

Application Profile

- Project:** Greer Water Treatment Plant Expansion, Greer, SC
Potable Water Tank Lining
- Lining Applicator:** Osborn Contract Services, Greer, South Carolina
Inspection / Project Monitoring by Primeaux Associates LLC
- System Applied:** Elasto-Prime Series 401 Primer, Elasto-Shield Series 406
Spray Liner System, The TNEMEC Company
- Substrate / Area:** Concrete Floor and Walls, approximately 4000 ft²
- Date:** May, 2005

The Greer WTP was in process of an expansion and a new water holding tank was built. In order to protect the concrete and avoid leakages, a sprayed applied liner system was specified. Since the tank holds potable water, an ANSI/NSF-61 approved lining system was required. The TNEMEC series of primer system and applied liner were chosen due to the performance and track record of these products in tank lining applications.



For surface preparation, a high pressure water cleaning (HP-WC) was used to remove laitance and open bug-holes. The concrete wall areas were skim coated with a polymer modified cementitious material to provide for a uniform surface. The Elasto-Prime Series 401 epoxy primer system, NSF Certified, was then applied using rollers. The Elasto-Shield Series 406 (white) spray polyurethane / polyurea hybrid system, NSF Certified, was then applied at a minimum average 50 mils (1.3 mm). Areas of high water flow received a minimum average 80 mils (2.0 mm) of the Elasto-Shield Series 406 system.

Since the Elasto-Shield Series 406 is a 1:2 (ISO:Resin) by volume system, the GUSMER H-3500 proportioning unit had to be converted to 1:2 by volume processing. A mix manifold was attached to the end of the plural component heated hoses, followed by a high pressure spray hose with two 12-inch internal static mixers. A GRACO Airless II spray gun was used for application of the Elasto-Shield Series 406 system. The tank was lined in a series of 3 days, avoiding the oncoming rains in the forecast.



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