CIKOpoxy Floor SD

High Performance epoxy resin based floor screed

Description

CIKOpoxy Floor SD, three components floor screed topping for concrete, screeds and other suitable substrates.

CIKOpoxy Floor SD is based on liquid epoxy cured with special grade of hardener and reinforced with graded fillers. It offers a seamless tough floor screed that can be applied in thicknesses from 2 mm to 5 mm in a single application.

Properties

- Three component epoxy based screed system.
- Exhibits good wear and abrasion resistance.
- Seamless and easy to clean and maintain hygienic floor.
- Resistance to wide range of chemicals.
- Can withstand dynamic and static heavy loads.
- Slip resistant in both dry and wet conditions.
- High Impact resistance
- Service temperature 5ºC to 70 ºC.

Application Area

CIKOpoxy Floor SD as floor screed is suitable to use both in industrial and commercial segments such as,

- Hospitals and laboratories.
- Warehouse floors and food storage areas.
- Dairies and chemical plants.
- Engineering work shops and offices.
- Walkways and loading bays
- Production and storage areas.
- Showrooms and shops
- Operational rooms in plants, factories and substations.

Physical properties @ 25 ^{0}C

Form	3 component system Part-A & B : Liquid Part-C : Powder
Colour	Standard colours
Mixing ratio	Pre-weighed packs
Pot life	30-40 minutes
Tack free	Approx. 6 hours
Final cure	7 days
Foot traffic	After 24 hours
Compressive Strength @ 7 days	≥85 N/mm^2
Flexural Strength @ 7 days	≥20 N/mm^2
Tensile Strength @ 7 days	≥10 N/mm^2
Pull off Bond Strength to primed concrete ASTM D7234 @ 7 days	≥ 2 N/mm^2 (Concrete Failure)
Water Penetration of Concrete topped with CIKOpoxy Floor SDX BS EN 12390	NIL
Shore A Hardness ASTM D 2240-05 @ 7 days	90-95
VOC	<10g/L

Chemical resistance

CIKOpoxy Floor SD is resistant to a wide range of chemicals. Specific data is available on request. Resistance to occasional spillage includes:

Test Solution	Test Condition	Observation & Test Result
Sulphuric acid	23± 2ºC 48 hours	No Characteristics Observed (Resistant)
Hydrochloric Acid		
Acetic Acid		
Lactic Acid		
Sodium Hydroxide		
Ammonium Hydroxide		
Sodium Chloride		
Petrol		
Kerosene		
Hydraulic oil		
Vegetable oil		

Coverage

9.5 kg of CIKOpoxy Floor SD will provide a theoretical coverage of 1 m^2 at 5mm DFT.

Note: The coverage depends on the floor condition and finish.
It is recommended to apply CIKOpoxy Floor SD at minimum thickness of 2 mm up to 5 mm.
The required total dry film thickness of the build-up system is evaluated depending on service life and conditions. Consult CIKO technical service department for assistance and further support.

Application instructions

Surface preparation

The concrete surface shall be aged at least 28 days and has achieved 25 Mpa compressive strength and pull of bond strength of at least 1.5 Mpa. All contamination such as oil, grease and extraneous spillages has to be cleaned using the suitable cleaning agent. Concrete shall be grinded using rough diamond disk, grit blasted, shot blasted or treated with equivalent and suitable mechanical means prior to the application of the primer.

Application

Priming

CIKOpoxy Prim14 or CIKOpoxy Prim 11, a two component epoxy based primer shall be used for priming the substrate. The base [Part-A] and hardener [Part-B] components of CIKOpoxy Prim14 or CIKOpoxy Prim 11 should be mixed thoroughly using a heavy duty, slow speed drill paddle assembly for three to five minutes and ensure a homogenous mix is obtained. Application of primer should be carried out as per the respective technical data sheet. Allow the primer to dry for 12 -24 hours depending on the prevailing ambient conditions.

Application of epoxy screed

The base component [Part-A] of CIKOpoxy Floor SD should be mixed thoroughly using a heavy duty slow speed drill-paddle assembly for two minutes and ensure that a homogenous mix with uniform colour is obtained. Transfer the mixed base component [Part-A] completely to a suitable container that can hold a volume of minimum 20 L.

Pour the hardener component [Part-B] into the mixed base component [Part-A] and mix well to homogeneity. Add the powder component Part-C to the properly mixed Part-A & Part-B and mix well to obtain a homogenous mass.

Properly mixed materials should be spread over the dry and clean primed surface using a notched trowel maintaining the required thickness. Immediately spike the applied surface using spike rollers to release entrapped air in the material to obtain a uniform, smooth and even finish. It is applicable to apply CIKOpoxy Floor SD in a skim coat application of approximately 2 mm to reduce the floor irregularities and imperfections at least 12 to 24 hours prior to the actual screed application. The coated surface should be left for 12 – 24 hours curing, depending on the prevailing ambient conditions prior to the application of the body screed or top coat.
CIKOpoxy Putty, CIKOpoxy FC or CIKOmortar FC can be used to repair, fill or resurface any noticeable defects over the primed surface, applied skim coat or screed.

Cleaning

Used tools must be well cleaned with CIKOsol or CIKOsolvent 20 directly after usage.

Precautions

Prior application of primer and CIKOpoxy Floor SD, ensure that

- Moisture content of the substrate is less than 4.5 % for the primer application
- Ambient temperature is between 10– 45^{0}C.
- Substrate temperature is between 10–35^{0}C and at least 3^{0}C above dew point temperature.
- Relative humidity is below 75%.
- When CIKOpoxy Floor SD is applied at direct UV radiations exposed areas, it is recommended to apply a thin layer of CIKOcoat UV333 at 100 microns DFT.
- When CIKOpoxy Floor SD is applied at floor levels without direct exposure to UV radiations, it is recommended to apply a single or two layers of CIKOpoly FL111 at thickness ranging between 0.5 mm up to 1 mm.

Packaging
CIKOpoxy Floor SD is available in 25 & 34 kg kit consisting of Part-A, B & C.

Shelf life
CIKOpoxy Floor SD has a shelf life of 12 months if stored in accordance with CIKO instructions.

Storage
CIKOpoxy Floor SD should be stored under enclosed shaded area at temperatures between 5^0C and 35^0C.

Health & safety
CIKOpoxy Floor SD should not come in contact with the eyes. It should not also be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Applicator should wear appropriate clothes, gloves and goggles. Use of barrier cream is recommended to provide additional skin protection. If comes in contact with eyes, flush with plenty of fresh water and seek medical advice.
Refer Material Safety Data Sheet for further details.

Technical Support
For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

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- *Waterproofing and damp proof coatings*
- *Surface treatments*
- *Flooring and toppings*
- *Grouts and anchors*
- *Tile adhesives and grout*
- *Concrete repair materials*
- *Adhesives and bonding agent*
- *Protective coating*
- *Joint Sealants and Moulding compounds*
- *Ancillaries*

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