

CCI NEOZINC

Two-component, Epoxy, Zinc-rich Primer

Description

CCI NeoZinc is supplied as a two-component system based on metallic zinc and epoxy resin which on mixing gives a grey-coloured liquid.

Uses

CCI NeoZinc is recommended for priming exposed steel reinforcement for use with concrete repair mortars. The product actively resists corrosion within the confines of the repair location and avoids the generation of incipient anodes in immediately adjacent locations. CCI NeoZinc is compatible with all Neocrete PMC mortars and fluid micro concretes.

Advantages

- ✓ **Anti-corrosive:** Active 'Zinc-rich' system combats corrosion by electro chemical means.
- ✓ **Two-component Product:** Easy to mix and use.
- ✓ **Timesaving:** Touch dry after 30 to 40 minutes.
- ✓ **Excellent Adhesion:** Exhibits excellent bond strength in cementitious repairs.

Properties

Specific Gravity	1.75	
Wet film thickness per coat	100 microns	
Dry film thickness per coat	40 microns	
Total zinc content in dry film	> 84% by weight	
Adhesive bond strength with steel (ASTM D4541)	> 1.5 N/mm ²	
Pot life	30 minutes at 30°C	
Application thickness	100 microns (wet) per coat	
Drying time	At 20°C	At 35°C
Touch dry	45 minutes	15 minutes
Full dry/Recoatable	45 minutes to 1 hour	
Surface drying time at 27°C	20 to 40 minutes	

Note: At temperatures below 20°C, the drying times will be slower. Conversely, at temperatures above 35°C, the drying times will be faster.

Design Criteria

One or two coats of CCI NeoZinc are generally required, dependent largely on the nature and profile of the substrate. CCI NeoZinc is generally recoatable between 30 minutes and one hour after the application of the first coat. Application of topcoat may also proceed at this time. At elevated temperatures, the recoatable and overlay times will be reduced. The minimum application temperature for CCI NeoZinc is 10°C.

Specification Clauses

Steel Reinforcement Primer Performance Specification

The steel reinforcement primer shall be an epoxy, two-component, zinc-rich liquid packed and supplied ready-to-use. An unbroken 40 microns DFT coating shall be capable of providing 'active' galvanic protection and avoiding the generation of incipient anodes in the immediately adjacent locations. It shall be of suitable viscosity to enable the coating to penetrate into imperfections and pits within the surface of the structural steel. The formulation of the primer shall be such that drying occurs to allow the application of the repair mortar after 45 minutes at 35°C or after one hour at 20°C. It shall be fully compatible with the reinstatement methods adopted.

Application Instructions

Preparation

Any corroded steel shall be fully exposed, and all loose scale and corrosion deposits shall be removed. Steel should be cleaned to a bright condition paying particular attention to the back of exposed steel bars. Grit-blasting is recommended for this process. Where corrosion has occurred due to the presence of chlorides, the steel should be high-pressure washed with clean water immediately after grit-blasting to remove corrosion products from pits and imperfections within its surface.

Mixing

Both components shall be mixed until a homogenous mixture is obtained. It is important that both components are intermixed thoroughly and that no traces of the components remain unmixed. A slow speed heavy duty drill fitted with a paddle is recommended for mixing.

Application

The application of **CCI NeoZinc** must take place as soon as possible to a dry steel surface after completion of the preparation work but always within 3 hours.

One full and unbroken coat of **CCI NeoZinc** shall be applied using a suitable brush, making sure the surfaces of the steel are properly coated. A small brush is generally suitable for this purpose. It shall be allowed to dry fully before continuing. If in doubt of having achieved an unbroken coating, a second application should be made as soon as the first coat is fully dry (generally between 30 minutes and one hour).

The primed surfaces should not be left exposed to the elements for longer than necessary before overcoating. **CCI NeoZinc** will, however, protect steel under clean interior exposed conditions for a period of several months. In non-aggressive exterior environments, a maximum interval of 14 days will be tolerated but in industrial and/or marine environments this interval should be reduced to the practical minimum.

The application of concrete repair materials should proceed as soon as the **CCI NeoZinc** is fully dry (generally 45 minutes to 1 hour - Refer **Properties**).

Low temperature working

The minimum application temperature is 10°C. The material should not be applied when the substrate and/or air temperature is 10°C and below.

Cleaning

CCI NeoZinc should be removed from tools, equipment, and mixers immediately after use.

Limitations

CCI NeoZinc should not be applied when the temperature is below 10°C. If any doubts arise concerning temperature or application conditions, CCI Chemicals shall be contacted.

Coverage

CCI NeoZinc: 4 m² to 5 m²/L

Note: This coverage figure is theoretical – due to wastage factors, variety and nature of possible steel substrates, the practical coverage figures may be reduced.

Packaging

CCI NeoZinc – 1 L and 5 L Pack.

Shelf Life & Storage

6 months if kept in dry store in the original, unopened containers. If stored at high temperature and/or high humidity conditions, the shelf life may be reduced.

Precautions

Health & Safety Instructions

CCI NeoZinc should not come in contact with the skin and eyes or be swallowed. Adequate ventilation should be ensured, and inhalation of vapours should be avoided.

Before use, refer to the Material Safety Data Sheet (MSDS). The MSDS is available on www.ccichemicals.in or contact us at info@ccichemicals.in.

Fire

CCI NeoZinc is flammable. It shall be kept away from the source of ignition. Smoking is prohibited during handling / application of the product. In the event of fire, it shall be extinguished with Carbondioxide or foam. Use of water jets is not recommended.

Flash points

CCI NeoZinc – 16°C.

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