

Salvador Dali Museum

St. Petersburg, Florida

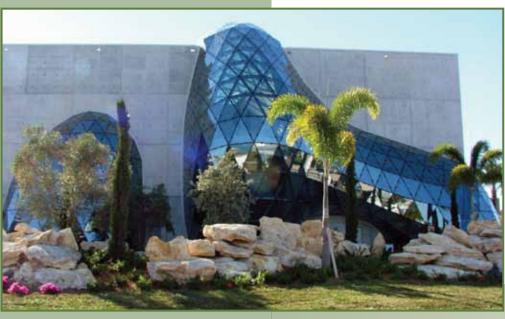


fitting tribute to an iconic artist, the new Salvador Dali Museum is a work of art reflective of the artist's characteristic juxtaposition of classical and fantastic elements. The structure, designed by Yann Weymouth and Novum Structures, features an undulating, abstract 75-foot glass structure that flows from the plaza up and around the cubist "treasure box" museum. The innovative structure of this popular museum will receive worldwide attention, as the geometry of the glass structure is groundbreaking in the architectural world.

The structure, located in the highly corrosive Floridian coastal environment, faced several development challenges. All steel elements of the museum needed a durable, low-maintenance

corrosion protection system to guard against unsafe and unsightly corrosion; however, the appearance of the structure must also be pleasing to the eye, without distracting from the glass structure. Finally, the complexity and scale of the architecture required the steel elements be fabricated, processed, and delivered to the jobsite in order and without loss.

Incorporating a duplex system of powder coating over hot-dip galvanized steel for corrosion protection was the ideal solution for addressing all of these concerns. A duplex system combines the superior protection of galvanized steel with the additional benefits of another corrosion protection system, such as powder coating or paint, to extend the



Galvanizer

Valmont Coatings - IGA - Tampa

Specifier

Novum Structures

Architect

Yann Weymouth, HOK Architects

Additional

Custom Colors Powder Coating Sandman of Sarasota

duplex system





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maintenance-free life of the project. The powder coated finish allowed a color selection that would blend with the facility, while the galvanized steel beneath ensured the pieces would be protected by the most durable corrosion protection system available – the best of both worlds.

Galvanizing was ideal for the elements of this project, as the glass structure is formed with structural steel tubing, with access holes that would expose the inside of the tubing. As the steel pieces are lowered into the zinc bath during the galvanizing process, the molten zinc flows in and throughout the element being dipped. This means the interior of hollow tubes develop the same corrosion protection as the exterior – and will be protected from corrosion both inside and out.

In collaboration with the galvanizer and powder coater, the fabricator utilized a barcode technology that would withstand the galvanizing, sandblasting, and powder coating processes, then get the pieces to their final destination in the correct order without any losses. Novum fabricated the parts at their plant, and then shipped them 1,300 miles to the galvanizer.

Because the galvanizing process is conducted indoors, there were no weather-related delays or interruptions to slow things down. After quick turnover by the galvanizer, the pieces moved on to the sandblaster, then the powder coater, and then finally to the jobsite with precision. This fast and efficient process saved the specifier thousands of dollars in repairs due to transportation damage or lost parts.

Now fully constructed, the museum is a 66,450 square foot behemoth offering 50 percent more gallery space than the previous facility. The 18-inch thick concrete walls and glass structure are designed to withstand 165 mph winds, so the valuable artwork within will be protected in up to a Category 5 storm surge. As the design will protect the building from the onslaught of weather extremes, so the duplex system of powder coating over hot-dip galvanized steel will work to protect the structure from the ravages of corrosion for generations.

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