

LIT BROTHERS BUILDING

After closing its doors in 1977, the Lit Brothers Department Store in Philadelphia was a prime candidate for demolition when public pressure came to its rescue, resulting in a major renovation that included the use of a protective overcoating system from Tnemec. "The main focus was on protecting the concrete surface," Tnemec coating consultant Ed Enoch recalled. "The elastomeric coating system that was specified provided the aesthetics the owner required, along with protection against driving rain, alternating freeze-thaw cycles and ultraviolet light."

The coating specification was determined after mockups of different coating systems determined which one offered the best adhesion. "The southwest side of the block received very little sunlight, so they had a difficult time with coating adhesion on buildings facing that direction," Enoch explained. "After the surface preparation and mockups were evaluated the Tnemec coating system was selected based on its adherence, aesthetics and performance."

Surface preparation consisted of power-washing and hand tool cleaning to remove loose paint. A full coat of Series 151-1051 Elasto-Grip FC, a penetrating, flexible polyamine epoxy primer, was applied by brush and roller at 1.5 mils dry film thickness (DFT) over the entire building. "In the mockups that used Series 151, the coating adhered tightly, which is what finally sold them on using that coating," Enoch said.

Two coats of Series 156 Enviro-Crete, a premium acrylate coating that can fill and bridge minor hairline cracks in concrete and masonry substrates were brush- and roller-applied at 4.0 to 8.0 mils DFT. Enviro-Crete is a durable coating for exterior masonry substrates due to its ability to withstand thermal cycling, its resistance to moisture intrusion and its breathability.

Sections of the department store constructed with a cast iron façade were prepared by power-washing and hand tool cleaning and coated with Series 27 F.C. Typoxy, a polyamide epoxy widely used as a field tie-coat for steel fabrication. A finish coat of Series 73 Endura-Shield, aliphatic acrylic polyurethane, provided resistance to abrasion, wet conditions, corrosive fumes and exterior weathering.

"Dating back to 1907, the Lit Brothers building is a Philadelphia landmark, so aesthetics and long-lasting performance were very important considerations," Enoch added. "Long service life is critical for projects like this. Scaffolding and containment can be very expensive, especially in the middle of the city where you have people walking within 10 feet of the building."

Following its renovation, the 720,000-square-foot building was converted into retail space on its lower levels and a banking operations center on its upper floors.

FEATURED PRODUCTS

- Series 27 F.C. Typoxy
- Series 73 Endura-Shield
- Series 151-1051 Elasto-Grip FC
- Series 156 Enviro-Crete



PROJECT INFORMATION

Project Location

Philadelphia, Pennsylvania

Project Completion Date

December 2005

Owner

The Brickstone Companies

Architect / Engineer

Brickstone Realty

Field Applicator

Avalotis - Collingsdale, Pennsylvania

The historic Lit Brothers Building received a high-performance coating system from Tnemec in 2005 during a renovation that restored the 720,000-square-foot building that stands in downtown Philadelphia.

