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Goodman Theatre Re-Opens Curtains

■ World-Famous Chicago Theater Relocates

by Travis McGee

Last November, the Goodman Theatre moved from its current location on the east end of the Art Institute of Chicago into its new 170,000-square-foot complex located in the heart of the city's North Loop. The \$46 million project is the anchor of the city's plan to recreate a thriving theater district in the North Loop, restoring its reputation forged 100 years ago as one of the liveliest theater districts in the country.



The main lobby of the Goodman Theatre is the gateway to a truly state-of-the-art facility—one of the first to feature automated sound.



The Owen Bruner Goodman Theatre is a flexible, 400-seat courtyard theater with sound coverage from 10 MacPherson IS12 full-range loudspeakers.

The Goodman Theatre houses two principal theaters: The 856-seat proscenium stage Albert Ivar Goodman Theatre anchors the south end of the complex, while the Owen Bruner Goodman Theatre is on the north end. Modeled after London's famed Cottesloe Theatre at the Royal National Theatre, the Owen features three levels of courtyard seating surrounding the stage. Composed of flexible modules, the stage can be rearranged to create a variety of configurations including an end stage, thrust, arena stage or runway stage. Seating capacity ranges from 335 to 467, depending on the configuration.

For David Naunton, house audio engineer at the Goodman, the new theater is

a dream come true. "We started planning for it almost 10 years ago," he said. "At that point, we just sort of had ideas of what we wanted to do and what we hoped to do. Gradually, our small plans would get bigger as we learned that the building was going to become a reality."

Naunton, along with Jeff Award-winning sound designers Milburn/Bodeen Music & Sound Design, oversaw the systems installation of the theater. For the Owen Theatre, which is scheduled to open in January, Naunton chose to install 10 MacPherson IS12 full-range loudspeakers. The IS12 is a full-range loudspeaker utilizing a 12-inch woofer and a 1-inch compression driver for smooth, even coverage. The enclosure,

less than eight inches deep and narrow enough to fit between wall studs, was designed for ease of installation and features multiple rigging points and connection flexibility. "We found the IS12s to be very favorable and particularly good at voice reproduction, and they've served us extremely well so far," Naunton said. "We can't wait to put them to the test in January."

Naunton and Michael Bodeen first heard the IS12s at a shootout last winter, where they were impressed with the audio quality. "The speakers really responded well with vocals. The sound was very natural and incredibly clear. And the imaging was transparent," Bodeen said.

Of particular challenge to Naunton and the rest of the sound crew, the Owen is constructed over the Chicago Transit Authority's subway tunnel and adjacent to the CTA elevated tracks. As a result, special soundproofing designs and a vibration isolated grade beam system were implemented to reduce tremors. Both the Owen and the Albert are literally floating on 6-inch-thick steel-reinforced rubber pads, ranging in size from 13 3/4 inches to 24 inches square—much like those used in earthquake-prone California construction. Isolating the theaters

from outside noise was accomplished by using multiple layers of heavy walls with large amounts of air space between each layer. Over 1,700 lineal feet of Acoustic Isolation Joint was created to ensure high sound quality. "I have yet to hear the outside world in either of the theaters," said Rob Milburn, resident sound designer for the Goodman.

A truly state-of-the-art facility, the Goodman Theatre is one of the first to feature automated sound. Using an LCS system, the sound levels are preset for specific scenes, requiring a simple push of a button from the sound engineer. All audio playback and routing is automated, although wireless and orchestra microphones will probably not be.

"We have 16 channels of internal digital control," Milburn said. "It can also control outboard units, like CD players or samplers, whatever we hook up to it. We can move sound around the space very easily. It gives us a great amount of sophistication in terms of our playback options."

For Naunton, automated sound has been a long time coming. "We used to make all these jokes that sound is 20 years behind lighting in terms of automation, but now we finally have some,"

Naunton said. "Not many people in this field are up to that point, there are very few people doing professional theatrical automation. One of my goals is to get sound to the point where it can be as consistent as lighting. Lighting has been automated for so long that everyone expects it. But automated sound is not expected, and some people don't even know it exists."

With reverence to the old Goodman Theatre, the acoustics and equipment in the new building are a vast improvement. "The old space was very bad at getting people's voices from the stage to the house, so we always had to support them with floor mics and carefully placed loudspeakers," Naunton said. "We were hoping that we wouldn't have to be doing that here, and we haven't. With the current technology, this building is a lot quieter. We used to turn off ventilation in the building every show after 5 minutes because it was so noisy. The design of the new building definitely makes for better acoustics."

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