



Flowfresh MF (3 - 4 mm)

Antimicrobial self-levelling floor



Flowfresh MF antimicrobial flooring system is multi-component and self-levelling. It passed HACCP certification.

It contains polygiene® additive that inhibits bacteria, fungi and mold growth. Low odor application. Homogeneous finish provides excellent dimensional stability. Good chemical resistance, abrasion resistance and easy to clean up. It can be used in dry (or wet) areas of manufacturing, e.g. food factory, freezer, medicine manufacturing and chemical factory.



HACCP International certified:
Certified as food-safe for use in wet and dry food handling areas.



Hygienic:
Contains Polygiene®, an antimicrobial additive that inhibits bacteria growth.



High chemical resistance:
Protects against a majority of acids, bases, salts and cleaners during food/medicine manufacturing.



Abrasion resistance:
A hard-wearing and abrasion resistant finish to protect the substrate below.



Temperature resistant:
Homogeneous finish. Very good thermal shock properties and resistant to extreme temperatures.

Technical Profile*

FIRE RESISTANCE			
EN 13501-1	B _s - 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	15 N m		
WATER PERMEABILITY			
Nil - Karsten test (impermeable)			
VAPOUR PERMEABILITY			
ASTM E96:90	5g/m ² /24 hrs (at 4 mm thick)		
TEMPERATURE RESISTANCE			
From -5°C to 70°C (at 3 mm)	From -15°C to 90°C (at 4 mm)		
CHEMICAL RESISTANCE			
Acids, bases, salts and detergents			
ABRASION RESISTANCE			
Taber Abrader (1 kg load using CS17 wheels)	0.1g loss per 1000 cycles		
COMPRESSIVE STRENGTH			
EN 13892-2	>50 N/mm ²		
FLEXURAL STRENGTH			
EN 13892-2	>20 N/mm ²		
TENSILE STRENGTH			
BS 6319	7 N/mm ²		
COEFFICIENT OF THERMAL EXPANSION			
ASTM C531	5.70 x 10 ⁻⁵ °C ⁻¹		
BOND STRENGTH			
Greater than cohesive strength of 25 N/mm ² concrete. >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	10 days	7 days	6 days

* These figures are typical properties achieved in laboratory tests at 20°C and at 50% Relative Humidity.



Flowfresh MF (3 - 4 mm)

抗菌自流平優固地床



Flowfresh MF優固抗菌地床為多組份聚氨酯自流平系統，通過HACCP認證，及特有的Polygiene歐盟認證抗菌功能，可抑制細菌、真菌、黴菌生長。

環保材料施工無異味，同質透心的特性於冷熱交替時尺寸安定性佳，優異的耐化學性、耐髒汙易潔、耐磨損，適用於乾燥或半潮濕之生產區域，如食品廠、冷凍冷藏庫、醫療、化工廠等生產包裝場所。



HACCP國際認證：
取得食品安全認證，可用於乾燥或潮濕的食品生產、包裝區域。



衛生：
Polygiene® 歐盟抗菌認證，有效抑制真菌、黴菌、細菌的生長。



耐化學性優：
可防止食品、醫藥等製造過程中所使用的酸、鹼、鹽與清潔劑。



耐磨耗：
高耐磨特性、耐重壓。



耐冷熱衝擊：
材料同質透心具優異的抗冷熱衝擊性能，並能抵抗極端溫度。

產品性能*

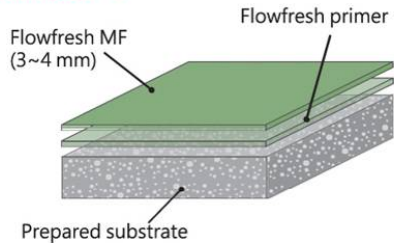
耐燃防焰			
EN 13501-1	B _s - s1		
止滑性			
依照BS 7976-2 (參考值為4-S橡膠塊) (按照HSE和UKSRG指南)			
耐衝擊			
EN ISO 6272	15 N m		
透水性			
無滲透 (NIL KARSTEN測試)			
透氣性			
ASTM E96:90	5g/m ² /24 hrs (at 4 mm 厚度)		
容許溫度			
From -5°C to 70°C (3mm 厚度)	From -15°C to 90°C (4mm 厚度)		
耐化學性			
耐酸、鹼、鹽與清潔劑			
表面耐磨耗			
泰伯磨耗試驗機 (CS17 磨擦輪, 加載1公斤質量)	每1000轉損耗0.1 g		
抗壓強度			
EN 13892-2	>50 N/mm ²		
抗彎強度			
EN 13892-2	>20 N/mm ²		
抗拉強度			
BS 6319	7 N/mm ²		
熱膨脹係數			
ASTM C531	5.70 x 10 ⁻⁵ °C ⁻¹		
接著強度 (混凝土基材)			
> 1.5 MPa · 大於抗壓強度為 25 N/mm ² 的混凝土的抗拉力			
硬化時間			
	10 °C	20 °C	30 °C
可輕荷載	36 小時	24 小時	12 小時
可重荷載	72 小時	48 小時	24 小時
完全硬化	10 天	7 天	6 天

* 以上數據為 20 °C 及 50 % 相對濕度的性能參數。

產品規格：

系 統	Flowfresh MF (3-4 mm)
完 成 面	消光

系統設計：



理論塗佈量：

底 漆	1.0~1.2 kg/m ²
面 層	6.0 kg/m ² (厚 3 mm) 8.0 kg/m ² (厚 4 mm)

產品包裝：

Flowfresh Primer 底漆
三組份 · 12 kg/組

Flowfresh MF 面層
四組份 · 20 kg/組

素地條件：

混凝土基層或整平層強度需大於3,000 psi。施工前表面應去除浮漿、灰塵和其它油脂污染物，需保持表面乾燥。

微生物/真菌抗性：

Flowfresh MF中加入了Polygiene® 抗菌添加劑，可抑制大多數與地板接觸的細菌和真菌生長。

HACCP國際食品安全認證：

Flowfresh工業地坪系統為食品安全用建材，由合格的評估團隊(包含專業的食品安全專員和產品評估員所組成)，根據國際標準和一系列的食安風險標準(包含潛在的物理、化學和微生物的風險)進行評估通過。適合用於潮濕和乾燥的食品處理區域，如廚房、生產作業區等等，並可符合食品安全計劃HACCP的條件。

HACCP International為全球知名的食品安全認證計劃單位，針對全球食品和飲料加工業的設備、材料、產品和服務進行認證，以確保食品的製作過程中，所使用的相關系統是適合在食品企業中使用，且符合世界最高標準。

維護、清潔和保養：

需定期使用合適清潔劑、洗地設備，進行清洗保養維護。

產品顏色：



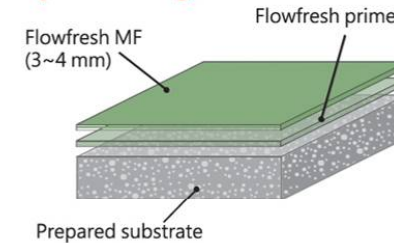
* 實物的顏色可能與圖例有些輕微的差異



Model Specification:

System	Flowfresh MF (3-4 mm)
Finish	Matt

System Design:



Consumption:

Primer	1.0~1.2 kg/m ²
Finishing coat	6.0kg/m ² (3 mm thick) 8.0kg/m ² (4 mm thick)

Packaging:

Flowfresh Primer
3 component, 12 kg/set

Flowfresh MF finish coat
4 component, 20 kg/set

Substrate requirements:

Concrete / screed substrate should be a minimum of 3000 psi, free from laitance, dust and other contamination. Substrate should be surface dry and free from rising damp and ground water pressure.

Microbial / Fungal resistance:

The Polygiene® antimicrobial additive incorporated into Flowfresh MF provides control of most bacteria and fungi which come into contact with the floor.

HACCP International Certification:

Flowfresh has been evaluated to international standards and a set of key food safety criteria for potential physical, chemical and microbiological food safety risks by a team of degree qualified food technologists and product assessors. The Flowfresh range has been identified as food-safe for use in wet and dry food handling areas such as kitchens, production areas and processing areas operating a HACCP based Food Safety Program, noting the conditions of the certification statement SSZ. HACCP International operates a world renowned product certification scheme for equipment, materials and services used within the global food and beverage processing, production and packaging sector - confirming a product's suitability for use within food businesses that operate to the world's highest standards.

Aftercare, Cleaning & Maintenance:

Clean regularly using proper equipment in conjunction with a suitable detergent.

Colours:



* The applied colors may differ from the examples shown.