

**Flowcrete**  
for the world at your feet



## FOOD & BEVERAGE PROCESSING

► Specialist resin and HACCP International certified treated floor coating systems designed to cater for Food & Beverage environments.

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



# COLOUR CHART STANDARD COLOURS

## Flowshield CR



Sand Chilli Red Steel Blue Mid Blue Light Green Dark Green



Sage Grey Mist Grey Steel Grey Charcoal

## Flowcoat HTS

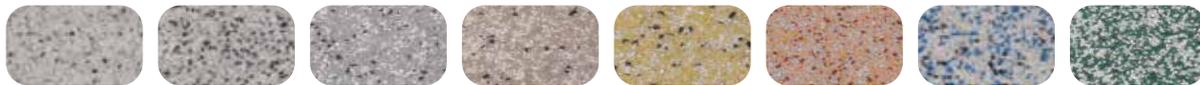


Sand Chilli Red Steel Blue Mid Blue Light Green Dark Green



Sage Grey Mist Grey Steel Grey Charcoal

## Flowfresh SRQ



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

## Flowfresh MF



Warm Buff Clay Coral Red Shamrock Green Ash Grey Pewter Grey

## Flowfresh SR / RT



Warm Buff Clay Coral Red Shamrock Green Ash Grey Pewter Grey

\*\*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.



## Welcome to Flowcrete

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Food and beverage manufacturing facilities include a diverse range of wet and dry processing environments as well as non-processing areas such as laboratories, changing rooms, corridors and warehouse areas. Each of these are subject to a host of challenges, including wet conditions, extreme temperature swings and heavy traffic as well as attack from chemicals and corrosive ingredients.

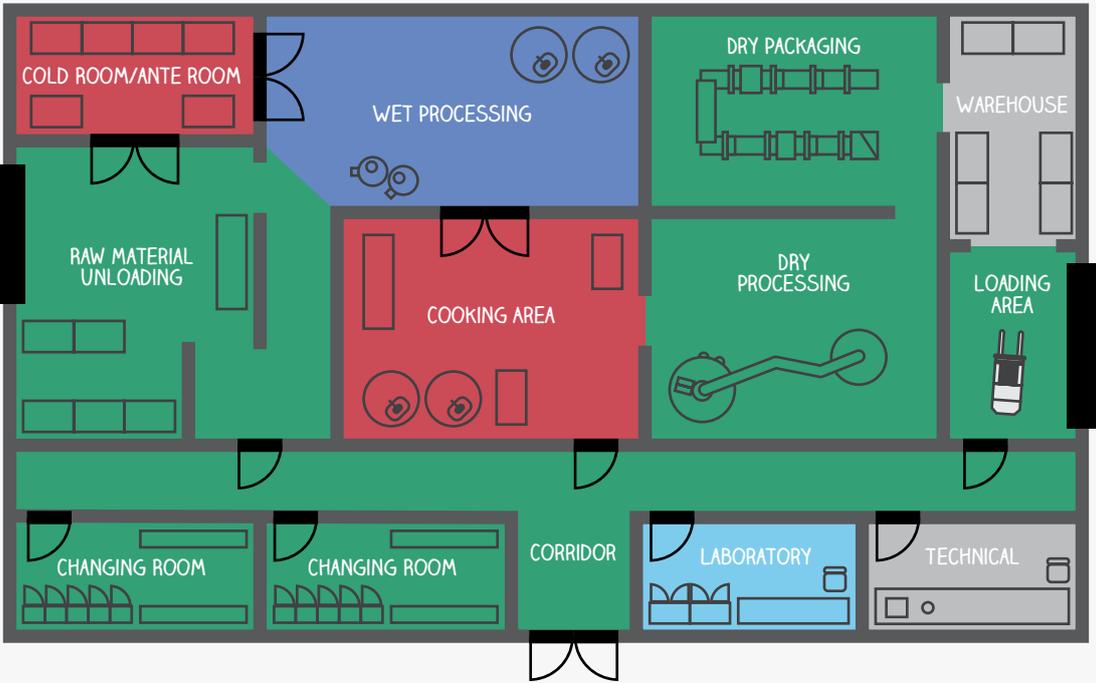
As such, each area of the food and beverage processing facility requires protective floor coating systems that meet strict hygiene and safety protocols in line with local regulations and HACCP principles as well as the individual performance characteristics needed to withstand their unique service conditions.

Flowcrete offers a complete package of speciality floor coating systems designed to cater for all areas within a food and beverage processing environment.

# Flowcrete Flooring Systems Summary

	THICKNESS	TYPE	DESCRIPTION
Flowfresh MF	3-4 mm	Polyurethane	A matt finish polyurethane floor system for use in dry areas.
Flowfresh SR	3-4 mm	Polyurethane	A heavy duty polyurethane floor with an anti slip finish.
Flowfresh RT	6-9 mm	Polyurethane	A slip-resistant polyurethane screed for use in wet and thermal shock areas.
Flowfresh SRQ	Dependent on specification	Polyurethane	A heavy duty polyurethane floor with decorative, anti slip, coloured quartz aggregates.
Flowcoat HTS	Dependent on specification	Hybrid Polyurethane	A heavy duty pigmented hybrid polyurethane coating system.
Flowshield CR	2-3 mm	Epoxy	A chemical resistant, self-smoothing epoxy resin.

## Food & Beverage Processing Floor Plan



- Flowfresh MF
- Flowfresh RT
- Flowfresh SRQ / SR
- Flowcoat HTS
- Flowshield CR



## HACCP International Certified Hygienic Flooring

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Flowcrete's HACCP International certified flooring materials are engineered to withstand the rigorous demands of the food and beverage industry.



Floors in food processing environments face heavy traffic, equipment impact and constant exposure to oils, chemicals and corrosive ingredients.

Resin flooring systems provide a seamless, non-porous surface that prevents cracks and crevices where bacteria and mould could grow. This ensures a hygienic, easy-to-clean environment that complies fully with strict food safety standards.

With HACCP certification, Flowcrete floors support contamination control, product integrity and compliance with international hygiene regulations.

# Flowfresh MF (3–4mm)



Flowfresh MF is a seamless, heavy duty self-smoothing polyurethane cement-based flooring system.

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



4-tick SGBC Leader-rated for excellent environmental sustainability.



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.

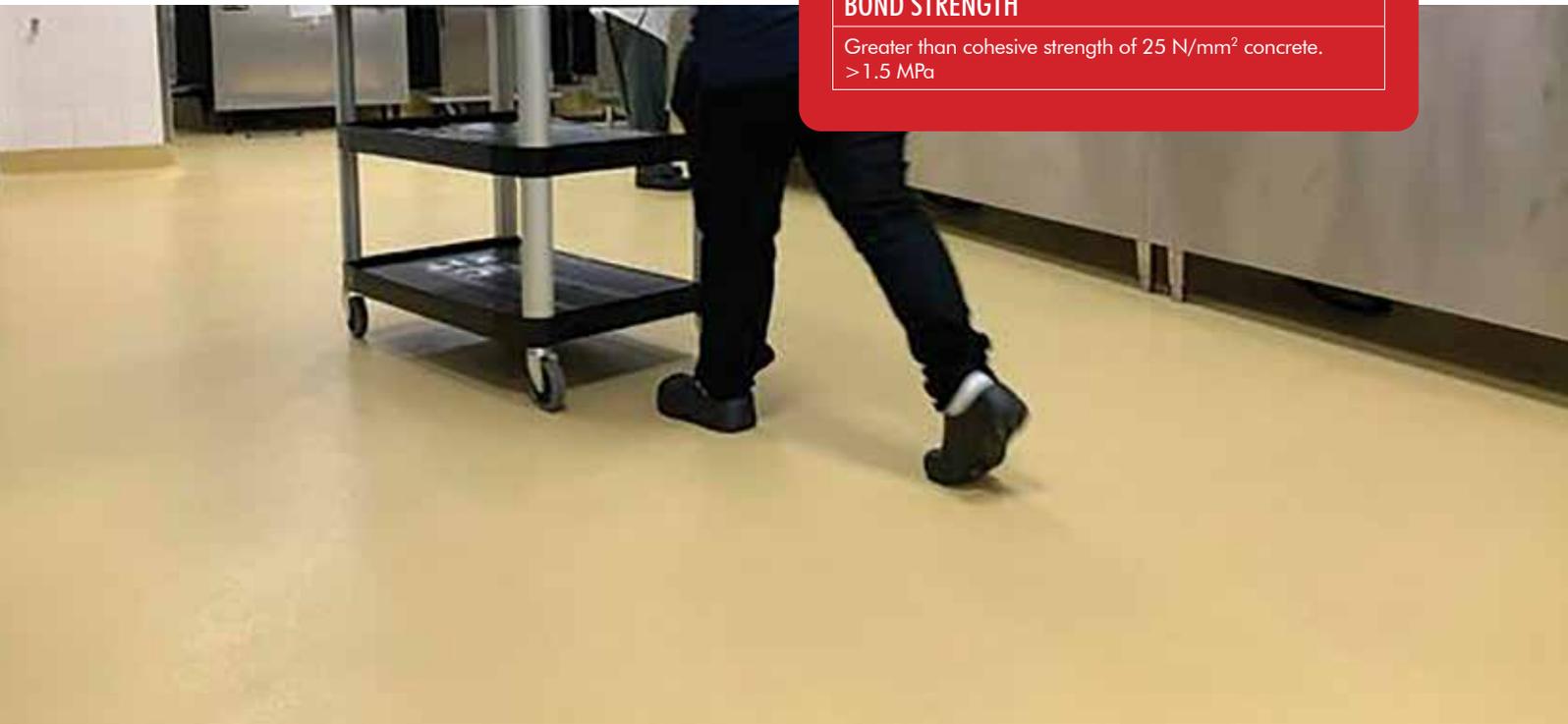


Very good thermal shock properties and resistant to extreme temperatures.

## Technical Profile

FIRE RESISTANCE	
EN 13501-1	B <sub>fl</sub> - s1
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 -5°C to 70°C (at 3mm)	From -15°C to 90°C (at 4mm)
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>
COEFFICIENT OF THERMAL EXPANSION	
ASTM C531	5.70 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 applications falling outside of this temperature range, please contact your local Flowcrete Technical Department.



# Flowfresh SR (3–4mm)



A heavy duty, slip resistant, seamless polyurethane resin flooring system.

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



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.



HACCP International Certified.



## 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)
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### 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
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### 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

# Flowfresh SRQ



A decorative 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.



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.



# Flowfresh RT

(RT: 6–9mm)



A heavy-duty, hygienic PU screed providing a highly durable, lightly textured finish with excellent chemical and temperature resistance.

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



4-tick SGBC Leader-rated for excellent environmental sustainability.



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.



HACCP International Certified.

## 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.



# 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

<b>FIRE RESISTANCE</b>	
EN 13501-1	B <sub>fl</sub> - s1
<b>SLIP RESISTANCE</b>	
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)
<b>THERMAL RESISTANCE</b>	
Tolerant up to 70°C	
<b>WATER PERMEABILITY</b>	
Nil – Karsten test (impermeable)	
<b>CHEMICAL RESISTANCE</b>	
Contact technical department	
<b>SURFACE HARDNESS</b>	
Koenig Hardness Test	180 secs.
<b>ABRASION RESISTANCE</b>	
Taber Abrader (1 kg load using CS10 wheels)	40 mg loss per 1000 cycles
BS 8204-2	Grade AR2 Medium Duty Industrial and Commercial
<b>TENSILE STRENGTH</b>	
BS 6319	> 15 N/mm <sup>2</sup>
<b>BOND STRENGTH</b>	
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 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

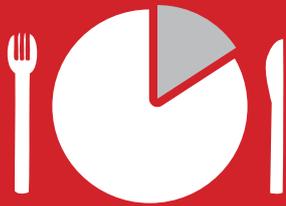
<b>FIRE RESISTANCE</b>	
EN 13501-1	B <sub>fl</sub> - s1
<b>SLIP RESISTANCE</b>	
Method described in BS 7976-2 (typical values for 4-S rubber slider)	Dry > 40, Wet depends on specification (in accordance with HSE and UKSRG guidelines)
<b>THERMAL RESISTANCE</b>	
Tolerant up to 60°C	
<b>WATER PERMEABILITY</b>	
Nil – Karsten test (impermeable)	
<b>CHEMICAL RESISTANCE</b>	
Contact technical department	
<b>ABRASION RESISTANCE</b>	
Taber Abrader (1 kg load using CS17 wheels)	90 mg loss per 1000 cycles
<b>COMPRESSIVE STRENGTH</b>	
BS 6319	> 60 N/mm <sup>2</sup>
<b>FLEXURAL STRENGTH</b>	
BS 6319	> 40 N/mm <sup>2</sup>
<b>TENSILE STRENGTH</b>	
BS 6319	> 25 N/mm <sup>2</sup>
<b>BOND STRENGTH</b>	
Greater than cohesive strength of 25 N/mm <sup>2</sup> concrete. > 1.5 MPa	
<b>TOXICITY</b>	
Taint free to sensitive foodstuffs	

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



# Bacteria in Food Processing Environments

**bac•ter•i•a** Single-cell organisms that feed on nutrients in their surroundings to reproduce. Pathogenic bacteria are harmful to humans, and can enter the body through contaminated food.



Approximately **16%** of foodborne illness cases are attributed to a contaminated processing environment.

Foods most prone to bacterial contamination are:



Meat



Poultry



Eggs or foods made with raw eggs



Cold cooked seafood



Raw shellfish



Soft cheeses

# Flowfresh Bacterial and Chemical Resistance

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

\*Full chemical resistance chart available on request.





# Flowcrete

for the world at your feet

Australia | China | Hong Kong | Indonesia | Japan | Macao | Malaysia | New Zealand  
Philippines | Singapore | South Korea | Taiwan | Thailand | Vietnam



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Contact Us

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