

ONE CANAL

FEATURED PRODUCTS

Series 394 PerimePrime

Series 971 Aerolon Acrylic

In the historic Bulfinch Triangle neighborhood in Boston, Massachusetts, the new One Canal apartment and condo development made some history of its own as one of the first architectural projects in the nation to use Tnemec's insulation coating technology as a thermal break.

"Project specifications originally called for 2,200 thermal break pads as a solution for thermal bridging," recalled coating consultant Michael Woessner of Righter Group, Inc. "After comparing the cost of that approach with using Tnemec's fluid-applied thermal break, the designer realized a substantial savings."

Series 971 Aerolon Acrylic is a fluid-applied, high-build coating that contains aerogel, which is a highly efficient insulative particle. When applied over steel members, Aerolon provides a thermal shield that slows the transfer of heat or cold between the interior and exterior of the building, reducing the formation of condensation in a building's wall cavity.

"Aerolon is extremely cost effective compared to thermal pads that require a physical break in the steel beam," Woessner explained.

The coating was field-applied over a prime coat of Series 394 PerimePrime, a specially formulated, one-component micaceous iron oxide and zinc-filled aromatic polyurethane coating. A single coat of Aerolon was spray-applied at 60 mils dry film thickness (DFT) on balconies, while two coats were spray-applied at 120 mils DFT on steel decking and 100 mils beneath pavers on concrete balconies.

Applied in the shop or in the field, the use of Aerolon as a thermal break represents a new technology and concept for the construction industry. "It can be used on a variety of surfaces, including metal decking, concrete slab edges, metal studs, canopies, and window frame systems," Woessner emphasized.

The effectiveness of Series 971 as a thermal break in controlling the condensation effect has been confirmed in thermal modeling conducted by Morrison Hershfield engineering consultants and by Cabot Corporation. A water-based formulation, Aerolon conforms to regulatory requirements for low volatile organic compound (VOC) coatings and is compatible with common fireproofing products.

With unobstructed views of the Rose Fitzgerald Kennedy Greenway, 12-story, \$190-million One Canal consists of 320 units of housing, including 21 onsite affordable units, 21,000 square feet of retail space, and a parking garage with space for 147 vehicles. Amenities include a rooftop swimming pool and sun deck, a state-of-the-art fitness center with spin and yoga studios, and outdoor courtyard with a dog washing station.

PROJECT INFORMATION

Project Location Boston, Massachusetts

Project Completion Date November 2015

Owner

Apartment Investment and Management Co. Denver, Colorado

Architect/Engineer ICON Boston, Massachusetts

General Contractor John Moriarty & Associates Winchester, Massachusetts

Field Applicator

EMC Painting Boston, Massachusetts



Tnemec's insulating coating, Aerolon, was spray-applied at One Canal Place in Boston, Mass., as a non-structural thermal break on balconies and steel decking, common areas of concern for thermal bridging.