

CHURCH EXECUTIVE

How a large and fast-growing church found its home

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by: Greg Stringer and Morgan Johnston

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A sign in the Lakewood construction office read, "If it were easy, everyone would be doing it." Tellepsen Builders adopted that motto last year as it tackled the conversion of a 600,000-square-foot sports arena into Houston's Lakewood Church.

Faced with incredible growth and an overflowing congregation for Sunday services, Lakewood staff knew they had to do something. As the largest and fastest growing church in the country, finding a venue to hold literally thousands of people from across the Gulf Coast region was a daunting task. A centrally located venue with multiple entry and exit points, coupled with a strong infrastructure to support the traffic, was the optimal solution for the church, which is continuing to grow at a phenomenal rate.

Calling the Compaq Center home

In 2003, when Lakewood Church staff decided they wanted to turn Houston's Compaq Center arena into the nation's largest ministry facility, an unprecedented task lay before them. Lakewood took on a 30-year lease of the city-owned Compaq Center, located along one of Houston's busiest freeways.

A first for both Lakewood Church and Tellepsen Builders, the \$95 million project required an almost complete gutting of the former sports arena to create a sanctuary that could accommodate nearly 30,000 visitors attending multiple services in the 16,000-seat auditorium every weekend in addition to a worldwide following of seven million via televised programming.

"We've been building churches in and around Houston for nearly a century, but the Lakewood Church project is the one that presented the most challenges. We are very proud of our accomplishments at Lakewood and are pleased that we were able to create the atmosphere Senior Pastor Joel Olsteen envisioned," says Howard Tellepsen, Tellepsen Builders' chief executive officer.

The new Central Campus for Lakewood Church opened the weekend of July 16, 2005. More than 57,000 people attended the inaugural services, which were broadcast to more than eight million homes in 100 nations around the world. That opening weekend, however, few could forget that only 16 months prior to the worldwide christening of Lakewood's new home, the facility was no more than a vacant sports arena.

Building the facility

Having had a steady hand in building past and present-day Houston, Tellepsen was a natural choice for the Lakewood Church when it came time to select the general contractor that would lay the foundation for its future.

While no simple task, Tellepsen managed to turn the cavernous interior into an intimate place of worship. This involved successfully directing the intricate details of the project to ensure that acoustics, lighting and overall setting provided tranquility and intimacy on a grand scale.

The sanctuary is equipped with all the technology of a functional broadcast facility with integrated systems for amplified sound, production lighting, dimmer system and three giant I-mag screens near the stage. Steel catwalks were built in the ceiling around the stage to accommodate complex lighting requirements needed to create Lakewood's desired ambiance for each Sunday service.

Unique effects that both softened the internal acoustics and enhanced the overall sanctuary mood included a white stage curtain that can be illuminated with different colored lights. Carpeting along the floors and 52,000 square feet of acoustical panels hung from the roof structure helped battle the echo inside the arena.

The renovation project involved extensive demolition of the first level, which included multiple sports training areas to create an appropriate space for the infant and pre-school classrooms.

Troublesome air vents

However, extraneous noise from the return air vents underneath the stadium seating which lead directly to the children's center created a new obstacle for Tellepsen. To prevent noise from traveling through the vents and interfering with the service and television broadcasts, a sound separation barrier was installed below the seats.

Now a distinguishing feature of the renovated complex, the 900-square-foot stage presented a new challenge for Tellepsen. The entire west end of the arena had to be removed and replaced with elaborate steel framing and concrete to support the impressive structure. Gradually the vast stage platform was transformed into an aesthetic array of visual

effects that would undoubtedly capture the attention of thousands of viewers and create a tranquil setting for traditional service activities. Flanked by waterfalls, circular staircases and seating to accommodate a 250-member choir, the stage also houses an adjustable orchestra pit that can be lifted or dropped as required.

Raised concrete flooring on a metal deck was installed on the basketball floor to provide the slope needed for the theater seats. The concrete was brought into the arena using pumps and buggies.

One of the most difficult elements of the project was constructing the 26,000-square-foot independent central plant on the roof of the former food court with new boilers, chillers, cooling towers and electrical transformers to provide the more than one million cubic feet of air conditioning needed to keep the facility cool. The original roof could not accommodate the new weight and required steel reinforcements to support the plant.

“Just-in-time” delivery

On an average day, 183,800 cars and trucks pass directly beside Lakewood Church. This tight construction site created unique obstacles including space restrictions and most significantly, safety risks. With very little room beyond the building for material lay down areas, Tellepsen implemented the “just-in-time” delivery method so that materials could be brought to the site on the day they were needed. This strategic solution required precision planning by the on-site construction team.

The office, housed at the complex for the duration of the project, staffed 13 administrative personnel in addition to project executives and served as a full-capability extension of Tellepsen’s main office. One full-time safety professional at the job site and a project-specific safety program helped ensure the safety of all workers and visitors and resulted in project completion with no lost-time injuries.

A five-story, 200,000-square-foot, multi-purpose building was erected on the eastern side of the sanctuary, providing space for additional classrooms, assembly rooms, a bookstore and a coffee/gathering area. Television studios now populate the fifth floor of the building and allow Lakewood Church to manage production in-house.

Working within the confines of the church’s location involved the engineering feat of running the Edloe Street access ramp to Highway 59 through the ground floor of the newly constructed building. After successfully completing the ramp, the exterior was painted to match the arena’s original pink concrete tone. Columns and exterior lighting and a black curved pre-cast concrete feature wall were positioned in front of Lakewood’s new home, distinguishing the church from the previous Compaq Center.

A new home

After 17,963 cubic yards of poured concrete, 500,000 square feet of carpet, 1.4 million man-hours, 7,000 light fixtures, and 57 miles of low-voltage cable, Lakewood Church has a new home.

Tellepsen, in its 96th year, was recently recognized with the American Subcontractor Association's Project of the Year over \$15 Million award for the successful transformation of the Compaq Center.

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