

## **Sacrificial Zinc Anodes**

Simple and fast installation

Effective and long-term protection

Protects against incipient anode effect

Suitable with ARDEX BR 340 and ARDEX BR 460 FLOW

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## **Sacrificial Zinc Anodes**

### **DESCRIPTION**

ARDEX BRX 60 LO is a hybrid anode based on a composition of a multi-layered zinc core coated with a patented ion-conductive self-moistening overlay paste keeping the anodes active during their entire service-life and pre-embedded in a hybridic silicate based mortar. ARDEX BRX 60 LO anodes are utilized in areas where high expectancy of corrosion is expected. They guarantee corrosion control and preventing new locations with initiation of corrosion.

ARDEX BRX 60 LO has been designed to be used in conjunction with the ARDEX Concrete Repair Range - ARDEX BR 340 and ARDEX BR 460 FLOW.

### **FEATURES**

- Simple and fast installation
- Effective and long-term protection
- Protects against incipient anode effect
- Suitable with ARDEX BR 340 & ARDEX BR 460 FLOW

Typical corrosion, defined as galvanic corrosion, occurs when two different types of metal are in contact with each other and surrounded by an electrolyte. The metal with the most negative electrochemical potential will corrode or sacrifice itself to protect the other metal with a more positive electrochemical potential. In a similar way, the ARDEX BRX 60 LO hybrid anodes will corrode and sacrifice themselves protecting the steel or reinforcing structure being attached to it. Each anode will create an extended electric field around itself within the electrolyte commonly referred to as "throwing power" which is the protecting zone of the anode.

### **PREPARATION**

Completely expose any corroded steel in the repair area, and break out at least 20mm minimum behind all exposed reinforcing steel. All loose scale and corrosion deposits must be removed and all reinforcing steel cleaned to a bright condition (grit-blasting or abrasive power tools is recommended), with particular attention to the back of exposed steel bars. High pressure washing is required immediately after scale and corrosion is removed.

### **ANODE INSTALLATION**

Securely fasten the anodes (i.e. tie wires, tack welding etc) on the prepared steel reinforcement so they will not move or loosen during the repair mortar application. The anodes must be installed immediately after the steel reinforcement preparation has been completed.

Both anode-to-steel and steel-to-steel continuity within the repair area should be checked by the project designer/engineer with an appropriate resistance meter.

### PRIMING FOR REINFORCEMENT STEEL

To the prepared reinforcing steel, apply one continuous and uniform coat of ARDEX BR 10 ZP. If a continuous and uniform coat has not been achieved, apply a second coat of ARDEX

BR 10 ZP once the first coat has fully dried (1hr @ 20°C). Again, allow the second coat to fully dry before continuing with the repair. ARDEX BR 10 ZP should be cured prior to applying the ARDEX BR 460 FLOW or ARDEX BR 340.

Do not overcoat the anodes or where the anodes are attached to the steel reinforcement with ARDEX BR 10 ZP.

### **REPAIR MATERIAL**

Both ARDEX BR 340 and ARDEX BR 460 FLOW can be used with the ARDEX BRX 60 LO anode. The repair material must cover each anode by 20mm minimum.

Encapsulating the installed anode with ARDEX BR 340 will be required if the repair area requires a high resistivity material such as ARDEX BR 345. Ensure the area between the encapsulated anode and substrate is firmly packed to provide a conductive path to the substrate.

Please refer to the respective product datasheet on each ARDEX Concrete Repair product for surface preparation, rebar priming, and installation methods.

### **DESIGN CRITERIA**

MAXIMUM SPACING - LOW TO MODERATE CORROSION RISK		
	CORROSION PREVENTION	CORROSION CONTROL
STEEL DENSITY RATIO	ANODE SPACING (mm)	ANODE SPACING (mm)
<0.3	750	450
0.31 - 0.6	600	400
0.61 - 0.9	500	350
0.91 - 1.2	450	300
1.21 - 1.5	400	275
1.51 - 1.8	350	250
1.81 - 2.1	300	225

MAXIMUM SPACING - HIGH CORROSION RISK			
	CORROSION PREVENTION	CORROSION CONTROL	
STEEL DENSITY RATIO	ANODE SPACING (mm)	ANODE SPACING (mm)	
<0.3	600	375	
0.31 - 0.6	500	325	
0.61 - 0.9	400	275	
0.91 - 1.2	350	225	
1.21 - 1.5	250	200	
1.51 - 1.8	200	175	
1.81 - 2.1	175	150	

NOTE: Anode placement and spacing must be specified by the project designer/engineer.

## **Sacrificial Zinc Anodes**

### ANODE DIMENSIONS

130mm (L) x 50mm (W) x 12mm (H)

### **PACKAGING**

24 units per carton

### **SHELF LIFE**

ARDEX BRX 60 LO has a shelf life of 36 months when stored in the original unopened packaging, in a dry place at 23°C and 50% relative humidity.

### **LIMITATIONS**

The project structural engineer must provide specification on anode placement and spacing (design criteria). The anode is soley designed for corrosion prevention or corrosion control, and does not address structural damage. The anode must never be overcoated with a zinc-rich primer or paint, or where attached to the prepared steel reinforcement.

Before any substrate preparation, installation or finishing methods relating to ARDEX products are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

### **SAFETY DATA**

NON-HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. Wear general protective gloves e.g. light weight rubber gloves. Check with your local Council regarding the disposal of contents, dispose of packaging thoughtfully and recycle where possible. Additional information is in the Safety Data Sheet (SDS) at www.ardexaustralia.com

### **GUARANTEE**

ARDEX Australia Pty Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX Australia Pty Ltd, 20 Powers Road Seven Hills NSW 2147; Toll Free: 1800 224 070; Email: technicalservices@ ardexaustralia.com) and provide evidence of your purchase of the product within 30 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the Australian Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure".

### **DISCLAIMER**

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standards. Our instructions and recommendations are only for the uses they are intended. Users are advised to confirm that this product is suitable for their application and conforms with the specifications of the system. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

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