STRUCTURAL BUILDING COMPONENTS MAGAZINE (FORMERLY WOODWORDS) April 2001

"Yes We Can" by Brigit Frank

When Champion Truss of Albuquerque, New Mexico began doing business, they decided that they would need to concentrate on custom work to be competitive with the larger truss companies in the area. The company has grown significantly since then and accepts many different projects, but their ability to complete custom work is still in demand.

Recently, Champion Truss was challenged to build the roof trusses for the Blue Ridge Christian Center, an Assembly of God Church. The difference between this and any of Champion's other jobs was that the Blue Ridge Christian Center required 98-foot trusses. The reason, "We didn't want any columns in the sanctuary," said Reverend Odis McCloud. "We needed a free span."

The other companies that had given quotes for this job submitted plans using trusses built in two pieces with a field splice to join them. However, to field splice these trusses would require scabs, bolting, nailing and additional engineering. Two-piece trusses would also entail additional work from the general contractor as well as the liability of interpreting and correctly following the engineering.

The obvious negatives involved with using two-piece trusses made Richard Luna and Gilbert Blea, the owners of Champion, ask the general contractor if there was a reason that they wanted the trusses to be made in two pieces, suggesting that Champion could construct a 98-foot truss in one piece. The contractor's response was instantaneous, "You can do that?!" No other company had offered this as an option.



truss that they couldn't build. "The fact that no one else could do it motivated us to say yes we can." Luna told the customer that he didn't know how long of a truss they could build but he knew that they

never had to refuse a project because of its design.

To ensure safety, the design of the trusses needed to be conservative. To do this, the duration factor they would normally use in designing their trusses was changed to 90 percent. In addition, to make sure there was no damage during handling, the plate size on the top chord was increased by 25 percent.

The workers at Champion knew that the success of this project relied on them taking extra caution during production. The normal problems encountered when manufacturing trusses became magnified when building the 98-foot trusses. For example, Champion has a 100-foot, roof-glider assembly line that, in this instance, did not offer much spare room to work. This meant that the workers had to allow the entire truss to be pressed properly before putting another on the assembly line.



The potential for problems didn't end with the manufacturing of the trusses. Their handling and transportation also had to be well orchestrated. "We didn't spare any people stacking these monsters," said Luna. At an estimated finished

weight of 850 pounds each, 15 people were required to stack the completed product.

Fortunately, transportation was not a problem for Champion. They were able to bring the trusses to the construction site using a local company that specializes in oversized loads in addition to one of Champion's "stretch trailers" that has annual oversize load permits.

At the construction site, the preparations made by the general contractor, Milam Building Associates, played a big part in the success of this project. When the trusses arrived, Vernon Eldridge of Milam had a crane with a spreader-bar waiting. According to Luna, Eldridge also knew the importance of temporary and permanent bracing as they, "followed the WTCA bracing information to the T and then some."

The teamwork between the truss manufacturer and the general contractor paid off in a project that was completed without problems. Champion considers the entire experience to be a success. Gilbert Blea feels that this giant project has brought more awareness to their company. The building's occupants are happy with the results as well. Reverend McCloud was pleased with the work done by Champion and Milam and added, "Aesthetically, it looks wonderful."

Luna and Blea's advice to any company faced with a similar manufacturing challenge is to, "be conservative in the design and take extra precautions when handling and bracing."

"Yes, maybe a little longer," Luna responded eagerly.

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