

Overview

The successful application of an innovative engineered wood product known as cross laminated timber (CLT) in mid-rise and commercial buildings in Europe has attracted the attention of the construction industry, building design professionals and wood industry in North America. CLT was first commercially produced in Austria some fifteen years ago, and has experienced exceptional growth since the mid 1990's. The total European production is expected to reach 0.5 million m³ by 2012. The rising popularity of CLT building systems can be attributed to the following factors: high degree of prefabrication leading to substantially reduced construction time, low building mass, and the inherent thermal resistance and low environmental footprint of massive wood panels. CLT is now available in Canada. The one-day Symposium on October 12th consists of a series of presentations by Canadian and European experts that cover all major aspects of performance of CLT assemblies, and case studies from Canada and Europe. The half-day interactive Workshop on October 13th will be led and facilitated by CLT manufacturers and design professionals who will guide the audience through the design process of a CLT building. This one and half day event will be of interest to developers, wood product manufacturers, researchers, architects, structural engineers, fire engineers, building officials, building science consultants, building contractors, and economic development officers who would like to find out more about CLT panel, assemblies and potential of using the product in mid-rise and commercial building projects.

Key Presenters

- **Prof. Gerhard Schickhofer** is a university professor at the Institute for Timber Engineering and Wood Technology, Graz University of Technology, Austria. His research has played a key role in establishing CLT as an accepted engineered wood product in Europe.
- **Philipp Zumbrunnen** is a specialist timber engineer and project director who manages a team of engineers at EURBAN Ltd in London UK. His company has designed a number of mid-rise residential and non-residential CLT buildings in UK.
- **Andrew Harmsworth** is a partner with GHL Consultants Ltd in Vancouver, BC. Mr. Harmsworth has over 20 years of experience in fire science and building code consulting. His firm specializes in developing design solutions for construction to demonstrate its compliance with the intent of the building codes for fire resistance requirements.



Sponsors:



Canadian Wood Council
Conseil canadien du bois



Photos courtesy of: Nordic Engineered Wood

Day 1 Wednesday, October 12, 2011 - Symposium

- 8:45-8:50 **Opening Remarks**
Prof. Y. H. Chui, University of New Brunswick, Fredericton
- 8:50-9:00 **Welcome Speech**
(TBD)
- 9:00-9:25 **Manufacturer's Perspective**
Mathias Oberholzer, Nordic Engineered Wood, Montreal
- 9:25-9:50 **North American Market Perspective and Regulatory Requirements for CLT construction**
Richard Desjardins, FPInnovations, Quebec City
- 9:50-10:20 **Structural Performance and Design of CLT Building Systems**
Dr. Mohammad Mohammad, FPInnovations, Ottawa
- 10:20-10:35 **Coffee Break**
- 10:35-11:25 **CLT structural engineering research in Europe**
Prof. Gerhard Schickhofer, Graz University of Technology, Austria
- 11:25-11:55 **Structural Designer's Perspective**
Eric Karsh, Equilibrium Consulting Inc, Vancouver
- 11:55-1:00 **Lunch**
- 1:00-1:25 **Fire Performance and Design of CLT Construction**
Dr. Steve Craft, FPInnovations, Ottawa
- 1:25-2:15 **Alternative Solution Approach to Fire design of CLT Buildings**
Andrew Harmsworth, GHL Consultants Ltd, Vancouver
- 2:15-2:45 **Serviceability and Building Envelope Design of CLT Construction**
Sylvain Gagnon, FPInnovations, Quebec City
- 2:45-3:00 **Coffee**
- 3:00-3:25 **Hybrid CLT Concrete Project**
Dr. Katherina Beck, KLH Element Inc., Quebec City
- 3:25-3:50 **CLT Construction Projects in Western Canada**
Larry McFarland, McFarland Marceau Architects, Vancouver
- 3:50-4:15 **CLT Construction Projects in Eastern Canada**
Franck Faelli, Nordic Engineered Wood, Montreal
- 4:15-5:00 **CLT Construction Projects in UK**
Philipp Zumbrunnen, EURBAN Ltd, London, UK
- 6:00-7:00 **Reception**

Online Registration: www.cltsymposium.ca

	General	Students
Fee	\$150.00	\$75.00
13% HST (108162025RT)	\$19.50	\$9.75
Total	\$169.50	\$84.75

Pre-Order your CLT Handbook now

Under the Transformative Technologies Program of Natural Resources Canada, FPInnovations launched a multi-disciplinary research program on cross-laminated timber in 2005. Based on these studies and the knowledge gained from the European experience, FPInnovations has prepared a peer-reviewed CLT handbook which provides key technical information related to the manufacturing, design and performance of CLT in construction.

Cost: CLT Handbook*	\$150.00
13% HST (R106868797)	\$19.50
Total	\$169.50

(The handbooks will be available for pickup at the Symposium)

*French language handbooks available by request

For information related to the symposium contact:
Stephen Delahunty at the University of New Brunswick's Wood Science and Technology Centre, 1-506-458-7973, e-mail: delahunt@unb.ca

For information on payment contact:
Sarah Hicks at the Canadian Wood Council, 1-866-886-3574 (ext 384), e-mail: shicks@cwcc.ca

Secure payment using a credit card (VISA or MasterCard).

Registration includes food and beverages.

Simultaneous translation services will be available on Day 1 of the Symposium.

Cancellation Policy:

Cancellations must be made no later than 48 hours before the seminar starts. Fees are non-refundable after this time.

Registration deadline:

EDT Friday October 7, 2011 at 5:00 pm
No registration on-site.

Hotel Reservation

Hotel rooms at the Delta Beausejour are available at a discounted rate for CLT symposium participants. The number of rooms is limited, so please call 1-888-351-7666 to reserve your room today. Be sure to say that you are attending the CLT symposium to ensure that you receive the discounted rate (block code is UNB06231).

Day 2 Thursday, October 13, 2011 – CLT Building Design Workshop

- Purpose:** To review and guide the audience through the CLT building design process to meet the intent of the building code in terms of requirements for building envelope durability, energy efficiency, structural, serviceability and fire performance
- 8:30-10:30 **Building Envelope Design**
Structural Design of Floor, Wall and Roof Diaphragms
Connection Choices and Design
- 10:30-10:45 **Coffee Break**
- 10:45-12:00 **Fire Resistance Design**
Construction Management and Site Practices
- 12:00-12:30 **Panel Discussion and Workshop Wrap-up**