

# BROOKLYN ART MUSEUM

In 1986, the Brooklyn Art Museum's Board of Trustees sponsored an international architecture competition to guide the Museum's renovation, restoration and growth into the 21st Century. The winning Master Plan was submitted by the partnership of architects Arata Isozaki and James Stewart Polshek. Fifteen years later, construction was started on a grand entry pavilion—the first visible execution of the Polshek master plan. A \$63 million bold, innovative creation of structural glass and skylight roof structure, painted steel plates and architectural steel truss assemblies, the spacious, sun-filled Pavilion was a sparkling vestibule to the 19th Century landmark, a key element in a major facility renovation completed in 2004.

Polshek Project Manager Craig Mutter has been involved with the Brooklyn Museum master plan for the past twenty years. He said it was a logical choice to call in a Tnemec coating consultant to handle the very intricate coatings sequencing involved with the one-of-a-kind structural glass roof, laminated glass panels, architecturally exposed steel trusses, overhead walkway and glass skylights.

"I have worked with Tnemec's high-performance coatings for many years," Mutter said. "This is a very complicated roof structure, and I knew the coatings had to be handled by the very best. It was tough just knowing where the steel ended and the skylights began. Most of the steel, exposed fixtures and plate systems coatings would be shop-applied. But the tricky part came when it all joined together and the field-applied interior finishes had to seamlessly match the color of the shop-applied steel."

For the pavilion structure, Tnemec coating consultant Phil Gonnella specified a coating system that included a zinc-rich aromatic polyurethane called Series 90-97 Tneme-Zinc, a moisture-cured primer. Its rapid-curing properties make it possible to be topcoated the same day; Tneme-Zinc also may be used for field touch-up. A polyamide epoxy called Series 27 F.C. Typoxy, a versatile low-temperature coating ideally suited for steel fabrication and OEM applications, was then applied. It is widely used as a field tie-coat, and provides rapid curing and handling capabilities. The final part of the pavilion coating system was Series 73 Endura-Shield, an aliphatic acrylic polyurethane coating highly resistant to abrasion, wet conditions and exterior weathering as well as normal interior physical abuse and allows for repeated cleaning.

As a consulting architect to the Polshek Partners on the Brooklyn Museum project since 1986, James R. Gainfort was in charge of the Museum's exterior coatings. As a part of this major facade restoration, Gainfort had to find a way to deal with many of the 8-by-6-foot iron grates that have protected the windows since 1895. Working with Polonia Restoration, the iron window grates were partially stripped and coated. The team first applied Tnemec's Series 135 Chembuild, a modified polyamidoamine epoxy high-build coating with superior wetting for marginally prepared rusty steel and tightly adhering old coatings; this was ideal for the century-old grates and a perfect foundation for aliphatic polyurethanes. For the topcoat, they applied Endura-Shield for its high resistance to Brooklyn's abrasive, wet conditions, corrosive fumes and exterior weathering.

On completing the job, Gainfort said to Gonnella, "Tnemec has been, and continues to be, the best coating system for a building. If you want it to last, you apply Tnemec!"

## FEATURED PRODUCTS

**Series 27 F.C. Typoxy**  
**Series 73 Endura-Shield**

**Series 90-97 Tneme-Zinc**  
**Series 135 Chembuild**



## PROJECT INFORMATION

**Project Location**  
Brooklyn, New York

**Project Completion Date**  
April 2004

**Owner**  
City of New York

**Architect**  
Polshek Partnership Architects - New York,  
New York

**Building Exterior Consultant**  
James R. Gainfort Consulting Architects -  
New York, New York

**Applicator**  
Sterling Company - New York, New York

Tnemec's high-performance coatings played a significant role in the creation of the Brooklyn Art Museum's \$63 million glass entry pavilion.

