



WOOD ARCHITECTURE + DESIGN

# LOOKBOOK

Get inspired and see what's possible

**THINK**  
**WOOD®**



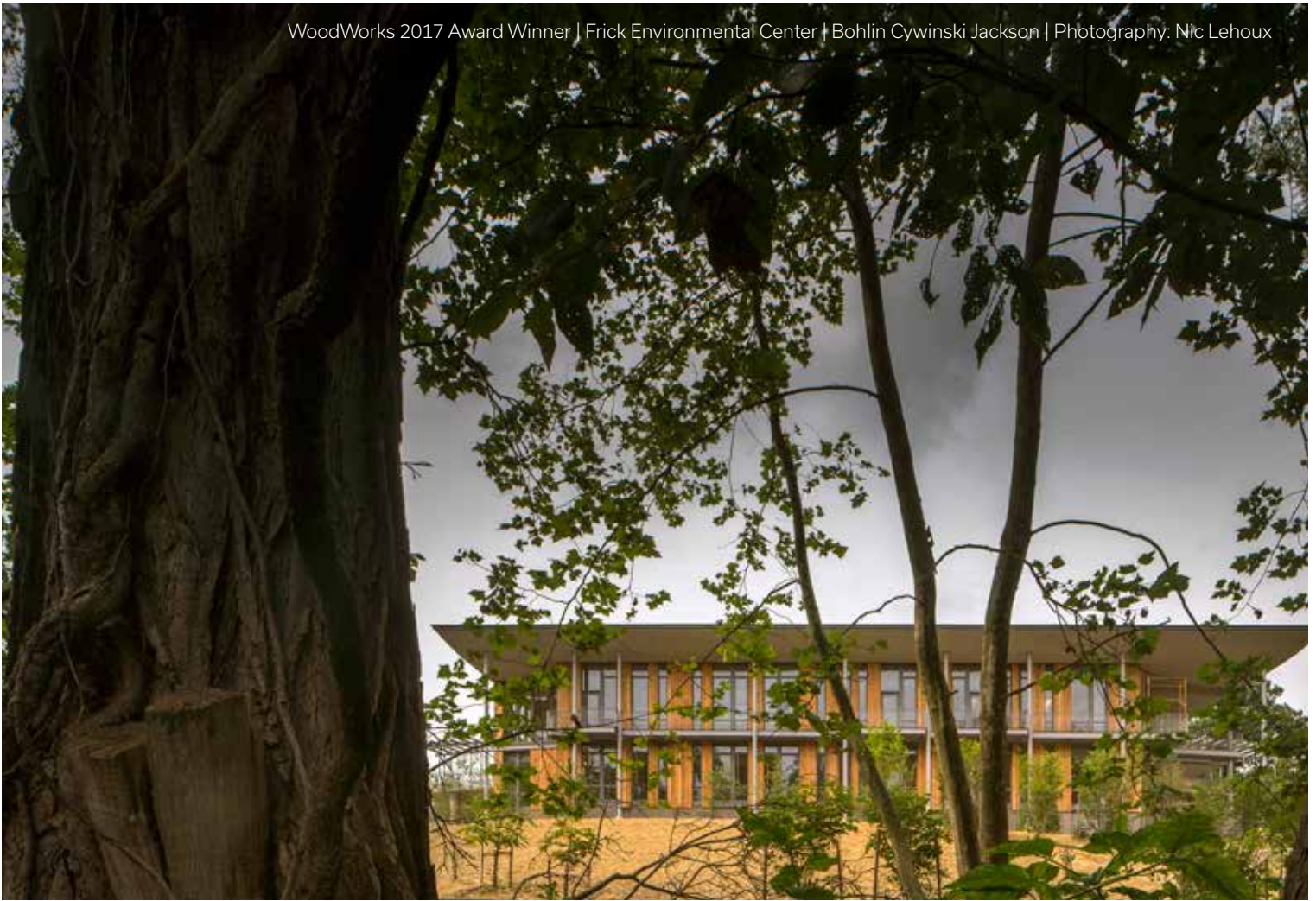
THINK  
WOOD®

# LOOKBOOK

See what's possible with wood

**THINK**  
**WOOD®**





# THINK WOOD®

## ABOUT US

Think Wood promotes the economic, environmental and societal benefits of using wood in commercial, community and non-residential building applications. We contextualize innovative technologies and practices that involve softwood lumber. In addition, we identify and introduce innovators in the field to our community of architects, engineers, researchers, designers and developers

## JOIN OUR COMMUNITY

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# WARMTH

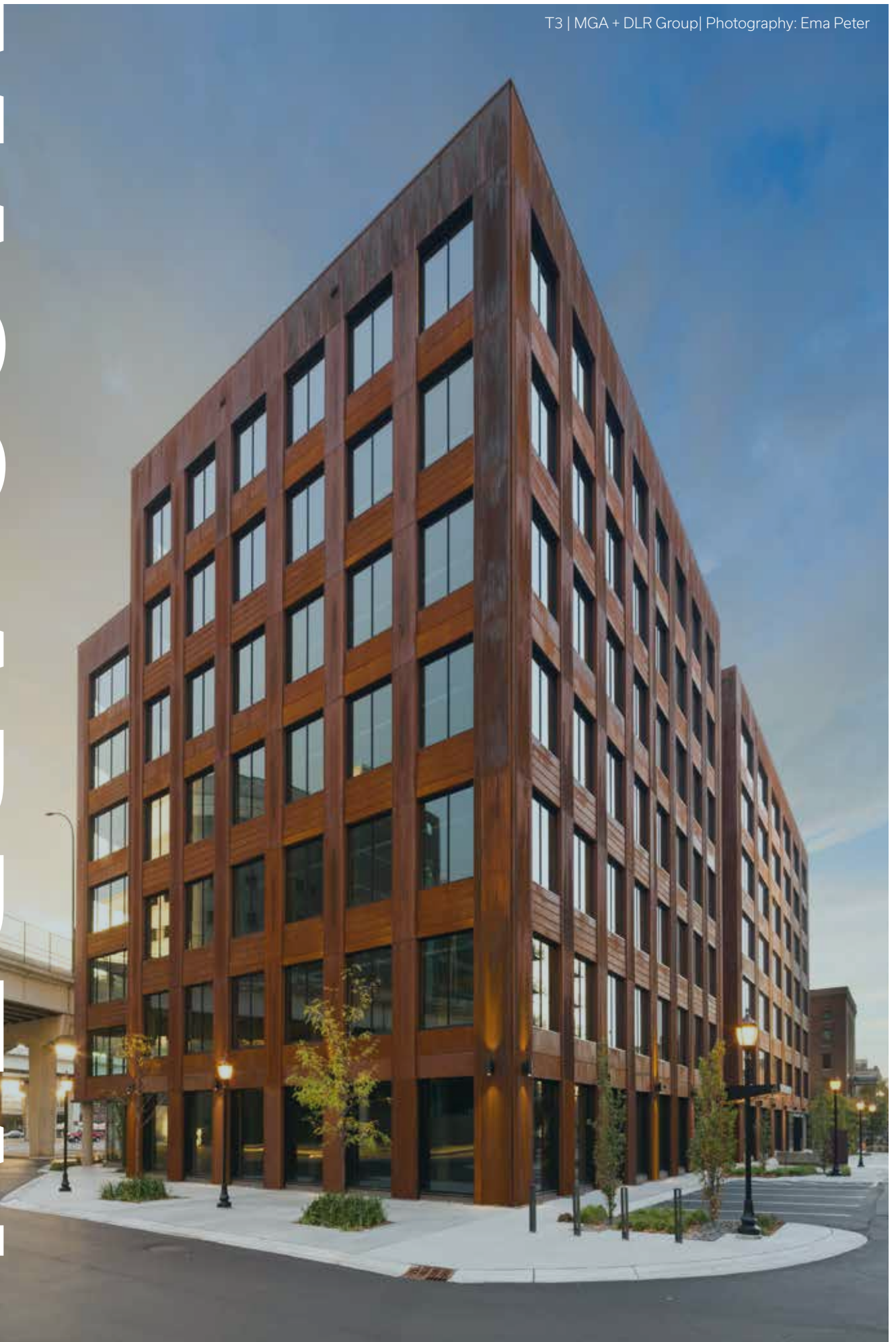
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**TENANT-COOL** SPACES MADE  
WARM AND WELCOMING  
**WITH WOOD**

Give employees spaces they'll love to work

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# MASS APPEAL





Mass timber **opens up new opportunities** for workplaces. Today's employees are drawn to companies with a commitment to the environment and offices that reflect an **inviting, welcoming** and **warmer** atmosphere.

## REACHING NEW HEIGHTS

### Past as Prologue

"What makes T3 special is the way it's getting the industry to think about building with mass timber again," Candice Nichol, AIBC, NCARB of MGA explains. "T3 is an incredibly beautiful building that's also economical and responsible."

A great example of that "old idea" is just a few blocks from T3: Butler Square is a 367,717 square foot, nine-story brick and heavy timber building built in 1906 and substantially renovated in 1974. T3 is made chiefly with nail-laminated timber (NLT). Over 1,100 8-foot wide by up to 40-foot long NLT panels were used for exposed structural ceiling and roof panels with concrete topping.

### Differentiation Rules

T3's design has proven to be a critical differentiator in a hot market. Wood's natural warmth and beauty offers leasing agents a competitive edge. Coupled with T3's leading-edge technology, LEED Gold certification, and extensive workplace amenities, T3's

leasing story is a powerful one for Millennial, tech-focused tenants (Amazon is T3's lead tenant, occupying two floors).

### An Emerging Formula

A mixed-use building like T3 makes so much sense for the owner in terms of construction speed, labor, budget, and result. T3 is a successful example of a mass timber structure which is cost-competitive with steel and concrete. With this success, we're continuing to see incredible interest to use mass timber as a primary building material across the U.S.

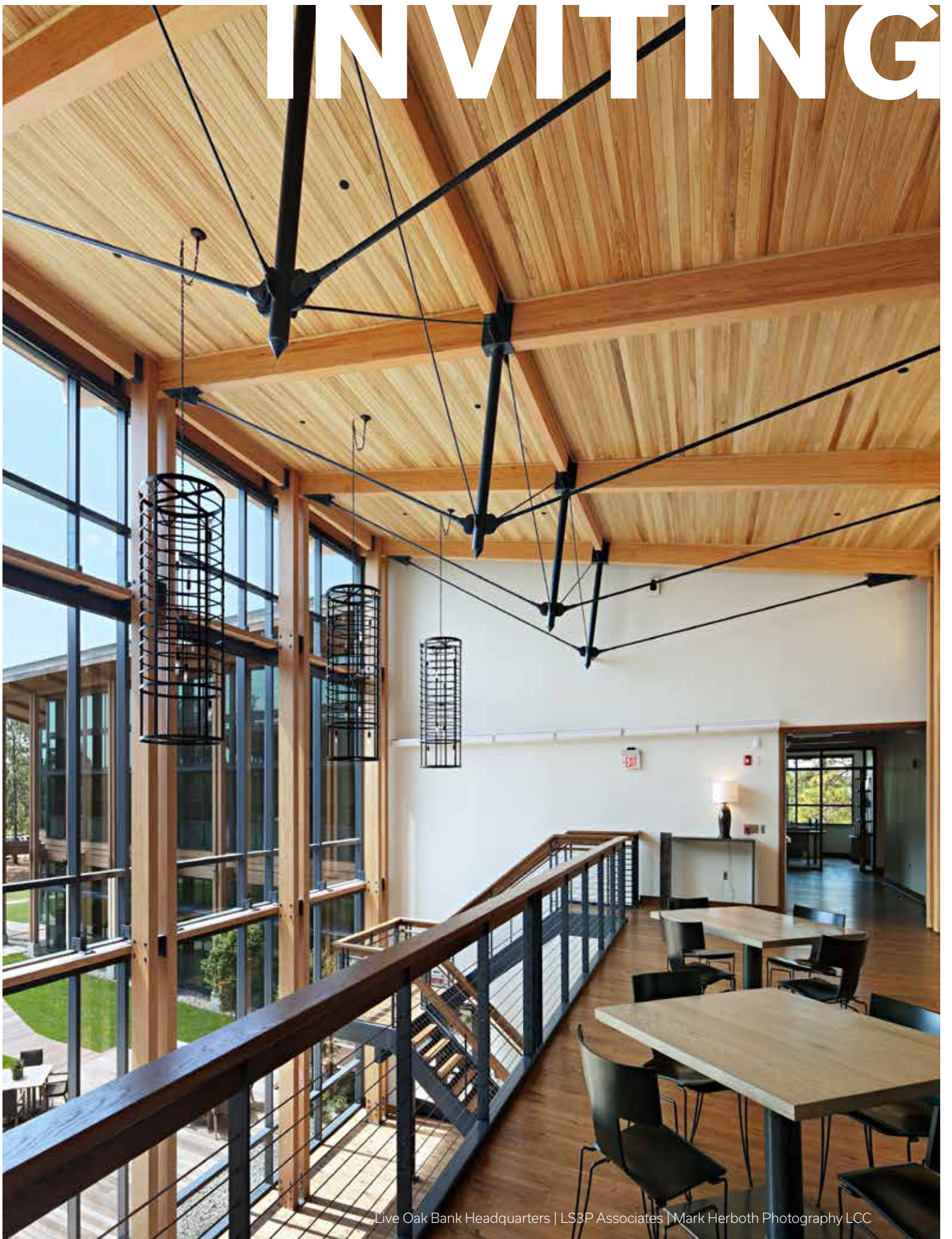
### RESOURCES:

[Download NLT Guide](#)

[Take a Mass Timber or Taller Wood CEU](#)

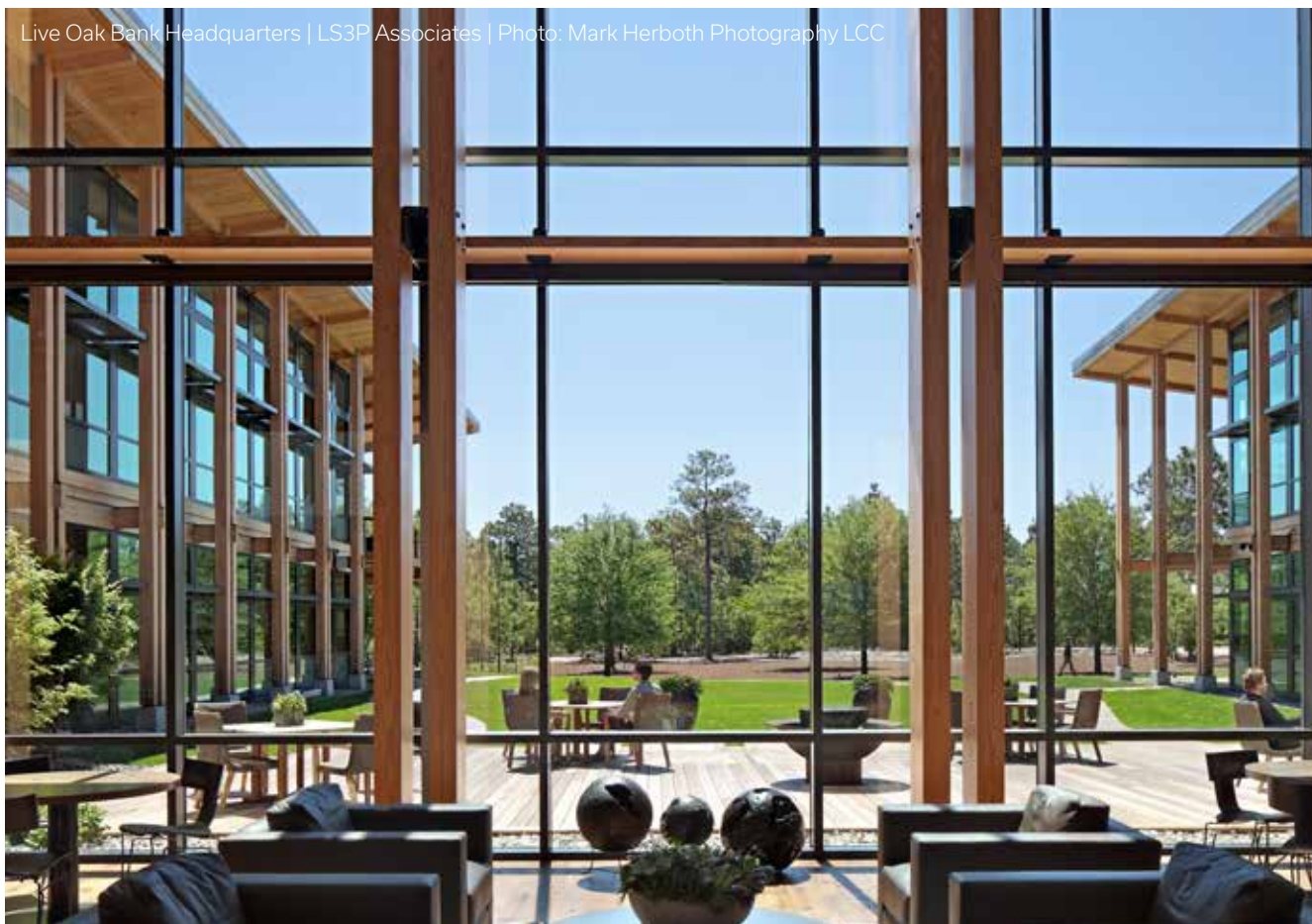
[Explore More Mass Timber Projects](#)

# INVITING





Live Oak Bank Headquarters | LS3P Associates | Photo: Mark Herboth Photography LCC



## BANKING ON BIOPHILIA

### A Bank Connects Employees to Abundant Light, Wood and Nature

Hidden in a nearly forgotten woodland glade in the heart of Wilmington, N.C., the 36,000 square foot Live Oak Bank Headquarters sits lightly in the arboreal splendor like a shimmering Tolkienesque “cathedral of wood.”

The dramatic play of wood provides a relaxed, unbank-like setting to help attract and retain top financial talent to the Wilmington area. Bank staff now claim a workplace that’s second to none for personal performance, comfort, and efficiency.

Uses of wood as a structural or finishing material in workplaces not only offers aesthetic beauty, but enhance indoor air quality, acoustics, thermal comfort, and energy efficiency. Perhaps most notably, it also has biophilic benefits—the innate sense of wellness humans feel towards nature and natural building products.

#### RESOURCES:

[Learn More About Design Trends & Wood](#)

[Explore More Commercial Projects](#)



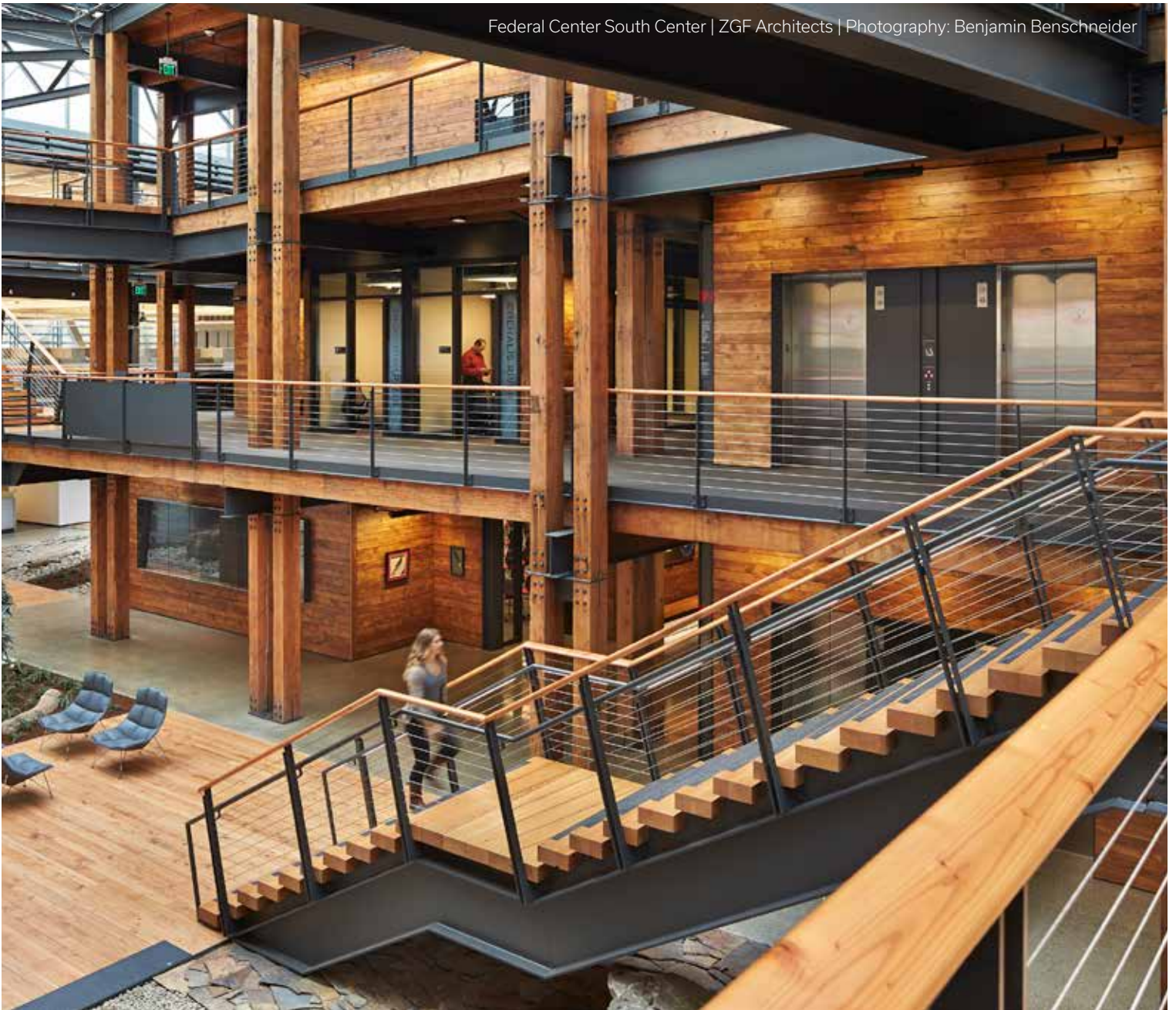
# NATURAL



## Natural Advantage

Live Oak Bank Headquarters' interior features nail-laminated timber (NLT) in the ceiling with custom millwork for the workstations. Oak is used for the flooring and southern yellow pine for the exposed glulam columns, beams, and trusses. Large, exposed glulam columns serve as major design and structural elements across the building's exterior and interior. It's not uncommon for no more than task lighting to be used during the day by bank employees. The proximity of nature and the use of natural, locally-sourced wood lift spirits and enhance productivity.







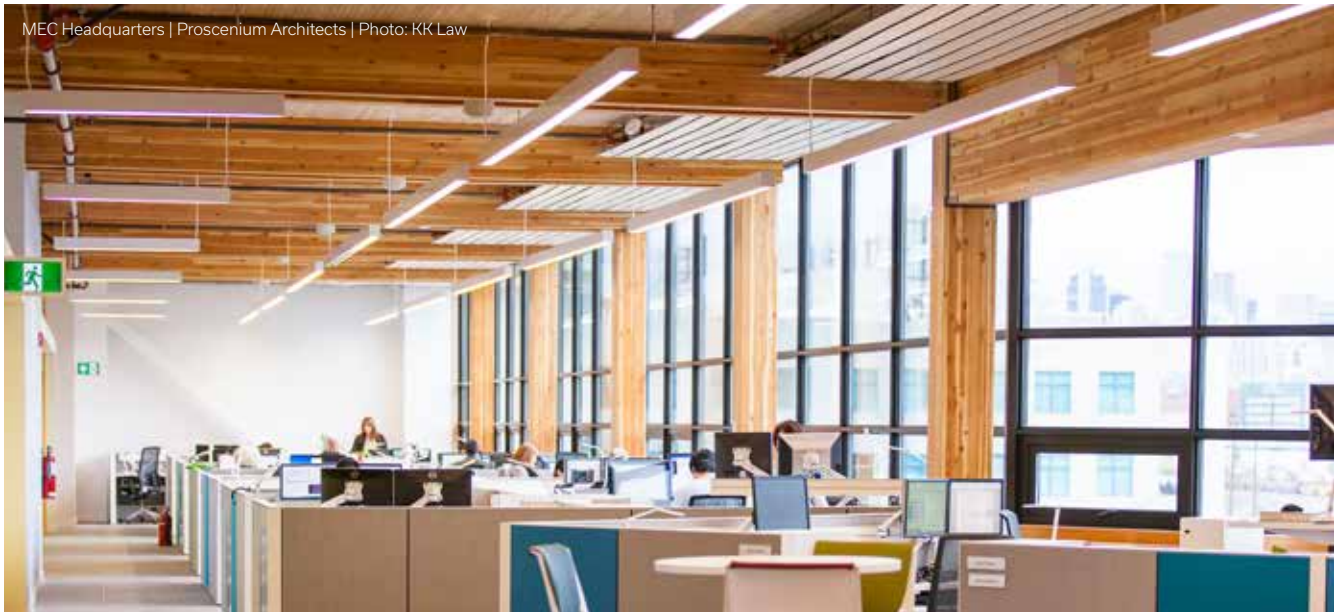
## Outside the Cubicle

A recent trend in workplace design is more open informal spaces for impromptu collaboration and community. Wood can offer attractive alternatives to cubicle cages of the past and a connection to nature.



# MODERN





# WOOD'S ALTERNATIVE TO CUBICLE CAGES

## Bringing the Outdoors Inside

Outdoor retailer Mountain Equipment Co-op's (MEC) head office is a 112,000 square foot hybrid mass timber and steel structure. As Canada's leading retailer and manufacturer of outdoor gear, MEC selected mass timber as the primary building material for its performance, renewability and aesthetic qualities. Wood was chosen for the health benefits and well-being it can provide employees. An open concept plan emphasizes the warmth and beauty of timber construction.

## Thinking Outside the Cubicle

Interior Douglas fir millwork screens offer an inviting alternative to traditional office cubicles. A double-beam configuration serves double duty: the exposed beams give warmth and architectural interest to the interior and their increased stiffness reduces deflections and floor vibrations. This acoustic benefit helps minimize distractions in an open office environment.

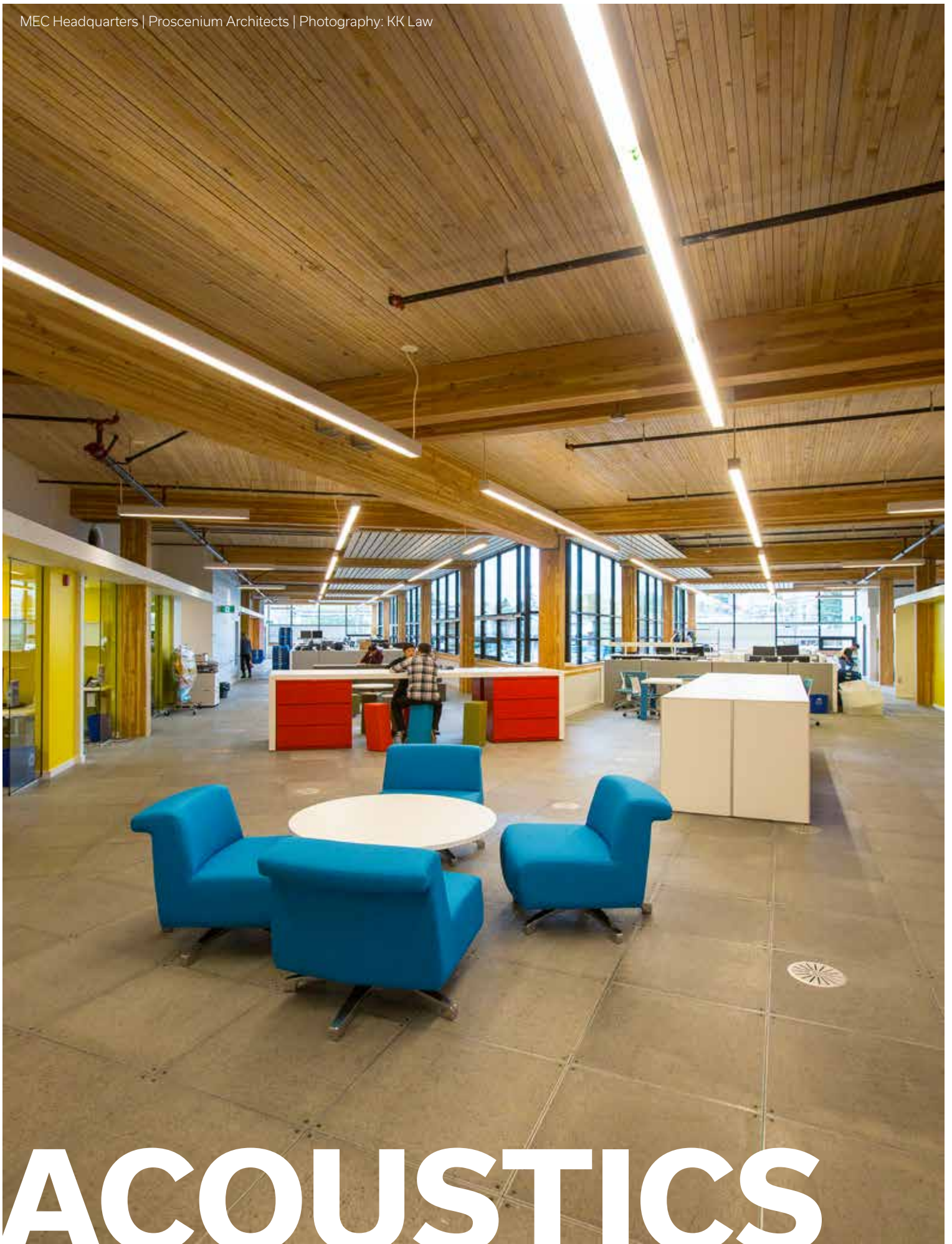
## Affordable Alternative to Steel and Concrete

Nail-laminated timber (NLT) is created by fastening individual dimension lumber with nails, stacked on edge, into one structural element. The building's floor assemblies are made of modular prefabricated NLT panels, making them more economical, while meeting all building and fire codes. The result is a cost-effective way to incorporate an abundance of wood into the office's design.

### RESOURCES:

[Learn More About NLT](#)

[Explore More Commercial Projects](#)

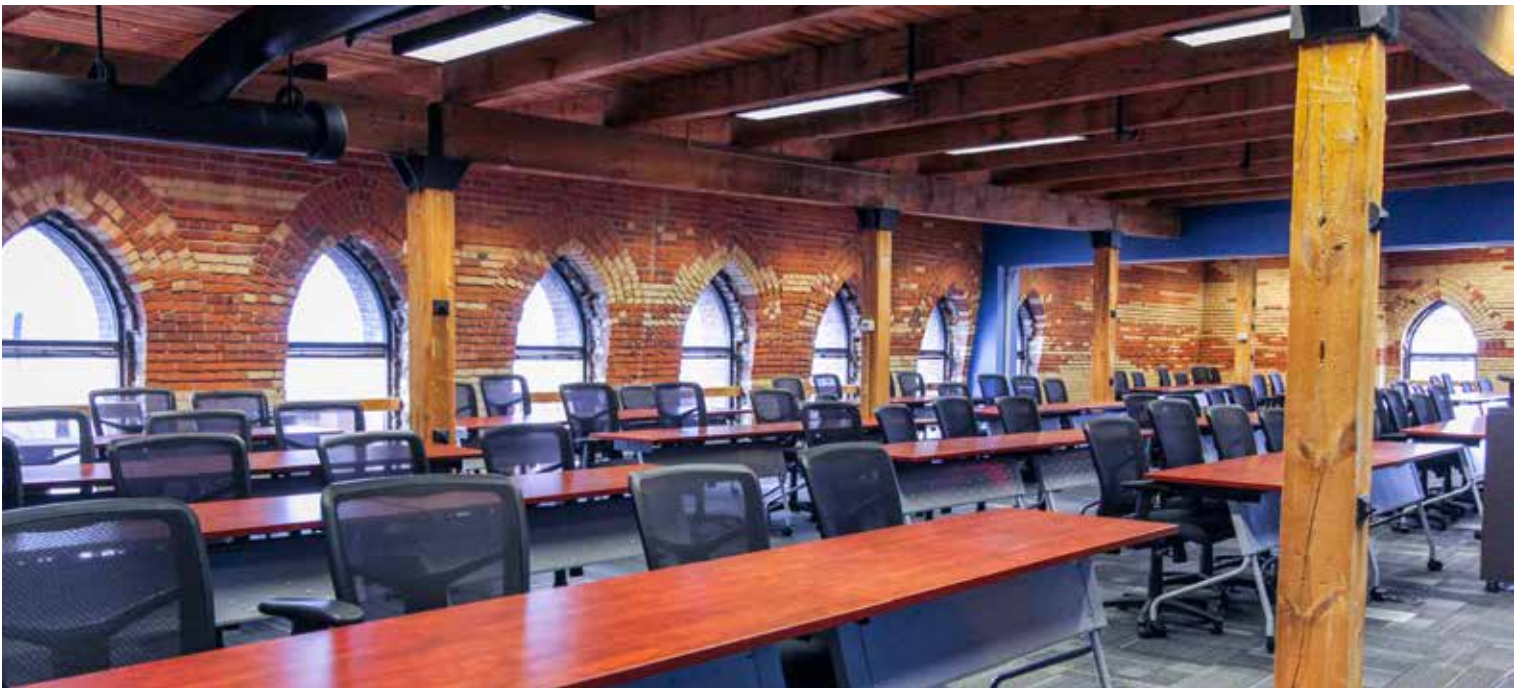


# ACOUSTICS

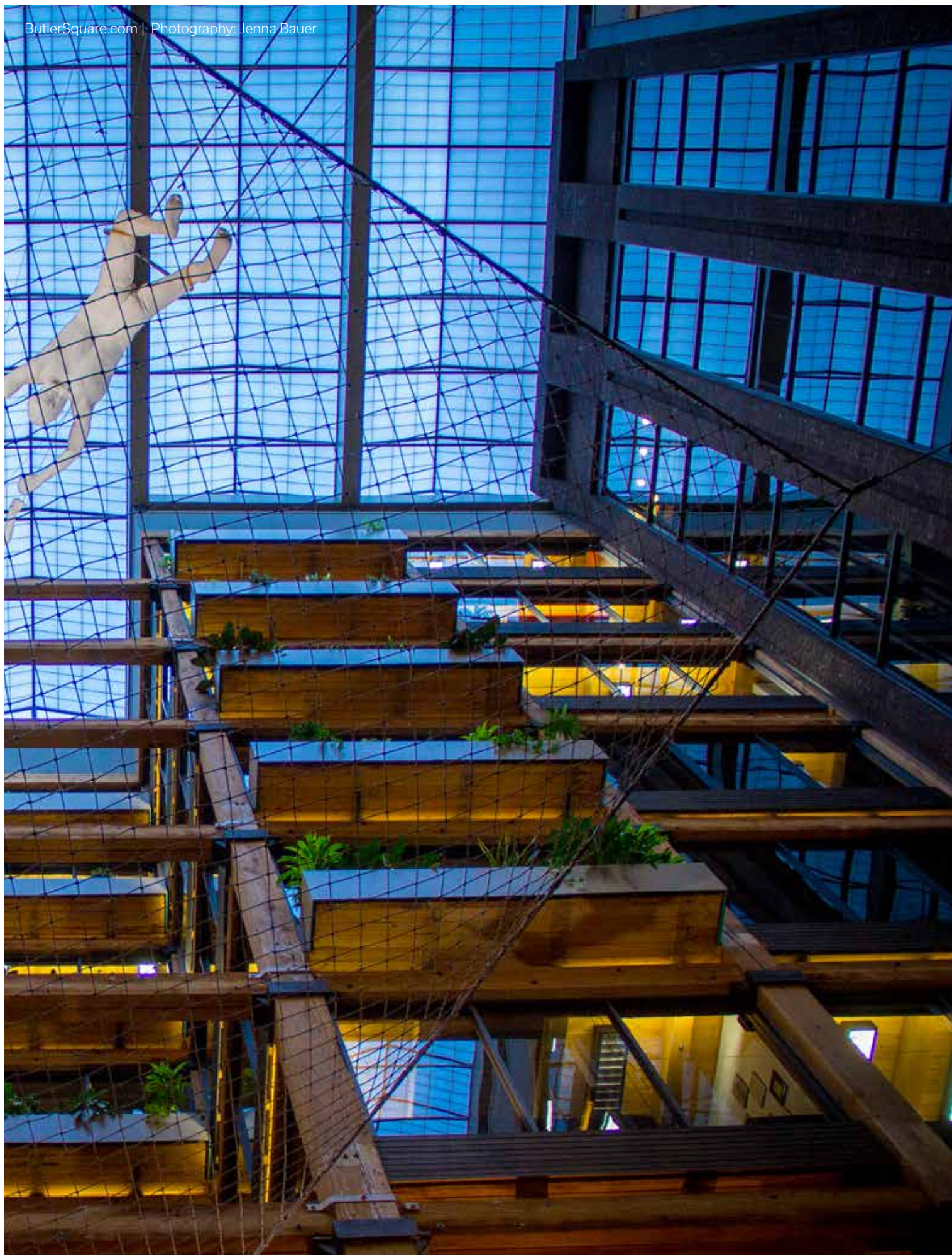














# SUSTAINABLE



Common Ground High School | Gray Organschi Architecture | Photography: David Sundberg



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# **SCHOOLS** MADE HEALTHY AND INVITING **WITH WOOD**

Give educators and students a place where they'll love  
to teach and learn

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Common Ground High School | Gray Organschi Architecture | Photography: David Sundberg





Common Ground High School | Gray Organschi Architecture | Photography: David Sundberg

## A SCHOOLING IN SUSTAINABILITY

### School's Design Teaches Environmental Benefits of Wood

The school is called Common Ground High School and it offers public school students an innovative curriculum of urban agriculture combined with sustainable land-management practices. It honors an earth-first ethic, becoming the nation's first building to use cross-laminated timber (CLT) as a "stressed skin" assembly. The person responsible for the design is Alan Organschi, designer and principal at Connecticut-based Gray Organschi Architecture.

Common Ground High School asked the firm for design recommendations. Organschi suggested using mass timber as the construction material, a key benefit being they could source the wood and know exactly what forest the wood came from.

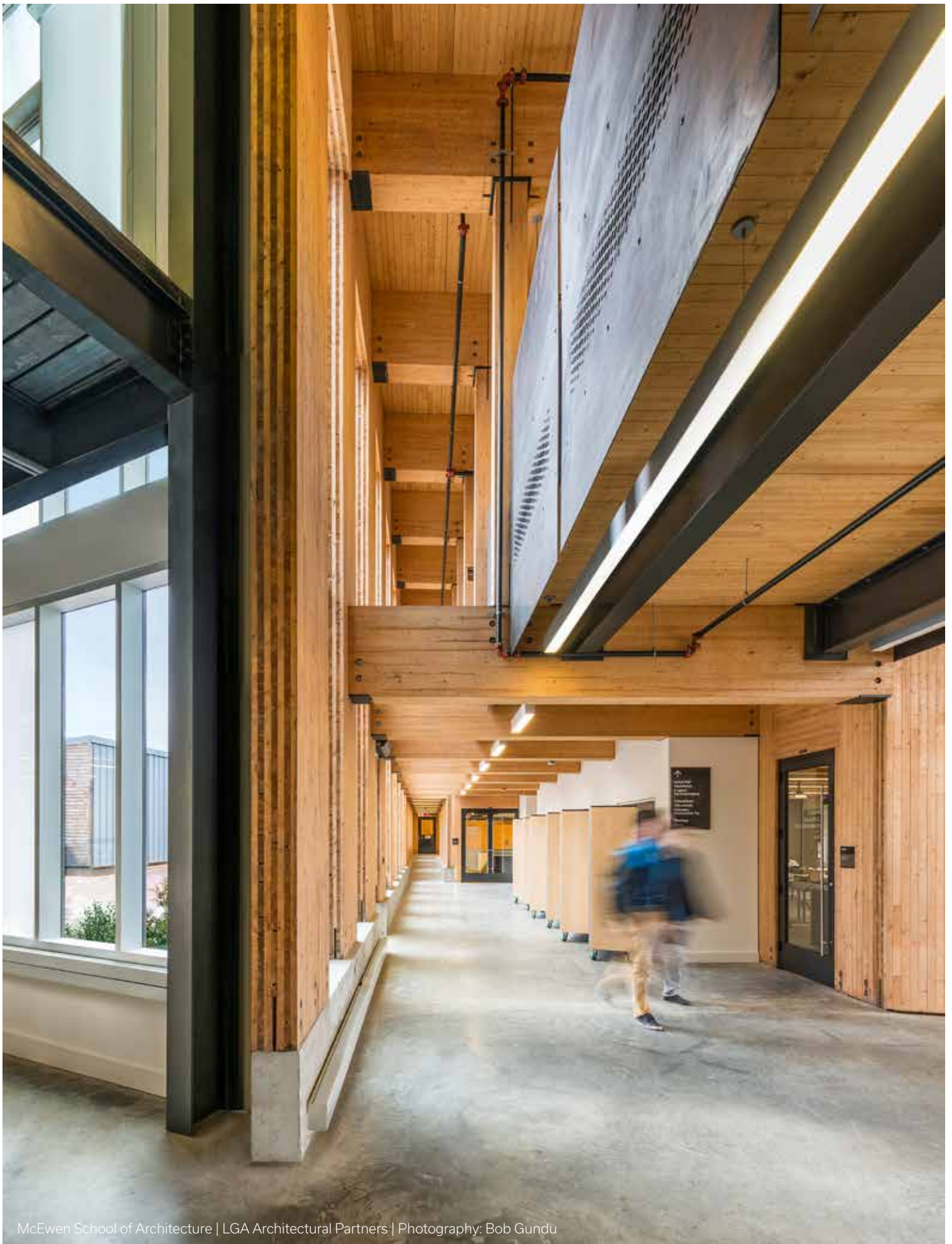
The design became a great pedagogical lesson for the students. School leadership liked it and were committed from the beginning.

Working in close collaboration with design partner and co-principal of the firm Elizabeth Gray, along with respected local timber and structural engineers, Organschi and his team devised a construction strategy that deployed cellulose-based building materials throughout the addition. Black spruce CLT panels act as the tension surface and final ceiling finish. Vertical CLT panels form bearing and shear walls, while glue-laminated rafters and heavy timber trusses span the ground-floor multi-purpose space.



McEwen School of Architecture | LGA Architectural Partners | Photography: Bob Gundu





McEwen School of Architecture | LGA Architectural Partners | Photography: Bob Gundu





John W. Olver Design Building at UMass, Amherst | Atelier Ten | Leers Weinzapfel Associates | Photography: Albert Vecerka/Esto



The 87,000 square foot facility is one of the **most advanced CLT buildings** in the U.S. and saves the equivalent of **over 2,300 metric tons of carbon** when compared to a traditional energy-intensive steel and concrete building.

## A CROSS-LAMINATED CLASS ACT

### From Research to Reality

With a glulam frame and floor slabs of composite, exposed cross-laminated timber (CLT), the John W. Olver Design Building at UMass Amherst is a demonstration of leading-edge timber engineering, a concept informed by the school's current research in building technology.

The design team chose mass timber over steel to remove 2,600 metric tons of carbon from the atmosphere. Intended to demonstrate the latest sustainable design practices and serve as a model for the integration of campus landscape and architecture, the new four-story Design Building at the University of Massachusetts Amherst is the largest CLT academic building in the U.S. and one of the first institutional buildings in the Northeast to use a mass timber structure.

The university's Building and Construction Technology program developed some of the CLT technology and has been testing native species for CLT suitability with support from a National Science Foundation grant.

The interdisciplinary building is home to three academic units: architecture; building and construction technology; and landscape architecture and regional planning. It intentionally features exposed structural elements and service systems for teaching, while its Trimble Technology Lab provides advanced tools for design research and development. The building's multi-disciplinary program, organized around an interior courtyard of exposed timber and an exterior landscaped courtyard and outdoor classroom, will foster collaboration across the disciplines.

At the upper level, the building has a roof garden, which is supported by a long-span wood-steel truss system (a "zipper" truss) that is exposed in the atrium below.

### RESOURCES:

[Download CLT Handbook](#)

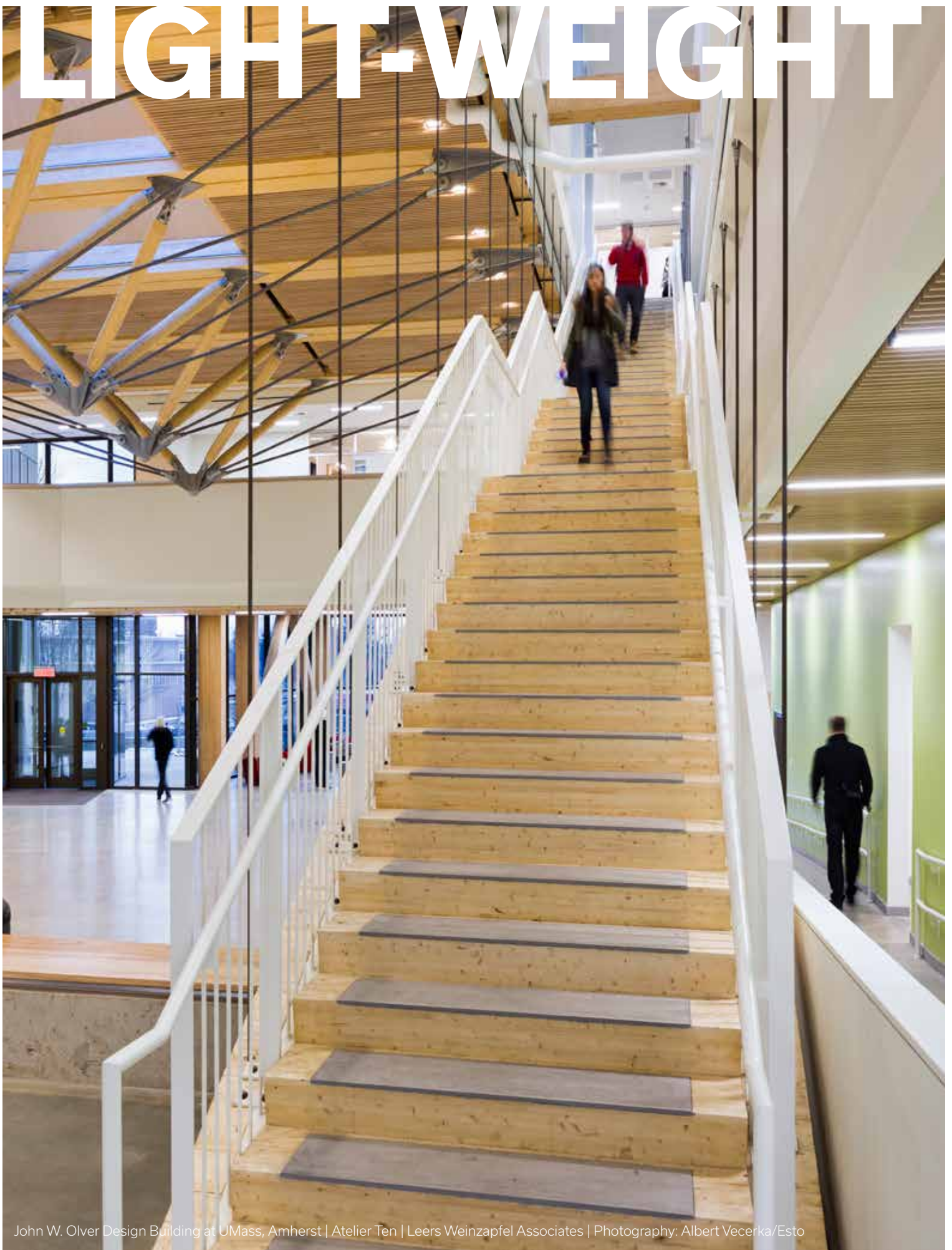
[Take Designing Modern Wood Schools CEU](#)

[Learn More About Wood's Performance](#)





# LIGHT-WEIGHT



John W. Olver Design Building at UMass, Amherst | Atelier Ten | Leers Weinzapfel Associates | Photography: Albert Vecerka/Esto



# VERSATILE





UBC Earth Sciences Building | Perkins + Will | Photography: Martin Tessler



## DEFYING GRAVITY

### Cantilever and They Will Come

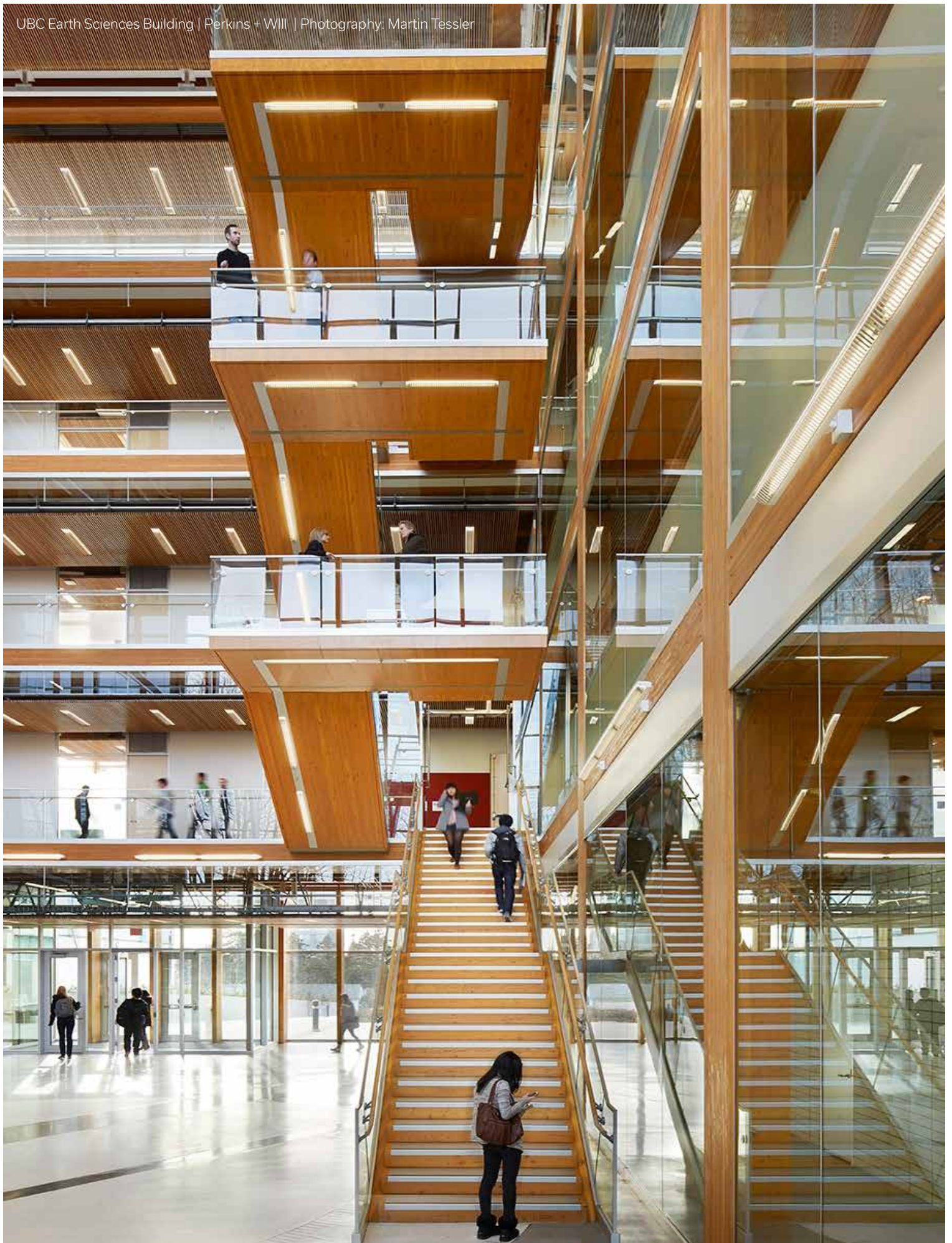
Using wood as the primary structure in the office wing, this five-story building is one of North America's largest panellized wood structures. A key design feature is the cantilevered timber stairway that appears to defy gravity while demonstrating the design and structural capabilities of modern engineered timber. The dramatic stair-design draws people in and encourages social interaction among students and professors.

A solid wood cross-laminated timber (CLT) canopy wraps three sides of the project to provide rain cover for pedestrians. It extends from inside the building, where it forms

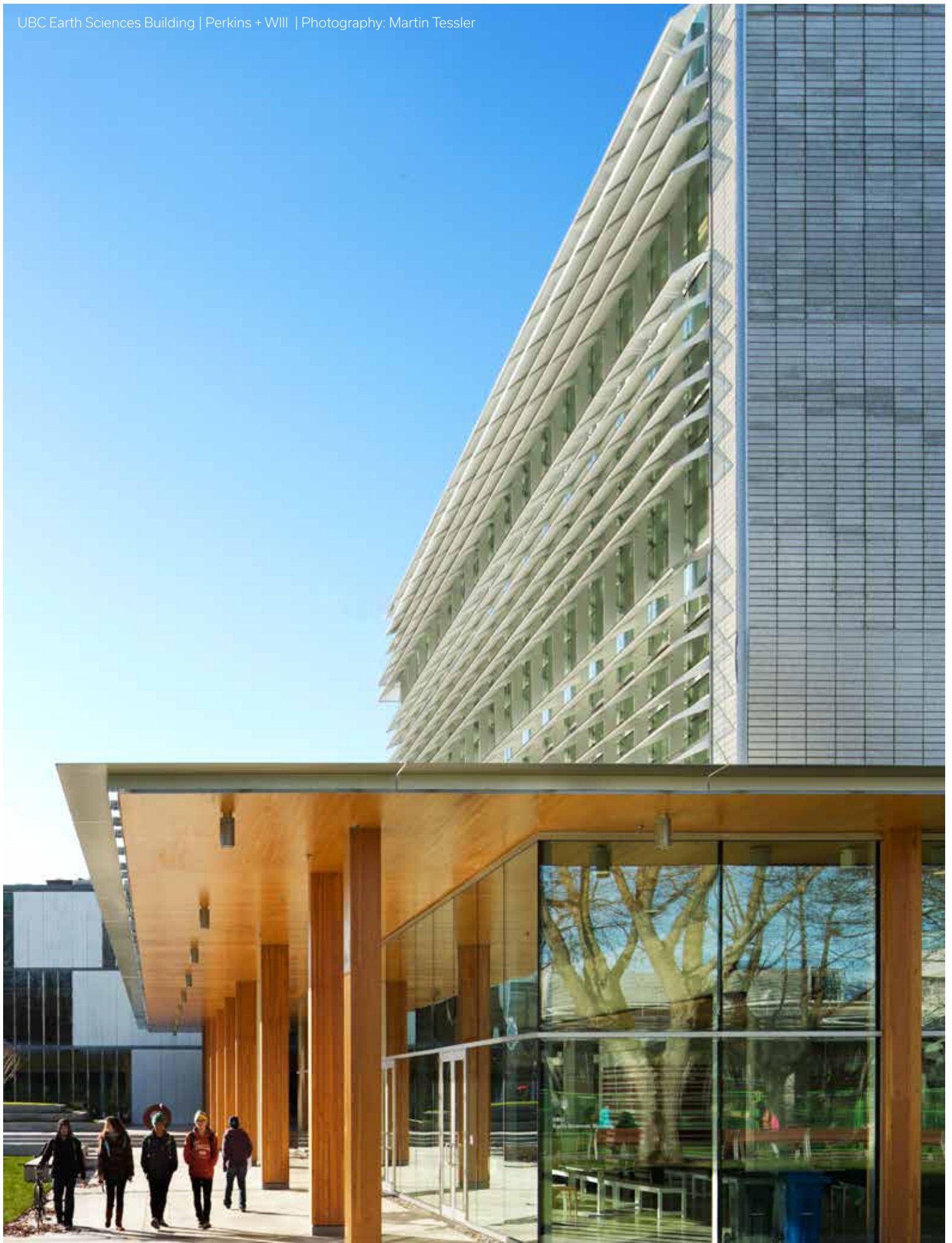
the interior ceiling finish of the museum and café. This feature unifies the interior and exterior spaces, giving occupants a connection to nature and the outdoors. Throughout the building, special connections were put in place to attach steel beams and wood beams to engineered wood columns. Diagonal glulam heavy timber braces at the end walls of each story are used to resist seismic loads.

The project sets a new standard of structural performance and innovation in mass timber construction and demonstrates how modern engineered wood can be efficient and cost-effective in institutional projects of this size and scale.









# CALMING



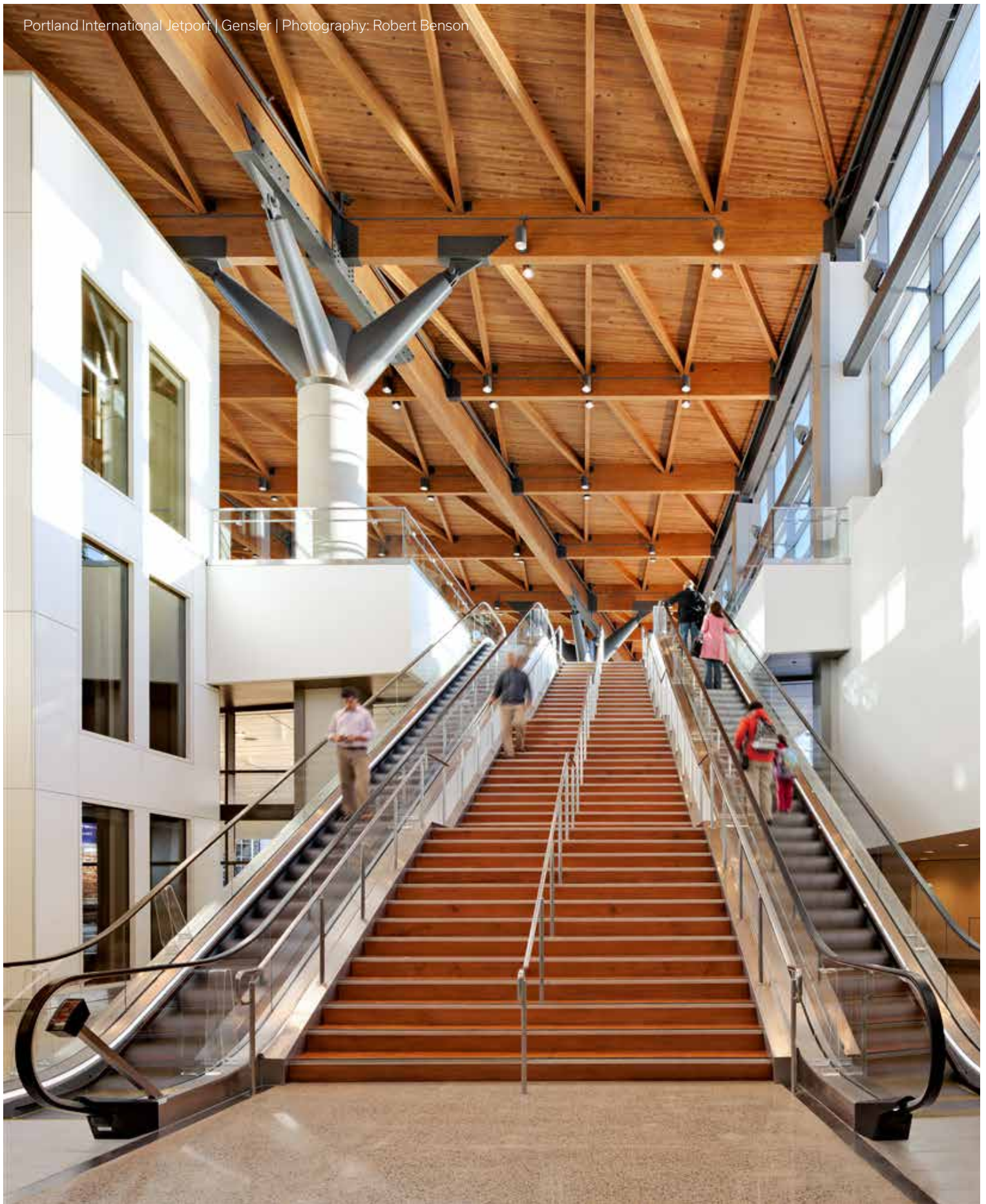


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**GOING PLACES:**  
UNEXPECTED USES OF  
WOOD IN **CIVIC** AND  
**TRANSPORTATION** DESIGN

Wood's durability and flexibility makes it a good choice for civic,  
institutional and transportation infrastructure

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The owner's **challenge:**  
A blindfolded airline passenger coming off the jet bridge should be able to remove his or her blindfold and **instantly know they're in Maine.**

## TIMBER TAKES OFF

### Wood Calms Travellers, Naturally

The Portland International Jetport's context-sensitive design supports Maine's storied brand by incorporating symbols of the state's magnificent woodland beauty. The 40,000 square foot ceiling—an array of southern pine glue-laminated timber (glulam) girders, beams, purlins, and a roof deck of tongue-in-groove planks supported by massive metal-seated tree columns—is the airport's signature design element.

Glulam's inherent strength offers designers nearly unlimited design flexibility when specifying long spans and distances for an airport terminal or other commercial or non-residential applications.

The owner's challenge was direct: A blindfolded airline passenger coming off the jet bridge should be able to remove his or her blindfold and instantly know they're in Maine.

"Wood was selected for many reasons in order to accomplish this goal," says Gensler architect Jim Stanislaski, AIA, LEED AP.

The Gensler Washington D.C. office embraced a context-sensitive design approach, using wood for its biophilic and calming benefits.

"We wanted the terminal to represent the surrounding location," Stanislaski explains.

"There is a real tactile and visual warmth to wood that we liked. Creating an atmosphere where people can connect with the natural environment, a biophilia dimension, is a major advantage in designing with wood."

### RESOURCES:

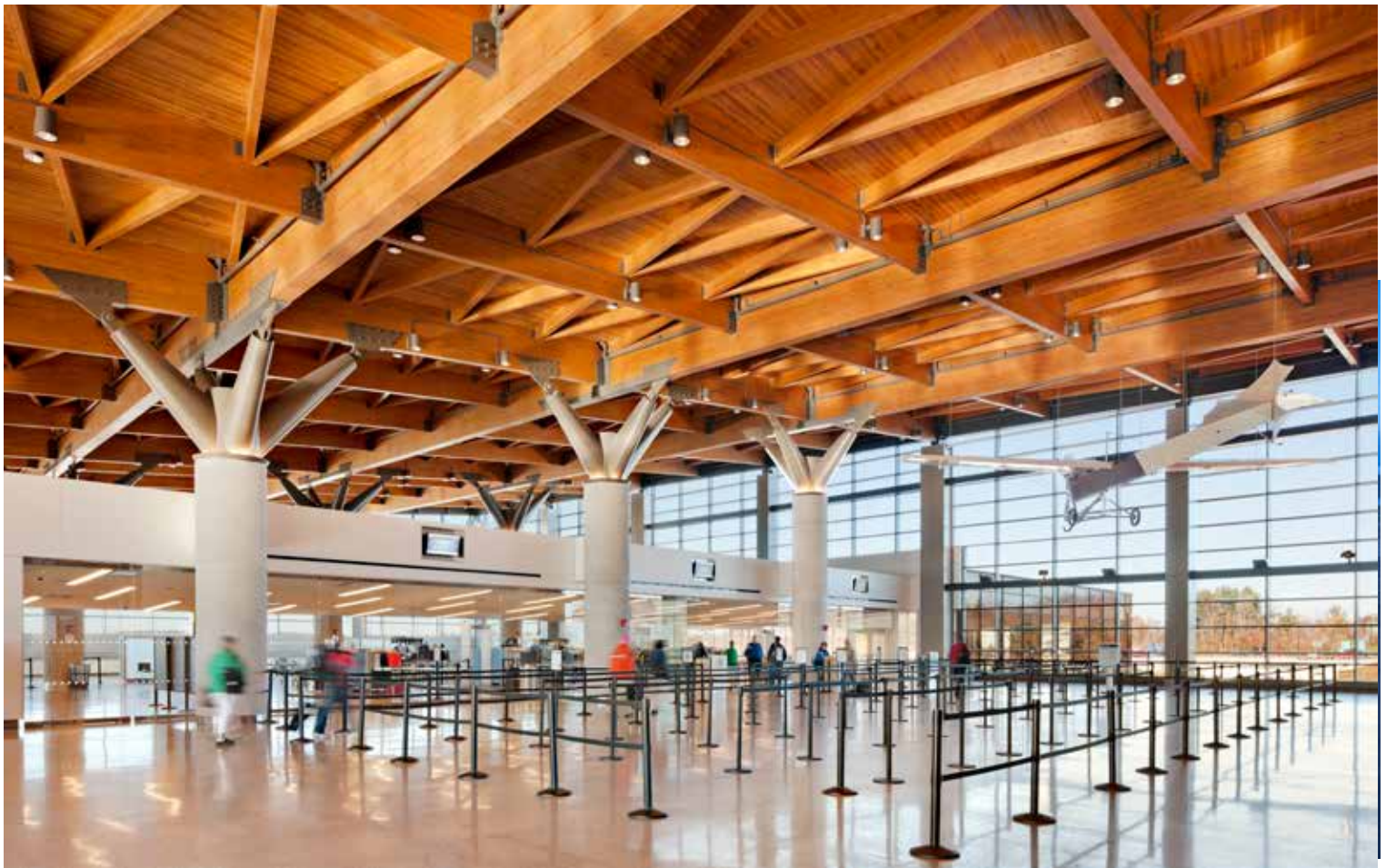
[Learn More About Glulam & Other Products](#)

[Check Out Fort McMurray Airport](#)

[Explore More Public & Institutional Projects](#)





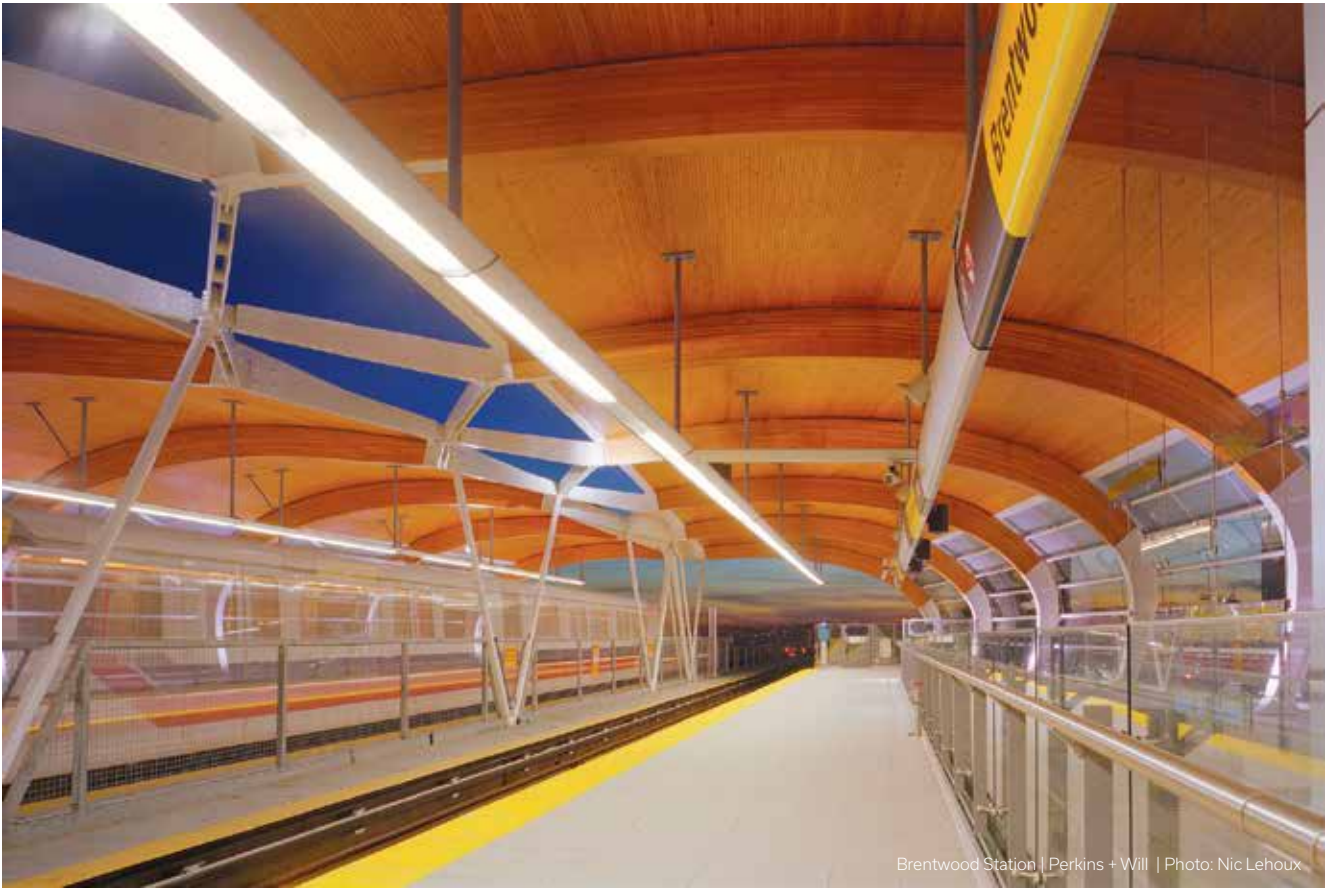




# FLEXIBLE







Brentwood Station | Perkins + Will | Photo: Nic Lehoux

## TIMBER TRAINING

### NLT: A Durable Choice for Transportation

The nail-laminated timber (NLT) at Brentwood station in Vancouver, British Columbia is curved perpendicular to the laminations and uses a combination of curved NLT, curved in plan. The NLT is curved to follow the shape of the glue-laminated beams.

The station structure is an intriguing combination of high and low tech. The double-curved form could not be defined mathematically, so it had to be designed using 3D computer software. Although the glazing follows a double curve, the model

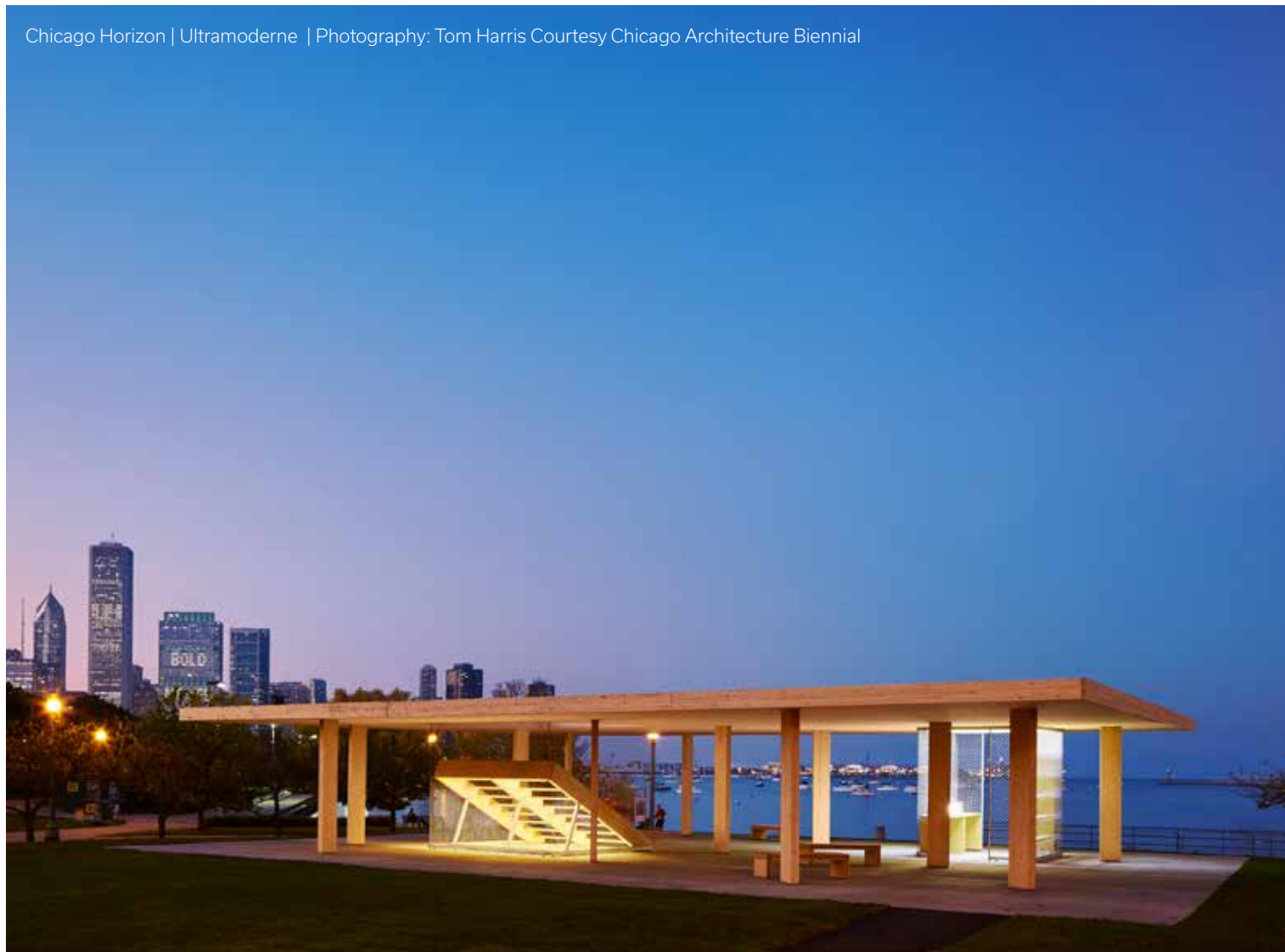
made it possible to design a swivelling supporting clip that permitted 70% of the glazed area to be covered with flat panels of a standard size.

The NLT spans between the curved glue-laminated beams set at varying angles. The result is an innovative compound curvature building form.

#### RESOURCES:

[Learn More About NLT](#)

[Download the NLT Guide](#)





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## COMMUNITY ROOTS: WOOD IS A NATURAL CHOICE FOR **PUBLIC BUILDINGS**

Community facilities built with wood products connect residents to local craftsmanship and contribute to economic vitality

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Scott Family Amazeum | Haizlip Studio | Photography: Jeffrey Jacobs



## A WOOD WELCOMING

### A Family-Friendly Warm Welcoming Space

The Scott Family Amazeum is a 50,000 square foot children's discovery museum in Bentonville, AK that provides educational learning experiences through hands-on interactive exhibits that foster a sense of place, showcase technology and endear respect for the natural world. The building contains 20,000 square feet of indoor exhibits including an art studio, learning labs, and Maker Space.

The structure is low-slung and features a curved roof structure comprised of glue-laminated timber beams and wood

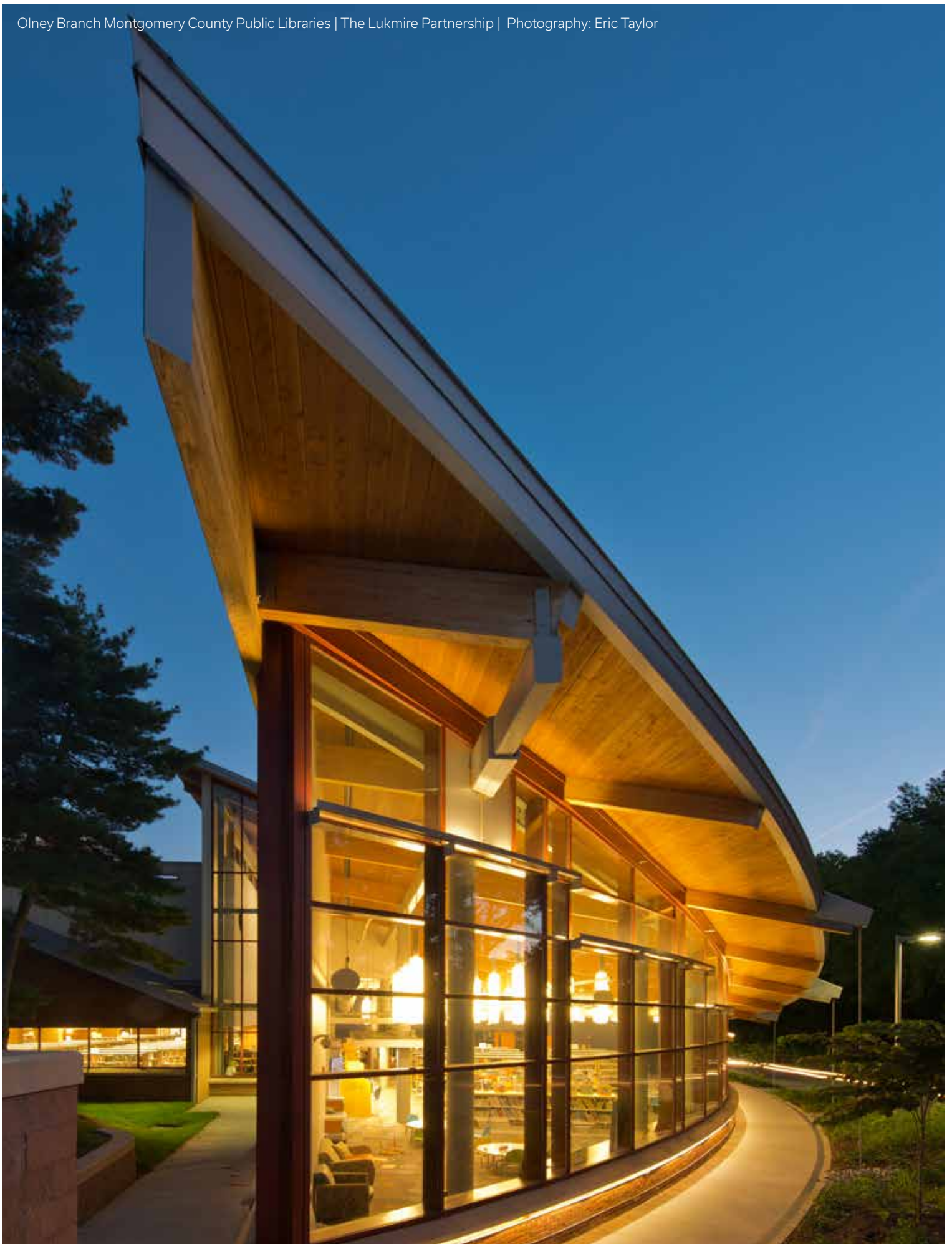
decking, and uses conventional steel frame construction. The exterior of the building is clad in zinc metal panels, vertical tongue and groove cedar and clear and colored glazing.

Wood was used in the building process to complement the surrounding natural environment of Northwest Arkansas that could not be expressed through any other material. Cedar cladding is prominently featured in the additive forms that append the main building mass.

Terry Trueblood Boathouse | ASK Studio | Photo: Cameron Campbell











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