



## FLOWFRESH

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

# 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.

Offering total protection, a continuous migration of silver ions is 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 is HACCP International certified safe for use in food and beverage processing environments and meets the stringent ISO 22196 standard of evaluating the antimicrobial activity of antimicrobial treated plastics and other non-porous surfaces.

## Application Suitability



Food  
Manufacturing



Bottling Plants  
& Breweries



Meat, Poultry &  
Seafood



Bakeries &  
Confectionery



Food  
Preparation



Healthcare &  
Pharmaceutical



Dairies &  
Hatcheries



Animal  
Care





## Resistance Chart

### BACTERIAL RESISTANCE

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

### CHEMICAL RESISTANCE\*

|                       |   |                 |   |
|-----------------------|---|-----------------|---|
| Hydrochloric Acid 10% | ✓ | Methanol        | ✓ |
| Sulphuric Acid 10%    | ✓ | Sugar Syrups    | ✓ |
| Citric Acid 10%       | ✓ | Caustic Soda    | ✓ |
| Acetic Acid 5%        | ✓ | Petrol          | ✓ |
| Lactic Acid 10%       | ✓ | Oil Ingredients | ✓ |
| 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 Coating       | 3-component, matte polyurethane cement sealer with low odour.  | Used as a sealer to Flowfresh flooring systems e.g. Flowfresh SR.                          |
| Flowfresh Sealer        | 2-component, full gloss polyurethane sealer with low odour.  | Used as a sealer to Flowfresh flooring systems e.g. Flowfresh SR.                          |
| Flowfresh Coating Satin | 3-component, semi-gloss polyurethane cement sealer with low odour.   | Used as a sealer to Flowfresh flooring systems e.g. Flowfresh SR.                          |
| Flowfresh SL            | 3-component, polyurethane cement base coat for the Flowfresh Range containing the antimicrobial additive, Polygiene®.  | Used as a base coat to Flowfresh flooring systems e.g. Flowfresh SR.                       |

# Flowfresh SR

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

Flowfresh SR is available in various thicknesses with a matte, semi-gloss or gloss finish and is designed for wet processing zones such as food manufacturing, preparation areas, commercial kitchens and chemical processing plants.



## Antimicrobial:

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



## Thermal Resistant:

Resistant to temperatures up to 120°C and freeze/thaw resistant.



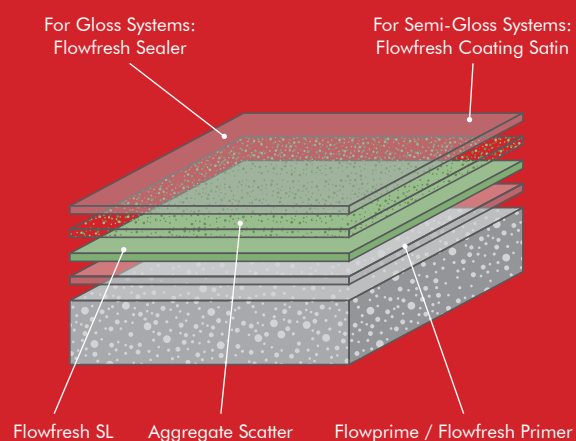
## Certified:

HACCP International certified polyurethane flooring system.



## Slip Resistant:

Impressive anti-slip profile in dry and wet conditions.



# Technical Profile: Flowfresh SR

|  | 4 mm   |            |       | 6 mm   |            |       | 9 mm   |            |       |
|--|--|------------|-------|--|------------|-------|--|------------|-------|
|  | Matte  | Semi-Gloss | Gloss | Matte  | Semi-Gloss | Gloss | Matte  | Semi-Gloss | Gloss |
| <b>FIRE RESISTANCE</b><br>AS/ISO 9239.1                    | CHF Value: 10 kW/m <sup>2</sup><br>Smoke Value: 69% (Mean) |            |       | CHF Value: 10 kW/m <sup>2</sup><br>Smoke Value: 69% (Mean) |            |       | CHF Value: 10 kW/m <sup>2</sup><br>Smoke Value: 69% (Mean) |            |       |
| <b>SLIP RESISTANCE*</b><br>Method described in AS4586-2013 | Dry & Wet Rating is dependent on specification             |            |       | Dry & Wet Rating is dependent on specification             |            |       | Dry & Wet Rating is dependent on specification             |            |       |
| <b>IMPACT RESISTANCE</b><br>EN ISO 6272                    | 15 Nm  |            |       | 15 Nm  |            |       | 15 Nm  |            |       |
| <b>TEMPERATURE RESISTANCE</b>                              | -15°C to 65°C  |            |       | -25°C to 90°C  |            |       | -40°C to 120°C   |            |       |
| <b>WATER PERMEABILITY</b><br>Karsten Test                  | Nil  |            |       | Nil  |            |       | Nil  |            |       |
| <b>VAPOUR PERMEABILITY</b><br>ASTM E96:90                  | -  |            |       | -  |            |       | 3 g / m <sup>2</sup> / 24 hrs                              |            |       |
| <b>ABRASION RESISTANCE</b><br>Taber Abrader                | 0.1 g loss per 1000 cycles<br>(1 kg using CS17 wheels)     |            |       | 0.1 g loss per 1000 cycles<br>(1 kg using CS17 wheels)     |            |       | 0.1 g loss per 1000 cycles<br>(1 kg using CS17 wheels)     |            |       |
| <b>COMPRESSIVE STRENGTH</b><br>EN 13892-2                  | >50 N/mm <sup>2</sup>                                      |            |       | >50 N/mm <sup>2</sup>                                      |            |       | >50 N/mm <sup>2</sup>                                      |            |       |
| <b>FLEXURAL STRENGTH</b><br>EN 13892-2                     | >20 N/mm <sup>2</sup>                                      |            |       | >20 N/mm <sup>2</sup>                                      |            |       | >20 N/mm <sup>2</sup>                                      |            |       |
| <b>TENSILE STRENGTH</b><br>BS 6319                         | 7 N/mm <sup>2</sup>  |            |       | 7 N/mm <sup>2</sup>  |            |       | 7 N/mm <sup>2</sup>  |            |       |
| <b>BOND STRENGTH</b><br>ASTM D4541 (Pull-Off Test)         | >1.5 MPa   |            |       | >1.5 MPa   |            |       | >1.5 MPa   |            |       |
| <b>TOXICITY</b>  | Taint free to sensitive foodstuffs (when cured).           |            |       | Taint free to sensitive foodstuffs (when cured).           |            |       | Taint free to sensitive foodstuffs (when cured).           |            |       |
| <b>SPEED OF CURE**</b><br>Full Chemical Cure at 20°C       | 6 days   |            |       | 6 days   |            |       | 6 days   |            |       |

\*The slipperiness of flooring materials can change significantly, due to the installation process, after short periods of use, due to inappropriate maintenance, longer-term wear and/or surface contaminants (wet or dry). Textured systems are recommended to meet slip resistance value requirements for wet conditions and/or surface contaminants (wet or dry) — please contact our Technical Advisors for further details. \*\*For full speed of cure details, contact our Technical Advisors.





# Flowfresh SL (3 mm)

A pigmented, self-smoothing, chemical resistant, polyurethane resin-based floor finish containing Polygiene® antimicrobial additives.

Typically used in dry or semi-wet food processing and packaging zones.



## Antimicrobial:

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



## Chemical Resistant:

Protects against corrosive ingredients and cleaning agents.



## Certified:

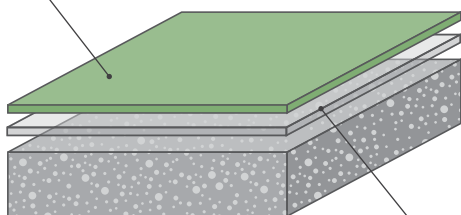
HACCP International certified polyurethane flooring system.



## Easy to Clean:

The self-smoothing finish is easy to maintain and sterilise.

Flowfresh  
SL



Flowprime /  
Flowfresh Primer

## Technical Profile

### FIRE RESISTANCE

EN 13501-1

B<sub>FL</sub>-s1

### SLIP RESISTANCE\*

Method described in  
AS4586-2013

Dry & Wet Rating is  
dependent on specification

### IMPACT RESISTANCE

BS8204 Part 1 Cat: A  
(<0.8 mm) ISO 6272

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

### TEMPERATURE RESISTANCE

5°C to 65°C

### COEFFICIENT OF THERMAL EXPANSION

ASTM C531

$5.70 \times 10^{-5} \text{ }^{\circ}\text{C}^{-1}$

### WATER PERMEABILITY

Karsten Test

Nil (Impermeable)

### ABRASION RESISTANCE

Taber Abrader

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

### COMPRESSIVE STRENGTH

EN 13892-2

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

### FLEXURAL STRENGTH

EN 13892-2

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

### TENSILE STRENGTH

EN 13892-2

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

### BOND STRENGTH

ASTM D4541 (Pull-Off Test)

>1.5 MPa

### TOXICITY

Taint free to sensitive foodstuffs (when cured).

### SPEED OF CURE\*\*

Full Chemical Cure at 30°C

6 days

\*The slipperiness of flooring materials can change significantly, due to the installation process, after short periods of use, due to inappropriate maintenance, longer-term wear and/or surface contaminants (wet or dry). Textured systems are recommended to meet slip resistance value requirements for wet conditions and/or surface contaminants (wet or dry) — please contact our Technical Advisors for further details. \*\*For full speed of cure details, contact our Technical Advisors.







## Flowfresh MF (4 mm)

A chemical resistant, polyurethane resin floor system containing Polygiene®, with a smooth matte brightly coloured finish.

Typically used in dry to semi-wet areas such as food or pharmaceutical packaging zones.



### Antimicrobial:

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



### Chemical Resistant:

Protects against corrosive ingredients and cleaning agents.



### Certified:

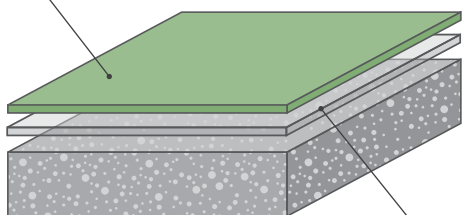
HACCP International certified polyurethane flooring system.



### Easy to Clean:

The self-smoothing finish is easy to maintain and sterilise.

Flowfresh  
MF



Flowprime /  
Flowfresh Primer

## Technical Profile

### FIRE RESISTANCE

|            |                     |
|------------|---------------------|
| EN 13501-1 | B <sub>FL</sub> -s1 |
|------------|---------------------|

### SLIP RESISTANCE\*

|                                 |  |
|---------------------------------|--|
| Method described in AS4586-2013 | Dry & Wet Rating is dependent on specification |
|---------------------------------|--|

### IMPACT RESISTANCE

|             |       |
|-------------|-------|
| EN ISO 6272 | 15 Nm |
|-------------|-------|

### TEMPERATURE RESISTANCE

-15°C to 90°C

### COEFFICIENT OF THERMAL EXPANSION

|           |   |
|-----------|---|
| ASTM C531 | $5.70 \times 10^{-5} \text{ }^{\circ}\text{C}^{-1}$ |
|-----------|---|

### WATER PERMEABILITY

|              |                   |
|--------------|-------------------|
| Karsten Test | Nil (Impermeable) |
|--------------|-------------------|

### VAPOUR PERMEABILITY

|             |                               |
|-------------|-------------------------------|
| ASTM E96:90 | 5 g / m <sup>2</sup> / 24 hrs |
|-------------|-------------------------------|

### ABRASION RESISTANCE

|               |  |
|---------------|--|
| Taber Abrader | 0.1g loss per 1000 cycles<br>(1kg using CS17 wheels) |
|---------------|--|

### COMPRESSIVE STRENGTH

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

### FLEXURAL STRENGTH

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

### TENSILE STRENGTH

|            |                     |
|------------|---------------------|
| EN 13892-2 | 7 N/mm <sup>2</sup> |
|------------|---------------------|

### BOND STRENGTH

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

### TOXICITY

Taint free to sensitive foodstuffs (when cured).

### SPEED OF CURE\*\*

|                            |        |
|----------------------------|--------|
| Full Chemical Cure at 30°C | 6 days |
|----------------------------|--------|

\*The slipperiness of flooring materials can change significantly, due to the installation process, after short periods of use, due to inappropriate maintenance, longer-term wear and/or surface contaminants (wet or dry). Textured systems are recommended to meet slip resistance value requirements for wet conditions and/or surface contaminants (wet or dry) — please contact our Technical Advisors for further details. \*\*For full speed of cure details, contact our Technical Advisors.

# Flowfresh SRQ

A durable, highly decorative, non-slip, hybrid resin-based flooring system featuring a blend of coloured quartz granules.

Typically used in wet processing areas, food preparation and chemical processing plants.



## Antimicrobial:

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



## Flexible Design:

Offers extensive design potential to deliver the wow-factor underfoot.



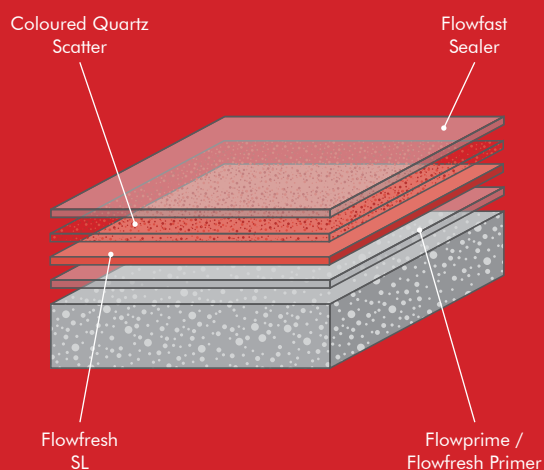
## Certified:

HACCP International certified polyurethane flooring system.



## Slip Resistant:

Impressive anti-slip profile in dry and wet conditions.

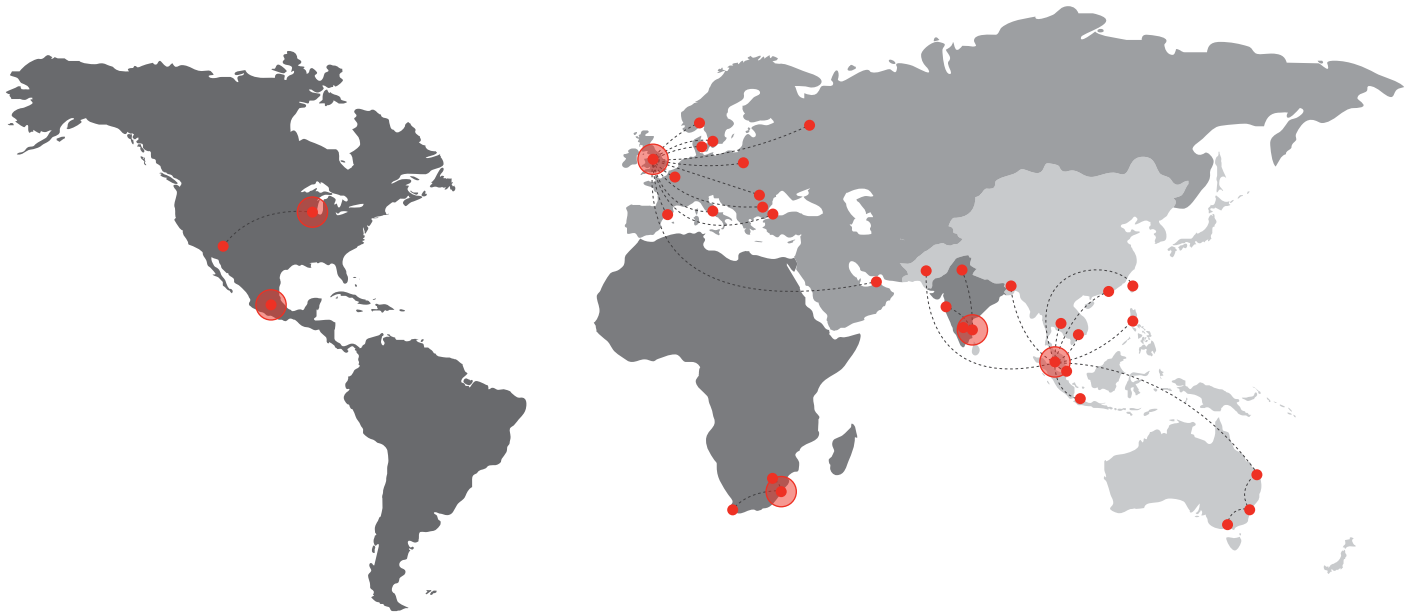




# Technical Profile: Flowfresh SRQ

|  | 4 mm   | 6 mm   |
|--|--|--|
|  | Satin  | Satin  |
| <b>FIRE RESISTANCE</b><br>EN 13501-1                       | B <sub>FL</sub> -s1  | B <sub>FL</sub> -s1  |
| <b>SLIP RESISTANCE*</b><br>Method described in AS4586-2013 | Dry & Wet Rating is dependent on specification   | Dry & Wet Rating is dependent on specification   |
| <b>IMPACT RESISTANCE</b><br>EN ISO 6272                    | 15 Nm  | 15 Nm  |
| <b>TEMPERATURE RESISTANCE</b>                              | -15°C to 70°C  | -25°C to 70°C  |
| <b>WATER PERMEABILITY</b><br>Karsten Test                  | Nil (Impermeable)  | Nil (Impermeable)  |
| <b>ABRASION RESISTANCE</b><br>Taber Abrader                | 0.1g loss per 1000 cycles<br>(1kg using CS17 wheels)                                       | 0.1g loss per 1000 cycles<br>(1kg using CS17 wheels)                                       |
| <b>COMPRESSIVE STRENGTH</b><br>EN 13892-2                  | >50 N/mm <sup>2</sup>  | >50 N/mm <sup>2</sup>  |
| <b>FLEXURAL STRENGTH</b><br>EN 13892-2                     | >20 N/mm <sup>2</sup>  | >20 N/mm <sup>2</sup>  |
| <b>TENSILE STRENGTH</b><br>BS 6319                         | 7 N/mm <sup>2</sup>  | 7 N/mm <sup>2</sup>  |
| <b>BOND STRENGTH</b><br>ASTM D4541 (Pull-Off Test)         | >1.5 MPa   | >1.5 MPa   |
| <b>SPEED OF CURE**</b><br>Full Chemical Cure               | Base Coat (Flowfresh SL) at 20°C: 6 days<br>Seal Coat (Flowfast Sealer) at 20°C: 2–3 hours | Base Coat (Flowfresh SL) at 20°C: 6 days<br>Seal Coat (Flowfast Sealer) at 20°C: 2–3 hours |

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## 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  | +88 02 985 7222  | bangladesh@flowcrete.com  |
| Hong Kong   | +852 2795 0478   | hongkong@flowcrete.com    |
| Indonesia   | +62 21 252 3201  | indonesia@flowcrete.com   |
| Malaysia    | +60 3 6277 9575  | asia@flowcrete.com        |
| Pakistan    | +60 3 6277 9575  | pakistan@flowcrete.com    |
| Philippines | +63 2 834 6506   | philippines@flowcrete.com |
| Singapore   | +60 3 6277 9575  | 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 4 886 4728      | uae@flowcrete.com      |
| UK       | +44 (0) 1270 753 000 | uk@flowcrete.com       |

### India

|       |                 |                     |
|-------|-----------------|---------------------|
| India | +91 44 40176600 | india@flowcrete.com |
|-------|-----------------|---------------------|

## North America

|        |                 |                        |
|--------|-----------------|------------------------|
| Mexico | +55 44 40 94 00 | mexico@flowcrete.com   |
| USA    | +1 513-943-4225 | americas@flowcrete.com |