CELEBRATION C-5 OFFICE BUILDING, CELEBRATION, FL

SHEET METAL CONTRACTOR: VICKERS METAL WORKS, INC., ORLANDO, FL
The scope of this project called for the fabrication and installation of one Aluminum Tower/Spire feature, sixteen decorative aluminum fins located at the base of the spire, ten decorative aluminum masts (finials), ten decorative aluminum medallions: two at the front entrance canopy, two at the rear entrance canopy and three at each side.

**Aluminum Tower**

The Aluminum Tower, standing atop a three story office building at 86 feet above the ground, measures approximately 30 ft tall x 7 ft diameter at the base.

The Tower base was fabricated using structural steel then welded to the steel beams of the existing building.
Next the Aluminum Tower was fabricated using 1/8” aluminum roll formed panels with a seven ft diameter cast aluminum base cap. The bottom section of the Tower was fabricated using 3/16” and ½” aluminum in a custom decorative pattern. All parts were welded and finished as required. The Tower was then powder coated to the owner’s specifications. A crane was used to set the tower in place and fastened to the steel frame using stainless steel fasteners as specified.

**The Decorative Aluminum Fins**

Four of the fins are 22 ft tall and 12 are 5” tall. Each fin is fabricated using 2” x 8” x 1/8” rectangular aluminum tube welded and finished as required. Fins were painted to the owner’s specifications.

**Decorative Aluminum Masts (finials)**

The Masts measured approximately 16 ft tall and were fabricated using five inch round schedule 40 aluminum pipe and 3 1/2” round schedule 40 aluminum pipe with 3/8” aluminum end caps and topped off with a 6” round aluminum sphere.

Each finial base included three .080 aluminum radius covers welded and finished as required. Finials were painted to the owner’s specifications prior to installation.

**Decorative Aluminum Medallions**

The Medallions were 24 inches in diameter with 1/8” aluminum back plate custom cast and then painted to the owner’s specifications prior to installation. Each cover was then installed at every entrance rod connection. Rods were made of aluminum pipe attached to the canopy as required.

Shop fabrication for this project totaled 1,300 man hours and field installation required 450 man hours.
The scope of the project that McDonald Air & Sheet Metal, Inc. undertook on Trinity Hospital in New Port Richey, Florida included manufacturing and installing 36,400 linear feet of rectangular duct that was tested from 2 inches to 6 inches s.p., 31,000 linear feet of round duct also tested at six inches s.p. all working in conjunction with two TRANE 1400 ton chillers, 13 rooftop, two modular indoor and six CRAC units, and 46 exhaust fans in this five story, 340,000 square foot hospital. The building is of structural frame with metal decking.

The sheer amount of duct work alone made the job different: it required over 67,000 linear feet or 12.7 miles of metal duct.

Coordination was a challenge. Coordination with all the different trades was complicated, specifically in the priority corridors and having to work closely with the wall contractor, South Most Drywall, where first the top rails were installed, then fire proofing.
Next came Harper/Limbach with mechanical piping testing and insulation, then the ductwork, pressure testing to six inch s.p. and then the insulator followed. Only after all the overhead work was completed and inspected were the remaining walls allowed to be finished.

Time constraints required extraordinary problem solving. Because the main building envelope was completed in 2008 - 2009 before the final mechanical contracts were executed, shop drawings were done in two phases.

The first phase (60%) was completed in 2008 and the remaining work in early 2010. Since the building was immediately ready for ductwork, Cadvantage was asked to finish the coordination ASAP.

McDonald’s Shop Manager, Les Jones, worked closely with Project Manager, Bob Grumblatt and David Laietta, job site foreman.

McDonald’s Owner and President, Ralph Carver, gave special thanks to Bovis Superintendent, Bill Speight; Harper/Limbach Project Manager, Mark Wood; McDonald’s Project Manager, Bob Grumblatt; and General Foreman, David Laietta and all the men doing the day in and day out heavy lifting.

When asked by TECH/SPEC if there were any” budget constraints” on this project, Carver responded: “Are there any jobs out there without budget constraints? The work out there is going for the same price we received ten years ago.”
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