-CoV | ✓ | Salmonella Typhi | ✓ | Hydrochloric Acid 10% | √ | Methanol | ✓ |
| MRSA | ✓ | Enterococcus Faecalis | ✓ | Sulphuric Acid 10% | √ | Sugar Syrups | ✓ |
| E-coli | ✓ | Staphylococcus Aureus | √ | Citric Acid 10% | √ | Caustic Soda | ✓ |
| Listeria | ✓ | Streptococcus Pyogenes | ✓ | Acetic Acid 5% | √ | Petrol | Image: A start of the start of |
| C.difficile | ✓ | Pseudomonas Aeruginosa | ✓ | Lactic Acid 10% | √ | Oil Ingredients | ✓ |
| Proteus Vulgaris | √ | Campila Bacta | √ | Phosphoric Acid 5% | √ | Detergents | ✓ |

*A chemical resistance chart is available on request.

System Components



| | DESCRIPTION | USES |
|----------------------------|---|---|
| Flowfresh Primer | 3-component, polyurethane scratch coat/primer for concrete and cementitious substrates. Flowfresh Primer will bond to surface dry substrates that have a Relative Humidity up to 95% (to BS 8204). | For priming concrete and screeds, prior to overcoating with the Flowfresh flooring system. |
| Flowfresh Cove | 4-component, solvent-free, polyurethane concrete cove for the Flowfresh range of products containing antimicrobial additive, Polygiene®. | Used as footing/moulding compound to form coves for the Flowfresh SL, MF, RT and HF systems. |
| Flowfresh Sealer | 2-component, solvent free, polyurethane coloured coating containing antimicrobial additive, Polygiene®. | Used as a lock coat for Flowfresh SR system. |
| Flowfresh Coating | 3 component, antimircrobial polyurethane coloured coating. | Used for sealing Flowfresh Cove. |
| Flowseal Ultra | 2-component, fast curing, UV light stable, gloss sealer with low odour. | Used as a fast curing UV stable sealer or receiving coat for coloured flakes and coloured quartz broadcast systems. |
| Flowseal Ultra EWT | 2-component, fast curing, UV light stable, polyurea gloss sealer with low odour. | Used as a fast curing UV stable sealer or receiving coat for coloured flakes and coloured quartz broadcast systems. The Flowseal Ultra EWT has extended working time as compared to the Flowseal Ultra. |
| Flowfresh Coating Satin | Flowfresh Coating Satin is a 4-component, solvent free, coloured polyurethane concrete coating. The product contains Polygiene®, an antimicrobial additive based on silver ion technology. | Flowfresh Coating Satin is normally used as a topcoat for the Flowfresh SR system but if applied in thin coating layers the product will exhibit a light texture due to the sand included in the product. |

** 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.

Flowfresh SL & MF



Self-smoothing polyurethane screeds for use in dry areas subject to light-medium traffic.

Best suited to packaging areas and processing zones subject to light-medium foot and wheeled traffic, these trowel applied systems deliver a seamless, joint-free, smooth matt finish.



Hygienic:

Contains Polygiene[®] - an antimicrobial additive that kills up to 99.9% bacteria.



Accredited:

HACCP International certified and complies with USDA and FDA guidelines.

Heat Resistant:

Resistant to temperatures of up to 90°C.



Chemical Resistant:

Protects against the majority of acids used in manufacturing processes.



Abrasion Resistant:

Holds its own against impact, traffic and chemical attack.

Colours

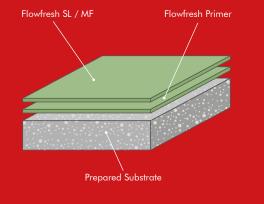


The applied colours may differ from the examples shown. For a full colour chart and samples, contact your local Flowcrete office.

Technical Profile

TEMPERATURE RESISTANCE

| TEMPERATURE RESISTANC | TEMPERATURE RESISTANCE | | | | | |
|---|--|------|-------|--------|--|--|
| SL | MF | | | | | |
| 2mm: From 5°C to 65°C | 3mm: From -5°C to 70°C 4mm: From -15°C to 90°C | | | | | |
| WATER PERMEABILITY | | | | | | |
| Karsten Test | Nil (Impe | rmed | able) | | | |
| 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) | | | | | |
| ABRASION RESISTANCE | | | | | | |
| Taber Abrader | 0.1 g loss per 1000 cycles (1 kg load using CS17 wheels) | | | | | |
| COMPRESSIVE STRENGTH | | | | | | |
| EN 13892-2 | N 13892-2 >50 N/mm ² | | | | | |
| FLEXURAL STRENGTH | | | | | | |
| EN 13892-2 | >20 N/mm ² | | | | | |
| TENSILE STRENGTH | | | | | | |
| BS 6319 | (SL) (MF) >10 N/mm ² 7 N/mm ² | | | | | |
| BOND STRENGTH | | | | | | |
| ASTM D4541 (Pull-Off Test) | >1.5 MP | a* | | | | |
| | | | | | | |
| SPEED OF CURE** | 10°C | 20° | °C | 30°C | | |
| Light Traffic | 36 hrs | 24 | hrs | 12 hrs | | |
| Full Traffic | 72 hrs | 48 | hrs | 24 hrs | | |
| Full Chemical Cure | 10 days | 7 d | ays | 6 days | | |
| | | | | | | |



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



| Light - Medium Traffic 2mm | ✓ |
|--------------------------------------|---|
| Medium - Heavy Traffic 3–4mm | ✓ |
| Industrial Kitchens / Semi Dry Areas | ✓ |
| Packaging Areas | ✓ |
| Loading Bays | ✓ |
| Laboratories / Quality Control | ✓ |
| Dispensaries | ✓ |
| Cold Stores / Freezers | |





| Dry Process (Med/Heavy Traffic) | ✓ |
|----------------------------------|---|
| Wet Process (Med/Heavy Traffic) | ✓ |
| Industrial Kitchens / Wash Areas | ✓ |
| Packaging Areas | |
| Chemical / Solvent Stores | ~ |
| Loading Bays | ~ |
| Laboratories / Quality Control | |
| Dispensaries | |
| Cold Stores / Freezers | ✓ |

** 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.

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Flowfresh HF & RT



Slip-resistant polyurethane screeds for use in wet areas subject to high volumes of traffic.

Best suited to wet processing zones subject to high volumes of foot and wheeled traffic, these trowel applied 6–9 mm systems deliver a seamless joint-free matt finish.



Hygienic:

Contains Polygiene[®] - an antimicrobial additive that kills up to 99.9% bacteria.



Accredited:

HACCP International certified and complies with USDA and FDA guidelines.



Heat Resistant:

Resistant to temperatures of up to 120°C.



Chemical Resistant:

Protects against the majority of acids used in manufacturing processes.



Slip Resistant:

Impressive anti slip profile in dry and wet conditions.

Colours



Pewter Grey

Blue

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

Technical Profile

TEMPERATURE RESISTANCE

From -25°C to 100°C (at 6mm) From -45°C to 120°C (at 9mm)

WATER PERMEABILITY

 Karsten Test
 Nil (Impermeable)

 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)

 ABRASION RESISTANCE

| (1 kg load using CS17 wh |
|--------------------------|
| |

>10 N/mm²

| COMPRESSIVE STRENGTH | | |
|----------------------|-------|--|
| EN 10000 0 | 50.11 | |

| EIN 13092-2 | >50 N/mm² |
|-------------------|-----------------------|
| FLEXURAL STRENGTH | |
| EN 13892-2 | >20 N/mm ² |

EN 13892-2

Taber

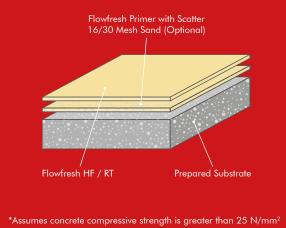
TENSILE STRENGTH

BS 6319

BOND STRENGTH

```
ASTM D4541 (Pull-Off Test) >1.5 MPa*
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| SPEED OF CURE** | 10°C | 20°C | 30°C |
|--------------------|---------|--------|--------|
| Light Traffic | 36 hrs | 24 hrs | 12 hrs |
| Full Traffic | 72 hrs | 48 hrs | 24 hrs |
| Full Chemical Cure | 10 days | 7 days | 6 days |



** 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.

Flowfresh SR



Flowfresh SR is a heavy duty polyurethane screed with an anti slip finish.

Suited to all zones subject to heavy foot and wheeled traffic, such as wet processing areas or food preparation zones, this trowel applied 3mm to 4mm system delivers an anti slip floor finish.



Hygienic:

Contains Polygiene® - an antimicrobial additive that kills up to 99.9% bacteria.



Accredited:

HACCP International certified and complies with USDA and FDA guidelines.



Chemical Resistant:

Protects against the majority of acids used in manufacturing processes.



Slip Resistant:

Impressive anti slip profile in dry and wet conditions.



Abrasion Resistant:

Holds its own against impact, traffic and chemical attack.

Colours



Technical Profile

TEMPERATURE RESISTANCE

From -15°C to 90°C

WATER PERMEABILITY

Karsten Test Nil (Impermeable)

FIRE RESISTANCE

EN 13501-1 B_{FL} - s1

SLIP RESISTANCE

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

on specification (in accordance with HSE and UKSRG guidelines)

ABRASION RESISTANCE

Taber Abrader

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

>20 N/mm²

7 N/mm²

Dry >40, Wet depends

COMPRESSIVE STRENGTH

EN 13892-2 >50 N/mm²

FLEXURAL STRENGTH

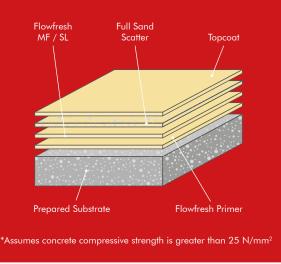
TENSILE STRENGTH

BS 6319

BOND STRENGTH

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

| SPEED OF CURE** | 10°C | 20°C | 30°C |
|--------------------|---------|--------|--------|
| Light Traffic | 36 hrs | 24 hrs | 12 hrs |
| Full Traffic | 72 hrs | 48 hrs | 24 hrs |
| Full Chemical Cure | 12 days | 7 days | 6 days |



*Additional topcoat is required for Rich Cream and other lighter colours.

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



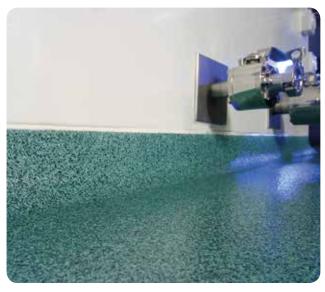
| Dry Process (Med/Heavy Traffic) | |
|----------------------------------|-----------------------|
| Wet Process (Med/Heavy Traffic) | ✓ |
| Industrial Kitchens / Wash Areas | × |
| Packaging Areas | |
| Chemical / Solvent Stores | |
| Loading Bays | |
| Laboratories / Quality Control | |
| Dispensaries | ✓ |
| Cold Stores / Freezers | |

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| Dry Process (Med/Heavy Traffic) | |
|----------------------------------|---|
| Wet Process (Med/Heavy Traffic) | ✓ |
| Industrial Kitchens / Wash Areas | ✓ |
| Packaging Areas | |
| Chemical / Solvent Stores | |
| Loading Bays | |
| Laboratories / Quality Control | |
| Dispensaries | ✓ |
| Cold Stores / Freezers | |





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

Flowfresh SRQ



A heavy duty decorative screed with a coloured quartz aggregate that provides anti slip properties.

Suited to all zones subject to heavy foot and wheeled traffic, such as wet processing areas or food preparation zones, this trowel applied system delivers a decorative joint-free floor finish.



Hygienic:

Contains Polygiene® - an antimicrobial additive that kills up to 99.9% bacteria.



Accredited:

HACCP International certified and complies with USDA and FDA guidelines.



Decorative:

Offers an attractive finish to enhance the working environment.



Protects against the majority of acids used in manufacturing processes.



Slip Resistant:

Impressive anti slip profile in dry and wet conditions.

Colours





Dark Grey



Light Blue



Yellow



Mid Grey

Red

Light Grey

Technical Profile

TEMPERATURE RESISTANCE

90°C (continuous exposure) 110°C (intermittent spills)

WATER PERMEABILITY

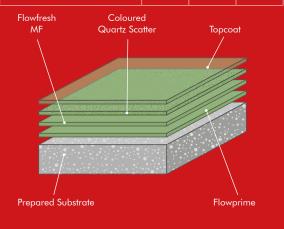
Karsten Test Nil (Impermeable) FIRE RESISTANCE EN 13501-1 B_{FI} - s1 **SLIP RESISTANCE** Method described in Dry >40, Wet depends BS 7976-2 on specification (typical values for (in accordance with HSE and UKSRG guidelines) 4-S rubber slider) ABRASION RESISTANCE Taber Abrader 0.12 g loss per 1000 cycles (1 kg load using CS17 wheels)

COMPRESSIVE STRENGTH EN 13892-2 >50 N/mm²

FLEXURAL STRENGTH

EN 13892-2 >20 N/mm² **TENSILE STRENGTH** BS 6319 >10 N/mm² BOND STRENGTH ASTM D4541 (Pull-Off Test) >1.5 MPa*

| SPEED OF CURE** | 10°C | 20°C | 30°C |
|--------------------|---------|--------|--------|
| Light Traffic | 36 hrs | 24 hrs | 12 hrs |
| Full Traffic | 72 hrs | 48 hrs | 24 hrs |
| Full Chemical Cure | 10 days | 7 days | 6 days |



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

Brown

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





Flowcrete

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

Africa

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.co |
| 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.cc |
| Pakistan | +60 3 6277 9575 | pakistan@flowcrete.com |
| Philippines | +63 2 834 6506 | philippines@flowcrete.cor |
| 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 |
| | | |

angladesh@flowcrete.com ongkong@flowcrete.com donesia@flowcrete.com prea@flowcrete.com sia@flowcrete.com ewzealand@flowcrete.com akistan@flowcrete.com nilippines@flowcrete.com ngapore@flowcrete.com iwan@flowcrete.com ailand@flowcrete.com etnam@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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