



# **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

## Pharmaceutical Environments

# **Resistance Chart**

BACTERIAL RESISTANCE			CHEMICAL RESISTANCE*				
MRSA	✓	Enterococcus Faecalis	~	Hydrochloric Acid 10%	✓	Methanol	✓
E-coli	✓	Staphylococcus Aureus	<b>√</b>	Sulphuric Acid 10%	✓	Sugar Syrups	✓
Listeria	✓	Streptococcus Pyogenes	<b>√</b>	Citric Acid 10%	✓	Caustic Soda	✓
C.difficile	✓	Pseudomonas Aeruginosa	✓	Acetic Acid 5%	✓	Petrol	✓
Proteus Vulgaris	✓	Campila Bacta	<b>√</b>	Lactic Acid 10%	✓	Oil Ingredients	✓
Salmonella Typhi	✓			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®.	range of products containing for the Elowfresh SL ME RT and HE 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.	
FlowfreshFlowfresh 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<sup>®</sup> - 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

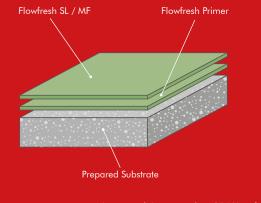


The applied colours may differ from the examples shown. For a full colour chart and samples, contact your local Flowcrete office.

# **Technical Profile**

# **TEMPERATURE RESISTANCE**

SL	MF				
2mm: From 5°C to 65°C	65°C 3mm: From -5°C to 70°C 4mm: From -15°C to 90°C				
WATER PERMEABILITY					
Karsten Test	Nil (Impe	rmec	ıble)		
FIRE RESISTANCE					
EN 13501-1	B <sub>FL</sub> - s1				
SLIP RESISTANCE					
Method described in BS 7976-2Dry >40, Wet depends on specification (in accordance with HSE 					
ABRASION RESISTANCE					
Taber Abrader         0.1 g loss per 1000 cycles           (1 kg load using CS17 wheels)					
COMPRESSIVE STRENGTH					
EN 13892-2 >50 N/mm <sup>2</sup>					
FLEXURAL STRENGTH					
EN 13892-2	EN 13892-2 >20 N/mm <sup>2</sup>				
TENSILE STRENGTH					
BS 6319	(SL) >10 N/m	חm²	(MF 7 N	) /mm²	
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	nrs	24 hrs	
Full Chemical Cure	10 days	7 d	ays	6 days	



\*Assumes concrete compressive strength is greater than 25 N/mm<sup>2</sup>



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	<b>√</b>

# \*\* 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** 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



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	
N 13501-1	B <sub>FL</sub> - s1
SLIP RESISTANCE	
Method described in 3S 7976-2 typical values for 4-S rubber slider)	Dry >40, Wet depends on specification (in accordance with HSE and UKSRG guidelines)
ABBYCIUN BECICTANCE	

### ABRASION RESISTANCE

Taber Abr

(

ader	0.12 g loss per 1000 cycles
	(1 kg load using CS17 wheels)

N 13892-2 >50 N/	mm²
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### **FLEXURAL STRENGTH** EN 13892-2 >20 N/mm<sup>2</sup>

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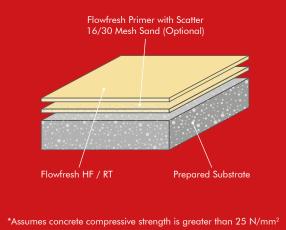
# TENSILE STRENGTH

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

# **BOND STRENGTH**

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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



# 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<sub>FI</sub> - s1 **SLIP RESISTANCE** Method described in Dry >40, Wet depends

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

### ABRASION RESISTANCE

Taber Abrader

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

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

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

(in accordance with HSE

and UKSRG guidelines)

on specification

$\cap M$	DR	ECCI	VE ST	BEV	GTI
				NLN	

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

FLEXURAL STRENGTH

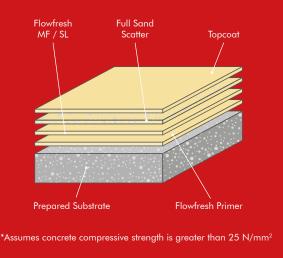
### **TENSILE STRENGTH**

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



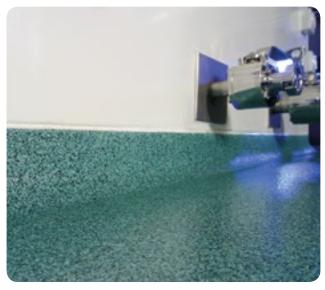
\*Additional topcoat is required for Rich Cream and other lighter colours.

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)	<ul> <li>Image: A set of the set of the</li></ul>
Industrial Kitchens / Wash Areas	~
Packaging Areas	
Chemical / Solvent Stores	
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.

**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



Light Grey

Light Blue



Yellow



Brown

Red

# **Technical Profile**

# **TEMPERATURE RESISTANCE**

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

### WATER PERMEABILITY

Karsten Test	Nil (Impermeable)	
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)	
ABRASION RESISTANCE		

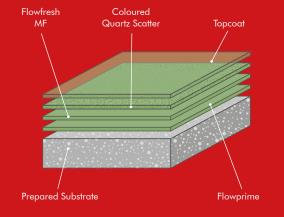
### Taber Abrader

0.12 g loss per 1000 cycles (1 kg load 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** BS 6319 >10 N/mm<sup>2</sup> BOND STRENGTH ASTM D4541 (Pull-Off Test) >1.5 MPa\* 20°C 20°C 10°C **SDEED UE UIBE\*\*** 

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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/mm<sup>2</sup>

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

Mid Grey







www.flowcreteasia.com



asia@flowcrete.com

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