

# CORRO GUARD -B

# (For highly corrosive industrial application)

# **DESCRIPTION:**

Corro Guard -B are the anodes used in concrete to prevent further corrosion. Anodes are surrounded by Alkali activated mortars once installed or fastened to the reinforcement steel zinc core corrodes & protects the reinforcement steel in highly corrosive environment.

# AREAS OF APPLICATION:

- > New and old Structures.
- > It can be used in bridges, Jetties.
- > Can be used in Residential buildings.
- > Can be used in Chimneys & Cooling towers.
- ➢ In all types of Industries.
- > Can be used in water retaining structure.

### **ADVANTAGES:**

- Provides corrosion protection.
- > Easy to install, anode can be easily fastened to the reinforcement steel.
- > It doesn't require external power source.
- Performance can be easily monitored.
- $\succ$  It is long lasting for 10-20 years & reduces the future repairs.

# **TECHNICAL SPECIFICATIONS:**

| Sr.<br>No | Specifications                               | Technical Details                 |  |
|-----------|--|-----------------------------------|--|
| 1         | Working Principle                            | Galvanic Series                   |  |
| 2         | Anode (Zn-alloy) Material<br>Compliance with | As per ASTM B418 95A              |  |
| 3         | Outer shell material                         | Ion Conductive Galvanic<br>Matrix |  |
| 4         | Size of finished goods                       | 80mm x 40mm x 35mm                |  |
| 5         | Total mass of Zinc                           | 57 gm                             |  |
| 6         | Wire & specifications                        | Galvanized iron wire              |  |

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### **INSTALLATION METHOD:**

- > Break concrete from around & behind the reinforcement.
- Remove all scales, rust, loose mortars from the reinforcement & around the reinforcement.
- For repairs remove all de bonded concrete which induces chloride penetration & further corrosion.
- > Anodes are typically tied to the exposed reinforcement close to the concrete.
- Proper cleaning of reinforcement steel is needed where anode tie wires are going to be connected. It provides good electrical conductivity.
- Soaking of anodes for 15 -20 Minutes before application are recommended.
- > Fasten the tie rods to the reinforcement steel.
- > Electrical connection between anodes tie wires & the clean the reinforcement steel should be between 0-1.0  $\Omega$ .
- > Minimum cover on the anodes must be 20 mm.
- Spacing between the anode
- 1. In repairing of structure.
  - If corrosion is low, spacing of anodes are 2 sqm.
  - > If corrosion is medium, spacing of anodes are 1.5 sqm.
  - > If corrosion is High, spacing of anodes are 0.75 sqm.
- 2. In new construction
  - > Fasten the tie rods to the reinforcement & maintain the space of 2 sqm.

#### **STORAGE:**

- > Anode should be placed in dry atmosphere.
- It should be used within 12 months

