





#### Meat Processing

## **FLOWFRESH** - antimicrobial flooring





Bakeries



Fish Processing



Drinks Industry



Pharmaceuticals

www.flowcrete.com

# welcome to Flowcrete for the world at your feet

THORNTONS, DERBYSHIRE

Systems

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<sup>®</sup> technology - killing microbes on contact



ELECTRICAL RESISTANCE (ESD GRADES IN HF, MF AND TZ) E-coli
 Staphylococcus Aureus
 MRSA
 Proteus Vulgaris
 Listeria Weshimen

Pseudomonas Aeruginosa
 Salmonella Typhi
 Streptococcus Pyogenes
 Enterococcus Faecalis

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.

To further enhance their performance in strict hygiene controlled environments, Flowcrete's range of polyurethane flooring systems incorporate Polygiene<sup>®</sup> performance silver based antimicrobial 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.





### SLIP RESISTANT POLYURETHANE SCREED



#### 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<sup>®</sup> 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 PHARMACEUTICAL 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

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



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#### **TECHNICAL DATA**

#### PHYSICAL PROPERTIES

PHISICAL PROPERTIES	
Compressive Strength to BS6319 (N/mm <sup>2</sup> )	>50
Flexural Strength to BS6319 (N/mm <sup>2</sup> )	20
Tensile Strength to BS6319 (N/mm <sup>2</sup> )	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 <sup>®</sup> 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 <sup>.5</sup> °C
Thermal Conductivity to BS874 W/m°C	1.20
Mixed Bulk Density	2.10
Adhesion to primed concrete by direct	
pull (N/mm <sup>2</sup> )	>1.50
	cohesive
	concrete failure

#### MICROBIAL / FUNGAL CONTROL

BACTERIA		
Staphylococcus aureus	<b>v</b>	
Ecoli	<b>v</b>	
Salmonella choleraesuis	<b>v</b>	
Listeria welshimeri	<b>v</b>	
CONTACT INHIBITION	100%	

A.A.T.C.C. Test Method 147 - 1993: The inclusion of Polygiene<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> additive, so ensuring replenished activity at the floor surface.

#### CHEMICAL RESISTANCE SUMMARY

(comprehensive list available on request)	
Hydrochloric Acid 10%	<b>v</b>
Sulphuric Acid	
25%	<ul> <li>✓</li> </ul>
Citric Acid	
10%	<ul> <li>✓</li> </ul>
Acetic Acid 5%	<b>v</b>
Lactic Acid 10%	<b>v</b>
Acetone	<b>v</b>
Methanol	<b>v</b>
Sugar Syrups	<b>v</b>
Caustic Soda	<b>v</b>
Petrol	<b>v</b>
Oil	<b>v</b>
Detergents	<b>v</b>

#### APPLICATION

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

Colours may vary due to the limitation in the printing process

### FOR HEAVY TRAFFIC AREAS





### FLOWFRESH MF



Safer to Touch



### **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

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Dark Grey

Blue



### **REFERENCE LIST**

#### PHARMACEUTICAL INDUSTRY

**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

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

## www.flowcrete.com

#### **TECHNICAL DATA**

#### PHYSICAL PROPERTIES

FILISICAL FROFERILES	
Compressive Strength to BS6319 (N/mm <sup>2</sup> )	> 50
Flexural Strength to BS6319 (N/mm <sup>2</sup> )	20
Tensile Strength to BS6319 (N/mm <sup>2</sup> )	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 <sup>®</sup> 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 <sup>-5</sup> °C
Thermal Conductivity to BS874 W/m°C	0.85
Mixed Bulk Density	1.95
Adhesion to primed concrete by direct	
pull (N/mm <sup>2</sup> )	>1.50
	cohesive
	concrete failure

#### MICROBIAL / FUNGAL CONTROL

BACTERIA		
Staphylococcus aureus	<ul> <li>✓</li> </ul>	
Ecoli	<b>v</b>	
Salmonella choleraesuis	<b>v</b>	
Listeria welshimeri	<b>v</b>	

100%

#### CONTACT INHIBITION

A.A.T.C.C. Test Method 147 - 1993: The inclusion of Polygiene<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> additive, so ensuring replenished activity at the floor surface.

#### CHEMICAL RESISTANCE SUMMARY

(comprehensive list available on request)	
Hydrochloric Acid 10%	<ul> <li>✓</li> </ul>
Sulphuric Acid	
25%	<ul> <li>✓</li> </ul>
Citric Acid	
10%	<ul> <li>✓</li> </ul>
Acetic Acid 5%	<ul> <li>✓</li> </ul>
Lactic Acid 10%	<ul> <li>✓</li> </ul>
Acetone	<b>v</b>
Methanol	<b>v</b>
Sugar Syrups	<b>v</b>
Caustic Soda	<b>v</b>
Petrol	<b>v</b>
Oil	<ul> <li>✓</li> </ul>
Detergents	<b>v</b>

#### APPLICATION

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

Colours may vary due to the limitation in the printing process

Mid Grey Cream Ochre Mustard Red OLOUR υ





### 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<sup>®</sup> - 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





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#### **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



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#### **TECHNICAL DATA**

#### PHYSICAL PROPERTIES

FILISICAL FROFERILES	
Compressive Strength to BS6319 (N/mm <sup>2</sup> )	>50
Flexural Strength to BS6319 (N/mm <sup>2</sup> )	20
Tensile Strength to BS6319 (N/mm <sup>2</sup> )	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 <sup>2</sup> )	>1.50
	cohesive
	concrete failure

#### **MICROBIAL / FUNGAL RESISTANCE**

BACTERIA	
Staphylococcus aureus	<b>v</b>
Escherichia coli	<b>v</b>
Salmonella choleraesuis	<b>v</b>
Listeria welshimeri	<b>v</b>
CONTACT INHIBITION	100%

A.A.T.C.C. Test Method 147 - 1993: The inclusion of Polygiene<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> additive, so ensuring replenished activity at the floor surface.

#### CHEMICAL RESISTANCE SUMMARY

(comprehensive list available on requ	uest)
Hydrochloric Acid 10%	<ul> <li></li> </ul>
Sulphuric Acid	
50%	<ul> <li>✓</li> </ul>
Citric Acid	
30%	~
Acetic Acid 5%	<ul> <li>✓</li> </ul>
Lactic Acid 10%	<ul> <li></li> </ul>
Acetone	<ul> <li>✓</li> </ul>
Methanol	<ul> <li>✓</li> </ul>
Sugar Syrups	<ul> <li>✓</li> </ul>
Caustic Soda	<b>v</b>
Petrol	<ul> <li>✓</li> </ul>
Oil	<ul> <li>✓</li> </ul>
Detergents	<b>v</b>

#### APPLICATION

Production Areas - Medium traffic - dry process	
- Heavy traffic - dry process	V
- Wet /spillage areas	~
- Kitchens/Pot Wash areas	<b>v</b>
- Packaging areas	
Warehouses	
- Loading bays	
Laboratories/Quality Control	
Dispensaries	<b>v</b>
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<sup>®</sup> - the anti microbial additive
- Very high chemical resistance
- Attractive decorative terrazzo finish
- Easy to clean
- High temperature resistance
   Event installation analised by
- 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
  - onong chemice

Laboratories Clean rooms Tablet production

#### **REFERENCE LIST**

#### PHARMACEUTICAL INDUSTRY

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



#### FOOD INDUSTRY

Nestlé Courage Northern Foods Cadburys Lyons Bakery **McVities** Fox's Biscuits Terry Suchards Wrigleys

### RHM Mars Bovril Tryton Foods Grants Coca Cola Hazelwood Foods

### **TECHNICAL DATA**

Compressive Strength to BS6319 (N/mm <sup>2</sup> )       >55         Flexural Strength to BS6319 (N/mm <sup>2</sup> )       >20         Tensile Strength to BS6319 (N/mm <sup>2</sup> )       8         Impact Resistance by BRE Screed Tester       <0.5mm         Temperature Resistance (°C)       Dry       -40 to 120         Wet       105 max       Woter absorption to Camden         test TSSH008       Nil       Surface Resistivity to BS2050         Surface Resistivity to BS2050       Std Grade       N/A         A/S Grade       <1.0x10 <sup>s</sup> 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 <sup>so</sup> C       Thermal Conductivity to BS874 W/m°C       1.20         Mixed Bulk Density       2.10       Adhesion to primed concrete by direct       >1.50       cohesive         pull (N/mm <sup>2</sup> )       >1.50       cohesive </th <th>PHYSICAL PROPERTIES</th> <th></th>	PHYSICAL PROPERTIES	
$\begin{array}{l lllllllllllllllllllllllllllllllllll$		>55
Impact Resistance by BRE Screed Tester       <0.5mm	0	>20
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 <sup>s</sup> 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 <sup>so</sup> C         Thermal Conductivity to BS874 W/m°C       1.20         Mixed Bulk Density       2.10         Adhesion to primed concrete by direct       >1.50         pull (N/mm <sup>2</sup> )       >1.50	Tensile Strength to BS6319 (N/mm <sup>2</sup> ) 8	
Dry     -40 to 120       Wet     105 max       Water absorption to Camden     105 max       test TSSH008     Nil       Surface Resistivity to BS2050     Std Grade       A/S Grade     1.0x10 <sup>a</sup> 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 <sup>so</sup> C       Thermal Conductivity to BS874 W/m°C     1.20       Mixed Bulk Density     2.10       Adhesion to primed concrete by direct     >1.50       pull (N/mm <sup>2</sup> )     >1.50	Impact Resistance by BRE Screed Tester	<0.5mm
Wet     105 max       Water absorption to Camden     105 max       test TSSH008     Nil       Surface Resistivity to BS2050     Std Grade       A/S Grade     N/A       A/S Grade     <1.0x10 <sup>a</sup> 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       ASTM C531     1.7x10 <sup>so</sup> C       Thermal Conductivity to BS874 W/m°C     1.20       Mixed Bulk Density     2.10       Adhesion to primed concrete by direct     >1.50       pull (N/mm <sup>2</sup> )     >1.50	Temperature Resistance (°C)	
Water absorption to Camden         test TSSH008       Nil         Surface Resistivity to BS2050       Std Grade         Std Grade       N/A         A/S Grade       <1.0x10 <sup>a</sup> 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         ASTM C531       1.7x10 <sup>so</sup> C         Thermal Conductivity to BS874 W/m°C       1.20         Mixed Bulk Density       2.10         Adhesion to primed concrete by direct       >1.50         pull (N/mm <sup>2</sup> )       >1.50	Dry	-40 to 120
test TSSH008     Nil       Surface Resistivity to BS2050     Std Grade       A/S Grade     <1.0x10 <sup>s</sup> 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       ASTM C531     1.7x10 <sup>so</sup> C       Thermal Conductivity to BS874 W/m°C     1.20       Mixed Bulk Density     2.10       Adhesion to primed concrete by direct     >1.50       pull (N/mm <sup>2</sup> )     >1.50	Wet	105 max
Surface Resistivity to BS2050 Std Grade N/A A/S Grade <1.0x10 <sup>a</sup> 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 <sup>so</sup> C Thermal Conductivity to BS874 W/m <sup>o</sup> C 1.20 Mixed Bulk Density 2.10 Adhesion to primed concrete by direct pull (N/mm <sup>2</sup> ) >1.50 cohesive	Water absorption to Camden	
Std Grade     N/A       A/S Grade     <1.0x10 <sup>s</sup> ohms       Abrasion Resistance by Taber (Loss per     1000 cycles in mg/1000g load).       H22 Wheel to ASTM D4060     25mg       Coefficient of Thermal Expansion to     25mg       ASTM C531     1.7x10 <sup>so</sup> C       Thermal Conductivity to BS874 W/m°C     1.20       Mixed Bulk Density     2.10       Adhesion to primed concrete by direct     >1.50       pull (N/mm <sup>2</sup> )     >1.50	test TSSH008	Nil
A/S Grade     <1.0x10° ohms	Surface Resistivity to BS2050	
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 <sup>so</sup> C         Thermal Conductivity to BS874 W/m°C       1.20         Mixed Bulk Density       2.10         Adhesion to primed concrete by direct       >1.50         pull (N/mm <sup>2</sup> )       >1.50	Std Grade	N/A
1000 cycles in mg/1000g load).           H22 Wheel to ASTM D4060         25mg           Coefficient of Thermal Expansion to         ASTM C531           ASTM C531         1.7x10 <sup>so</sup> C           Thermal Conductivity to BS874 W/m°C         1.20           Mixed Bulk Density         2.10           Adhesion to primed concrete by direct pull (N/mm <sup>2</sup> )         >1.50 cohesive	A/S Grade	<1.0x10 <sup>8</sup> ohms
H22 Wheel to ASTM D4060     25mg       Coefficient of Thermal Expansion to     ASTM C531       ASTM C531     1.7x10 <sup>so</sup> C       Thermal Conductivity to BS874 W/m°C     1.20       Mixed Bulk Density     2.10       Adhesion to primed concrete by direct pull (N/mm²)     >1.50 cohesive	Abrasion Resistance by Taber (Loss per	
Coefficient of Thermal Expansion to       ASTM C531     1.7x10 <sup>5</sup> °C       Thermal Conductivity to BS874 W/m°C     1.20       Mixed Bulk Density     2.10       Adhesion to primed concrete by direct     >1.50       pull (N/mm <sup>2</sup> )     >1.50	1000 cycles in mg/1000g load).	
ASTM C531     1.7x10 <sup>5</sup> °C       Thermal Conductivity to BS874 W/m°C     1.20       Mixed Bulk Density     2.10       Adhesion to primed concrete by direct pull (N/mm <sup>2</sup> )     >1.50 cohesive	H22 Wheel to ASTM D4060	25mg
Thermal Conductivity to BS874 W/m°C       1.20         Mixed Bulk Density       2.10         Adhesion to primed concrete by direct pull (N/mm²)       >1.50 cohesive	Coefficient of Thermal Expansion to	
Mixed Bulk Density     2.10       Adhesion to primed concrete by direct pull (N/mm <sup>2</sup> )     >1.50 cohesive	ASTM C531	1.7x10 <sup>-5</sup> °C
Adhesion to primed concrete by direct pull (N/mm <sup>2</sup> ) >1.50 cohesive	Thermal Conductivity to BS874 W/m°C	1.20
pull (N/mm <sup>2</sup> ) >1.50 cohesive	Mixed Bulk Density	2.10
cohesive	Adhesion to primed concrete by direct	
	pull (N/mm <sup>2</sup> )	>1.50
concrete failure		cohesive
		concrete failure

#### **MICROBIAL / FUNGAL RESISTANCE**

BACTERIA	
Staphylococcus aureus	<b>v</b>
Escherichia coli	<b>v</b>
Salmonella choleraesuis	<b>v</b>
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  $^{\circledast}$  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  $^{\circledast}$  additive, so ensuring replenished activity at the floor surface.

#### CHEMICAL RESISTANCE SUMMARY

(comprehensive list available on r	equest)
Hydrochloric Acid 10%	<b>v</b>
Sulphuric Acid	
50%	v
Citric Acid	
30%	v
Acetic Acid 5%	✓
Lactic Acid 10%	✓
Acetone	<b>v</b>
Methanol	<b>v</b>
Sugar Syrups	<b>v</b>
Caustic Soda	<b>v</b>
Petrol	<b>v</b>
Oil	<b>v</b>
Detergents	<b>v</b>

#### APPLICATION

Production Areas		
- Medium traffic - dry process	~	
- Heavy traffic - dry process	<ul> <li>✓</li> </ul>	
- 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		

#### 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 flood 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."





#### Flowcrete around the world

Argentina Australia Belgium Brazil Ching **Czech Republic** Denmark Estonia France Germany Hong Kong South Korea Latvia Malaysia **New Zealand** Norway Poland Singapore South Africa Sweden Switzerland Thailand UAE UK USΔ

Flowcrete Argentina Flowcrete Australia Flowcrete Corrosion Protection Flowcrete South America Flowcrete Shanghai Ltd Flowcrete Czech c/o Techfloor Flowcrete Denmark Flowcrete Estonia Flowcrete France c/o Solve Flowcrete Germany Flowcrete (Hong Kong) Ltd Flowcrete Korea **Flowcrete Baltics** Flowcrete Asia Sdn Bhd Flowcrete New Zealand Flowcrete Norway AS Flowcrete Polska Sp. z.o.o. Flowcrete Singapore Pte Ltd Flowcrete SA (Pty) Ltd Flowcrete Sweden AB Flowcrete Switzerland Flowcrete Thailand Flowcrete Middle East FZCO Flowcrete UK Ltd Flowcrete North America Inc.

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