For the East Texas Symphony Orchestra (ETSO), a brand new acoustical shell was a long time coming. After 15 years of rallying for the addition of a shell to the Cowan Center at the University of Texas Tyler, the ETSO finally got their wish.

The Bravado™ Acoustical Shell is constructed with a lightweight aluminum alloy frame and composite honeycomb core reflector panel. The system includes an easy-to-use wheeled mover, making transporting and storing towers a simple and efficient process. The shell is fully customizable giving customers the option to choose from a variety of panels, finishes, light fixtures and configurations.
THE CUSTOMER

Alec Stoll of Stages Consultants was chosen to be the theatre consultant on the project, ultimately leading the project by facilitating the collaborative team necessary to both design and install the acoustical shell. The team led by Stages Consultants, which included Staging Concepts, required the expertise of the Symphony, the Cowan Center and the University of Texas, Tyler.

The long anticipated project debuted in late September with a private gathering held by the Orchestra’s President and Executive Director, Nancy Wrenn.

“This project has been long anticipated by our major audience. We expect even the mere sight of the shell is going to be thrilling for them,” Wrenn said. “The acoustical shell enhances on-stage communication between musicians, increases the projection of quality sound into the hall . . . and allows for unique flexibility through our ability to reconfigure the space to accommodate ensembles of varying sizes.”

THE CHALLENGE

Although sharing the stage is a difficulty for many community centers, high schools and universities, larger groups such as the East Texas Symphony Orchestra (ETSO) have struggled with utilizing a shared performance space that has limited storage and few accommodations for the acoustical needs of a larger orchestra. For Music Director and Conductor Richard Lee, a more distinct concern had been growing: musical acoustics in the performance hall.

“The problem with this hall is that it’s multipurpose; it is very difficult to project sound out to the audience and there’s often no real volume,” Lee said.

Storage was also a large concern when thinking of making improvements and additions to the performance space, which is used by community and student groups alike. In order to execute this project, it took the expertise of many.

THE SOLUTION

Stoll proposed an alternate solution for the space hindrances in the venue; an acoustical shell that would utilize fly space, leaving more room for other groups to store materials behind the stage and relieving the venue of any concerns about suitable space backstage. According to Lee, the best part of the shell design is that it’s
flexible, and has the ability to take a different shape depending on the size; whether that is a large concert or a chamber orchestra.

“The fun and the challenge over the next year or two is figuring out what kind of standard setups we can have,” Lee said.

THE RESULTS

The shell is fully customizable, giving customers the option to choose from a variety of panels, finishes, light fixtures and configurations.

“Staging Concepts played a key role in the engineering of this project and was instrumental to the success of the custom aspects of this acoustical shell,” Stoll said. “The disassembly and reconnecting of the towers to the bases is so orderly and quiet that it’s almost anticlimactic.”

With numerous other Bravado™ projects underway, Staging Concepts hopes to continue to exhibit excellent service and unbeatable results.

“We were truly thrilled to successfully complete this challenging orchestra shell. Our team worked closely with the client and theatre consultant to achieve some very innovative features to meet the needs of the space,” Bob Randall, Staging Concepts Vice President said. “We were very happy to customize a shell system that perfectly satisfies their venue.”
Contact us at info@stagingconcepts.com or visit stagingconcepts.com for more information.
In the fall of 2015, Staging Concepts began its work renovating the Pete Mathews Coliseum at Jacksonville State University (JSU). Although the existing stadium structure was in good condition, the internal layout needed a revitalized look and feel. A main issue with the older interior layout was the seating risers, which did not provide site lines needed for audiences to view all of the action on the court.

Hoping to increase the experience for their fans, JSU invested $2 million into the renovation of the 41 year old facility, which wrapped up construction in late 2015. Part of Staging Concepts’ scope of work included the design, manufacture and install of entirely new seating risers for the stadium, which greatly improve sight lines and provide comfortable chair back seating overlooking the new court. On the baselines, bench seating was provided.

While athletic teams were temporarily moved to an alternate location during the renovations, Staging Concepts knew there was a very tight timeline on the project. Though the construction of the Pete Mathews Coliseum was an extremely fast-paced project, Staging Concepts delivered and installed its equipment, enabling the new home of the Jacksonville State Gamecocks to open as scheduled.

“The team at Staging Concepts and the installation crew that was here was absolutely outstanding. Typical to construction of this magnitude, there will be many small conflicts that must be resolved. The installation crew, given their experience, was able to identify and address many of these conflicts before the first fastener was installed. If they weren’t as experienced and professional as they were, we certainly wouldn’t have finished when we did.”

-David Thompson, JSU Director of Physical Plant
To achieve a solid, concrete-like feel for the seating riser, Staging Concepts designed and supplied over 100 heavy-duty, steel raker beams for the understructure along with nearly 1,000 custom 1” SC90 platforms.

To bring the arena up to code and make the arena IBC-compliant, Staging Concepts modernized the space with:

- 1,000 linear feet of railing along the front and sides of the seating risers
- Nearly 200 seating riser step units with handrail
- Appropriate amount of ADA compliant seating capacity

Staging Concepts added the following design and finishing features to create a modern look and feel to the arena:

- Custom gray polyvinyl SC90 platforms
- Gray polyvinyl fascia panels
- Custom black powder-coated handrail

New camera platforms and a band platform were installed to make the arena more functional. The arena now features improved sightlines, added safety features and a modern, sleek appearance.
CASE STUDY: MOUNT OLIVET CHURCH
CUSTOM CHORAL RISER

With many Christmas sermons, programs, concerts and gatherings around the holiday season, Mount Olivet Lutheran Church worked with Staging Concepts in the winter of 2015 to refresh their resources in preparation. Between both campuses in Minneapolis and Plymouth, more than 1,000 individuals lend their voices to Mount Olivet’s 14 choirs. At the beginning of this project, Mount Olivet had a choral riser that Facilities Operations Manager Don Wamsley estimates was almost 40 years old. Staging Concepts worked with Mount Olivet to design and build a custom choral riser that would fit perfectly into their sanctuary and alter space, accommodating up to 200 choir members and the large Christmas trees behind it. Originally bought for the holiday season, the choral riser will get great use out of the groups that use it— but the platforms within this structure can be used for many other applications year-round. The principal Staging Concepts products used in this custom choral riser are SC90 Platforms, SC9600 Bridge Supports, two-line guardrail, and accessories.

Customer: Mount Olivet Lutheran Church
Scope: Large Custom Choral Riser
Location: Minneapolis, MN
Principal Products: SC90 Platforms, SC9600 Bridge Supports, Two-Line Guardrail and accessories
Market: Worship
CASE STUDY: SAN FRANCISCO OPERA

CUSTOM SEATING RISER

In February of 2016, the San Francisco Opera opened the new Diane B. Wilsey Center for the Opera. The Center was part of a 40,000 square foot renovation to the 1930s era Veterans Building, located just north of the 3,146 seat Opera House. Reconstructing the Veterans building had been an unavoidable task since a 1996 seismic assessment deemed the building unsafe after a major earthquake. The Opera used the retrofit to their advantage by having the foresight to consolidate inefficient Opera activities that were spread throughout the city onto one campus, adding office space, an archive, and the state-of-the-art space now named the Dianne and Tad Taube Atrium Theatre.

The 299-seat Taube Theatre is located on the 4th Floor of the Wilsey Center, and was previously occupied by the Museum of Modern Art. They wanted a space that would offer the ability to push performance boundaries, inspire a new generation of audiences, and be relevant for decades into the future. The space was to be dubbed ‘The Lab’.

The list of challenges was long. The Opera needed the equipment and technology to make the space flexible for the experimental performance styles and acoustical techniques that future performances may dream up. They also needed to modify the historic fourth floor space to handle the weight loads of an audience, and have the ability to control the lighting and acoustics for professional performances. One of the most important elements considered was the ability to manipulate was the audience configurations and sight lines. Staging Concepts was selected to build flexible audience risers and stages that would meet two primary configurations, but would allow for many variations.
CASE STUDY: SAN FRANCISCO OPERA CONT.

Every design detail, material, and finish was meticulously considered. The riser had to seat 299 people in an end stage and corner configuration, yet tuck away into the limited storage space of the 1930s building. Our engineers achieved this by ensuring we had the least amount of unique parts and pieces needed to make the two configurations.

The understructure of the risers are powder coated black to disappear in the darkness, and are also closed off with custom steel mesh closure panels. The panels transition seamlessly into custom raker guardrail engineered to meet the loading criteria of the International Building Code, but can also be installed quickly using a minimalist design by allowing the rail to lock directly into the platform frames. The closure panels, guardrail, handrail, platform frames, and stairs are all powder coated gray to blend into the gray walls of the performance space. The custom gray carpet was selected to match the room aesthetics as well as dampen performance reverberation and footfall. The carpet is two-toned with black accents to ensure audience members can see stair edges at egress. LED lighting was integrated into step units to mark aisle ways.

The venue required fast set up and tear down so choosing something more sophisticated than the traditional stick-built understructure for the seating riser was needed. The Opera chose the high performance SC2000 understructure, which is an accordion style understructure which folds in and out for the nine tier seating riser system. Custom chairs for the riser were purchased from an Italian manufacturer, and are designed so that empty chairs would have the same acoustical characteristics of an occupied chair.

The riser had to be approved by a team of acousticians to ensure it would complement a state-of-the-art sound system. The sound system in this room has a network of integrated microphones and speakers connected to a computer system; this allows users to apply algorithms to the sound which has the same effect of changing the room shape and materials.

Staging Concepts was thrilled to be a part of this cutting edge performance space and jumped at the fantastic challenge of turning the burden of a seismic retrofit into an advantage by consolidating spread out facilities into one centralized campus. The benefits of the Opera’s vision will extend far into the future as audiences will be a part of performances in which producers have full creative control of a high-tech, flexible space with equipment designed to last for generations.
In February of 2016, Staging Concepts completed a beautiful custom Bravado Acoustical Shell for the Shadow Mountain High School in Phoenix, Arizona. In coordination with Clearwing Productions, Staging Concepts was able to supply 4 towers, each panel 20 feet high and 4 feet wide. The shells also feature 6 doors at the bottom of the panels which serve well for moving about the stage.

The renovated Performing Arts Center cost $4.8 million and was completed on time and on budget. Renovations included state-of-the-art audio and visual equipment, new seating, building facade facelift, renovated restrooms, new interior makeover, complete lobby remodel, all new energy efficient lighting, mechanical upgrades, new carpet and flooring, and new paint throughout.

Customer: Clearwing Productions
Scope: Bravado Acoustical Shell
Location: Phoenix, AZ
Market: Performing Arts
During the 2015 off-season, the Ed and Rae Schollmaier Arena at Texas Christian University (TCU) underwent a major renovation—the first in almost 50 years. Previously known as the Daniel-Meyer Coliseum, the all donor-funded facility wrapped up the $72 million project in November of 2015.

With a goal of enhancing the fan experience, TCU set out to find the perfect team of experienced professionals to create an entirely new look and feel to the arena and building—which ultimately included 125,000 additional square feet, a new floor, updated concessions and restrooms, a hall of fame, new locker rooms and more.

Along with the new basketball arena’s floor, all new seating risers and club seating were installed to enhance the game atmosphere for fans. Working alongside the general contractor, Austin Commercial and the Architect, HKS, Staging Concepts played a large role in the project’s success.

Staging Concepts provided the lower bowl platforms on both ends of the court that will serve as the “Courtside Club” for donors and courtside seat holders. These high-end seating areas feature SC90 platforms and SC9600 bridging supports.

Part of the large scope of renovation included Staging Concepts’ ability to design and engineer a system that would fit seamlessly in the radius lower bowl. These areas needed to have a ‘permanent’ feel but with the option of being dismantled and moved into storage for specific events. Unlike traditional modular platforms, these sections utilized fixed seating which would be bolted through the platforms.

In collaboration with Irwin Seating, Staging Concepts came up with a solution to disengage the fixed chairs without having to get underneath the system. This makes for easy set-up and take down of the system as the TCU staff utilizes the venue for a wide variety of events.

The court, lowered approximately 4 feet for closer seating, features a Nike-designed floor complete with frog scales and a large new Panasonic video board above center court. The frog scales commemorate the TCU mascot, the Horned Frogs. Staging Concepts modular system delivers great sight lines and improved ability for patrons to enjoy all of the newly upgraded amenities.

Staging Concepts played a major role in the project, supplying over 200 platforms and 50 custom handrails, as well as almost 70 stair units for situations when the platforms are not in play. We were proud to be part of making the TCU arena an incredibly flexible and world class space for years to come.
Staging Concepts designed and supplied over 200 custom SC90 Platforms that ultimately comprised a semi-circular shape of court side-seating, as well as the following technical seating additions:

- Support consisting of nearly 600 SC90 legs, 12 SC100 C-Frames, and 22 SC9600 assemblies – virtually every style of support Staging Concepts offers.
- 64 custom step units with custom flat-bar handrail to aid in accessing the seating area.
- In collaboration with Irwin seating, a fixed seat mounting connection for quick removal of seats.
- 4 large stairs provided to access the precast seating when the platforms were not in use.

Staging Concepts added the following design and finishing features to create a modern look and feel to the arena:

- Custom SC90 Platforms with gray polyvinyl surface and clear anodized finishes.
- Over 200 custom gray polyvinyl closure panels to finish off the riser faces.
- Step units with custom flat bar handrail.

Staging Concepts provided the lower bowl platforms on both ends of the court that will serve as the “Courtside Club” for donors and courtside seat holders. These high-end seating areas feature SC90 Platforms and SC9600 bridging supports.

These areas needed to have a “permanent” feel but with the option of being dismantled and moved into storage for specific events.