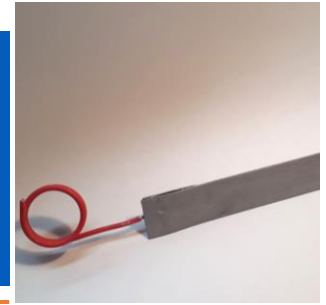


# TECHNICAL DATASHEET

## PatchGuard Strip™

An inter-connected sacrificial anode system which acts to control corrosion of reinforcing steel in concrete.

### Uses

PatchGuard Strip is used to control corrosion and mitigate cracking and spalling of sound but contaminated reinforced concrete where a corrosion risk has been identified. The profile of PatchGuard Strip makes it ideal for installing into slots in the concrete cover zone or into bedding joints.

### Advantages

- Compact size to fit into 6mm (1/4") wide slots
- Quick and easy to install
- Corrosion resistant connection system
- No need to break out contaminated concrete
- Can be adapted to comply with BE EN ISO 12696 (2016) standard for impressed current cathodic protection
- Suitable for carbonated and chloride contaminated structures
- No need to pre-soak anodes
- Pre-mixed embedding mortar in handy cartridge
- Measurable performance
- Up to 20 year service life\*

### Description

A corrosion control system comprising zinc alloy strips with integral titanium connecting wires and a specially formulated backfill mortar. PatchGuard Strip is a proven effective way of adopting BS EN 1504 Part 9 Principle 10 (cathodic protection by applying an electrical potential). PatchGuard Strips can be supplied as individual units or pre-connected in strings of up to 20 units. When installed into slots in sound but contaminated concrete, the units will corrode sacrificially to the surrounding steel reinforcement.

### Properties

Product	Thickness	Width	Length	Zinc Weight
<b>PatchGuard Strip 20/550</b>	3.5mm ( 1/8" )	20mm ( 3/4" )	550mm ( 21 3/4" )	86g

Different lengths and widths can be fabricated on request

### Application

Application shall be in accordance with the 'Installation Guidelines' and is summarised as follows:

Mark up locations for the PatchGuard Strip units in conjunction with the contract drawings. Cut slots 6mm (1/4") wide x 40mm (1 1/2") deep for recessing the anode units and the connection wiring. Remove a small area of cover concrete to expose a section of steel reinforcement and drill a 4mm (3/16") hole. Using steel rivets connect the titanium wire at both ends of each string of anodes (max no. 20) to the exposed reinforcement.

Clean and then wet the slots for a minimum of 15 minutes and remove excess water. Apply DuoCrete PG mortar into the slots using a caulking gun. Insert PatchGuard Strip anodes into the mortar which shall flow 20mm (7/8") from the concrete surface. Ensure that the units are fully encapsulated in the PG mortar. The remaining space at the top of the slots, and steel reinforcement connection excavations, shall be filled with an appropriate low shrink mortar within 2 hours of installation.

## Limitations

In order that suitable current flow and lifetime can be achieved from the PatchGuard Strip anode, certain practical considerations should be taken into account. The patch repair material cover for the PatchGuard Strip unit must be a minimum depth of 20mm. When installed in a previous patch repair, the resistivity of the repair material should be in the range of 50-200% of the parent concrete.

Any discontinuous steel should be either electrically bonded to, or electrically isolated from the system negative. Any cracks or delamination in the concrete which affect ionic current flow will affect performance of the PatchGuard Strip unit and should thus be pre-treated.

\*Service life will depend on local site conditions including chloride concentration, concrete properties, humidity and temperature.

## Packaging

PatchGuard Strip units are supplied as individual units or in bespoke pre-connected strings of maximum 20 units to meet project requirements.

## Storage

Store dry

Boxes should only be opened when the product is required.

The lid of the box should be closed at all times when not in use. Do not remove silica gel.

Do not allow contact with oxidizing materials.

CPT products have specific guidelines shown clearly on the packaging which **must** be followed to ensure a successful install.

## Ancillary Materials

DuoCrete PG Mortar

MN15 Manganese dioxide reference electrodes

Monitoring equipment

## Precautions - Health and Safety

Health and safety protective clothing, gloves and eye protection must be worn at all times.

## Specification Clause

The discrete anode shall be an activated zinc alloy strip with an integral titanium electrical connection. The zinc strip anode shall be embedded into pre-prepared slots using a factory pre-mixed activating mortar of pH<12.8 which remains pliable for a minimum of 48 hours.

## Technical and Sales Support

w: [www.cp-tech.co.uk](http://www.cp-tech.co.uk)

t: +44 (0) 115 9724 238

e: [general@cp-tech.co.uk](mailto:general@cp-tech.co.uk)



For technical and sales support please contact us at:  
 Concrete Preservation Technologies  
 1 Palmer Business Court, Manor House Road, Nottingham, UK, NG10 1LZ  
 (T) +44 (0) 115 9724 238 (E) [general@cp-tech.co.uk](mailto:general@cp-tech.co.uk)  
[www.cp-tech.co.uk](http://www.cp-tech.co.uk)