

# CULLISON CONCRETE ELEVATED WATER STORAGE TANK

The 50,000-gallon elevated water storage tank located in Cullison, Kansas, is one of the few remaining concrete-constructed water tanks throughout the state. When minor structural problems were causing the elevated tank to leak in 2003, the City of Cullison wanted to do whatever possible to preserve and continue utilizing its existing structure. Upon inspection of the water tank, the project engineers recommended Tnemec coating systems to properly repair and help maintain the structure for the residents of Cullison.

Following an abrasive blast cleaning in accordance with SSPC-SP13/NACE No. 6 Surface Preparation of Concrete, the interior of the water storage tank included Series 218 MortarClad, an epoxy-modified cementitious resurfacer, applied at 1/8-inch in order to rebuild and smooth out the concrete surface. Series 406 Elasto-Shield, a two-component, fast setting, hybrid aromatic polyurethane coating, was then applied at 60.0 to 75.0 mils dry film thickness (DFT) using plural component spray equipment.

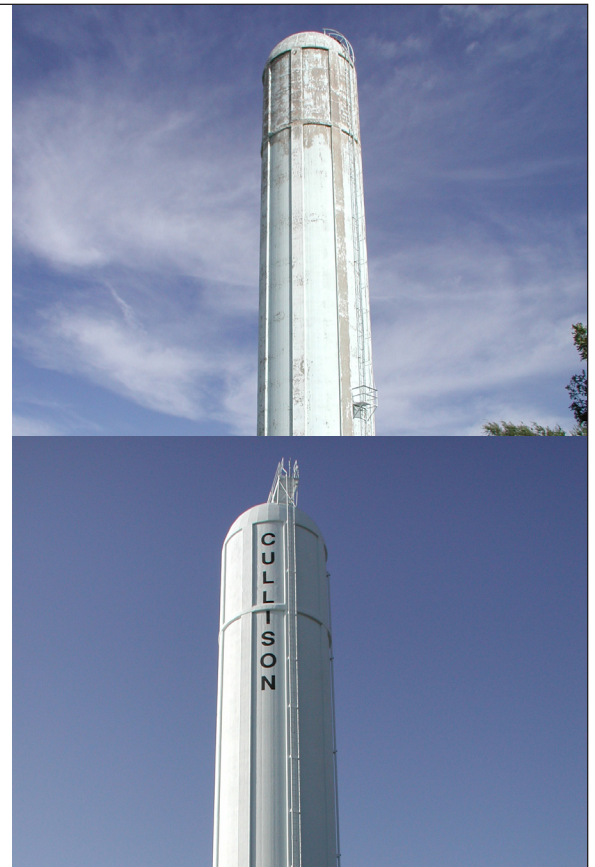
“Series 406 Elasto-Shield is a flexible coating,” said Tnemec coating consultant Rick Penner. “It’s designed to sustain durability in a single coat application, and it has excellent corrosion resistance properties. It was a good fit for this project.”

The tank’s exterior received two coats of Series 180 W.B. Tnemec-Crete, a tough acrylic emulsion built to withstand alternating freeze/thaw weather elements, mildew growth and industrial fumes. Following a power wash and repair of the existing exterior concrete, Series 180 W.B. Tnemec-Crete was airless spray-applied to the surface.

“The water tank is a historical landmark for the community of Cullison,” noted Penner. “We were happy to help preserve this structure, and the city remains pleased with the performance of the Tnemec coating system.”

## FEATURED PRODUCTS

- Series 218 MortarClad
- Series 180 W.B. Tnemec-Crete
- Series 406 Elasto-Shield



## PROJECT INFORMATION

**Project Location**  
Cullison, Kansas

**Project Completion Date**  
June 2003

**Owner**  
City of Cullison

**Engineer**  
EBH & Associates  
Pratt, Kansas

**Applicator**  
W.S. Bunch  
Omaha, Nebraska

Series 406 was applied to the Cullison, Kansas, tank’s interior providing excellent corrosion resistance properties.

