



## Superdome Gets a New Gleaming White Roof with a 20-Year Warranty

Iconic New Orleans landmark relies on Kynar Aquatec®-based topcoat to achieve long-term durability, cleanliness, and service life.

### The Landmark Dome

Immense in both its size and its impact on the American sports and entertainment scene, the Mercedes-Benz Superdome has been labeled the “crown jewel of the New Orleans skyline.” Its massive 9.8-acre white roof serves as an important landmark in the Big Easy and represents one of the most challenging aspects of maintaining the aesthetic appearance and performance of the iconic stadium.

In 2013, with the roof’s 10-year warranty about to expire and some blistering and ponds appearing on the surface, the Superdome’s management group decided to initiate a recoating project. When it came to choosing a topcoat finish, resistance to dirt buildup and

biological growth were two very important considerations due to the Superdome’s urban location and the city’s challenging, hot and humid environment.

### Coating Evaluations

The project team tested eight different coating products on the Superdome roof for six to ten months to evaluate their performance in color retention, cleanliness and ability to resist biological growth. “The inspection made it clear that Quest Construction Products’ Kymax® coating could offer the specific durability and aesthetic performance characteristics we wanted,” said lead architect Brad McWhirter of Trahan Architects.



### Project:

Mercedes-Benz Superdome  
New Orleans, LA

### Coating:

KYMAX®

### Coating Supplier:

Quest Construction Products,  
Home of United Coatings  
Phoenix, Arizona

Kymax® is a thin-build elastomeric coating that provides long-term color stability, resistance to dirt buildup and protection against severe weather conditions. The coating is based on Kynar Aquatec® PVDF latex, an emulsion-based technology developed by Arkema Inc. that provides durability and performance similar to that of Kynar 500® PVDF resin-based coatings. However, unlike factory-applied Kynar 500® resin-based coatings, coatings based on Kynar Aquatec® latex cure at ambient temperatures, meaning they can be field-applied to a variety of substrates and as a finish coat over acrylic basecoats.

### The Project Kicks Off

To prepare the roof for the coating job ahead, the team from Brazos Urethane power washed the entire 9.8-acre dome with United Coating Concentrate. Next, one layer of a "solar gray" basecoat was sprayed on the roof at an application rate of 16 wet mils. After the basecoat was applied, low areas, ponds and blisters were repaired with polyurethane foam and a water-based, high-tensile strength

elastomeric sealant. Working in 16 pie sections, the workers then applied two white Kymax® topcoat layers at a rate of 6 wet mils each. "It was basically a mist coating," said project manager Tom Keller. "We used smaller tips and had no issues with applying the topcoats at all."

As the final step, the team hand-applied the basecoat and topcoats to the Mercedes-Benz logo at the center of the roof and the lettering along the north and south sides of the dome. "The quality control on the dome application was "second to none," added Keller. Throughout the process, the QC team took small slit samples of application areas that were then evaluated in the lab to verify coating thickness. However, the product's ease of mixing and spraying meant that the team was "right on the money" in its application rate.

### The 20-Year Certification

Upon completion of the work, the roof was evaluated by two independent inspection companies who verified the quality of the high-performance Kymax®

roof coating. More than 700 measurements were taken, including testing of additional slit samples according to ASTM standards for total solar reflectance and color tolerances. On November 15, 2014, Quest Construction Products issued a comprehensive 20-year warranty covering all labor and materials for the new roof.

The new roof is one of the largest cool roofs in the country and is expected to save on energy costs for the Superdome. Additionally, because the new coating has excellent dirt and biological growth resistance, maintenance costs will be reduced. "The old coating needed to be power washed every year to maintain its white appearance," McWhirter said, "Now the goal was to eliminate the need for washing. The Kymax® topcoat is almost self-cleaning. When it rains, it appears to wash itself." Keller agrees, saying the Superdome roof is brighter than ever. With its brilliant white roof guaranteed to last for the next 20 years, the Superdome is once again ready for the national spotlight.

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