

MCOR[™] ABILITIES[™]

CASE STUDY

SERIES



PROJECT: Aerator Tower Walkway
OWNER: Fort Myers Water Treatment Plant, FL
DATE: December 2015
PRODUCTS: MCOR[™] 5511 | mCrete[™] Corpac[™]

Hanging Upside Down with MCOR[™] 5511

With the help of MCOR[™] experts, Fort Myers Water Treatment Plant found a resolution for a troubling problem with one of their aerator towers. The plant facility, built in 1988, is made of several wells surrounded and connected by concrete walkways 20 feet above the ground. The plant was experiencing some serious issues with corrosion, and being in Florida, coastal chloride contamination from rain cycles and sulfuric build-up were taking a toll on the walkways. Cracks were found throughout, and some of the corners were of particular concern, as anchor bolts and rebar swelled. To stop the eroding effect of this corrosion, an immediate repair that would restore and seal was necessary.

Service Painting of Florida, Fort Myers Water Treatment Plant's servicing contractor, requested the assistance of MCOR[™], a manufacturer of advanced mechanical polymers, due to their extensive product line and expertise in concrete rehabilitation. Cesar Castillo (NACE #56474) of MCOR[™] assessed the situation and determined that MCOR[™] 5511 | mCrete[™] Corpac[™] would be the ideal product for the job.

MCOR[™] 5511 | mCrete[™] Corpac[™] is an ultra-light weight, structural-grade polymer packing grout. The material solves application challenges requiring deep structural fill permanency, extreme vertical build-up, and/or high build overhead hanging. It also delivers unprecedented hanging ability (approx. 20–25 cm or 8-10 inches overhead per pass). The 5511 is an intensely strong yet feather-weight kinetic polymer grout. Its tailorability is another one of its biggest advantages. The material can be manipulated and molded into any shape or form in order



to be applied in areas requiring a sealed, light-weight, high strength solution. Castillo knew that all of these features combined would yield an excellent result in reconstructing the walkways at the treatment plant.

The ease and usability of MCOR™ 5511 | mCrete™ Corpac™ added an additional advantage to this repair job. To begin, the concrete surfaces of the damaged areas were brushed clean to eliminate any contaminants. Supports, studs, and/or forms to hold the product in place were not necessary due to the Corpac™'s extreme hanging ability, a very beneficial feature because of the position and height of the structures. Although priming is optional, in this case it was not necessary because the rough profile of the concrete provided a great mechanical bond for the product. The elimination of these two steps saved an enormous amount of time, making this option even more economical.

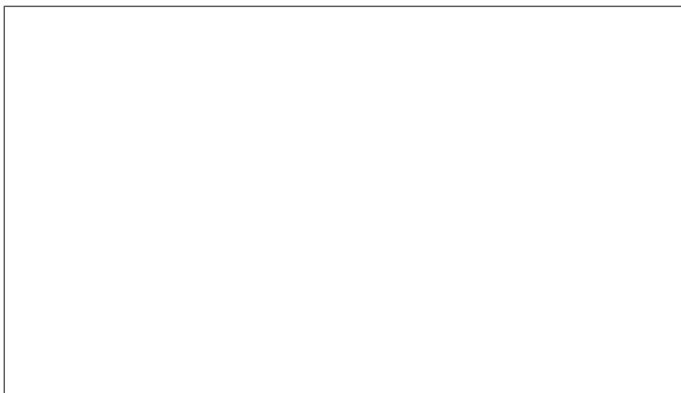
After the surface was prepped, the two-part product was mixed and simply packed into cavities in the concrete or troweled into cracks. The entire process took no more than 15 minutes per area, because MCOR™ 5511 | mCrete™ Corpac™ does not sag and cures quickly.

Using MCOR™ 5511 | mCrete™ Corpac™ on the reconstructed walkways provides a long-term solution that the Fort Myers Water Treatment Plant can feel confident about. MCOR™ delivered a repair that ensures lasting durability and strength for the concrete sections. This product addressed the challenges of this deep spall repair, including a restoration that required extreme overhead and vertical hanging capability.

For more information on MCOR™ 5511 | mCrete™ Corpac™ visit www.mcor.net/mcor-5511-mcrete-corpac . In addition, view [MCOR 5511 Mixing / Application Instructions \(youtu.be/SQhiV9txNQ\)](https://youtu.be/SQhiV9txNQ) to learn more about the mixing process of MCOR™ 5511 | mCrete™ Corpac™ .

To learn more about MCOR™'s complete product line, visit www.mcor.net/products.

For more information, please contact your local MCOR™ consultant



MCOR™ 5511 easily filled in concrete cavities and replicated the beveled feature of the existing concrete.