

Epoxy Resin Used to Rehabilitate 108 Manholes

Published in Municipal Sewer & Water

April 2014

Problem: The public utility department of Baltimore, Md., was charged with rehabilitating 108 deteriorated brick and concrete manholes.

Solution: For this project, Spiniello Companies chose to use Neopoxy LLC's high-strength, corrosion-resistant NPR-5304 epoxy system. First, the manholes were pressure-washed at 2,500 to 3,500 psi. Although NPR-5304 is a totally hydrophobic product and can cure underwater, hot air was then blown on the surface for 15 to 30 minutes in order to get maximum adhesion. Following this preparation, NPR-5304 was sprayed onto the surface as a monolithic 250-300 mils in one pass without preliminary mortar repair. This direct-to-aggregate method gives the best results since aggregates are the most corrosion-resistant part of concrete, and act like additional anchors for the epoxy layer.

Result: The project was completed successfully, and the manholes were back in service within an hour. Through this application of NPR-5304, the life span of the manholes was extended by approximately 50 years.

Link: [https://www.mswmag.com/editorial/2014/04/manhole equipment and rehabilitation1](https://www.mswmag.com/editorial/2014/04/manhole_equipment_and_rehabilitation1)

