

Product Evaluation

RE: Review of Vector Galvanode ZincRibbon

PRODUCT

Galvanode ZincRibbon Anode is designed to neutralize or slow down new corrosion cells around reinforcing steel in concrete repair work. This product is distributed by Vector Corrosion Technologies.

VENDOR CLAIMS AND INFORMATION

CLAIMS

Galvanode ZincRibbon is an innovative and unique galvanic corrosion protection anode system. The system is designed to provide distributed corrosion protection to concrete patch repairs, joint repairs and other applications where an interface between new and old concrete will exist and will likely result in patch accelerated or "halo effect" corrosion. When compared to discrete or point anodes which are typically spaced up to 30 in. (762 mm) apart, Galvanode ZincRibbon anodes provide more uniform current distribution and more thorough corrosion protection. Product web link: <http://www.vector-corrosion.com/>

DESCRIPTION

Based on Vector Corrosion Technologies' Galvanode DAS distributed anode technology, the thin, low profile design of Galvanode ZincRibbon anodes allows the system to be used in a wide range of applications where larger Galvanode DAS anodes are not well suited. Due to the anode flexibility, it can be bent to conform to irregularly shaped areas such concrete patch repairs. When distributed across the concrete surface, Galvanode ZincRibbon will provide protection over large areas. The anodes can be installed along joints between new and old (existing) concrete, encased in concrete overlays, grouted into saw cut slots, or installed in new construction. The quantity of zinc provided, the anode shape, electrical components and installation procedures can be customized to meet specific project requirements. Individual Galvanode ZincRibbon anode components can be supplied in lengths of up to 7.5 ft (2.3 m).

POTENTIAL USAGE

The Galvanode ZincRibbon is suitable for bridge deck repairs, joint replacement and interface applications between new concrete and existing concrete.

STANDARDS

ACI 222-R
ASTM B 418 Type II
ASTM B69

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE

Alberta Transportation has listed similar technology, Galvashield XP Embedded Galvanic Anodes, on the Product List. The product has been specified by many US DOT's and Provincial transportation departments. Alberta Transportation has had no experience with Galvanode ZincRibbon.

APPLICABLE STANDARDS

Alberta Transportation has no standard specifications for cathodic protection but does specify minimum standards for galvanic coating of steel products. Special provisions must be developed on a site specific basis to account for varying reinforcing steel densities.

RECOMMENDATIONS:

Galvanode ZincRibbon be listed as a Proven Product under Alberta Transportation Products List, Corrosion Protection, Galvanic – Proprietary.

TRIAL PROJECTS

Bridge file 79472

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