



FLOWFRESH FLOORING

High Performance Antimicrobial Flooring for:

- ✓ Food & Beverage
- ✓ Meat & Seafood
- ✓ Bottling Facilities
- ✓ Food Preparation
- ✓ Healthcare
- ✓ Pharmaceutical











Welcome to Flowcrete

Flowcrete is a world leader in the manufacture of seamless resin flooring systems for application in both industrial and commercial environments.

Flowcrete has a fresh approach to flooring and is constantly looking to introduce world-class systems, which offer clients a number of performance advantages while at the same time make floors much more than a surface to walk on.

Flowcrete is dedicated to innovating sustainable flooring materials and using the earth's natural resources responsibly across all operations to ensure a more positive impact on the construction industry and a greener world at our feet.

Flowcrete in North and South America is manufactured by Key Resin Company in Batavia, Ohio. Together serving expanding business opportunities across the continent including the USA, Canada, Latin America and the Caribbean. With clients including Coca Cola, L'Oreal, Cargil, Nestle, NASA, GE and Southwest Airlines, Flowcrete continues to develop a significant presence in the Americas' polymer flooring market.

HACCP International Certified Hygienic Flooring



Flowfresh is a line of HACCP International certified, antimicrobial treated cementitious urethane flooring designed predominantly for use in hygiene industries.

Containing a silver-ion based antimicrobial additive, Polygiene®, Flowfresh systems complement floor cleaning and hygiene practices between wash cycles by protecting the surface from degradation caused by microbial growth.

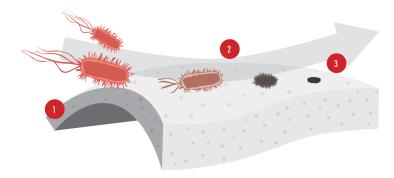
Silver is a natural element known for its ability to purify and protect from bacterial infections – and provides an environmentally friendly alternative to chemically manufactured antimicrobials.

This technology remains active for the lifetime of the floor - even when damaged or worn - unlike traditional coatings or surface treatments.

Polygiene®: How Does It Work?

Polygiene® is a natural silver-ion antimicrobial that is homogeneously distributed throughout the Flowfresh cementitious urethane material.

Polygiene® is not a substitute for cleaning, but should be regarded as a complement to regular hygiene and sanitization practices.



- The silver ions are homogeneously distributed throughout the floor.
- The silver ions migrate to the surface.
- They protect the surface from degradation caused by microbial growth.

Flowfresh Application Suitability



Food & Beverage



Meat, Poultry & Seafood



Bottling Plants & Brewhouses



Food Preparation



Healthcare Environments



Pharmaceutical & Laboratories

Resistance Chart

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

^{*}A chemical resistance chart is available on request.



Flowfresh HF & RT (1/4" - 3/8")

Rake or trowel-applied, heavy-duty and HACCP International certified antimicrobial treated cementitious urethane mortar.

Flowfresh HF & RT provide a durable, anti-slip finish, which is resistant to thermal shock, steam cleaning and moisture vapor transmission.



Polygiene®:

Contains a silver ion antimicrobial additive to protect the surface.



Chemical Resistant:

Protects against food by-products, fats, hot oils, blood, sugar and acids.



Slip Resistant:

Positively textured profile to minimize slip risks in wet or damp areas.



Temperature Resistant:

Resistant to temperatures of up to 250°F and suitable for steam cleaning.



Unaffected by MVT:

Allows moisture to move through the material at a safe rate.

Standard Colors:



Technical Profile

COVERAGE RATES: (1	HF: 66 LB UNI	T RT: 55 LB UNIT)
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HF: 24 sq ft/unit at 1/4" or 17 sq ft/unit at 3/8" RT: 21 sq ft/unit at 1/4" or 14 sq ft/unit at 3/8"

COMPRESSIVE STRENGTH:

ASTM C 579 8,000 psi

TENSILE STRENGTH:

ASTM C 307 1,450 psi

COEFFICIENT OF THERMAL EXPANSION:

ASTM C 531 1.1 x 10⁻⁵in/in/°F

FLEXURAL STRENGTH:

ASTM C 580 2,900 psi

ABRASION RESISTANCE:

ASTM D 4060 CS 17 Wheel, 1000 cycles

HF: 0.05g loss RT: 0.07g loss

ADHESION:

ASTM D 4541

400 psi (100% concrete failure)

COEFFICIENT OF FRICTION:

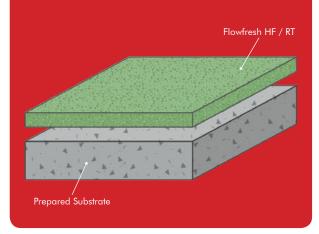
ASTM D 2047

Full Chemical Cure

Exceeds ADA recommendations

TEMPERATURE RESISTANCE:

Continuous Exposure:	220°F			
Intermittent Spills:	250°F			
VOC:	HF: 5 g/l RT: 6 g/l			
SPEED OF CURE:	50°F	70°F	90°F	
Light Traffic	12-14 hrs	6-8 hrs	3-5 hrs	
Full Traffic	24-36 hrs	12-16 hrs	8-10 hrs	



Flowfresh SR & SRQ (1/4" - 5/16")

Slurry-broadcast and HACCP International certified antimicrobial treated cementitious urethane floor systems.

Flowfresh SR & SRQ (quartz) provide a positively textured, hardwearing and vibrantly colored floor finish, which is resistant to thermal shock and moisture vapor transmission.



Polygiene®:

Contains a silver ion antimicrobial additive to protect the surface.



Slip Resistant:

Positively textured profile to minimize slip risks in wet or damp areas.



Temperature Resistant:

Resistant to temperatures of up to 250°F and suitable for steam cleaning.



Unaffected by MVT:

Allows moisture to move through the material at a safe rate.

Flowfresh SR Standard Colors:



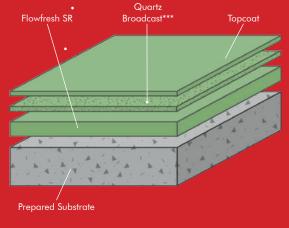


Flowfresh SRQ Standard Colors:



Technical Profile

24 sq ft/unit at 3/16" (yield 18 sq ft/unit at 1/4" (yieldi	ng 5/16″ f	inishe	ed flo	oor)
COMPRESSIVE STRENGT	H:			
ASTM C 579	8,128 ps	si		
TENSILE STRENGTH:				
ASTM C 307	1,450 ps	si		
COEFFICIENT OF THERM	AL EXPAN	SION		
ASTM C 531	1.5 x 10	-⁵in/ir	n/°F	
FLEXURAL STRENGTH:				
ASTM C 580	2,900 ps	si		
ABRASION RESISTANCE:				
ASTM D 4060 CS 17 Wheel, 1000 cycles	1 (1) (1)5g locc			
ADHESION:				
ASTM D 4541	400 psi (100% concrete failure)			
COEFFICIENT OF FRICTION:				
ASTM D 2047	ASTM D 2047 Exceeds ADA recommendations			
TEMPERATURE RESISTAN	NCE:*			
	SR*		SRC	Q**
Continuous Exposure:	200°F		180)°F
Intermittent Spills:	250°F		210)°F
VOC:	7 g/l			
SPEED OF CURE:	50°F	70	°F	90°F
Light Traffic	12-14 hrs	6-8	hrs	3-5 hrs
Full Traffic	24-36 hrs	12-1	6 hrs	8-10 hrs
Full Chemical Cure	5-7 days	3-5	days	1-2 days



when using Flowfresh FC as the topcoat. when using Flowcoat CR as the topcoat. ***Light colored quartz may require an additional broadcast. Consultyour sales representative

Flowfresh MF (3/16" - 1/4")

A self-leveling, HACCP International certified, smooth, matte antimicrobial treated cementitious urethane floor system.

Flowfresh MF provides a vibrantly colored, easy clean floor finish, which is suited to use in medium duty dry-service zones including packaging areas.



Polygiene®:

Contains a silver ion antimicrobial additive to protect the surface.



Easily Cleaned:

Minimal surface joints ensure the floor is easy to clean and sanitize.



Chemical Resistant:

Protects against food by-products, fats, hot oils, blood, sugar and acids.



MVT Resistant:

Resistant to 12 lbs of moisture vapor (12 lbs / 1,000 sq ft / 24 hrs).



Safety Yellow

Low Odor:

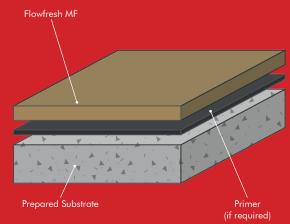
Low odor installation, non-toxic, and phthalate-free formulation.

Standard Colors:



Technical Profile

COVERAGE RATES: (40 L	B UNII)			
22 sq ft/unit at 3/16" 17 sq ft/unit at 1/4"				
COMPRESSIVE STRENGTI	1 :			
ASTM C 579	>7,250	psi		
TENSILE STRENGTH:				
ASTM C 307	1,740 ps	si		
COEFFICIENT OF THERM	AL EXPAN	SION:		
ASTM C 531	2.2 x 10	-⁵in/in/°F		
FLEXURAL STRENGTH:				
ASTM C 580	ASTM C 580 2,900 psi			
ABRASION RESISTANCE:				
ASTM D 4060 CS 17 Wheel, 1000 cycles 0.07g loss				
ADHESION:				
ASTM D 4541	400 psi (100% concrete failure)			
COEFFICIENT OF FRICTION:				
ASTM D 2047 Exceeds ADA recommendations				
TEMPERATURE RESISTAN	ICE:			
Continuous Exposure:	180°F			
Intermittent Spills:	200°F			
VOC:	7 g/l			
SPEED OF CURE:	50°F	70°F	90°F	
Light Traffic	12-14 hrs	6-8 hrs	3-5 hrs	
Full Traffic	24-36 hrs	12-16 hrs	8-10 hrs	
Full Chemical Cure 5-7 days 3-5 days 1-2 days				



Flowfresh SL (1/8" - 3/16")

A slurry-broadcast, cost effective and HACCP International certified antimicrobial treated cementitious urethane floor system.

Flowfresh SL provides an excellent alternative to traditional epoxy floor screeds with enhanced durability and anti-slip properties.



Polygiene®:

Contains a silver ion antimicrobial additive to protect the surface.



Decorative:

Available in a wide-range of decorative patterns and finishes.



Lifecycle Cost Efficiencies:

Offers significant lifecycle cost savings compared to tile or acid brick.



MVT Resistant:

Resistant to 12 lbs of moisture vapor (12 lbs / 1,000 sq ft / 24 hrs).



Low Odor:

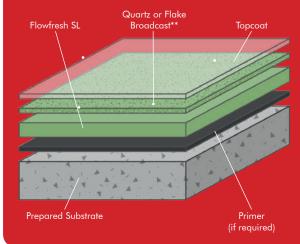
Low odor installation, non-toxic, and phthalate-free formulation.

Standard Colors:



Technical Profile

COVERAGE RATES: (61 L	B UNIT)		
94 sq ft/unit at 3/32" (yield 63 sq ft/unit at 1/8" (yieldi			
COMPRESSIVE STRENGTH	 :		
ASTM C 579	>7,250	psi	
TENSILE STRENGTH:			
ASTM C 307	1,740 ps	si	
COEFFICIENT OF THERMA	AL EXPAN	SION:	
ASTM C 531	2.7 x 10	-⁵in/in/°F	
FLEXURAL STRENGTH:			
ASTM C 580	2,900 ps	si	
ABRASION RESISTANCE:			
ASTM D 4060 CS 17 Wheel, 1000 cycles	0.05g loss		
ADHESION:			
ASTM D 4541	400 psi (100% concrete failure)		
COEFFICIENT OF FRICTIO	N:		
ASTM D 2047	Exceeds ADA recommendations		
TEMPERATURE RESISTAN	ICE:*		
Continuous Exposure:	180°F		
Intermittent Spills:	220°F		
VOC:	9 g/l		
SPEED OF CURE:	50°F	70°F	90°F
Light Traffic	12-14 hrs	6-8 hrs	3-5 hr
Full Traffic	24-36 hrs	12-16 hrs	8-10 h
Full Chemical Cure	5-7 days	3-5 days	1-2 day



*Temperature resistance values shown apply when using Flowfresh FC as the topcoat. **Light colored quartz may require an additional broadcast. Consult your sales representative.

Flowfresh Cove (1/8" - 3/16")

A trowel-applied, chemical resistant and HACCP International certified antimicrobial treated cementitious urethane cove mortar.

Flowfresh Cove provides a hardwearing cove base, which ensures a seamless, hygienic transition between the floor and wall.



Polygiene®:

Contains a silver ion antimicrobial additive to protect the surface.



Chemical Resistant:

Protects against food by-products, fats, hot oils, blood, sugar and acids.



Lifecycle Cost Efficiencies:

Offers significant lifecycle cost savings compared to tile or acid brick.



Easily Maintained:

Can be patch-repaired in position to minimize renovation costs.





Technical Profile

COVERAGE RATES: (32 LB UNIT)

16 sq ft/unit or 48 linear ft/unit at 4" high at 1/8" 11 sq ft/unit or 33 linear ft/unit at 4" high at 3/16"

COMPRESSIVE STRENGTH:

ASTM C 579

TENSILE STRENGTH:

ASTM C 307 1,450 psi

COEFFICIENT OF THERMAL EXPANSION:

ASTM C531 1.1 x 10⁻⁵in/in/°F

FLEXURAL STRENGTH:

ASTM C 580 2,900 psi

ABRASION RESISTANCE:

ASTM D 4060 CS 17 Wheel, 1000 Cycles

0.079g loss

8,000 psi

ADHESION:

ASTM D 4541

(100% concrete failure)

TEMPERATURE RESISTANCE:

220°F Continuous Exposure:

Intermittent Spills: 250°F

VOC: 5 g/l

Standard Colors:









Tan





Green

Dark Grey



Blue

Black









Safety Yellow

The applied colors may differ from the examples shown. General wear on Safety Yellow may be more visible. For a full color chart and samples, contact your local Flowcrete office.





Flowfresh IF (3/8" - 1/2")

An exceptionally heavy duty, trowel applied and HACCP International certified iron filled cementitious urethane mortar.

Flowfresh IF provides a durable and finely textured floor finish, which is resistant to heavy impact, thermal shock and moisture vapor transmission.



Polygiene®:

Contains a silver ion antimicrobial additive to protect the surface.



Slip Resistant:

Positively textured profile to minimize slip risks in wet or damp areas.



Temperature Resistant:

Resistant to temperatures of up to 250°F and suitable for steam cleaning.



Chemical Resistant:

Protects against food by-products, fats, hot oils, blood, sugar and acids.

Technical Profile

COVERAGE RATES: (62 LB UNIT)			
14 sq ft/unit at 3/8" 10 sq ft/unit at 1/2"			
COMPRESSIVE STRENGTH:			
ASTM C 579	8,000 psi		
TENSILE STRENGTH:			
ASTM C 307	1,450 psi		
COEFFICIENT OF THERMAL EXPANSION:			
ASTM C531 1.1 x 10 ⁻⁵ in/in/°F			
FLEXURAL STRENGTH:			
ASTM C 580 2,900 psi			
ABRASION RESISTANCE:			
ASTM D 4060 CS 17 Wheel, 1000 Cycles 0.05g loss			
ADHESION:			
ASTM D 4541 400 psi (100% concrete failure)			
TEMPERATURE RESISTANCE:			
Continuous Exposure:	220°F		
Intermittent Spills:	250°F		
VOC:	5 g/l		

Flowfresh Ultra Flakes (3/16"-1/4")

A hybrid flooring system combining antimicrobial treated cementitious urethane with a polyurea finish.

Flowfresh Ultra Flakes provides a decorative, colorful and UV-resistant finish with an enhanced speed of cure to ensure a fast return to service.



Polygiene®:

Contains a silver ion antimicrobial additive to protect the surface.



Decorative:

Available in a wide-range of decorative patterns and finishes.



Easily Cleaned:

Minimal surface joints ensure the floor is easy to clean and sanitize.



Lifecycle Cost Efficiencies:

Offers significant lifecycle cost savings over tile or acid brick finishes.



Low Odor:

Low odor installation, non-toxic, and phthalate-free formulation.

Standard Colors:



Scarlet



Domino



Green Bay



Cobblestone



Midnight

Ice Blue

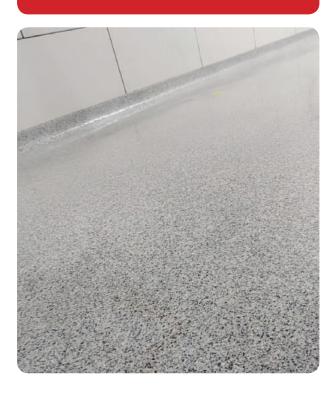


Desert Tan

Technical Profile

VOC:

iccillical Frome				
COVERAGE RATES: (40 LB UNIT)				
22 sq ft/unit at 3/16" 17 sq ft/unit at 1/4"				
COMPRESSIVE STRENGTH	H:			
ASTM C 579	>7,250 psi			
TENSILE STRENGTH:				
ASTM C 307	1,450 psi			
COEFFICIENT OF THERMAL EXPANSION:				
ASTM C531 2.7 x 10 ⁻⁵ in/in/°F				
FLEXURAL STRENGTH:				
ASTM C 580	2,900 psi			
ABRASION RESISTANCE:				
ASTM D 4060 CS 17 Wheel, 1000 Cycles	0.05g loss			
ADHESION:				
ASTM D 4541	400 psi (100% concrete failure)			
TEMPERATURE RESISTAN	ICE:			
Continuous Exposure:	165°F			
Intermittent Spills:	200°F			



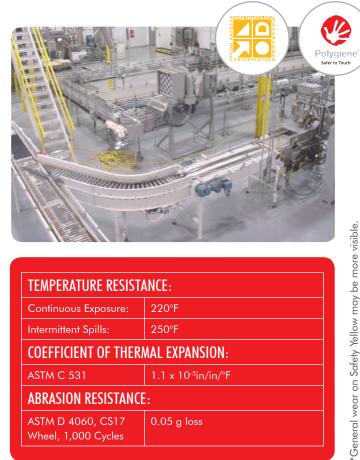
6 g/l

Flowfresh FC (1/4" - 3/8")

A pigmented, high performance, antimicrobial treated cementitious urethane floor sealer with a matte appearance. Applied as a lock coat sealer to any Flowfresh cement overlays that can be fully broadcast with aggregate.

Standard Colors:





TEMPERATURE RESISTANCE:		
Continuous Exposure:	220°F	
Intermittent Spills:	250°F	
COEFFICIENT OF THERMAL EXPANSION:		
ASTM C 531	1.1 x 10 ⁻⁵ in/in/°F	
ABRASION RESISTANC	E:	
ASTM D 4060, CS17 Wheel, 1,000 Cycles	0.05 g loss	



Flowfresh FCUV (1/4" - 3/8")

A pigmented, high performance, UV stable, semi-gloss, antimicrobial treated cementitious urethane floor sealer. Applied as a lock coat sealer to any Flowfresh cement overlays that can be fully broadcast with aggregate.

Standard Colors:

TEMPERATURE RESISTANCE:		
200°F		
250°F		
COEFFICIENT OF THERMAL EXPANSION:		
1.5 x 10 ⁻⁵ in/in/°F		
ABRASION RESISTANCE:		
0.05 g loss		

Cream	Tan	Khaki	Red
Green	Blue	Grey	Dark Grey
Black	Safety Yellow		



Flowfresh Flowfill (1/2"-2")

Flowfill Rapid setting urethane underlayment mortar. Applied by trowel or screed bar from 1/2" to 2".

Fast and efficient repair for damaged floor slabs. Also creates sloping on a floor where time doesn't allow the use of normal concrete or polymer floor mortars.



Polygiene®:

Contains a silver ion antimicrobial additive to protect the surface.



Unaffected by MVT:

Allows moisture to move through the material at a safe rate.



Temperature Resistant:

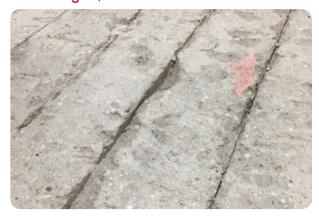
Resistant to temperatures of up to 250°F and suitable for steam cleaning.



Chemical Resistant:

Protects against food by-products, fats, hot oils, blood, sugar and acids.

Damaged/Untreated Concrete Floors



After Flowfill & Flowfresh Applications



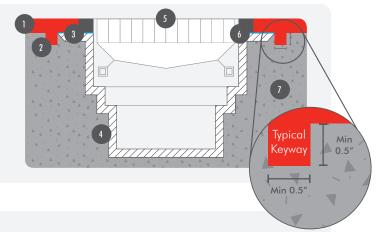
Complementary Products

	DESCRIPTION:	USES:
Flowfill	A rapid setting urethane cement underlayment mortar. Applied by trowel or screed bar from ½" to 3".	Used as a fast and efficient repair for damaged floor slabs. Also creates sloping on a floor where time doesn't allow the use of normal concrete or polymer floor mortars.
Flowprime	A 2-component, low viscosity, 100% solids, epoxy primer for cementitious substrates.	Used for priming of concrete, prior to overcoating industrial and commercial resin floor finishes.
Peran TCW	A 2-component, multi-purpose, 100% solids thixotropic epoxy resin system.	Used as a thixotropic vertical primer, grout coat, binder and sealer coat fo cove base.
Flowfresh FC	A cementitious urethane floor coating, designed to complement the Flowfresh antimicrobial flooring system.	Used to coat cementitious urethane floors to enhance slip resistance, while retaining chemical resistance and durability.
Flowfresh FCUV	High performance, UV stable, semi-gloss, cementitious urethane floor sealer.	Used as a UV stable sealer, which is applied as a finish to Flowfresh flooring systems.
Flowfresh SR Sealer	A 100% solids, solvent-free, semi-flexible, pigmented, cementitious urethane sealer for broadcast systems.	Used as a lock coat for Flowfresh SR or SL systems.
Flowcoat CR	A 100% solids, high performance, high chemical resistant epoxy coating.	Used as a topcoat for chemical resistant flooring applications.
Flowseal Ultra	A 2-component, very fast cure, gloss, UV stable, chemical resistant, polyurea coating.	Used as a fast curing UV stable sealer or receiving coat for flake and quartz broadcast systems.
Peran STC	A 100% solids, low viscosity, crystal clear epoxy resin binder and sealer that provides improved clarity and increased UV stability as compared to conventional epoxy coatings.	Used as a finish coat for color quartz aggregates or decorative flakes.
Flowflex UVR	A UV resistant, 100% solids, two component, heavy duty, semi-rigid polyurea joint sealant for industrial and commercial floors.	Used to fill construction joints to protect joint edges from spalling and to seal open joints. It creates a longe lasting floor, reducing the areas wher bacteria can hide and grow.

Typical Construction Joints

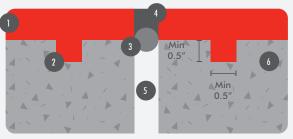
Typical Termination at Steel Floor Drain Cross Section:

- Flowfresh System
- 2 Typical Keyway
- 3 Bond Breaker Tape
- 4 Steel Drain Liner
- 5 Drain Cover
- 6 Joint Sealant
- 7 Existing Substrate



Typical Expansion Joint:

- Flowfresh System
- 2 Typical Keyway
- Backer Rod
- 4 Joint Sealant
- 5 Expansion Joint
- 6 Existing Substrate

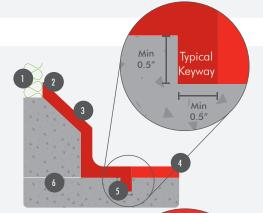


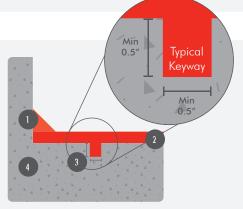
Typical Bottle Cove to Curb:

- 1 Insulation Panel
- 5 Typical Keyway
- 2 Sealant
- 3 Flowfresh CM (curb)
- 4 Flowfresh System
- 6 Existing Substrate

Typical 2" Cant Cove:

- Flowfresh CM (curb)
- 2 Flowfresh System
- 3 Typical Keyway
- 4 Existing Substrate











Flowcrete

Flowcrete is the world's leading manufacturer of seamless resin floor, wall and coving solutions as well as a range of other specialist coating technologies with operations across the globe.



latvia@flowcrete.com
bulgaria@flowcrete.com
denmark@flowcrete.com
france@flowcrete.com
germany@flowcrete.com
italy@flowcrete.com
norway@flowcrete.com
poland@flowcrete.com
romania@flowcrete.com
rus@flowcrete.com
spain@flowcrete.com
sweden@flowcrete.com
turkey@flowcrete.com
uae@flowcrete.com
uk@flowcrete.com

Africa

East Africa +254 20 682 1011 South Africa +27 31 461 3411

eastafrica@flowcrete.com southafrica@flowcrete.com

India

India +91 44 4202 9831

india@flowcrete.com

Asia Pacific

Australia	+61 7 3205 7115	austral
Bangladesh	+88 02 9857222	bangla
China	+86 10 8472 1912	china@
Hong Kong	+852 2795 0478	hongko
Indonesia	+62 21 252 3201	indone
Malaysia	+60 3 6277 9575	malays
Philippines	+63 917 514 2696	philipp
Singapore	+65 6848 7166	singap
Thailand	+66 2539 3424	thailan
Vietnam	+84 8 6287 0846	vietnan

australia@flowcrete.com bangladesh@flowcrete.com china@flowcrete.com hongkong@flowcrete.com indonesia@flowcrete.com malaysia@flowcrete.com philippines@flowcrete.com singapore@flowcrete.com thailand@flowcrete.com vietnam@flowcrete.com

North & South America

Manufactured +1 936 539 6700 by Key Resin Company

sales@keyresin.com

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