

# GEORGIA AQUARIUM

When plans for the Georgia Aquarium in Atlanta specified a waterborne polyurethane coating system from Tnemec, it turned out to be one whale of a project. The coatings were applied to all of the structural steel over the top of an 800,000-gallon tank specially designed to simulate the natural habitat of beluga whales. "The whale tank was huge," confirmed Tnemec coating consultant Dean Drehoff. "The architect chose the Tnemec coating system because the ceiling in the roof structure included glass panels, so ultra-violet sunlight was an issue. They needed a coating that could also resist condensation and humidity, and adhere long-term."

The steel was shop-primed with Series 90-97 Tneme-Zinc, a moisture-cured, zinc-rich urethane. The steel was then shipped to the aquarium jobsite where it was erected, power-washed and touched up with Series 66 Hi-Build Epoxoline, a polyamide epoxy, using a brush and roller. Chosen as the topcoat for its excellent color and gloss retention, two coats of Series 1080 Endura-Shield, a waterborne acrylic polyurethane, were brush- and roller-applied. "It was an off-white color," Drehoff noted. "I would estimate we used 400 gallons of Endura-Shield on the project. The applicator commented on how user-friendly the products were to apply."

The whale tank, which is home to four beluga whales and a variety of cold water fish, is one of five galleries in the Georgia Aquarium, which is among the largest aquariums in the world with more than eight million gallons of water and more than 100,000 animals of 500 different species. The \$200 million, 400,000-square-foot facility encompasses 60 habitats with 12,000-square-feet of viewing windows that weigh a total of 328 tons. The aquarium has its own water treatment plant with a capacity to retreat all of the water at the facility every 80 minutes. Located on 9½ acres of land adjacent to Centennial Olympic Park in downtown Atlanta, the exterior of the building was designed to look like a giant ship breaking through a wave.

The Georgia Aquarium is a gift to the people of Georgia from Bernie Marcus, co-founder of The Home Depot, and his wife Billi, through the Marcus Foundation. A non-profit corporation run by a board of directors oversees operation of the aquarium.

## FEATURED PRODUCTS

- Series 66 Hi-Build Epoxoline
- Series 90-97 Tneme-Zinc
- Series 1080 Endura-Shield



## PROJECT INFORMATION

### Project Location

Atlanta, Georgia

### Project Completion Date

October 2004

### Owner

City of Atlanta

### Architect

tvdesign - Atlanta, Georgia

### Field Applicator

Goodman Decorating - Atlanta, Georgia

Series 1080 Endura-Shield, a waterborne acrylic polyurethane with excellent color and gloss retention, protects the structural steel over the top of an 800,000-gallon beluga whale tank at the Georgia Aquarium in Atlanta.

