

MasterProtect[®] 8065CP /8105CP /8160CP

Embedded galvanic anodes for the protection of reinforcing steel

FORMERLY EMACO CP INTACT GALVANIC ANODES

PACKAGING

MasterProtect 8065CP - 30 anodes/case
MasterProtect 8105CP - 24 anodes/case
MasterProtect 8160CP* - 24 anodes/case
*MasterProtect 8160CP Anodes are make-to-order items. For lead times and minimum order requirements, contact your Master Builders Solutions sales representative.

COLOR

Color coded for quick and easy identification. See property chart.

YIELD

Yield will vary according to specific project requirements. Consult MasterProtect[®] Galvanic Anode Installation Guide or contact Master Builders Solutions Technical Services.

STORAGE

Store in unopened containers in a clean, dry area.

SHELF LIFE

12 years when properly stored.

DESCRIPTION

MasterProtect[®] 8065CP, 8105CP and 8160CP are engineered discrete zinc anodes encased in a proprietary mortar with integral galvanized tie wires for easy connection to concrete reinforcing steel. As a component of a complete concrete repair strategy, the sacrificial zinc core generates a small electrical current as it is consumed, protecting the reinforcing steel from accelerated corrosion.

PRODUCT HIGHLIGHTS

- Lower pH mortar is non-caustic and safer to handle than high-alkali mortars
- ASTM B418 Type II zinc alloy prolongs shelf life and effectiveness
- Chelation-driven activation prevents re-passivation of zinc core after long periods of inactivity
- Increased zinc surface area optimizes anode performance; 50% increase in efficiency versus other anodes of similar weight
- Pre-twisted tie wires ensure proper stand-off from steel for fast, easy installation
- Enhanced transport of reaction byproducts promotes anode reactivation after wet/dry cycles, prolonging service life

APPLICATIONS

- Interior and exterior
- Horizontal, vertical and overhead
- Above and below grade
- Corrosion protection of steel-reinforced concrete
- High-chloride environments, such as bridges, parking structures, piers

SUBSTRATES

- Steel-reinforced concrete
- Pre-stressed concrete
- Post-tensioned concrete

HOW TO APPLY

DEMOLITION

All loose and spalled concrete should be removed in accordance with conventional repair guidelines. Anticipated positioning of anodes should be considered when removing existing concrete.

POSITIONING

In most applications, the anodes should be positioned at the perimeter of the repair and on plane with the reinforcing steel to provide a proper level of coverage. Anodes must be positioned so that the entire anode and wire connections to the reinforcing steel are completely covered by the encasement material once the repair is complete.

PREPARATION

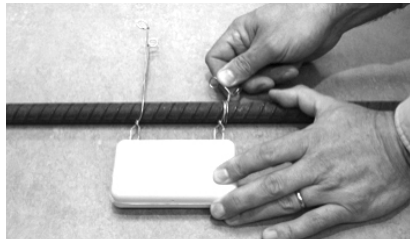
For correct electrical connection and anode function, only structures using black bar reinforcing are suitable; the surface of the reinforcing steel should be untreated and cleaned to a near-white surface condition in areas designated for connection of anodes to the steel. No other pre-treatment or post-treatment of the steel is necessary or permitted.

Reinforcing steel should be tested for continuity; that is, assuring that the reinforcement is electrically connected by confirming the DC resistance is $\leq 1\Omega$. Connections to test continuity should be made using traditional techniques such as wire ties or welding bonds.

Pre-wetting of MasterProtect® Galvanic Anodes in clean water prior to encasement is recommended for optimum adhesion of the encasement material.

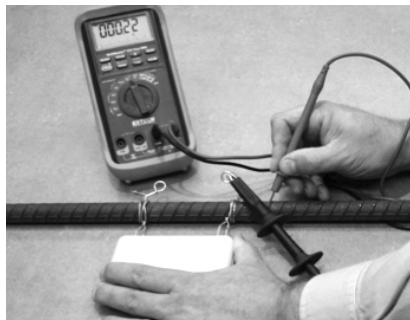
ATTACHMENT

Tighten the two pairs of pre-twisted wires by hand around the reinforcing steel in a double wrap pattern to achieve a sound electrical bond (See Photo). The pre-twisted wires connectors provide a sound bond, good electrical contact and proper spacing from the reinforcing steel to which the anode is attached. No additional form of attachment or electrical connection is necessary or permitted.



VERIFICATION

Verify sound electrical connection of anodes to reinforcing steel by checking for a DC resistance $\leq 1\Omega$ (See Photo).



ENCASEMENT MATERIAL

Conventional, commercially available encasement material should be used. Corrosion protection is enhanced with low-resistance mixes ($\leq 20,000 \Omega\text{-cm}$), but mixes should not be selected that exceed $50,000 \Omega\text{-cm}$. High polymer content and silica fume should not be used. Place encasement materials in accordance with conventional techniques to assure good consolidation.

FOR BEST PERFORMANCE

- When repairing concrete incorporating MasterProtect Galvanic Anodes, make certain to use a compatible repair mortar. Suitable repair products have a resistivity of less than $20,000 \Omega\text{-cm}$. Higher resistivity materials can be used. Contact Master Builders Solutions Technical Services for additional information.
- For professional use only; not for sale to or use by the general public.
- Make certain the most current versions of product data sheet and SDS are being used; call Customer Service to verify the most current version.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

**Technical Data
 Composition
 Compliances**

Test Data

PROPERTY	MASTER PROTECT® 8065CP	MASTERPROTECT® 8105CP	MASTERPROTECT® 8160CP
Color	Green	Blue	Orange
Packaging	30	24	24
Total Anode Weight	0.53 lb (0.24 kg)	0.75 lb (0.34 kg)	0.82 lb (0.37 kg)
Zinc Alloy	ASTM B 418, Type II	ASTM B 418, Type II	ASTM B 418, Type II
Zinc Content	0.14 lb (65 g)	0.23 lb (105 g)	0.35 lb (160 g)
Zinc Surface Area	20.6 in ² (133 cm ²)	40.0 in ² (258 cm ²)	42.0 in ² (279 cm ²)
External Surface Area	34.0 in ² (219 cm ²)	40.0 in ² (258 cm ²)	40.0 in ² (258 cm ²)
Auto-Corrosion	<0.0004 in/yr (<0.01 mm/yr)	<0.0004 in/yr (<0.01 mm/yr)	<0.0004 in/yr (<0.01 mm/yr)
Tie Wire Composition	Galvanized, 16 gauge steel	Galvanized, 16 gauge steel	Galvanized, 16 gauge steel

HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting www.master-builders-solutions.com/en-us, e-mailing your request to mbsbscst@mbcc-group.com or calling 1(800)433-9517. Use only as directed.

IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.

LIMITED WARRANTY NOTICE

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