



KALESNIKOFF

TIMBER INSPIRES

**FROM SEEDLINGS
TO SOLUTIONS, OUR
TIMBER INSPIRES.**

A Mass Timber Introduction and Design Guide

SEEDLINGS TO SOLUTIONS

WE DESIGN AND MANUFACTURE MASS TIMBER INTO HIGH-PERFORMING, SUSTAINABLE, AND AESTHETICALLY-STUNNING BUILDINGS.

With over 80 years rooted in timber, our legacy draws inspiration from the forests and the endless possibilities of designing and building with wood. From planting to final construction, we are committed to supporting our innovative building partners across North America with mass timber solutions that meet all design and sustainability goals.

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Like the mass timber products we manufacture, this Introduction & Design Guide is designed to serve as a functional and lasting reference for the building community. Within this guide, you'll find:

- An introduction to mass timber and the Kalesnikoff legacy
- A portfolio that shares how we support our building partners with mass timber
- A breakdown of the mass timber products and services we offer
- A set of design tables

INSIDE BACK COVER:

A thank-you letter from our leadership team – a family with four generations of history in the building industry.



SEEDLINGS

WE ARE INSPIRED BY FORESTS, AND HAVE SHAPED
OUR CULTURE AND BUSINESS OPERATION TO SUSTAIN THEM.

- 04 BENEFITS OF MASS TIMBER
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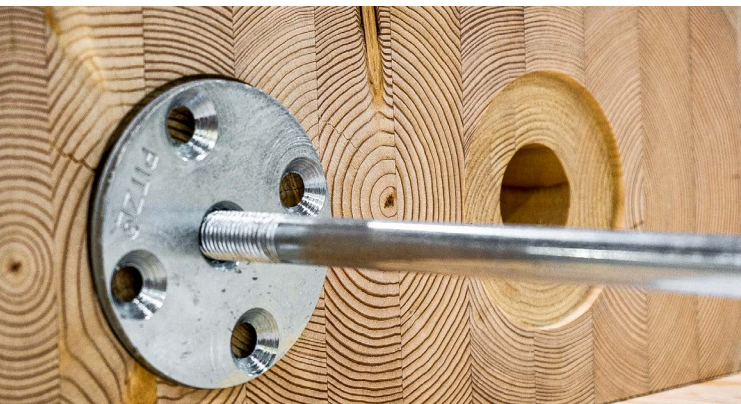
WEIGHING UP TO FIVE TIMES LESS THAN CONCRETE, MASS TIMBER SYSTEMS OFFER SIGNIFICANT BENEFITS TO BOTH BUILDERS AND BUILDING OWNERS ALIKE:

MASS TIMBER BENEFITS FOR BUILDERS



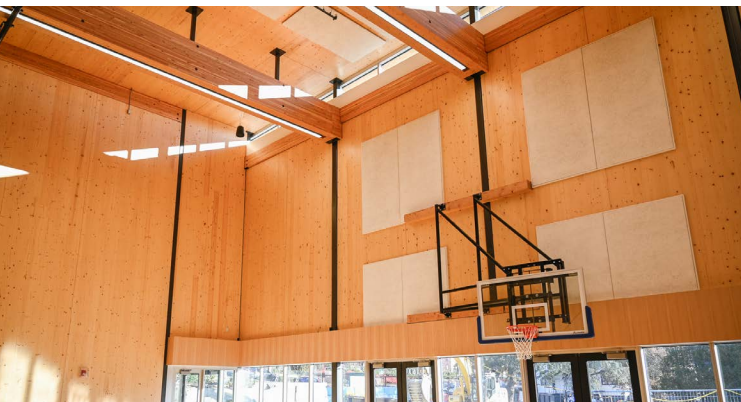
EFFICIENCY

Mass timber builds can be constructed up to 25% faster than traditional builds, significantly reducing labour costs.



DESIGN FLEXIBILITY

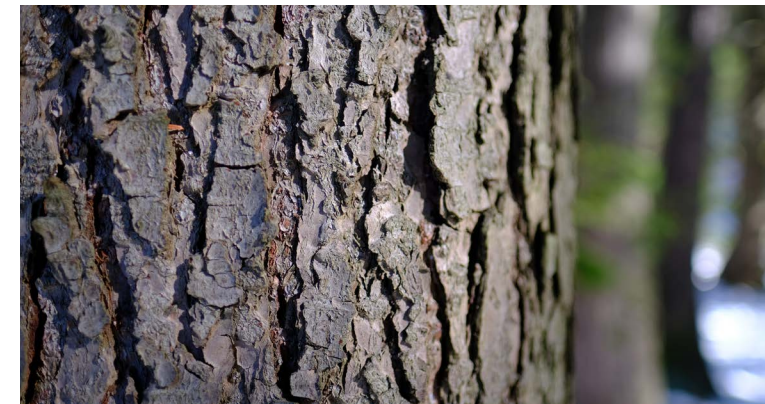
With a variety of panel dimensions and wood species to choose from – fabricated to precise tolerances – mass timber offers endless design possibilities.



PERFORMANCE

At only 20% of the weight of comparable buildings, mass timber reduces foundation size and inertial seismic forces.

MASS TIMBER BENEFITS FOR BUILDING OWNERS



SUSTAINABILITY

As a renewable resource, mass timber can significantly reduce a building's carbon footprint.



COMFORT

As an attractive, long-spanning structural system, mass timber supports spacious, open concept planning for biophilic advantages.



HEALTH & HAPPINESS

Introducing natural elements in architectural design has shown to increase productivity and reduce stress.

FOUR GENERATIONS OF WOOD EXPERTS

SINCE 1939, THE KALESNIKOFF FAMILY COMPANY HAS GROWN A LEGACY OF TRUST AND INTEGRITY, WITH A REPUTATION FOR PRECISION AND QUALITY.

What began with three brothers in 1939 with axes, horses, cross-cut saws, and a vision for a sustainable life working on the land has evolved into an innovative building partner with the capacity to design and manufacture over 50,000 cubic metres of mass timber product each year.

Though the equipment and technology has changed, what has sustained across four generations has been our respect for people, our passion for the forest, and our expertise.

By offering quality timber products with a personalized service, the Kalesnikoff family quickly earned its reputation as the timber supplier of choice.

Today, we are working hard to continue this legacy with our expansion into mass timber. As North America's most advanced, vertically integrated, multi-species mass timber manufacturer, we offer a high degree of flexibility in the services and products we offer our building partners.

OUR APPROACH TO MANUFACTURING MASS TIMBER IS GROUNDED IN OUR COMMITMENT TO THE FOREST.

**“TAKE CARE OF THE LAND,
AND THE LAND WILL TAKE CARE OF YOU.”**

For over 80 years, Kalesnikoff has maintained a history of exemplary sustainable forest management practices, ensuring our renewable resources flourish as much today as they will tomorrow. Through our connection to the forest, our support of local communities, and our commitment to environmental standards, we ensure a healthy and vigorous wood supply for generations to come.

We are excited to be part of an industry that is revolutionizing construction methods across North America. With expertise, experience, and an industry-leading mass

timber facility, our passionate team creates structures you can trust and solutions that inspire. **Our mass timber solutions include:**

- **Cost effective materials**
- **Multiple species for a variety of cosmetic appearances**
- **Variety of lumber and stress grades**
- **Flexibility in design**
- **Services that include design and fabrication solutions to achieve project goals**
- **Delivery and load planning support**



WORLD CLASS FACILITY, WORLD CLASS PEOPLE

**WE BELIEVE MASS TIMBER
BELONGS IN NORTH AMERICA.**

We invested in developing North America's most advanced, state-of-the-art multi-species mass timber manufacturing facility.

From stewardship to advanced manufacturing to final delivery, our people are inspired by a future that is built naturally and responsibly.





SEEDLINGS

WORLD CLASS FACILITY



SEEDLINGS

WORLD CLASS FACILITY

A WORLD CLASS FACILITY FOR NORTH AMERICA'S LEADING BUILDERS

ONLY THE BEST FOR NORTH AMERICA

We spent years studying the mass timber industry to best understand the process and where we can maximize manufacturing efficiencies. By incorporating leading-edge technology and equipment from around the world, we deliver innovative solutions and unmatched service to North American builders.

WE COLLECTED INPUT FROM OUR CUSTOMERS

We listened to builders across North America – architects, engineers, and general contractors – about what they require from a mass timber supplier, and we are delivering on what we heard. This includes service, product variety, and delivery expectations.

WE INVESTED IN THE FUTURE OF CONSTRUCTION

WE ACHIEVED THE CAPACITY TO DELIVER

By being able to plant and harvest our own trees, as well as control our supply through our sawmill, we achieve a capacity of 50,000 cubic metres of mass timber product each year. Our integrated system ensures a precise, consistent product delivered on schedule.

WE ARE ADVANCING NORTH AMERICAN BUILDING PRACTICES

Our investment in equipment and technologies allows us to improve our cutting abilities to create custom grades. Combined with our diverse fibre basket, we can fulfill a wide range of mass timber solutions.



SOLUTIONS

WE HELP SHAPE THE WAY NORTH AMERICA BUILDS
BY CONNECTING WITH NATURE AND CONTRIBUTING TO SUSTAINABILITY.

14	FEATURED PROJECTS
32	SPECIALIZED SERVICES
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BALTIC POINTE

DRAPER, UT, USA

CREDIT: METHOD STUDIO

PROJECT OWNER: Pelion Venture Partners
ENGINEER: BHB Structural
ARCHITECT: Method Studio
CONSTRUCTION MANAGER: Okland
INSTALLER: Timber Works Inc.
STEEL SUPPLIER: Command Industries

COORDINATING LOGISTICS AND PROVIDING SOLUTIONS

A total of 70+ truckloads will be required for this commercial office building, so effective logistics coordination is paramount. Our team divided the loads into two zones and is preinstalling most of the beam hangers to hasten the on-site installation process. We also spearheaded the clash detection and MEP integration processes and proposed solutions to facilitate a more efficient installation.

COMPLETION: 2024
SIZE: 2,100 m³
SPECIES: DFL Glulam + CLT
PROJECT TYPE: Commercial
PROJECT DELIVERY: Design-Bid-Build

PRODUCT OFFERED:

- CLT
- Glulam

SERVICES PROVIDED:

- 3D Modelling
- Shop Drawings
- Value Engineering
- Lifting Engineering

UNIVERSITY OF WASHINGTON TACOMA – MILGARD HALL

TACOMA, WA, USA

PROJECT OWNER: University of Washington Tacoma
ENGINEER: AHBL
ARCHITECT: Architecture Research Office (ARO)
CONSTRUCTION MANAGER: Anderson Construction
SUSTAINABLE FEATURES: PEFC Certification + EPD provided for the project

COORDINATION KEY TO SUCCESSFUL INSTALL

This steel-timber hybrid project involved complex detailing and MEP coordination. To ensure cohesion between the various partners, we coordinated with subtrades to incorporate tolerances and ensure a smooth and seamless install. Our delivery coordination was integral to the successful install for this educational space, where exposed glulam and CTL components will provide a warm, inviting and natural environment for students.

COMPLETION: Spring 2024
SIZE: 642m³
SPECIES: Douglas Fir Glulam + CLT
PROJECT TYPE: Institutional
PROJECT DELIVERY: Design-Bid-Build

PRODUCT OFFERED:

- CLT
- Glulam

SERVICES PROVIDED:

- Detailing
- Coordination
- Fabrication
- Logistics Management



THE KIND PROJECT

WEST SACRAMENTO, CA, USA

PROJECT OWNER: Urban Elements
ENGINEER: Holmes Structures
ARCHITECT: Williams + Paddon
CONSTRUCTION MANAGER: RCP Construction
INSTALLER: SD Ochs Carpentry

COMPLETION: August 2021
SIZE: 875 m³
SPECIES: SPF
PROJECT TYPE: Multifamily
PROJECT DELIVERY: Design-Bid-Build

STREAMLINING INSTALLATION

The Kind Project is a cost-effective studio apartment model with exposed CLT mezzanines offering beautiful and unique spaces. With only five different CLT panel sizes used for this project, we were able to streamline production and maximize efficiencies. Using a strategy of minimal variation in panel sizes led to an extremely efficient install despite a complex phased schedule with challenges including concurrent overlaps and a tight site.

PRODUCT OFFERED:

- CLT

SERVICES PROVIDED:

- Detailing
- Coordination
- Fabrication
- Logistics Management



KEITH DRIVE

VANCOUVER, BC, CANADA

PROJECT OWNER: Bentall Green Oak
ENGINEER: Fast + Epp
ARCHITECT: Dialog
CONSTRUCTION MANAGER: Ventana Construction
STEEL TRADE SUPPLIER/INSTALLER: George Third + Sons

COMPLETION: 2025
SIZE: 4,772 m³
SPECIES: DFL (Glulam) + SPF (CLT)
PROJECT TYPE: Mixed Use/
 Office Space
PROJECT DELIVERY: Design-Bid-Build

A STRIKING MASS TIMBER SHOWCASE

This ten-story tall wood office building features an eye-catching honeycomb-style exterior with seismic and biophilic benefits. This build has nine stories that are primarily constructed of mass timber above a concrete podium and parking garage. This complex project – with a fully integrated and coordinated steel and timber model – required a high level of coordination, experience and expertise.

PRODUCT OFFERED:

- CLT
- Glulam

SERVICES PROVIDED:

- Modeling
- Coordination
- Procurement
- Fabrication
- Logistics Management
- Additional services

HUMBER COLLEGE CULTURAL HUB

ETOBICOKE, ON, CANADA

PROJECT OWNER: Humber College
ENGINEER: Entuitive
ARCHITECT: Diamond Schmitt Architects
CONSTRUCTION MANAGER: EllisDon
INSTALLER: Bryte Designs

COMPLETION: Spring 2024
SIZE: 2,206 m³
SPECIES: DFL (Glulam) + SPF (CLT)
PROJECT TYPE: Residential/Institutional
PROJECT DELIVERY: Integrated Project Delivery

A NATURAL FIT

Mass timber was a natural fit for the Humber College Cultural Hub. Our mass timber supported the client's sustainability targets and allowed for an efficient install of two five-story repetitive residential towers above a concrete podium. As an Integrated Project Delivery partner, we helped to refine the mass timber connection design, establish a MEP strategy and flag clashes with other structural materials. This collaboration resulted in efficient manufacturing and assembly on site.

PRODUCT OFFERED:

- CLT
- Glulam

SERVICES PROVIDED:

- Design Assist
- 3D Modeling
- Shop Drawings
- Hardware

KALESNIKOFF MASS TIMBER EXPANSION

SOUTH SLOCAN, BC, CANADA

PROJECT OWNER: Kalesnikoff
ENGINEER: WHM Structural Engineers
ARCHITECT: TKA+D
CONSTRUCTION MANAGER: Kalesnikoff

COMPLETION: 2022
SIZE: 400 m³
SPECIES: Hemlock (CLT) + Douglas fir (Glulam)
PROJECT TYPE: Industrial

PREFABRICATED TRUSSES

The glulam and steel hybrid trusses we used for our 20,000 square-foot expansion span 80-foot widths. We prefabricated the trusses on our shop floor, which allowed for a swift installation. Our expansion extends our capacity to offer value-added services for our customers and allowed us to bring in additional equipment that will further improve our productivity.

PRODUCT OFFERED:

- CLT
- Glulam

SERVICES PROVIDED:

- Design
- Development
- Fabrication
- Install Management
- Additional services

UNIVERSITY OF VICTORIA STUDENT RESIDENCES

VICTORIA, B.C. CANADA



PROJECT OWNER: University of Victoria

ENGINEER: Fast + Epp

ARCHITECT: Perkins&Will

CONSTRUCTION MANAGER: EllisDon, Kinetic

COMPLETION: November 2021

SIZE: 650 m³

SPECIES: Douglas Fir

PROJECT TYPE: Institutional, Residential

SUSTAINABLE FEATURES: LEED Gold,
Passive House

PROJECT DELIVERY: Design-Bid-Build

A NEW SUSTAINABLE GOAL FOR A NEW GENERATION

With a dynamic and sustainable plan to elevate social living and student engagement, this new residence targets LEED Gold and Passive House certification, which will be a first for the University of Victoria.

DEDICATED SUPPORT THROUGHOUT THE DESIGN AND CONSTRUCTION PHASES

While the two-building, 320,000-square-foot development is predominantly cast-in-place concrete, Kalesnikoff was selected to provide the fabrication and installation support of a large exposed mass timber dining hall.

A COLLABORATIVE APPROACH

True to our collaborative and supportive processes, we worked closely with the engineers and architects throughout the pre-construction phase to accommodate updates to the mechanical and structural drawings.

A SEAMLESS FINISH

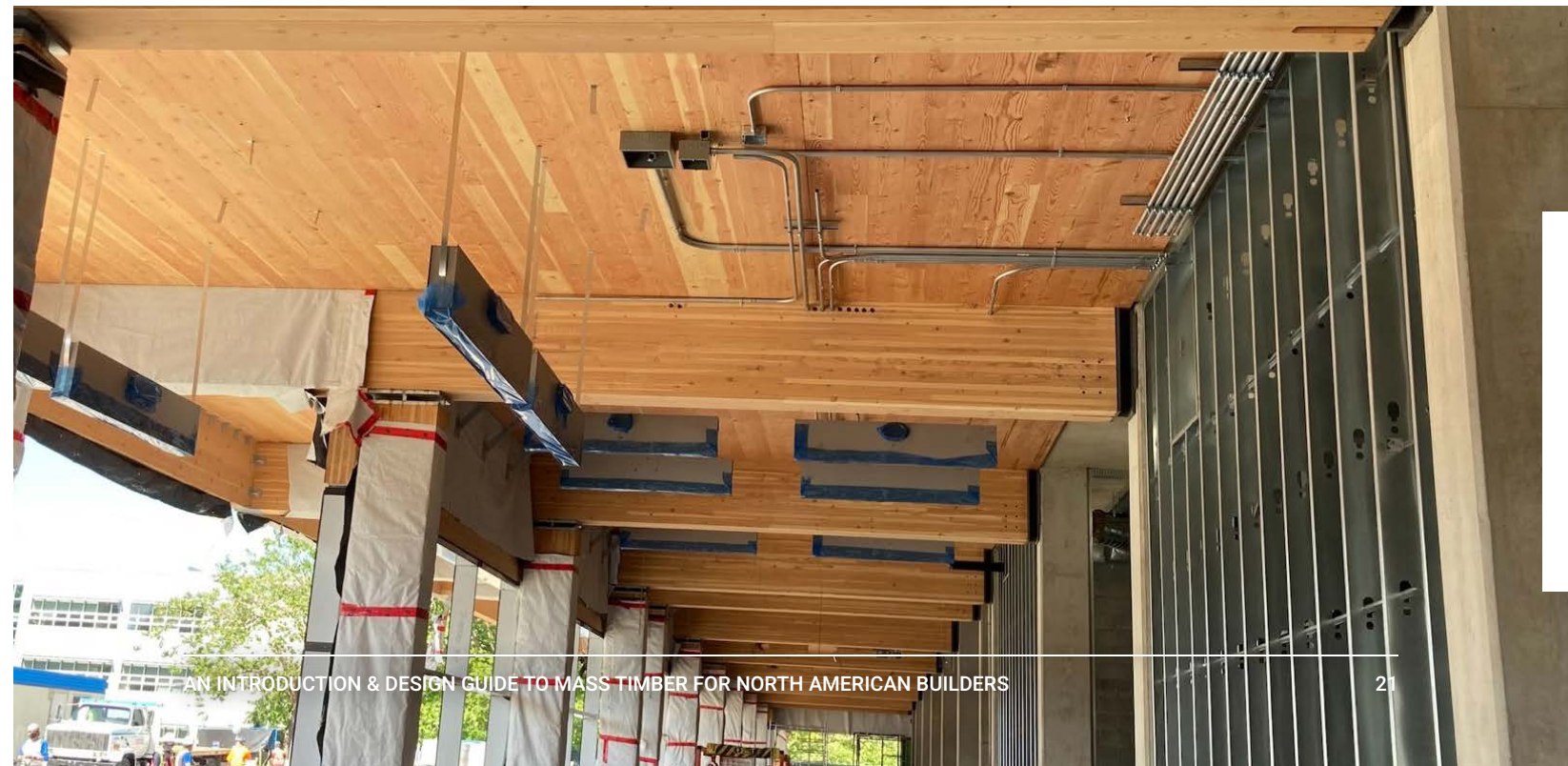
We also modified the design of the CLT panels from Spruce to Douglas Fir to match the Glulam beams for a seamless finish throughout the structure.

PRODUCT OFFERED:

- CLT
- Glulam

SERVICES PROVIDED:

- Detailing
- Shop Drawing
- Pre-Machining
- Pre-Fabrication
- Hardware Assembly
- Sequence Delivery
- Installation Support



PLACE MAILLARDVILLE COMMUNITY CENTRE

COQUITLAM, BC, CANADA

PROJECT OWNER: City of Coquitlam

ENGINEER: WHM

ARCHITECT: TKA+D

CONSTRUCTION MANAGER: Ledcor Construction

INSTALLER: Seagate Mass Timber

COMPLETION: 2022

SIZE: 480 m³

SPECIES: DFL (Glulam) + SPF (CLT)

PROJECT TYPE: Institutional

PROJECT DELIVERY: Design-Bid-Build

PRODUCT OFFERED:

- CLT
- Glulam

SERVICES PROVIDED:

- 3D Modeling
- Shop Drawings
- Hardware

MASS TIMBER FROM FLOOR TO CEILING

Place Maillardville Community Centre features exposed mass timber with our DFL glulam beams and SPF CLT on display throughout the building. The gymnasium is a mass timber focal point as the entire room – from the floors to the walls to the ceilings and support beams – is comprised of mass timber.

BAYVIEW ELEMENTARY SCHOOL SEISMIC REPLACEMENT

VANCOUVER, BC, CANADA



PROJECT OWNER: Vancouver School Board

ENGINEER: Fast + Epp

ARCHITECT: Francl Architecture

CONSTRUCTION MANAGER: Chandos Construction

COMPLETION: January 2022

SIZE: 1,335 m³

SPECIES: Spruce (CLT) + Fir (Glulam)

PROJECT TYPE: Institutional

PROJECT DELIVERY: Design-Bid-Build

A NEW SUSTAINABLE GOAL FOR A NEW GENERATION

Delivering a net CO₂ benefit of 1,137 metric tons, this new two-storey school will accommodate 365 students, with a preschool, two kindergarten classrooms and 13 classrooms for grades one through seven. The lower level will house administrative offices, classrooms, two multipurpose rooms and a large gymnasium, while the upper level will contain more classrooms and the library.

A ROBUST DESIGN FOR A FLEXIBLE LEARNING ENVIRONMENT

Throughout the pre-construction and design phases, we worked closely with the architect and engineer to deliver a school experience focused on collaborative learning spaces. This included widening corridors, while allowing for break-out rooms, seating, hang-out space, and flexible spaces for informal learning options.

MEETING ALL SEISMIC REQUIREMENTS

To comply with seismic requirements, we ensured the CLT system serves double duty as both gravity and shear walls to resist the high seismic forces of the region. The gymnasium and multipurpose spaces in the lower level are comprised of a composite double-T design, combining CLT with glulam beams to form 16 metre long spanning panels.

PRODUCT OFFERED:

- CLT
- Glulam

SERVICES PROVIDED:

- Detailing
- Shop Drawing
- Pre-Machining
- Pre-Fabrication
- Hardware Assembly
- Sequence Delivery
- Installation Support



TIMBER HOUSE

NEW WESTMINSTER, BC, CANADA



PROJECT OWNER: Aragon Properties

ENGINEER: Fast + Epp

ARCHITECT: RWA Group

CONSTRUCTION MANAGER: Aragon Construction

COMPLETION: 2022

SIZE: 3,000 m³

SPECIES: Spruce

PROJECT TYPE: Residential

PROJECT DELIVERY: Bid-Build

A COST-EFFECTIVE MASS TIMBER KIT-OF-PARTS SOLUTION

Kalesnikoff was brought into this project as a building partner that can offer a cost-effective, mass timber kit-of-parts solution that could be fabricated off-site and installed on-site with complete efficiency. By working closely with our client and partnering engineering, architectural, and construction management teams, we helped provide mass timber floors, bearing walls, and shearwalls throughout an entire mid-rise residential development that is both structurally sound and aesthetically pleasing.

CAPITALIZING ON EFFICIENCIES

For a kit-of-parts project of this scale, it's critical to deliver and off-load trucks in sequence to be installed on-site quickly and efficiently. We worked closely with the construction management partner throughout the planning and construction stages, helping them understand how the product would arrive to be assembled on-site. This ensured they were able to accurately schedule truck delivery, material unloading and installation sequencing to minimize time and labour.

A WOOD SPECIES THAT MEETS ALL EXPECTATIONS

We reviewed the different species of wood available with the client to understand which unique features were most important to them and what they were looking to achieve. We ultimately selected spruce as a species that is lightweight, dimensionally stable, and can be fabricated to tight tolerances, while maintaining appealing aesthetic preferences.

COMBINING STRUCTURAL AND AESTHETIC QUALITIES

Mass timber will not only be used as the primary structure throughout the 77-unit mid-rise housing project, but it also serves as an integral design feature of the interior finish, with many walls left exposed to showcase the natural and attractive aesthetic of the wood. As a true kit-of-parts solution, Timber House optimizes mass timber's structural and aesthetic design qualities with constructability and cost efficiency.

PRODUCT OFFERED:

- CLT
- Glulam

SERVICES PROVIDED:

- Machining
- Fabrication
- Hardware Assembly
- Delivery
- Installation Support



OAKCREST HEADQUARTERS

VICTORIA, BC, CANADA



PROJECT OWNER: Oakcrest Park Estates LTD.

ENGINEER: Skyline Engineering

ARCHITECT: Studio 531

CONSTRUCTION MANAGER: Story Construction

COMPLETION: 2022

SIZE: 235 m³

SPECIES: Spruce (CLT) + Fir (Glulam)

PROJECT TYPE: Commercial

PROJECT DELIVERY: Bid-Build

A TRUE BUILDING PARTNER

This project is a perfect example of how well Kalesnikoff is able to work with a builder that is new to mass timber, guiding them through the nuances of the process to optimize constructability and efficiency. From the early project tender and scheduling stages to on-site delivery and installation, the Kalesnikoff team was a true building partner that offered a complete 360-degree perspective.

DESIGN ASSIST SUPPORT

We leveraged our technical experience with the design and building teams to provide feedback on the engineering details, including offering guidance throughout the specific code requirements of this commercial building. We also standardized all of the screws and fasteners that were specified in the hardware connections, simplifying the materials required for a streamlined and more cost-efficient installation.

INSTALLATION SEQUENCING IN THE SHOP DRAWING STAGE

Early in our shop drawing process, we're able to offer installation sequencing to optimize the delivery and on-site installation of the mass timber panels and beams. Particularly helpful for builders who are new to mass timber, or for projects that are constructed in heavily-populated urban areas with limited room for staging or storing materials, installation sequencing ensures the trucks are scheduled to arrive at the job site and be unloaded directly in place.

PRODUCT OFFERED:

- CLT
- Glulam

SERVICES PROVIDED:

- Detailing
- Shop Drawing
- Machining
- Fabrication
- Hardware Assembly
- Delivery
- Installation Support





MAPLEWOOD FIRE & RESCUE CENTER
NORTH VANCOUVER, BC



SOUTHSIDE ELEMENTARY SCHOOL
CHILLIWACK, BC



CREDIT: MIGUEL ORELLANA AND HCMA

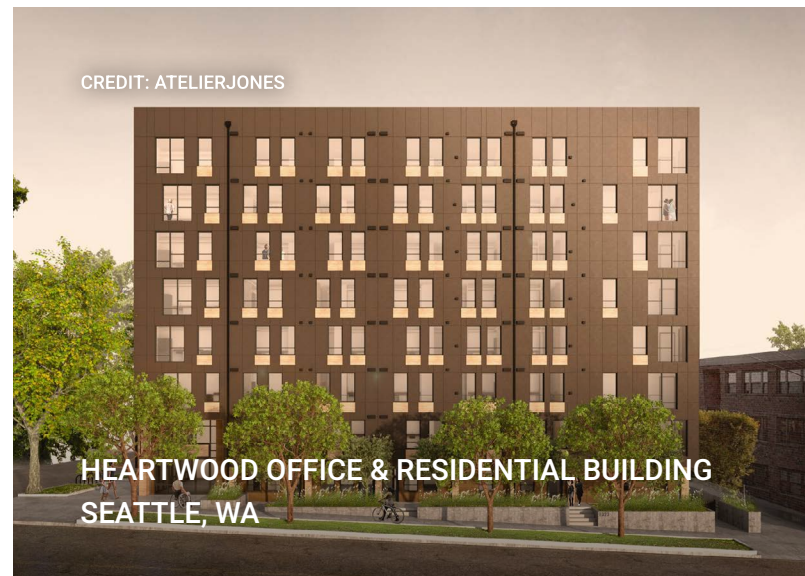
NEW WEST AQUATIC & COMMUNITY CENTER
NEW WESTMINSTER, BC



SONRISA STUDIO APARTMENTS
SACRAMENTO, CA



ROCKFORD APARTMENTS & COMMERCIAL SPACE
LANGFORD, BC



CREDIT: ATELIERJONES

HEARTWOOD OFFICE & RESIDENTIAL BUILDING
SEATTLE, WA



LATONA OFFICE & LIFE SCIENCE BUILDING
SEATTLE, WA



EGLISE MOUNTAIN SKI LODGE
BIG SKY, MT



CREDIT: COVER ARCHITECTURE

CASTLEGAR CHILDCARE CENTER
CASTLEGAR, BC



THE ANNEX AFFORDABLE HOUSING DEVELOPMENT
PORTLAND, OR



CREDIT: MCFARLAND MARCEAU ARCHITECTS

ALLIANCE FRANCAISE
VANCOUVER, BC



CREDIT: EKISTICS ARCHITECTURE

MAN 6
VANCOUVER, BC

CUSTOMIZED SOLUTIONS THROUGH SUPPORTIVE & COLLABORATIVE PROCESSES

WE WORK WITH BUILDING OWNERS, ARCHITECTS, AND ENGINEERS TO DELIVER INNOVATIVE, COST-EFFECTIVE, AND SUSTAINABLE SOLUTIONS.

From planting and harvesting, to design and fabrication, to delivery and installation, we are as involved in your mass timber project as you want us to be. With a passionate, knowledgeable, and experienced team, we continuously seek ways to make the most out of each phase and project milestone.

WE ARE RELATIONSHIP BUILDERS

Personalized service is the foundation of our company's legacy. Our team of mass timber specialists will listen to your needs and help you solve your unique building challenges to achieve every design and sustainability goal.

OUR PROVEN PROCESS

We carefully manage everything we plant, harvest, and cut, offering a true seedlings-to-solutions mass timber supply. Through state-of-the-art facilities and access to a variety of species, we're able to meet design specifications with precise machining tolerances.

YOUR BUILDING PARTNER THROUGH EVERY STAGE OF CONSTRUCTION

INVOLVEMENT IN EVERY STAGE OF PRODUCTION ALLOWS US TO LEVERAGE TECHNICAL ADVANTAGES THAT ONLY COME WITH A 360-DEGREE PERSPECTIVE.

Through our integrated delivery approach, we can make design and constructability recommendations in the pre-construction stage that will provide measurable cost savings at the installation stage.

DESIGN ASSIST

We offer complete design-assist guidance and feedback as needed, leveraging our years of technical experience and expertise to customize a plan that achieves your vision.

FABRICATION

With an efficient, precise, and strict tolerance process, we manage our building partners' mass timber fabrication needs to optimize on-site installation.

INSTALLATION SUPPORT

Our knowledgeable and creative team supports our building partners' installation crews with a detailed and proven On-Site Installation Management Strategy, maximizing on-site delivery and scheduling.

CROSS-LAMINATED TIMBER (CLT)

FROM FLOORS TO WALLS TO ROOFING, OUR EDGE-GLUED CLT PANELS PROVIDE NATURALLY BEAUTIFUL, RESPONSIBLE, AND EFFICIENT STRUCTURAL SOLUTIONS.

OUR CLT PROCESS

Formed by stacking and gluing together multi-layers of dimensional lumber at an alternating 90-degree orientation, CLT stacks are pressed both vertically and horizontally to allow for an exceptionally clean, edge-glued panel. Using CNC machines, we fabricate to precise tolerances and finish to be installation-ready on the job site.

CLT VS. CONCRETE OR STEEL

Lighter than concrete or steel, CLT panels can reduce foundation costs while remaining extremely durable, carbon neutral, and cost effective, particularly on multi-storey and long-span diaphragm applications.

THE CLT ADVANTAGE

Combined with other materials such as Glulam Beams and GLT Panels, builders can create innovative and stable structures that can save installation time on the job site, while meeting all compliance, design, and sustainability goals.



AVAILABLE SIZES

WIDTHS: up to 3.5 m
HEIGHTS: from 87 mm (3 ply)
up to 315 mm (9 ply)

LENGTHS: up to 60 ft

*Custom depths and
layups available.*

AVAILABLE GRADES

V2	E1
V2.2	E1.3
V2.4	E1M11
V2M6	E1M9

V are visually rated input lumber; E are machine stress rated input lumber. All of the layups come in Spruce, Fir, and Hemlock.

MOISTURE CONTENT

12% moisture content plus or minus 2%. Max. 15%.

FINISH

Machining, sanding, patching, and filling as per design specifications. Visual grade finishes are edge-glued.

CERTIFICATION

PRG - 320
Sustainably certified product
available by request.

AVAILABLE SPECIES

Douglas Fir/Larch
Spruce (SPF)
Hemlock

DESIGN TABLES

*Refer to pages 40-43 for our
common CLT Design Tables*

GLULAM BEAMS

AN IDEAL SOLUTION FOR HORIZONTAL OR VERTICAL FRAMEWORK IN TALL WOOD BUILDINGS OR STRUCTURES, GLULAM IS A NEXT-GENERATION ALTERNATIVE TO CONCRETE AND STEEL.

Our Glulam can be manufactured into beams and columns of varying size, shape, and configuration to be used in innovative applications where strength, durability, and design are critical. With a world class facility that manufactures lamstock material in a variety of species, our manufacturing precision has been perfected over 30 years.



GLUE-LAMINATED TIMBER PANELS (GLT)

WHEN LAID FLAT FOR FLOOR OR ROOF APPLICATIONS, GLT PANELS COMBINE STRUCTURAL PERFORMANCE WITH AN ATTRACTIVE FINISH.

GLT Panels combine traditional mass timber construction techniques with the precision and quality of engineered wood products. The result is a strong, light-weight structural material that can be engineered in a broad range of configurations, species, and sizes with a clean and attractive aesthetic.





INDUSTRIAL ENGINEERED WOOD PRODUCTS

WE ALSO ENGINEER TIMBER INTO INDUSTRIAL ACCESS AND RIG MATS, ENSURING A HIGH-STRENGTH, LIGHT-WEIGHT, AND COST-EFFECTIVE SOLUTION.

More durable than traditional bolted mats, our industrial access and rig mats transport easily and install quickly, and are engineered to ensure your people and heavy equipment arrive safely, wherever the job site takes you. This includes:



- Temporary Roadways
- Crane Mats
- Swamp Mats
- Rig Mats



PREMIUM STRENGTH LUMBER PRODUCTS

WE BRING OVER 80 YEARS OF EXPERIENCE MANUFACTURING WOOD INTO A VARIETY OF HIGH STRENGTH, CONSISTENT, AND DEPENDABLE LUMBER PRODUCTS.

With access to some of the strongest fine grain softwood available across North America, we offer a wide range of premium strength, stress-graded lumber products, designed for framing, general construction, and other high-strength applications. This includes:

- Dimensional Lumber
- Timbers
- Lamstock

DESIGN TABLES

CROSS LAMINATED TIMBER PANEL LAYUPS

PLY	PANEL DEPTH		GRADE	LAYUP								
	mm	in.										
3 Ply	105	4 1/8	V2	35	35	35						
4 Ply	175	6 7/8		35	35	35	35	35				
5 Ply	175 EL	6 7/8		35 x 2	35	35 x 2						
6 Ply	245	9 5/8		35	35	35	35	35	35	35		
7 Ply	245 EL	9 5/8		35 x 2	35	35	35	35 x 2				
8 Ply	280 EL	11		35 x 2	35	35	35	35	35	35		
9 Ply	315	12 3/8	V2M6	35	35	35						
10 Ply	105	4 1/8		35	35	35						
11 Ply	175	6 7/8		35	35	35	35	35				
12 Ply	245	9 5/8	V2.2	35	35	35	35	35	35	35	35	
13 Ply	315	12 3/8		35	35	35	35	35	35	35	35	
14 Ply	87	3.42		35	17	35						
15 Ply	139	5.47		35	17	35	17	35				
16 Ply	157 EL	6.17		35 x 2	17	35 x 2						
17 Ply	191	7.52		35	17	35	17	35	17	35		
18 Ply	209 EL	8.22	35 x 2	17	35	17	35 x 2					
19 Ply	243	9.56	35	17	35	17	35	17	35	17		
20 Ply	261 EL	10.27	35 x 2	17	35	17	35	17	35 x 2			
21 Ply	114	4.5	V2.4	38	38	38						
22 Ply	190	7.5		38	38	38	38	38				
23 Ply	266	10.5		38	38	38	38	38	38			
9 Ply	342	13.5		38	38	38	38	38	38	38	v	

LSD STIFFNESS AND UNFACTORED RESISTANCE VALUES

Grade	MAJOR STRENGTH DIRECTION				MINOR STRENGTH DIRECTION			
	"(FbS)eff.f.0 (10 ⁶ N-mm/m)"	"(E)eff.f.0 (10 ⁹ N-mm ² /m)"	"(GA)eff.f.0 (10 ⁶ N/m)"	"Vs,0 (kN/m)"	"(FbS)eff.f.90 (10 ⁶ N-mm ² /m)"	"(E)eff.f.90 (10 ⁹ N-mm ² /m)"	"(GA)eff.f.90 (10 ⁶ N/m)"	"Vs,90 (kN/m)"
V2	18	884	7.2	35	1.4	32	7.5	12
	41	3,388	14	58	12	837	15	35
	51	4,210	15	58	1.4	32	8.9	12
	72	8,388	22	82	29	3,213	23	58
	93	10,788	22	82	12	837	16	35
	96	13,660	25	93	29	3,213	23	58
V2M6	112	16,724	29	105	51	7,958	30	82
	18	884	7.6	35	2.4	34	7.6	12
	41	3,390	15	58	21	884	15	35
	72	8,394	23	82	48	3,390	23	58
V2.2	112	16,738	30	105	85	8,394	30	82
	13	518	7.5	29	0.34	4	4.4	6
	29	1,907	15	46	4.9	215	8.7	23
	41	3,060	18	52	0.34	4	6.3	6
	52	4,659	22	64	11	856	13	40
	71	7,008	25	70	4.9	215	11	23
V2.4	80	9,230	30	81	19	2,147	17	58
	107	13,218	32	87	11	856	15	40
	21	1,131	7.8	38	1.7	41	8.2	13
	48	4,336	16	63	15	1,071	16	38
	85	10,735	23	89	34	4,112	24	63
132	21,403	31	114	60	10,185	33	89	

DESIGN TABLES

CROSS LAMINATED TIMBER PANEL LAYUPS, CONTINUED

PLY	PANEL DEPTH		GRADE	LAYUP												
	mm	in.														
3 Ply	105	4 1/8	E1	35	35	35										
5 Ply	175	6 7/8		35	35	35	35	35								
7 Ply	245	9 5/8		35	35	35	35	35	35	35						
9 Ply	315	12 3/8		35	35	35	35	35	35	35	35	35	35	35	35	35
3 Ply	105	4 1/8	E1M11	35	35	35										
5 Ply	175	6 7/8		35	35	35	35	35								
7 Ply	245	9 5/8		35	35	35	35	35	35	35						
9 Ply	315	12 3/8		35	35	35	35	35	35	35	35	35	35	35	35	35
3 Ply	105	4 1/8	E1M13	35	35	35										
5 Ply	175	6 7/8		35	35	35	35	35								
7 Ply	245	9 5/8		35	35	35	35	35	35	35						
9 Ply	315	12 3/8		35	35	35	35	35	35	35	35	35	35	35	35	35
3 Ply	105	4 1/8	E1M8	35	35	35										
5 Ply	175	6 7/8		35	35	35	35	35								
7 Ply	245	9 5/8		35	35	35	35	35	35	35						
9 Ply	315	12 3/8		35	35	35	35	35	35	35	35	35	35	35	35	35
3 Ply	105	4 1/8	E1M9	35	35	35										
5 Ply	175	6 7/8		35	35	35	35	35								
7 Ply	245	9 5/8		35	35	35	35	35	35	35						
9 Ply	315	12 3/8		35	35	35	35	35	35	35	35	35	35	35	35	35
3 Ply	87	3.42	E1.3	35	17	35										
5 Ply	139	5.47		35	17	35	17	35								
7 Ply	191	7.52		35	17	35	17	35	17	35						
9 Ply	243	9.56		35	17	35	17	35	17	35	17	35				
3 Ply	114	4.5	E1.2	38	38	38										
5 Ply	190	7.5		38	38	38	38	38								
7 Ply	266	10.5		38	38	38	38	38	38	38						
9 Ply	342	13.5		38	38	38	38	38	38	38	38	38	38	38	38	38

LSD STIFFNESS AND UNFACTORED RESISTANCE VALUES, CONTINUED

GRADE	"(FbS)eff.f.0 (10 ⁶ N-mm/m)"	"(E)eff.f.0 (10 ⁹ N-mm ² /m)"	"(GA)eff.f.0 (10 ⁶ N/m)"	"Vs.0 (kN/m)"	"(FbS)eff.f.90 (10 ⁶ N-mm ² /m)"	"(E)eff.f.90 (10 ⁹ N-mm ² /m)"	"(GA)eff.f.90 (10 ⁶ N/m)"	"Vs.90 (kN/m)"
E1	42	1,088	7.3	35	1.4	32	9.1	12
	98	4,166	15	58	12	837	18	35
	172	10,306	22	82	29	3,220	27	58
	267	20,536	29	105	51	7,984	36	82
E1M11	36	958	7.2	35	1.4	32	8.1	12
	83	3,671	14	58	12	837	16	35
	146	9,086	22	82	29	3,215	24	58
	227	18,110	29	105	51	7,968	32	82
E1M13	36	958	7.6	35	2.4	34	8.1	12
	83	3,671	15	58	21	884	16	35
	146	9,091	23	82	48	3,392	24	58
	227	18,125	30	105	85	8,403	33	82
E1M8	42	1,088	9.3	35	5.8	42	9.3	12
	98	4,175	19	58	50	1,088	19	35
	173	10,338	28	82	115	4,175	28	58
	268	20,615	37	105	203	10,338	37	82
E1M9	42	1,088	7.7	35	2.4	34	9.1	12
	98	4,168	15	58	21	884	18	35
	172	10,312	23	82	48	3,397	27	58
	267	20,551	31	105	85	8,420	36	82
E1.3	30	637	7.7	29	0.34	4	5.3	6
	69	2,347	15	46	4.9	216	11	23
	123	5,732	23	64	11	860	16	40
	191	11,351	31	81	19	2,161	21	58
E1.2	50	1,392	7.9	38	1.7	41	9.8	13
	115	5,332	16	63	15	1,072	20	38
	203	13,190	24	89	34	4,121	30	63
	315	26,282	32	114	60	10,218	39	89

THANK YOU

On behalf of the Kalesnikoff team, my family and I would like to thank you for considering our mass timber offerings.

As a fourth-generation family company, we have business partnerships going back several decades, and we take pride in the relationships we've established over the years.

We are driven by our passion for the forests, and have a storied history of helping our customers achieve their goals. Ever since my grandfather and his brothers started our company, we've been taking care of the land and protecting our natural resources for future generations.

As a true building partner, our team is always available to offer support. Whether you're seeking technical advice, an estimate on cost or delivery, or you're interested in learning more about how we help builders across North America achieve their design and sustainability goals, please contact our dedicated mass timber team. You can reach us at **250-399-4211** or **mtsales@kalesnikoff.com**

We look forward to helping bring your buildings to life.

Sincerely,
Ken Kalesnikoff, along with Krystle Seed and Chris Kalesnikoff



KALESNIKOFF

TIMBER INSPIRES



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