DeckFloor PU-E

PU based deck coating system for internal and external usage

Dr Cipy
SPECIALIZED FLOOR COATINGS

TYPE 4 EFNARC GUIDELINE

MULTI LAYER FLOORING

Description

Deckfloor PU-E, aliphatic polyurethane system, comprises of highly flexible intermediate membrane with highest abrasion resistant wear coating. DeckFloor PU-E is designed for external and internal deck protection, subjected to vehicular traffic.

Uses

- Car park decks and ramps
- Jetty deck slab
- Garage floors
- Aircraft hangars
- Foot bridge
- Staircase anti slip coatings
- Transport depots

Key feature

- UV stable
- Flexible and crack bridging
- High abrasion resistant
- Water tight in nature

Performance data

The mandatory performance parameters as per FeFRA and EFNARC guidelines for resin flooring system

Other mechanical properties

MEMBRANE : FLOORFLEX

Pull of adhesion test ASTM D 7234-2022	:	≥ 2 MPa for M20 grade concrete / Concrete failure	Tensile strength ASTM D 638	: ≥ 7 N / mm^2
			Elongation ASTM D 638	: 92%
			Crack bridging ability EN 1062-7-2004 A	: Passes

WEAR COURSE : FK 333

Pull of adhesion test ASTM D 7234-2022	:	≥ 2 MPa for M20 grade concrete / Concrete failure	Elongation ASTM D 638	: 50%
Abrasion resistance ASTM D 4060 CS 17, 1 kg, 1000 cycle	:	20 mg loss	Weathering	: No colour change in 30 days

WEAR COURSE OPTION : SPARTIKOTE FC

Pull of adhesion test ASTM D 7234-2022	:	≥ 2 MPa for M20 grade concrete / Concrete failure	Elongation ASTM D 638	: 20%
Abrasion resistance ASTM D 4060 CS 17, 1 kg, 1000 cycles	:	32 mg loss	Weathering	: No colour change in 30 days
Curing	:	4 hours	Hot tyre pick up test (ITM)	: Passes

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

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System design

- Primer : Cipoxy 18
- Sealing : Cipoxy 18
- Broadcast : DF 150 / DF 200
- Membrane : Floorflex
- Top coat : FK 333 / Spartikote FC

APPLICATION INSTRUCTIONS

Surface preparation : The long-term durability of the applied system 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, or grease. Excessive laitance should be removed by light mechanical scrabbling, 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.

Priming : Prepared substrates to be treated, with primer Cipoxy 18. Primer should 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 primer. It should be allowed to become tack free. Primer coverage and number of coats will depend on the texture and porosity of the substrate and also the application thickness.

Broadcast : Whilst Intermediate coat is still wet, blind with broadcast aggregate DF 150 / DF 200 at an estimated rate of between 2 – 2.5 kg / m^2, leave to dry for 16 hours @ 35ºC. Prior to the removal of excess antislip grain ensure that the grains are firmly embedded in the intermediate layer

Intermediate coat : Apply Floorflex as the intermediate coat with or without filler as per the desired thickness by roller / trowel. For roof deck application, do not add aggregates with Floorflex.

Top coat : Mixing & Application : FK 333 Resin and Hardener is supplied separately in 20 litre packs. Mix the same in the recommended ratio of 1:1 by volume. Solvent or thinners should not be added. A forced action mixer with a paddle fitted into a heavy duty, slow speed electric hand drill is recommended for mixing. The material is poured onto the intermediate substrate and spread to the required thickness, in two coats, with a roller and allow to cure for 24 hours.

Other option for aliphatic top coat can be Spartikote FC : It is supplied in pre-weighed pack. Solvent or thinners should not be added. A forced action mixer with a paddle fitted into a heavy duty, slow speed electric hand drill is recommended for mixing. The material is poured onto the prepared substrate and spread to the required thickness with a roller and allow to cure for minimum 4 hours.

Packaging and coverage

Type	Product name	Pack size	Theoretical Coverage per pack to achieve 1.5mm DFT	Theoretical Coverage per pack to achieve 2.5mm DFT
Primer - first coat	Cipoxy 18	40 litre	320 sq m per pack	320 sq m per pack
Sealing - second coat	Cipoxy 18	40 litre	160 sq m per pack	133 sq m per pack
Anti slip grain	DF 150 / DF 200	50 kg	25 sq m per pack	20 sqm per pack
Intermediate	Floorflex Floorkote 4 K Aggregate EPI	4 kg 1.5 kg 0.2 kg	8.5 sq m per pack	6 sq m per pack
Top coat	FK 333	40 litre	200 sq m per pack	200 sq m per pack
Top coat - optional	Spartikote FC	5.18 kg	10.9 sq m per pack	10.9 sq m per pack

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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. Ideal temperature for storage of the material is 25°C to 30°C, in a covered shed.

Do's	Don't
Clean regularly	Drag any sharp and heavy object
Remove aggressive chemical spillage immediately	Expose to fire or welding spark
Maintain wheel for proper rolling, should not getdragged.	Expose to very high temperature than recommended by Manufacturer
Handle heavy material gently and cautiously	Drop down and heavy material on the floor
Clean any oil or any liquid which may cause accident during people's movement	Expose to highly corrosive chemicals

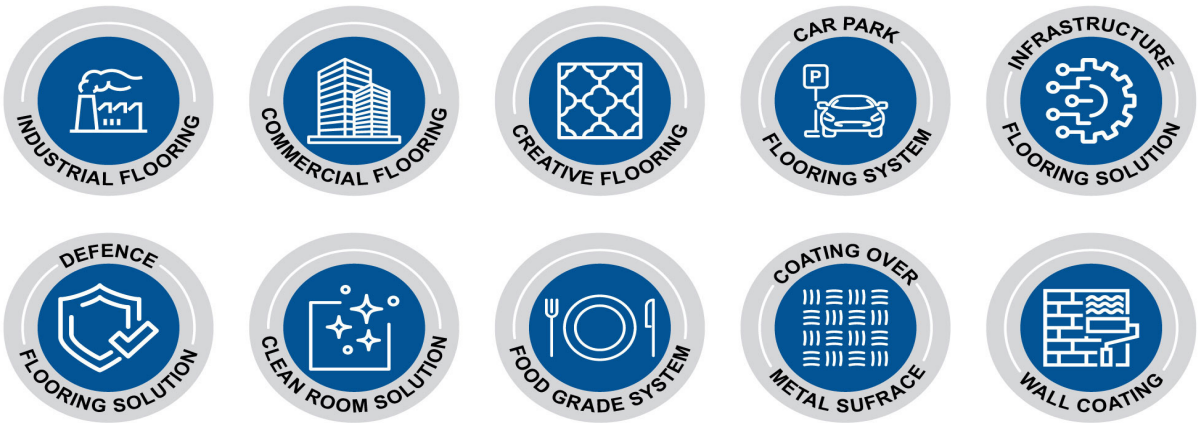
Health and safety precautions

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.

Limitations

It is not compatible for application over asphalt, unmodified sand-cement screeds or PVC tiles and sheets. PU DeckFloor system laid floor will be scratched due to nails or sharp objects protruding from machinery, packings, or trolleys moving on the floor. Presence of sand will also cause abrasion. The product is not advised to be applied below 15°C as the flow reduces. While applying the product above 35°C, here can be a problem of low pot life etc., and it will be difficult to apply the material. Cured product is not suitable for exposure to sub-zero temperatures and above 65°C. When there is not enough material in a given area, roller marks caused due to spiked rolling may not close which will result in an undesirable finish. The product is not suitable for areas exposed to direct sunlight.

Other Products Categories available
Dr.Cipy brings you the widest range of Flooring Systems



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