

CABING

Using Mass Timber in Modern Methods of Construction to Build
CMHC Housing Design Catalogue Homes Sustainably and
Economically



The Intersection of Crisis and Innovation

Canada stands at a critical crossroads—where a deepening housing crisis collides with an accelerating climate emergency. For Leeds and Grenville, this moment is not a burden. It is an opportunity to lead.

The Challenge

A national housing shortage demands bold, scalable, and sustainable solutions — now.

The Solution

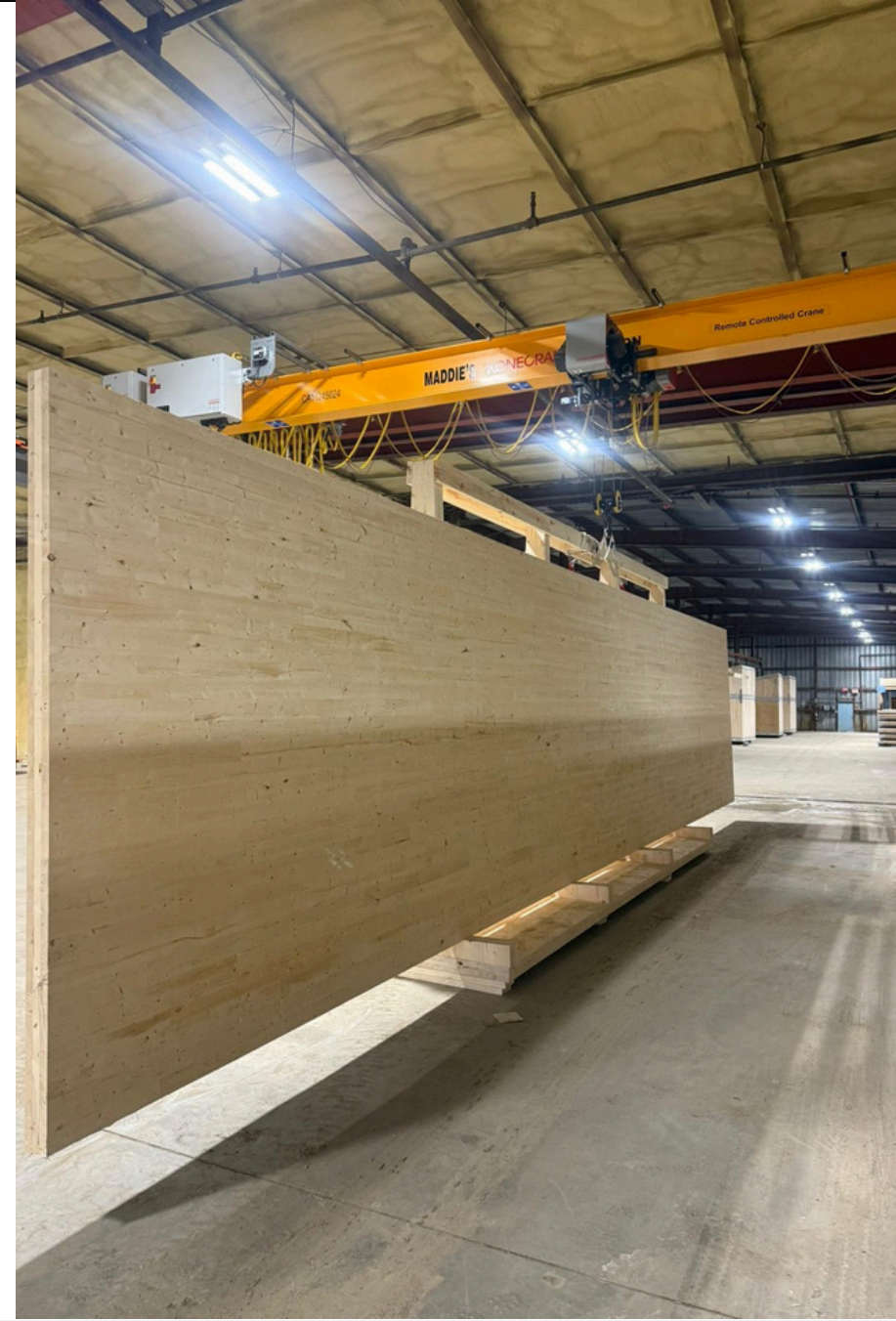
CABN Core Technology™ — mass timber, precision robotics, and net-zero engineering in one integrated system.

The Partnership

Empowering municipalities and affordable housing providers to move beyond the limits of traditional construction.

Local Impact

An 85,000 sq. ft. advanced manufacturing facility in Brockville, Ontario — ready to deliver.





The CMHC Design Catalogue: The Execution Platform

The federal government has provided the blueprints. CABN provides the advanced manufacturing engine to bring them to life – at scale, at speed, and with unmatched precision.

What CMHC Provides

Pre-approved architectural designs and unit configurations – ready for production without lengthy approvals.

What CABN Provides

The robotic manufacturing technology, supply chain, and installation expertise to execute those designs rapidly and at volume.

500+ Units Per Year

Per shift from our Brockville facility – scalable to meet regional demand.

6-Axis Robotics

Millimeter-level precision that eliminates the human error common in stick-frame construction.

48 Hours to 15 Days

Core structures assembled on-site in days, not months – from catalogue to standing structure.

Why Mass Timber? The Case for Cross-Laminated Timber (CLT)

Cross-Laminated Timber is not a trend—it is a paradigm shift. Engineered for structural performance, climate resilience, and environmental responsibility, CLT outperforms conventional materials on every dimension that matters.



Fortress-Like Structural Integrity

CLT's multi-directional grain layering creates exceptional rigidity and load distribution, delivering superior resilience against environmental extremes.



Natural Fire Resistance

The outer layer chars to form a protective shell, insulating the structural core and maintaining stability longer than steel under fire conditions.



Climate-Engineered Resilience

Engineered to withstand 140 mph winds (EF-4 equivalent) and seismic impacts – built for a changing climate.

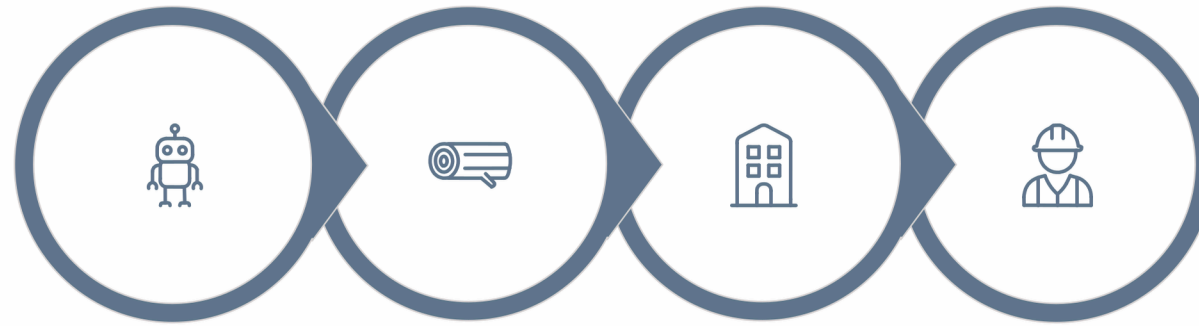


Carbon-Negative Construction

Structures actively sequester carbon and produce 60% fewer GHG emissions than conventional builds – a net positive for the planet.

Building Faster: The "Trees to Keys" Workflow

Speed with purpose. CABN's fully integrated delivery model compresses traditional 8–12 month build timelines in todays—without sacrificing quality, safety, or sustainability.



Design &
Fabrication

Local
Sourcing

Logistics &
Transport

On-Site
Assembly

By controlling every stage — from material sourcing to final installation — CABN eliminates the coordination failures, weather delays, and cost overruns that plague traditional construction. Our climate- controlled facility runs **365 days a year**, regardless of Ontario winters.

48-72hrs

ARU Unit Assembly

Core structure standing on-site
from flat-packed delivery.

15 Days

6-Plex Assembly

Multi-unit structures complete
in under three weeks on-site.

365

Days of Production

Factory-controlled
manufacturing uninterrupted by
weather or season.

60%+

Timeline Reduction

Compared to traditional 8-12
month stick-frame builds.

Building Affordably: Net-Zero and Operational Savings

Affordability is not just about the purchase price—it is about the total cost of living. CABN homes are engineered to dramatically reduce energy bills, maintenance costs, and long-term operational expenses for residents and housing providers alike.

Energy Informed Design™ (EID)

Predictive modeling tools optimize the building envelope, mechanical systems, and energy loads before a single panel is fabricated — reducing energy consumption by up to **80%**.

Thermal Comfort Guaranteed

High-performance envelopes maintain interior temperatures of **21–24°C** even during extreme cold snaps and power outages — critical for vulnerable populations.

→ Off-Grid Ready

Integrated solar PV arrays and battery storage allow homes to operate **net-positive or fully off-grid**, insulating residents from hydro price volatility.

→ Smart Supply Chain Savings

Standardization and robotic fabrication reduce unit production costs by **17–24%** compared to conventional site-built construction.

→ Lower Lifetime Costs

Durable mass timber structures with minimal mechanical complexity translate to significantly reduced maintenance and operating costs over the building's lifecycle.

Social Equity and The CABN Foundation

Housing is more than shelter – it is the foundation of community health, economic participation, and intergenerational prosperity. The CABN Foundation ensures that every unit built creates lasting social value beyond its four walls.



The 2% Pledge

2% of every sale is committed to the CABN Foundation, funding equitable housing initiatives and ensuring that growth benefits the most vulnerable in every community we serve.



Advanced Construction Technology Training (ACTT)

Our workforce development program upskills local tradespeople in net-zero installation techniques – creating well-paying, future-proof careers right here in Leeds and Grenville.



Municipal Co-Creation

We work directly with municipal leaders and housing providers to design communities that reflect local needs, zoning realities, and long-term strategic plans – not one-size-fits-all solutions.



Economic Reconciliation

By sourcing Canadian lumber and employing local labor, capital circulates within the community – reducing leakage and strengthening the regional economic base.

Scalability for Leeds and Grenville

A CABN Community is not a single building— it is a resilient, self-sufficient ecosystem. From accessory dwelling units on existing lots to mid-rise urban infill, our technology scales seamlessly to match the ambition and growth plans of every municipality in the region.

1

ADUs to 17-Storey Structures

A single manufacturing platform delivers everything from single-storey garden suites to full mid-rise residential towers.

2

Decentralized Micro-Grids

CABN communities can function as energy micro-grids, reducing strain on aging provincial infrastructure and improving grid resilience for surrounding areas.

3

Healthier Indoor Environments

Non-toxic, VOC-free materials combined with advanced Heat Recovery Ventilation (HRV) systems eliminate mold risk and dramatically improve indoor air quality.

4

Buy Canadian, Build Canadian

FSC-certified Canadian lumber insulates our supply chain from international tariff disruptions, keeping costs predictable and supply reliable.



Lead the National Housing Agenda — Starting Here

The manufacturing scale, the domestic supply chain, and the rapid deployment capabilities are not hypothetical. They are operational, and they are located right here in the Counties of Leeds and Grenville.

The Advantage

Brockville's 85,000 sq. ft. facility gives this region a manufacturing head start that no other municipality in Eastern Ontario can replicate — today.

The Goal

Accelerate projects and transform plots into thriving, climate resilient affordable communities that attract residents and investment for generations.

The Next Step

Move from the CMHC catalogue to the construction site. Let's begin identifying your first CABN deployment site with the support of consistent design, fabrication and erection of Canadian homes.

- ❑ **Ready to move forward?** CABN's team is available to meet with municipal leaders, housing providers, and economic development officers across Leeds and Grenville. The catalogue is ready. The factory is running. The community is waiting.

