

# IRON HORSE TRAIL PEDESTRIAN BRIDGE

With its curving arches and advanced technology coating system from Tnemec, the 800-ft.-long pedestrian and bicycle overcrossing along the Iron Horse Trail in Contra Costa County, California, is a footbridge with flair. "Aesthetics were far more important on this project than a typical industrial job," explained Tnemec coating consultant Glen Amos. "Also, keeping to a tight schedule was critical. The city wanted disruption to the traffic flow to be kept at an absolute minimum."

Located in the major transportation and commercial hub of Pleasant Hill, the visually striking bridge is supported by widely spaced cables suspended from two 42-foot-high arches constructed of steel pipes that were bolted together. All structural steel was primed by the fabricator with Series 90E-92 Tneme-Zinc, an ethyl silicate inorganic, zinc-rich primer/finish with tenacious bonding and corrosion resistance, followed by an intermediate coat of Series 66 Hi-Build Epoxoline, a polyamide epoxy. The arches received a finish coat of Series 1077 Enduralume, an aliphatic acrylic polyurethane containing a sparkle aluminum pigment that creates a metallic finish.

For spot repairs and iron bolts, the field applicator prepared the substrate in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning. Brushes and rollers were used to apply Series V69F Hi-Build Epoxoline II, an advanced generation polyamidoamine epoxy, which conforms to air pollution regulations limiting volatile organic compounds (VOCs). For field touch-up where abrasive blasting was not feasible, the applicator prepared the surface in accordance with SSPC-SP3 Power Tool Cleaning and SSPC-SP1 Solvent Cleaning. These areas were then primed with Series 135 Chembuild, a high-build polyamidoamine epoxy for marginally prepared rusty steel and tightly adhering old coatings.

All steel surfaces, except for the arches, received a full finish coat of Series 740 UVX, an advanced technology polyurethane that offers less than 100 grams/liter VOC content, superior color and gloss retention and a hard, durable film that stands up to abrasion, exterior weathering and ultraviolet (UV) light. "We recoated the bridge with Series 740 to compliment the silver and dark aluminum Enduralume colors," noted Todd Anderson, project manager for Jeffco Painting and Coating in Vallejo, California. "The finish coat sprays nicely and can make any structure look great."

The \$6.8 million Robert I. Schroder pedestrian bridge, named for a former Contra Costa County supervisor and community activist, is part of a plan to improve access to the Pleasant Hill Bay Area Rapid Transit (BART) Station, while making the Bay Area's Iron Horse Trail safer.

## FEATURED PRODUCTS

Series 66 Hi-Build Epoxoline  
Series V69F Hi-Build Epoxoline II  
Series 90E-92 Tneme-Zinc

Series 135 Chembuild  
Series 740 UVX  
Series 1077 Enduralume



## PROJECT INFORMATION

### Project Location

Contra Costa County, California

### Project Completion Date

October 2010

### Owner

Contra Costa County Redevelopment Agency

### Architect / Engineer

Arup - San Francisco, California

### Shop Applicator

Mountain States Steel - Lindon, Utah

### Field Applicator

Jeffco Painting & Coating, Inc. - Vallejo, California

The Iron Horse Trail Pedestrian Bridge is protected by Tnemec coatings. All steel surfaces and support sections of the bridge received coatings that will keep it looking like new while protecting it from wear and tear from pedestrians and the environment.

