

6th – 7th November 2024 Pan Pacific Toronto, Canada



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# **EVENT OVERVIEW**

The building sector stands as the third most carbon-intensive industry in Canada, contributing 13% of the nation's emissions in 2022, totaling 92 million tonnes (MT) of carbon dioxide, as reported by the Royal Bank of Canada. In response to this alarming emission rate, the government aims to reduce it to 53 MT by 2030. Kicking off towards this target, the construction sector is embracing wood, particularly mass timber, as an alternative or complement to concrete and steel, as it holds the potential to slash embodied emissions in buildings by up to 25%.

5.8 million—that's the number of new homes Canada needs to build by 2030 to ensure affordable housing for everyone, according to the Canada Mortgage and Housing Corporation. Ontario government is further bolstering housing initiatives with its Building Faster Fund, unveiled in August 2023. With an allocation of up to \$1.2 billion over three years, to incentivize municipalities actively engaged in expanding residential options. Notably, a portion totaling \$120 million is earmarked for smaller, rural, and northern municipalities to empower these regions in constructing housing-supporting infrastructure, while also prioritizing projects that accelerate the augmentation of housing availability. Mass Timber buildings can expedite this process, reducing construction time by up to 20% compared to concrete structures. On average, Mass Timber projects are completed 4-6 weeks faster than their concrete or steel counterparts.

Canada, as a pioneer in the Timber Construction industry, has completed 689 mass timber projects to date, with 76 under construction and 67 in the planning stages. Of the total 832 projects, British Columbia (BC) takes the lead with 355, followed by Quebec with 221, and Ontario with 151. Reflecting the industry's trajectory, the Canadian government is playing a pivotal role in boosting timber projects development and regulation for major stakeholders in the construction sector. A recent update to the BC Building Code, now in effect, allows for taller encapsulated mass-timber construction (EMTC) buildings, enabling residential and office structures to reach up to 18 storeys—an increase from the previous limit of 12 storeys. This is drawing other provinces throughout Canada to revamp codes to promote mass timber construction on a national scale.

The Mass Timber Construction Summit, a flagship event by Trueventus, features presentations from leading industry experts on the latest techniques and technologies in timber construction. Gain firsthand insights and experience on the latest innovations and opportunities in modern construction methods to streamline workflows, improve productivity, generate ample profit, and take advantage of the excellent networking opportunities

## WHY YOU CANNOT MISS THIS EVENT

- Navigate the intricate landscape of strict regulations and building codes while contemplating the enduring durability of timber structures over the long term.
- · Gain insights from case specific studies on how current players have successfully leveraged mass timber construction.
- Grasp the nuanced understanding of the financial landscape, empowering builders to make discerning decisions that safeguard their investments and fortify the economic foundation of their projects.
- Embark on an exploration of cutting-edge technologies and methodologies in engineered timber, seamlessly integrating them into construction practices to elevate the timber structures to unprecedented levels.

# **WHO SHOULD ATTEND?**

# This event is targeted but not limited to:

- CEOs, CFOs, & COOs
- Chief Construction Officers
- Project Directors
- · VPs/ Directors/ Heads/ General

#### Managers/ Managers of:

- o Construction
- o City Planning
- o Architecture
- o Property Management
- o Civil Engineering
- o Project Engineering
- o Property Development
- o Infrastructure
- o Drafting Design
- o Procurement
- o Structural & Technical

# From the following industries:

- Government Entities
- Construction Companies
- Real Estate Developers/ Investors
- Contractors
- Building Service Providers
- Technology Solution Providers
- Design & Architecture Firms
- Construction Project Management
- Modular and Prefab



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# FEATURING PRESENTATIONS AND CASE STUDIES BY DISTINGUISHED SPEAKERS



**Oliver Lang** CEO & Co-Founder Intelligent City, Vancouver, British Columbia



**Kevin McElhone** Director Silvaspan, **New Lowell, Ontario** 



Lee Scott Sales Manager Element5, **Toronto, Ontario** 



Ryan Going Project Manager Pomerleau, **Toronto, Ontario** 



Zenon Radewych Principal **WZMH Architects, Toronto, Ontario** 



**Michael Pankratz** Vice President / Design Lead **Cornerstone Timberframes,** Kleefeld, Manitoba



**Andre Lema Business Development Manager** Western Archrib, Edmonton, Alberta



**Mark Gaglione Director Construction Sciences** EllisDon, **Toronto, Ontario** 



**Patrick Chouinard** Founder & VP of Corporate Citizenship Element5, **Toronto, Ontario** 



**Harshil Kaushal** Superintendent Pomerleau, Pickering, Ontario



**Robert Jackson Partner** Fast + Epp, Vancouver, British Columbia



**Justin Den Herder** Principal TYLin | Silman Structural Solution, NYC, New York



**Aryan REZAEI RAD** Professor | Department of Civil & Mineral Engineering University of Toronto, Toronto, Ontario

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# Day One: Wednesday, 6 November 2024

#### 0800 Registration & Coffee

0850 Chairperson's Welcome Address

#### 0900 Session One

## **Building Communities: Mass Timber-Based Affordable Housing Solutions for Inclusive Development**

- Mass Timber offers a repeatable, adaptable "kit of parts" solution to affordable housing
- Buildings are prefabricated, shipped to and assembled on site, making them quick to assemble and cost-effective.
- Wood is a natural, renewable and sustainable resource that is healthy for occupants and the planet

Patrick Chouinard, Founder & VP of Corporate Citizenship Element5, Toronto, Ontario

#### 0945

#### **Session Two**

# Innovative Modular & Prefabricated MASS TIMBER Building Components

- Mass Timber Modular Building Blocks for Mid-Rise Multi-Family **Residential Buildings**
- Mass Timber Modular Data Centres
- Mass Timber Cladding for Industrial Buildings & Data Centres
- Mass Timber Modular Residential Building Envelope Cladding

Zenon Radewych, Principal

**WZMH Architects, Toronto, Ontario** 

#### 1030 The Speed Networking - The Mad Minutes!

Fun and fast, this networking activity is a great opportunity to grow your connections

# 1105 Morning Refreshments

#### 1130 Session Three

# Reaching New Heights: A Case Study on the Academic Wood Tower

- Canada's tallest timber building
- Design challenges related to tall timber (eg: deflection, diaphragm system, etc)
- Lessons learned from construction (moisture management, site logistics and productivity, etc)
- Challenges with building permit and AHJs (eg: City of Toronto requirements for encapsulation, increased sprinkler density, etc.

Harshil Kaushal, Superintendent, Pomerleau, Pickering, Ontario Ryan Going, Project Manager, Pomerleau, Toronto, Ontario

#### 1215 Session Four

# **Effective Moisture Content Management Strategies for Mass Timber**

- Pre-Construction Moisture Control
- On-Site Moisture Monitoring
- Post-Construction Climate Control

Mark Gaglione, Director Construction Sciences

EllisDon - Toronto, Ontario

## 1300 Networking luncheon

#### 1400 Session Five

#### **Mass Timber & Adaptive Reuse**

- Evaluating the viability of existing structures for a mass timber overbuild using computational tools and workflows.
- Key details and considerations at connections points between mass timber vertical overbuild and the existing structure below.
- The potential for mass timber vertical extensions as a scalable solution for decarbonization and increasing value of existing structures

Justin Den Herder, Principal

TYLin | Silman Structural Solution, NYC, New York

#### 1445 Session Six

#### **NLT: The Next Generation of Mass Timber**

- Breathing new life into an old concept, NLT, and how it compares to
- How Laminated Timber can offer new and innovative options to your next project
- Deliver amazing beauty and value with NLT that will make you rethink your mass timber options

Kevin McElhone, Director

Silvaspan, New Lowell, Ontario

#### 1530 Afternoon refreshments

#### 1600 Session Seven

#### **Industrialization of Sustainable Construction**

- Woodframe construction system
- CLT construction system
- Combination of different construction systems

## (Speaker to be Advised)

#### 1645 Session Eight

## From Mass Timber to Whole Building Componentization

- How Design for Site Assembly (DfSA) can achieve labour productivity
- Outlining critical cost and schedule elements of componentized
- Mass timber building
- Reviewing the impacts of componentization on cashflow and design (Speaker to be Advised)

#### 1730 Session Nine

# Implementing Structural Health Monitoring for Enhanced Safety and Longevity of Mass Timber Structures

- Utilize embedded sensors to continuously monitor stress, strain, and moisture levels for immediate real time insights
- Analyze collected data to anticipate potential issues and schedule maintenance proactively
- Implement structural health monitoring systems to detect early signs of wear or damage

(Speaker to be Advised)

## 1815 End of Day One



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# Day Two: Thursday, 7 November 2024

0800 Registration & Coffee

0850 Chairperson Welcome Address

0900 Session One

Case Study: The Hive - A 10-storey tall timber braced frame structure with seismic dampers

- Seismically advanced timber structures
- CLT shear walls and
- Glulam braced bays

Robert Jackson, Partner

Fast + Epp, Vancouver, British Columbia

0945 Session Two

#### **Product Platforms for Scalable Housing Production**

- Discover Intelligent City's revolutionary approach to urban housing through a scalable yet customizable mass timber product platform
- Learn how Intelligent City's integration of robotic manufacturing and parametric software enables the industrialization of construction
- Explore the impact of Intelligent City's innovative solutions on reducing greenhouse gas emissions and construction costs, paving the way for affordable, high-quality urban living

Oliver Lang, CEO & Co-Founder

Intelligent City, Vancouver, British Columbia

1030 Morning refreshments

## 1100 Session Three

## **Advancing Joinery Techniques: Innovations for Secure Connections** in Mass Timber Construction

- How to please both architectural and engineering parameters within connection design
- What CLT connection makes the most sense for the application with considerations of the supplier
- Emerging connection technologies in the market

Michael Pankratz, Vice President / Design Lead

Cornerstone Timberframes, Kleefeld, Manitoba

#### 1145 Session Four

# **Digital Fabrication Technology in Design of Mass Timber Structures** with High-Performance Systems

- Digital Fabrication as a backbone of construction 4.0 in mass timber
- Integrated Computational Structural Design
- Material Optimization and Prefabrication

Aryan REZAEI RAD, Professor | Department of Civil & Mineral Engineering

University of Toronto, Toronto, Ontario

1230 Networking luncheon

#### 1400 Session Five

# **Enhancing Efficiency: Optimization Strategies for Cross-Laminated Timber (CLT) Production**

- Material Selection and Sourcing From grading techniques to environmental regulations and certification.
- Design and Manufacturing Minimizing waste, reducing customization costs and automating production.
- Quality Control and R&D Implementing rigorous quality control and piloting new technologies and processes

Lee Scott, Sales Manager

Element5, Toronto, Ontario

#### 1445 Session Six

#### **Understanding Costs in Mass Timber Projects**

- Redefine innovation with products, systems, and design collaborations
- Discover the key levers that impact building costs
- GLT Panels and Glulam column and beam case study

Andre Lema, Business Development Manager

Western Archrib, Edmonton, Alberta

#### 1530 Afternoon refreshments

#### 1600 Session Seven

# **Ensuring Lateral Stability in Tall Mass Timber Buildings: Design Strategies and Structural Solutions**

- Employing CLT shear walls to provide robust lateral resistance
- Integrating steel or concrete cores with mass timber elements to improve lateral strength and distribute loads more effectively
- Post-tensioned timber beams and columns to increase stiffness and reduce deflections

(Speaker to be Advised)

# 1645 Session Eight

# **Optimizing Performance: Advanced Strategies for Timber Species Selection in Construction Projects**

- Species Suitability Analysis
- Sustainability Considerations
- Enhanced Treatment Methods

(Speaker to be Advised)

# 1730 End of Conference





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# **COMPANY DETAILS**

Name	Industry
Address	
Postcode	Country
Tel	Fax

# **ATTENDEE DETAILS**

1	Name	Job Title
	Tel	Email
2	Name	Job Title
	Tel	Email
3	Name	Job Title
	Tel	Email
4	Name	Job Title
	Tel	Email
5	Name	Job Title
	Tel	Email

# **APPROVAL**

NB: Signatory must be authorised on behalf of contracting organisation.		
Name	Job Title	
Email		
Tel	Fax	
Authorising Signature		

#### **REGISTRATION FEES**

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	Corporate
End of August 2024	CAD 1995 (Per Delegate)
End of September 2024	CAD 2495 (Per Delegate)
1st October 2024 onwards	CAD 2995 (Per Delegate)
All options inclusive of delegate pack, luncheon and refresl	hments.

# **PAYMENT METHODS**

Payment is due in 5 working days. By Signing and returning this form, you are accepting our terms and conditions.		
	Bank Transfer Credit Card	
"		

# **REGISTER NOW**

#### Nurul

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Take a Snapshot or Scan and Email us

#### **TERMS & CONDITIONS**

- The course fee is inclusive of the event proceedings

