



constructive solutions

Nitoprime Zincrich (WB)

Two-component water based inorganic zinc primer

Uses

Nitoprime Zincrich (WB) is the recommended anti-corrosion primer for exposed steel reinforcement for use with Fosroc 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. It is fully compatible with all Fosroc Renderoc mortars and fluid micro-concretes.

Advantages

- Eco-friendly waterbased primer
- VOC free
- Fast drying
- Resistant to high temperature
- 'Active' zinc-rich system combats corrosion by electro-chemical means
- Excellent oil resistance and solvent resistance
- High hardness, high mechanical abrasion resistance
- Strong adhesion, conductive
- Unaffected by welding and cutting, free of combustible volatiles when application
- Marine antipollution properties
- Formulated for use with Fosroc Renderoc repair products

Standards Compliance

Nitoprime Zincrich (WB) complies with BS4652.

Description

Nitoprime Zincrich (WB) is a two-component water based inorganic zinc primer system, consists of water based inorganic liquid and zinc powder.

Design criteria

One or two coats of Nitoprime Zincrich (WB) are generally required, dependent largely on the nature and profile of the substrate. Nitoprime Zincrich (WB) is recoatable generally between 20 minutes and 45 minutes after the initial application. Application of concrete repair materials may also proceed at this time.

Technical support

Fosroc offers comprehensive technical support, including help at the design stage, application advice and on site problem solving. Specifiers and contractors are encouraged to contact our trained staff for answers to their questions. For further information please contact Fosroc.

Typical Properties

Colour	Grey			
Specific gravity:	Approx. 2.8			
Recommended thickness :	75-100 microns (dry)			
Drying times –	@5°C	@10°C	@23°C	@35°C
Touch dry(mins):	120	50	30	20
Fully dry(hours):	9	4	2	1
Flexibility and adhesion(BS 4652):	Pass			
Resistance to impact(BS 4652):	Pass			
Resistance to continuous salt spray(BS 4652):	Pass			

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

Specification clauses

Steel reinforcement primer

The steel reinforcement primer shall be Nitoprime Zincrich (WB), a two-component water based zincrich primer and supplied ready to use. An unbroken 75 microns thick coating shall be capable of providing 'active' galvanic protection and of avoiding the generation of incipient anodes in the immediately adjacent locations. The formulation of the primer shall be such that drying occurs to allow the application of the repair mortar to proceed after 20 minutes at 35°C or after 30 minutes to 45 minutes at 23°C. It shall be fully compatible with the Renderoc system of concrete repair.

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.

Mixing

The liquid should be poured into container provided, then add the zinc powder slowly to the liquid and should be thoroughly stirred before the two are mixed together. The two materials must be mixed thoroughly for at least 3 mins. The use of a heavy-duty slow speed, flameproof or air driven drill with a mixing paddle is desirable.

Nitoprime Zincrich (WB)

Application

Apply one full and unbroken coat of Nitoprime Zincrich (WB) with a 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 20 minutes to 45 minutes).

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 (WB) 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.

The application of concrete repair materials should proceed as soon as the Nitoprime Zincrich (WB) is fully dry (generally 20 minutes to 45 minutes - refer to Properties section).

Cleaning

Nitoprime Zincrich (WB) should be removed from tools, equipment and mixers with clean water immediately after use. Cured material can only be removed mechanically.

Limitations

Nitoprime Zincrich (WB) should be applied when the temperature is between 5°C to 35°C, relative humidity is below 85%. If any doubts arise concerning temperature or application conditions, please consult Fosroc.

Estimating Supply

Nitoprime Zincrich (WB) Liquid: 0.58kg/plastic bottle

Nitoprime Zincrich (WB) Powder: 1.52kg/tin

After mixing, it shall give approximate 0.75 litre of Nitoprime Zincrich (WB).

Note: In accordance with Commercial or Health & Safety requirements packaging detail may alter. Please contact your local Fosroc office for detail.

Coverage

Nitoprime Zincrich (WB):	6.5-8.5 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.

Storage

Shelf life

Nitoprime Zincrich (WB) has a shelf life of 6 months if kept in a dry store in the original, unopened containers. Storage at high temperatures/humidity may reduce shelf life.

Precautions

Health and safety

Nitoprime Zincrich (WB) should not come in contact with the skin and eyes, or be swallowed. Wear suitable protective clothing, gloves and eye protection. If working in confined areas, suitable respiratory protective equipment must be used. In case of contact with skin remove immediately with Product removing cream followed by washing with soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately - do not induce vomiting.

Powder products should be handled to minimise dust formation ; use a dust mask if excessive dust is unavoidable.

Fire

Nitoprime Zincrich (WB) mixture is non-flammable.

Nitoprime Zincrich (WB) powder is flammable. Keep away from water. Keep away from sources of ignition. In the event of fire, extinguish with CO₂ or foam. Do not use a water jet.

For further information see relevant Material Safety Data Sheet.

Nitoprime is the trademark of Fosroc International Limited.

Important note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it.

