



**EPOXYTEC™**

## Epoxytec's Uroflex Stands the Test of Time

Protective coatings are designed to stand the test of time and a project in Florida demonstrates that Epoxytec Uroflex did just that. Coated with Epoxytec's Uroflex over 15 years ago, a digester (oxygenation train) in one of Miami-Dade's Wastewater Treatment Plants was recently inspected to determine the quality of the concrete behind the coating. The result proved that Uroflex had indeed withstood the elements and protected the substrate for close to two decades.

The treatment plant is located in Virginia Key, a barrier island in Miami, Florida. Along with several other tourist attractions, this small 863-acre island houses the Miami-Dade Central District Wastewater Treatment Plant. In the late 90s, Epoxytec coated one of the closed anaerobic digesters in this treatment plant with Epoxytec Uroflex. The immersion area of the chambers was protected with one coat, while the areas above the waterline took two coats for additional protection against the high temperatures (up to 140 degrees) and gases. The Uroflex coating, then black in pigment, was rolled on. The job took about three weeks.

Fast forward two decades later. In late November, 2015, these chambers were readdressed. Routine inspection measures were taken to assess the integrity of the structure. Depending on the condition of the concrete, either a simple re-coat of protective coating would suffice or an entire costly, time-consuming concrete repair job would be necessary before the installment to the protective coating. The superintendent along with the plant supervisor, inspected the tank prior to re-coat. The concrete substrate was tested and evaluated to determine whether the concrete behind the original Epoxytec Uroflex coating was sound, intact, and in good condition. The conclusion: only a few minor spot repairs in conjunction with a new protective epoxy coating would be needed. Not surprisingly, Epoxytec Uroflex was chosen once again to protect and line the eight chambers of the oxygen train.

Prior to the application of the new Uroflex coating, the concrete surface was brush/abrasive blasted to remove all loose and weak

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### Featured Products

**Uroflex**



### Project Information

**Location**

Miami, FL

**Completion Date**

January 2016

**Structure**

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**Owner**

Miami-Dade Water and Sewer Central District

**Applicator**

Southland Painting





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## **Epoxytec's Uroflex Stands the Test of Time (cont.)**

remains of the original coating. Epoxytec's Mortartec Ceramico, a highly advanced epoxy modified mortar, was used to spot repair any areas of concrete deterioration. A pH test determined the substrate was within normal range, indicating that the concrete was adequately cleaned and prepared, and ready for the Uroflex topcoat.

Southland Painting, Epoxytec's Certified Applicator, then sprayed Uroflex was then sprayed using a single component spray. Two coats were applied, totaling 40-50 mils thick. This Uroflex coating possesses the advantages of both a polyurethane and epoxy. Together as one technology, it incorporates novolac- exhibiting superior adhesion and the tolerance and strength of an epoxy, but with the flexibility (38% tensile elongation), gloss, and impact resistance of a urethane. The epoxy resin incorporates novolac, thus enhancing its chemical resistance and crosslinking. This hybrid technology is unique and proprietary, producing a coating with protective corrosion resistance that outperforms all similar coatings on the market. Uroflex is formulated "green," environmentally friendly, and 100 percent solid (no VOCs, no solvent).

As proven by Uroflex's initial installment, this completed Miami-Dade oxygen train project will ensure decades of protection. Uroflex is designed to specifically address, protect, and seal in environments that are immersed or non-immersed, and susceptible to movement, corrosive exposure, microbial and chemical attack, and joint infiltration, elements that are all present in these chambers.

