



Multifloor FC 100 Hi-build Epoxy Floor Coating

Description:

MultiFloor FC 100 is a solvent free, two component, high build epoxy floor coating designed to provide a durable floor finish with excellent abrasion and chemical resistance. It is available in a wide range of colours to provide good aesthetics with an easy to clean surface, or positive grip aggregate finish, at a nominal thickness of 400 - 500 microns in 2 coats.

Characteristics:

- High abrasion and impact resistance
- Solvent free, no odor during application
- Anti-fungal, anti-bacterial and non-toxic
- Resistant to wide range of industrial chemicals
- Available in wide range of colors
- Slip-resistant finish can be obtained
- Easy to use - simple roller application

Uses:

Multifloor FC 100 is typically used for coating concrete floors subject to abrasion or chemical attack such as shops, warehouses, production areas, wet areas, cleanroom, plant & mechanical rooms and workshops. The addition of an anti slip aggregate can be used to give a non slip finish for car parks or other trafficable areas. It can also be used as a base coat for Multithane PU for exposed areas, or sealer coat on top of Multifloor HS 23E (see separate data sheets).

Surface Preparation:

Long term durability and function can only be achieved with good preparation to give a strong adhesive & mechanical bond to the substrate. Concrete surfaces particularly if new, should be fully cured with a maximum residual relative humidity (RH) of 75%, clean and free from contamination such as dust, oil, grease, organic growth, release agents & curing compounds. Mechanically prepare concrete surfaces preferably by grinding or vacuum shot blasting to remove laitance, curing compounds and other loose materials to provide a mechanical key for Multi Primer EP. After preparation, fill all blow holes and surface imperfections using Multi Poxxy Putty (see separate data sheet) to provide a smooth even surface prior to priming or over coating. Allow 24 hours to cure at 25°C and lightly abrade before over coating.

Priming:

Thoroughly mix both parts of Multi Prime EP together in full, using a slow speed drill and paddle for at least 4 – 5 minutes until a homogenous consistency is achieved.

Apply Multi Prime EP using a brush or roller to the prepared concrete surface at a theoretical coverage rate of 5 – 6 m² per litre. Allow the primer to become tack free before applying Multifloor FC 100.

Technical Data		
Properties	Test Standards	Typical Values
Solids Content		:100%
Pot life @ 20°C @ 30°C		: 45 minutes : 20 – 30 minutes
Working time (applied over concrete) @ 25°C @ 35°C		: 100 minutes : 60 minutes
Compressive strength (50 x 50 cm cube) @ 6 h @ 24 h @ 3 days		: 18 N/mm ² : 50 N/mm ² : 80 N/mm ²
Touch dry @ 25 / 35°C		: 6 / 4 hours
Maximum over coat time		: 24 hours
Minimum over coat time		: 6 – 8 hours
Light foot traffic after		: 18 – 24 hours
Full cure		: 7 days (Exposure to chemicals)
Compressive Strength		: 70 N/mm ²
Flexural strength		: 42 N/mm ²
Tensile strength		: 22 N/mm ²
Bond Strength to concrete @ 7 days	ASTM D 4541	: > 1.5 N.mm ²
CHEMICAL RESISTANCE Hydrochloric acid, 30% Nitric acid, 20% Acetic acid, 10% Sulphuric acid, 40% Sodium hydroxide, 50% Kerosene Ketones Alcohol Petrol Diesel		: excellent : good : very good : excellent : excellent : excellent : non resistant : good : excellent : good

Allow the primer to become tack free before applying Multifloor FC 100.

A second priming coat may be required if the substrate is particularly porous. Re-prime if the primer coat has not been over coated within 24 hours.

Dust and surface contamination must be removed prior to the subsequent application of Multifloor FC 100.





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Mixing:

It is essential that the mixing instructions are carefully followed to ensure the correct characteristics of the product are achieved. Failure to do so can result in lower performance or even possible failure of the product. Add the contents of the Multifloor FC 100 Part B container to the contents of the Part A container and mechanically mix the components together for 3–5 minutes until a homogenous consistency is achieved. Do Not Under Any Circumstance Part Mix Materials.

Application Method :

Apply the first coat of Multifloor FC 100 using brushes or rollers to a theoretical coverage rate of 4–5 m² per litre.

If a non slip finish is required, scatter or completely blind Multifloor AntiSlip Aggregates into the wet first coat until the desired anti slip profile is achieved. Allow the first coat to dry and sweep off any excess aggregate prior to the second coat.

Apply the second coat of Multifloor FC 100 in the same manner, 24 hours after the first coat, to ensure sufficient curing of the first coat.

For thickness more than 0.5 mm, silica flour can be added into Part A & Part B in the same ratio.

Please note the coverage rate will reduce if an anti slip profile has been used.

If line marking is required, mix and apply Multifloor FC 100 Line Marker as per the method for Multifloor FC 100.

Curing:

Allow Multifloor FC 100 to cure fully for 4 - 7 days before exposing to full mechanical or chemical conditions.

Cleaning :

Clean tools and equipment immediately after use with Multicleaner.

Storage:

For application above 40°C we recommend adopting the following guidelines:

Store unmixed materials in a cool preferably air conditioned environment.

Avoid exposure of mixed & unmixed materials to direct sunlight.

Keep equipment that will be in contact with the product cool and away from direct sunlight.

Avoid application during the hottest time of day.

Packaging:

Multifloor FC 100 pack size: 20 litres. Coverage rate approximately 5 m² per litre @ 200 microns thickness.

Shelf Life :

Multifloor FC 100 has a maximum shelf life of 12 months from the date of manufacture. To maximize shelf life always store products in their original, unopened packaging in a dry environment, away from direct sunlight with a minimum temperature of 10°C but not exceeding 35°C. Damaged packaging, high humidity or extreme temperatures may reduce the shelf life.

Limitations:

Substrate temperatures should be above 5°C and rising. For application in temperatures above 40°C please refer to hot weather condition recommendations. Avoid application if the work area may be subject to the onset of rain or moving water. Do not part mix under any circumstances. Chemical spillages should be cleaned quickly in accordance with good house keeping to maximise the life of the product.

Colour fading may occur in areas subject to prolonged UV exposure however the performance of the material will not be affected. All products should be used within the pot life. Materials not used within the specified time should be discarded. The product should not be thinned with any type of solvent under any circumstances. If the above general application details do not meet with your requirements, please contact Corrotech for a project specific method statement.

Disclaimer:

The information supplied in our literature or given by our employees is based upon extensive experience and together with that supplied by our agents or distributors, is given in good faith in order to help our customers. Our company policy is one of continuous research and development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products. However, as we have no control over site conditions or the execution of the work. We accept no liability for any loss or damage which may arise as a result thereof.

Health & Safety:

Always use appropriate PPE including gloves, goggles and a barrier cream to avoid contact with skin and eyes. Should contact with skin or eyes occur, wash immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately. Do not induce vomiting. Avoid inhalation and ensure adequate ventilation or suitable respiratory equipment if working in confined spaces. Do not expose products to fire or naked flames under any circumstances. Always refer to the product Material Safety Data Sheet (MSDS) for full health & safety and handling recommendations.

