



## Solutions for a Unique Coating Situation

### THE PROBLEM

Coating "green" concrete has been, and remains, a topic of debate within the coating world. If not done properly, coating "green" or freshly poured concrete can lead to disastrous results. However, time constraints don't always allow for the industry standard of a 30-day cure time before coating, as was the case with this concrete lift station/wet well located in the City of Orlando. The structure measured 21'x21' and contained two tanks. The city was searching for a solution to line and protect the structures.

Universal Painting Corp, a Lakeland, FL, contractor, has been providing the highest quality painting, protective coating and related services to industrial and governmental clients since 1992 and was able to deliver that desired solution using Epoxytec's products.

### PRODUCTS THAT OUTPERFORM

Epoxytec Mortartec Ceramico is an epoxy-modified mortar. It is a highly advanced, formulated epoxy blend incorporating cutting-edge epoxide technology with proprietary engineered curing agents. It combines a specific balance of Portland cement, hardened ceramics, graded silica aggregate, synthetic fibers and silica fume to produce one of the most coveted mortars in the industrial market today. Epoxytec Mortartec Ceramico exhibits excellent acid resistance, with incredible adhesive properties, barrier sealing capabilities, tolerances, and out-gassing, hydrostatic and MVT reduction.

Epoxytec CPP Sprayliner is a two-component, moisture-insensitive, highly adhesive, chemical-resistant, 100% solids, high-strength and reinforced epoxy. The material can be sprayed ultra-high build, between 1/16" x 1/4" (62.5-250 mils) per pass. Blended with reinforcing agents and various fibers, the Epoxytec CPP Sprayliner, when cured, creates reinforcement lining as a fiber-reinforced polymer (FRP), with high strength and flexural properties for partially or fully deteriorated structures.

### THE APPLICATION

The key to success for this coating application was in the surface preparation. Surface preparation needed to be achieved immediately between 24-48 hours from concrete pour. All receiving surfaces were thoroughly cleaned using abrasive blasted to NACE No. 6/SSPC-SP 13 standards to make them free of all foreign materials including release agents and all debris or material that might have been attached to the surface of the substrate. The objective was to produce a surface suitable for

*(continued on next page)*

## Featured Products

**CPP Sprayliner**

**Mortartec Ceramico**



### Project Information

#### Project Location

Orlando, FL

#### Completion Date

January 2020

#### Structure

Lift Station

#### Owner

City of Orlando

#### Engineer

Tetra Tech

#### Applicator

Wharton Smith Inc./Universal Painting



PART OF THE TNEMEC FAMILY OF COATINGS

123 West 23rd Avenue, North Kansas City, Missouri 64116 USA +1 816-483-3400 epoxytec.com



## **Solutions for a Unique Coating Situation (cont.)**

application and adhesion of the specified Epoxytec Mortartec Ceramico. Voids and other defects near the surface were exposed during surface preparation, and all concrete that was not sound was removed, so that only sound concrete remained. This allowed the substrate to achieve saturated-surface-dryness (SSD), and precautions were taken to keep the substrate moist.

Epoxytec Mortartec Ceramico was then applied at 1/4" minimum thickness. The product was kept under humid conditions while curing and away from direct sunlight to avoid dry-out conditions. Epoxytec CPP Sprayliner was applied as a protective topcoat.

"The application process was seamless. The ease of use of the Epoxytec products were a delightful surprise." - Joshua Nickerson

### **FINAL LOOK**

Time is always a constraining factor, particularly by the time the coatings come along. But the application qualities of Epoxytec allowed the project to be completed on time.

"We are really impressed with the products. It has been the easiest Purual Application we have ever had. Absolutely love the surfacer. We are planning on submitting the product for some thin film systems whose manufacturer doesn't have an equal." - John Aldrich.

