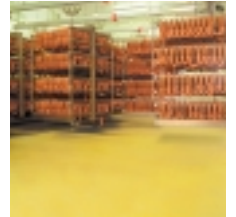
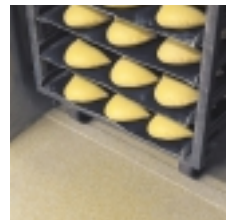




Food Industry



Meat Processing



Bakeries



Fish Processing



Drinks Industry



Pharmaceuticals



Polygiene®
Safer to Touch

WELCOME TO FLOWCRETE - for the world at your feet

Flowcrete's commitment to exceptional design, technical support and advisory services from initial enquiries through to installation is at the heart of its business philosophy.

Our global success is driven by our commitment to excellence; excellence in products, excellence in service and excellence in people.

With manufacturing plants across Europe, the Americas, Asia and Africa - and a global presence in 26 countries - we are well placed as the world's favourite specialist flooring designer and manufacturer.

Our fully trained and monitored global network of approved contractors - ensures your flooring project is in safe hands with Flowcrete.



*Dawn Gibbins MBE
Chairman Flowcrete Group plc*



A FRESH APPROACH to flooring



Flowfresh represents a new generation of performance antimicrobial flooring based on the use of silver in partnership with polygiene.

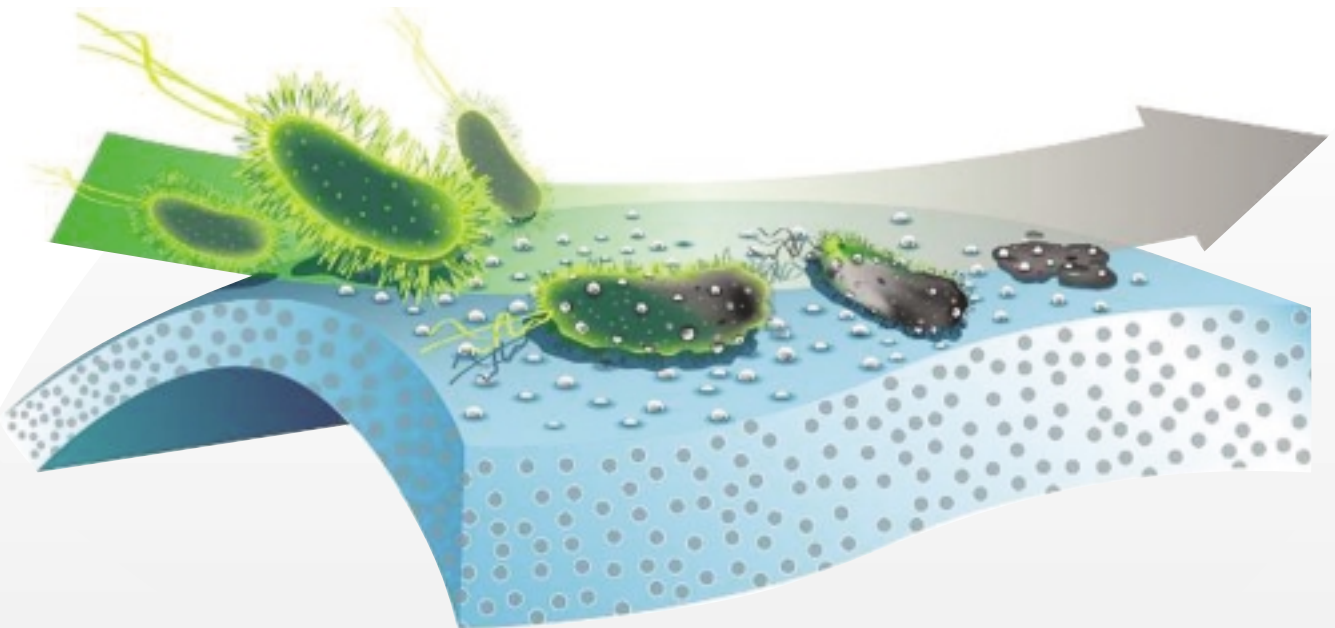
The science is based on an amino compound constantly emitting ions of silver that kills bacteria which settle on the floor and continues to be active for the life time of the floor.

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

It offers total protection. A continuous migration of silver ions delivered to the contact surface from where they attack gram positive and gram negative bacteria and viruses.

The process remains active through the lifetime of the floor, even when damaged or worn, unlike coatings or surface treatments.

Polygiene® technology - killing microbes on contact



**ELECTRICAL RESISTANCE
(ESD GRADES IN HF, MF AND TZ)**

- | | |
|-------------------------|--------------------------|
| ✓ E-coli | ✓ Pseudomonas Aeruginosa |
| ✓ Staphylococcus Aureus | ✓ Salmonella Typhi |
| ✓ MRSA | ✓ Streptococcus Pyogenes |
| ✓ Proteus Vulgaris | ✓ Enterococcus Faecalis |
| ✓ Listeria Weshimen | ✓ SARS Coronousitus |

FLOWFRESH HF

We design and supply floors that can cope with all the rigours of the food and drink sector – and offer choice in the specification process to ensure the right solution for individual environments.

Different systems can offer the ability to withstand daily rigours such as falling bottles, wheeled traffic, food spills, chemical leaks and everything else the industry throws at it - even sugar.

For thirty years, Flowcrete floors have been installed across the sector - in meat processing areas, dairies, kitchens zones and within both wet and dry processing zones.



SLIP RESISTANT POLYURETHANE SCREED

To further enhance their performance in strict hygiene controlled environments, Flowcrete's range of polyurethane flooring systems incorporate Polygiene® - performance silver based anti-microbial which inhibits the growth of bacteria, fungi, moulds and mildew.

When used in food or pharmaceutical applications, Flowfresh provides effective anti-bacterial and anti-fungal protection, ensuring that the floor surface remains free of bacteria between cleaning cycles.



Polygiene®
Safer to Touch



Description

Flowfresh HF is an 8mm trowel applied, heavy duty polyurethane resin screed, ideal for wet surfaces such as food preparation areas, and chemical processing plants. Complies with FeRFA category: type 8

Benefits

- Very high chemical resistance
- Steam cleanable - non dusting, non tainting



- Incorporates Polygiene® silver based - anti microbial additive
- Anti-slip surface
- Suitable for fork lift truck traffic
- Expert installation - applied by trained and approved contractors

Application

Production Areas - Heavy traffic
Wet/spillage areas
Strong chemicals
Solvent stores
Steam cleaning

REFERENCE LIST

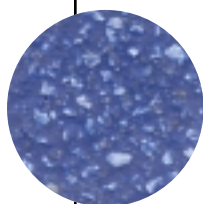
FOOD INDUSTRY

Nestlé
RHM
Mars
Fisher
Cadburys
Lyons Bakery
McVities
Fox's Biscuits
Terry Suchards
Wrigleys
Hays Soft Drinks
Courage
Northern Foods
Bovril
Tryton Foods
Grants
Coca Cola
Hazelwood Foods
Diageo
Dalehead Foods

PHARMACEUTICAL INDUSTRY

Lever Brothers
Pfizer
Baxter Healthcare
Bayer
Schering Plough
Glaxo Smith Kline
Astra Zeneca
Boots
Convatec Ltd
Orchard Mill
Roche Pharmaceuticals
Cox Pharmaceutical
Wyeth Laboratories
Merck

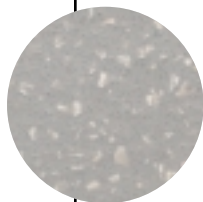
FINISHES



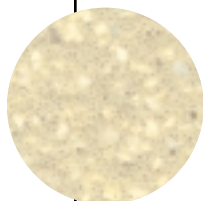
Ultramarine



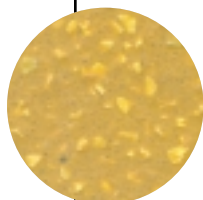
Dark Grey



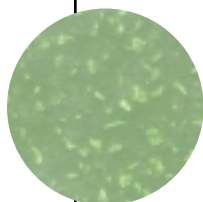
Mid Grey



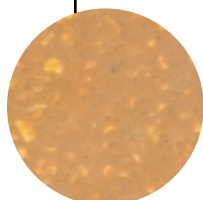
Cream



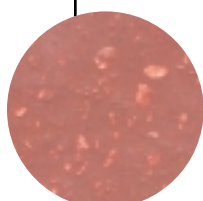
Ochre



Dark Green



Mustard



Red

COLOUR

TECHNICAL DATA

PHYSICAL PROPERTIES

Compressive Strength to BS6319 (N/mm ²)	>50
Flexural Strength to BS6319 (N/mm ²)	20
Tensile Strength to BS6319 (N/mm ²)	10
Impact Resistance by BRE Screed Tester	<0.5mm
Temperature Resistance (°C)	
Dry	-40 to 110
Wet	105
Water absorption to Camden test TSSH008	Nil
Electrical (surface) Resistivity to BS2050	
Std Grade	N/A
ESD Grade	<1.0x10 ⁸ ohms
Abrasion Resistance by Taber (Loss per 1000 cycles in mg/1000g load).	
H22 Wheel to ASTM D4060	25mg
Coefficient of Thermal Expansion to ASTM C531	1.7x10 ⁻⁵ °C
Thermal Conductivity to BS874 W/m°C	1.20
Mixed Bulk Density	2.10
Adhesion to primed concrete by direct pull (N/mm ²)	>1.50 cohesive concrete failure

MICROBIAL / FUNGAL CONTROL

BACTERIA	
Staphylococcus aureus	✓
Ecoli	✓
Salmonella choleraesuis	✓
Listeria welshimeri	✓
CONTACT INHIBITION	100%

A.A.T.C.C. Test Method 147 - 1993:
The inclusion of Polygiene® within the screed matrix of the industrial floor system ensures the permanency of this biocidal additive even in the event of excessive surface wear. Polygiene® is effective following ingestion by living bacteria, whereupon metabolic activity within the organism is arrested. Atrophy of the organism follows, when subsequent decay allows re-release of the Polygiene® additive, so ensuring replenished activity at the floor surface.

CHEMICAL RESISTANCE SUMMARY

(comprehensive list available on request)	
Hydrochloric Acid 10%	✓
Sulphuric Acid 25%	✓
Citric Acid 10%	✓
Acetic Acid 5%	✓
Lactic Acid 10%	✓
Acetone	✓
Methanol	✓
Sugar Syrups	✓
Caustic Soda	✓
Petrol	✓
Oil	✓
Detergents	✓

APPLICATION

Production Areas	
- Medium traffic - dry process	
- Heavy traffic - dry process	
- Wet /spillage areas	✓
- Kitchens/Pot Wash areas	✓
- Packaging areas	
Warehouses	
- Loading bays	
Laboratories/Quality Control	
Dispensaries	
Cold Stores/Freezers	
Solvent/Chemical Stores	✓
Battery Charging Areas	✓

Colours may vary due to the limitation in the printing process

FLOWFRESH MF



SELF SMOOTHING HEAVY DUTY POLYURETHANE TOPPING FOR MAXIMUM HYGIENE



Description

Flowfresh MF is a 4-6mm self-smoothing, heavy duty polyurethane topping with a matt finish, ideal for use in dry process, packaging and storage areas that are subject to light to medium traffic and occasional chemical spillage. Complies with FerFA category: type 7

Benefits

- Very high chemical resistance
- Easy to clean
- Matt finish
- Hygienic and safe - incorporates Polygiene® - anti microbial additive
- Excellent wear and impact resistance
- Expert installation - applied by trained and approved contractors

Application

Production Areas - Medium traffic
- Strong chemicals
- Loading bays

Warehouses
Laboratories
Cold Stores



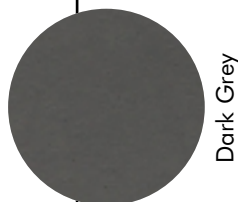
Polygiene®
Safer to Touch



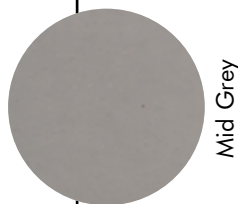
FINISHES



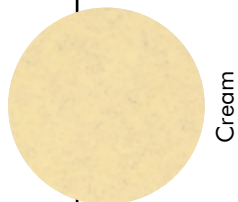
Blue



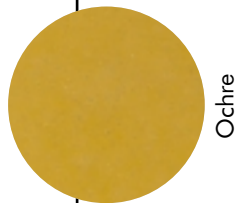
Dark Grey



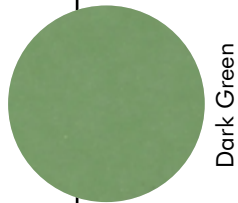
Mid Grey



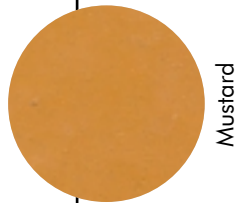
Cream



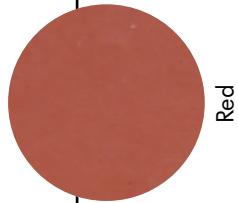
Ochre



Dark Green



Mustard



Red

COLOUR



REFERENCE LIST

FOOD INDUSTRY

Nestlé
RHM
Mars
Fisher
Cadburys
Lyons Bakery
McVities
Fox's Biscuits
Terry Suchards
Wrigleys
Hays Soft Drinks
Courage
Northern Foods
Bovril
Tryton Foods
Grants
Coca Cola
Hazelwood Foods

PHARMACEUTICAL INDUSTRY

Lever Brothers
Pfizer
Baxter Healthcare
Bayer
Schering Plough
Glaxo Smith Kline
Astra Zeneca
Boots
Convatec Ltd
Orchard Mill
Roche Pharmaceuticals
Cox Pharmaceutical
Wyeth Laboratories
Merck



TECHNICAL DATA

PHYSICAL PROPERTIES

Compressive Strength to BS6319 (N/mm ²)	> 50
Flexural Strength to BS6319 (N/mm ²)	20
Tensile Strength to BS6319 (N/mm ²)	10
Impact Resistance by BRE Screed Tester	< 0.5mm
Temperature Resistance (°C)	
Dry	-20 to 80
Wet	60 max
Water absorption to Camden test TSSH008	Nil
Surface Resistivity to BS2050	
Std Grade	N/A
ESD Grade	<1.0x10 ⁸ ohms
Abrasion Resistance by Taber (Loss per 1000 cycles in mg/1000g load).	
H22 Wheel to ASTM D4060	30mg
Coefficient of Thermal Expansion to ASTM C531	1.4x10 ⁻⁵ °C
Thermal Conductivity to BS874 W/m°C	0.85
Mixed Bulk Density	1.95
Adhesion to primed concrete by direct pull (N/mm ²)	> 1.50 cohesive concrete failure

MICROBIAL / FUNGAL CONTROL

BACTERIA	
Staphylococcus aureus	✓
Ecoli	✓
Salmonella choleraesuis	✓
Listeria welshimeri	✓

CONTACT INHIBITION	100%
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A.A.T.C.C. Test Method 147 - 1993:
The inclusion of Polygiene® within the screed matrix of the industrial floor system ensures the permanency of this biocidal additive even in the event of excessive surface wear. Polygiene® is effective following ingestion by living bacteria, whereupon metabolic activity within the organism is arrested. Atrophy of the organism follows, when subsequent decay allows re-release of the Polygiene® additive, so ensuring replenished activity at the floor surface.

CHEMICAL RESISTANCE SUMMARY

(comprehensive list available on request)

Hydrochloric Acid 10%	✓
Sulphuric Acid 25%	✓
Citric Acid 10%	✓
Acetic Acid 5%	✓
Lactic Acid 10%	✓
Acetone	✓
Methanol	✓
Sugar Syrups	✓
Caustic Soda	✓
Petrol	✓
Oil	✓
Detergents	✓

APPLICATION

Production Areas	
- Medium traffic - dry process	✓
- Heavy traffic - dry process	
- Wet /spillage areas	
- Kitchens/Pot Wash areas	
- Packaging areas	✓
Warehouses	
- Loading bays	✓
Laboratories/Quality Control	✓
Dispensaries	✓
Cold Stores/Freezers 4	
Solvent/Chemical Stores	
Battery Charging Areas	

Colours may vary due to the limitation in the printing process

FLOWFRESH SRQ



Description

Flowfresh SRQ is a 5 - 6mm heavy duty, chemical resistant antimicrobial treated polyurethane resin floor screed system, with an attractive and positively textured, coloured quartz floor finish. Ideal for wet processing zones such as food manufacturing, food preparation areas, and chemical processing plants.

Benefits

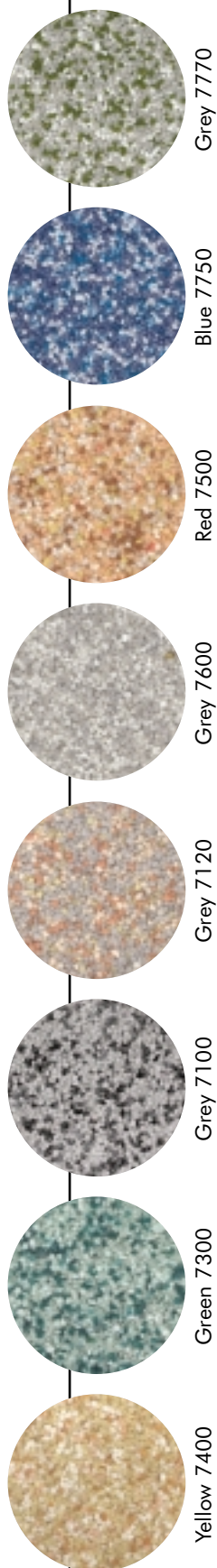
- Hygienic and safe - incorporates Polygiene® - an anti microbial additive based on silver ion technology
- Very high chemical resistance
- Attractive decorative terrazzo finish
- Easy to clean
- High temperature resistance
- Expert rapid installation - applied by trained and approved contractors
- Non-tainting, non-dusting
High Abrasion Resistance, withstands mechanical stress
Good alternative to expensive acid resistant tiles
Low odour during application
Positive slip resistance

HEAVY DUTY POLYURETHANE FOR MAXIMUM CLEANABILITY AND HYGIENE



Application

- Production Areas*
- Heavy traffic
 - Aesthetic requirements
 - Strong Chemicals
 - Wet processing



REFERENCE LIST

PHARMACEUTICAL INDUSTRY

Lever Brothers
Pfizer
Baxter Healthcare
Bayer
Schering Plough
Glaxo Smith Kline
Astra Zeneca
Boots
Convatec Ltd
Orchard Mill
Roche Pharmaceuticals
Cox Pharmaceutical
Wyeth Laboratories

FOOD INDUSTRY

KP Nuts
Kellogs
Sun Valley Foods
Bernard Matthews
Boddingtons
Britvik
Kraft Foods
Nestlé
Hells Kitchen



TECHNICAL DATA

PHYSICAL PROPERTIES

Compressive Strength to BS6319 (N/mm ²)	> 50
Flexural Strength to BS6319 (N/mm ²)	20
Tensile Strength to BS6319 (N/mm ²)	10
Impact Resistance by BRE Screed Tester	< 0.5mm
Temperature Resistance (°C)	
Dry	
Wet	

Water absorption to Camden test TSSH008

Surface Resistivity to BS2050	
Std Grade	N/A

Abrasion Resistance by Taber (Loss per 1000 cycles in mg/1000g load).
H22 Wheel to ASTM D4060 25mg

Coefficient of Thermal Expansion to ASTM C531

Thermal Conductivity to BS874 W/m°C

Mixed Bulk Density

Adhesion to primed concrete by direct pull (N/mm ²)	> 1.50 cohesive concrete failure
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MICROBIAL / FUNGAL RESISTANCE

BACTERIA

Staphylococcus aureus	✓
Escherichia coli	✓
Salmonella choleraesuis	✓
Listeria welshimeri	✓

CONTACT INHIBITION	100%
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A.A.T.C.C. Test Method 147 - 1993:

The inclusion of Polygiene® within the screed matrix of the industrial floor system ensures the permanency of this biocidal additive even in the event of excessive surface wear. Polygiene® is effective following ingestion by living bacteria, whereupon metabolic activity within the organism is arrested. Atrophy of the organism follows, when subsequent decay allows re-release of the Polygiene® additive, so ensuring replenished activity at the floor surface.

CHEMICAL RESISTANCE SUMMARY

(comprehensive list available on request)

Hydrochloric Acid 10%	✓
Sulphuric Acid 50%	✓
Citric Acid 30%	✓
Acetic Acid 5%	✓
Lactic Acid 10%	✓
Acetone	✓
Methanol	✓
Sugar Syrups	✓
Caustic Soda	✓
Petrol	✓
Oil	✓
Detergents	✓

APPLICATION

Production Areas

- Medium traffic - dry process	
- Heavy traffic - dry process	✓
- Wet /spillage areas	✓
- Kitchens/Pot Wash areas	✓
- Packaging areas	

Warehouses

- Loading bays	
Laboratories/Quality Control	
Dispensaries	✓
Cold Stores/Freezers	
Solvent/Chemical Stores	
Battery Charging Areas	

MONDÉCO TZ



Description

Mondéco TZ is a high temperature resistant, steam cleanable 8mm polyurethane terrazzo finish, ideal for pharmaceutical, food and chemical process areas, where the floor area is subjected to hot fluid spillage, steam cleaning, heavy traffic, impact and chemical attack.

Benefits

- Hygienic and safe - incorporates Polygiene® - the anti microbial additive
- Very high chemical resistance
- Attractive decorative terrazzo finish
- Easy to clean
- High temperature resistance
- Expert installation - applied by trained and approved contractors
- Antistatic grade available for dry powder processing areas

HEAVY DUTY POLYURETHANE TERRAZZO FOR MAXIMUM CLEANABILITY AND HYGIENE

Application

Production Areas - Heavy traffic
- Aesthetic requirements
- Strong chemicals

Laboratories
Clean rooms
Tablet production



REFERENCE LIST

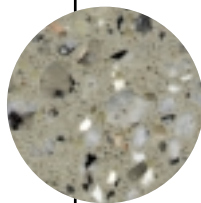
PHARMACEUTICAL INDUSTRY

Lever Brothers	Boots
Pfizer	Convatec Ltd
Baxter Healthcare	Bayer
Astra Zeneca	Roche Pharmaceuticals
Schering Plough	Cox Pharmaceutical
Glaxo Smith Kline	Wyeth Laboratories
Merck	

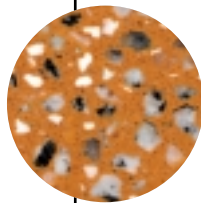


Polygiene®
Safer to Touch

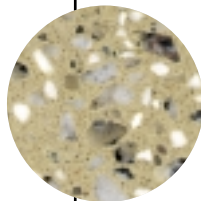
FINISHES



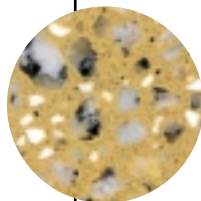
Pomegranate



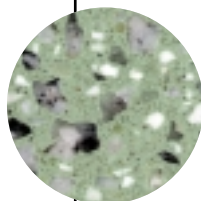
Cherry



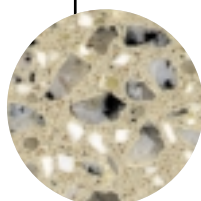
Hazelnut



Mango



Avocado



Almond

COLOUR

FOOD INDUSTRY

Nestlé	RHM
Courage	Mars
Northern Foods	Bovril
Cadburys	Tryton Foods
Lyons Bakery	Grants
McVities	Coca Cola
Fox's Biscuits	Hazelwood Foods
Terry Suchards	
Wrigleys	

TECHNICAL DATA

PHYSICAL PROPERTIES

Compressive Strength to BS6319 (N/mm ²)	>55
Flexural Strength to BS6319 (N/mm ²)	>20
Tensile Strength to BS6319 (N/mm ²)	8
Impact Resistance by BRE Screed Tester	<0.5mm
Temperature Resistance (°C)	
Dry	-40 to 120
Wet	105 max
Water absorption to Camden test TSSH008	Nil
Surface Resistivity to BS2050	
Std Grade	N/A
A/S Grade	<1.0x10 ⁸ ohms
Abrasion Resistance by Taber (Loss per 1000 cycles in mg/1000g load).	
H22 Wheel to ASTM D4060	25mg
Coefficient of Thermal Expansion to ASTM C531	1.7x10 ⁻⁵ °C
Thermal Conductivity to BS874 W/m°C	1.20
Mixed Bulk Density	2.10
Adhesion to primed concrete by direct pull (N/mm ²)	>1.50 cohesive concrete failure

MICROBIAL / FUNGAL RESISTANCE

BACTERIA	
Staphylococcus aureus	✓
Escherichia coli	✓
Salmonella choleraesuis	✓
Listeria welshimeri	✓
CONTACT INHIBITION	100%

A.A.T.C.C. Test Method 147 - 1993:
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CHEMICAL RESISTANCE SUMMARY (comprehensive list available on request)

Hydrochloric Acid 10%	✓
Sulphuric Acid 50%	✓
Citric Acid 30%	✓
Acetic Acid 5%	✓
Lactic Acid 10%	✓
Acetone	✓
Methanol	✓
Sugar Syrups	✓
Caustic Soda	✓
Petrol	✓
Oil	✓
Detergents	✓

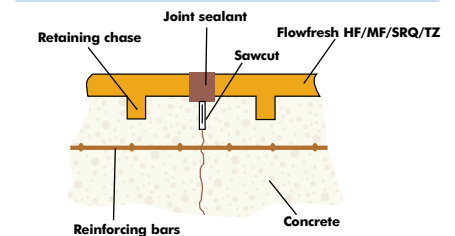
APPLICATION

Production Areas	
- Medium traffic - dry process	✓
- Heavy traffic - dry process	✓
- Clean rooms	✓
- Wet /spillage areas	
- Kitchens/Pot Wash areas	
- Packaging areas	
Warehouses	
- Loading bays	
Laboratories/Quality Control	✓
Dispensaries	✓
Cold Stores/Freezers	
Solvent/Chemical Stores	
Battery Charging Areas	

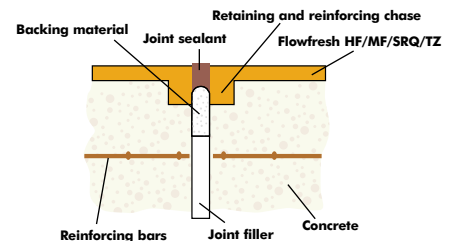
Colours may vary due to the limitation in the printing process

TYPICAL DETAILS

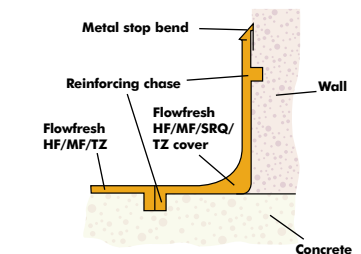
Typical (induced) movement joint



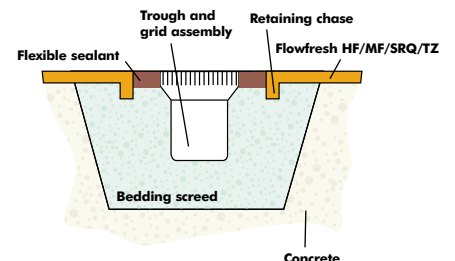
Typical (expansion) movement joint



Typical floor to wall detail



Typical drainage channel arrangement



SUCCESSFUL PROJECTS

"We had the utmost faith and confidence that Flowcrete could meet our needs. Our confidence was justified with a floor which underpins our own quality culture."

Bob Wakefield, Project Engineer, McVities

"We knew of the reputation of Flowcrete and relied heavily on their knowledge and the fact that they have an approved network of contractors."

Tim Stafford, Project Manager Tryton Foods

"Although the original floor met with all the relevant food act regulations, it hadn't been updated for 15 years. Flooring for the food industry had seen many new products, and we wanted to pick up on this and improve health and hygiene in the production areas Flowcrete was the ideal choice for us and the finished floor has not only bought us up to date, it looks great too."

Mr. Lyn, Owner, Cleone Foods

"By using different colours on the floor, we've been able to create very distinct easily understandable demarcation zones. The floor looks really good and we are very pleased with the result."

Theo Gavriel, Owner, Theo's



Flowcrete around the world

Argentina	Flowcrete Argentina	Tel: +54 11 4621 2991	Fax: +54 11 4481 1422	Email: argentina@flowcrete.com
Australia	Flowcrete Australia	Tel: +61 2 9651 4742	Fax: +61 2 9651 4742	Email: australia@flowcrete.com
Belgium	Flowcrete Corrosion Protection	Tel: +32 1575 6927	Fax: +32 1575 2894	Email: belgium@flowcrete.com
Brazil	Flowcrete South America	Tel: +55 11 3675 1873	Fax: +55 11 3675 1873	Email: brazil@flowcrete.com
China	Flowcrete Shanghai Ltd	Tel: +86 21 6236 0984	Fax: +86 21 6236 0476	Email: china@flowcrete.com
Czech Republic	Flowcrete Czech c/o Techfloor	Tel: +420 553 791 311	Fax: +420 553 791 311	Email: czechrep@flowcrete.com
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