

Promoting Use and Advancing Quality of Epoxy-Coated Reinforcing Steel.

## Welcome!

In February 2016, the Epoxy Interest Group of CRSI selected Dr. Danielle Kleinhans as their new Managing Director. Since 2011, Dr. Kleinhans served as Structural/Transportation Engineer for CRSI serving on several technical committees, assisting in the development of CRSI publications and overall learning much about the reinforcing steel industry. In her new role as Managing Director, she will be responsible for all operations of the Epoxy Interest Group of CRSI, promoting the interests and advantages of epoxy-coated reinforcing steel to the user community, developing and implementing strategy relating to market development of epoxy-coated reinforcing steel including representation on national technical committees such as CRSI, ACI, and ASTM, development of print and digital publications including newsletters and advertising materials, websites, and representation at trade shows.



Prior to joining CRSI, Danielle was the Manager of the Structural Engineering and Mechanics group at CTLGroup. She holds a B.S. in Civil Engineering from the University of Alaska-Fairbanks, and her M.S. and Ph.D. from the University of Missouri-Rolla. Dr. Kleinhans is a licensed engineer in five states and was recently awarded the Young Member Award for Professional Achievement from ACI.

Please join EIG in welcoming Dr. Danielle Kleinhans!  
And, as always, don't hesitate to reach out if EIG can be of assistance.

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*"Opportunity is missed by most people because it is dressed in overalls, and looks like work."*

— Thomas Edison

## Projects Using Epoxy-Coated Reinforcing Steel Wanted

EIG wants to feature your project in upcoming editions of Anti-Corrosion Times and our Project Gallery. All project types are welcome. Please send basic information on the project and information on how to access photography (construction and/or finished, all photo credits) to [info@epoxy.crsi.org](mailto:info@epoxy.crsi.org).

## Projects



### Tilikum Crossing

Portland, OR

Epoxy coated reinforcing steel is being used in the Tilikum Crossing, Bridge of the People formerly the Portland-Milwaukie Light Rail Transit project that will connect Portland State University in downtown Portland, inner Southeast Portland, Milwaukie and north Clackamas County. This bridge will be the first span built over the river since the addition of the Fremont Bridge in 1973 and it is designed to carry light rail trains, buses, cyclists and pedestrians and, in the future, streetcars...

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### West 7th Street Bridge

Fort Worth, TX

The new West 7th Street Bridge was opened in October 2013 consisting of 12 precast concrete network arches, each measuring 24 high with spans of 163 ft. The arches are more than aesthetic, separating the roadway from the two 10 ft wide sidewalks, enhancing pedestrian safety...



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### Thornton Transitional Reservoir

Thornton, IL

The Thornton Quarry is part of MWRD's Tunnel and Reservoir Plan (TARP). Also known as "Deep Tunnel," this project provides a series of deep, large diameter tunnels and vast reservoirs aimed to reduce flooding and improve water quality in Chicago area rivers and streams. The reservoir at Thornton Quarry will hold up to 7.9 billion gallons of combined sewage and storm water from 14 communities...

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## New Publications from the Epoxy Interest Group

EIG continues to develop publications to assist with the use of epoxy-coated reinforcing steel. The following document may be downloaded from [www.epoxyinterestgroup.org](http://www.epoxyinterestgroup.org) or if you wish hard copies, please contact us at



### **Epoxy-Coated Reinforcing Steel in Parking Garages**

This 6-page document provides guidance on the use of epoxy-coated reinforcing steel to protect concrete parking garages. Over \$600 million is spent yearly to repair parking decks and structures without epoxy-coated reinforcing steel may show deterioration within 10 to 15 years.



### **Field Handling and Field Repair**

This two-page document outlines methods to reduce damage during field handling and methods to repair any visible damage using a two-part epoxy. It describes where to obtain materials and basic procedures for optimum performance of the epoxy-coated reinforcing steel. It is beneficial to engineers, field inspectors, contractors and ironworkers.

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## **Epoxy Interest Group now on Facebook**

Become a fan of the Epoxy Interest Group on Facebook and stay updated as we find new research and projects.



[Visit EIG on Facebook](#)

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## **Questions from the Field**

**Question:** *Of the reinforcing steel used in North America each year, how much of it is epoxy-coated?*

**Answer:** Approximately 10 to 12% of reinforcing steel bars in North America is epoxy-coated. This equated to roughly 600,000 tons annually. Epoxy-coating reinforcement is the 2nd most commonly used corrosion prevention strategy employed; increasing the concrete cover is the most common.

**Question:** *What precautions should I take when using Epoxy-Coated Steel Reinforcing Bar?*

**Answer:** The following precautions should be taken when using Epoxy-Coated Steel Reinforcing Bar:

- Follow the design requirements for Epoxy-Coated Steel Reinforcing Bar, as outlined in the AASHTO Bridge Design Specifications or ACI 318.
- Purchase the Epoxy-Coated Steel Reinforcing Bar from a CRSI certified manufacturer.
- Consider use of a CRSI certified fabricator of Epoxy-Coated Steel Reinforcing Bar.
- Use the Epoxy-Coated Steel Reinforcing Bar in both top and bottom mats of decks.
- Minimize damage during transport, handling and placement.
- Repair damage using two-part epoxy coating, approved by bar supplier.
- Use plastic headed concrete vibrators during concrete placement.

#### **Editor's Note:**

We hope that you find the information in our newsletter useful. Please [contact us](#) if additional information is required.