

CRES® FLOOR FC 100

Solvent free high build epoxy floor coating

CRESFLOOR FC 100 is a three component high performance solvent free epoxy system designed for the protection of concrete. Once cured, the product has excellent abrasion and good chemical resistance. It provides an attractive hard wearing and easily cleanable floor finish.

USES

- Chemical Manufacturing plants
- Car parks and workshops
- Warehouses and industrial floors
- Production assembly areas, penetration should be removed by the use of a bottling, Plants, breweries, pharma plants, kitchens, showrooms

ADVANTAGES

- Solvent free
- Easy application by brush, roller or squeegee
- Excellent chemical resistance
- High abrasion and impact resistance
- Durable, low maintenance cost
- Slip resistant finish can be obtained.

SURFACE PREPARATION

Concrete substrates:

Long term durability and function can only be achieved with good preparation to give a strong adhesive & mechanical bond to the substrate.

New concrete floor:

Ensure that concrete should be more than 28 days old and have a moisture content of less than 5%. Floors should be sound and free from contamination such as oil and grease, mortar and paint splashes or curing compound residues. Excess laitance deposits are best removed by light mechanical scabbling, grinding or grit/captive blasting followed by vacuum cleaning to remove dust debris.

Old concrete floor:

A sound, clean substrate is essential to achieve maximum adhesion. As for new concrete floors, ensure that the substrate is, void of oil, grease, laitance and loose friable matter. Oil and grease penetration should be removed by the use of a proprietary chemical degreaser or by hot compressed air treatment. Any damaged areas of surface irregularities should be treated using suitable CRES range of products.



TECHNICAL PROPERTIES

Description	Value	Standard
Appearance	Liquid coating	-
Specific gravity @25°C	1.45 (±0.02)	ASTM D 1475
Pot life @25°C, hr.	> 1.0	ASTM D 2471
Touch dry @25°C, hrs.	6 - 8	-
Compressive Strength, N/mm ²	> 65.0	ASTM C 579
Over coating Time, hrs.	Min. 20 Max. 36	-
Full cure @ 25°C, days	7.0	-
Bond strength, N/mm ²	> 5.0	ASTM D 7234

Priming:

Priming is not normally required provided the substrate is sound, untreated and good quality nonporous concrete. If any doubts exist of the quality of the concrete, or if it is porous it should be primed with **CRESFLOOR EP 100**. The primer should be applied by brush or roller on the cleaned surface area. The primer should be left to achieve a tack free condition before applying the top coat. A second coat may be required if the substrate is excessively porous. Re-prime if the primer coat has not been over coated within 18 hours. Dust and surface contamination must be removed prior to subsequent application of **CRESFLOOR FC 100**.

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. For preparation of product, Component A should be mixed separately for two minutes with a heavy duty, slow speed drill fitted with a mixing paddle at low number of turns (200-300 RPM) until a homogeneous mix is obtained. Pour the hardener (Component B) into the base mixture and mix for another two minutes. It is always recommended to mix a complete kit at a time. Over mixing must be avoided to minimize air entrainment. Once mixed, the material must be used within its pot life

APPLICATION

A minimum 2 coat application is generally recommended. Apply the first coat of mixed material using brushes or rollers to a theoretical coverage rate of 4-5 m²/litre/coat with a DFT of 200 to 250 micron. If a non-slip finish is required, scatter or completely blind Anti Slip Aggregate 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 **CRESFLOOR FC 100** in the same manner as the first, allowing at least 20-36 hours drying time between coats. Please note the coverage rate will vary if an anti-slip profile has been used. For high risk applications, we recommend glass fibre reinforcement is embedded into the wet first coat, particularly at floor / wall junctions and joints in concrete substrates, to reinforce the coating.

CURING

Allow **CRESFLOOR FC 100** to cure fully for 5 to 7 days before exposing to full mechanical, chemical or environmental.

LIMITATION

- (i) Substrate temperatures should be above 5°C and rising.
- (ii) For application in temperatures above 40°C please refer to hot weather condition recommendations.
- (iii) **CRESFLOOR FC 100** should not be applied at asphalt floors or PVC tiles.
- (iv) **CRESFLOOR FC 100** should not be applied onto surfaces likely to suffer from rising dampness or relative humidity > 70%.
- (v). All products should be used within the pot life. Materials not used within the specified time should be discarded.
- (vi). The product should not be thinned with any type of solvent under any circumstances.

HOT WEATHER CONDITION

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

- (i) Store unmixed materials in a cool (preferably temperature controlled) environment, avoiding exposure to direct sunlight.
- (ii) Avoid exposure of mixed & unmixed materials to direct sunlight.
- (iii) Keep equipment that will be in contact with the product cool and away from direct sunlight.
- (iv) Try to eliminate application in during hottest time of the day.

CLEANING

Tools and equipment should be cleaned with suitable solvent immediately after use. Hardened material should be removed mechanically.

STORAGE

CRESFLOOR FC 100 should be stored in cool, dry and shaded warehouses. Shelf life is 12 months when stored under cover, out of direct sunlight, protected from extreme temperatures and as per recommendations. In extreme tropical climate, the product must be stored in cooled ambience. Excessive humidity and over exposure to UV will result in the reduction of shelf life.

CHEMICAL RESISTANCE

Fully cured **CRESFLOOR FC 100** sample have been tested in wide range of aggressive chemicals commonly found in industrial environments. Test were performed in accordance to ASTM D543 over 168 hours (7days at 23°C, 50% RH).

Material	Resistance
Soap solution (1%)	Excellent
Hydrochloric acid (10%)	Excellent
Sulphuric acid (3%)	Excellent
Nitric acid	Excellent
Sodium carbonate soln. (2%)	Excellent
Sodium chloride soln.(10%)	Excellent
Sodium Hydroxide soln.(10%)	Excellent
Petrol	Excellent
Diesel	Excellent
Sea water	Excellent
Acetic acid	Excellent

PACKING

CRESFLOOR FC 100 is supplied in three packs of 18 litre kit.

Component A – Resin

Component B - Hardener

Component C: Colour Pack

18 L (17.2 litre Neutral + 0.8 litre colour pot).

SUPPLY

CRESFLOOR FC 100 is supplied in three packs of 18 litre kit.

CRESPOXY EP : 7.5kg kit

CRESFLOOR EP 100 : 18L kit

CRESSLIP SS : 25kg bag

CRESFLOOR FC 100 : 18L kit

CRESPROTECT UVR : 20L kit

CRESCLEAN EC 300 : 20L kit

SHELF LIFE

Keep away from direct sunlight and store under normal warehouse conditions. Containers must be tightly closed. Shelf life of this product is 12 months from the date of manufacturing.

HEALTH AND SAFETY

Always use protective clothing, eye goggles and hand gloves when handling this product. Avoid contact with skin or eyes. If spilled on the skin, wash immediately with soap and plenty of water. Accidental splashes on the eyes should be immediately clean with fresh water. Accidental splashes on the eyes should be immediately clean with fresh water and medical attention sought.

Product Disclaimer:

Kanz chemical Ind. LLC products are guaranteed against defective materials and are sold subject to standard terms and condition of sale, copies of which are available on request which are reasonable. All recommendations regarding the use of product are made without guarantee since the conditions of use are beyond the company's direct control. It is the customer's responsibility to ensure each product is fit for the purpose for which they intend to use it. Furthermore the specifications and description herein cannot be used to void a contract.

*Refer material safety data sheet (MSDS) for further information.