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Tobin Center for the Performing Arts

A Star on San Antonio's **Riverwalk**

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SPARKLING VEIL

San Antonio Gets a World-Class, Multipurpose Performing Arts Center

By: Randi Minetor

The Tobin Center is wrapped in a shimmering mesh veil, blending the architectural concept with the San Antonio environment.

the geographic center of San Antonio's Riverwalk—a five-mile lane of shops, restaurants, hotels, and nightspots along the city's San Antonio River—the Tobin Center for the Performing Arts connects directly with the footpath, inviting visitors to stop at this newly revived and reimagined cultural center.

The 120'-high structure is wrapped in a metal veil, a shimmering mesh that becomes a spectacle on the city's skyline and complements the environment. If it's early morning, the twinkling veil reflects the pale rose and blue of a Texas desert sunrise; if it's twilight, the entire building turns a deep blue to match the darkening sky. Every visit to the Tobin Center brings a different perspective, thanks to the ingenious design by Seattle-based LMN Architects, in association with local architecture firm Marmon Mok, which unites the center's historic façade with new construction in a blend reminiscent of the Beaux-Arts style.

"You have this historic civic venue, a beloved community landmark, that had lost its connection to the life of the current city," says George Shaw, one of the architects who led the project for LMN. "Its architectural presence was exclusively focused on the historic town square to the south, while a whole new form of urban life had emerged to the north. In response to this shift in urban conditions, we organized the program parts to make a strong link to the river. The new performance venues are oriented within the framework of the existing building to create public arrival sequences from both sides, stitching the performance experience into the patterns of neighborhood activity."

The Spanish Colonial Revival outer walls are all that remain of the original 1926 structure, the rest of which burned to the ground in 1979. The city rallied and rebuilt the municipal auditorium in the 1980s, but as San Antonio's cultural scene grew and more organizations needed a place to perform, the hall's shortcomings became painfully obvious.

"What was there was a 6,500-seat multipurpose venue that not only the San Antonio Ballet and the opera and Bruce Springsteen and Jimi Hendrix had performed in, but also the circus," says Michael Fresher, executive director of the Tobin Center. "It was not really the right place for the performing arts."



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In 2006, visionaries, including Rodney Smith, then the center's executive director, imagined a new space with a smaller, multipurpose main hall, a black-box theatre, and an outdoor element that would link the city's performing arts organizations with the Riverwalk. Smith passed away in 2011, just before the project broke ground, but his participation influenced many of the design decisions incorporated into the final building. "It's a tribute to the client and to Rodney's successors that people stuck to the vision, and the building is a tribute to the great work that he did," says Josh Dachs, principal with Fisher Dachs Associates, Inc. (FDA), the theatre consultant on the project.

Construction required closure of the building and razing its interior, leaving three outer walls intact. "In that footprint rose H-E-B Performance Hall, a 1,750-seat world-class performing arts hall; the 300-seat Carlos Alvarez Studio Theatre; and Riverwalk Plaza, where we can put 1,000 people," says Fresher. "It's still the same acreage, but completely different when it comes to aesthetics, acoustics, and the performance mix."

Here's the most extraordinary part: In its first 365 days, the Tobin Center hosted 780 events—making it the thirdmost-used performing arts center in the world with halls under 2,000 seats. "The building is busy on average twice a day," says Fresher. "We have ten resident companies that take up 265 days. The rest of the events allow us to keep the costs down for our resident non-profit companies."

How does the Tobin Center do it? One of its tools is a convertible floor in the main hall—the first one of its kind in the United States.

From flat floor to full seating

The floor, a customized product of Gala Systems, converts from rows of permanent seating to a completely flat, highquality wood floor in about 40 minutes. (See a time-lapse video of this floor in action at

https://youtu.be/5PnGjacoi5s).

The recommendation for this floor came from Dachs and Adam Huggard at FDA. "The challenge is in how you generate revenue," says Dachs. "We had to solve the high occupancy model with things the main performance hall couldn't solve on its own."

The most practical way to increase the center's total income is through rentals for weddings, conferences, luncheons, parties, trade shows, and other events that require the kind of flat floor found in a convention center. Until recently, changing a performance hall into a flat event space was labor-intensive at best, and impossible with the turnaround time required in a hall with permanent seating.

FDA had worked on the Schermerhorn Symphony Center in Nashville in the early 2000s, where a convertible floor had been the pivotal solution to achieving profitability. That floor used seats on motorized wagons, which were raised from the basement on lifts and rolled into place. Since then, Dachs and Huggard had seen the Gala floor in theatres in Canada, and were impressed with its quality and functionality.

"Essentially, every row is an elevator that can move vertically within the space," says Dachs. "One particular row can rise up out of the floor, and the seats on the row can flip under and store there. They can do this for about 27 rows in the orchestra, and they can all change over from a seated configuration to a flat floor."

The flat floor can provide seating for 800 at tables, fewer seats and a dance floor for special occasions, or an exhibition floor for trade shows. A simple push-button controller with a dead-man safety feature makes the transition smooth.

With each row operating independently, the house staff



Opposite: The arabesque pattern in H-E-B Hall carries into the entrance area and lobby of the new Tobin Center—a concept forwarded by LMN Architects, recipients of the 2016 National Architecture Firm Award. Above: Outside, the Tobin Center links the city's performing arts organizations with the famous Riverwalk.



Lighting within H-E-B Hall can be choreographed to fit the performance onstage.

also can change the configuration of the orchestra hall, for example, using concert seating in part of the hall and adding cocktail tables in a terraced arrangement. "The majority of the rentals are looking for the flat configuration that can happen below or at stage level, but other configurations are easy," says Dachs. "There's a great amount of flexibility in this system."

With more than a year's usage and almost daily conversions on the house schedule, Tobin Center's vice president of facilities and operations, Jack Freeman, says the floor has more than lived up to expectations: "Its functioning is outstanding. People are mesmerized by it. We have a person onstage with a round circle that controls the floor, and people in the back to keep an eye on the rows. If someone drops something and it blocks the seats, we see it and say, 'Stop,' and the person running the computer just takes the finger off the button and it stops."

In designing the convertible floor, Gala determined that performance halls wanted high-quality materials in addition to simple functionality. "Each one looks like a permanent venue," says Robert Heimbach, Gala Systems vice president. "Rodney Smith told me they were going with this floor because of three main points: It was highly transformable, it was quick, and it looked good in all of its configurations."

The floor itself includes a high-quality finish and a subfloor with a 1/4" steel plate to make it robust without sacrificing the look of a permanent floor. "No one walking into the space will know that it's a convertible hall," said Heimbach.

Acoustical harmony

The venue floor plays a critical role in the sound quality of the hall, so principals from the acoustical design firm Akustiks toured to venues in Canada to see the Gala floor in action. "From an acoustic point of view, one of the critical aspects for any concert hall is that the acoustic mass of the boundary surfaces is high enough to retain the bass energy," says C. Russell Todd, principal with Akustiks. "If you look at the great concert halls in Europe, they tend to be thick plaster on masonry. Any time we design a multipurpose hall like the Tobin, we design it with



The sound system in H-E-B Hall includes Meyer Sound MICAs, JM-1Ps, MSL-4s, and HP-700s.

fairly massive surfaces—a concrete floor or a wood floor on concrete. By no means is it lightweight construction."

Working together, Gala and Akustiks developed a floor construction plan using heavy, thick wood and the steel plate described earlier, ensuring that no bass energy would be lost in the floor. "The double basses and the other stringed instruments retain the acoustic warmth," says Todd. "It was a big change for Gala, so you can imagine all the ripple effects of engineering the structural capacities."

The floor is only one component in the sound quality and controllability of the room. Akustiks began working with the Tobin Center staff and architects at the very beginning of the design process. "If you look at the plan of the H-E-B Performance Hall, the basic width of the room is not unlike the great shoebox concert halls in Europe," says Todd. "Then we bring in the horseshoe shape that's reminiscent of the great opera houses. Sizing the room to the seat count helps with the acoustic power and acoustic gain."

Addressing the needs of the resident San Antonio Symphony, the team specified the Wenger Diva orchestra shell, as well as a forestage reflector. "The reflector sits right above the orchestra pit," says Todd. "For example, in the opera mode, the reflector is set in a flat position, parallel to the stage, such that the sound from the orchestra pit is somewhat maintained relative to a singer onstage. In the ballet mode, we create an angle, so the downstage edge of the reflector is higher than the upstage edge. We're now directing more energy from the orchestra into the audience, which masks some of the footfall noise."

Akustiks brought an extensive amount of adjustable acoustic material into the walls and up into the ceiling space, giving the house sound technicians the ability to adjust the room for resonance and responsiveness for the symphony, and to shift to controlled acoustics for popular music events. "All of that material is retracted and stored outside of the room in pockets, so in symphonic mode, the only acoustic absorption is the audience," says Todd. "It's all automated—there are doors that close on each pocket."

Delivering air at a very low velocity plays an important role as well. "We want to create the opportunity for the performers to have a full range of dynamic progression," says Todd. "So the quiet moments can be truly quiet during the performance. We often say that the splendor of music happens at the highest sound levels, but the magic of music happens at the edge of silence."

The 360° lighting experience

Inside H-E-B Hall, audiences have something special to entertain them long before the performance begins. LMN Architects conceived of the lighting within the main hall as "part of an integrated set of ideas," notes Erik Indvik, one of the project's designers. "How do you bring that excitement on stage into the room? We marry the theatrical with the architecture of the room itself. The sense of anticipation and excitement before the house lights go down is part of the experience that starts with the exterior LED lights on the veil. The external presence sets the tone for the event, something everyone will experience together inside the auditorium."

Just as the play of light on the external veil picks up the changing sunlight and sky, the lighting in H-E-B Hall house has its own interactivity. "For any particular performance, you can choreograph the lighting to go with the performance itself," says Shaw.

The architectural team chose an arabesque pattern—a scrolling texture of foliage and curving lines found in the original auditorium—for the surface of the balcony fronts. "The use of pattern and color and light came from things we saw in the city—we looked at the light and the trees, the tradition of decorative ironwork and veils, the interplay of patterns," says Indvik. "They were all part of the local culture and systemic to the quality of the place."

The pattern only begins with the balcony fronts, however. The textured effect is screened across the walls, and executed as perforations in the wood panels. "It's also on the house curtain itself," says Huggard. "We had it hand-painted onto the velour by [Fairview, New Jerseybased] iWeiss. There's no other house curtain that I know of that has this similar look and feel, this special quality."

Even the orchestra shell picks up the house design, requiring a custom dot pattern on the veneer the likes of which Wenger had not encountered before. "The architects wanted to incorporate a series of dot patterns that would evoke images of clouds, ocean waves, or wind currents,"



The Wenger Diva shell was custom-designed to match the pattern in the house curtain and walls.

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says Mark Ingalls, Wenger product manager for the performing arts. "We did some research and found a company that was able to paint these patterns on 4 x 8 sheets of veneered plywood. Each individual sheet had a different pattern. We developed very detailed drawings to make sure we had every sheet in the right place."

To make the most of the patterns, the architects and FDA worked with lighting designer Teal Brogden, senior principal of HLB Lighting Design in Los Angeles, to design lighting that could illuminate the patterns, change to fit that day's production or event, and fascinate the audience. The result: "The balcony fronts have front-lit LEDs to light the panels, and backlit LEDs to light the perforations," says Huggard. The house lighting operator can fine-tune the color selections and any movement of the color during the production as appropriate, making the entire hall part of the light show for a music act or creating a sultry glow for a symphony concert. "When Renée Fleming performed here, they matched the color of the balcony fronts to her dress," Huggard adds. "She said that she wouldn't play in another hall unless they found a way to make the hall match her outfit."

Onstage: Turn on a dime

The challenges of twice-daily turnarounds in H-E-B Hall and the Studio Theatre would be enough to make most production managers reconsider their professional options.

"I try not to think about it, to be honest with you," laughs Sean Jenkins, Tobin Center technical director. He credits his "tremendous staff"—a measure of quality rather than volume—for the center's ability to turn on a dime and move swiftly from one event to the next. The aggressive schedule has created year-round work for members of IATSE Local 76.

Venue management made the decision early on to stay with well-known, traditional stage technology, making it easy for any visiting performer or touring show to get up and running in the shortest possible amount of time. "The thinking was not just about cost, but about ease of use," says Huggard. "They were more comfortable with conventional systems that they could use more quickly and rationally than fully automated ones. People can put in a full day's work without having to be retrained."

Within these parameters, the Tobin Center is well equipped for its resident companies and guests. Jenkins lists a remarkable sound equipment inventory, including Meyer line-array loudspeakers, four Meyer 700-HP subwoofers on each side of the main stage, "tons" of Shure wireless and handheld microphones, and a DiGiCo SD9 live digital console in front of house.

The center began with a fairly limited lighting inventory based on its original budget, but this has grown with demand for daily use of the spaces. Conventional lighting now includes a complete inventory of more than 150 ETC Source Four ellipsoidals and PARs, ETC Sensor racks for the dimming system, and Altman cyc and ground row lights. The theatres have moving light capabilities as well, using Clay Paky Alpha Spot QWO 800s. Three Robert Juliat Cyrano followspots complete the lighting inventory.

"In addition to normal dimming capacity, there was a lot of thought put into providing some dedicated switching power for automated and LED fixtures, as well as converting the dimmers to non-dimmer switchable power," says Dachs. "We went with ETC modules that are changeable from a dimmer to a relay. This allows the facility to change quickly and seamlessly as they adopt more LED sources."

Each performance space has its own MA Lighting grandMA2 light lighting console, a control system with a nearly infinite number of presets, cues, sequences and effects. The consoles can control both conventional and moving lights, as well as LEDs, videos and other media, providing the Tobin Center's two halls with the flexibility they need to handle lighting for just about any kind of event.

In addition, Texas Scenic Company sales and design rep Roy Harline reported that company switches were installed throughout the building, giving guest events the opportunity to access power wherever they need it. Acting as the principal equipment dealer for the entire hall, Texas Scenic provided Lex Products switches, making it easy and convenient for event crews to bring in their own dimmer and audio racks, motor controls and other powered gear.

Backstage, the rigging system in H-E-B Hall includes more than 90 Texas Scenic counterweight linesets, as well as five TAIT-Stage Technologies automated linesets that operate the main curtain and the soft goods rep plot blacks, legs, and other curtains. Raynok chain hoists lift the side lighting onstage, making it easy to lower the lights for maintenance. Staging Concepts provided a large stage trap system with a maple tongue-and-groove surface.

When the San Antonio Symphony is scheduled, it takes just three linesets to move the Wenger Diva shell into place. The shell's three sections weigh 3,800lb, 3,600lb, and 3,200lb respectively, but "once they get going, it's very smooth," Jenkins says. "The shell goes in very, very easily." PARs built into the shell ceiling are already focused for the orchestra, so the changeover into a concert setting has become a fairly simple process.

"It's always the risers that take up the time," Jenkins notes. "Our risers are StageRight, and we had them custom-made—they are beautiful and the symphony loves them. They are quite heavy, though, so picking those up and getting them in takes time. As far as functionality, though, I couldn't ask for better."

A place to call home

Nestled into one of the pieces of the original building, the Alvarez Studio Theater is an octagonal black box. "It's stretched out from a circle to an oval, a geometry we had



The house lighting operator can fine-tune the color selections and movement as appropriate, making the entire hall part of the light show.

not done before," says Huggard. "Part of the mission of this facility is to support smaller organizations that can't afford a venue of their own and don't have a place to call home. And when it's not being used as a performance venue, it can be rented for weddings and banquets and so on." (Staging Concepts supplied aa flexible 200-seat platform package to the Alvarez.)

With its dark blue palette usually seen under subdued lighting, the room can fade quietly into the background while a production takes place on stage—but it has its own character, Huggard notes. "When you turn all the lights on, you can see that the dark blue walls are actually a stained wood grain," he says. "It has a lot of texture and vitality. To make the space even more convivial, one of the doors is a guillotine with a glazed wall overlooking the Riverwalk, so you can have a reception in the lobby space



The Alvarez Studio Theater offers a convertible space that serves well for small productions, concerts, and special events.

and have a dramatic reveal as the door goes up. Or you can have a larger event and leave the door up. These well-planted seeds are starting to bear fruit now."

The last of the three performance areas, the Riverwalk Plaza, features an outdoor 18' x 38' video screen to give passers-by the opportunity to bring a lawn chair and watch a sold-out performance, see a family movie for free, take part in a yoga class, or enjoy an orchestra concert. "The plaza blends so well with the building design," says Huggard. "It's part of the facility rather than something just tacked onto it."

The plaza has created opportunities of its own to connect with a much wider audience, Fresher says. "We had some touring shows that sold out very quickly, so we asked them if we could open it up and show them outside. There are a number of those types of events, where we've flipped a switch and people bring their lawn chairs and blankets, and come and see it. We do movie night—we pick a fun family movie, and people come. We've done Saturday morning yoga, spin classes, health programming."

"We are pretty much a 24/7 building," said Fresher, who was with Madison Square Garden and The Bushnell Center for the Performing Arts in Connecticut for ten years before taking this position in San Antonio. "There's someone here almost all the time, doing something. What we haven't had is downtime—a lot of performing arts centers slow down a bit in June, July and August, but we haven't experienced that. We decided to keep our foot on the gas and see what happens."

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