





Celebrating WOOD DESIGN IN ONTARIO













Let's Celebrate the winners!

Timber is strong, lightweight and safe.

It is durable, versatile and adaptable. In Ontario we have a long tradition of building with timber. It is a fundamental part of our architectural heritage, embraced for its warmth, beauty and sustainability.

The construction sector is one of the major contributors to GHG emissions. As forests absorb carbon through photosynthesis, responsibly harvested timber products store the carbon and prevent it from being released into the atmosphere. Wood thereby has an important role to play as people move towards cities, causing increased urban densification and the need for midrise and taller buildings.

Timber can be used in many applications beyond residential homes. Codes permit many types of low-rise commercial, up to 6-storey light wood frame construction, and soon the use of mass timber in 12 storey buildings in many regions of Canada.

We congratulate all the winners of the 2019 Ontario Wood *WORKS!* award program as we support the remarkable evolution of timber design.

Thank you to our supporters, your contributions make the awards program possible and we appreciate your involvement and support.

Ontario Wood WORKS! Team







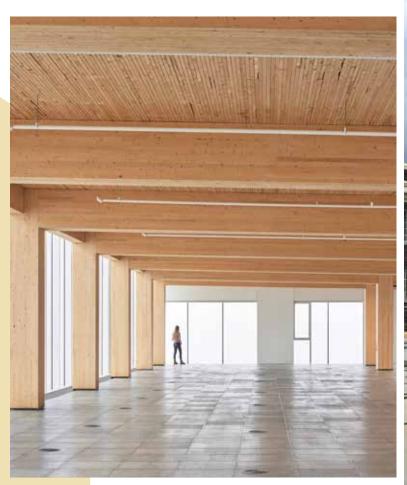
Mass Timber WOOD DESIGN AWARD

SPONSOR Ontario

80 Atlantic Toronto, ON, Canada

PROJECT DESIGN TEAM
Architect: Quadrangle

Structural Engineer: RJC Engineers



Photography credit: Doublespace Photography



BUILDING USE

Office building, with ground floor retail uses

BUILDING SIZE 90,000 sq. ft.

October 31, 2019

Ontario's first mid-rise mass timber commercial building in over a hundred years, 80 Atlantic pioneers a new urban office typology for potentially many more timber frame projects across the province.



Revisions to the Ontario building code in 2015 made it possible to build commercial wood buildings up to six storeys high. The developer and architect saw this as an opportunity to demonstrate leadership in the rapidly developing field of mass timber, and to attract tenants seeking a premium workplace environment associated with innovation and sustainability.

80 Atlantic brings back all the features that people love about historic brick and beam workplaces: the open, spacious layout, generous ceiling heights, and the warm look and feel and even smell that are known to have a positive impact on human well-being.

As a building material, wood offers more than aesthetic appeal – it is also highly sustainable. Wood sequesters carbon for the life of the building. Also, prefabricated mass timber panels can be manufactured off site, thereby improving construction safety, reducing waste, and decreasing overall construction time.

The upper four floors are composed of glulam beams and columns, on which are installed **Nail-Laminated Timber (NLT)** floor deck panels.



The interiors were left raw for fit-out, exposing long expanses of the **NLT** and columns and empowering the tenants to make the space their own while still celebrating the nature of this 21st century wood building.

An engineered floor plenum within a raised access floor system integrates the mechanical, electrical and telecommunications systems and tucks these out of view beneath tenants' feet.



The **natural wood** columns and ceilings are on display throughout.

Project Structure Data that is Wood Related

FRAME:

Glulam beams and columns.

FLOOR AND ROOF SYSTEMS:

Institutional WOOD DESIGN AWARD

SPONSOR

Canadian Conseil Wood canadien Council du bois



King Township Municipal Administration Centre King City, ON, Canada

PROJECT DESIGN TEAM Architect: +VG Architects Structural Engineer: Stephenson Engineering Ltd.





Photography credit: A-Frame Inc.

BUILDING USE Municipal/Administrative

BUILDING SIZE 46,285 sq. ft.

COMPLETION DATE February 2019



Glu-laminated heavy timber in an exposed structural configuration becomes a playful sculptural assemblage where one can trace the lines of Spruce-Pine-Fir criss-crossing through the air overhead.

The structural patterning is evocative of heavy timber barn structures so dominant a symbol of rural King.

Heavy Timber birch veneer panelling is paired with a strong, brick masonry, double colonnade which forms the central organizing spine for the building.

A defining characteristic of the Township of King is the presence of the provincially protected Green Belt natural preserve. The new municipal administration building and site are designed to reflect the symbolic importance of this character. The site is bounded by natural woodland and wetland preserves.

The building design incorporates many green initiatives like geothermal mechanical systems and enhanced sustainable site strategies and is anticipated to meet either LEED Silver or Gold level certification.





A key focus on the structure as a building "for the public" with a design approach that created spaces that could be multi-functional in nature and to create spaces that were memorable, iconic in nature, and symbolic for the community.

Project Structure Data that is Wood Related

FRAMF:

Glu-lam columns. T&G wood decking.

Innovation

WOOD DESIGN AWARD

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Shopper's Drug Mart Flagship Toronto, ON, Canada

PROJECT DESIGN TEAM

Architect: Brook McIlroy (base building), Petroff Architects (interior retail), ERA Architects (heritage)

Structural Engineer: Blackwell



Photography credit: Scott Norsworthy

The Shoppers Drug Mart Flagship is the first significant mid-rise mass timber building in Toronto's downtown core.

Four levels of glulam post-and-beam framing.

Pioneered Toronto's first use of an all wood CLT elevator shaft and stairwell shafts.



A sophisticated system of glulam columns and beams, and Cross Laminated timber (CLT) floor, roof, and shaft panels.

A stunning example of what modern timber building technology can offer.



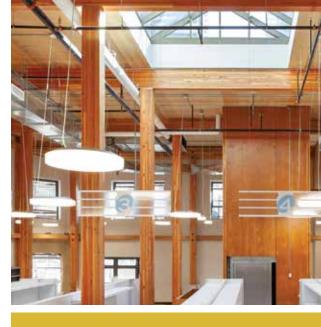
BUILDING USERetail store and office

BUILDING SIZE 22 027 sq. ft.

COMPLETION DATE
December 2019

"It (mass timber) was additionally chosen as a commitment to sustainability, as mass timber sequesters carbon and is a sustainable construction material," principal Calvin Brook, architect said.





Project Structure Data that is Wood Related

FRAME:

Four levels of glulam post-and-beam framing.

FLOOR AND ROOF SYSTEMS:

Cross Laminated Timber (CLT).

Low Rise Commercial

WOOD DESIGN AWARD

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Kenora Terminal Building Kenora, ON, Canada

PROJECT DESIGN TEAM

Architect: Architecture49 Inc., A WSP Company

Structural Engineer: WSP Canada Ltd.



Photography credit: Ryan T. Fisher Photography

"When you come in here, the wooden architecture really has the culture of the Lake of the Woods and it brings so much more feeling. It's the last place you leave and it's the first place you enter. It makes it a lot better from a work standpoint," airport board chair Don McDougall.

The structural frame included a timber posts, glulam beam and Laminated Strand Lumber (LSL) wood joist first floor over a partial basement, and exterior glulam canopies with stone clad columns, both airside and groundside.

Includes the use of local wood as a key structural element which is not typical to typical aviation terminal designs to date, and stone cladding.



The glulam was sourced in **Ontario**.



Roof and floor joists were manufactured in Kenora, Ontario at a local plant to support the local employment and as a source of pride.

"Look around here with all the wood . . . It's green, it's renewable and it makes you feel warm." stated Kenora Mayor and former mill man Dave Canfield.



BUILDING USE

A year-round airport with arrivals and departures belonging mainly to Bearskin Airlines with destinations to Dryden, Fort Frances, Sioux Lookout, Thunder Bay and Winnipeg.

BUILDING SIZE 10,915 sq. ft.

COMPLETION DATE

Grand opening ceremony was September 29, 2018



Project Structure Data that is Wood Related

FRAME:

Timber Posts and Exposed Glulam beams in double height space and other key locations such as the exterior covered walkway.

FLOOR AND ROOF SYSTEMS:

Trus Joist TimberStrand LSL Product by Weyerhaeuser; SFI Certified. Manufactured in Kenora, Ontario.

Mid Rise Residential

WOOD DESIGN AWARD

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Deerhurst Lakeside Lodge Resort Homes

Huntsville, ON, Canada

PROJECT DESIGN TEAM

Architect: Richard Wengle Architect Inc.

Structural Engineer: Gamaley & Associates Engineering



Photography credit: Deerhurst Resort (finished building) Steven Street (construction)



The \$60 million Lakeside lodge is made up of 150 suites, comprised of 1, 2 and 3-bedroom models, making up the 155,000 square footage at 5 storeys of building height.

The Lakeside Lodge, a jewel, located at the iconic Muskoka resort, represents the newest addition on Peninsula Lake.

Commanding scenic views of the water, the building's architecture reflected traditional design features, and wanted to showcase a cottage inspired interior design theme in its new suites.

This is the **first waterfront hotel** to open in Muskoka **in over a decade** and stands majestically on the site of the original lodge built in 1896 by Charles Waterhouse.

The development design team chose to incorporate prefabricated factory-built wall panels, and a light frame roof truss system as the method of construction. This was not only **cost-driven**, but it gave the design team some **flexibility** with the layout of the building. It also helped because of the project location, and accessibility to skilled trades and materials.



The structural design used a combination of materials, utilizing dimensional lumber, engineered wood and beam products, and panel sheathing.

BUILDING USE Condo Development BUILDING SIZE 155 000 sq. ft. COMPLETION DATE February 2019



Project Structure Data that is Wood Related

FRAME:

Conventional Light wood frame walls throughout.

FLOOR AND ROOF SYSTEMS:

Conventional Light wood frame floor and roof system throughout.



Northern Ontario

WOOD DESIGN AWARD

SPONSOR Canada FedNor

Temagami First Nation Multi-Use Facility Bear Island, ON, Canada

PROJECT DESIGN TEAM

Architect: Larocque Elder Architects, Architectes Inc.

Structural Engineer:A2S Consulting Engineers





Photography credit: Ruth Elder

BUILDING USENon-Residential Multi-Use Facility

BUILDING SIZE 16,469 sq. ft. COMPLETION DATE
November 2019

For thousands of years, the lands and waters of Temagami have been home to families of the Teme-Augama Anishnabai (The Deep Water People).

Today, Bear Island, located in the heart of Lake Temagami, is home to 250 residents who preserve the integrity of the Teme-Auguam Anishnabai as the stewards of n'Daki Menan (homeland).

The Minowaabandan-gamiing Maawanjihidiwining (Lakeview Gathering Place) epitomizes the values, believes and traditions of the Temagami First Nation.

Warm, renewable and representative of the land and all of its generous offerings, wood was the clear material of choice for the Lakeview Gathering Place.

Influenced by the Temagami First Nation's techniques and materials used to create their birch bark canoes, the Lakeview Gathering Place boasts extensive use of wood throughout.



The building's superstructure is almost exclusively wood, consisting of woodstud framing, engineered wood, and glu-laminated columns and beams, wood I-joists and an elaborate wood truss system designed to include a large cathedral ceiling in the Gathering Room while still allowing for transport to the remote island by barge.

Wood products also sheath the exterior wood framed walls as well as the roof structure, allowing local trades and the First Nation workforce to participate and be engaged in the creation of this unique community project.

On the interior, wood window units, exposed wood glu-laminated columns and beams in the central 'tower' portion of the foyer, wood slat ceilings, Douglas fir plywood panels and extensive wood millwork and furnishings offer warmth to the building's occupants and serve as a reminder of the interconnection between the natural world and the Lakeview Gathering Place.

More than just a functional building for the different government institutions of the Temagami First Nation, this building is a place for ideas, innovative thinking, reflection, celebration, and rituals that recognize the importance and guiding principles of sustainability.

The choice of wood facilitated lighter material loads while still requiring over 1400 barge shipments and numerous deliveries navigated to Bear Island over the Temagami First Nation's ice road infrastructure.

Project Structure Data that is Wood Related

FRAME:

Primarily wood superstructure including conventional stick-framed wood walls, engineered wood built-up beams, glu-lam beams, wood I-joists and wood trusses, along with steel columns and steel trusses.

FLOOR AND ROOF SYSTEMS:

Pre-Engineered Wood Roof Trusses, and Steel Truss in Gathering Room.

