

MARGOT & BILL WINSPEAR

OPERA HOUSE

ARCHITECT FOSTER + PARTNERS

# DEEP SEATING INNOVATION

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Article written by Michael Crabb



## Innovative solutions:

*Making a great theatre seat requires design inspiration, teamwork and engineering ingenuity.*

“It’s the most sophisticated project we’ve ever undertaken.”

That’s how Colombian-born Mauricio Olarte, founder-owner of SERIES Seating, assesses his company’s achievement in meeting the challenge to develop, manufacture — and deliver on time — the more than 2,200 uniquely customized seats for the Margot and Bill Winspear Opera House in Dallas, Texas. SERIES’ success at the Winspear is reflected in the comments of the design and construction team. James McGrath of Foster + Partners, the opera house’s British architects, frankly admits that at the outset he’d never heard of Miami headquartered SERIES.

And now? “They’ve done a wonderful job down to every last detail,” says McGrath. “They’re fantastic people to work with.” McGrath — Foster’s partner-in-charge on the Winspear project — is echoed by his associate Bjørn Polzin. “I couldn’t recommend them more highly.”

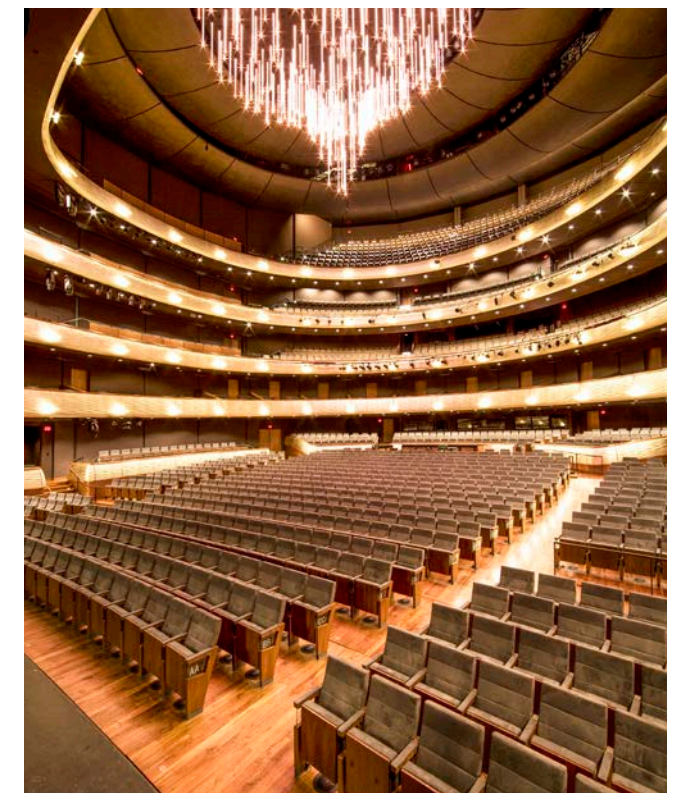
Dave Clark, senior project engineer for contractors The Linbeck Group, maintained a close watch on SERIES’ progress throughout the project, making three visits to the company’s state-of-the-art factory in Chía, just north of Bogotá. “Mauricio’s way is to do it the right way,” he says. “He’s not going to take any shortcuts.”

The opera house, part of the recently inaugurated Dallas Center for the Performing Arts, was a passion of Canadian-born businessman/philanthropist Bill Winspear. His \$42 million gift was the largest in the \$338 million capital campaign. Winspear, until his death in 2007, involved himself closely in the hall’s development. Being a big, solid man and avid opera fan, he wanted the hall to have outstandingly comfortable seats.

Foster + Partners responded accordingly. Working in collaboration with Theatre Projects Consultants, Linbeck and the owners, they made the chair design a high priority, launching a long and exhaustive supplier-selection process to ensure that whoever got the contract would be able to meet exacting design ambitions.

“Winning the beauty contest first”, explains TPC’s John Runia, “we wanted to see what was out there.” Some 30 suppliers worldwide were invited to offer samples of their best theatre chair model with “basket” mount air diffuser. SERIES was among 15 suppliers who submitted seats. They were displayed in Dallas Opera’s rehearsal hall where the design team, as well as Winspear and some of his seating committee members — folk large and small — tried them out.

Meanwhile the design team worked on the criteria for a prototype, by which time acoustician Robert Essert of London’s Sound Space Design had agreed to the substitution of floor air outlets for basket mounts, making



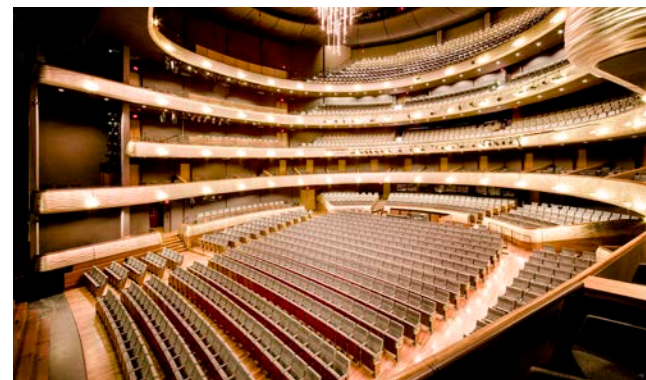
way for a cleaner-looking seat envelope. Four or five suppliers were then selected to respond with a two-seat mock-up in what Olarte jokingly calls “the beauty contest.”

“It was a whole new chair for everybody,” says Runia. SERIES’ submission was an eye opener for the team. “They produced excellent mockups all the way through,” says McGrath. The finalists were rigorously interviewed and scrutinized for their design approach, testing methods and ability to deliver a quality product at the right price, on schedule. “It was a very tight race,” Runia recalls, “but there was this sense that Mauricio, one way or another, was going to make it happen.”

Mauricio Olarte, a Miami resident for many years, studied industrial design in New York, taught in Mexico and then Colombia where, still in his late twenties, he became dean of the design school at La Universidad de Bogotá Jorge Tadeo Lozano. Meanwhile, he bought a small furniture company, the first step towards the founding of SERIES more than a quarter century ago. SERIES’ director of performing arts projects, Thomas Boyd worked hard to put Olarte’s company in the right position on the project and

manage it through the approval stages. Boyd leads an expanding performing arts business that complements SERIES’ work in worship, educational, and restaurant seating markets. Some notable past projects include Atlanta’s Cobb Energy Performing Arts Center, the new Guthrie Proscenium and Thrust Stages in Minneapolis, the Adrienne Arsht Center for the Arts in Miami and the Durham Performing Arts Center in North Carolina. Other future projects Boyd has SERIES working on include Macau’s City of Dreams Dragone Theatre, Carmel Performing Arts Center in Indiana and the Hylton Performing Arts Center at George Mason University in Virginia.

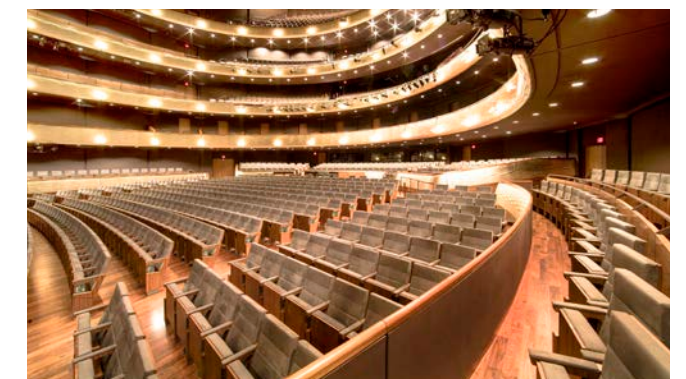
Mauricio Olarte’s passion for the perfect seat permeates his entire company. Design team members who made multiple visits to SERIES’ factory returned with glowing accounts of the staff, from designers and engineers down to the smiling employees on the line. Team members were amazed how, after requesting modifications, they’d be taken to lunch or for a site-seeing tour and return to the factory to find a new mock-up awaiting their inspection. “I was just blown away,” says Runia.



“This is a company that really gets stuff done!” Linbeck’s Dave Clark concurs. “These are some of the best people you’d ever want to work with.” TPC affiliate Carol Allen notes: “They have wonderful people in their design department; just top-notch people working in that factory and most of them speak English.”

It’s worth noting that SERIES is continuously seeking new environmental advances and has always been pro-active in minimizing its factory’s environmental impact. It uses a variety of environmental strategies such as water harvesting and an ozone layer friendly, hydrochlorofluorocarbons-free, water-only foam blowing process. Mauricio Olarte admits he normally likes to drive the design process so the Winspear project, with Foster + Partners taking the lead, was a departure.

“Frankly,” says Polzin, “knowing that Mauricio is a designer, we thought he might try to throw too much at us, but he didn’t. And we listened to his advice on a number of points.”







# INTERPRETING A CHALLENGING DESIGN

Olarte describes his role as that of an “interpreter,” “implementer” and engineering problem solver. “They were very clear what they did and didn’t want,” he explains. “They aimed for a very clean, contemporary look with no exposed anything. We found the solutions to make it work.”

The finished American walnut veneer seats with their grey, perforated Ultrasuede-covered cushioning have an unfussy, modern appearance. And you’d never notice the small, naturally occurring variations in the color of the wood or fabric. SERIES matched them all up for consistency within the hall’s various seating areas.

The seats are so unobtrusively secured that it’s hard to figure how they’re so rock-solid. On the orchestra level the tapering support panels are screwed directly into the hardwood floor. In the upper ranges seats are cantilevered out from the concrete riser face in an ingenious “floating” mount. For complex seat installations, SERIES sub-contracts Clearwater, Florida-based Joe Diebold. The results have been consistently excellent. “Joe did an amazing job,” says Polzin. “The seats are incredibly well aligned.” Says Runia: “It’s one of the best installations I’ve ever seen.”

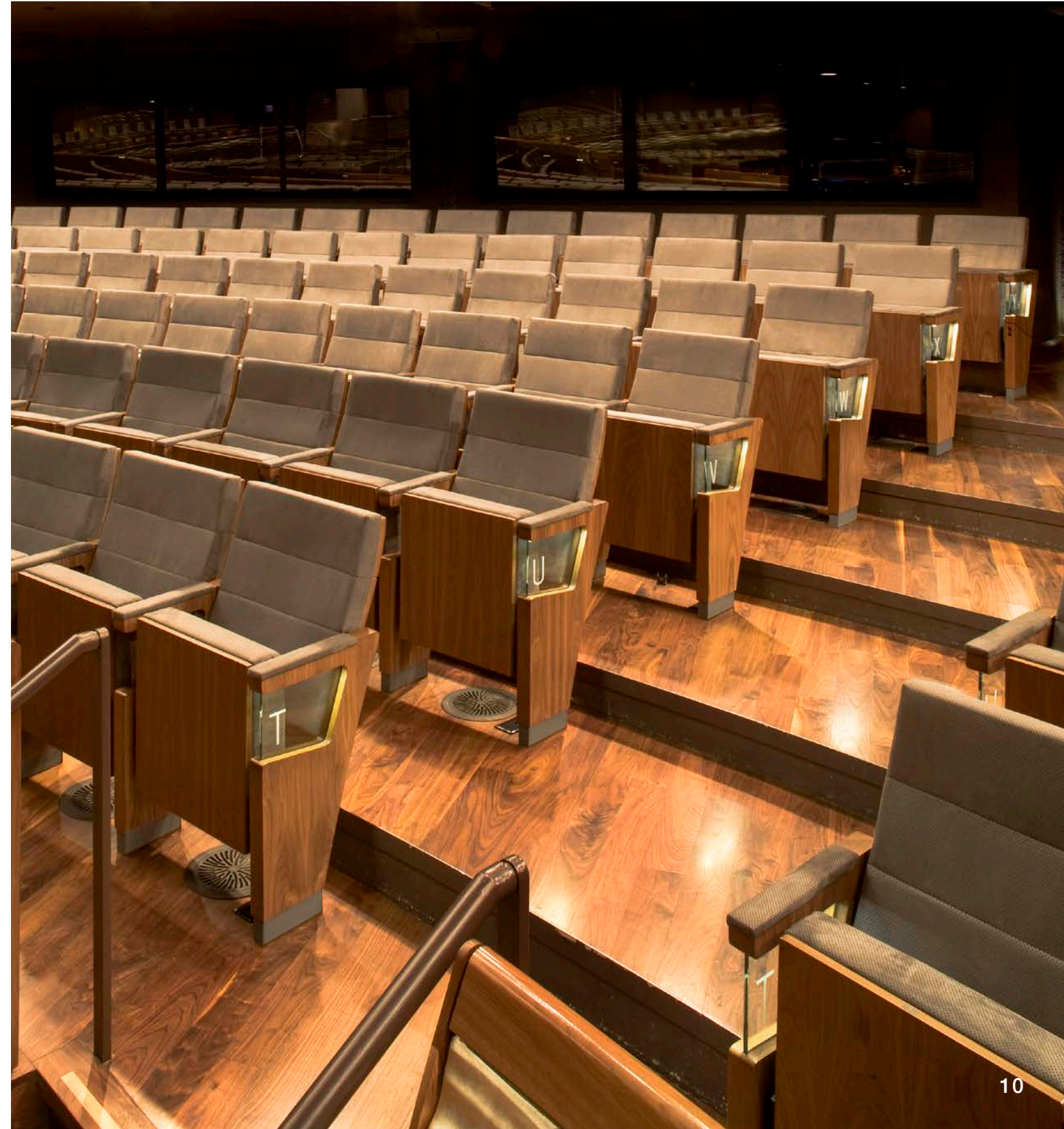
The support panels have cutaways to maximize seat area. The strong yet seemingly slender plywood padded armrests are cantilevered out and engineered in multiple layers to far exceed code weight-bearing specifications. In an unusual design flourish, the row end panels feature glass inserts to match the cutaway design. Row letters on the glass almost seem suspended in thin air yet are readily visible, illuminated by LED aisle lighting recessed beneath the armrests.

Because of the raked floor of the orchestra seating (sometimes referred to as stalls) and stepped risers in the hall’s tiers, SERIES also had to modify many of these complex end panels accordingly and produce four unique chair widths to provide the correct staggering of seats, achieving clear sight-lines and even row widths. Designing ADA-compliant (Americans with Disabilities Act) seats was a major challenge.



Olarte and his team of engineers in Chia devised a hinged, magnetically secured end panel with a discreet latch release. The glass and its wooden framing swings out at seat-pad level for easy access without compromising the design’s visual integrity. “They did such a beautiful job; such a neat solution,” says McGrath.

TPC affiliate Carol Allen is equally admiring of the way SERIES designed removable seating for wheelchair placement. “Removable seats in theatres tend to be ugly. They came up with a very neat design.” These are just some of the ways Series came up with imaginative solutions to a variety of design challenges. “I bet we nearly drove them mental on certain points,” laughs Bjørn Polzin, “but they were responsive to all our design requests.” Adds John Runia: “They went way beyond the call of duty.” Jeff Innmon, the Dallas Center’s project manager, offers an apt summation of the arduous process to develop and create an outstanding chair. “It was a very collective, collaborative effort but when SERIES promised something, they delivered.”





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