Charlotte Douglas International Airport Rental Car Facility & Hourly Parking Deck



Charlotte, North Carolina



Charlotte Douglas International Airport's new seven-story hourly parking deck opened in time for the 2014 Thanksgiving rush, adding 4,000 new parking spaces to the airport. The \$120 million parking deck has been under construction for more than a year. At 3.2 million square feet, the 7,700-space facility is roughly half the size of the Pentagon. In addition to 4,000 new public parking spaces, the deck features 3,700 spaces for rental cars on the first three floors of the structure.

Airport officials wanted each of the parking decks to extend beyond the standards of conventional design. Perforated stainless steel metal panels are backlit blue to match the airport is accent color, reveal the galvanized truss structure, and provide visibility and ventilation to meet airport safety requirements. The galvanized bow-string trusses surrounding the building create a graceful arch on the exterior surface of the concrete structure and the perforated stainless skin eliminates the need for fans and ductwork. The combination of galvanizing and stainless steel will guarantee decades of corrosion free service life for the city without maintenance, while maintaining the architect's vision.

The completion of the hourly deck marks completion of the fourth parking deck with a fifth deck to be completed in early 2015. All of the new decks built over the past decade use the galvanized truss design to give the airport its signature appearance. The underside of each parking level is painted white, enhancing security while reducing the need for artificial lighting and reducing lighting energy costs.



At night the point loaded, galvanized steel and glass-enclosed stair towers glow to create lanterns. Dynamic blue LED signal lights are programmed to chase around the helix. The decks feature an automated parking management system. hot-dip galvanized steel ensures all of the structures will remain a corrosion-free centerpiece of the airport landscape for years to come.





Galvanizer Galvan Industries, Inc.

Fabricator Eric Ferrell, Commercial Metals Corp (CMC Structural)

> Architect Brian Wilson, The Wilson Group LS3P Associates, Ltd.

> General Contractor Archer Western Contractors, Ltd.

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