



**SPECIAL**  
8-PAGE SUPPLEMENT

# WOOD IN INDIGENOUS PROJECTS

WINTER 2019-20 – VOLUME 6, ISSUE 5



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INDIAN RESIDENTIAL SCHOOL HISTORY AND DIALOGUE CENTRE, VANCOUVER, BC PHOTO: ANDREW LATREILLE

## Planting the Seeds of Change

There is an undeniable link between forestry and Indigenous communities in Canada. For thousands of years, Indigenous people relied on their natural surroundings to satisfy their resource and spiritual needs. From the First Nations who lived in the eastern part of Canada and relied on the materials of the dense boreal forest, to the Northwest Coast First Nations who had abundant access to red cedar trees – the forests provided these communities with the means to acquire shelter, warmth and medicines.

As we look to previous examples of First Nations practices and the respect given to anything harvested, we have much to learn regarding sustainability and the importance of being conscientious of the entire food/resource supply chain. Famous author and poet Maya Angelou once said, “I have great respect for the past. If you don’t know where you’ve come from, you don’t know where you’re going.”

Today, “climate change” is no longer a niche term exclusively used by environmentalists. Natural disasters happening around the world are challenging people to live more eco-friendly lifestyles. Positive changes to combat climate change do not have to be grandiose to be impactful. The accumulation of many small actions can equate to the same result. It starts small, similar to a seedling – and eventually grows larger, like the building examples throughout these pages.

Wood is the only major building material that is sustainably harvested. In this Wood *WORKS!* magazine insert, we pay homage to Indigenous projects and celebrate their relationship with wood construction.

Learn more about the Canadian Wood *WORKS!* program by visiting: [www.wood-works.ca](http://www.wood-works.ca).

Etienne Lalonde  
National Director  
Wood *WORKS!*

Interested in attending a Wood *WORKS!* educational opportunity in your region? Check out the events listed in this insert and get involved with your regional Wood *WORKS!* today.

This Wood *WORKS!* magazine insert was created to help inspire design professionals throughout Canada. Do you have a project that features wood as a primary building material? Take advantage of our Wood *WORKS!* magazine insert and get featured today! Contact Natalie Tarini at [ntarini@cwcc.ca](mailto:ntarini@cwcc.ca), and share your story.

## Mark your CALENDARS 2020 EVENTS

January 16–19

**Défi Cecobois**

Quebec City, QC

[cecobois.com/fr/evenements/defi-cecobois-2020](http://cecobois.com/fr/evenements/defi-cecobois-2020)

January 29

**Casual Eats and Mass Timber  
(5:30–8:30pm)**

Vancouver, BC

[wood-works.ca/event/casual-eats-and-mass-timber](http://wood-works.ca/event/casual-eats-and-mass-timber)

February 10 / 11

**Tall Wood Design:  
Getting into the details**

Victoria, BC / Vancouver, BC

[www.wood-works.ca/bc](http://www.wood-works.ca/bc)

February 25

**Wood Solutions Fair**

Montreal, QC

[cecobois.com](http://cecobois.com)

March 24–26

**International Mass  
Timber Conference**

Portland, OR

[masstimberconference.com](http://masstimberconference.com)

For upcoming events and updates,  
please visit: [cwcc.ca/event](http://cwcc.ca/event)



### 2018–19 Wood Design Awards Book

**Celebrating Excellence  
in Wood Architecture**

Showcasing unique and  
international projects from the  
Wood Design Awards Programs.

## QUICK FACT

The IRSHDC is located on the ancestral, unceded territory of the hə́nqəmíneh̓ speaking x̣ʷməθkʷəy̓əm (Musqueam) people.

## BRITISH COLUMBIA

# INDIAN RESIDENTIAL SCHOOL HISTORY AND DIALOGUE CENTRE

*Vancouver, BC*

**Owner:** UBC Properties Trust

**Architect:** Formline Architecture

**Structural Engineer:** Bush, Bohlman & Partners LLP

**General Contractor:** Bird Construction

**Photography:** Andrew Latreille

The design of the 6,500-sq.ft. Indian Residential School History and Dialogue Centre (IRSHDC) reflects the diversity of the Indigenous peoples of Canada, rather than being identifiably associated with any particular culture group. Its purpose is to acknowledge the suffering of the 150,000 Indigenous students who attended 132 residential schools across Canada, to honor the memory of more than 6,000 children believed to have died in these institutions and to promote dialogue that connects past struggles to today's movements for human rights.

The project uses a hybrid structure of spruce-pine CLT roof and wall panels, and a Douglas fir glulam curtain wall system to create the shell of the building. The CLT roof panels evoke lightness, countering the dark concrete exhibit space housing residential school data. The pavilion above has canted circular Douglas fir glulam columns supporting the broad overhangs. Concealed steel beams float above the CLT panels, hung by welded riveted flat plates seen on the underside. Around the perimeter, glulam columns support the weight of the roof, with a lightweight glazed curtain wall attached to the framing.

The exposed, whitewashed CLT used for the interior further enhances the feeling of lightness. Inspired by traditional basket weaving, the wall cladding along the stairway is composed of strips of Western red cedar woven around Douglas fir dowels and framed in cedar.

The exterior is composed of curtain wall glazing and charred, reverse batten clear A vertical grain Western red cedar. The project has won several awards, including the B.C. Wood *WORKS!* 2019 Wood Design Award for Institutional Wood Design – Small.



## SALT RIVER FIRST NATION MULTIPURPOSE FACILITY

Fort Smith, NWT

**Owner:** Salt River First Nation

**Architect:** Manasc Isaac

**Structural Engineer:** Fast + Epp

**General Contractor:** Clark Builders

**Wood Supplier:** Western Archrib

**Photography:** Thomas Koidhis

The Salt River First Nation invited Manasc Isaac and Clark Builders to create a new Multipurpose Facility to house the Nation's administration offices and Council meeting room; the vision also included a 400-seat community hall and leasable office spaces. Designed to reflect the pride and traditional values of the community, the Multipurpose Facility already has become a landmark in the town of Fort Smith, where the Salt River First Nation is headquartered.

The building's shape was inspired by the oxbow river form found on the original lands of the Salt River First Nation. This shape also inspired the linoleum pattern, which depicts a river running through the building.

Wood plays a leading role in the Multipurpose Facility, beginning with its superstructure; it was constructed with a heavy timber framing system of solid glulam panels, supported by glulam beams and columns.

Wood also was celebrated as a highly visible finish within the space. Although the special areas of the Council meeting room and the band's circular conference room prominently showcase wood, the heavy timber structure has been left deliberately exposed throughout the whole building to provide a connection of occupants to nature, and providing added warmth to the building interior.

This project sold the partnering contractors on heavy timber construction; they were impressed with how efficient and easy the construction process was. Unlike other structural systems, heavy timber does not need to be encased in gypsum wall board, nor does it require finishing post-installation. Heavy timber structures arrive on site cut to length, ready to erect and fasten together and fully finished. The project manager said he was dubious at the start, but he is now a convert to the use of heavy timber.

### QUICK FACT

When viewed from above, the building represents the shape of the First Nation's land, which spans across the border of Alberta and the Northwest Territories.



## QUICK FACT

Wood and the important presence of Indigenous peoples are honored by the 1,660-sq.ft. structure, which features a main meeting room that was inspired by a wigwam.

## ONTARIO

# LAURENTIAN UNIVERSITY INDIGENOUS SHARING AND LEARNING CENTRE

*Sudbury, ON*

**Architect:** Diamond Schmitt Architects

**Owner:** Laurentian University

**Structural Engineer:** Blackwell Structural Engineers

**Wood Supplier:** Timber Systems Ltd.

**Photography:** Tom Arban



Built as a new addition to an existing campus building, the Indigenous Sharing and Learning Centre (ISLC) is a dynamic gathering space to support Laurentian University's Indigenous community. Inspired by the form of a traditional wigwam, the structure accommodates large groups of different configurations, allowing for teaching, meetings and special celebrations.

From the beginning, this project was designed to use wood wherever possible – from primary girders to wood deck and stud walls. Using wood allowed the team to better embrace the curved geometry of the space and celebrate the beauty of natural building materials.

The primary wood girders, tipped off the central structural axes to look like the gunwales of two canoes, support the dome's gravity loads while also resisting lateral loads in the room. Each glulam frame provides the strength and ductility to resist seismic loads in its own axis, while never exposing structural connections. Despite the ambitious 50-ft. span, modern glulam fabrication methods allowed for wood to perform nearly every structural role in the facility, only being assisted by a small steel tension ring to resist the thrust of the dome.

The warm aesthetic provided by the wood structure is intentionally exposed to view in the round room itself, so visitors can see the glulam purlins and girders which define the shape of the domed roof. Further interior wood finishes were applied at the perimeter to diffuse the light into the room while creating the impression of an all-wood enclosure, despite the glass facade beyond the fins.

## CREE NATION GOVERNMENT OFFICE BUILDING

*Waskaganish, QC*

**Owner:** Cree Nation Government

**Architect:** Rubin & Rotman Architects

**Structural Engineer:** CIMA +

**Wood Suppliers:** T colam, Maibec,  
Baillargeon, C.P. Labrosse

**Photography:** Katherine Dehm

What better way to represent the First Nations than this wood building that houses the offices of the Cree Nation Government and those of the Eeyou Marine Region, a tenant of the building. It was designed to symbolize the harmonious cohabitation between the two entities, while also demonstrating a closeness to nature, the founding element of Cree culture and therefore essential to the design.

The building, which also houses a reception area, a conference room and a cafeteria, is designed to reflect that it is a shared space, and this is evident even in the choice of wood used. The exterior cladding features two contrasting shades, a darker charcoal color for the exterior of the Cree Nation offices and a lighter beige for the exterior of the space occupied by the Eeyou Marine Region. Furthermore, each of the two square volumes that they occupy features a sloped aluminum roof that meets the other in the center of the building. This contemporary roof style lends an air of modernity to the whole.

Beyond reflecting this duality, the building features an exposed wood structure as well as wood for the inside and outside cladding. The use of wood for the doors was designed with the intention of adding warmth and softness as a counterbalance to the building's glass and metal elements.

The many large windows perform a double duty, allowing direct and indirect natural light to bathe the interior, while also offering views of the natural environment that surrounds the building.

### QUICK FACTS

Four different species of wood were used for this 8,342-sq.ft. building: glulam spruce for the structure, birch for the doors, walnut for the cladding of the interior walls and knotty spruce-fir for the exterior cladding. The \$4.1-million building was nominated for two awards in the 2019 edition of the Prix d'excellence Cecobois.



## QUICK FACTS

The design of the 4,500-sq.ft. church includes two types of gathering spaces. The first is for large, less frequent events like weddings, funerals and baptisms, all of which are hugely important to the Innu community. The second space is for small, regular gatherings of the parish.

## ATLANTIC

### OUR LADY OF THE SNOWS

*Sheshatshiu, NL*

**Owner:** Sheshatshiu Innu First Nation

**Architect:** Woodford Sheppard Architecture

**Structural Engineer:** Sound Engineering Inc.

**General Contractor:** Shipiskan Construction Ltd.

**Photography:** Julian Parkinson



Our Lady of the Snows Church is located in the Innu community of Sheshatshiu, on the banks of Lake Melville overlooking the Mealy Mountains. The building needed to celebrate and enhance its unique site within the community, while at the same time be easily constructed by local tradespeople with locally available materials. Wood is used throughout the building's structure, and for exterior and interior finishes. Detailing is kept simple, speaking to the Moravian style of traditional church building on the Labrador coast. In addition to the building's wood framing, cladding and finishes, wood also is used in the design and fabrication of the wall-mounted Stations of the Cross within the church.

Very little in the architectural scope of this project is not made of wood. Above grade the building is constructed of typical wood stud wall framing, with vaulted ceilings achieved with pre-manufactured scissor trusses that were constructed in the neighboring town and shipped to site. The four-sided vaulted roof above the apse space is built from a system of roof joists, with recessed lighting in a gypsum board finish. The interior of most of the main nave and apse spaces is clad in plywood for its beauty, simplicity and ease of construction.

The grey color chosen for the exterior wood cladding was selected to highlight the building's simple geometry; it also helps the building stand out against the pure white colors of the snow and frozen lake in winter, and the brown sand surrounding the building in the summer.

# NATIONAL PARTNERS

Canadian Wood Council  
Conseil canadien du bois



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Intelligence In Wood

**CertainTeed**  
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## WOOD WORKS! REGIONS IN CANADA

### National Wood WORKS!

c/o Canadian Wood Council  
99 Bank Street, Suite 400  
Ottawa, ON K1P 6B9  
Tel: 613.747.5544

### British Columbia

837 Riverside Drive  
North Vancouver, BC V7H 1V6  
Tel: 877.929.WOOD (9663)

### Alberta

900-10707 100 Ave.  
Edmonton, AB T5J 3M1  
Tel: 780.392.1952

### Quebec

1175, avenue Lavigerie Bureau 200  
Quebec, QC G1V 4P1  
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### Ontario

1350 Fisher Street, Unit 115  
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