GFORGFTOWN PFDFSTRIAN BRIDGES

Updating the two bridges connecting canal-side offices to the fashionable Georgetown Park Mall posed a host of difficult challenges for the NPS: remove years of paint and rust; prevent the blast medium from falling into the waters of the C&O Canal; keep the bridges open at all times to the daily, heavy pedestrian traffic; keep noise levels to a minimum (this prevented heavy equipment—compressors, dust collectors, precipitators, sand blasters—on site and allowed only one small barge in the canal) and deliver a finish that would last for a decade and perfectly match the special NPS brown.

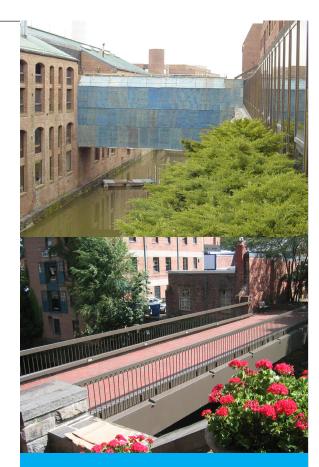
Working closely with United Coatings, Tnemec coating consultant Todd Guntner developed creative solutions to meet all these demands. The 16,000 square feet of previously painted steel had to be fully stripped of the badly deteriorated coating. The contracting team chose to clean to bare metal per SSPC-SP11 guidelines, leaving a one mil surface profile on the steel. To achieve this method of cleaning, the crew used needle-guns and rotor-piners to remove the rust and old paint, as sandblasting was out of the question. Laboring from 7:00 a.m. to 4:00 p.m. in this confined space (5 feet high by 8 feet wide), workers prepared the 80 feet by 3 feet steel beams down to bare metal. To prevent the debris from falling into the Canal, United Coatings built a unique containment structure of wood and plastic tarp around both bridges. Supported by cables, this house of insulated plywood (for noise protection) required the approval of a structural engineer.

For the prime coat, Guntner specified Series 594 Omnithane, a MIO/zinc filled urethane applied at 2.5 to 3.5 mils DFT. For the intermediate coat, Series 27 F.C. Typoxy, a polyamide epoxy, was applied at 3.0 to 5.0 mils DFT. And for the topcoat, Series 1072 Fluoronar, a fluoropolymer specially created to perfectly match the NPS brown color, was applied at 2.0 to 3.0 mils DFT.

"What I learned from this experience is to never say never. It is when the barriers and restrictions appear insurmountable that the greatest opportunity appears! In this case it was a golden opportunity to win the contractor's trust and give the owner a system, under budget, that will last for years and years," Guntner says.

FEATURED PRODUCTS

Series 594 Omnithane Series 27 F.C. Typoxy Series 1072 Fluoronar



PROJECT INFORMATION

Project Location

Project Completion Date

Owner

The U.S. National Park Service (NPS)

Contractor

Applicator

For the pedestrian bridges over the historic C&O Canal, Tnemec met numerous National Park Service restoration demands including custom color matching a special Park Service brown.

