Galvashield® XP
Monitoring Kit Instructions

Galvashield® Product Line includes: XP, XPT, XP2 and XP4
Each Galvashield® XP Product Monitoring Kit contains:

- Galvashield® CC anode unit hard-wired to insulated red electrical lead (3 m long)
- Switch with crimp-on connectors
- Stainless steel hose clamp
- Insulated black electrical lead (3 m long)
- Weather-proof junction box

Prior to installation, as in all standard patch repairs, concrete should be removed from around and behind the steel reinforcement in accordance with good concrete repair practice. Clean all exposed reinforcement inside the repair area appropriately to facilitate a good electrical connection. Galvashield® XP-type anode units should be placed inside the patch area, adjacent to the repair edge. The monitored anode units should be attached directly to the steel using plastic cable ties (NOT provided) and should be positioned in such a way that after patching, concrete cover over the anode unit is consistent with the surrounding areas.

The cathode connection (to reinforcing steel) is made by attaching the stripped end of the black copper lead to clean reinforcing steel (near the location of the anode) using the hose clamp. Continuity is checked after installation with an appropriate multi-meter. By touching one meter lead to the reinforcing steel and the other to the switch contact connected to the cathode wire (black), the DC resistance should be less than 1 (Ω). If not, tighten or reposition hose clamp. Finally, the entire connection must be covered completely in silicone or epoxy (NOT provided) to prevent corrosion between the copper wire and the steel clamp. Place the junction box away from traffic or other possible causes of damage or disturbance. Secure the box with the adhesive tape found on the underside of the box or by another means. The two wires (black & red) leading out of the patch area to the junction box may be better protected by placing in a saw-cut groove or plastic conduit. However, excess wire may be coiled up and placed neatly outside of the patch area until the repair material has been placed. When convenient, the switch (provided) must be connected to the black and red leads inside the junction box.

When installing monitored anode units in conjunction with unmonitored anode units, the spacing and location is as stated in the specification. Compatible repair materials must have a resistivity below 15,000 ohmcm. Products with significant polymer modification and/or silica fume content may not be suitable. Similarly, if bonding agents are used, they should have suitable conductivity. Insulating materials such as epoxy bonding agents should not be used. If rebar coatings are to be used, care should be taken to ensure the anode and tie wires do not become coated or the connection between the anode tie wires and the rebar is not lost. Complete the repair following normal concrete repair procedures, taking care not to create any voids around the anode unit.

CURRENT MEASUREMENT

Current is measured with the same meter as when measuring continuity. Be certain the range is set for microamps (μA) or milliamps (mA) when measuring DC current. Connect the multimeter leads to the two contacts of the switch. When the switch is ON the reading will be zero. To correctly take a reading, turn the switch OFF and record the current measurement. (Do not forget to return the switch to ON).

Health and Safety Information and Storage Instructions are consistent with Galvashield® CC Installation Instructions.
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