

Stadium Trivia■ **Just How Big?**

The stadium encases 104 million cubic feet with the roof closed. The entire American Airlines Center, where the Dallas Mavericks play, could fit into the stadium at field level.

■ **What About Tailgating?**

Approximately 30,000 parking spaces will be available at the stadium and in near-by lots.

■ **How Will it Do That?**

A series of 7.5 horsepower electric motors will open and close the bi-parting retractable roof panels in 12 minutes with a unique rack-and-pinion design.

■ **Quarter-Mile in 40 Months**

The arches of the new stadium span 1,290 feet, almost a quarter mile, and the entire project will be completed in 40 months (summer 2009).

■ **Ski Slope Roof**

The unique retractable roof of the new stadium boasts the steepest path of any in North America.

■ **Just How Tall?**

With the roof arching 320 feet above the playing field, the entire Statue of Liberty and its base could fit, upright, into the stadium with the roof closed.

America's Team, America's Landmark Stadium

Texas detailing manager talks about his company's role in reinforcing the NFL's largest football arena.



Ten-gallon hats. Giant steaks. Wide-open spaces. In Texas, they tend to like everything big. Nowhere, perhaps, is that more evident than with the new home of the Dallas Cowboys being built in Arlington, Texas.

Whether you are a fan of the Cowboys or not, no football fan can deny the excitement of watching football on Thanksgiving Day, in awe of the stadium with a huge hole in the roof. The Cowboy's new stadium takes the current Texas Stadium concept to the next level, incorporating a massive retractable roof, two 35-foot deep by 17-foot wide boxed arch trusses, and the two tallest moveable glass walls in the world.

The concrete in the stadium requires more than 20,000 tons of rebar, most of which is being supplied by the Commercial Metals Company's (CMC) North Texas locations.

"We have shipped 18,000 tons," says Tom Terry, CMC North Texas Detailing Manager, "We will ship another 2,000 tons before the job is completed." He adds, "What made this job different was that we had to

use five detailers to detail the job. It wasn't so much the size of the job, but the time frame. They needed it done very quickly." Tom explains that it was essential to keep all of the detailers on the same page, and sharing information was crucial on such a large project. CMC uses a wide-area network (WAN) to store information for multiple locations in a single server cluster that provides instantaneous data transfers. CMC locations use

aSa software to automate all phases of rebar fabrication, from estimating, to detailing, to production and computer shearing. They also use aSa Rebar Financials to manage their rebar contracts.

Although CMC handled 98% of the job, by Tom's estimation, two other fabricators also pitched in — Arrowhead Rebar and Gerdau Ameristeel. Tom explains that the general contractor, Manhattan Construction, coordinated the schedules and resources of the different companies well. He also praised the contractor for staying true to the original design of the HKS, Inc. architects.

Tom says the project was interesting from a detailer's perspective for a couple reasons. "The amount of structural steel needed almost matches the amount of reinforcing steel. It will need about 16,000-17,000 tons of structural steel," he says. Another factor is the number of specialty items required, including, "lots of grade 75. Lots of couplers." Nevertheless, after 28 years in the industry, Tom says he is "not phased by much." □



Quick Facts

- Encompasses 2.3 million total square feet.
- World's largest column-free room.
- Largest domed roof structure in the world (660,800 square feet.)
- Longest single-span roof structure in the world.
- The clear glass retractable doors at each end zone will measure 120 feet high by 180 feet wide. They are the largest moveable glass walls in the world.
- The Cowboys new stadium is designed to seat 80,000 fans. It can easily expand to accommodate up to 100,000 for special events, such as the Super Bowl, which Dallas hosts in 2011.

◀ Arch Milestone.

The first of two historic arches that will support the two roof panels was completed in October 2007. Each arch spans 1,290 feet — more than twice as long as the Gateway Arch in St. Louis.

◀ One Big Pour.

More than 20,000 tons of rebar was required for the new Cowboys stadium. The project required almost as much structural steel — approximately 17,000 tons.

Here We Go, Steelers

As Pittsburgh Steelers fans, we're looking forward to the day when we beat the Cowboys in their impressive new home.

- The Editors

