



Flowfresh FC Moisture Mitigation System

Product Data Sheet

Product Description

Flowfresh FC Moisture Mitigation System consists of a cementitious urethane primer/basecoat broadcasted with silica sand, for use as a moisture vapor treatment on concrete floor slabs or elevated lightweight concrete with excessive moisture vapor emission rates or a high internal moisture content. Flowfresh FC Moisture Mitigation System will tolerate moisture vapor emission rates (MVER) up to 20 lbs moisture per 1,000 square feet per 24 hours when tested in accordance with ASTM F1869. When tested in accordance with ASTM F2170 it will tolerate up to 99% internal relative humidity.

Uses

Designed for use as a moisture mitigation system underneath all Key Resin and FlowResin flooring systems.

Environment & Health

Follow the appropriate Occupational Health and Safety guidelines applicable to the location where the application is undertaken. For more information, please refer to the safety data sheets for the individual product components.

Flowfresh FC Ratio of Components

The Flowfresh FC product is supplied in full units as A + B + Filler C + Oxide Pigment Pack (optional). Do not split the components as this may jeopardize proper curing. Part B and C must be stored dry or clumping of part C is possible and a reduction of active powder content that can produce carbon dioxide gassing pin holes in the cured finish. Do not reseal part B containers that have been contaminated with moisture.

Flowfresh FC Mixing and Application – 1.4 gallon unit applied at typical 80 sq ft/ unit (30 wet mils)

Surface Preparation: Shot blasting or coarse grit diamond grinding to achieve minimum CSP 3-4 surface profile.

Add Base A to mixing vessel. Add Pigment Pack (optional) and mix with slow-medium speed drill and jiffy mixer until all the powder is well dispersed for 20 seconds. Add Filler C and mix for 1 minute, ensuring all filler has been fully dispersed. This will require scraping powders from the sides of the mixing pail and remixing until lump free. Finally, add Hardener B and mix for 30 seconds. Flowfresh FC should be applied evenly in a consistent layer thickness. Apply the material immediately after mixing by pouring out in strips and spread using a 30 mil Easy Squeegee or similar spreading tool and back roll with a looped roller as needed to even out the material. Proceed immediately with broadcast.

Alternate procedure: Apply a scratch coat of 6-10 mils, allow to cure minimum 8 hours at 70F. Apply body coat at 12-30 mils, proceed immediately with broadcast. Contact Key Resin to verify approved minimum thickness of the 2nd body coat, which may vary depending on project details and type of flooring system to be installed.

Broadcast application: Immediately after spreading/back rolling while the Flowfresh FC is still wet, broadcast to refusal with 30-40 mesh or finer grade sand. Allow to cure minimum 8 hours at 70F or overnight. Sweep up and vacuum thoroughly all excess broadcast sand to remove all non-bonded and poorly adhered sand.

Note: The sand broadcast is required unless otherwise approved by Key Resin.

Flowfresh FC Application Temperature

The recommended substrate temperature is 60 - 80°F, but no less than 50°F. Temperature greater than 80 F will reduce working time significantly. The temperature of the substrate should exceed the “dew point” by 5°F during application and hardening. Temperatures should not fall below 40°F in the 24 hours after application.

Flowfresh FC Working Time

Mixed product should be immediately poured out, spread and broadcasted within 10 minutes at temperature of 70°F and 50% RH. Higher temperatures and RH will decrease working time.
Do not delay broadcasting of sand—do so immediately after spreading material.
Curing Time (at 70°F, 50% RH): Tack free after 6-8 hours, flooring system can be installed after 8 hours.
No maximum overcoat time with a broadcast texture.

Cleaning of Tools

Clean immediately after use in solvent, e.g., acetone or denatured alcohol.

Storage

Storage temperature between 45-90°F
12 months in unopened packs for Components A and B, 6 months for unopened packs of Component C.
Protect from weather and moisture / contaminant ingress.

Physical Properties

Property	Result	Test Method
Compressive Strength	7,250	ASTM C579
Tensile Strength	1,740 psi	ASTM C307
Flexural Strength	2,900 psi	ASTM C580
Bond Strength	300-400+ psi (concrete substrate failure)	ASTM D4541
VOC (basecoat/sealer)	9 g/L	EPA Method 24
Impact Resistance	>160 in/lbs	ASTM D2794 Gartner Impact Test

Further Information

If you would like additional information please consult our Technical Service Team at the number listed below or visit our website.

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