



PROJECT PROFILE

Featured Products

Series 66 Hi-Build Epoxoline

Series N69 Hi-Build Epoxoline II

Series 73 Endura-Shield

Series 76 Endura-Clear

Series 84 Ceramlon ENV

Series 90-97 Tneme-Zinc

Series 1071 Fluoronar

Series 1075 Endura-Shield II



Series 1071 Fluoronar provides long-term performance and excellent resistance to UV light for the exterior of the National Aquarium in Baltimore.

National Aquarium in Baltimore

As one of the most visited destinations in Maryland, the National Aquarium in Baltimore (NAIB) has kept its interior and exterior structures shipshape for more than a quarter century using the latest coating systems available from Tnemec. "From its beginning, the National Aquarium has been willing to use new technology from Tnemec to achieve and maintain long-lasting aesthetic performance," according to Tnemec coating consultant Todd Guntner.

In 2004, a coating system featuring an advanced fluoropolymer topcoat was used on interior and exterior concrete as part of a 65,000-square-foot expansion. The surface was brush-off blast-cleaned in accordance with SSPC-SP13/NACE No. 6, followed by a prime coat of Series N69 Hi-Build Epoxoline II, a polyamidoamine epoxy. A coat of Series 1075 Endura-Shield II, a semi-gloss acrylic polyurethane, and Series 1071 Fluoronar, an air-dried fluoropolymer, completed the coating system. "Fluoronar was chosen for its resistance to ultraviolet light and its long-term performance," Guntner explained. "In addition, the Aquarium is located right in the harbor, so salt water was an issue, too."

Prior to the introduction of Fluoronar, the same primer and intermediate coatings were used for concrete along with a topcoat of Series 76 Endura-Clear, a high-gloss urethane, to maintain the bright, nautical color scheme used at the Aquarium. "Eventually, when the clear coat needs repainting, the Aquarium intends to use Fluoronar," Guntner said.

Both interior and exterior steel at the NAIB was commercially blast cleaned in accordance with SSPC-SP6/NACE 3 and shop-primed with Series 90-97 Tneme-Zinc, a zinc-rich, moisture-cured urethane. Steel inside the Aquarium's atriums received an intermediate coat of Series 66 Hi-Build Epoxoline, a polyamide epoxy, and a finish coat of Series 73 Endura-Shield, an aliphatic acrylic polyurethane. "We've never had to retouch any coating on the atrium steel," Guntner noted. On exterior steel, an intermediate coat of Series N69 Hi-Build Epoxoline II, a polyamidoamine epoxy, was followed by a coat of Endura-Shield II and a finish coat of Endura-Clear. These applications included a glass curtain wall, handrails, an outdoor pedestrian bridge and artwork resembling a nautical mast.

"Over the years, through expansions and renovations, thousands of gallons of Tnemec coatings have been used at the National Aquarium," added Guntner.

Opened on August 8, 1981, the NAIB has an annual attendance of 1.6 million visitors.

Project Name
National Aquarium in Baltimore

Owner
National Aquarium in Baltimore

Shop Applicator
Tidewater Steel

Project Location
Baltimore, MD

Architect
Chermayeff, Sollogub & Poole, Inc., Boston, MA

Field Applicator
RH Fewster, Baltimore, MD

Project Completion Date
September 2004