



# Epoxy and Polyurethane based multi-coat protection system for concrete surfaces

#### Uses

This is a chemical and Ultraviolet ray resistant high build multicoat protective coating system for bridge decks, RCC girders and other atmospherically exposed RCC structures.

# Advantages

- Excellent resistance to chemicals and Ultraviolet rays
- Excellent adhesion to concrete substrates
- Economical and durable
- Easy application
- Available in selected colours

# Description

Nitocote BCS 300 is a multi coat, anticorrosive, Epoxy and Polyurethane system, approved by CECRI (Central Electrochemical Research Institute) specially formulated to provide a durable chemical and Ultraviolet resistant coating for exposed surfaces with a total dry film thickness of about 300 microns. The system consists of 4 products.

Nitocote EP50 : Two component, Red oxide primer based on epoxy - polyamide applied at a wet film thickness of 100 microns.

Nitocote EP110 : Two component, Micaceous Iron oxide middle coat based on epoxy - polyamide applied at a wet film thickness of 175 microns.

Nitocote EP100 : Two component, Titanium dioxide top coat based on epoxy - polyamide applied at a wet film thickness of 175 microns.

Dekguard PU : Two component, Aliphatic polyurethane based finish coat applied at a wet film thickness of 110 microns.

#### **Technical Support**

The company provides a technical advisory service supported by a team of specialists in the field.

# **Properties**

| Product       | Pot life<br>at 35ºC | Ovecoating<br>time | WFT<br>(mic | DFT<br>rons) | Coverage<br>m²/L      |
|---------------|---------------------|--------------------|-------------|--------------|-----------------------|
| Nitocote EP50 | 4 hours             | 2 hours            | 100         | 50           | 5- 6m²                |
| Nitocote EP11 | 0 4 hours           | 6 hours            | 175         | 110          | 4 - 5m <sup>2</sup>   |
| Nitocote EP10 | 0 4 hours           | 6 hours            | 175         | 100          | 5 - 6m²               |
| Dekguard PU   | 3 hours             | 2 hours            | 110         | 40           | 9 - 10 m <sup>2</sup> |

Below 35°C the pot life and over coating times are longer.

The coverage rates given above are for guidance only. The actual coverage depends on surface conditions like surface texture, porosity of the substrate, application methods etc. Specification Clauses

The protection system shall be Nitocote BCS 300, a multicoat, anticorrosive, epoxy polyamide system approved by CECRI, with redoxide primer at a DFT of 50 microns micaceous iron oxide middle coat at 110 microns, titanium dioxide topcoat at a DFT of 100 microns. The finish coat shall be aliphatic polyurethane at a DFT of not less than 40 microns capable of providing ultraviolet resistance. The total dft of the system shall not be less than 300 microns. The cured film shall provide a smooth surface.

Application Instructions

# Surface preparation

Surface to be coated must be structurally sound dry and free from loose material. All surface contamination must be removed. Grease and oil should be grit blasted. Any laitence must be removed from concrete surface by etching with Reebaklens then washed off and dried. New concrete should be allowed to cure for at least 28 days prior to priming. It is essential that Nitocote BCS 300 system is applied to sound clean dry substrate in order to achieve maximum adhesion between coating systems and the substrates.

# Mixing

Before mixing, the contents of each can should be thoroughly stirred to disperse any settlement which may have taken place during storage. The base and hardener are emptied into a suitable container and the material is thoroughly mixed for at least 3 minutes. Mechanical mixing using a slow speed (300 - 500 rpm) flame proof, drill fitted with a mixing paddle is recommended.

#### Coating

Apply the mixed material to the dry prepared substrate making sure continuous film is achieved using a standard paint brush, good quality lambs wool roller or spray equipment at the wet film thickness recommended in the table.

#### Cleaning

Tools and equipments should be cleaned with Nitoflor Sol immediately after use.



# **Temperature limitations**

Minimum application temperature 15°C. At temperatures, below 15°C and over 40°C, please contact your local Fosroc office.

# Estimating

#### Packaging

| Nitocote EP50  | : | 4 / 20 litre pack |
|----------------|---|-------------------|
| Nitocote EP110 | : | 4 / 20 litre pack |
| Nitocote EP100 | : | 4 / 20 litre pack |
| Dekguard PU    | : | 4 / 20 litre pack |
| Nitoflor Sol   | : | 5 and 20 Ltr Cans |
| Reebaklens     | : | 5 and 20 Ltr Cans |

# Storage

# Shelf Life

All the above products have a shelf life of 12 months if stored in unopened containers below 35°C.

# Coverage

Please refer to the table given above for individual product coverages. However the practical coverage may vary depending on the surface condition.

# Precautions

# **Health and Safety**

Some people are sensitive to epoxy resin systems and the may develop dermatitis on skin contact. Gloves and barrier creams should be used while handling the materials. If contact with skin or eyes occurs, wash with plenty of water. DO NOT USE SOLVENT. If irritation persists, seek immediate medical advise. Smoking and naked flame should be avoided while using the materials.



FRANKLIN FLOOR TECH OFFICE ADDRESS ADDRESS: HOUSE# 553, SHAHINBAG, TEJGAON, DHAKA 1215, BANGLADESH. PHONE: 01715-289292 E-MAIL:CHASHIMASUM@GMAIL.COM, WEBSITE : WWW.FRANKLIN.COM.BD