

RICHMOND CENTERSTAGE

RICHMOND, VA

PROJECT PROFILE

Wenger



DIVA® ACOUSTICAL SHELL

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– Bruce Herrmann, AIA, Director, Wilson Butler Architects

CHALLENGE

Provide full-stage acoustical shell to enhance acoustics and complement aesthetics of renovated historic theatre.

WENGER SOLUTION

Engineering and constructing ceiling panels and custom wall towers incorporating unusual niches, shapes and angles.

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BENEFITS

- Incorporates design elements of interior architecture
- Custom tower design simulates 'skyline' with visual depth
- Creates optimal acoustical environment for musicians and audience
- Offers easy handling and flexible configuration options

HIGHLIGHTS

"Having worked with Wenger on other unusual shells over the past ten years, we knew they could do something different in the design once they understood our goals," explains Bruce Herrmann, AIA, Director with Wilson Butler Architects of Boston, Mass. "We wanted something memorable," he recalls.

When it opened in 1928, the historic Carpenter Theatre in Richmond, Va., was designed for both silent films and vaudeville. One of the original 'atmospheric theaters' designed by John Eberson and built by Marcus Loew, the Carpenter featured interior architecture Herrmann describes as 'Spanish baroque' or a 'medieval Mediterranean castle garden.' After sitting vacant for two years due to stalled civic efforts, the Carpenter was completely renovated and restored, and reopened in 2009 as part of the new Richmond CenterStage complex.

While the physical dimensions of the Carpenter's auditorium were maintained, the stage house was demolished and replaced: its depth and width were almost doubled, and the grid was raised to over 70 feet. Other updates to suit the 21st century included a new 80-line manual counterweight rigging system, an enlarged orchestra pit, increased dressing room capacity and a functional loading dock and scene dock.

The Carpenter's interior side walls were designed to resemble building facades, complete with balconies, statues and inset niches glowing blue from the simulated "twilight" lighting behind them. The domed ceiling is painted dark blue, featuring twinkling stars.

To continue this feeling of depth in the skyline, Wenger sandwiched together two of its Diva full-stage acoustical shell wall towers, spaced 2"-3" apart. The 'blue sky' Diva in back recedes behind the 'city wall' Diva in front.

Wenger constructed niche boxes, or insets, in six of the 11 Diva wall towers, inspired by the niches in the auditorium's walls. While the auditorium niches contain statues, the shell's niches are simply insets featuring hidden lights that create a bluish, twilight glow.

CRAFTING THE SKYLINE, SUSPENDING DISBELIEF

To help create the outdoor atmosphere, the original theatre featured cloud projectors that cast moving shadows across the ceiling. New cloud projectors were installed to continue that fantasy, and the cloud motif is also designed into six custom acoustical reflectors suspended from the ceiling in front of the proscenium.

The 48 original incandescent-light stars in the ceiling were upgraded to fiber-optics, providing more variety in sizes and a better twinkling effect. More stars were added to help fill empty areas while maintaining a random, natural look.

In manufacturing the shell, one of Wenger's biggest challenges was cutting the niches in the wall towers and unusual "skyline" shapes along the top edges of the shell. A solid block edge was fabricated into the honeycomb panel so it was strong enough not to fray when cut.

Herrmann and Wenger worked together to create the Diva's unusual shapes and angles. "If Wenger couldn't cut the exact shape or unusual angle or I was looking for, they would send me a sample of something else approximating it," he recalls. "Wenger was great to work with and the result turned out really well."



Photo by Richmond Symphony Orchestra

“All the interior architectural elements are intended to enhance the temporary suspension of disbelief – imagine you are in a plaza under the evening sky,” says Herrmann. This visual treatment was also carried through to the acoustical shell, which features a vibrant color scheme. The shell’s ornamentation is painted on because real ornamentation would have made folding it and parking it too difficult. Herrmann praises EverGreene Architectural Arts for their creative painting of shell and theatre interior. “They have one foot in real world and one foot in artistic world,” he explains.

Herrmann believes that if orchestra shells are really done well, the room and shell integrate together. “You feel like you’re in the same room with the orchestra.”

IMPROVING ACOUSTICS, OFFERING FLEXIBILITY

Aurally, shells strive to create that same feeling of connectedness by joining the stage house and audience chamber into one acoustical space. The result benefits both the audience and performers.

“The Diva shell helps us create the best acoustic environment for the musicians,” says Laura Bordner Adams, Director of Orchestral Operations with the Richmond Symphony Orchestra. “Musicians are now able to hear each other, which they couldn’t before. This enables them to play together as a much more unified group.”

Adams had previous experience with a Diva shell when she worked at the Embassy Theatre in Fort Wayne, Indiana.

Early in the renovation process, Herrmann says the Richmond Symphony played a key developmental role. Symphony representatives attended every meeting and shared their goals for this multi-use venue.

“The Diva’s flexibility definitely gives us different opportunities and ways of thinking about how to set up the orchestra,” Adams remarks. The Symphony prefers a smaller shell configuration, allowing just enough space onstage to fit all the musicians.

HANDLING WITH EASE, ‘CAN-DO’ ATTITUDE

Like Adams, Technical Director Steve Sweet worked with a Diva shell previously, in Columbus, Georgia. He says the Carpenter’s crew can deploy the shell in less than two hours and strike it in under one. For storage, he likes how the Diva towers nest together and stack fairly tight, without taking much room in a dedicated area located offstage left.



Photo by Richmond Symphony Orchestra

Because of its architectural details, Sweet says this Diva shell must be deployed in a specific way; the towers are not interchangeable. The large configuration is 11 towers – five across the back and three on each side. The medium configuration features eight towers – four across the back and two on each side.

“I’m a big proponent of the Diva system,” explains Steve. “I think it’s easy to deploy – we deploy it at least twice a month, sometimes more.”

Recalling the earliest stages of this project, Herrmann says Wenger was originally selected because the Diva shell was a product his firm knew well. “The Diva fit all the right criteria, including portability, affordability and flexibility for this multi-use facility,” he contends.

“One of the things I like about working with Wenger is their can-do attitude,” Herrmann continues. “They get into the spirit of what we’re trying to accomplish, roll up their sleeves and offer solutions – even when we’re asking for something new.”

The theatre design consultant also valued collaborating with Wenger. “After the Carpenter Theatre opened, Wenger’s follow-up and field modifications were especially appreciated, ensuring

the towers operated in a functional, safe manner,” says Jules Lauve, ASTC, Associate with Theatre Projects and their project manager for the Carpenter Theatre. The acoustical consultant was Jaffe Holden.

REKINDLING THE PAST, MAKING MEMORIES

The Carpenter Theatre beautifully blends the new and old – hearkening back to a golden past while adding the Diva shell and other enhancements for the future.

“Some people remember seeing shows here as kids and now they’re bringing their grandchildren,” comments Herrmann. He believes the facility pulls on emotional strings for patrons – sharing memories and building traditions – by recapturing that magic.

“Memorable buildings like this have the potential to be enjoyed by generations who haven’t even been born yet,” he concludes. “What a great legacy to leave behind.”



Photo by Richmond Symphony Orchestra



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