

Nitoprime Zincrich

constructive solutions

Single component epoxy zinc primer

Uses

Nitoprime Zincrich is the recommended anti-corrosion primer for exposed steel reinforcement for use with Fosroc concrete repair mortars.

It is fully compatible with all Renderoc mortars and fluid micro-concretes.

Advantages

- 'Active' zinc-rich system combats corrosion by electro-chemical means
- Formulated for use with Renderoc repair products
- Single component product — easy to use with no restrictive pot-life
- Time saving — touch dry after 15 to 45 minutes
- Economical — single component ensures almost no waste

Description

Nitoprime Zincrich is supplied as a single component grey-coloured liquid based on metallic zinc and epoxy resins.

Standards compliance

The product has also been approved by the British Board of Agrément, Certificate No. 98/3461 as part of the Renderoc System of Concrete Repair.

Specification clauses

Steel reinforcement primer

The steel reinforcement primer shall be Nitoprime Zincrich, a single-component zinc-rich liquid packed and supplied ready to use. An unbroken 40 microns thick coating shall be capable of providing 'active' galvanic protection. It shall be a suitable viscosity to enable the coating to penetrate imperfections and pits within the surface of corrosion-damaged steel bars.

The formulation of the primer shall be such that drying occurs to allow the application of the repair mortar to proceed after 20 to 45 minutes at 35°C or after 30 minutes to one hour at 20°C.

It shall be fully compatible with the Renderoc system of concrete repair.

Properties

Test method	Typical result	
Specific gravity:	2.0	
Recommended thickness per coat:	40 microns (dry)	
Application thickness per coat:	135 microns (wet)	
Drying times —	@ 20°C	@ 35°C
Touch dry:	45 min	15 min
Fully dry/recoatable:	30 mins to 1 hour	20 to 45 min

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

Application instructions

Preparation

Expose fully any corroded steel in the repair area and remove all loose scale and corrosion deposits. 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.

Application

The application of Nitoprime Zincrich must take place as soon as possible to a dry steel surface after completion of the preparation work but always within 3 hours. Although a single component product, it should be stirred thoroughly before use in order to redisperse any settlement.

Apply one full and unbroken coat of Nitoprime Zincrich by suitable brush, making sure that the back of exposed steel reinforcing bars are properly coated. A small brush is generally more suitable for this purpose. Allow to dry fully before continuing. If any doubt exists about 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 or application of the repair material. Nitoprime Zincrich will, however, protect steel under clean interior exposure 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.

Nitoprime Zincrich

The application of concrete repair materials should proceed as soon as the Nitoprime Zincrich is fully dry (generally 20 minutes to one hour — see under Properties).

Low temperature working

The minimum application temperature is 5°C. The material should not be applied when the substrate and/or air temperature is 5°C and falling. At 5°C static temperature or at 5°C and rising, the application may proceed.

Cleaning

Nitoprime Zincrich should be removed from tools, equipment and mixers with Fosroc Solvent 102 immediately after use.

Estimating

Supply

Nitoprime Zincrich:	1 and 2.5 litre cans
Fosroc Solvent 102:	5 and 25 litre tins

Coverage

Nitoprime Zincrich:	7.4 m ² /litre
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Note: this coverage figure is theoretical — due to wastage factors and the variety and nature of possible steel substrates, practical coverage figures will be reduced.

Limitations

Nitoprime Zincrich should not be applied when the temperature is below 5°C or is 5°C and falling. If any doubts arise concerning temperature or application conditions, consult the local Fosroc office.

Storage

Store in dry conditions in the original containers. Nitoprime Zincrich and Fosroc Solvent 102 have a shelf life of 12 months if kept in a dry store in the original, unopened containers.

If stored at high temperatures and/or high humidity conditions the shelf life may be reduced.

Nitoprime Zincrich should be stored in accordance with the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972.

Precautions

Health and safety

For further information refer to the appropriate Product Safety Data Sheet

Fire

Nitoprime Zincrich and Fosroc Solvent 102 are flammable. Keep away from sources of ignition. No smoking. In the event of fire, extinguish with CO₂ or foam. Do not use a water jet.

Flash points

Nitoprime Zincrich:	16°C
Fosroc Solvent 102:	33°C

For further information, refer to the Product Material Safety Data Sheet.

Additional information

Nitoprime Zincrich is the approved reinforcing steel primer for use with the Renderoc, Patchroc and Paveroc systems of concrete repair.



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Important note

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