SPAULDING REHABILITATION HOSPITAL BOSTON

With its view overlooking Boston Harbor, the 132-bed Spaulding Rehabilitation Hospital represents a healing and healthy environment with its patient-centered design and use of sustainable materials including low volatile organic compound (VOC) coatings from Tnemec.

"This was a very high profile project," observed coating consultant Greg Pope of the Righter Group, Inc. "It is an extremely attractive building that has earned a Gold rating for Leadership in Energy and Environmental Design (LEED)."

The gray color scheme on the hospital's exterior is suggestive of the past when military ships populated the Charlestown Navy Yard during most of the 20th century.

Exterior concrete and masonry were coated with Series 156 Enviro-Crete, a flexible, waterborne acrylate coating that protects against driving rain, alternate freezing-thawing, and ultraviolet (UV) light. Exterior steel doors and frames were coated with Series 1029 Enduratone, a water-based, low-VOC high-dispersion pure acrylic polymer coating with long-term protection. Series 1029 was also used on selected interior surfaces.

An ultra-durable fluoropolymer coating system was used sparingly on exterior steel. The substrate was primed with Series 90-97 Tneme-Zinc, a zinc-rich urethane primer, followed by an intermediate coat of Series 73 Endura-Shield, an aliphatic acrylic polyurethane coating; and a finish coat of Series 1071 Fluoronar, a high-solids fluoropolymer in the color black.

A selection of coatings was specified for kitchen and laundry area walls, ceilings and floors that are exposed to frequent cleaning or sterilization. Series 130 Envirofill, a waterborne cementitious acrylic coating with exceptional filling capabilities, was applied on concrete block in laundry and sterilization areas. Other walls and ceilings received a topcoat of Series 1080 Endura-Shield, a waterborne polyurethane coating, applied over a base coat of Series 280 Tneme-Glaze, a corrosion-resistant modified polyamine epoxy coating.

Concrete floors in high-traffic areas were topped with Series 287 Enviro-Pox, a low-odor, waterborne epoxy-amine adduct coating. Series 287 can withstand repeated cleaning and mild to moderate chemical exposures.

"The architect uses Tnemec as the standard for high-performance coatings in areas where longevity and durability are needed," Pope added.

Since 1995, Spaulding Rehabilitation Hospital has been recognized as one of "America's Best Hospitals" by U.S. News and World Report magazine. As the official teaching hospital of Harvard Medical School Department of Physical Medicine and Rehabilitation, Spaulding is one of the largest rehabilitation facilities in the nation.

FEATURED PRODUCTS

Series 73 Endura-Shield Series 90-97 Tneme-Zinc Series 130 Envirofill Series 156 Enviro-Crete Series 280 Tneme-Glaze Series 287 Enviro-Pox Series 1029 Enduratone Series 1071 Fluoronar Series 1080 Endura-Shield



PROJECT INFORMATION

Project Location Charlestown, Massachuse

Project Completion Date April 2013

Owner

Spaulding Rehabilitation Hospital, Partners HealthCare

Architects Perkins+Will - Boston, Massachusetts

Field Applicator M.L. McDonald - Watertown, Massachusetts

Opened in April 2013, the Spaulding Rehabilitation Hospital in Charlestown, Mass., used several low VOC coatings systems from Tnemec on its way to earning LEED Gold certification. Photos © Anton Grassl/Esto.

