

FIBFLOOR FC 21

High Solids Epoxy Coating

Product # 114.19
Version no: 01.10.24

Product Data Sheet

PRODUCT DESCRIPTION: Fibfloor FC 21 is a high build epoxy amine adduct mma (Methyl Methacrylate) blended coating for walls, floors, concrete & metal structures. It has good resistance to abrasion and makes the floor surface dust free. The cured surface is hard and gives smooth finish. It does not allow bacterial growth and can be easily cleaned. Standards: Food grade from CFTRI, Mysore.

AREAS OF APPLICATION

Fibfloor FC 21 is recommended for protection of metal and concrete surfaces from erosion and for areas subjected to foot traffic and traffics with wheels of rubber and nylon:

- Chemical Plants & Pharmaceutical Industries
- Food Processing Areas
- Bottling Plants/ Water tanks
- Electric / Electronics Industries
- Computer Rooms
- Hospital Operation Theatres
- Nuclear Power Plants
- Laboratories
- Aerospace Industry & Airport Hangers
- LCD Manufacturing Plants
- Automobile Industries
- Tea Processing Units
- Textile Mills
- Dairies & Breweries

ADVANTAGE

- Resists chemical, fungal & bacterial growth.
- Very high abrasion resistant.
- Easy to apply, flow-able consistency.
- Provides monolithic surface with good aesthetics.

APPLICATION

SURFACE PREPARATION

Correct preparation of surface is essential. Fibfloor FC 21 should be laid only if the moisture content of the floor is below 5 %. The surface must be sound and made free from dust, oil, grease and other contaminants before application. Surface shall be cleaned by wire brushing, acid wash or by burning followed by washing with liquid detergent. Allow the floor/surface to dry before priming. Where there are expansion joints in the floor, these must be treated separately. For best bond concrete surface must be prepared as per CSP 1, 2 or 3.

MIXING

Surface should be bone dry prior to this application. All surface should be primed using Fibfloor Primer/ Primer 10/ Primer 12 @ 250 gms/m². Mix Primer Component A & B thoroughly and apply by brush or roller. Allow the primer to become dry.

APPLYING AND LAYING

The mixed material should be applied to the prepared surface using roller or brush. Ensure mix material is spread evenly. Do not re-roll later. The work area should be protected during the installation process and during the initial curing time to ensure that no

airborne debris can contaminate the surface of the wet resin as this will lead to unwanted blemishes in the hardened, cured surface.

CLEAN UP

- Clean all tools immediately after use with Fibrex Paint Remover. Do not allow material to harden.
- Service life of a floor will be considerably extended by good housekeeping. Regular cleaning may be carried out using a rotary scrubbing machine.

TECHNICAL SPECIFICATIONS

Apparance component A	Epoxy Resin colored liquid
Apparance component B	Hardener clear to Brown liquid
Density of component A	1.44±0.02gms/cc
Density of component B	1.07±0.02gms/cc
Mix density (A+B)	1.41±0.02gms/cc
Pot life	30 to 40 minutes @35°C
Mixing ratio (A : B)	4 : 1 (by weight)
Consumption	280/300 gms/m ² /200 micron thickness
Pull off Adhesion to Concrete ASTM D 7234	> 3 MPa Concrete Failure
Systems	1 - 2 coats (dependent on substrate porosity)
Resistance to fire	class a
Over coat time	10 to 12 hrs @ 27°C
Relative air humidity	80 % max.
Substrate moisture content	< 4 %
Shrinkage factor	10-12%
Resistance to chemicals spillage	7days
Compressive strength	70 ± 2MPa
Flexural strength	40 ±2MPa
Tensile strength	20 ±2MPa
Water absorption	<0.1%
Shore d hardness	77-85

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

CHEMICAL RESISTANCE

Fibfloor FC 21 is resistant to a variety of chemicals as given below:

Chemicals	Result
10% Acetic Acid	Pass
25% Ammonium Hydroxide	Short Term

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50% Caustic Soda	Short Term
10% Lactic Acid	Pass
10% Citric Acid	Pass
10% Hydrochloric Acid	Short Term

* Prolonged contact with chemicals will affect the color of the flooring. Wash off spillage with water. Regular washing of floors with detergent water is recommended 7 days after application time. Good housekeeping such as regular washing will prolong the life of the floor

LIMITATIONS

- Do not apply **FIBFLOOR FC 21** on surfaces known to, or likely to, suffer from rising dampness, potential osmosis problems or having relative humidity greater than 75 %. Consult fibrex before using FIBFLOOR FC 21 in those areas.
- Do not install **FIBFLOOR FC 21** at temperature < 10° C or > 40° C.
- Do not apply **FIBFLOOR FC 21** to asphalt, weak or infirm concrete, unmodified sand / cement screeds, PVC tiles or sheets, or substrates known to move substantially e.g. steel walkways.
- Do not apply **FIBFLOOR FC 21** over treated expansion joints.
- In common with all epoxy material, some light shades may fade in the long term, when placed in adverse exposed condition. Such changes (Discoloration), if any, are normal and has no effect on the performance of **FIBFLOOR FC 21**.

Please contact FIBREX for installation of floor coating over

- Oil / Fat rigged floors
- Floors with moisture content over 4 %
- Floors with rising moisture problem
- Asphalt based floor (interior)
- 2 Floors with a pull off strength less than 1.5 N/mm

COLOR RANGE

Fibfloor FC 21 is available in various attractive colors (See Fibrex shade card). Every effort is made in manufacturing to maintain consistency of color, however exact color can vary from one batch to other batch.

PACKAGING

FIBFLOOR FC 21 (A+B : 5 KG PACK)

1 Pack Cover 16.66 m² @300gms/m²/200micron dft

Supply

2 Packs set : 10 KG (A Part : 2 Nos, B Part : 2 Nos)

STORAGE

Store the material at temperatures between + 10° C and + 35° C in originally sealed packages, the material can be stored for twelve months. But before opening the drums, be assured that the temperature of the materials has the ambient temperature to avoid condensation. Open containers of material should be used quickly to avoid moisture contamination.

PRECAUTIONS

During mixing and application the following precautions should be observed: ensure adequate ventilation and avoid contact of the material with the eyes, nasal passages, mouth and unprotected skin. Avoid contact with the hands by wearing protective gloves and busing, if necessary, a suitable barrier cream. In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to resin-based materials. Always wear gloves and eye/face protection as necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

DISPOSAL / SPILLAGE

Spillage of the product should be absorbed onto sand or other inert material and transferred to a suitable disposable vessel. Disposal of such spillage or empty packaging should be in accordance with local waste disposal authority regulations.

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NOTE

The information supplied in this datasheet is based upon extensive experience and is given in good faith in order to help you. 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 AND SAFETY

This material is intended to be used by trained professionals with proper equipment's. The following safety measures are recommended:

- Wear protective gloves, clothing, goggles, hearing protection for noise reduction and hard hats for falling debris.
- Do not eat, drink or smoke while in active contact with these materials.
- Avoid skin contact.
- Wash hands thoroughly with soap and cool water.
- Never wash the skin with a solvent.
- Anyone experiencing difficulty breathing when working with these materials or showing an allergic reaction should seek fresh air immediately and consult a physician if symptoms persist.

DISCLAIMER

Fibrex Construction Chemicals products though are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Fibrex Construction Chemicals wishes to clarify that any advice, recommendation, specification or information is accurate and correct, though it cannot, at any time assume any liability either directly or indirectly arising from the use of its products. This is because it has no direct or constant control over where or how its products are applied, and whether or not in accordance with the advice specification, recommendation or information given by it.

FIBREX OTHER PRODUCTS – WE DO

