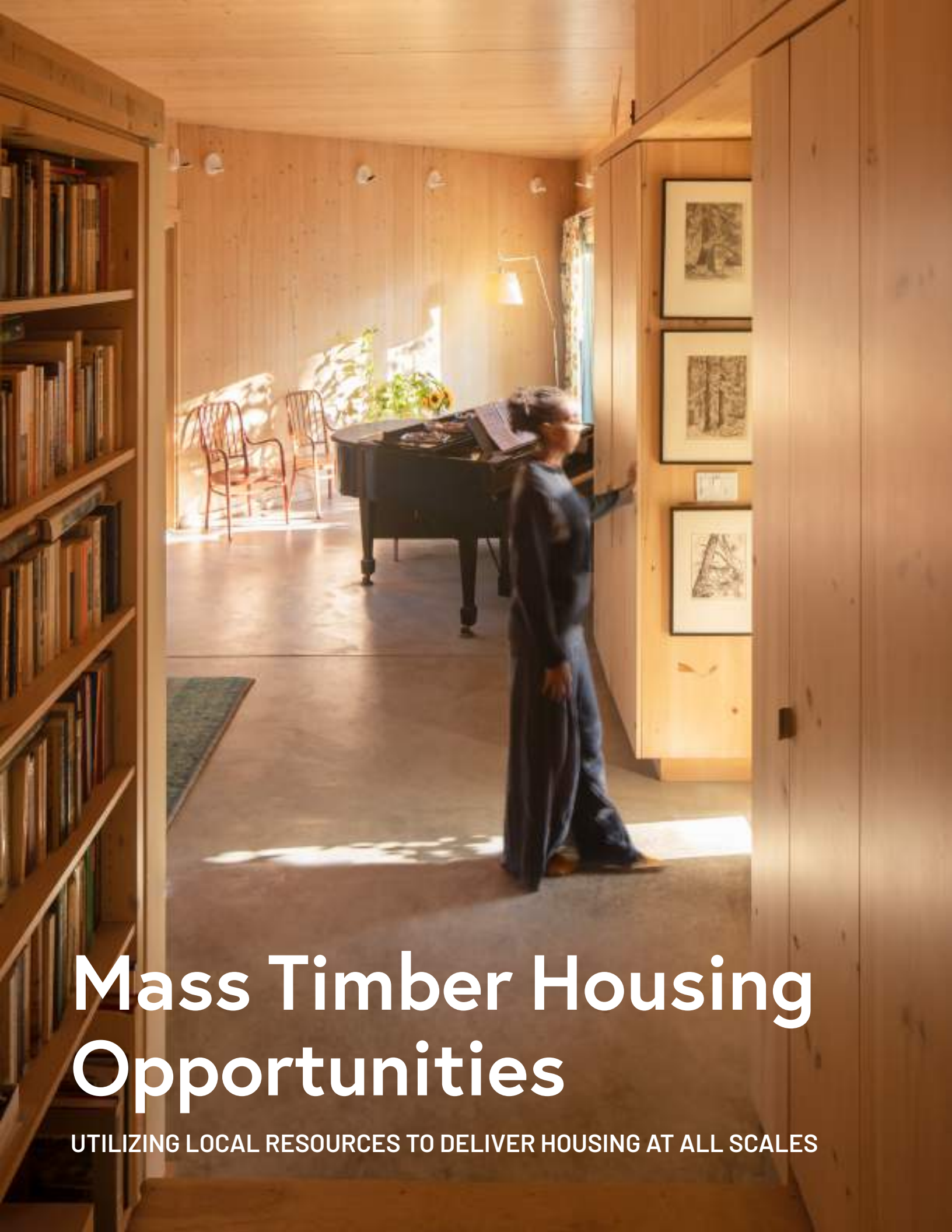


Mass Timber Housing Opportunities

UTILIZING LOCAL RESOURCES TO DELIVER HOUSING AT ALL SCALES

Lead Producers

Erica Spiritos
EXECUTIVE DIRECTOR

Sofia Chavez
DESIGN/RESEARCH

Contributors

This publication reflects the deep commitment and innovation of organizations dedicated to developing projects with mass timber across different typologies. We would like to thank the MASSTAC Housing Committee members and individuals for their participation and support.

Matthias Olt
ARCADIS

Susan Jones
ATELIERJONES

Meghan Doring
ATELIERJONES

Jason Whitney
COUGHLIN PORTER LUNDEEN

Geoffrey Wood
CRTC

Darrin Griechen
GREEN CANOPY NODE

Sadie Carlson
GREEN CANOPY NODE

Adam Slivers
HOLMES US

Logan Goins
LSW ARCHITECTS

Todd Beyreuther
MASS TIMBER SYSTEMS

Myer Harrell
PERKINS&WILL

Alex Mondau
TIETON CABIN COMPANY

Matthew Collins
UPTIC STUDIOS

Photo Credits

Andrew Latreille
CHILES HOUSE

Andrew Pogue Photography
CARBON12

Flor Projects
HEARTWOOD APARTMENTS

Inside Spokane Photography
CLT TOWNHOME BUILDING KIT

Jeremy Bitterman Photography
THE CANYONS
EXTERIOR & INTERIORS

Marcus Kaufmann
THE CANYONS

John Hyland Construction
CROSSWOOD APARTMENTS

Lara Swimmer Photography
SIERRA HOUSES, CLTHOUSE,
HEARTWOOD APARTMENTS

Notion Workshop
FRIDAY HARBOR WAVE

Oliver Irwin Photography
BLOCKHOUSE

Riff Creative
PATHHOUSE

Taylor White
CROSSWOOD APARTMENT

Truebeck Construction
CHILES HOUSE

FRONT COVER IMAGE
CLTHouse, atelierjones, © Lara Swimmer Photography
BACK COVER IMAGE
Blockhouse, Uptic Studios, © Oliver Irwin Photography

Acknowledgements

This Book was funded by the Washington State Department of Commerce, through the Innovation Cluster Accelerator Program.

Funding from the Washington State Department of Commerce is under grant number 25-78250-005.

The Washington Mass Timber Accelerator would like to express its gratitude for the generous funding provided by the Washington State Department of Commerce, which has enabled Washington's design, construction, and manufacturing industries to show the nation how we might sustainably address our housing crisis, at all scales, and across rural and urban landscapes.

Washington State Department of Commerce

About the Washington Mass Timber Accelerator

The Washington Mass Timber Accelerator (MASSTAC) is a non-profit organization working to advance high quality, low-carbon construction through increased utilization of locally manufactured mass timber. With representation from Indigenous communities, government agencies, private industry, labor organizations, and forestry, we are the central hub of mass timber activity in the State of Washington.

Our Mission

To sustainably and equitably accelerate the adoption of mass timber in construction, in Washington and nationally.

Our Vision

Locally manufactured mass timber is driving cleaner, faster, safer construction and healthier, more beautiful buildings in Washington and beyond.

We envision a future where mass timber is not only a standard in construction but also a catalyst for economic growth, community development, and environmental stewardship. Where sustainable mass timber buildings provide healthy and inspired environments for living, working, learning, playing, and healing. Where reciprocal relationships between cities and forests, urban and rural communities, support social, environmental, and economic well-being for our region.

Our Funders

Seed funding for MASSTAC was provided by the City of Seattle Office of Economic Development, and the Washington State Department of Commerce.

Contents

Foreword

Rico Quirindongo

DIRECTOR, OFFICE OF PLANNING
& COMMUNITY DEVELOPMENT, CITY OF SEATTLE

From Vancouver, British Columbia to Portland, Oregon, Seattle, Washington and the Olympic Peninsula, the Pacific Northwest has deep roots in the timber industry. Timber production in the state of Washington has not only shaped our cities but has also been pivotal in defining the region's economic trajectory. The state's forests, particularly in the Olympic Peninsula and the Cascade Range, have long been a rich source of timber, which fueled the state's development into one of the nation's most prosperous regions.

And so, the timber industry in Washington was not just about extracting resources, it was about transformation. The rise of the timber industry put Washington on the map and contributed significantly to the establishment of the Pacific Northwest as an industrial hub during the early 20th century. Cities like Seattle grew rapidly due to the vast timber resources of the region. The iconic sawmills and logging camps that dotted the Puget Sound provided raw materials for much of the nation's infrastructure and built the foundation of the Pacific Northwest economy. Washington's timber industry, along with its proximity to the Pacific Ocean, also played a key role in the development of ports and transportation networks, which allowed timber products to be exported globally. The growth of the railroads, shipyards, and other transportation networks followed in the wake of intensive timber harvesting, creating a powerful industrial economy. As Seattle and the surrounding areas became the epicenter of timber production, the state's economy flourished. For decades, timber was the cornerstone of the region's prosperity.

However, as the world has grown more environmentally conscious in the last several decades, the traditional timber industry has faced many challenges. Unsustainable logging practices and deforestation concerns prompted a call for a different approach to the work. Today, the demand for timber remains strong, and we are moving into a more sustainable relationship with the forests. Simultaneously, we are recognizing the power of wood to be used as a substitute for energy intensive and carbon-emitting structural materials.

This is where the new frontier of mass timber comes into play. Today, we find ourselves at a crossroads where the timber industry, once defined by traditional methods, is evolving into something even more revolutionary with the development of cross-laminated timber (CLT). Utilizing products such as CLT, mass timber construction is not just reshaping construction, but paving the way for a more sustainable, carbon-neutral future while creating jobs, spurring economic growth, and supporting the state's industrial and architectural innovations.

CLT is an engineered wood product that has been hailed as a breakthrough in sustainable building, offering a new way to utilize the region's rich forest resources while dramatically reducing carbon emissions from traditional construction. A shift to mass timber is critical for Washington's ambitious goals of achieving carbon neutrality in the coming decades.

Mass timber is not just a material; it represents a new vision for the state's future, combining the historical legacy of timber production with cutting-edge innovations in architecture and construction. As a renewable resource, mass timber is part of the solution to reducing the carbon footprint of our built environment. When sourced and produced sustainably, mass timber buildings can sequester carbon, locking away greenhouse gases that would otherwise contribute to climate change.

" Utilizing products such as CLT, mass timber construction is not just reshaping construction, but paving the way for a more sustainable, carbon-neutral future while creating jobs, spurring economic growth, and supporting the state's industrial and architectural innovations. "

The Canyons, LSW Architects
Photo: © Marcus Kaufmann Photography

The production of mass timber also uses far less energy than traditional construction materials like concrete and steel, making it a key component in Washington's transition to a carbon-neutral economy.

Beyond its environmental benefits, mass timber has the potential to invigorate the state's economy and provide a pathway to future job growth. From blue-collar construction industry jobs in the assembly and erection of mass timber buildings to white-collar jobs in architectural design and engineering of carbon-neutral buildings, the industry holds tremendous promise for diverse job creation. The growth of mass timber manufacturing could revitalize rural communities in the state's timber-producing regions, such as the Olympic Peninsula, creating opportunities for local manufacturing across the region. Investment in the development of mass timber production facilities and the necessary infrastructure to support the industry is critical to the state's economic future.

This investment will also help foster innovation in construction techniques. The ability to build mass timber skyscrapers, residential buildings, and even single-family homes represents a new era for the construction industry. For Seattle and its neighboring cities, mass timber offers a more efficient, sustainable way to build for the growing population. It opens new possibilities for housing production, from small accessory dwelling units (ADUs) to large-scale transit-oriented development (TOD) projects. Mass timber allows for faster construction timelines, which is essential in addressing the housing crisis that many cities across the U.S. are currently facing. Whether for mid-rise apartment buildings in Seattle or sustainable affordable housing projects in rural communities, mass timber provides a scalable solution that can meet the housing demands for urban and rural communities across the region.

What's more, the integration of mass timber into the design and construction of tall buildings, including mass timber towers, is breaking new ground in architectural design. Washington, a region known for its innovative architectural firms and design-driven approach to construction, is poised to lead this charge.

Mass timber provides a unique material aesthetic, warmth, and versatility that cannot be replicated with traditional construction materials. As architects and builders increasingly turn to mass timber, Washington could position itself at the forefront of a global movement toward sustainable building practices.

Investing in mass timber represents a chance to honor the region's timber roots while propelling the state toward a more sustainable, carbon-neutral future. Washington's timber industry has always been a powerful economic engine, and the mass timber sector offers the potential to continue that legacy while aligning with a green energy and materials strategy and a carbon neutral future. Supporting the emerging mass timber industry will strengthen our economy, reduce global carbon emissions, create green jobs, and improve the quality of life for residents in both urban and rural communities. Mass timber is part of the sustainable future that I want to see for myself, my family, and the diverse communities of which we are all a part.

This book outlines a vision for how we can invest in and see a sustainable vision forward, one that leans into our housing needs for the state and the region.

I am grateful to the leadership and investments of Washington Governor Bob Ferguson, Policy Director Sahar Fathi, Housing Senior Policy Advisor Nicholas Carr, City of Seattle Mayor Bruce Harrell, Office of Economic Development Director Markham McIntyre, Manufacturing and Maritime Strategic Advisor John Persak, and Washington Mass Timber Accelerator Executive Director Erica Spiritos. Their vision, their efforts, and their commitment in partnership with state, city, and industry leadership makes me hopeful for our collective future.

The Canyons, LSW Architects
Photo: © Andrew Pogue Photography

Introduction

Stronger, Faster, Greener: Mass Timber Housing in Action

The mass timber industry is evolving rapidly, reshaping the way we think about building design and construction. Once a niche material, mass timber has rapidly gained acceptance across the architectural and construction industries, thanks to its remarkable versatility, sustainability, and economic advantages. With advancements in technology and updates to the International Building Code (IBC), including allowances for taller structures currently up to 18 stories, mass timber is poised to transform skylines and communities alike.

Mass timber offers a compelling suite of benefits that make it a smart choice for developers, institutions, and private clients alike:

- **Revenue Generation:** Mass timber buildings offer opportunities for increased density, faster speed to market, and enhanced leasing velocity due to the beauty of exposed wood.
- **Streamlined Construction:** Harnessing the potential of prefabrication to reduce construction timelines, mass timber buildings are erected quickly, quietly, and with minimal waste generated on-site.
- **Carbon Reduction:** A renewable material sourced from sustainably managed forests, mass timber reduces reliance on high-carbon materials and stores carbon throughout its lifecycle.
- **Building Performance:** Mass timber buildings offer durability, thermal comfort with energy efficiency, fire-resistance, and higher indoor air quality due to a reduced reliance on finish materials.
- **Health and Wellness:** Mass timber buildings enhance occupant well-being by fostering connections to natural materials. Research links such environments to improved cognitive function, reduced stress levels, and overall psychological benefits.

The state of Washington has emerged as a leader in this movement, with forward-thinking policies that enable mass timber's use in taller buildings. However, broader adoption will require continued collaboration among architects, developers, policymakers, and builders as we co-create a better way to build.

This Mass Timber Housing look book celebrates the vast potential of mass timber in housing projects throughout the Pacific Northwest, showcasing examples across categories such as modular and custom single-family homes, accessory dwelling units (ADUs), cluster housing, townhome, low- rise and mid-rise developments, tall timber housing, and skyscrapers. These projects — both built and unbuilt — demonstrate the material's adaptability and its ability to meet diverse housing needs. While the focus is on Washington State, the lessons and inspiration drawn from these projects resonate across North America and beyond. The projects in this look book demonstrate what is possible.

The next step is yours.

CLT Townhome Building Kit, Green Canopy Node
Photo: © Spokane Photography

Meet Washington's Mass Timber Manufacturers

Cascade Joinery • Bellingham, WA

FABRICATOR

For 33 years, Cascade Joinery has been crafting timberwork for high-end, commercial, residential, and municipal buildings, in a vast range of architectural styles. Today, we're one of the Northwest's leading producers of structural and decorative crafted timberwork, providing creative solutions to complex structural challenges. We believe in Mass Timber, and we're devoted to, and passionate about, delivering on it. From design-phase consultation to fabrication and on-site installation, we're by your side to manifest the most ambitious Mass Timber projects.
For more information, contact: Allen Stoltzfus, Sales Engineer
allen@cascadejoinery.com • *cascadejoinery.com*

Composite Recycling Technology Center (CRTC)

MASS TIMBER PANELS (CLT)

CRTC Building Innovation Center was established to provide mass timber-based housing solutions to rapidly deployable military housing, with an emphasis on durability and protection. With access to vast stands of rapidly growing coastal western hemlock on the Olympic Peninsula, the CRTC-BIC is the first entity worldwide to utilize thermal modification to stabilize and enable this underutilized species in CLT. ACLT - Advanced Cross Laminated Timber, is a CLT product that uses thermal modification (TM) of the lamstock in place of kiln-dried lumber. The TM process imparts improved dimensional stability as well as increased resistance to mold and mildew attack. Sourcing our primary lumber supply from the Makah Tribe, we have expanded to provide tribal and other affordable single-family modular detached homes.
For more information, contact: Glenn Ellis Jr, Housing Business Manager
(505) 274-9198 • gellis@crtc-wa.org • *compositerecycling.org*

Green Canopy Node • Seattle, WA

PREFABRICATED MASS TIMBER HOUSING

Green Canopy NODE builds sustainable housing using offsite and traditional methods. We service developers in Washington and Oregon to acquire, plan, and construct their low rise multifamily and multi-unit projects. We innovate construction methods and components to increase cost control, reduce timelines, and improve sustainability. Green Canopy NODE offers a catalog of mass timber modular houses, townhomes, and apartments that are pre-designed and customizable to deliver carbon negative housing for developers and neighborhoods.
For more information, visit: *greencanopynode.com*

Mercer Mass Timber • Spokane Valley, WA

COMPLETE MASS TIMBER STRUCTURES

As a global mass timber manufacturer with operations in Washington, we provide high-performance prefabricated solutions for residential construction at all scales. Our vertically integrated approach—combining digital design, off-site manufacturing, and construction services—reduces project risk, accelerates schedules, minimizes site disruption, and enhances energy performance. From modular homes to mid- and high-rise developments, we enable sustainable, innovative, and resilient housing solutions.
For more information, contact: clt@mercerint.com • *mercermasstimber.com*

Tieton Cabin Co. • Tieton, WA

PREFABRICATED MASS TIMBER HOUSING

Tieton Cabin Company, located in Tieton, WA, builds ready-made, thoughtfully designed one and two bedroom small homes optimized for versatile functionality as guest accommodations, income properties, or personal retreats. Robustly built with Cross Laminated Timber, Rockwool installation, steel frames and premium fixtures for energy efficiency, durability and performance, their elegant simplicity offers modern, timeless warmth with essential features. IBC compliant and WA State L&I certified, these homes arrive complete and install in one day with minimal disruption, ready for immediate use.
For more information, contact: Alex Mondau, Director of Strategy • 509-673-1030
alex@tietoncabinco.com • *tietoncabinco.com*

Vaagen Timbers • Colville, WA

COMPLETE MASS TIMBER STRUCTURES

Vaagen Timbers is a leader in sustainable mass timber manufacturing, transforming small-diameter logs from forest restoration into premium glulam and cross-laminated timber (CLT) products. By sourcing wood from within 100 miles of their Colville, WA (USA) facility, they reduce emissions and support local economies. Their precision-engineered glulam beams offer exceptional strength and beauty, meeting stringent ANSI/APA standards. Choosing Vaagen Timbers means investing in resilient, low-carbon buildings while actively contributing to healthier forests and wildfire pcrevention. From Forest to Frame — with purpose.
For more information, contact: Joel D. Rohrs, Executive Vice President
(206) 708-3260 • *vaagentimbers.com*

Washington's Mass Timber Manufacturer's Map

Glue Laminated Timber (Glulam)

Fabrication

Mass Timber Panels (CLT, DLT, MPP)

Prefab Mass Timber Housing

Connectors and Hardware

Complete Mass Timber Structures

Typology 1
Modular Detached Homes

What are modular detached homes?

Ranging in size from 400-1400 square feet, modular detached homes are partially or fully built off-site, then transported to site and assembled on a permanent foundation. Though delivered as flat-pack panelized systems or full volumetric modular construction, designs adhere to the same local and state building codes as traditional site-built houses.

Mass Timber is treated much the same as lightwood frame by residential code, with the exception of lateral design of a structural system utilizing CLT shear walls in a seismic zone. The most recent version of the referenced standard within the International Residential Code, Special Design Provisions for Wind and Seismic (SDPWS) , uses more conservative design values than equivalent plywood shear walls. Architects and designers should be aware of the impact of shear wall aspect ratios and how it affects the placement of openings.

Sierra Houses, atelierjones
Photo: © Lara Swimmer Photography

Why mass timber for this typology?

Modular detached mass timber homes are high-performing and rapidly deployable, with the warmth and beauty of natural wood. Solid timber construction increases durability and longevity and creates an airtight envelope, resulting in lower energy costs. CLT's fire resistance makes it well-suited for Wildland Urban Interface (WUI) zones. As CLT also serves as a finished interior surface, these homes feature improved indoor air quality for healthier living environments free from off-gassing and synthetic materials.

The exposed beauty of the timber panels not only reinforces the feeling of living with nature and associated positive outcomes, but also eliminates the least durable of all exposed building materials – sheetrock. For urban units with high occupant turnover this greatly enhances the value to the owners, while the solid wood walls provide a refuge away from the aggressive noise and chatter of everyday city life.

What are the opportunities to scale?

We can scale the delivery of modular detached mass timber homes to reach a broad demographic of homeowners through thoughtful and flexible designs that can be easily repeated across urban and rural communities. As repeatable standardized designs are deployed, benefits can be compounded and costs reduced significantly.

This solution to our housing crisis is enabled by distributed investments into small, nimble facilities tied to sustainable, local forestry. By keeping the supply chain regional, we reduce transportation emissions, support local jobs, and strengthen the mass timber industry as a key player in Washington's green economy.

The rapid delivery of mass timber housing makes it a good fit for rural areas with labor shortages, as well as for post-disaster rebuilding. In the wake of a fire or flood a mass timber pre-approved permit design can greatly reduce the time and cost investment for homeowners looking to rebuild. Total build time including foundation is days to a few weeks versus six months or more with traditional construction.

Wet-core prefabrication & on-site mass timber assembly
Construction photos courtesy of atelierjones

Sierra House 1.0

Greenville, CA

House 1 is a 780 SF lofted accessory dwelling unit (ADU) designed around flat-pack CLT and a modular wet core containing an efficient kitchen and bathroom as well as much of the homes' mechanical and electrical systems. As part of the rebuilding effort in Greenville, California following the 2021 Dixie Fire, this fire-hardened home utilizes mass timber construction in combination with passive design and Wildland Urban Interface design guidelines. The 1-bedroom format provides a missing typology in rural areas. The unit is available through Pre-Approved Master Permit in Plumas County and is available to residents at a greatly reduced fee.

Website: Sierra Houses

Photos: © Lara Swimmer Photography

PROJECT TEAM

Sierra Institute
OWNER

atelierjones
ARCHITECT

LightsCreek Construction
CONTRACTOR

Harriott Valentine Engineers
STRUCTURAL

Sugarpine Engineering
MEP ENGINEER

Sierra House 2.0

Greenville, CA

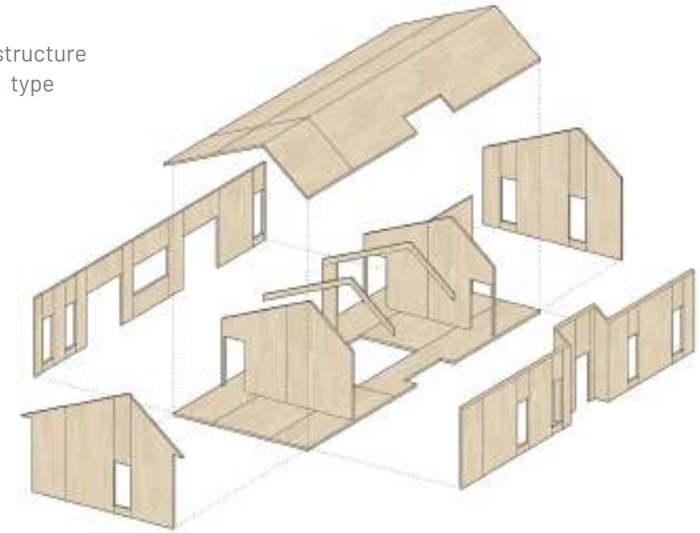
The 2021 Dixie Fire destroyed 1,000 structures, including 660 homes. Three small, 590, 780 and 990 SF modular mass timber prototype houses were developed to advance a new vision for community rebuilding: fire safe structures built with locally sourced materials, allowing denser walkable communities while supporting sustainable forestry and the local economy.

The houses were designed with a prefabricated modular wet core containing kitchen, bathroom, mechanical, and electrical systems. CLT walls, floors, and roofs arrived as flat-pack, prefab elements and were assembled around the wetcores. The structures were erected rapidly on site where minimal local labor was available. This approach can be deployed at scale.

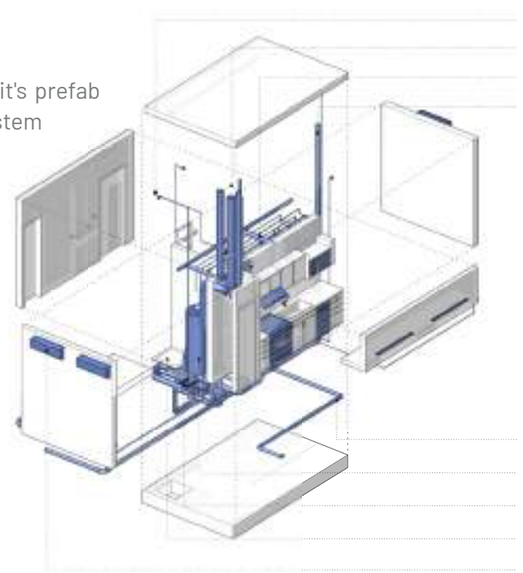
Completed in 2023 • Website: Sierra Houses

Diagrams courtesy of atelierjones
Photo: © Lara Swimmer Photography

CLT STRUCTURE
Panelized modular structure for a 3 bedroom unit type



MEP SYSTEM
Internal view of the unit's prefab volumetric wet core system



PROJECT TEAM

Sierra Institute
OWNER

atelierjones
ARCHITECT

LightsCreek Construction
CONTRACTOR

Harriott Valentine Engineers
STRUCTURAL ENGINEER

Sugarpine Engineering
MEP ENGINEER

SIERRA HOUSE COMPONENTS

Houses are designed with repeatable assemblies and components that allow for efficiencies of scale, making mass timber cost competitive for smaller homes.

Fire-hardened weathering steel + aluminum shell

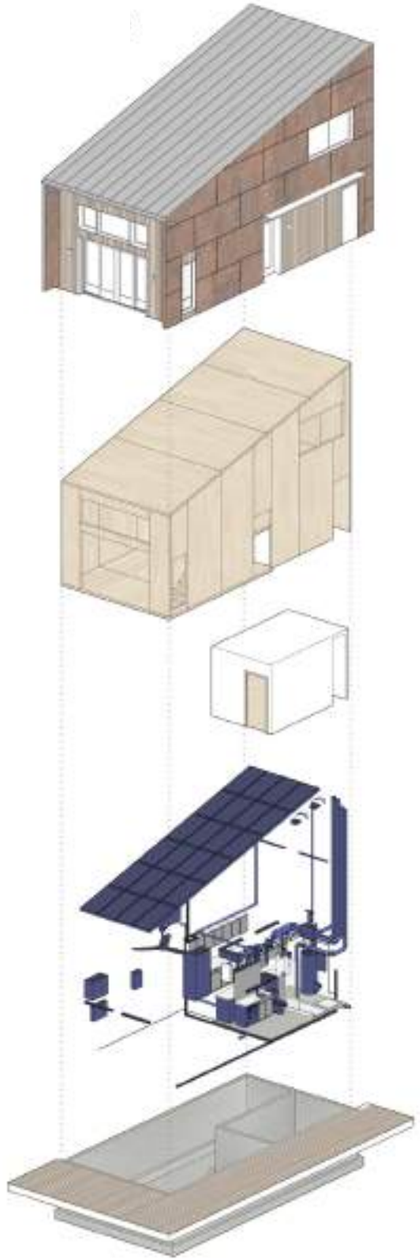
mass timber structure

modular wet core

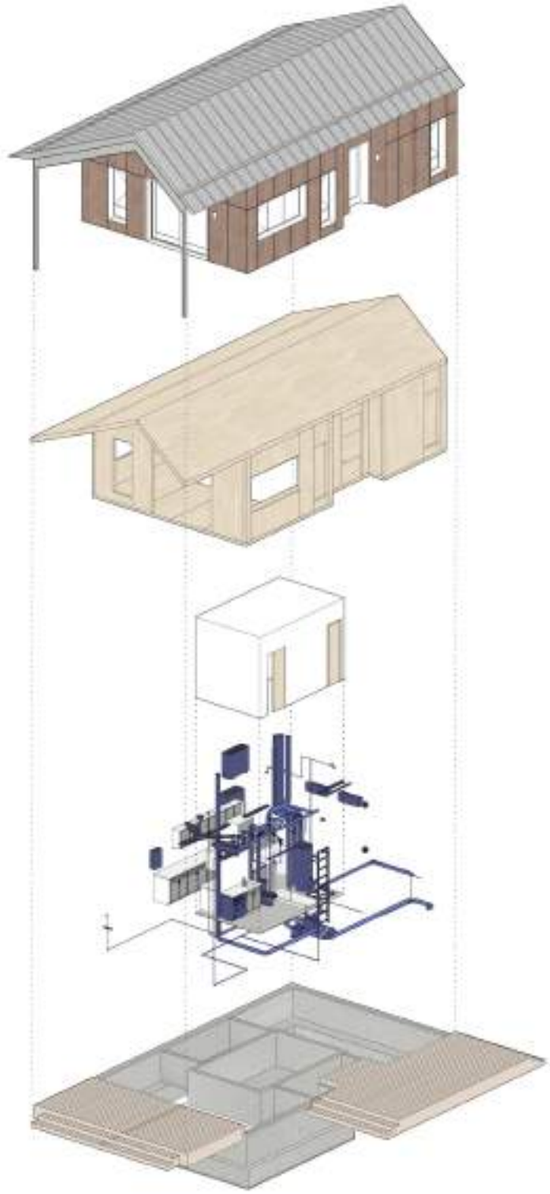
mechanical + electrical + plumbing + fire

foundation + decks

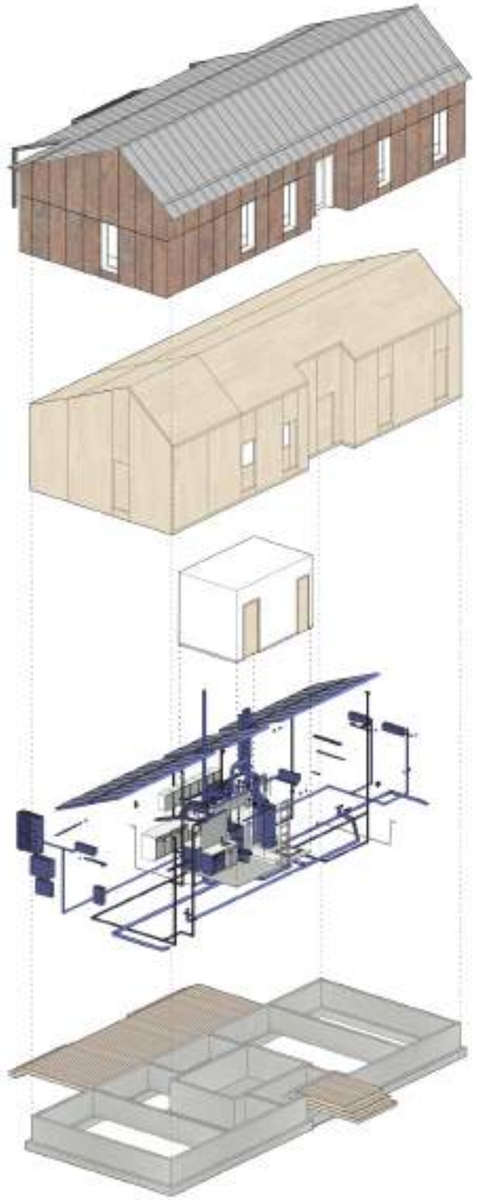
Sierra House 1.0 - 1 bedroom home



Sierra House 2.0 - 2 bedroom home



Sierra House 3.0 - 3 bedroom home



Diagrams courtesy of atelierjones.

Makah Home

Neah Bay, WA

Upending narratives that CLT requires manufacturing investments of $50-100 million, and that CLT small homes are not cost competitive with stick built, this initial tribal housing project is a cute 2BR/1Ba, 965 SF + 455 SF Lanai home. The Makah Tribe supplies milled western hemlock for the Composite Recycling Technology Center's (CRTC) small-panel Advanced CLT (ACLT) products. ACLT is composed of thermally modified wood and carbon fiber strips for a robust wall panel. Dimensional stability from our thermal modification enables using undervalued species usually unsuited for CLT processing.

Website: CRTC Building Innovation Center

At one-tenth the cost of typical CLT plants, this model can be duplicated in rural regions with undervalued timber species, providing local jobs and affordable, durable and elegant homes. The Makah home was designed by the CRTC and Makah, recognizing livability in a remote location with harsh weather conditions, cost-effective design for panelized modular construction, and elimination of sheet-rock and cavity insulation. The Makah Home demonstrates that mass timber single-family housing is a solution that extends well beyond middle to high-end homes.

PROJECT TEAM

CRTC & Makah Tribe
DESIGN

123WestDesignCollective
STRUCTURAL ENGINEER

Makah Tribe
WOOD SOURCING

CRTC
ACLT

Rendering courtesy of Mark O'Brien / CRTC

Friday Harbor Wave

Friday Harbor, WA

Nestled in Friday Harbor, the Wave embodies modern prefabrication and site-responsive design. Using Tieton Cabin Co.'s "Hat Trick" approach, a factory built cabin is customized, then crowned with the "Wave" roof—both a visual link to the sea and protection from shifting island weather. Washington State's Factory Assembled Structure (FAS) program streamlines compliance, accelerating permitting and assembly. Delivered as a complete kit, the home is craned onto its foundation for swift installation. Designed for efficiency, beauty, and sustainability, the Wave seamlessly integrates with its surroundings while ensuring durability and architectural integrity.

Website: Tieton Cabin Co.

Renderings courtesy of Notion Workshop

PROJECT TEAM

Indigo Architecture & Interiors
ARCHITECT

Tieton Cabin Co.
PRE-FABRICATION

Mercer Mass Timber
CLT

FraserWood
GLULAM

PathHouse

PathHouse is a standardized, prefabricated, and volumetric modular building system utilizing sustainable mass timber materials, that can be constructed and deployed at a scale required to help address North America's ever mounting housing crisis. PathHouse provides pre-designed, pre-approved (currently in process), and warrantied housing modules that dramatically reduce design, permitting and construction time. PathHouse modules can be configured in a multitude of ways to fit most project needs. By fully standardizing unit design and offering a limited selection of module types, PathHouse aims to solve the problems that slow down other, more conventional, modular housing manufacturers.

Website: On Demand Modular Housing with Mass Timber

Rendering courtesy of LSW Architects
Photo: © Riff Creative

PROJECT TEAM

US Forest Service
SPONSOR

LSW Architects, PC
ARCHITECT

Mods PDX
PRE-FABRICATION

PAE Engineers
STRUCTURAL

Generate
AEC TECHNOLOGY

Sustainable Northwest
PROCUREMENT

SmartLam
CLT

Freres Mass-Ply
MPP

Baker Woods

Bainbridge Island, WA

Baker Woods is pioneering urban infill by integrating multiple Detached Accessory Dwelling Units (DADUs) alongside new construction single-family homes. These DADUs, built from solid cross-laminated timber (CLT) panels and utilizing Green Canopy NODE's prefabricated building kits, offer an efficient, low-carbon housing solution. Additionally, CLT's natural warmth and biophilic qualities create a healthier, more inviting living space. The exposed wood aesthetic of mass timber beautifully complements the densely wooded site, seamlessly blending modern housing with the surrounding natural landscape. By leveraging mass timber DADUs, Baker Woods maximizes density while maintaining high-quality, energy-efficient homes—offering a scalable, cost-effective approach to urban development.

Website: Green Canopy NODE

Renderings courtesy of Green Canopy NODE

PROJECT TEAM

Green Canopy NODE
DESIGN & PRE-FABRICATION

Mercer Mass Timber
CLT

Elm Street Studio • Tieton, WA

Tieton Cabin Company designed a 300 SF Cross-Laminated Timber (CLT) home to maximize function and aesthetics. Clad in weathering steel, it complements its landscaped yard with a rugged, modern appeal.

PROJECT TEAM

Indigo Architecture & Interiors
ARCHITECT

Tieton Cabin Co.
PRE-FABRICATION

Mercer Mass Timber
CLT

Prefabricated utilizing CLT panels from Mercer Mass Timber ensures precision, sustainability and minimal site disruption. Inside, a full kitchen and queen bed create an efficient living space. Using Washington State's Factory Assembled Structure (FAS) program, these mass timber ADUs are factory-permitted, allowing statewide shipment with only local site planning approval required—offering a streamlined, durable, and low-maintenance housing solution. Everything you need—nothing you don't.

Website: On Demand Modular Housing with Mass Timber

Exterior Photo: © Sam McJunkin
Interior Photo: © Arturo Solorio

CLT House 1.0

Seattle, WA

House 1.0 is a compact 800 square foot 2-bedroom 1 bathroom home developed for the Seattle market. Developed under a Standard Plan, a pre-approval process for efficient permitting of repeatable projects, it is deployable as a backyard cottage or ADU, a stand-alone single-family home, duplex, or cottage court. House 1.0 is targeted to be attainable workforce housing for first-time homeowners or growing multi-generational families.

PROJECT TEAM

atelierjones
ARCHITECT

Harriott Valentine Engineers
STRUCTURAL ENGINEER

Sugarpine Engineering
MEP ENGINEER

CRTC
ACLT

The houses were designed with a prefabricated modular wet core containing kitchen, bathroom, mechanical, and electrical systems. CRTC's innovative Makah-sourced locally thermally modified Western Hemlock CLT walls , floors, and roofs will arrive as flat-pack, prefab elements to be assembled around the wetcores. The structures can be erected rapidly on site with few hands. This approach can be deployed at scale in Seattle or across Washington State. *Standard Plan Permit Expected 2025.*

Renderings courtesy of atelierjones

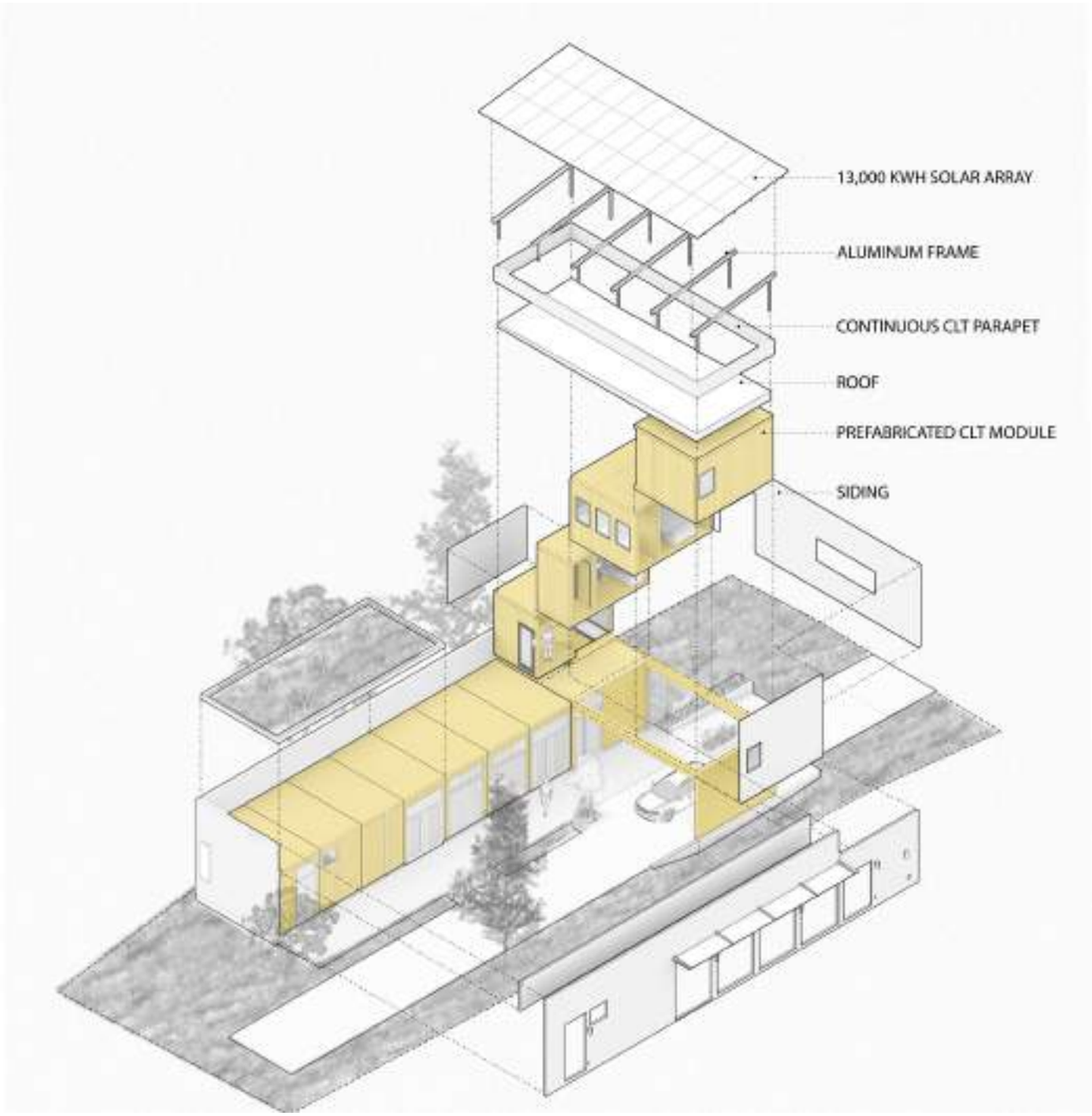
Matt's Place 2.0

Spokane, WA

Matt's Place is a prefabricated, modular, mass timber prototype designed to support patients and families navigating an Amyotrophic Lateral Sclerosis (ALS) diagnosis. The 1,500-square-foot home features a main-floor suite for patients and two upstairs bedrooms and a bathroom for family or caregivers. This separation of zones allows the patient to remain close to loved ones while preserving privacy and dignity. A carport and covered roof deck create weather-protected transitions from vehicle to wheelchair, encouraging safe movement and time outdoors. Cross-laminated timber walls and ceilings are built with modular joints that accommodate weather barriers and splines, while recessed outlets, accessible wiring, and plumbing chases streamline interior systems. Mass timber construction enhances the space by providing a warm, biophilic environment for patient well-being. The property is equipped with smart home technologies customized for ALS patients—such as control systems operable with eye movements—allowing for greater independence and ease of use.

Website: Matt's Place 2.0

Exterior Photo: © Patrick Martinez
Diagram courtesy of Miller Hull Partnership



PROJECT TEAM

Matt Wild, Theresa Whitlock-Wild
OWNERS

Miller Hull Partnership
ARCHITECT OF RECORD

DCI Engineers
STRUCTURAL & CIVIL ENGINEERING

Baker Construction
CONTRACTOR

Vestis Manufacturing
PREFABRICATOR

Vaagen Timbers
CLT

1 On-site installation of prefab walls

2 Entry

3 Family Bedroom

4 Bathroom for ALS Patients

5 Bedroom for ALS patients with direct bathroom access

6 Living Space

7 Prefab CLT wall assembly

Construction and Interior Photos: © Miller Hull Partnership

Typology 2
Custom Detached Homes

What is custom detached home?

A stand-alone home that is uniquely designed and built to meet the specific preferences, needs, and specifications of an individual homeowner—where the owner collaborates closely with architects and builders to create a uniquely tailored floor plan, material palette, and finishes.

Mass Timber is treated much the same as lightwood frame by residential code with the exception of lateral design of a structural system utilizing CLT shear walls in a seismic zone. The most recent version of the referenced standard within the International Residential Code, Special Design Provisions for Wind and Seismic (SDPWS) uses more conservative design values than equivalent plywood shear walls. Architects and designers should be aware of the impact of shear wall aspect ratios and how it affects the placement of openings.

Photo: CLTHouse, atelierjones
© Lara Swimmer Photography

Why mass timber for this typology?

Appealing to the conscientious homeowner, mass timber offers a quality and simplicity of material unlike conventional construction. The opportunity for fully exposed timber on all surfaces with a greatly reduced material palette gives homeowners peace of mind about the materials they are bringing into their homes. Wood-filled biophilic spaces have widely published positive mental and physical health impacts on human inhabitants. Meanwhile the carbon sequestering, renewable materials supports the environmental health of the region and the world beyond.

Mass timber can create a warm, durable, and truly lasting multi-generational legacy home that stands the test of time. These solid timber homes are both nostalgic and forward thinking, conveying permanence while being uniquely compatible with passive design to provide high performance, optimal thermal comfort, and high energy efficiency.

The large panels and precise digital prefabrication allow for innovative and highly crafted and customizable spaces that still evoke the unique qualities and materials of the Pacific Northwest.

What are the opportunities to scale?

The immersive and enticing biophilic appeal of mass timber will continue to grow in the custom housing market as mass timber becomes established in the United States as it has in Europe over the past few decades. Nimble flat-pack prefabrication is ideal for tight urban, remote rural, or climate-constrained sites presented by the custom home market. The natural warmth and tactility of mass timber is right at home in a remote ski chalet perched on a mountain side or a cozy and calming urban refuge.

Mass timber construction is a natural fit for passive design strategies to create uniquely sustainable and high performing homes. These same material characteristics and design principles are applied to create resilient fire-hardened homes in the Wildland Urban Interface, from materials that support the sustainable maintenance of the very forests that threaten these vulnerable areas.

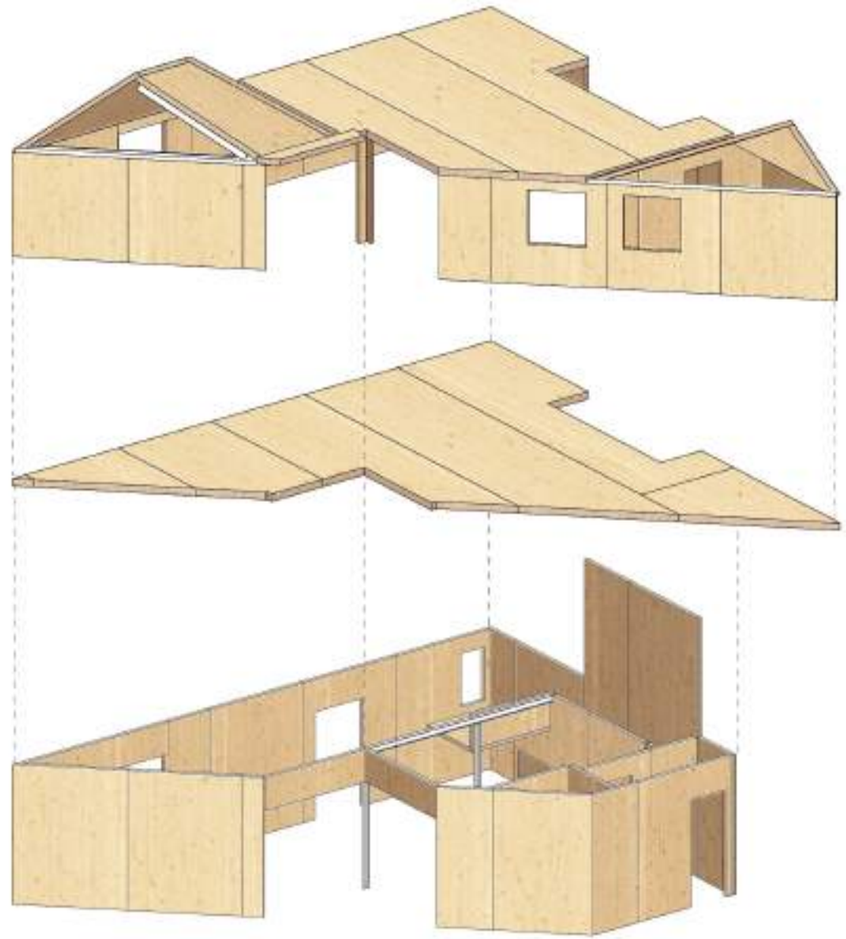
CLTHouse

Seattle, WA

CLTHouse represents atelierjones' first foray into mass timber construction, and became one of the first completed CLT projects in the United States. Situated in Seattle's Madison Park neighborhood, this unique residence was designed to accommodate a family of four on a small, irregularly shaped lot. The site's triangular shape inspired both the plan and section of the house, with pyramidal vaults reaching upward to bring natural light into the upper levels. The precise geometric design of the house was made possible through mass timber's digitally enabled prefabrication process. The compact, 1,500 SF design is conceived as a nesting series of volumes that spiral from entry to roof garden. Every square foot of the house was carefully considered, with spaces often serving multiple functions. A central core efficiently consolidates vertical services.

Completed in 2015 • Website: CLTHouse

Photo: © Lara Swimmer Photography
Diagrams courtesy of atelierjones



PROJECT TEAM

atelierjones
ARCHITECT

Cascade Built
CONTRACTOR

Harriott Valentine Engineers
STRUCTURAL

Pan Geo
GEOTECHNICAL ENGINEER

Structurlam
CLT

The CLTHouse panelized system includes 67 CLT panels for a total of 47, 796 board feet of lumber used. This translates to approximately 184 mature softwood trees or less than an acre of forest.

Kenmore House

Kenmore, WA

Kenmore house expands on atelierjones' work in single family mass timber construction, which started with the 2015 CLT house. This home for a multi-generational family outside of Seattle is arranged around a south-facing courtyard, with ample natural light to illuminate its warm Cross Laminated Timber interior.

To be completed in 2025 • Website: Kenmore House

Renderings and construction photo courtesy of atelierjones

PROJECT TEAM

atelierjones
ARCHITECT

gProjects
CONTRACTOR

Harriott Valentine Engineers
STRUCTURAL

LPD Engineering
CIVIL ENGINEER

Sugarpine Engineering
MEP ENGINEER

Mercer Mass Timber
CLT

Shoreline House

Shoreline, WA

Nestled amongst Douglas Firs on a site north of Seattle, this house will provide a healthy, sustainable, and resilient home for a family of four. Despite a compact footprint, the house will boast beautiful natural light and generous vertical connections, including a climbing wall that traverses the upper levels.

Construction to begin in 2025 • Website: Shoreline House

Renderings and diagram courtesy of atelierjones

PROJECT TEAM

atelierjones
ARCHITECT

gProjects
CONTRACTOR

Harriott Valentine Engineers
STRUCTURAL

Sugarpine Engineering
MEP ENGINEER

Kalesnikoff
GLULAM & CLT

Mass timber panel system with location of panel fasteners

Typology 3
Cluster Housing

What is cluster housing?

A residential development pattern in which individual homes are grouped together on one portion of a site around shared open spaces and amenities—such as landscaped courtyards, parking areas, or recreational facilities—while the remaining land is preserved for green space, conservation, or agriculture, with each dwelling retaining separate ownership.

Photo: Blockhouse, Uptic Studios © Oliver Irwin Photography

Why mass timber for this typology?

Mass timber, specifically Cross-Laminated Timber (CLT), is ideal for the cluster housing typology because it offers sustainability, efficiency, and adaptability. CLT enables higher density on small urban lots with minimal site impact. Modular design streamlines construction, reducing waste, site disruption, and overall build time. As a locally-sourced, prefabricated material, mass timber has a reduced environmental impact relative to traditional wood-frame construction due to the efficiency of on-site assembly.

Additionally, CLT's strength and precision allow for flexible, space-efficient designs that integrate seamlessly into existing neighborhoods, making it a responsible choice for addressing our housing shortage.

What are the opportunities to scale?

Modular, CLT-based construction enables efficient replication across different urban settings, making it a viable solution for addressing housing shortages. The cluster housing typology can be adapted to various lot sizes, individual unit sizes and layouts, and zoning conditions while maintaining high-density, sustainable living. Characteristics of speed to market, minimal environmental impact, and community integration make mass timber cottage clusters an attractive option for cities seeking innovative housing solutions.

Blockhouse

Spokane, WA

Blockhouse is a modular, CLT, micro-living project located in Spokane's Perry District, with short-stay and long-term rental units ranging from 200SF studios to 800SF 3-bed units. Originally three single family lots, the site was rezoned over 18 months and transformed into 14 dwelling units, maximizing density without compromising living quality—a result of close collaboration with local stakeholders.

Blockhouse showcases modular CLT design while reshaping housing with a commitment to sustainability, affordability, and minimal site disturbance. The foundations are on posts, not concrete slabs, reducing the amount of tree root clearing and damage. The prefabricated CLT, restored siding, solar energy, and smart wall system all come together to create a simple smart design. All together, this innovative approach allowed us to create residences that harmonize seamlessly in the neighborhood.

Addressing the urgent demand for housing in the city, Blockhouse emerges as a unique and efficient solution.

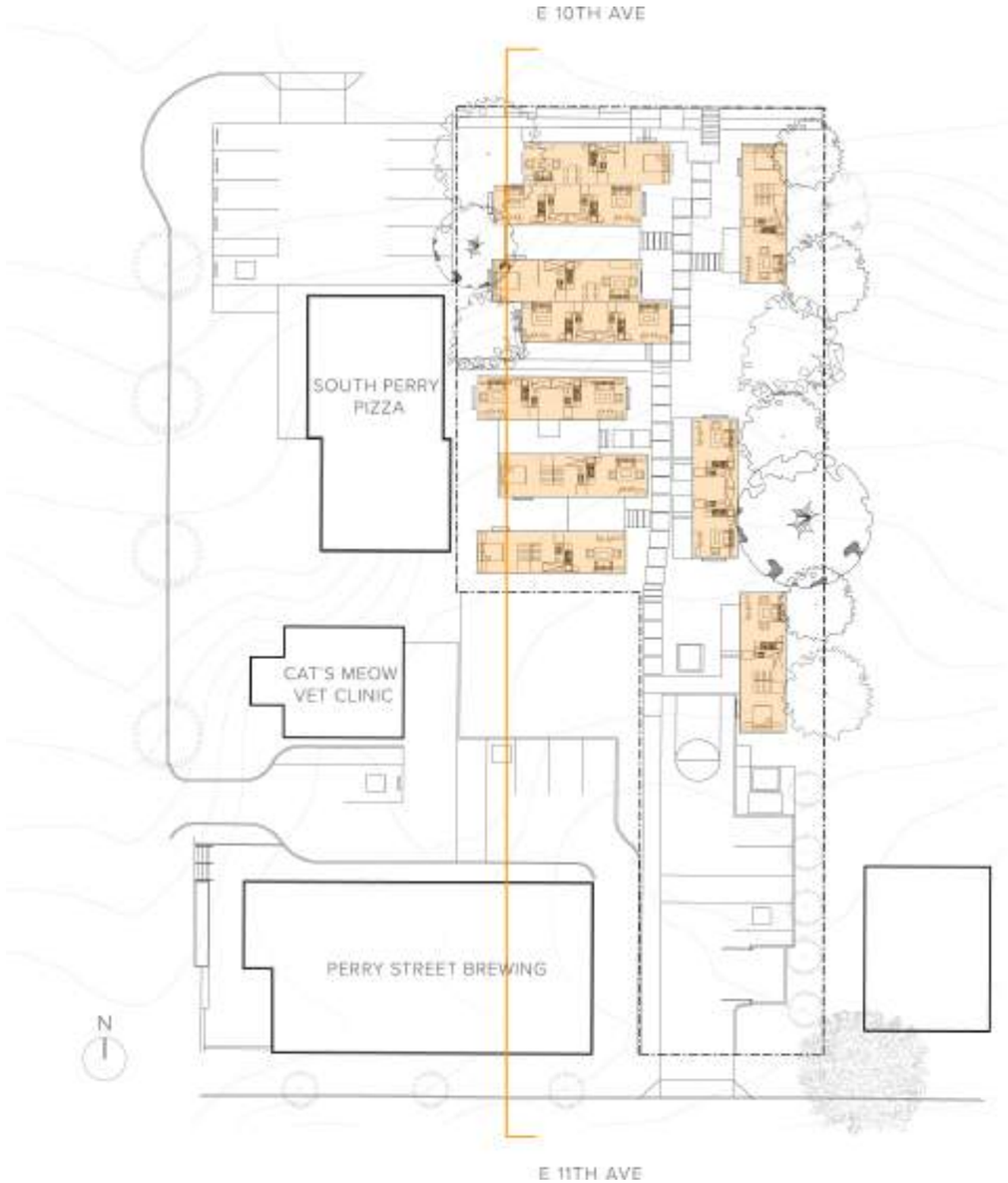
Website: Blockhouse

"We chose CLT for our Blockhouse project because it supports healthy, wildfire-resilient forests and offers a low-carbon, sustainable alternative to traditional materials. Its biophilic beauty enhances well-being, and its precision fabrication makes on-site assembly fast and efficient."

– Andy Barrett, Client

Drawing courtesy of Uptic Studios

Photos: © Oliver Irwin Photography



PROJECT TEAM

Shy Guy LLC
OWNER

Baker Construction
CONTRACTOR

Uptic Studios
ARCHITECT

DCI Engineers
STRUCTURAL & CIVIL ENGINEER

Land Expressions
LANDSCAPE ARCHITECTURE

Vaagen Timbers
CLT

Site plan illustrates flexibility of modular units to conform to site constraints

Typology 4
Townhomes

What is townhome?

A multi-story, single-family dwelling unit that shares one or more walls (party walls) with adjacent units while maintaining separate ownership and direct street access. Also known as a townhouse.

Photo: CLT Townhome Building Kit, Green Canopy Node © Inside Spokane Photography
Diagram courtesy of Green Canopy Node

Why mass timber for this typology?

Mass timber, particularly cross-laminated timber (CLT), is an ideal building material for townhomes due to its strength, sustainability, beauty and manufacturing efficiency for modular construction. Townhomes are often built on tight urban infill lots, where maneuverability is limited. CLT's rigidity and uniformity make it well-suited for prefabricated modular construction, allowing for efficient onsite assembly even in constrained spaces.

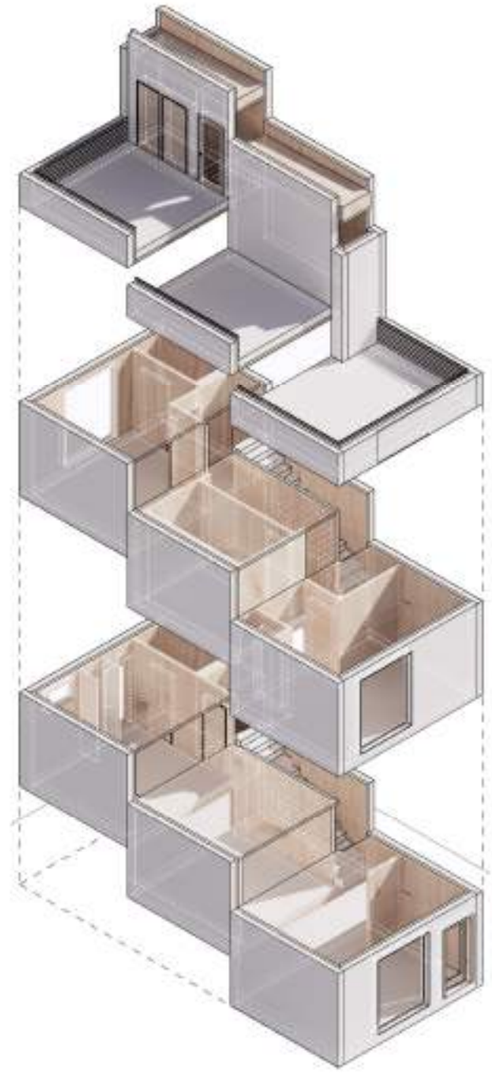
Additionally, townhomes typically follow standardized, repeated floor plans, making them perfect for factory-built mass timber components that reduce waste and streamline installation. Solid timber construction creates an airtight envelope, for highly energy efficient buildings.

Aesthetic and functional benefits further enhance townhome designs—CLT's natural warmth adds a cozy feel to smaller footprints, and its ability to be left exposed eliminates the need for additional finishes. This is particularly valuable for staircases, which are common in multi-story townhomes. Simple CLT stair assemblies are not only visually striking but also fast and easy to install, reducing labor time and improving overall project efficiency. By combining sustainability, efficiency, and beauty, CLT offers a compelling solution for modern townhome construction.

What are the opportunities to scale?

Mass timber presents a significant opportunity to scale townhome development by leveraging advanced manufacturing and prefabrication, providing developers a path to deliver housing twice as fast with greater predictability and performance. Mass timber townhomes, with their standardized and repetitive designs, enable cost certainty and economy of scale in the development process, for a product that will endure for many generations.

CLT Townhome Building Kit Design: Modular prefabricated elements provide for efficient delivery of a three story dwelling unit



CLT Townhome Building Kit

Spokane, WA

The CLT Townhome Building Kit tests Green Canopy NODE's Modular Integrated Building System. Volumetric CLT modules and Mechanical, Electrical, and Plumbing (MEP) kit components were manufactured off-site and assembled in Spokane, Washington, utilizing Mercer CLT panels to create a 1100sf two-story, 2 bedroom, home with a rooftop deck.

This project leverages prefabricated CLT within the modular building system's horizontal structure, offering a cost-effective, scalable solution while significantly reducing construction timelines. GCN building kits can be installed in a single day for a dried-in shell, with the remainder of finishes complete in under 100 days.

Website: Green Canopy NODE

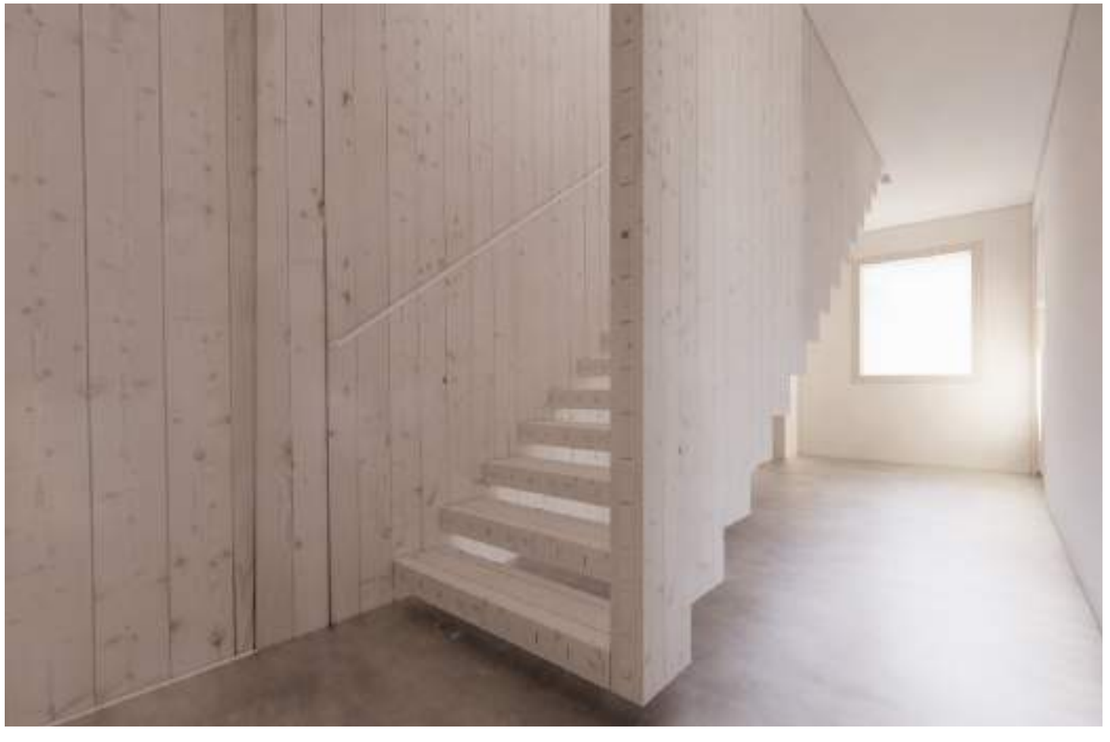
The project emphasizes sustainability, using mass timber's carbon storage properties to help achieve carbon-negative standards. In line with global efforts toward net-zero emissions, it incorporates strategies like designing for disassembly and minimizing fluid sealants and adhesives that complicate recycling. This approach not only accelerates construction but also sets a precedent for future sustainable housing developments.

Photos: © Inside Spokane Photography

PROJECT TEAM

Green Canopy NODE
DESIGN & PREFABRICATION

Mercer Mass Timber
CLT

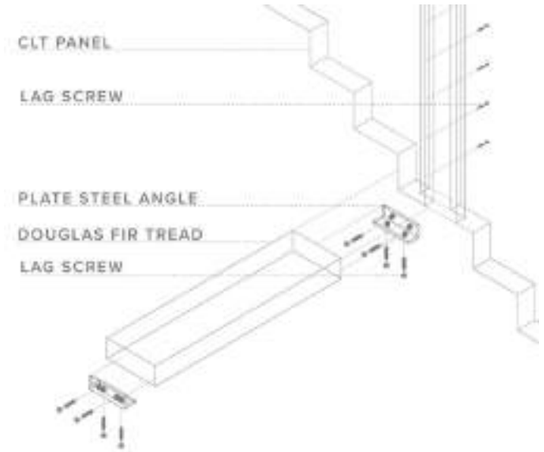


Schweitzer Townhome

Schweitzer Mountain, ID

These townhomes on Schweitzer Mountain were built on a steep site using helical piles and steel columns to minimize concrete and reduce site impact. The structure is primarily prefabricated wood-framed walls, with large, exposed glulam beams and a prefabricated CLT stair assembly to minimize fieldwork on the precarious site. The glulam beams supporting the roof create open, airy interiors. Natural materials define the interior palette, featuring white oak casework and fir soffits and window surrounds for a warm, modern alpine aesthetic.A key feature of the home is the floating CLT stair, crafted with solid fir treads and hidden connections, offering a sculptural focal point that expresses the project's refined structural detailing. Designed for both resilience and elegance, the home sits lightly on the land while embracing its rugged mountain environment.

Website: Uptic Studios



PROJECT TEAM

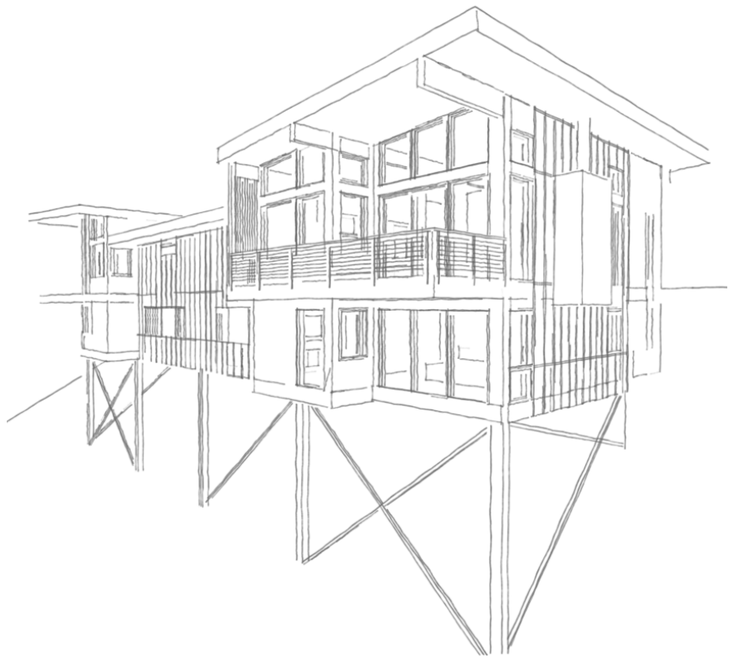
Uptic Studios
ARCHITECT

Place LA
LANDSCAPE ARCHITECTURE

Craven Construction
CONTRACTOR

TD&H Engineering
STRUCTURAL & CIVIL ENGINEER

Vaagen Timbers
GLULAM & CLT



Photo, drawings, and rendering courtesy of Uptic Studios

Typology 5
Low-rise

What is low-rise?

Residential buildings, typically walk-up apartments, between one and three stories in height, offering moderate density and a human-scaled streetscape.

Mass Timber is treated much the same as lightwood frame under type V-B with the exception of lateral design of a structural system utilizing CLT shear walls in a seismic zone. The most recent version of the referenced standard within the International Building Code, Special Design Provisions for Wind and Seismic (SDPWS), uses more conservative design values than equivalent plywood shear walls. Architects and designers should be aware of the impact of shear wall aspect ratios and how it affects the placement of openings.

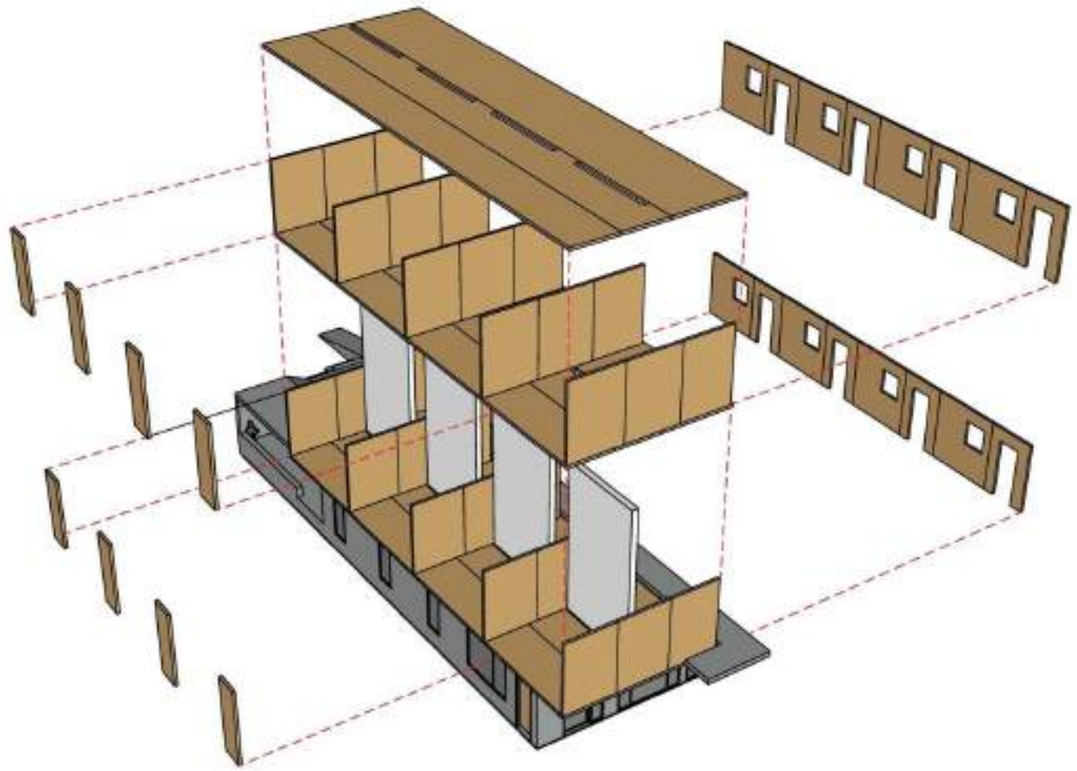
R&D Modular, atelierjones
Renderings courtesy of atelierjones

Why mass timber for this typology?

Mass timber enables shorter construction schedules and faster speed to market for low-rise projects. In low-rise construction, the entire structure can be built with almost fully exposed CLT to make the most of the biophilic properties and reduction in finishes. Alternatively, a hybrid approach can be taken, in which CLT floor and roof decks bear on light-frame wood walls. This hybrid approach harnesses the strengths of each system. Wood-frame bearing walls are an economical solution, provide ductility for shear walls, and allow for easy routing of electrical and plumbing. Prefabricated CLT panels provide schedule compression, offsetting the cost premium of this material relative to joists. The exposed timber walls and ceilings are a market differentiator, supporting enhanced leasing velocity, tenant well-being, and overall project value. The thinner floor plates afforded by CLT can positively impact floor-to-floor heights, and on some sites, enable an additional floor of units.

What are the opportunities to scale?

Both panelized all CLT and hybrid light-framed projects benefit from prefabrication and are primed for seamless integration with modular construction. Like CLT, light wood framed walls can be panelized off-site for quick on-site assembly, enabling faster building dry-in and speed to market. Modular wet cores containing kitchens and bathrooms can also be integrated, further reducing on-site time, labor, laydown area, and material waste. With the elimination of single family zoning across Washington, the opportunities for missing middle low-rise multi-unit residential construction expand exponentially.



R&D Modular

Seattle, WA

With the urgent need for cities to add housing of all types, R&D Modular is a case study on the rapid delivery of attractive urban dwellings. The project is a showcase for the possibilities of prefabrication with mass timber. R&D is located on a small, vacant site purchased in a surplus sale after the completion of Seattle's I90 tunnel lid. Working under Seattle's Mandatory Housing Affordability (MHA) program, the project will provide 5 units of workforce housing. Fully exposed cross-Laminated Timber floors and bearing walls support modular bathroom and kitchen cores. This modular methodology limits on-site labor and material waste, requiring minimal finishing. The exposed timber surfaces create warm biophilic units in compact footprints.

Website: R&D Modular Low-rise Workforce Housing

Rendering and diagram courtesy of atelierjones

PROJECT TEAM

atelierjones
ARCHITECT

Karen Kiest
LANDSCAPE ARCHITECT

DCI Engineers
STRUCTURAL ENGINEER

LPD Engineering
CIVIL ENGINEER

R&D Modular Structure: Cross-laminated timber floor and bearing wall system

Chiles House

Portland, OR

Located in southeast Portland, Chiles House provides 27 affordable housing units focusing on those facing homelessness. The project marks the first affordable housing development to use CLT in the city of Portland. Utilizing the sustainability and aesthetic of mass timber, the structure includes CLT decks with light-framed wood walls, bringing the warmth of exposed timber to the residential experience. Open-air corridors and exterior stairs connect the units and lead to a shared community room and courtyard. Four stories of residential units are accompanied by retail at the ground floor. The concrete basement contains bike parking and storage space for residents.

Website: Chiles House

Photo: © Truebeck Construction

PROJECT TEAM

Catholic Charities
DEVELOPER

Truebeck Construction
CONTRACTOR

All Hands Architecture
ARCHITECT

Holmes US
STRUCTURAL ENGINEER

Typology 6
Mid-rise

What is mid-rise?

Residential buildings taller than low-rise yet shorter than high-rise, ranging from four to seven stories, often wood construction above a concrete podium, offering moderate urban density with elevators, shared amenities, and opportunities for mixed uses such as ground floor retail.

Photo: Crosswood Apartments, Rowell Brokaw Architects
© John Hyland Construction

Why mass timber for this typology?

Podium construction in multi-family and mixed-use developments typically feature lower levels of concrete or steel with light-wood framing above. This approach balances density, ground-floor retail, and parking while remaining cost-effective by adhering to the height limits of Type-V or Type-III construction.

Mass timber offers a compelling alternative for floor structures in this typology. By replacing wood framing with mass timber floor decks, projects gain multiple benefits: streamlined construction with faster assembly and fewer onsite modifications, reduced reliance on finish materials, and the warmth of exposed wood ceilings. Combining mass timber floors with light-wood framed walls maximizes construction and cost efficiencies while meeting fire-rating requirements with fewer materials and less error.

Beyond construction advantages, mass timber enhances the tenant experience with natural wood interiors that support health and well-being. This higher value product enhances leasing velocity, making mass timber a smart, forward-thinking choice for podium construction.

What are the opportunities to scale?

Mass timber in podium construction presents multiple opportunities for scaling.

One area already advancing is the increased use of prefabricated mass timber components for specific building areas, further accelerating construction. This includes prefab mass timber elevator shafts, stairways, and stair towers, streamlining assembly and compressing construction schedules.

Another opportunity lies in replacing concrete with post-and-beam mass timber construction for ground-floor podiums, while staying within Type-V and Type-III construction limits. As parking requirements decrease and ground-floor programming becomes more flexible, this approach enables faster build times and creates high-value commercial spaces, while reducing the embodied carbon footprint of the building.

A third area for scaling is integrating mass timber volumetric modular systems above the podium, unlocking even greater efficiencies in speed and quality.

Leveraging mass timber, we can enhance the value of mid-rise construction.

The Canyons

Portland, OR

The Canyons delivers on a promise of accessible living for residents of all ages and abilities. The environmentally-advanced building was constructed using CLT panels and light-frame wood walls, atop a single-story concrete podium. Comprising 70 living units, the building features open-air zig-zagging corridors and the Alleywalk marketplace which adds vibrancy and welcomes the community to engage with the development.

PROJECT TEAM

Kaiser Group, Inc.
DEVELOPER

Hoosiers Corporation, Japan
DEVELOPER

LSW Architects PC
ARCHITECT

R&H Construction
CONTRACTOR

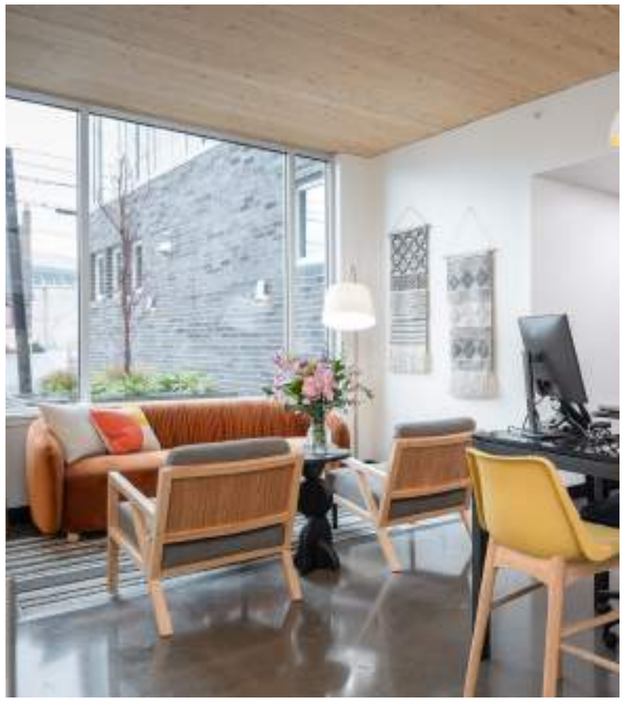
Catena Consulting Engineers
STRUCTURAL ENGINEER

Structurlam
CLT

The Canyons building stands at 65 feet tall, six stories high, and provides 70 apartments along the North Williams corridor in Portland. The Canyons features light-filled units with open floor plans, a modern design, and a 24/7 onsite trained paramedic. It offers more freedom and flexibility than found in an independent living facility, with health and safety features you won't find in a typical apartment building.

Website: Adding Warmth and a Modern Feel to Senior Housing

Photos: © Jeremy Bitterman Photography



Crosswood Apartments

Eugene, OR

Skirting the Willamette River, Crosswood constitutes a new six-story, mixed-use residential complex steps from the University of Oregon campus. With 127 units, the H-shaped development consists of hybrid CLT and wood-framed construction over a post-tensioned concrete podium with tuck-under parking.

The apartment levels include CLT floor and roof panels over prefabricated light-framed bearing walls. The CLT floor system allows for nearly 10ft-tall exposed wood ceilings for all units. The windows stretch to the ceilings and provide monumental views and natural light. The project was funded by HUD, through the 221(d)(4) program for market-rate housing.

Website: Crosswood Eugene

Construction Photo: © John Hyland Construction

PROJECT TEAM

deChase Miksis Development
DEVELOPER

Rowell Brokaw Architects
ARCHITECT

John Hyland Construction
CONTRACTOR

Holmes US
STRUCTURAL ENGINEER

Postmark Apartments • Shoreline, WA

The Postmark, former site of Shoreline's post office, finished in 2020, situated just east of Interstate 5, brings 243 apartment units in two L-shaped 5-story buildings on top of two levels of below grade post-tensioned concrete parking levels. Wood frame levels consist of exposed 5-ply CLT floor and roof panels supported by stud framed walls. Use of glulam post and beam transfer framing create large open spaces for a generous lobby, lounge and fitness area at the grade level of the east building.

PROJECT TEAM

The Wolff Company
DEVELOPER

VIA - A Perkins Eastman Studio
ARCHITECT

Coughlin Porter Lundeen
STRUCTURAL

Katerra
PRE-FABRICATION

KLH
CLT

Western Wood Structures
GLULAM

A standalone amenity building is situated in the courtyard between the two buildings showcasing a glulam post and beam structure supporting CLT roof panels.

Website: Postmark

Typology 7
Tall Timber

What is tall timber?

Multi-story multifamily residential buildings between 8 and 18 stories, meeting the definition of high-rise construction (which triggers additional fire and life safety requirements), while being permitted outright by the building code for mass timber (however often requiring concrete or steel elements for lateral stability). Tall timber provides increased urban density with elevators, shared amenities, and opportunities for a mix of uses along with housing.

Photo: Heartwood, atelierjones,
© Lara Swimmer Photography

Why mass timber for this typology?

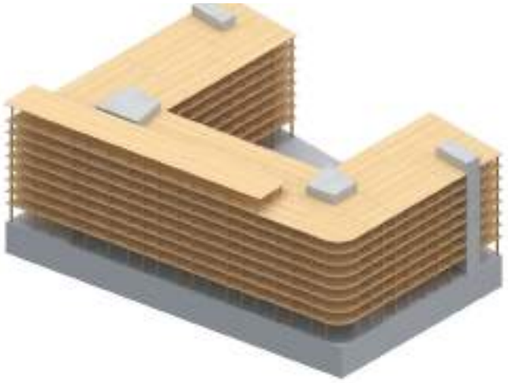
Of the many reasons to build with mass timber for 8-18 story projects the most common motivators are market differentiation, construction schedule compression, and reduced embodied carbon relative to concrete construction. Under the 2021 IBC, three new construction types (IV-C, IV-B, and IV-A) permit 8, 12, and 18 story timber towers respectively.

A new "missing middle" typology in the realm of building heights, these new codes allow developers to take advantage of zoning height allowances to increase the density of housing beyond what podium construction affords.

Mass Timber's precise prefabrication and simple connections make for structures that go up quickly, quietly, and cleanly. Combined with just-in-time delivery, mass timber construction can rise at a floor a week on a tight urban site with minimal disruptions to neighbors. These properties also mean that mass timber buildings can be deconstructed, with timber components remaining usable and retaining value after the lifetime of the building.

What are the opportunities to scale?

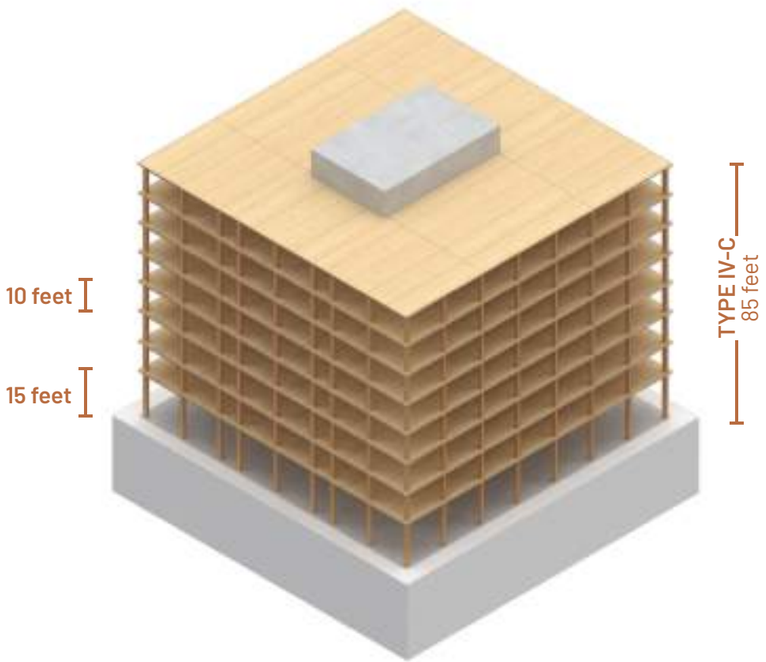
As of January 2025, twenty-eight states have adopted code provisions for 8-18 story mass timber construction. As many cities are upzoning their core zones to promote density, 8-18 story projects are set to become a larger percentage of the construction market. Mass timber will become an increasingly integral part of this construction market as more states and jurisdictions regulate embodied carbon. Mass timber is poised to fill a gap in the urban housing market by encouraging infill development on tricky sites due to its lightweight structures, thin floor assemblies, and efficient structural spans that are optimal for residential units. Mass timber allows projects to fit more units in more floors than lightwood frame podium construction topped out at 7 or 8 stories or heavy concrete construction that requires more intensive foundations than an equivalent mass timber alternative. The economic increase in units allows projects to supply vital affordable or missing middle income housing to cities.



The Heartwood project's mass timber system can be replicated across various building types and scales. Diagrams by atelierjones.

TYPE IV MASS TIMBER CONSTRUCTION

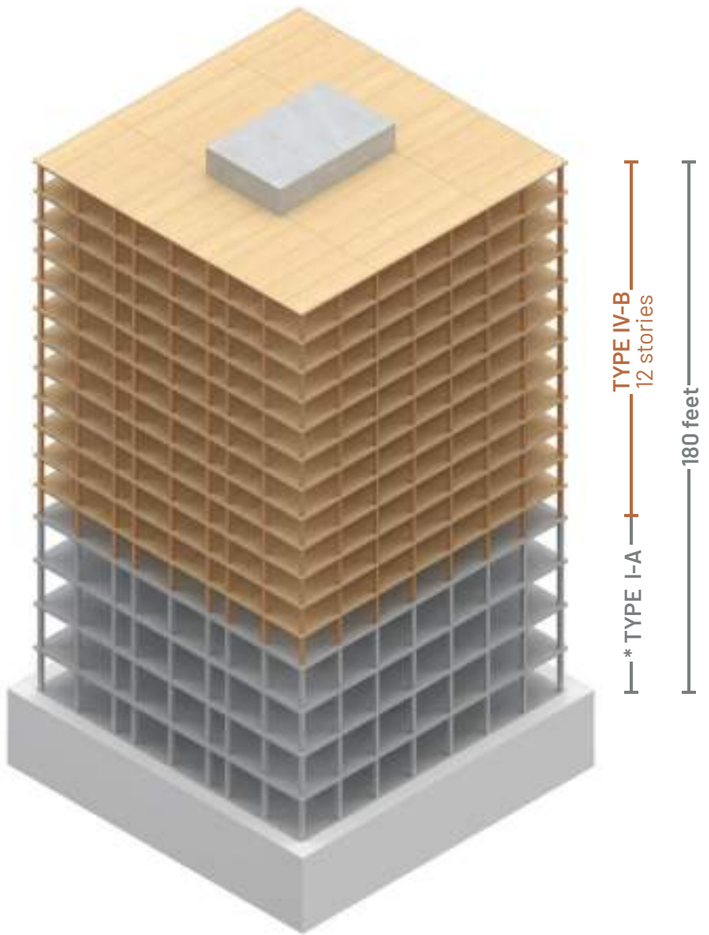
* Note that the use of podiums to achieve extra stories within the height limit of type IV-B and Type IV-A, varies by jurisdiction.



TYPE IV-C

Residential Allowable stories / Height:
8 stories / 85 feet

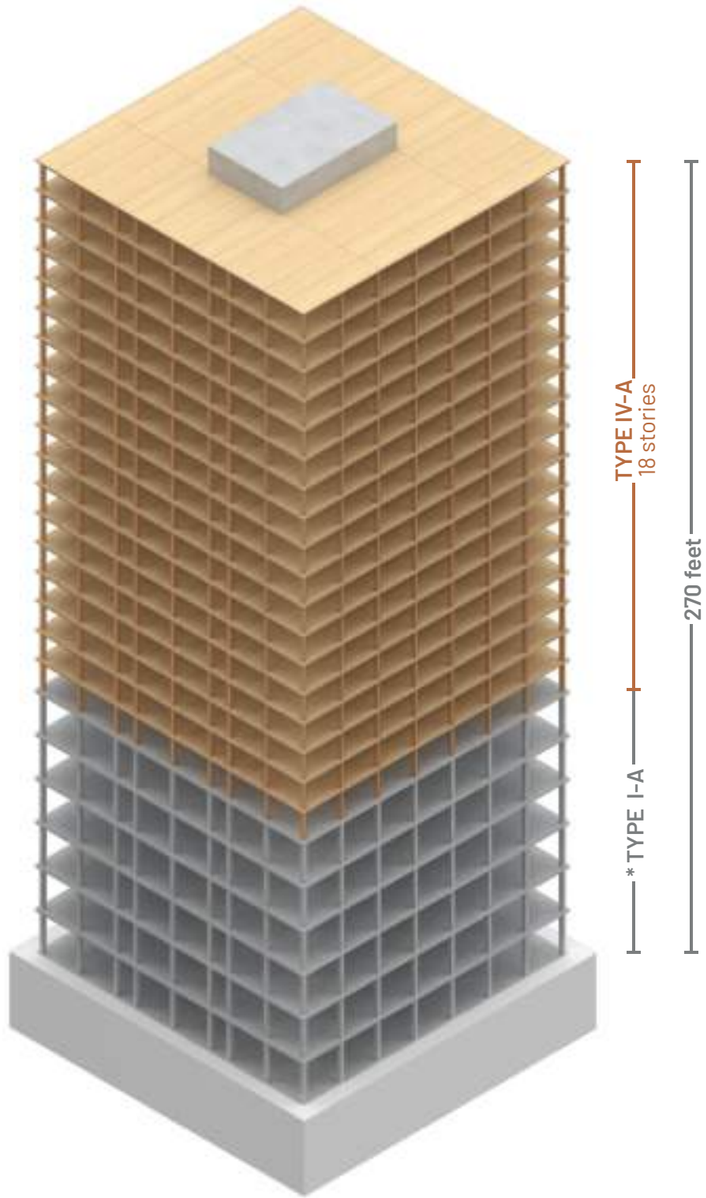
R-2 Total Allowable Building Area (varies with frontage):
230,625 - 307,500 GSF



TYPE IV-B

Residential Allowable stories / Height:
12 stories / 180 feet

R-2 Total Allowable Building Area (varies with frontage):
369,000 - 492,000 GSF



TYPE IV-A

Residential Allowable stories / Height:
18 stories / 270 feet

R-2 Total Allowable Building Area (varies with frontage):
553,500 - 738,000 GSF

Diagrams courtsey of atelierjones

Heartwood Apartments

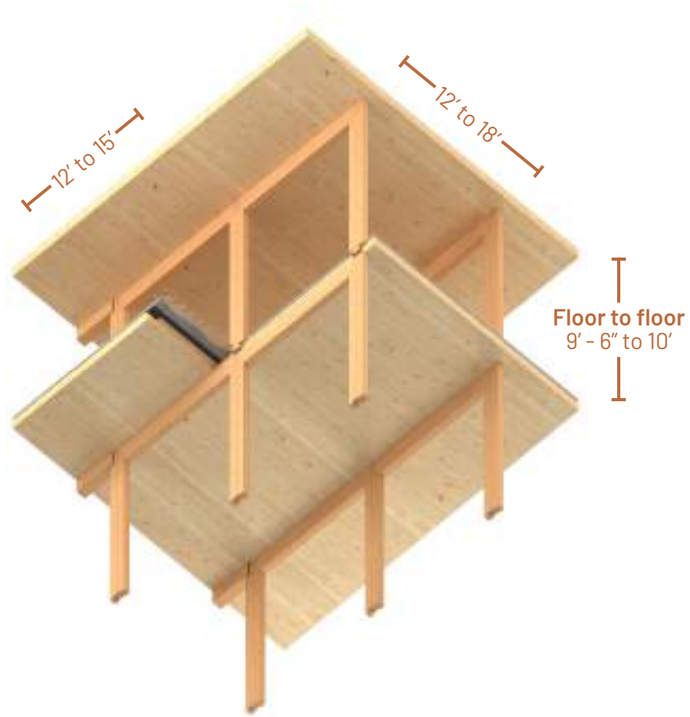
Seattle, WA

Heartwood is the first building in the U.S. completed as-of-right under the new Type-IV codes. Representing a significant development in tall timber construction, Heartwood provides not only "missing middle" workforce housing for Seattle, but a replicable model for future tall timber buildings across the country.

Located in the heart of Seattle's Capitol Hill neighborhood, the 67,500 SF 8-story building houses 126 units, averaging 400 SF per unit, with 113 studios and 13 one-bedrooms. Occupancy is targeted at 80-85% of Area Medium Income (AMI) and currently the building is 94% leased.

Completed in 2024 • Website: Heartwood

Photo: © Flor Projects
Heartwood structural diagrams courtesy of atelierjones



POST & BEAM SYSTEM

One-way post-and-beam construction allows for maximum grid flexibility to fit more units on constrained sites.

HEARTWOOD'S STRUCTURE

Hybrid mass timber post-and-beam superstructure with five-ply CLT floor panels supported by glulam beams and columns.

PROJECT TEAM

Community Roots Housing
OWNER

Skipstone
DEVELOPER

atelierjones
ARCHITECT

Blueline Group
LANDSCAPE ARCHITECT

Swinerton
CONTRACTOR

DCI Engineers
STRUCTURAL & CIVIL ENGINEER

Kalesnikoff
CLT

DR Johnson
GLULAM

Freres
MPP STAIR

Timberlab
TIMBER TRADE PARTNER

Carbon12

Portland, OR

Carbon12 sets a new standard for what's possible in sustainable development in the United States. At 85 feet tall and 8 stories high, Carbon12 is one of the tallest mass timber buildings in the country. Developed before the establishment of tall timber code provisions, the design team worked with city and state officials to re-examine restrictive codes limiting the height of wood buildings, making Carbon12 and future tall wood buildings possible in the US.

Carbon12 blends modern luxury with environmental stewardship. This sophisticated building integrates advanced technology and sustainability features. The innovative mass timber structure enhances its eco-friendly profile and provides a unique market advantage, enabling the 14 condominiums on Portland's east side to sell at a premium. This marked a significant shift, introducing a price point previously uncommon in that part of the city.

Website: Carbon12

Photo: © Andrew Pogue Photography

TYPE IV-C
Mass Timber elements permitted to be unprotected.

TYPE IV-B
Ceilings: 100% exposed
Or
Columns and walls: 60% exposed
Or
Combination of columns, walls, and ceilings: See 2024 IBC 602.4.2.2.3.

TYPE IV-A
All mass timber elements to be protected to an 80 minute rating or greater.

PROJECT TEAM

Kaiser Group, Inc.
DEVELOPER

LSW Architects, PC
ARCHITECT

Munzing
STRUCTURAL ENGINEER

Structurlam
CLT

TYPE IV mass timber construction diagrams courtsey of atelierjones

BCIT Student Housing

Burnaby, BC

With a growing student body, low vacancy in the surrounding cities, and lack of housing in the immediate vicinity of the campus, the British Columbia Institute of Technology (BCIT) has decided to significantly increase the supply of on-campus housing. With ambitious goals around carbon and energy, and aspirations of creating a living lab and demonstrating BCIT's innovative and progressive spirit, our team designed a mass timber building that utilizes modularity and prefabrication ensuring effective use of space and efficient construction: allowing the structure and facade installation to be completed in only six months.

PROJECT TEAM

British Columbia Institute of Technology (BCIT)
OWNER

Perkins&Will
ARCHITECT

Hapa Collaborative
LANDSCAPE ARCHITECTURE

Ledcor Construction
CONTRACTOR

Fast + Epp
STRUCTURAL ENGINEER

RDH Building Science
ENVELOPE

Introba
MECHANICAL ENGINEER

WSP
ELECTRICAL ENGINEER

McElhanney
CIVIL ENGINEER

GHL Consultants
CODE CONSULTING

Kalesnikoff
GLULAM & CLT

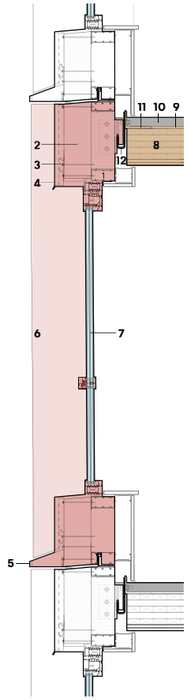
Seagate Mass Timber
TIMBER TRADE PARTNER

The hybrid building structure features point supported cross laminated timber (CLT) floor slabs on hollow structural steel (HSS) columns. The 12-storey Tall Timber Student Housing project will add 469 beds—a mix of 190 single bed dorm rooms, 267 studio style apartments with their own kitchen and bathroom, and 12 accessible units. Shared student amenities and an outdoor commons space will help to enliven the campus environment and student experience.

Rendering courtesy of Perkins&Will
Photos: © Andrew Latreille

Modular Façade Assembly

BCIT facade and structural diagrams courtesy of Perkins&Will

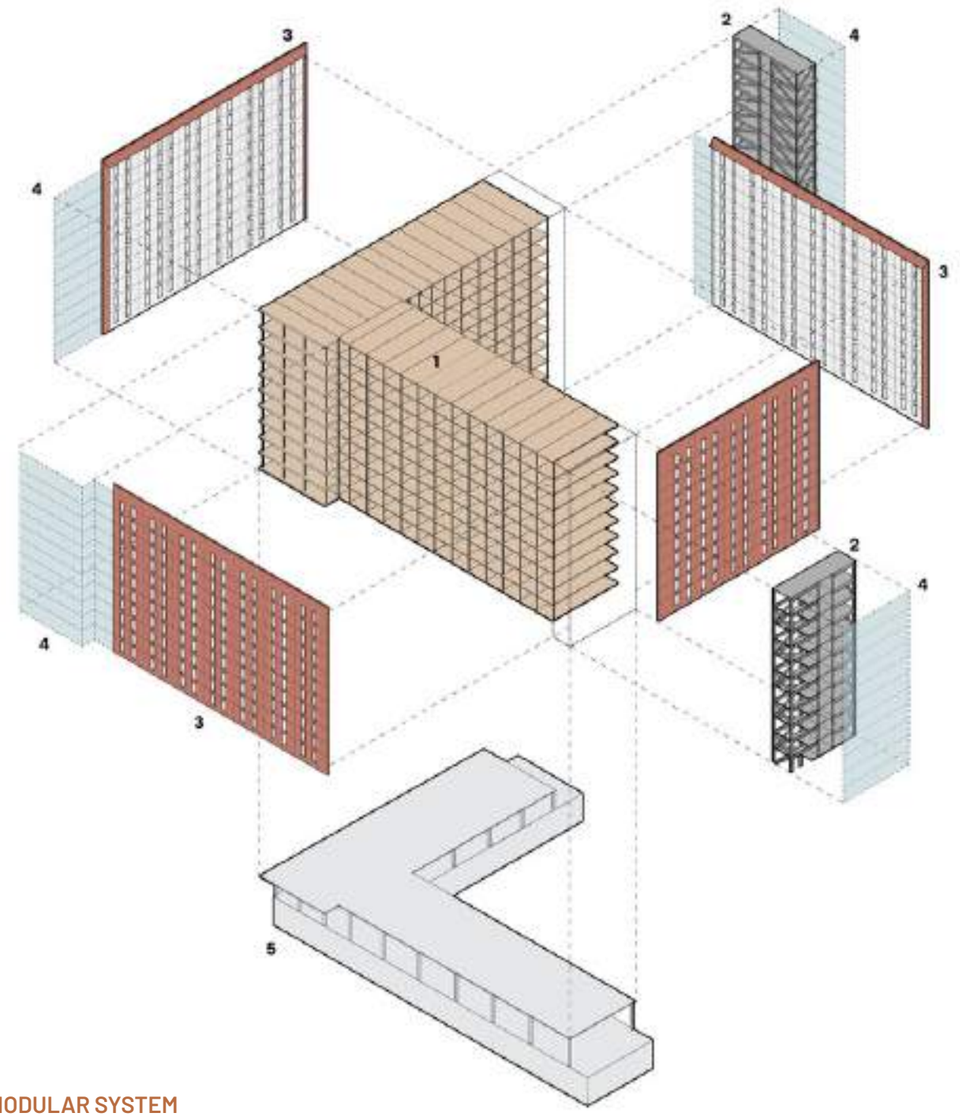


Prefabricated Modular Façade Unit

1. Extruded aluminum framing
2. Insulated metal panel
3. Clips
4. Aluminum cladding
5. Extruded aluminum flashing
6. Aluminum fin
7. Triple-glazed window unit

Mass Timber Structural Floor Assembly

8. 5-ply CLT
9. Acoustic membrane
10. Concrete topping
11. Steel edge angle
12. J-hook



BCIT MODULAR SYSTEM

1 Cross laminated timber panels point supported with steel columns

2 Steel brace frame core

3 Modular pre-fabricated facade panel assembly

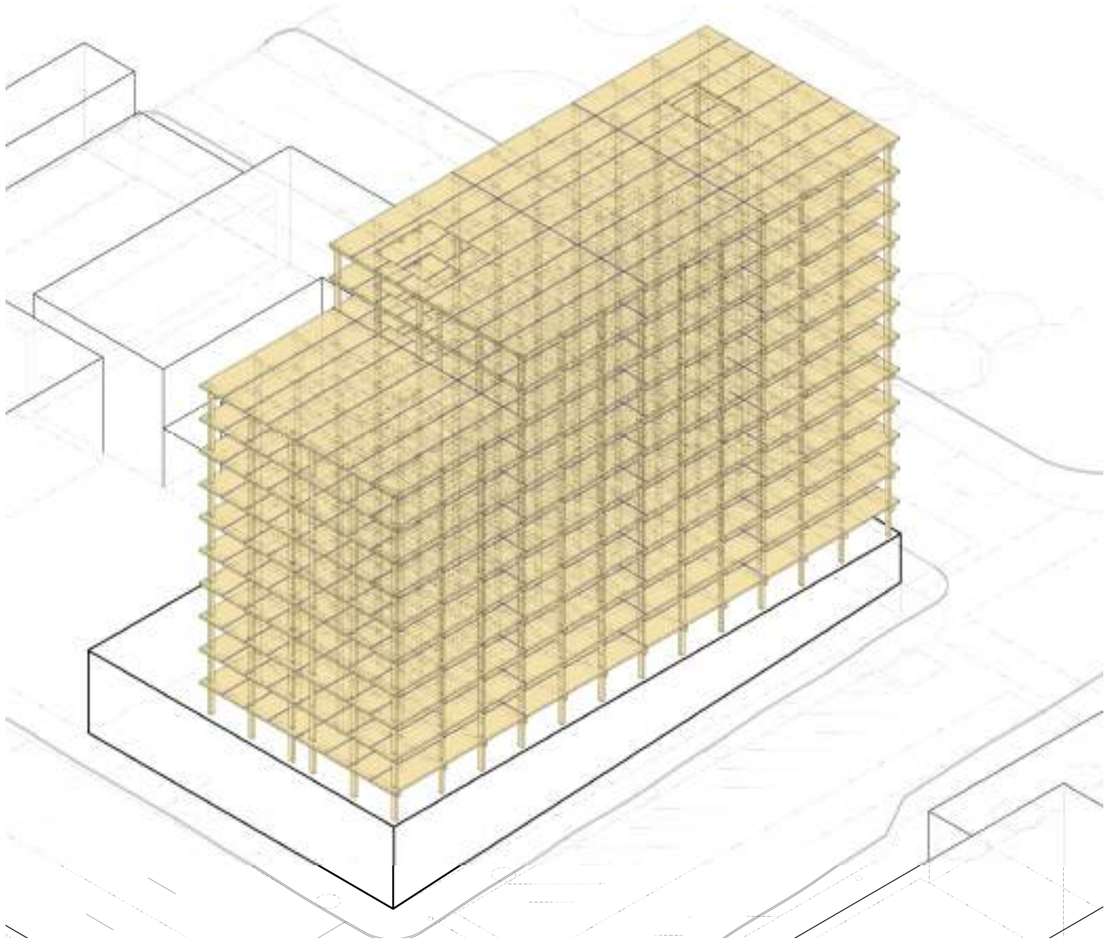
4 Unitized curtain wall

5 Cast-in-place (CIP) concrete base

High Rise on the High Plains

Spokane, WA

High Rise on the High Plains is a 12 story Mass Timber tower over a two-story concrete podium containing parking and retail. The tower contains 18,000 square feet of retail and amenity space and 228 units of mixed size for mixed income residents with a focus on workforce housing. The approach to this project was based on standardization and optimization of the recent innovations surrounding the adoption of the type IV- A,B, & C codes.



1 ACRE / 660 TREES =
6,916 trees

TIME NEEDED FOR TREES TO REGROW =
8 minutes

COMMERCIAL FOREST REQUIRED = **10.48 acres**

PROJECT TEAM

Great Expectations
DEVELOPER

atelierjones
ARCHITECT

DCI Engineers
STRUCTURAL ENGINEER

Number of trees and overall forestland required to produce the project's mass timber elements.

Rendering and diagrams courtesy of atelierjones

Silicon Valley Housing

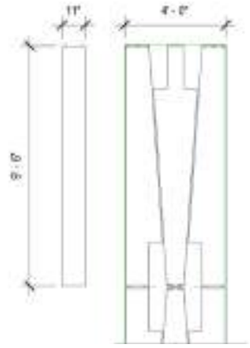
Bay Area, CA

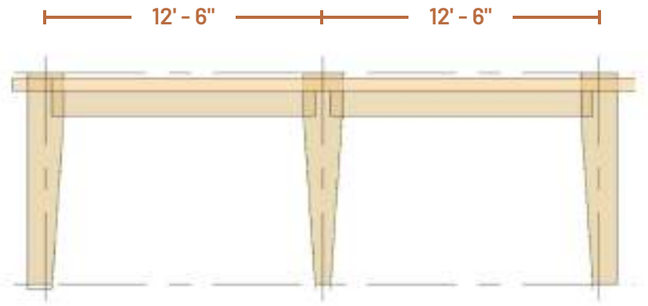
A mass timber housing study for a large Silicon Valley land owner, this project consists of over 1,000 units of housing with significant retail and amenity spaces over 850,000 square feet across 5 buildings and 2 sites. Learning from the innovations of early tall timber housing projects, this study sought to find increased efficiency and optimization in lower carbon housing. Utilizing a novel structural approach, the 12 story towers feature tapered laminated veneer lumber (LVL) columns designed to optimize wood fiber and machining time, with LVL beams and mass plywood panel floorplates. Exposing more wood with a simplified kit of parts and simplified details brings unit costs down and speeds construction timelines.

Rendering and diagram courtesy of atelierjones

STRUCTURAL SYSTEM

LVL structure is materially efficient and optimized for minimal waste using tapered columns that fit neatly on a standard panel dimension





PROJECT TEAM

Kaiser Group, Inc.
DEVELOPER

LSW Architects, PC
ARCHITECT

Munzing
STRUCTURAL ENGINEER

Structurlam
CLT

South Seattle Affordable Housing

Seattle, WA

A mass timber housing study for Seattle-based affordable housing non-profit, this project consists of 171 units of mixed sizes with community and amenity spaces over 150,000 square feet. Learning from the innovations of early tall timber housing projects, this study sought to find increased efficiency and optimization in lower carbon housing. Utilizing the structural system pioneered in Heartwood and achieving efficiency with a standardized grid and a similar kit of parts. Modular bathroom and kitchen wet cores integrate with the fast mass timber erection to reduce site waste and shorten construction schedules

Rendering and drawing courtsey of atelierjones

PROJECT TEAM

atelierjones
ARCHITECT

DCI Engineers
STRUCTURAL ENGINEER

Swinerton
CONTRACTOR

Typical Residential Level Plan, standardized structural grid spacing at 14' - 6" x 14' - 6".

Harlem Mass Timber

New York City, NY

Included in the inaugural NYC Economic Development Council (NYEDC) Mass Timber Studio, 15-21 West 124th Street is a 7-story apartment building located in the heart of Harlem on a 10,000 square foot south-facing site overlooking Marcus Garvey Park. The project is approximately 50,000 GSF and includes 35 two- and three-bedroom units with ample amenity space. The site is directly adjacent to the Harlem branch of the New York Public Library to the east. The site is well-served with transit less than a 5-minute walk from multiple subway lines and adjacent to the 125th Street commercial core. The owner's Swiss heritage and strong desire to create a meaningful, lower-carbon project pushed him to transition away from a previous concrete design to embrace and execute an innovative legacy Mass Timber building that will shape Harlem, sequestering carbon for generations.

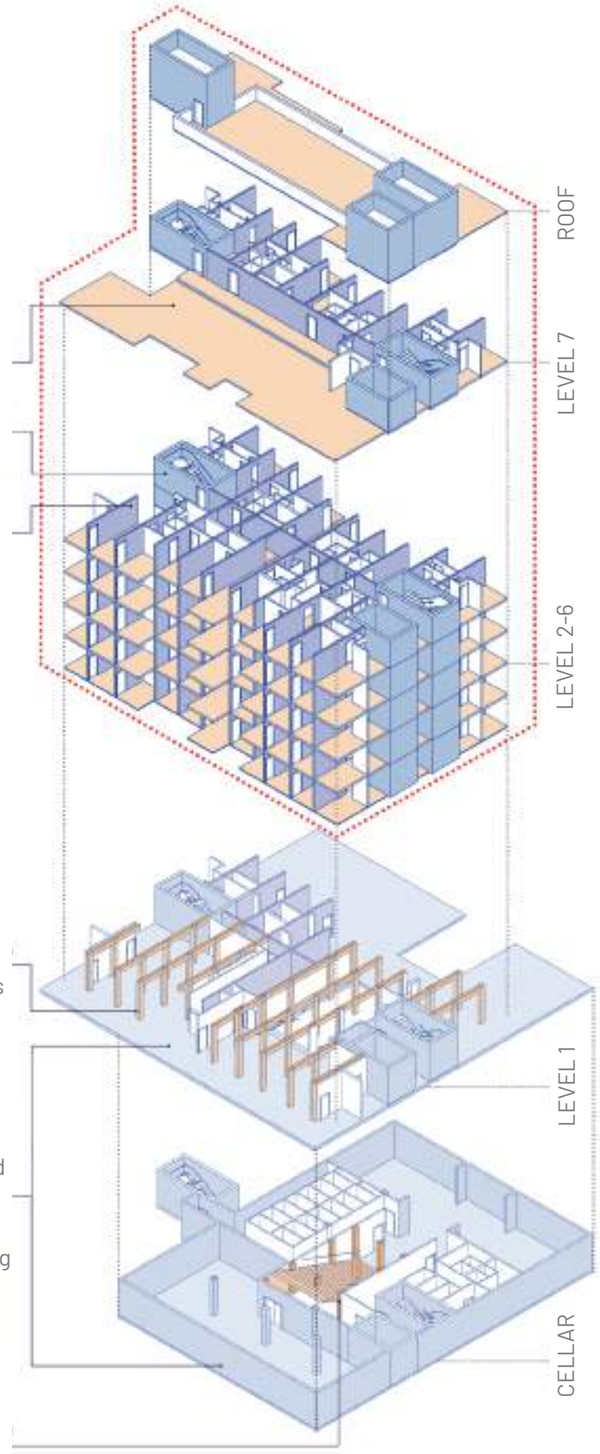
Website: Harlem

Rendering and diagram courtsey of atelierjones.

3-PLY CLT FLOORS
97.4 kg CO_2 per m^2 above podium

CONCRETE CORES
33.3 kg CO_2 per m^2 above podium

CFS LIGHT-GAUGE METAL WALLS
41.3 kg CO_2 per m^2 above podium



STRUCTURE
Glulam column and beams

STRUCTURE
Podium and cellar omitted in comparisons on the right to normalize data outside the Whole Building Life Cycle Analysis

STRUCTURE
Glulam column and beams

PROJECT TEAM

Magna & York
DEVELOPER

Sage&Coombe Architects
ARCHITECT OF RECORD

atelierjones
DESIGN ARCHITECT

Swinerton
CONTRACTOR

DCI Engineers
STRUCTURAL ENGINEER

Timberlab
TIMBER TRADE PARTNER

Tall with Timber

Seattle, WA

Tall with Timber is a 12-story design and feasibility study showcasing the commercial potential of mass timber for mid-rise urban development. Set in Seattle's Belltown neighborhood, the project integrates glulam beams and columns with CLT floor panels and a concrete core to meet seismic, fire, and acoustic codes. Designed as a Type IV-B structure, it allows exposed timber while meeting stringent life-safety standards. The mixed-use program – retail, office, and serviced apartments or hotel – demonstrates how prefabricated hybrid systems can reduce embodied carbon, shorten construction schedules, and offer unique market differentiation through sustainability and warm, natural aesthetics. Structural and architectural diagrams reveal efficient post-and-beam framing, CLT spans, and integrated façade assemblies. As one of the first tall timber cost and design case studies in the U.S., Tall with Timber sets a precedent for code evolution and positions mass timber as a viable, scalable solution for CRE developers targeting high-performance, future-forward buildings.

Website: A Seattle Mass Timber Tower Case Study

Renderings courtesy of Matthias Olt / Arcadis.

PROJECT TEAM

USDA Forest Service / Softwood Lumber Board
SPONSOR

Heartland
DEVELOPER

DLR Group, Matthias Olt (Arcadis)
ARCHITECT

Martha Schwartz Partners
LANDSCAPE ARCHITECT

Fast + Epp
STRUCTURAL ENGINEER

Swinerton
CONTRACTOR

StructureCraft
CLT

WoodWorks
TIMBER TRADE PARTNER

Re:Treat

Prototype designed for universal adaption across U.S. cities

Re:Treat is a 17 story residential mass timber prototype designed under the 2024 IBC for broad adaptation across U.S. cities. It combines a 12-story Type IV-B exposed mass timber tower with a five-story Type I-A concrete podium. Located in a transitional urban neighborhood, the project delivers a nature-inspired, biophilic living experience through the sensory qualities of exposed glulam and CLT. Its rhythmic façade features prefabricated aluminum and glass panels, wood-accented interiors, and customizable window-to-wall ratios.

The podium's ground level includes retail frontage and a media wall supporting community vitality and safety. Levels 2–4 are wrapped in aluminum mesh, while level 5 remains open for visual permeability. A landscaped terrace and rooftop pool on level 6 link podium and tower, enhancing resident wellness. With 179 units in an L-shaped, daylight-optimized plan, Re:Treat sets a replicable standard for sustainable, design-forward, mid- and high-rise mass timber housing in the evolving cores of American cities.

Website: Transferrable, Flexible, Economical MTC Hybrids

Renderings courtesy of Matthias Olt / Arcadis.

PROJECT TEAM

Swinerton
DEVELOPER

Matthias Olt (Arcadis)
ARCHITECT

Swinerton
CONTRACTOR

KL&A
STRUCTURAL & CIVIL ENGINEER

TimberLab
TIMBER TRADE PARTNER

Sandy Pine
Portland, OR

Inspired by modern and eco-chic design, Sandy Pine is set to occupy an entire city block in Southeast Portland. The mixed-use mass timber high-rise contains 274 dwelling units, with split-level retail at the ground floor. In addition to activated courtyards and connections to outdoor spaces, the building offers a gym, residential lounge, and shared workspace for residents. Two subterranean floors hold 174 stalls of parking, a bike room, and residential storage. The Type IV-B high-rise is designed as a point-supported CLT framing system with fully-exposed mass timber on the ceilings except at corridors and bathrooms.

Renderings courtesy of Ankrom Moisan.

PROJECT TEAM

SolTerra
DEVELOPER

Ankrom Moisan
ARCHITECT OF RECORD

Lever Architects
DESIGN ARCHITECT

Holmes US
STRUCTURAL ENGINEER

PAE
MEP ENGINEER

Swinerton
CONTRACTOR

Timberlab
TIMBER TRADE PARTNER

SANDY PINE STRUCTURE

11 stories of mass timber housing sit on a one-story concrete podium. Two-story mass timber townhomes fill out the city block.

POINT-SUPPORTED FRAMING

CLT spans in two directions to bear directly on columns allowing for a fully exposed, flat timber soffit.

Diagrams courtesy of Holmes

Typology 8
Skyscraper

What is a skyscraper?

Mass timber skyscrapers represent a new frontier in sustainable high-rise construction, offering an alternative to traditional steel and concrete towers with significant environmental and aesthetic benefits.

While not yet universally accepted, their adoption depends largely on jurisdictional inclusion and local code alignment – particularly for buildings exceeding the current Type IV-A height limit of 270 feet.

Recent developments suggest that the height potential for mass timber skyscrapers remains open-ended. For example, the proposed 55-story timber tower in Milwaukee aims to surpass the 284 ft tall Ascent building – currently the world's tallest mass timber structure, also in Milwaukee. Hybrid high-rise towers reaching up to 627 ft are already under construction or have received planning approval in Perth and Sydney, Australia.

As mass timber buildings grow taller, structural considerations such as overturning stability become increasingly critical. Because timber is lighter than traditional materials, tall timber structures can be more vulnerable to lateral forces like wind. Hybrid structural systems – combining mass timber with concrete or steel cores and columns – are proving essential to mitigate these risks and ensure resilience.

With no clear ceiling on height, the future of mass timber skyscrapers is expansive. As engineering strategies continue to advance, hybrid systems are enabling taller, safer, and more adaptable timber towers – redefining the possibilities for sustainable urban architecture.

Seattle Mass Timber Tower, Matthias Olt

Why mass timber for this typology?

High-rise construction demands a balance of structural efficiency, sustainability, and user experience—qualities where mass timber excels. When used as part of a composite system with steel and reinforced concrete, mass timber optimizes performance while reducing embodied carbon. The material's biophilic qualities create inviting, high-quality spaces that enhance occupant well-being and increase market appeal. Prefabricated timber components accelerate construction timelines, reducing labor costs and improving site efficiency. Washington State's strong timber supply chain and growing policy support make this an especially viable region for mass timber adoption. Additionally, fire safety regulations now recognize the resilience of large, engineered wood elements, further paving the way for its integration in high-rise buildings. By leveraging mass timber, developers gain a competitive edge in an industry increasingly driven by sustainability and user-centric design.

Rendering: UnTower, Matthias Olt

What are the opportunities to scale?

The opportunity to scale mass timber in high-rise construction lies in its adaptability, modularity, and evolving regulatory acceptance. A composite approach allows for targeted use of each material—concrete for foundations and super columns, steel for lateral stability, and timber for floor systems and structural cores—optimizing cost and performance. Local procurement options ensure stable pricing and supply chain resilience, making it a predictable material choice for investors. Furthermore, the reuse potential of modular timber components aligns with circular economy principles, offering long-term value beyond the initial construction. As cities focus on reducing carbon footprints, mass timber provides a tangible, scalable solution that aligns with environmental, social, and governance (ESG) mandates and developer objectives. The increasing adoption of hybrid mass timber systems across North America signals a major shift in how high-rises are designed, built, and operated, making now the ideal time for developers to invest in this future-ready construction method.

Seattle Mass Timber Tower

Seattle, WA

The Seattle Mass Timber Tower by Arcadis redefines urban luxury with a bold, sustainable presence in Emerald City. Designed for maximum prefab modularity, this 40-story multifamily high-rise blends the warmth of exposed timber with cutting-edge structural innovation, offering a striking contrast to traditional glass-and-steel towers. Its sleek, biophilic interiors enhance tenant well-being, while its carbon-negative materials reinforce Seattle's commitment to sustainability. Precision-engineered for rapid assembly, the tower minimizes construction waste and disruption, delivering unparalleled efficiency and cost predictability. A symbol of forward-thinking design, the Seattle Mass Timber Tower is a breakthrough for developers seeking an iconic, ESG-aligned investment.

The Seattle Mass Timber Tower by Arcadis redefines urban luxury with a bold, sustainable presence in Emerald City. Designed for maximum prefab modularity, this 40-story multifamily high-rise blends the warmth of exposed timber with cutting-edge structural innovation, offering a striking contrast to traditional glass-and-steel towers. Its sleek, biophilic interiors enhance tenant well-being, while its carbon-negative materials reinforce Seattle's commitment to sustainability. Precision-engineered for rapid assembly, the tower minimizes construction waste and disruption, delivering unparalleled efficiency and cost predictability. A symbol of forward-thinking design, the Seattle Mass Timber Tower is a breakthrough for developers seeking an iconic, ESG-aligned investment.

Website: Seattle Mass Timber Tower

Renderings courtesy of Matthias Olt / Arcadis.

PROJECT TEAM

Lovinklaan Foundation
SPONSOR/OWNER

Lovinklaan Foundation
DEVELOPER

Matthias Olt /Arcadis
ARCHITECT

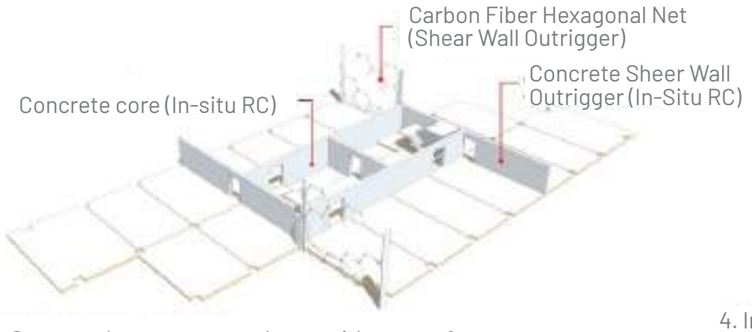
Sellen Construction
CONTRACTOR

Magnusson Klemencic Associates
ENGINEER

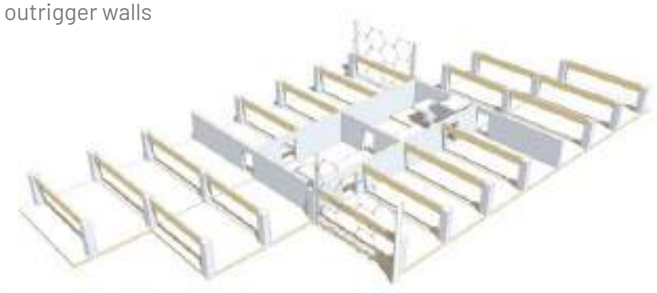
Anderson Construction
TIMBER TRADE PARTNERS

SEATTLE MASS TIMBER TOWER SYSTEM DESIGN

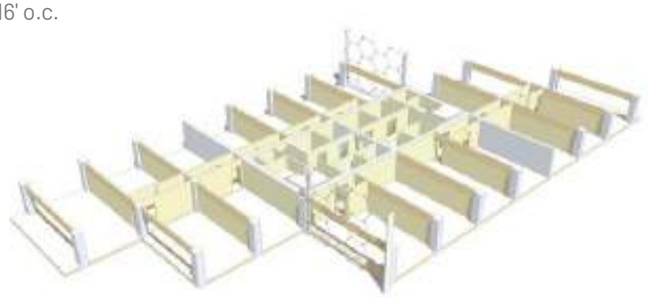
Installation sequence of modular building systems



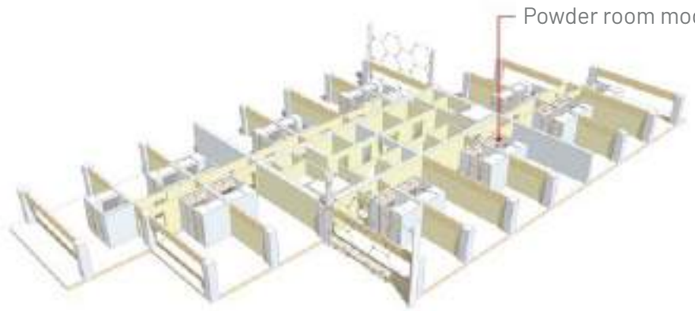
1. Structural system: central core with types of outrigger walls



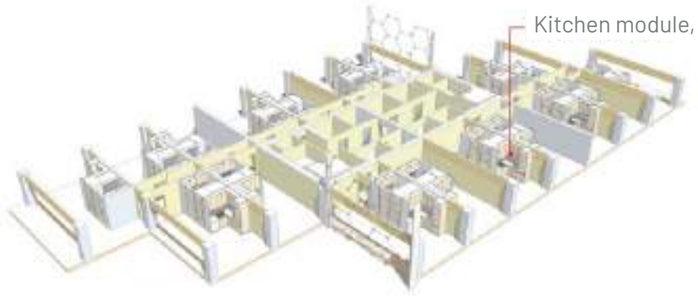
2. Steel Columns and Glue-lam beams 16' o.c.



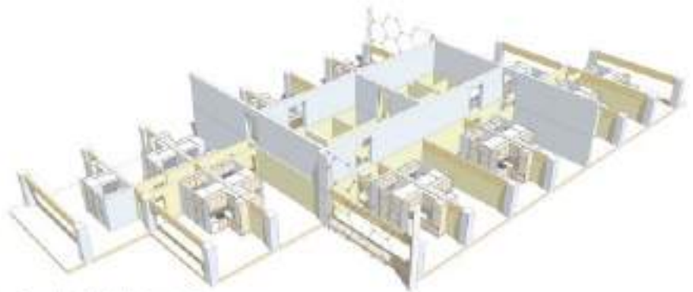
3. Interior, Non-load bearing partition walls



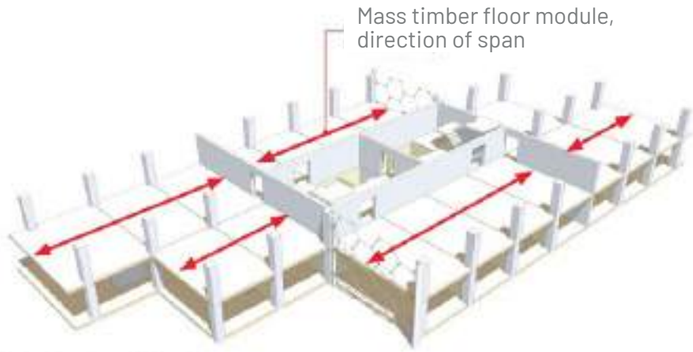
4. Installation of prefabricated powder room modules



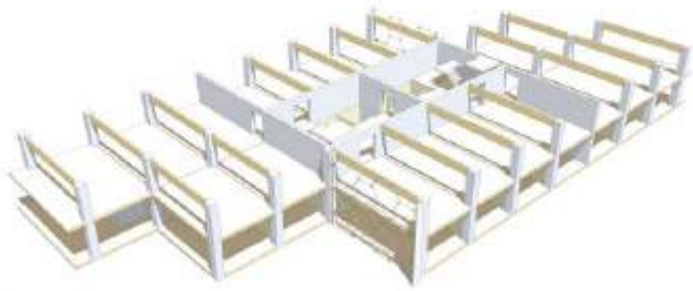
5. Installation of prefabricated kitchen modules



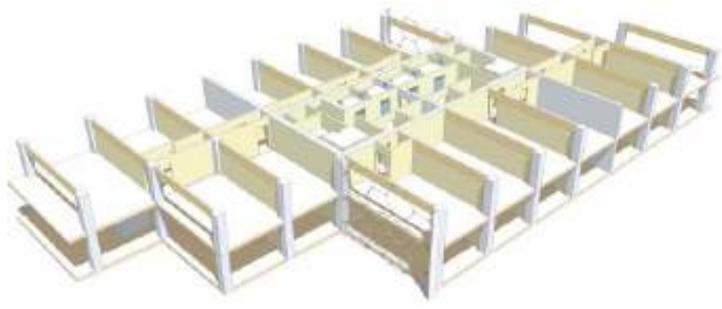
6. Next floor prep / Install of the central core outrigger walls



7. Steel column extensions and mass timber floor modules



8. Next floor Glue-lam beams

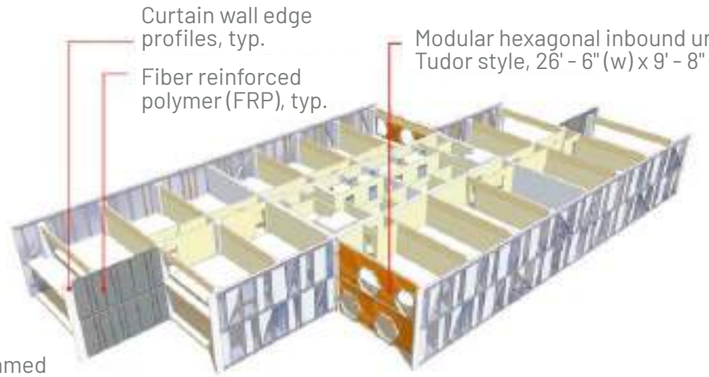


9. Interior, Non-load bearing partition walls

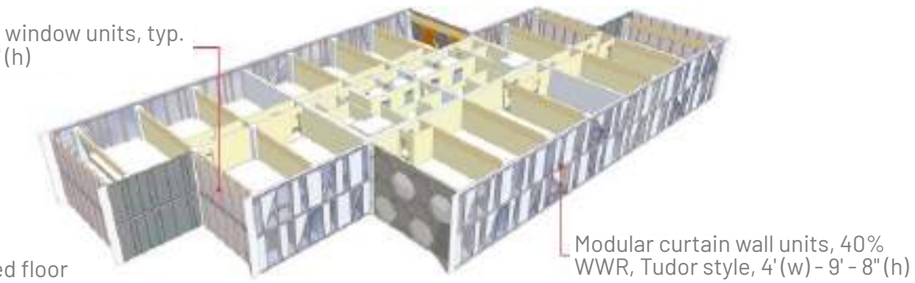
Diagrams courtsey of Matthias Olt / Arcadis.

SEATTLE MASS TIMBER TOWER SYSTEM DESIGN

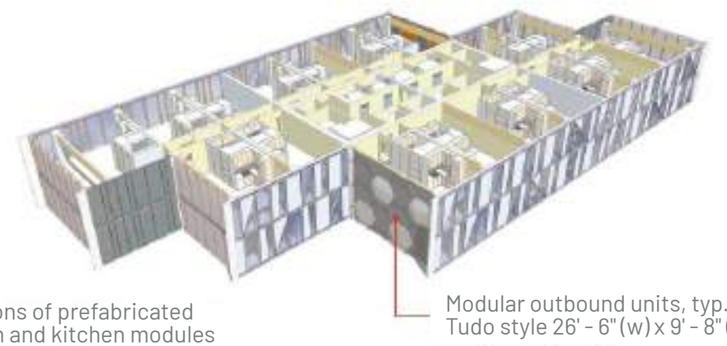
Installation sequence of modular building systems



10. Modular framed enclosure units



11. Completed floor enclosure



12. Installations of prefabricated powder room and kitchen modules

"Affordability and sustainability are the two most important conversations in which our community should be engaged. [...] I am thankful we have the kind of Design firms in this community who take it upon themselves to fund this R&D work."

- Peter Orser, Director, Runstad Center for Real Estate Studies, College of the Built Environments, University of Washington

Diagrams and photo courtsey of Matthias Olt / Arcadis.

SEATTLE MASS TIMBER TOWER SHEAR WALL DESIGN

COMPOSITION OF CARBON FIBER STRAND SHEAR WALL

Carbon fiber shear wall net and frames

Solid Wall Assembly

Completed wall with glass panels and rainscreen

Drawings and renderings courtesy of Matthias Olt / Arcadis.

unTower

Bellevue, WA

The architectural vision of the unTower centers on long-term adaptability and environmental responsibility. Its program-agnostic design allows seamless transitions between hotel, residential, and office uses with minimal disruption to building operations or environmental impact. The circular floor plate and modular layout enable a high degree of flexibility – movable partitions, flexible MEP systems, and generous floor-to-floor heights allow for rapid interior reconfiguration as market demands evolve.

Architectural diagrams reveal how the building's form and systems support this versatility. The radial geometry allows multiple towers to be linked horizontally or expanded vertically without compromising function or clarity – ensuring that scalability and adaptability remain intact across a range of applications and building heights. Each component is designed for assembly, disassembly, and reuse, promoting a circular lifecycle and minimizing construction waste.

Renderings and drawings courtsey of Matthias Olt / Arcadis.

CONCEPT: Proposed towers and skybridge to Meydenbauer Center from Bellevue Downtown Station (East Link).

PROJECT TEAM

Surbana Jurong
SPONSOR/OWNER

Mortenson
DEVELOPER & CONTRACTOR

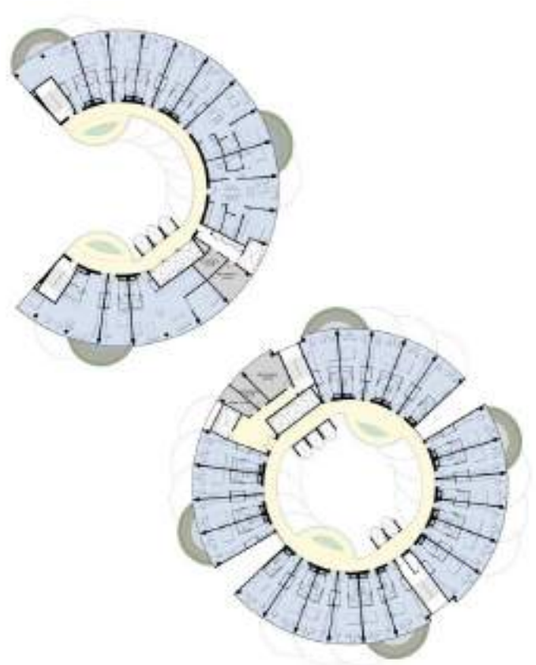
Silent Water Real Estate
DYNAMIC COST MODELING

B+H, Matthias Olt / Arcadis
ARCHITECT

Robert Bird Group
STRUCTURAL ENGINEER

Coffman Engineers
MASS TIMBER STRUCTURE / MEP

Vaagen Timbers
TIMBER PARTNERS



PLAN: Typical plan of residential (upper left) and hotel tower (lower right). For mid-rise developments, the tower pair achieves economic viability partly through integrated building cores.

unTower (Use-Neutral Tower)

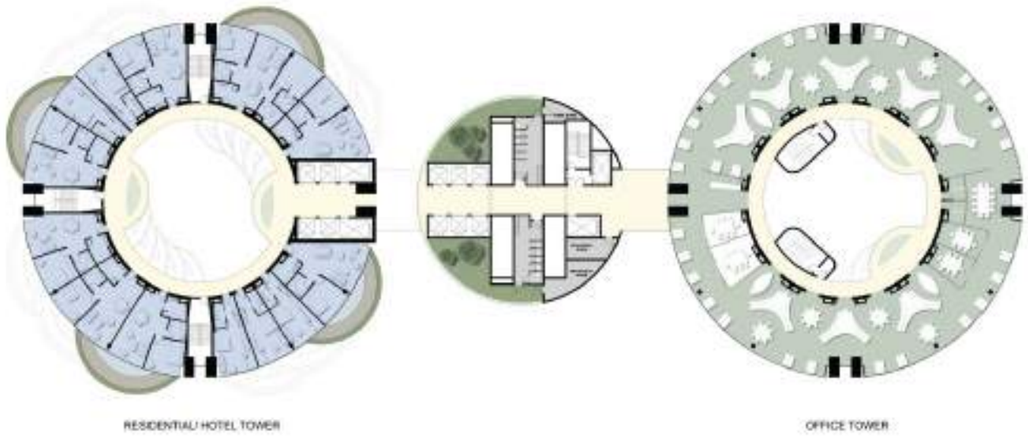
Burnaby, BC

The Use-Neutral Tower (unTower) is a paradigm shift in high-rise development, offering unmatched flexibility for commercial real estate investors. Designed as a program-agnostic structure, it seamlessly adapts to changing market demands—evolving from office to residential, hospitality, or mixed-use with minimal retrofitting. Its goldilocks geometry and modular, scalable design ensures longevity, maximizing asset value across economic cycles. Prototyped and cost-modeled for two locations—27 stories in Bellevue, WA, and 65 stories in Burnaby, BC—the unTower demonstrates its adaptability across diverse urban contexts. By eliminating rigid programming, it future-proofs investment, reduces risk, and sets a new benchmark for resilient, high-performance urban development.

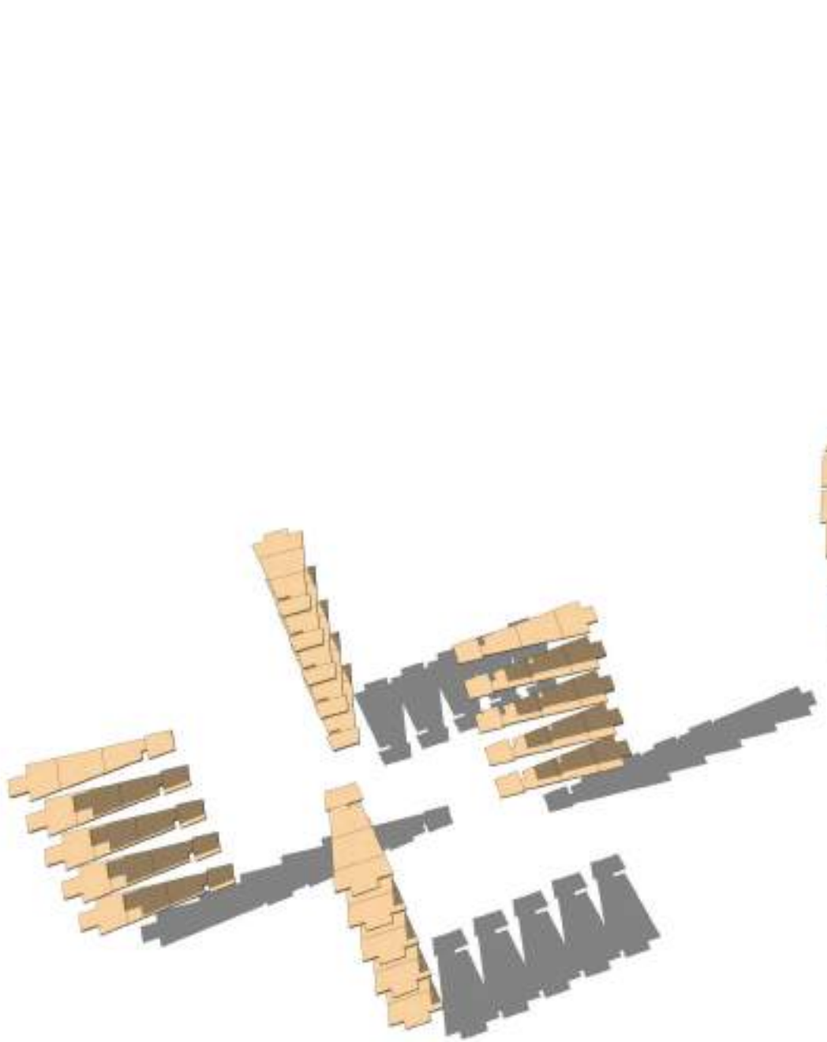
Website: The unTower

Renderings and drawings courtesy of Matthias Olt / Arcadis.

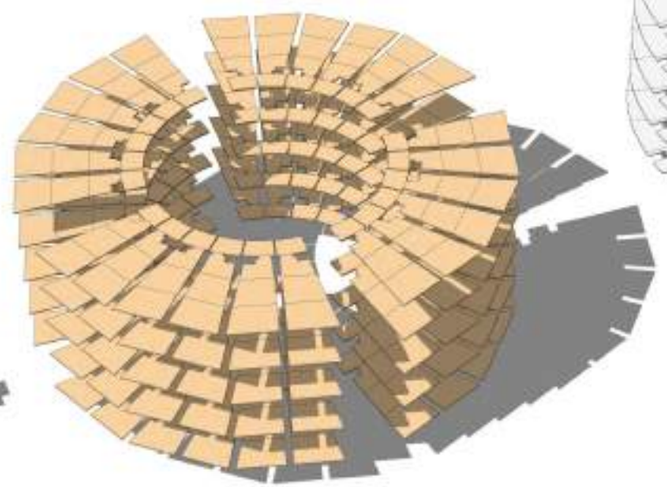
CONCEPTUAL PARTIAL SECTION: In-floor steel beam system minimizes the required structural floor assembly heights to 12 inches, resulting in reduced floor-to-floor heights, material volumes and associated costs.



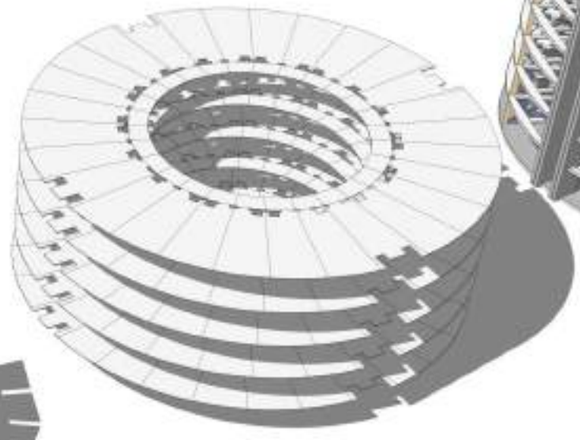
PLAN: Typical Plan of residential (left) and office tower (right). The tower pair achieves economic viability partly through a shared service core (center).



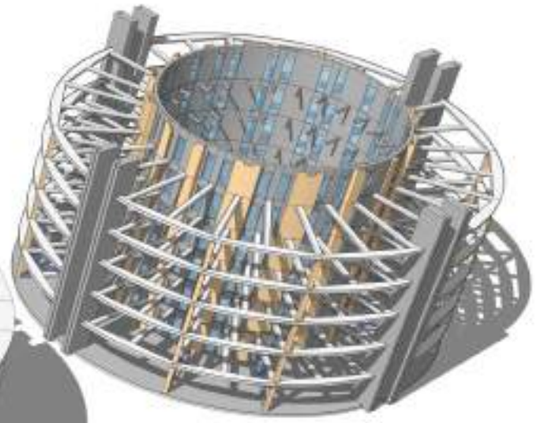
1. Uniform CLT Quadrant Panels



2. Uniform CLT Quadrants separated by Quadrant Panels



3. Concrete topping on CLT floor panels



4. In-floor structural steel framing

Renderings and drawings courtsey of Matthias Olt / Arcadis.

Atlassian HQ

Portland, OR

Over 39-stories high, Atlassian's proposed headquarters are designed to soar above the new innovation and technology precinct known as Tech Central. Upon completion this hybrid-mass timber commercial tower will be the tallest of its kind in the world. Holmes ANZ is providing base fire engineering alongside structural fire engineering for this groundbreaking project.

The hybrid mass timber design predominantly houses commercial offices, with retail and accommodation facilities that are adaptable for the evolving needs of Sydney's tech community.

Complex design pushes vertical limits and also sets a new benchmark in sustainable design and futureproofing. Sustainability targets include a 50% reduction in embodied carbon for the substructure, superstructure and facades compared to a conventionally-constructed building; a 50% reduction in operational energy compared to a conventional building; and the use of 100% renewable energy to power the building.

Construction photo courtesy of Holmes
Renderings © SHoP / BVN

PROJECT TEAM

Dexus
OWNER

Built
CONTRACTOR

SHoP Architects & BVN
ARCHITECTS

Holmes ANZ
FIRE ENGINEER

MASSTAC

Washington Mass Timber Accelerator

visit us at wamasstimber.org