

Concert Halls • Theaters • Opera Houses • Convention Centers • Cinemas • Arenas

# Auditoria

Annual 2016

## Cultural revolution

Why China and its neighbors are spending big on spectacular new venues

**Also inside:**

Conference call: **Mons International Congress Xperience**

Form and function: **Smart Financial Centre at Sugar Land**

Surround sounds: **National Music Centre, Canada**

Feeling festive: **Capturing the festival spirit**

**DESIGN**  
THEATRE PROJECTS

The 1,500-seat  
Grieghallen in  
Bergen, Norway

# Updating history

The ability to combine the latest advances in technology and infrastructure with a sympathetic approach to venue character is vital to truly successful theater renovation

**M**ore than anything, renovating a theater demands sensitivity. Whether it is the historic restoration of a Vaudevillian movie palace or modernizing the theater equipment inside a contemporary building, each renovation requires a delicate balance between preserving the character of a given space and ensuring that the building has the technology and infrastructure to operate amid the demands of modern productions and the high expectations of modern audiences.

This is exactly the kind of challenge that Theatre Projects has met head-on hundreds of times during the international theater planning and design firm's 50+ year history, transforming numerous shuttered, outdated and forgotten relics into fashionable, modern and lively spaces.

Recently, Theatre Projects has renovated three facilities that were looking to improve audience comfort, technical infrastructure and accessibility – without cutting off the venues' revenue stream. Through careful planning and resourceful, efficient work, Theatre Projects developed phased renovation plans for the Altria Theater in Richmond, Virginia, USA; the Lyceum Theatre in Sheffield, UK; and the Grieghallen in Bergen, Norway, allowing the three venues to continue operating substantial production schedules as economically viable facilities.

All of the three venues were driven by a need to improve both audience experience and overall operations. Each called for a robust, yet sensitive building review to examine issues such as ease of access, comfort, circulation, ticketing systems and technical infrastructure, as well as heating, ventilation, air-conditioning, lighting systems, restrooms, catering and the day-to-day operations of the building.

"Such projects are not for the faint-hearted," says Mark Stroomer, head of design for Theatre Projects in London. "These days, theater consultants require an increasingly wide range of skills and knowledge to successfully take a renovation project from concept to realization."

First-hand experience as a theater practitioner is very helpful, Stroomer continues, but theater consultants also require a great deal more than

that, such as the ability to evaluate seemingly conflicting perspectives and make the right decision: "Before we do anything, we establish a clear insight into how a venue functions from visitor, artistic and resident staff perspectives. We take into account the venue's mission and how that might change. Crucially, we evaluate the audience's experience in terms of their proximity to the stage and the quality of the sightlines. From this, we optimize the auditorium design, mindful of its original character."

#### **Technical makeover**

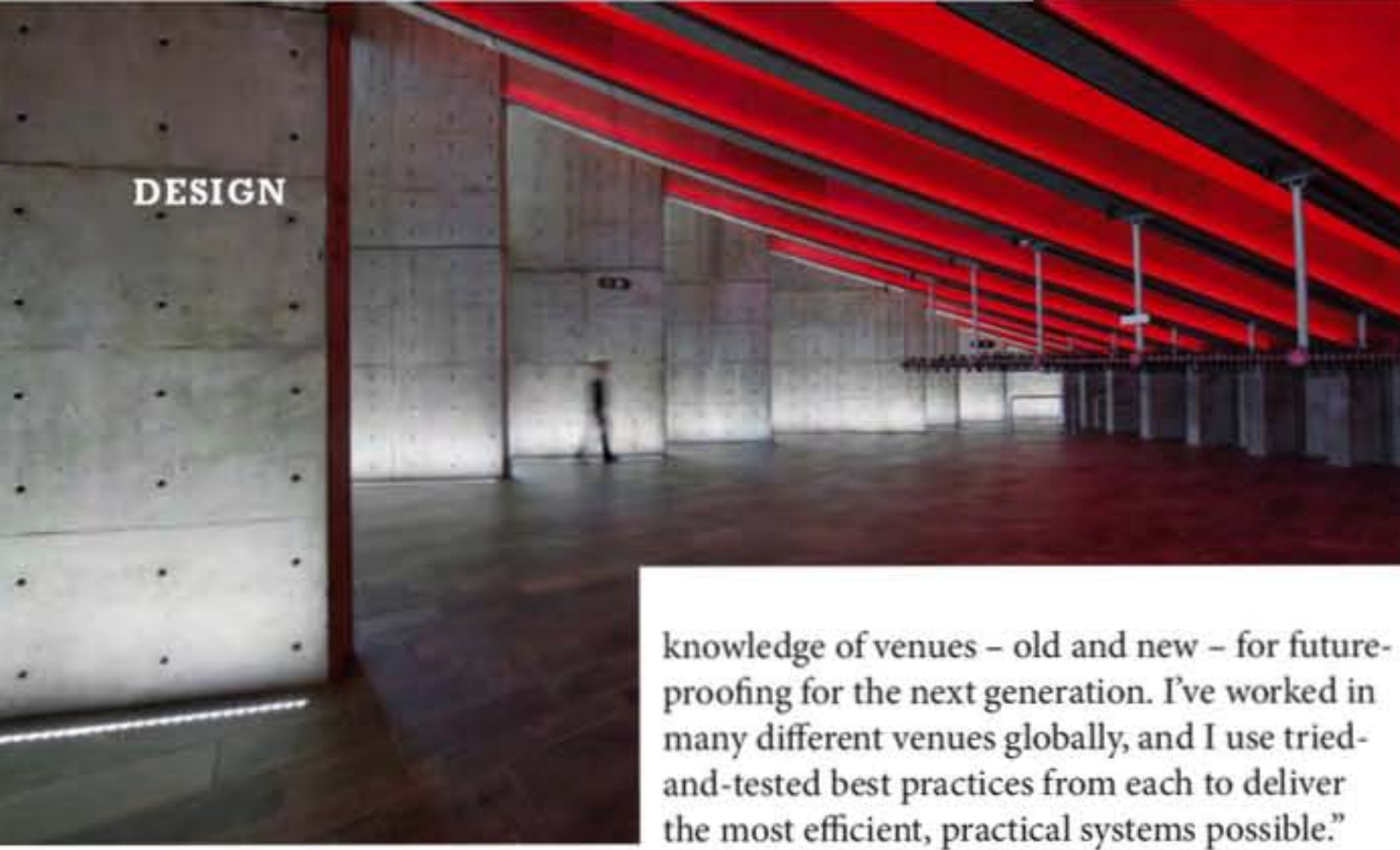
This was certainly true for the Grieghallen in Bergen, Norway, which was originally built and completed in 1978 and has since become the home of the Bergen Philharmonic Orchestra, the Bergen National Opera, and the International Festival. With 30 years of constant operation, the 1,500-seat concert hall, the smaller Peer Gynt-salen, and other support spaces required a complete technical renovation.

Martin Bailey, project manager for Theatre Projects, worked alongside the Grieghallen management to determine options to make a tangible operational impact and then assisted in raising government grants. Once these were secured, the selected architects – Per Christian Brynildsen and Terje Gundersen of Ratio and Rikke Sundt of Origo – joined the project.

"The renovation work was scheduled in stages because the building, which is entirely commercially run, could not afford to shut down for any significant period of time," Bailey says.

Remarkably, the main Griegsalen concert hall upgrade was completed during two periods of 14 weeks between June and October 2013 and June and October 2014, and the Peer Gynt-salen renovations and other public area improvements will be complete by 2016.

Bailey says that he takes a holistic view on venue design: "My approach to Grieghallen was to take the principles from touring theater and live music and apply them to the concert hall. I started by examining the spaces from a number of perspectives, taking into account the needs of the audience, the visiting companies, and resident management and staff. I then applied my



From top: In addition to work on the Grieghallen's main concert hall, the renovation also included the smaller Peer Gynt-salen and supporting spaces. Photos: Helge Skodvin

knowledge of venues – old and new – for future-proofing for the next generation. I've worked in many different venues globally, and I use tried-and-tested best practices from each to deliver the most efficient, practical systems possible."

Bailey and the team had a very clear aim – to maximize the venue's efficiency. "We enlarged the orchestra pit in the Griegsalen during 2013," he explains. "We also installed four automated lifts in the stage area so the venue can swiftly transform from a flat floor to a proscenium stage or concert hall configuration."

Bailey also looked at the logistics backstage and worked with Ratio and Origo to design a new route through the building for staff and performers. "Because the Grieghallen has been occupied by several different organizations, its evolution saw each group establish their own stage door entrances, each with little or no security," explains Bailey. "We worked alongside the architects to open up the backstage area, make a single, more secure stage door entry space, and improve the dressing room facilities and their location in relation to each performance space."

The second phase of the project saw renewal of the seating, a completely new power flying system, and installation and replacement of the lighting and sound infrastructure, including all loose equipment.

"The renewal project was divided into four summer periods to enable the building to run as normally as possible," says Rolf Skogstrand, director of events for Grieghallen. "Theatre Projects played a major part in pushing the project forward and contributed in a substantial way, ensuring that the project was within the time and budget required. Martin and his team continuously consulted with the various groups and staff that make use of the building throughout the process."

### Turning back time

At approximately the same time, in the USA, the 180,000ft<sup>2</sup> Altria Theater was facing similar wear-and-tear issues alongside aging technical and operational systems.

Like Bailey, Theatre Projects' project manager Millie Dixon worked with the client to determine



Anton Grassl/Esto

how the Altria could better accommodate touring groups and improve audience comfort. Dixon worked closely with Bruce Hermann and Rebecca Emanuel of Wilson Butler Architects to deliver the work in phases, allowing the theater to operate on as normal a schedule as possible.

"The Altria desperately needed to improve its facility in order to better accommodate touring companies and improve patron comfort, while still accommodating local groups," says Dixon.

The Altria's 3,500-seat auditorium has become the venue of choice in Virginia for touring Broadway shows and national touring companies. It also hosts a number of local productions and supports a very successful, often sold-out, speaker series.

Alongside improving the facilities, Theatre Projects was asked to examine how the building was managed and occupied, including considering the ticket management systems and the front-of-house amenities. All of this had to be achieved on a limited budget, and during a series of short shutdown periods.

"Although we had limited time and budget, we decided to approach the project from the opposite perspective and ask the client, 'If you had all the money and time in the world, what



would you do to this building to bring it up to spec?" explains Dixon. "We took their answers, broke them up into separate project packages, ordered them by priority, and matched each package with others, taking into account the downtime and the funding available. This enabled us to be strategic and precise in what we could realistically achieve during each time slot and decide which elements of the project it made sense to do at the same time. We also laid some foundations for future packages."

The work kicked off during the summer break of 2013 and started with the front-of-house spaces. "We reconfigured food service areas, improved front-of-house access, and accommodated as many accessibility upgrades as possible," Dixon says. "In the auditorium, we rearranged and refurbished many of the 3,610 seats, and we reshuffled them to improve sightlines. We also worked in some easily removable seats in the production area to accommodate technical rehearsals."

The second, longer 10-month phase saw the stage house gutted – replacing rigging, lighting, and sound systems, and installing improved cable management building-wide. "All 50 line sets were replaced with a new double purchase

flying system," explains Dixon. "We also created new storage facilities backstage and built a more accommodating loading dock. The entire control and dimming system was replaced too."

Theatre Projects also added infrastructure in the roof above the ceiling dome to enable the venue to hang a front-of-house lighting truss if required, including a series of cleverly disguised rigging ports and lighting openings. "In the ornate dome itself, there are half-scalloped holes running around the bottom edge, which can also be opened up to accommodate individual lighting positions," Dixon adds.

Altria's production manager, Steve Sweet, was closely involved with the project from its inception. "We hit the ground running, following the stage house refurbishment and opened with a one-off concert, followed by the touring production of *The Book of Mormon* – a nine-truck show," he says. "Since then, we've done a further five Broadway shows, a number of huge corporate events, plus plenty of private events and music concerts."

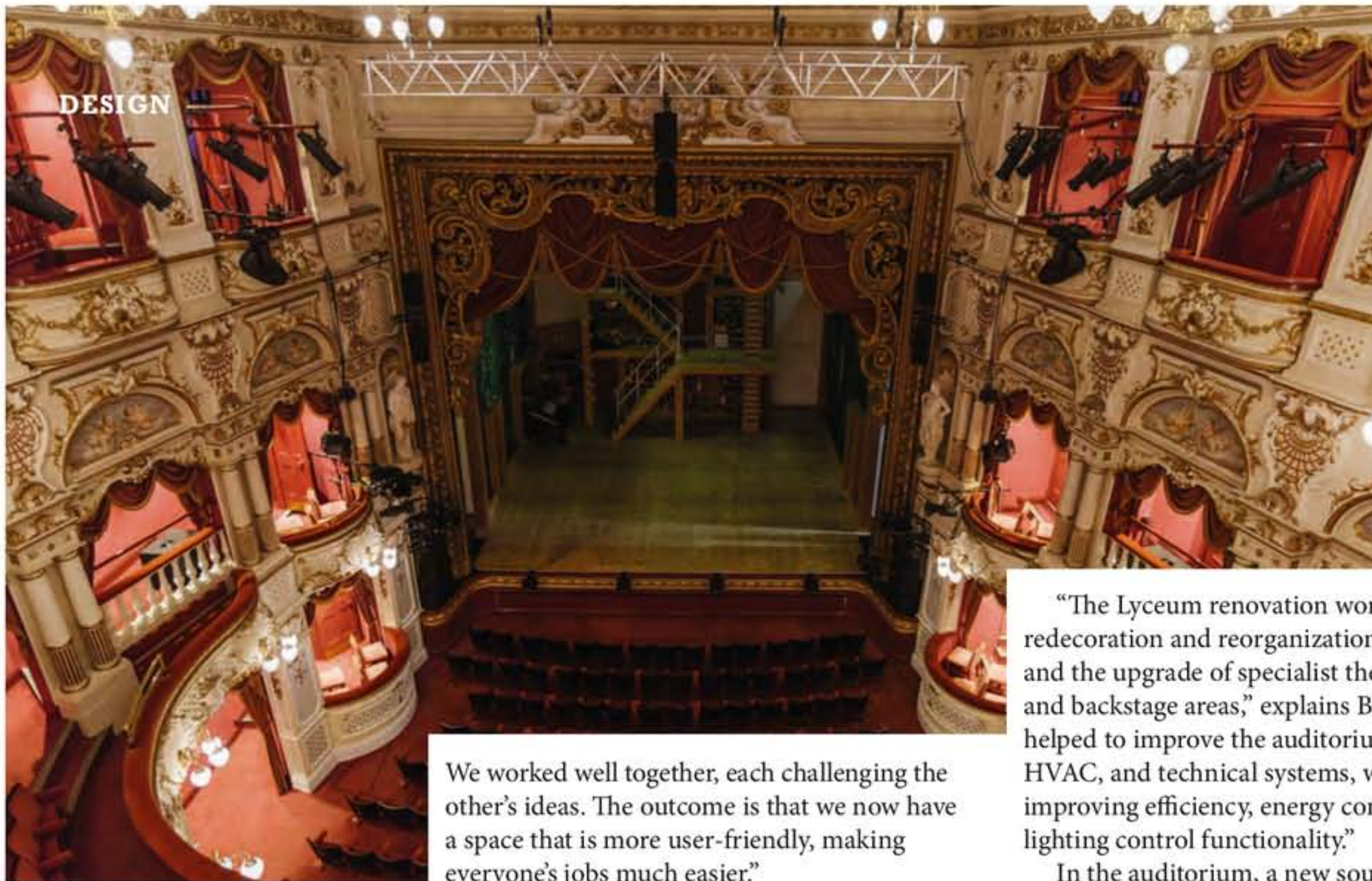
As Sweet goes on to explain, it was important for him to be hands on: "What's great is that Millie brought her passion for design to every aspect of the project. That was a big advantage.



**Top: The Altria Theater, which is located in Richmond, Virginia, is a popular venue for touring Broadway shows**

**Above: The second stage of the renovation required the gutting of the stage house and replacement of the equipment**

Anton Grassl/Esto



James Stewart Photography

**Renovation of Sheffield Theatres' Lyceum Theatre included improving public areas, upgrading theater equipment and making improvements to lighting, HVAC and technical systems**

We worked well together, each challenging the other's ideas. The outcome is that we now have a space that is more user-friendly, making everyone's jobs much easier."

Following the renovation project, the venue is already receiving excellent feedback from members of touring road crews. "Most touring visitors say the place got exactly what it needed and that it is much easier to integrate their technology with ours now," explains Sweet. "A major step forward on stage is the distributed power outlets. Before, I had just enough power to do whatever I needed, but it was all sited mid-stage left, which meant a lot of messy cabling. Having power switches distributed in the right places, at the right amperage, makes things a lot easier. We also have much improved work lighting and a lot more of it. This ensures that we can work faster and safer."

With regards to future-proofing, Dixon has ensured the potential for easy expansion of power and cabling to go along with any future development of the stage house. "We've strategically positioned fly floors and installed stage crossovers outside the stage house, so if the venue decides to raise the roof, all the current work can be left in place," she explains.

### **Old meets new**

In another historic renovation, Bailey worked on the regeneration of Sheffield Theatres' Lyceum Theatre in the UK – a beautiful Edwardian building that has hosted many touring West End productions and operas, but was in urgent need of an upgrade.

Bailey oversaw an intensive eight-week refurbishment that focused on improving three main areas: audience experience, production capability and operational efficiency.

"The Lyceum renovation work included the redecoration and reorganization of public areas and the upgrade of specialist theater equipment and backstage areas," explains Bailey. "We also helped to improve the auditorium lighting, HVAC, and technical systems, with the aim of improving efficiency, energy consumption and lighting control functionality."

In the auditorium, a new sound system has been installed, house lighting has been converted to LED, a new HVAC system has been installed, and balcony seating has been refurbished. Foyers have been decorated, re-carpeted, and the ornate Edwardian plasterwork has been re-gilded. On the ground floor, five additional ladies' restrooms and improved family-friendly facilities have also been created.

Investing to save energy, the building's efficiency and financial sustainability have been considerably improved with the installation of 66 photovoltaic panels on the roof, enabling the theater to generate its own electricity.

Sheffield Theatres' chief executive Dan Bates says, "The theater has been beautifully restored and reinvigorated to create a more comfortable experience, allowing us to attract, create and tour more world-class productions, and ensuring our long-term sustainability thanks to a variety of energy-efficient systems."

For all these venues, Theatre Projects' focus has always been on the specific needs of the staff, users and audiences. "We take a holistic approach to all our projects, both as a building, and from an artistic and occupancy perspective," stresses Stroomer. "Each venue is unique and our priority is always to deliver refurbished venues that maximize the intimacy of the theater experience. We are all too aware that where finances are stretched – as they often are – it's crucial that we deliver what we promised on time and on budget. In all three of these cases, that is exactly what we have done." ■

[www.theatreprojects.com](http://www.theatreprojects.com)