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# CONCRETE CORROSION *Chronicles* **MATCOR**

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*Visit MATCOR at the ICRI Conference in Daytona Beach, April 16-19!*

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## SUSTAINABLE CONCRETE REPAIR



“Go Green!” are the buzz words of the year, and likely will be the direction in building for years to come. With one-third of all construction work being repair related, concrete specialists must be aware of technology that will extend the life of a structure in an environmentally sensitive way. Cathodic protection will appeal to designers, structure owners, and community governments responsible for zoning and permits.

Manufactured cement, the key binding agent in concrete, creates approximately 5% of all man-made CO<sub>2</sub> emissions in the world. Furthermore, the energy used by the cement industry is estimated at close to 5% of the total global industrial energy consumption. MATCOR believes that the preservation of infrastructure is one way to lower the environmental impacts of repair construction. MATCOR’s cathodic protection (CP) products can extend the service life of steel-reinforced concrete structures, thereby reducing the demand for concrete. Some environmental professionals think CP could also help earn LEED® points.

LEED® (Leadership in Energy and Environmental Design) is a rating system developed by the United States Green Building Council to measure design elements that can reduce a building's overall impact on the environment. It is one of the most widely used project rating systems in the US for new construction and major renovations. LEED® for existing buildings addresses whole-building maintenance, recycling, exterior maintenance and infrastructure upgrades.

No product by itself is LEED® certified, and no product can guarantee a specific number of points for LEED® certification. However, MATCOR’s CP products may contribute to credits earned in certain LEED® categories. Consider the following environmental benefits of using cathodic protection:

### **Materials & Resources - Extend Structure Life in New Construction**

By maintaining existing walls, floors and roof structures you are promoting the reuse of existing building material. CP extends the structure life while conserving resources, reducing waste, and reducing the environmental impacts caused by manufacturing and transporting new concrete materials.

### **Materials & Resources - Construction, Demolition and Renovation Waste Management**

Divert construction waste from disposal and you may be eligible for credits for minimizing the amount of construction and demolition debris that goes to a landfill. The use of CP before corrosion damages the structure will not only extend the service life of the steel-reinforced concrete structure, it will minimize restoration waste associated with concrete repair.

### **Sustainable Site – Heat Island – Non-roof**

Dark surface areas can absorb and hold solar heat, contributing to urban heat-islands and causing a greater demand for energy

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## KEVIN EARLEY LEADS MATCOR'S NEW MARKET INITIATIVE IN CONCRETE



**Kevin Earley**, MATCOR's business development manager, holds a masters degree in Engineering Geology, and works with engineers, architects, and concrete repair specialists to prevent corrosion in steel-in-concrete structures.

Kevin Earley joined MATCOR in October, 2007 to lead the sales effort for MATCOR's cathodic protection solutions for reinforced concrete structures. Kevin brings more than 15 years of technical and business development experience in concrete and engineering and has a master's degree in engineering geology. Targeting concrete structures such as condos, parking garages, bridges and historic structures to remediate and prevent corrosion, he spends much of his time working with structural engineers to promote

cathodic protection as a cost-effective solution for extending the life of concrete structures.

Kevin has initially focused his efforts on Florida and a new web site dedicated to concrete corrosion issues. "MATCOR has worked on numerous condominiums in Florida over the past 10 years," said Earley. "Those high rise buildings are particularly affected by the salty sea air blowing off the Atlantic and Gulf of Mexico. Balconies fail rapidly and repeatedly without cathodic protection." To help engineers and concrete repair specialists explain this to homeowners and condominium managers, MATCOR has launched [www.stopconcretecorrosion.com](http://www.stopconcretecorrosion.com), a website designed to provide information about concrete corrosion and cathodic protection.

**For more information about cathodic protection contact Kevin Earley at [kearley@matcor.com](mailto:kearley@matcor.com) or at 267.629.9763.** 

## MEET CPT: MATCOR'S FLORIDA CONDOMINIUM LICENSEE

Since 1994, MATCOR's licensee in the Florida condominium market has been Cathodic Protection Technology (CPT) of Cocoa Beach, Florida.

CPT was founded by structural engineer Jim Emory, P.E., who had been active in the concrete restoration business for long enough to become frustrated with the constant cycle of repair and its associated disruption to the home or business owner. "It's hard to tell homeowners that their chip and patch repair job will last only three to five years, when they've just spent a great deal of money and endured the dust, debris, and noise of repairing their balcony or walkway," Jim says. MATCOR's proprietary impressed current cathodic protection offered the long term solution to customers that Jim sought.


"Adding cathodic protection to a concrete repair job adds about 10% to the time of completion," says Chris Hintz of CPT. "For instance, if a project timeline is four months, or 80 business days, adding CP will take an additional eight days." CPT does a great deal of education, both to engineers and contractors working on a project, and to home and business owners. During installation, CPT provides 24/7 support and ongoing

inspection to ensure the system is being installed per the design. CPT also tests and commissions the system.



"CPT is a terrific partner for MATCOR," says Kevin Earley of MATCOR. "They have a great track record of success with more than 40 referenceable projects, with some providing corrosion protection for more than a decade. CPT offers a 15-year No Corrosion Guarantee, and monitors Florida condominium projects closely."

**MATCOR and CPT are available to provide talks on corrosion mitigation and cathodic protection to engineers and building associations.**

MATCOR is seeking other licensees or distributors in defined markets throughout the U.S. and abroad. **For information, contact Kevin Earley at [kearley@matcor.com](mailto:kearley@matcor.com).** 

## SUSTAINABLE CONCRETE REPAIR

*Continued from cover*

to cool buildings. Light-colored surfaces with a Solar Reflectance Index (SRI) value of at least 29 comply with a LEED® requirement for sustainable construction. MATCOR's CPBD™-III conductive coating CP system is designed for use on horizontal surfaces such as balconies, walkways, and courtyards. Top coatings are available in a variety of light colors that may meet the SRI requirement, depending on your application.

**MATCOR can direct you to an accredited LEED® design professional for your next concrete restoration project; call 267.629.9763.** 