

Technical Data Sheet - Zinc Plate Anode 450

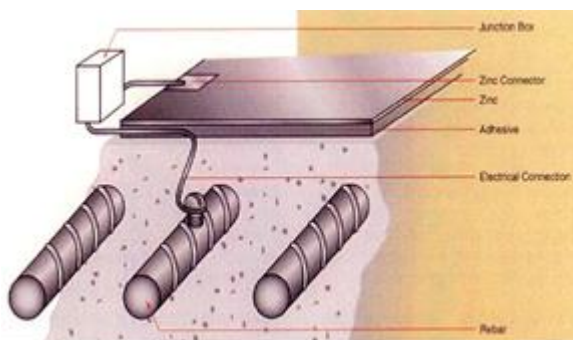
Product typical application

The product is indicated as Zinc Plate Anode or ZPA.

ZPA is a product used in the protection of reinforced concrete constructions against rebar corrosion. ZPA is a sacrificial galvanic anode specifically designed for giving electrochemical protection, known as cathodic protection, for the prevention of corrosion of the concrete steel reinforcement. The current required for cathodic protection is provided by the galvanic link of the steel reinforcement and the zinc-plate being part of the ZPA. No external power source or what so ever is necessary.

The ZPA has been therefore designed to function as an additional anode replacing all the anodic locations of the reinforced concrete construction. It is applied upon the concrete surface. The zinc-plate is electrically linked with the steel reinforcement. In this way the electric-circuit is completed because electric current flows through the adhesive layer and concrete by means of ionic conductance (both materials are so-called electrolytes). Since zinc has a natural potential which is more electronegative than the steel reinforcement, the zinc becomes the anode after installation and forms a new corrosion cell in which the reinforcement is forced to be the cathode.

In this way the corrosion process within the concrete is transferred to the zinc-layer avoiding future spalling and cracking of the concrete.



Product description

Zinc Plate Anode is a zinc foil coated with an ionically conductive adhesive. The adhesive is covered with a liner to help protect it from contamination. Before application, the protective liner is removed from the adhesive, and the Zinc Plate Anode is adhered to the clean, bare concrete surface. The ionically conductive adhesive enables the anode to be securely adhered to the surface of the concrete structure.

Roll Width : 25cm
Roll Length : 20m

Performance characteristics

Depolarization of Reinforcing Steel according to the EN-ISO standard 12696 "Cathodic protection of steel in concrete".

Installation Instructions



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Refer to "Installation Instructions" for details on installation methods.

COMPOSITION	Weight g/m ²	Thickness mm
Zinc Band	3200	0,45 ± 0,2
Ionically conductive acrylic adhesive	1420	0,9 ± 20%
Top Liner	148	0,10
Total weight ZLA	4758	1,45 ± 15%
PROPERTIES		
Zinc Band	Unit of measure	Value
Pureness	%	99,95 min.
Color	--	Grey metal
Lengthwise tensile strength	N/mm ²	>130
Crosswise tensile strength	N/mm ²	>150
Adhesive	Unit of measure	Value
Colour	--	Transparent
Minimum temperature for application	°C	> 3°
Ideal temperature for application	°C	> 10°
Working Temperature	°C	-10° +60°
Shelf Life	12 month from invoicing date when stored in original packaging at 22°C and 50% R.H.	

