

FIELDS CORNER MBTA STATION

With the modernization of its Fields Corner Station in Dorchester, the Massachusetts Bay Transportation Authority (MBTA) put passengers on a fast track to make their connections in style with enhanced aesthetics that included long-lasting fluoropolymer coatings from Tnemec. "The design is a state-of-the-art new station in contrast to the old facility that was demolished," Tnemec coating consultant Larry Mitkus observed. "The MBTA wanted to minimize maintenance on the new station, so they specified an ultra-durable coating system on all the exterior steel canopy roof structures that cover the platforms."

The steel was prepared by the fabricator in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning to remove all visible rust, mill scale, and other foreign matter. Shop priming consisted of a spray-applied coat of Series 594 Omnithane, a single-component, urethane containing a proprietary blend of micaceous iron oxide and zinc. Series 594 is available today as Series 1 Omnithane.

Following construction, the steel received a field-applied coat of Series 73 Endura-Shield, an aliphatic acrylic polyurethane, which is highly resistant to abrasion, wet conditions, corrosive fumes, chemical contact, and exterior weathering. For long-lasting performance, the architect specified Series 1078 Fluoronar Metallic, a high-solids advanced thermoset solution fluoropolymer, that offers outstanding color and gloss retention in even the most severe exposures. The specification also included an exterior coat of Series 1076 Fluoronar Clear, an exterior clear fluoropolymer finish, which was designed to enhance the exterior weatherability of Fluoronar. (Note: Series 1076 has been replaced by Series 1079 Metallic Clearcoat, an aliphatic acrylic polyurethane.) More than 100 gallons of coatings were required to complete the project.

"In the field, all of the coatings were spray-applied," Mitkus noted. "The applicator, M.L. McDonald Company, used containment to keep the overspray from getting on the surrounding surfaces. There were no issues with the application and everything went smoothly. After four years, everything is holding up nicely."

In addition to its canopy roof structures, the Fields Corner Station offers new automatic fare collection equipment in the lobby, a police substation, surveillance cameras, and customer assistance intercoms. The station serves as a transfer point between the subway's Red Line and several bus routes that provide direct access from Dorchester's commercial center to greater Boston. The station was completely re-configured to include a new fare lobby below the existing Red Line track, new vertical circulation, and new canopy roof structures over the extended platforms.

FEATURED PRODUCTS

Series 73 Endura-Shield
Series 594 Omnithane
Series 1076 Fluoronar Clear

Series 1078 Fluoronar Metallic



PROJECT INFORMATION

Project Location
Dorchester, Massachusetts

Project Completion Date
November 2006

Owner
Massachusetts Bay Transportation Authority (MBTA) - Boston, Massachusetts

Architect / Engineer
Cambridge Seven Associates, Inc. - Cambridge, Massachusetts

Field Applicator
M. L. McDonald Company - Watertown, Massachusetts

Fabricator
Casco Bay Steel - Saco, Maine

The Fields Corner MBTA Station in Dorchester, Massachusetts, chose Series 1078 Fluoronar Metallic to meet the project's life cycle needs.

