

KYNAR 500[®]

Smithsonian National Museum of African American History and Culture

Monumental Museum features Kynar 500[®] PVDF



SUMMARY

CASE STUDY

HIGH-DURABILITY EXTERIOR COATINGS FOR LONG-LASTING BUILDING DESIGN

- Outstanding weatherability
- Color retention
- UV resistance
- Cleanability and dirt pickup
- Chemical resistance
- Chalk resistance

PARTNER

Sherwin-Williams

APPLICATION

Exterior Lattice panels

PRODUCTION PROCESS

Extrusion Coating

MATERIAL

Kynar 500® PVDF
Fluoropon® 70% PVDF Coatings

PHOTO CREDIT

Alan Karchmer

INTRODUCTION

Opening in 2016, the Smithsonian National Museum of African American History and Culture (NMAAHC) is located in Washington D.C., adjacent to the Washington Monument.

The building is an important landmark for the nation, and was built on the last available spot on the National Mall.

The museum, which encompasses 397,000 square-feet of space across 10 levels, houses exhibit galleries, administrative areas, theatre space, and storage facilities for the collection, which includes approximately 33,000 pieces of artwork and historical objects.

The goal was a world-renowned museum that would accurately tell the story of the African American experience.



KYNAR 500® PVDF

"What we ended up with gave us the look of real bronze, a luminous feeling that created a dynamic and beautiful facade" -Lead project

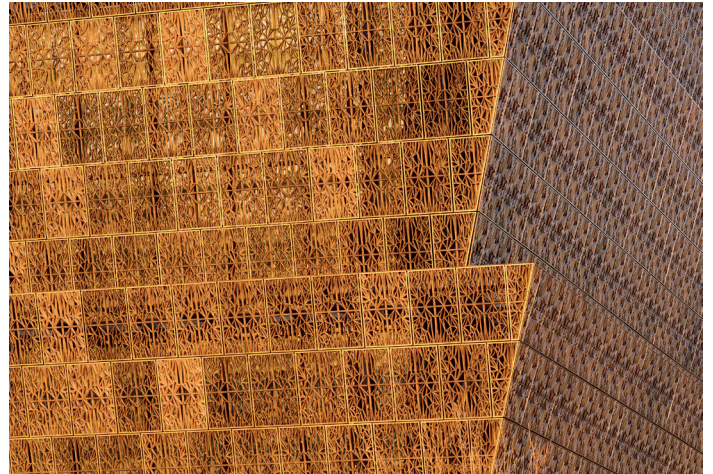
manager Zena Howard AIA, of Perkins+Will.

The building design features a corona (the three-tiered filigree envelope that wraps around the structure) with the corona's bronze color providing a distinctive look. The complex metal corona design is coated with **Sherwin-Williams' Fluropon® 70% PVDF** coating, which is a **Kynar 500® PVDF**-based coating that has been proven to maintain color and appearance for decades of exposure to the elements.

Three custom shades, African Sunset, African Sunrise and African Rose, and one standard shade of Black of **Sherwin-Williams' Fluropon®** coating with **Kynar 500® PVDF**-based coating resin were used on these massive aluminum panels, each weighing around 200 pounds and stretching 4 feet by 5 feet.

"The color-matching period lasted for more than 18 months because we were looking for depth even more than just color since the panels were so intricate and unique," said Del Stephens, president and CEO of Dura Industries, who served as the project's metal panel applicators.

Each panel was custom cast and finished with five different coating layers - - each a different color - - to achieve the exact bronze shade desired by the design team. **Sherwin-Williams Fluropon®** powered by **Kynar 500® PVDF** was the best product for this complicated job due to its durability and color retention, which will continue to showcase the vivid color for many years.



Extensive testing was done during the coating application process due to the sheer size of the panels, and because of the intricate design already cut into each piece. The coating was applied entirely by hand from the team at Dura Industries and each color layer was carefully inspected to make sure every part of the coating process was on track.

"This was truly a one of a kind job and something that I have never experienced before in my career with Sherwin-Williams. The finished product is simultaneously consistent and dynamic in the way that it looks." Said Juan Campos, Account Executive from

Sherwin-Williams.

The filigree is an eye-catching adornment that both draws visitors in and sets the stage for the rest of the guest's journey throughout the museum. It combines polish, artistry, creativity and persistence, just like the art, history, and culture memorialized within the building.

The museum itself is a work of art, one that stands out among the historic structures to its left and right, and will act as a physical representation of the historical past of African Americans.





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