

THE EXTERIOR OF HOLGATE LIBRARY BEAMS WITH THE WARMTH OF THE STRUCTURE WITHIN

Source: Bora Architecture & Interiors; Credit: Lara Swimmer

CASE STUDY: HOLGATE LIBRARY

MASS TIMBER PLAYS ROLE IN VIBRANT COMMUNITY SPACE

PROJECT OWNER: MULTNOMAH COUNTY LIBRARY

PROJECT LOCATION: 7905 SE HOLGATE BOULEVARD, PORTLAND, OR 97206

COMPLETION DATE: JULY 13, 2024

ARCHITECT/DESIGNER: BORA ARCHITECTURE & INTERIORS

MASS TIMBER ENGINEER/MANUFACTURER: TIMBERLAB (VDC, FABRICATION OF GL, AND INSTALLATION), KALESNIKOFF (MANUFACTURING OF CLT AND GL, FABRICATION OF CLT)

GENERAL CONTRACTOR: SWINERTON BUILDERS

STRUCTURAL ENGINEER: EQUILIBRIUM ENGINEERS, LLC

MECHANICAL, ELECTRICAL, AND PLUMBING: ARRIS CONSULTING, LLC

THE NEW 2-STORY Holgate Library for Multnomah County Library in Southeast Portland is one of the largest libraries in the county, tripling the size of the original 1971 building to accommodate one of the city's most diverse communities. Boasting a mass timber structure, the library is designed to foster a culture of civic pride, offering healthy and inspiring spaces amply connected to nature that will provide patrons of all ages and backgrounds with an uplifting and welcoming library experience.

Sitting prominently along Southeast Holgate Boulevard, the building is designed as a distinctive inward-folding form along the north and south, framing outdoor spaces and welcoming commu-



INTERIOR SPACES BECOME A STRONG CELEBRATION OF PLACE BY FEATURING PACIFIC NORTHWEST DOUGLAS-FIR

Source: Bora Architecture & Interiors Credit: Lara Swimmer



THE MAIN READING ROOM ON THE SECOND STORY SERVES A DIVERSE COMMUNITY

Source: Bora Architecture & Interiors Credit: Lara Swimmer

nities in. Mass timber canopies extend to receive patrons from the parking lot on the north side and Holgate on the south, providing cover from weather at both entry points.

Taking inspiration from the fluttering wings of the butterfly—a universal symbol of resilience, hope, beauty, and transformation—the building is wrapped in custom chevron-patterned metal cladding, creating a calming yet dynamic rhythmic play of light and shadow. Larger areas of glass offer visibility into the children's library and flexible meeting spaces on the ground floor, activating and connecting spaces inside and out.

Using a Design Justice lens, extensive community engagement sessions were held to ensure the building would authentically represent its patrons. This effort resulted in flexible programming and spaces including a large play and learning area for families, a dedicated teen room, and an outdoor plaza for gathering. The community publicly voted on Holgate Library's interior design and exterior color and patterns, as well as the designs of the

local artists that will enliven the lobby and exterior. At every turn, the design will reflect its patrons' aspirations to make the new library an inclusive celebration of people and place.

The power of place is strengthened with the use of a Pacific Northwest Douglas-fir timber frame. The timber strategy is a hybrid 1-way/2-way frame. The ground floor is divided into many rooms, minimizing the impact of the several columns required for an efficient 1-way frame. The additional columns also help carry substantial structural loads from the book stacks. The second story benefits from a reduced number of roof-supporting columns by employing girders in the large open reading rooms. The 3-ply Cross-Laminated Timber (CLT) decks carry gravity loads and act as horizontal diaphragms. Buckling Restrained Braces (BRB) serve as the vertical lateral elements and help reduce the overall carbon footprint by 61 percent, compared to conventional steel/concrete construction.

This case study has not been fact-checked, but it has been edited for length, clarity, grammar, and style.