

Galvashield XP



Tied on sacrificial anode for reinforced concrete structures

Use

Prevents incipient anode induced corrosion around the boundary of patch repairs.

Advantages

- Protects against residual chlorides
- Quick and easy installation
- Requires no external power source
- Extends lifetime of patch repairs
- Measureable performance
- Suitable for pre-stressed/post tensioned structures
- Proven technology
- Up to 20 years life

Description

A sacrificial metal embedded within a specially formulated cementitious mortar. The XP unit is fixed to the reinforcing steel by means of wire ties which allow attachment in horizontal, vertical and overhead locations.

Technical support

Fosroc offers a comprehensive range of high performance, high quality concrete repair and construction products. In addition, Fosroc offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance in locations all over the world.

Design criteria

Galvashield XP anodes shall be installed in accordance with the design table whereby the spacing of anodes is determined by steel reinforcement density.

Specification clause

The sacrificial anode shall be Galvashield XP, a sacrificial metal surrounded by a highly alkaline cementitious mortar which has a pore solution pH which is sufficiently high for corrosion of the anode to occur and for passive film formation on the anode to be avoided as described in patent no PCT/GB94/01224.

Application instructions

Preparation

The concrete shall be broken out from around and behind the steel reinforcement in accordance with good concrete repair practice.

All exposed steel reinforcement shall be cleaned to a bright condition paying particular attention to the back of exposed steel bars. Abrasive blasting is recommended for this process.

Prior to installation of the XP units, continuity of the steel reinforcement shall be checked. Any loss of continuity will require additional electrical connections or restoration of continuity by traditional means.

Application

Attach the Galvashield XP immediately following preparation and cleaning of the steel reinforcement.

Select a location for the Galvashield XP as close as practical to the edge of the broken out repair zone and excavate a rebate as required. Galvashield XP units should be positioned around/along the repair boundary.

The Galvashield XP should be positioned to ensure all round contact with the reinstatement material and attached using the wire ties. Tighten tie wires using Galvashield Fixing Tool so that no free movement is possible, thus ensuring good electrical continuity. To test electrical continuity between wire ties and reinforcement bar a continuity meter should be used.

In addition to standard substrate preparation the Galvashield XP should be thoroughly pre-soaked prior to application of the repair mortar.

Cover to the Galvashield XP should equate to the depth of cover to the steel reinforcement to which it is attached and in no case shall be less than 20mm for deck repairs or 10mm for vertical and overhead repairs.

Reinforcing steel priming

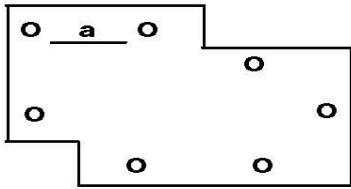
When required the steel reinforcement should be primed immediately following attachment of the Galvashield XP with a 135 micron (wft) continuous coating of Nitoprime Zincrich.

Overpainting of the bonding agent or reinforcement primer, or repair bonding agent, onto the surface of the Galvashield XP unit must be avoided.

See individual Renderoc product data sheets for specific details.



Typical Layout



- Galvashield XP units
- a Maximum spacing

Repair materials

The Galvashield XP should be used in conjunction with Fosroc's extensive range of Galvashield XP compatible repair mortars and acrylic bonding/curing agents.

Galvashield XP is not suitable for use with epoxy and polyester repair mortars or primers

Blanket galvanic protection of sound but contaminated areas of concrete can be established by the use of Galvashield CC sacrificial anodes (refer to Galvashield CC data sheet).

Packaging

Renderoc Galvashield XP 64mm wide x 27mm thick
20 units per pack

Design Table

Spacing of XP units

Steel surface area per m ² concrete	Maximum spacing between XP units (a)
≤ 0.6	610mm
0.61 - 0.9	500mm
0.91 - 1.2	430mm

For greater steel densities consult Fosroc

Storage

Store in dry conditions in the original unopened box. Shelf life 12 months - see package instructions for details.

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

Precautions

Disposal

All waste water used to Presoak Galvashield XP units must be mixed with a cementitious material before disposal, once cured dispose of by normal means.

Health and Safety

The Galvashield XP should be handled using gloves, and other personal protective equipment, as per standard procedures for handling cementitious materials.



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

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