EGA™

Embedded Galvanic Anodes

AFZIR
Advanced Solutions
Strengthening Company

PRODUCT DESCRIPTION

EGA™ embedded galvanic anode units utilize an innovative zinc anode core design surrounded by an enhanced formulated cement-based mortar to provide corrosion mitigation to reinforced concrete structures. Once installed, the zinc core corrodes preferentially to the surrounding rebar, thereby providing galvanic corrosion prevention to the adjacent reinforcing steel.

PRODUCT FEATURES

- Protects against residual chlorides
- Prevents corrosion
- Extends lifetime of repair
- Eliminates secondary repairs
- Provides highly cost effective repair
- Quick and easy installation

TECHNICAL DATA	
Total Anode Weight	0.24 kg
Zinc Alloy	ASTM B 418, Type II
Zinc Content	(65 g)
External Surface Area	219 cm^2
Auto-Corrosion	<0.01 mm/yr
Estimated Coverage	500-750 mm spacing depending on steel density and repair geometry

PRODUCT USES

- On new, steel-reinforced concrete structures and elements that will be affected by chloride ingress
- On existing, steel-reinforced concrete that exhibits corrosion from chlorides
- Can be installed in architectural precast before placement of concrete.

HOW TO USE

SURFACE PREPARATION

The concrete should be broken out from around and behind the steel reinforcement in accordance with established 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.

APPLICATION:

- Ensure that anodes are positioned and fastened in place to the reinforcing steel so that they do not move during repair and casting operations.
- Attach anodes to the reinforcement steel by welding, or by utilizing hose clamps or traditional steel rebar ties.
- Place the anodes along the perimeter of the repair area, ensuring that enough space is provided to completely surround the anodes with the repair material. The location and spacing of the anodes should be as directed by the design professional.
- To test electrical continuity between wire ties and reinforcement bar a continuity meter should be used.
- Where specified, the steel reinforcement should be primed using a continuous coating of Afzir's epoxy zinc rich primer (EZP™) immediately following attachment of EGA™.
- EGA™ should be used in conjunction with Afzir's extensive range of compatible repair mortars

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LIMITATIONS

For application in submerged conditions or in areas subject to high levels of chemical contamination/attack, consult the local Afzir office.

HANDLING

Approved personal protection equipment should be worn at all times. Particle mask is recommended for possible airborne particles. Gloves are recommended when handling anti-carbonation coating to avoid skin irritation. Safety glasses are recommended to prevent eye irritation. Wear chemical resistant clothing/gloves/goggles. Ventilate area. In absence of adequate ventilation, use properly fitted respirator.

PACKAGING

30 units per box.

STORAGE

EGA™ embedded galvanic anode will have a shelf life of 5 years if stored in original packing, in dry, warehouse conditions

FIRST AID

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water; contact physician immediately. For respiratory problems, remove to fresh air. Wash clothing before reuse.

DISCLAIMER OF LIABILITY

AFZIR, LLC warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within six months of the date of purchase.

AFZIR shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory.

The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production.

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