

DecoFlake

Multi layer flake based, epoxy creative flooring



Description

Dr. Cipy offers DecoFlake, the decorative flaked flooring systems where beauty meets the strength of Cipy's unique polymers. The coloured flakes are aesthetically blended with specially formulated epoxy and polyurethane polymers to create decorative floorings which are durable as well as attractive.

DecoFlake Creative floorings are top coated with wear resistant, aliphatic PU clear coating.

Uses

DecoFlake finds applications for industrial and commercial floorings such as :

- Pharmaceuticals
- Food & Beverages
- Airports Terminal Building
- Restaurants & Kitchens
- Railway Lavatories & Railway coaches

Key features

- Decorative as well as protective
- Solvent-free, eco friendly
- Highly wear resistant
- Available in attractive shades and patterns
- Easy cleanability & excellent aesthetics
- Glossy/Matt versions

Properties

Type : Epoxy-polyurethane

Decoflake system components

Primer : Cipoxy 16 / 17
Body coat : Cipoxy SL 500
Broadcasting : Colour flakes
Sealer coat : Cipoxy CG
Top coat : Floorkote CG /CM

Performance data

The mandatory parameters as per FeRFA and EFNARC guideline for resin flooring system

Adhesion, pull of test : >2 MPa with concrete
ASTM D 7234-2022 failure

Impact resistance : Pass (1.8 kg - 80 cm)
ASTM D 2794

Abrasion resistance : Max 50 mg loss
ASTM D 4060

Slip resistance : 44-45 PTV (low risk of slip)
BS 8204

Other mechanical properties

Compressive strength : > 36 MPa
@ 7 days (ASTM D 695)

Tensile strength : > 13 MPa
@ 7 days (ASTM D 638)

Flexural strength : > 7 MPa
@ 7 days (ASTM D 790)

Shore D : 45 - 50
ASTM D 2240

Scratch resistance : Pass (3 kg)
IS 101 (Part 5 / Sec 2)

DecoFlake design patterns

Decoflake HS : Heavily scattered : 900-1000 gms flakes / sqm

Decoflake SS : Scarcely scattered : 250-500 gms flakes / sqm

Note : The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing field-applied samples may vary, dependent on actual site conditions

Ref : Dr Cipy/Flooring/2023/24/Rev-3/02/24

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Directions to use :

Surface preparation

The long-term durability of the applied flooring is dependent upon the adhesive bond achieved between the flooring material and substrate. It is most important therefore, that substrate surfaces are correctly prepared prior to application. Ensure that the residual moisture level in the concrete is below 5%. All substrates should be sound and free from contamination such as mortar and paint splashes, curing compound residue, oil, grease. Excessive laitance should be removed by light mechanical scrubbing, grinding or grit blasting. Oil and grease contamination must be completely removed by grinding down to sound, clean concrete. Alternatively, blasting techniques can be used to provide the required substrate. All concrete surface to be prepared using shot blasting machine or grinding to achieve CSP 3-4.

Priming & Screed

The substrate should be primed with Cipoxy 17 /18. Primer to be mixed in the proportions supplied by adding the entire contents of hardener can to the base can. Once mixed the material should be immediately applied in a thin, continuous film using stiff brushes or rollers. Over application and puddles should be avoided. Porous floors may require two coats of Cipoxy 17 / 18. Primer should be allowed to become tack free prior to application. Coverage will depend on the texture and porosity of the substrate and also the application thickness. Based on the total thickness to be done, screed coat to be done with Cipoxy 17 and FQ aggregates.

Body coat of Cipoxy SL 500

Cipoxy SL 500 is a four component pre-weighed epoxy system with Resin, Hardener, EPI and Aggregates. All contents are unpacked and mixed under slow stirring to make a homogeneous mixture with no un-mixed parts remaining at the bottom. Lay this mix with a coverage of 17.5 sqm @ 500 microns thickness by a trowel. Deaerate the layer by a spike roller and allow to dry for 10-15 minutes.

Broadcasting of Flakes

Broadcast the flakes (pre-matched to the desired shade and pattern) evenly on the wet base layer @ 250-1000 gms / sqm based on the pattern. Ensure that all areas are evenly broadcasted. Allow to cure overnight. For heavily scattered pattern 900 - 1000 gms flakes and scarcely scattered 250 - 500 gms flakes to be broadcasted.

Sealer coat: 1st application

Ensure that the flakes are well stuck on the body layer. Remove the unstuck flakes by a scrapper. Apply Cipoxy CG @ 500 microns i.e. 0.5 litre per sqm and allow to dry overnight.

Sealer coat: 2nd application

Grind the flaked surface to make even and apply second coat of Cipoxy CG @ 500 microns i.e. 0.5 litre per sqm and allow to dry overnight.

Topcoat:

Apply hard-wearing, aliphatic grade polyurethane clear coating, Floorkote CG/CM. Mix Floorkote resin and Hardener in 1:1 by weight. Agitate the mixture for 2-3 minutes and then apply @ 400 gm per sqm. Ensure that no thicker film is deposited on the broadcasted layer. Allow to cure for 24 hours.

Full cure of the system

The total system needs a cure of 48 hours before it is allowed for traffic.

Storage and handling

The product should be stored in accordance with national regulations. It should be kept in a cool, well-ventilated area, away from heat, direct sunlight, sparks and children. Handle with care.

Health & Safety

Please refer to MSDS. Observe reasonable care and employ ordinary hygienic principles such as washing the hands with soap and water before eating or smoking. It is recommended to wear gloves, goggles and nose masks while application. Incase of splashes on the skin, dampen the cloth with thinner PUT 503 and wipe the hands with the cloth. Wash then with soap and water. Dried film is non toxic. Incase of contact with eyes, rinse with plenty of water and seek medical advice. Swallowed, seek immediate medical attention. Incase of continuous exposure to vapour, the applicator should be immediately moved to get fresh air. The disposal of excess or waste material should be carried out in accordance with the local legislations

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Packaging and theoretical coverage

Product name	Use	Pack size	Coverage & DFT
Cipoxy 17	Primer	Resin & Hardener available in 20 litre packing	1 litre covers 5 sqm @ 200 microns
Cipoxy 17 FQ 200	Screed	Resin & Hardener available in 20 litre packing / Aggregate available in 25 kg packing	1 litre of Cipoxy 17 mixed with 2.5 kgs of FQ 200 will cover an area of 1 sqm at 2mm
Cipoxy SL 500	Body coat	Pre-weighed set of 12.551 kgs (clear)	1 set cover 17.5 sqm at 500 microns
Cipoxy CG	Sealer coat	Resin & Hardener available in 20 litre packing	1 litre covers 2 sqm @ 500 microns.
Floorkote CM / CG	Clear top coat	Resin & Hardener available in 20 litre packing	1 litre covers 5 sqm @ 100 microns.

Do's

Clean regularly

Remove aggressive chemical spillage immediately

Maintain wheel for proper rolling, should not get dragged.

Nylon / teflon wheel trolleys are recommended

Handle heavy material gently and cautiously

Immediately clean spillage of any oil or fatty liquid which may cause accident during people's movement

Don't

Drag any sharp and heavy object. Movement of metal wheel trolley

Expose to fire or welding spark

Expose to very high temperature than recommended by Manufacturer

Drop down any heavy material on the floor

Expose to highly corrosive chemicals



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