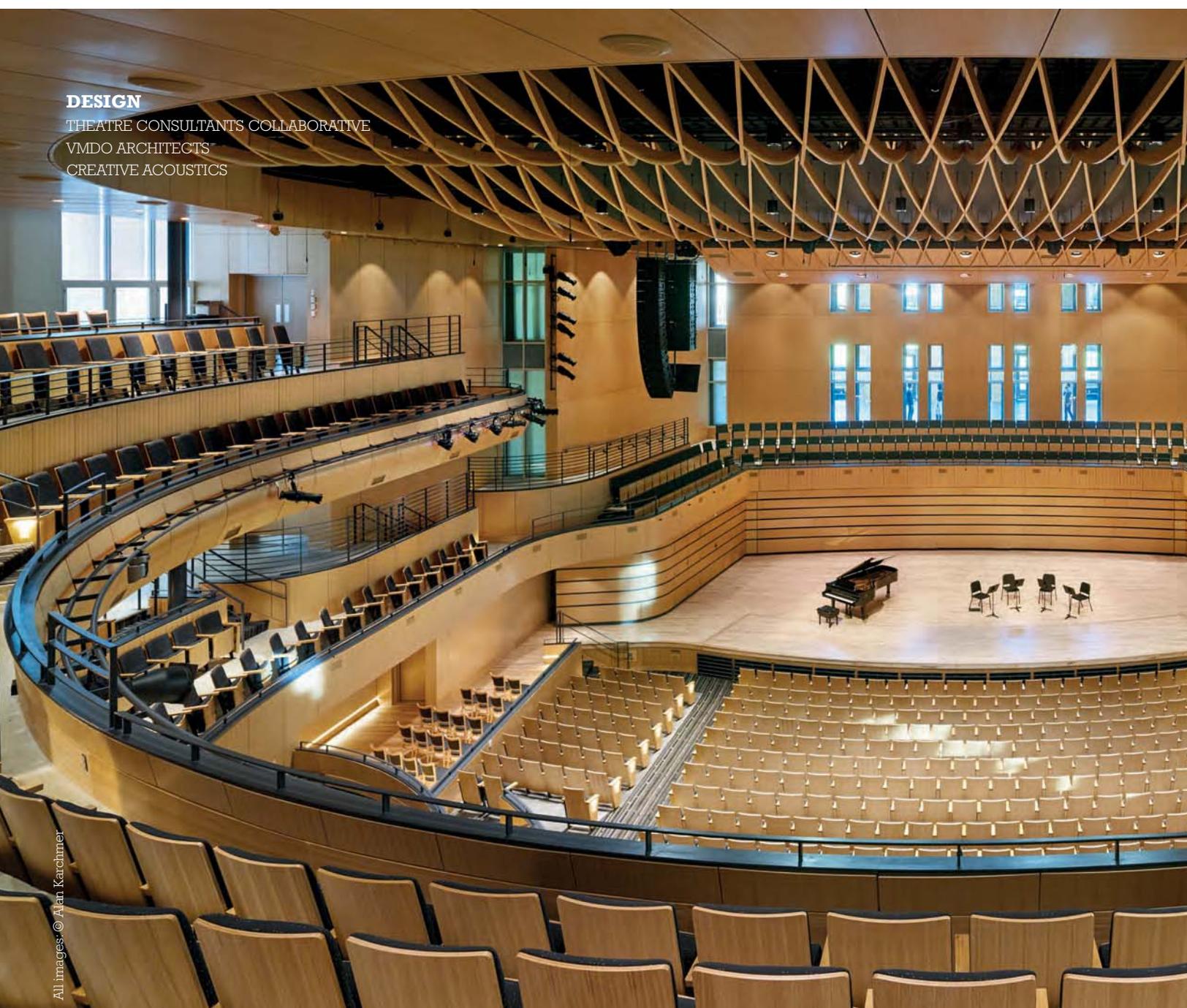


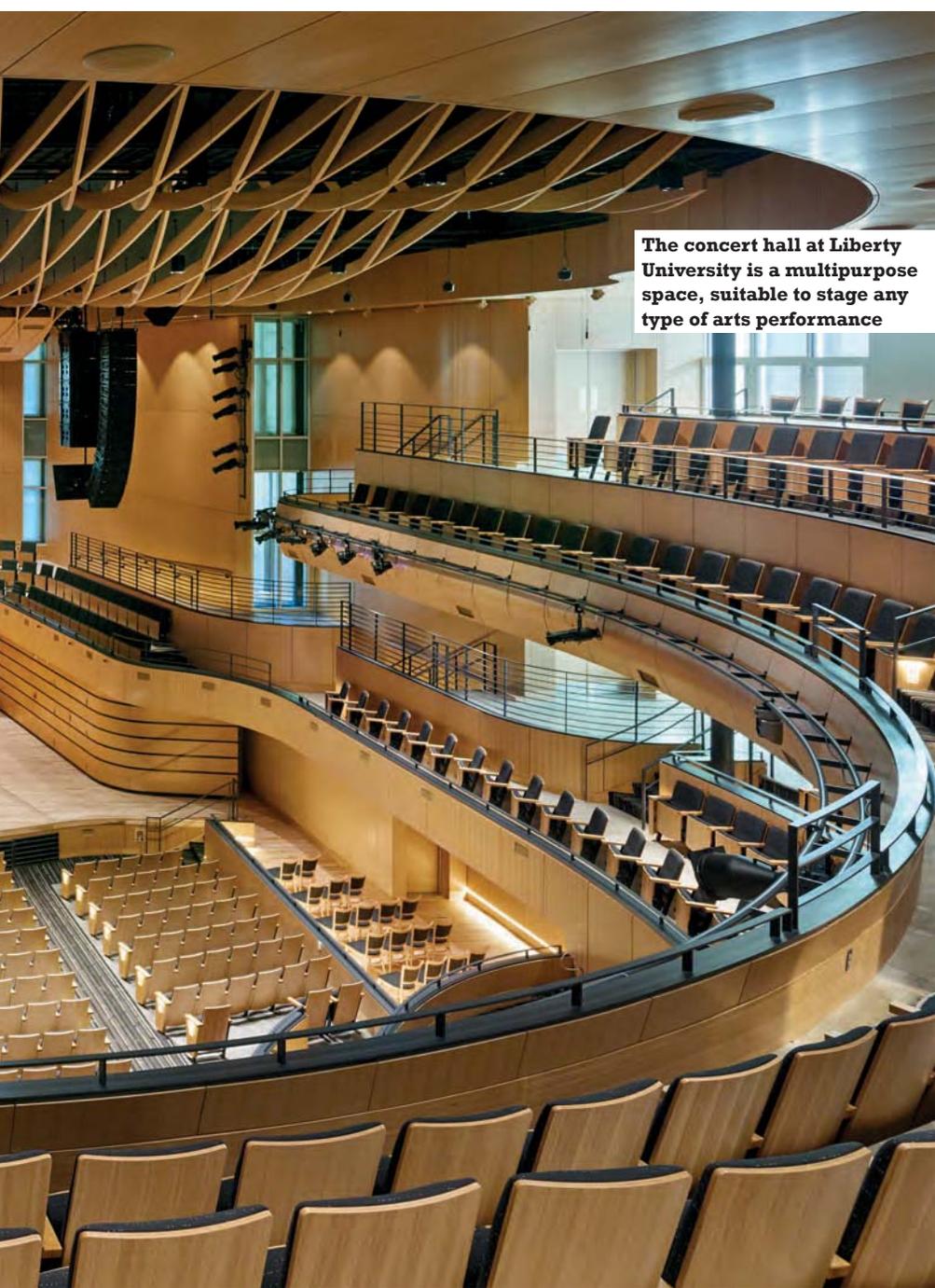
DESIGN

THEATRE CONSULTANTS COLLABORATIVE
VMDO ARCHITECTS
CREATIVE ACOUSTICS



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Unparalleled flexibility



The concert hall at Liberty University is a multipurpose space, suitable to stage any type of arts performance

With the ability to support acoustic and amplified performances within one dynamic setting, a university concert hall serves as the centerpiece of a burgeoning arts community

The 1,600-seat concert hall at Liberty University (Virginia, USA) is unique in its ability to accommodate every conceivable form of musical presentation – ranging from intimate natural acoustic concerts to large amplified events. The client’s desire to showcase the broad range of ways music resides within the campus setting sparked the design of a multimodal concert hall that integrates room design acoustics, adjustable acoustics and digital acoustics, making it the first of its kind in the USA. This ‘phygital’ space, which can be physically and digitally altered to support any type of performance, can be transformed from a wood-lined room designed for acoustic

events to a less reverberant space that embraces amplification and the ever-expanding possibilities of digital music making.

The design intent for the concert hall was twofold – to design a grand campus room ideally configured to support a wide variety of university performances, and also to create a welcoming and intimate home for large community and regional celebrations.

As Vernon Whaley, Dean of the School of Music, explains: “The diversity of the hall as a multipurpose space provides the opportunity to use the room in practical teaching application and professional presentation on a daily basis.” With the ability to support different performance types within one dynamic space, the concert hall at Liberty University creates a ‘concert hall for all’ – imbuing the arts with a new sense of allure on campus while providing a much needed, high-caliber performance space in central Virginia and the greater mid-Atlantic region.

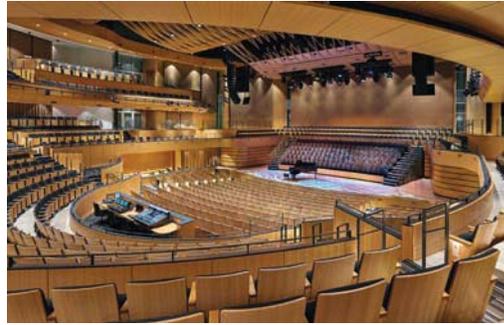
Engaging the audience

The sculptural form of the concert hall diverges from a conventional shoebox shape by deploying an expressive language of sinuous walls, balconies and wraparound seating – all housed within an iconic semicircular shell. “The design helps to connect the audience and performers by using a centripetal composition focusing on the stage and orchestra pit,” explains designer Jim Kovach of VMDO Architects. “By placing audience members in high-quality seats closer to the action, the intimate arrangement encourages participation rather than observation.” A 300-seat loft embraces three sides of the stage and, when not being used by the choir, further augments the sense that the audience is directly engaged in the performance.

“In another challenge to convention, the concert hall reverses the typical arrival sequence,” explains Theatre Consultants Collaborative designer Athos Zaghi. “The lobby is located behind the stage at the upper choral loft level. A patron enters the lobby and is presented with a wonderful and unexpected view of the audience seating – providing an immediate sense of anticipation analogous to a performer’s experience upon entering the stage platform.”

For the design team, the opportunity to create a signature room uniquely tailored for performances and communal experiences prompted reflection about how design can enhance connection. “Ultimately, the design of the concert hall is about making the intangible

DESIGN



Above (left and right): **The concert hall's innovative, flexible design components in different modes**
Right: **At the touch of a button, the performance space can be visually and acoustically transformed**

tangible,” says architect Drew Fleming of VMDO Architects. “By combining certain technical and aesthetic elements in unique ways, even a brief encounter can be powerfully lived, shared and remembered. The project team designed the hall to enliven this dialog between space and experience through proximity, views, light, beauty and variability.”

Daylighting and perimeter glazing attempt to break down the introverted nature of this often-closed space type. Complementing the interior's emphasis on audience participation, the lobby opens up performances to public view – inviting students and visitors to peer into the concert hall through a series of tall windows with sliding wood shutters. A series of radially located windows perforate the hall's curved exterior wall, bathing the stage and chamber with daylight and conveying an ambiance of warmth and wellness.

A generous multilevel promenade stitches together the main building's public spaces and academic programs – engaging visitors and students in the greater life of the building and in the campus and community setting beyond.

Flexible configuration

At the heart of the concert hall's flexible and community-oriented design is a revolutionary approach to acoustics. “Never before has the paradigm of the pure concert hall (designed for a wide range of flexible natural acoustics) also been equipped with an electronic architecture system whose variable, adaptive reverberation settings can be used separately or in synchronicity with the physical acoustic room,” explains acoustician David Greenberg of Creative Acoustics.

The baseline state of the room is a hickory-clad chamber that supports a wide range of natural acoustical performances – from soloists and small chamber groups to a full choir with orchestra. By deploying acoustic banners and drapes, the hall can physically mask its hard surfaces and transform into a space for amplified

music. A layer of digital architecture supports the adjustment of reverberation with the assistance of hundreds of small microphones, speakers and an array of digital signal processors. “What is gained by all three acoustic moves, and what makes this venue unique,” says Greenberg, “is the comprehensive, push-button control over both the purely natural and electronically controlled acoustic dynamics of the space.”

Building connections

“The technology in the venue is designed to extend the boundaries of the traditional concert hall,” explains Theatre Consultants Collaborative principal Jason Prichard. “A conductor can, with the push of a button, transform the space visually and acoustically to support a broad range of music-making experiences. The audience chamber and stage serve as a teaching laboratory by day, offering ease of operation, and provide state-of-the-art technology to support large touring and televised special events for the community.”

“Within a setting that feels more like it seats 400 than 1,600, the concert hall offers inspirational surroundings, comfortable seating, lighting and acoustics that seamlessly support ballet as well as orchestral performances,” explains Lynchburg Symphony Orchestra president Linda Edwards. “Nothing else in the region compares.”

Such flexibility serves as a mechanism for connection – between the audience and the performers, between art and architecture – within the context of a larger campus and regional setting. The transformational nature of the concert hall enables these connections to flourish and assemble/disassemble with relative ease – spurring innovation alongside everyday experience for the burgeoning arts community of central and surrounding Virginia. ■

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