MASS PLY BY FRERES

CASE STUDY

WOODLAND PARK ZOO'S FOREST TRAILHEAD EXHIBIT



SPECS

Building Type: Commercial, Community/Civic

Location: Seattle, WA

Architect: LMN Architects

Sq. Footage: 12,000

Year completed: 2026

> "Mass Ply was chosen for the project primarily because it evokes the feeling of being in a tree canopy — perfect for an exhibit focused on forests and sustainable forest management."
>
> – Mark La Venture, Associate (PA), LMN Architects

CHALLENGE

Design a mass timber pavilion that could serve as a functional structure and a visual expression of the Woodland Park Zoo's conservation message.

SOLUTION

LMN Architects selected Mass Ply for its thematic resonance, aesthetic versatility, and value. They used Mass Ply panels, beams, and columns throughout the pavilion.

RESULT

Forest Trailhead exhibit opened May 1, 2026, in Seattle, delivering an immersive forest canopy experience in a Pacific Northwest-made mass timber pavilion targeting LEED Gold certification.

OREGON MASS PLY HELPS SEATTLE'S WOODLAND PARK ZOO SHARE ITS VALUABLE CONSERVATION MESSAGE

When LMN Architects set out to design a 12,000-square-foot pavilion at the heart of the new Forest Trailhead exhibit at Woodland Park Zoo, they needed a structurally sound material that could also carry the zoo's conservation message. Freres Engineered Wood's Mass Ply met both needs.

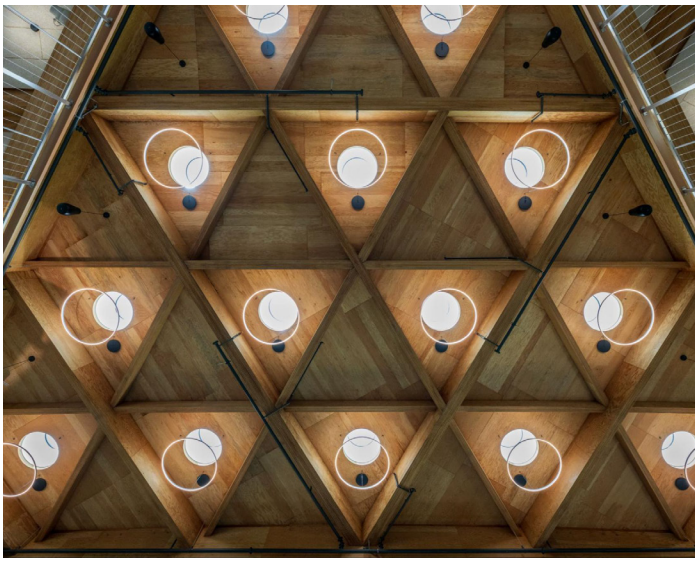


Photo: Matt Swain Photography

PARTNERS

WOODLAND PARK ZOO
LMN ARCHITECTS
LUND OPSAHL
KPFF CONSULTING ENGINEERS
PAE ENGINEERS
SELLEN CONSTRUCTION

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DESIGNED WITH NATURE IN MIND

The pavilion's main roof is formed by Mass Ply CLT panels supported by custom-cut Mass Ply girders. Secondary and tertiary Mass Ply beams build out the structure's distinctive form, all carried by Mass Ply columns. CNC cutting enabled the design team to shape custom beams with curved undersides and faceted tops, resulting in a dome-like interior. Prefabricated panels also helped compress the construction schedule and cut labor costs. A series of round skylights punctures the roof, letting dappled light filter through, mimicking gaps in a forest canopy. Mass Ply also extends beyond the building envelope to the eaves and a cantilevered terrace. Panels topped with a concrete slab form the floors and sloped walkways throughout.

EARTH-FRIENDLY BENEFITS

On the sustainability front, Mass Ply emits less carbon than concrete and steel and is produced primarily from small-diameter trees, thereby thinning overstocked forests. The building incorporates several other sustainable design strategies, including bird-safe glazing throughout to protect local wildlife, on-site stormwater management, and solar panels. Forest Trailhead officially opened on May 1, 2026, and is targeting LEED Gold certification.

Considering Mass Ply for your next project?
Contact us today.

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Mass Ply is a product of Freres Engineered Wood