



610 Newport Center Revitalized with Long-Lasting Façade Restoration Coating

Spectacular makeover of Southern California office tower relies on Kynar Aquatec® PVDF resin-based topcoat to achieve long-term durability and service life in harsh coastal climate.

With breathtaking views of the ocean to the west and mountains to the south and east, life and business thrive at the 610 Newport Center in heart of Newport Beach, California. Sheathed in gray solar glass with aluminum-clad columns, this 274,000-square-foot Class A commercial building was designed by the architectural firm Skidmore, Owens & Merrill LLP and constructed by the Irvine Company in 1972.

After 45 years of service in extreme coastal climate conditions, the façade of the 18-story office tower was showing signs of extreme weathering and degradation. The Class 1 anodized aluminum finish was severely faded and there were significant shifts in the sheen of the panels. The owner wanted to revitalize the property's external appearance with a long-term, economical solution. During the restoration, it was of vital importance to minimize disruption of the building's

high-profile tenants, which included mitigating odors and noise.

Restoration Considerations

Upon assessment of the building's exterior by coating contractor Stuart Dean Company, the protective anodic finish of the façade's aluminum was no longer thick enough to protect it from ultraviolet attack and water-borne corrosives. "We determined that the poor condition of the aluminum substrate could only be corrected by the application of a high-performance, field-applied protective coating to extend its service life," said Rex Dean, global director of façade restoration at Stuart Dean.



Project:
610 Newport Center

Coating:
Neverfade® Façade Restoration Coating

Coating Supplier:
APV Engineered Coatings, Inc.

Coating Applicator:
Stuart Dean Company

To meet the client's needs for an ultradurable, odor-free restoration, the project team recommended the application of a NeverFade® topcoat, which is backed by a 15-year warranty against color fading by APV Engineered Coatings. This waterborne coating system meets SCAQMD Rule 1113 VOC limits in Southern California for industrial maintenance coatings, with less than 100 grams/liter of VOCs.

With an expected service life of 30 years, the NeverFade® product is based on Kynar Aquatec® PVDF emulsion, which provides similar long-lasting durability, extreme weatherability, and color-retention properties as Kynar 500® resin-based coatings. Premium water-based architectural coatings formulated with these emulsions also resist dirt, staining, algae, mold, fungal growth, and corrosion.

Coating Evaluations

Prior to making a final decision on the coating system for the restoration, the building owner wanted to make a visual aesthetic comparison of the roller-applied Neverfade® product against a spray-applied, two-component solvent-based product, which was covered by a limited 10-year warranty. Color and finish aesthetics of the two mica-based coating products were the primary considerations during this phase of the evaluation process. The mock-up panels were 15 feet wide by 5 feet tall.

In a side-by-side comparison of the two coating products, the owner liked the

look of the Kynar Aquatec® PVDF based Neverfade® finish and the fact that it was roller applied. Being close to the ocean with strong wind conditions, overspray was a liability concern as the building was surrounded by parking lots and malls. Taking into consideration the aesthetic results, the elimination of overspray and solvent odor concerns, and the extended warranty coverage, the building owner was convinced that the Kynar Aquatec®-based Neverfade® coating was the best solution for the façade restoration.

Work Gets Underway

All materials and processes used in the restoration were selected not only for their high-performance qualities but also to maintain a high level of comfort and low-level of disturbance for the building tenants. Working from top to bottom on suspended scaffolding, the restoration team started the job by removing all joint sealants and clear protectant treatment on the building's 82,000-square-foot façade. They then washed all surfaces to remove loose environmental contaminants and scuff sanded by hand the aluminum substrate to give it a 1.0 to 1.5 mil anchor surface profile.

Once the aluminum façade was properly prepared, the coating crew roller applied APV's waterborne W-1650 bonding primer at a dry-film thickness of 1.5 to 2.0 mils. As the final step in the process, the workers roller applied the Kynar Aquatec®-based NeverFade® topcoat at a dry film thickness of 2.0 to 2.5 mils. The restoration was completed over the course of 10 months.

Stunning, Long-Lasting New Look

With its newly revitalized exterior, the modern 610 Newport Center offers the very best of life, work, and luxury on the west coast. Application of the water-based NeverFade® topcoat with Kynar Aquatec® resin enabled the service life of the façade to be extended by 25 to 30 years and eliminated odor nuisance concerns that come with using solvent-based coatings. Considering the environmental pressures that are put on the building with climate, humidity, dew point and salt air near the coast, the NeverFade® product's 15-year warranty from the manufacturer offered significant cost saving advantages as well. "This extended warranty coverage provides clients a 33% return on their investment when looking at the cost of the project over 15 years versus an industry standard warranty of only 10 years for field-applied fluoropolymer coatings systems," said Chris Incorvaia, Stuart Dean's national manager of facade restoration.

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