

KYNAR500FSF[®]

BY ARKEMA

PVDF-BASED COATINGS

APPALOOSA LIBRARY CASE STUDY



Appaloosa library

Library utilizes new PPG Duranar[®] VARI-Cool iridescent coating technology to offer a color-changing appearance that stays cool at the same time. PPG is a licensee of Kynar 500[®] PVDF coatings since 1965.

The one-story Appaloosa Branch Library in Scottsdale, AZ is a departure from libraries of the past that featured dark wood and dim lighting. As you approach the new Library, the building's metal skin-20,000 square feet (1,858 m²) of wall cladding from Morin, Fontana, Calif.-changes colors. "It's primarily silver-gray straight on, and then as you get off to an angle you see a grayish green," Jeremy Jones, AIA, of DWL Architects + Planners Inc., Phoenix, explains. "As you get flatter to it, it goes dark green or a purplish color. As you're driving up to it some of the walls look bright pink and some look bright green, creating the mirage effect."

When Jones and fellow architect Doug Sydnor, AIA, of Douglas Sydnor Architect and Associates, Scottsdale, Ariz., got together to collaborate on

a new library in the desert of northern Scottsdale, they decided they wanted something thoroughly modern and functional, with the crispness of steel design, but with something a little extra.

The mirage effect they achieved is created through the first commercial use in the U.S. of Pittsburgh-based PPG Industries' Duranar[®] VARI-Cool iridescent coating on the metal cladding. The coating is composed of mica chips in a clear base, creating colors by light interference patterns.

Duranar[®] VARI-cool coatings are based off of high-performance fluoropolymer resins with extraordinary capability to retain color and gloss, keeping painted metal looking vibrant and appealing for decades.



Project:
Appaloosa Library

Coating:
Duranar[®] VARI-Cool

Coating Supplier:
PPG Architectural Metal Coatings

When applied and cured on properly prepared substrates, Duranar® VARI-Cool coatings offer brilliant color change along with exceptional color stability, chalk resistance, durability, abrasion resistance, chemical resistance and flexibility. The polychromatic coating utilized on the library is designed to help the structure remain beautiful for decades.

Thomas McKay, product manager, coil and extrusion coatings, for PPG, said the fleeting mirage fashioned by the “Kaleidoscope” colored coating harmonizes with the color-shifting desert setting—the light-gray-green tint, for instance, matches surrounding plants ... and symbolizes the library’s delicate environmental footprint.

Restoration Considerations

“Duranar® VARI-Cool coatings also help minimize the building’s environmental impact, as it is the only coil formed polychromatic coating integrating energy-saving ULTRA-Cool technology,” McKay said. “In addition to changing colors, the pearlescent pigments reflect the sun’s infrared [heat] energy, which helps the library stay cool and thereby consume less energy for air conditioning, even in the hot Arizona sun,” he said.



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