

# Galvashield XP

constructive solutions

## Tied-on sacrificial anode for reinforced concrete structures

### Use

Prevents incipient anode 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
- Measurable 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.

### Standard Compliance

Independently certified performance.  
BBA Certificate (No. 04/4140)

### 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

Break out the concrete from around and behind the steel reinforcement in accordance with good concrete repair practice.

All exposed steel reinforcement should 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, check the continuity of the steel reinforcement. 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

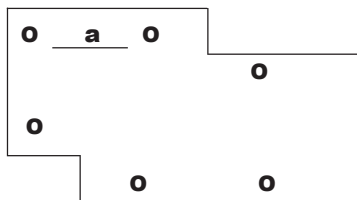
When required the steel reinforcement should be primed immediately following attachment of the Galvashield XP with a 135 micron (wft) continuous coating of Nitoprime Zincrich.

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.

# Galvashield XP

## 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 diameter x 27mm thick  
20 units per pack

## Design Table

Spacing of XP units

Steel surface area per m <sup>2</sup> 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 the Fosroc Technical Department.



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### Important note

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## 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.

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Certificate number FM 610