

BRONX COUNTY COURTHOUSE

Preserving the historic integrity of the Bronx County Courthouse in New York City was a prime consideration during restoration of the building's bronze window casings, so project engineers acted judiciously in specifying an advanced fluoropolymer coating system from Tnemec. "They were looking to duplicate a metallic golden bronze appearance and they wanted something that was long lasting," explained Tnemec coating consultant Phil Gonnella. "Getting permits to work on a government building and erecting the scaffolding for this project was expensive, so they wanted a coating system that would last as long as possible."

Mock-ups of the coating system were applied to several areas of the building and tested in accordance with ASTM D3359 Standard Test Methods for Measuring Adhesion by Tape Test. These test methods cover procedures for assessing the adhesion of coating films to metallic substrates by applying and removing pressure-sensitive tape over cuts made in the film.

"Whenever we work on jobs like this, we always do extensive adhesion testing to ensure maximum adhesion of the coating system," Gonnella explained.

After surface preparation consisting of extensive cleaning and sanding to remove the existing paint that was failing, a primer coat of Series 27 F.C. Typoxy, a polyamide epoxy widely used as a field tie-coat, was spray applied to the substrate. "Typoxy is our mainstay primer for non-ferrous metals," Gonnella noted.

The topcoat was Series 1078 Fluoronar Metallic, a high-solids fluoropolymer coating that provides an ultra-durable metallic finish that resists ultraviolet (UV) light exposure, making it ideal for architectural accents such as window detailing. It has outstanding color and gloss retention even in the most severe exposures and its exceptional long-term performance has made Fluoronar an excellent choice for numerous landmark projects in New York City. Series 1079-0763 Metallic Clearcoat, an aliphatic acrylic polyurethane, was applied to extend the long-term weathering qualities of the metallic pigmented coating and to provide a satin finish.

Built in 1933 during the Depression, the Bronx County Courthouse is designated as a New York City Landmark and is listed on the New York State and National Registers of Historic Places. The steel-framed building with a granite and limestone façade has a total floor area of 555,600 square feet and is designed in neoclassical and modern style.

FEATURED PRODUCTS

Series 27 F.C. Typoxy
Series 1078 Fluoronar
Metallic

Series 1079-0763 Metallic
Clearcoat



PROJECT INFORMATION

Project Location

New York, New York

Project Completion Date

October 2008

Owner

The Department of Citywide Administrative Services - New York, New York

Engineer

Superstructures Engineers & Architects (SSEA) - New York, New York

Field Applicator

Delidakis Construction Company - Brooklyn, New York

A metallic fluoropolymer from Tnemec was used during restoration of the bronze window casings on the Bronx County Courthouse in New York City. The product has been used on numerous other restoration projects throughout the city.

