

# Cross-Laminated Timber Symposium

February 8-9, 2011

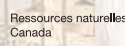
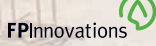
Vancouver Convention Centre – West, Level 2, Vancouver, BC



Presented by the Wood Enterprise Coalition

With the support of

Reception sponsors



## BACKGROUND

Among the new products recently introduced in the wood construction sector is the cross-laminated timber (CLT) panel, also commonly known as a solid wood panel. It is without doubt currently one of the most discussed wood products in BC and Canada.

CLT made its debut some fifteen years ago in Austria. Now, there are half a dozen major producers, located mainly in Austria, Germany and Scandinavian countries. This emerging successful system from Europe has been identified by the forest products industry and the research and wood design communities in Canada as a new opportunity for wood in non-traditional applications. CLT is now available in Canada. This two-day symposium is a unique opportunity to find out more about CLT, and how it can enhance and benefit your projects.

**Come to the Cross-Laminated Timber Symposium, and be among the first “in the know” about this innovative product!**

The Wood Enterprise Coalition of BC - Wood WORKS! BC, FPInnovations, and BC Wood Specialties Group - is organizing a comprehensive two-day symposium on CLT panels. Over the course of these two days, all major aspects relating to CLT panels will be discussed: architectural and structural design, manufacturing, seismic resistance, connections, fire safety, acoustics, floor vibrations, durability, and environmental performance. During the symposium, we are privileged to host experts from Austria, Italy and United Kingdom.

Professional learning credits available for participants  
9 core LU's for AIBC members

- Dr.techn. Gerhard Schickhofer, university professor, Graz University of Technology, Austria will speak to the European experience of building with the new material and the challenges met, as well as current research topics and advanced design with CLT.
- Dr. Ario Cecotti, professor, IValsa, Italian Trees and Timber Research Institute, Italy will be on hand to discuss seismic performance.
- Tristan Wallwork, CEng, MStructE, Ramboll Engineering, United Kingdom will give a presentation on the engineering requirements for CLT used in the construction of The Norwich Academy, the UK's largest structural timber building to date, and other European projects.



This symposium is for:

- Structural engineers
- Wood product manufacturers
- Building code consultants
- Economic development officers
- Business and product development managers
- Architects
- Builders
- Developers
- Building authorities

## Be among the first in Canada to receive the new Cross-Laminated Timber Handbook!

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.

## Event Program

### Day 1 - Tuesday, February 8, 2011

<b>7:45 - 8:30 am</b>	<b>45 min</b>	<b>Registration and continental breakfast</b>
<b>8:30 - 8:45 am</b>	<b>15 min</b>	<b>Opening Remarks</b> <i>Moderator: Brian Hawrysh, CEO, BC Wood Specialties Group</i>
		<b>Welcoming Remarks by BC Ministry of Forests, Mines and Lands and Natural Resources Canada</b>
8:45 - 9:00am	15 min	<b>Cross Laminated Timber (CLT) in the Context of Wood Building Systems</b> <i>Speaker: Erol Karacabeyli, P.Eng., Manager, Building Systems Department FPIInnovations, Building Systems Department</i>
9:00 - 9:20am	20 min	<b>CLT - Assessing the Market Opportunity in North America</b> <i>Speaker: Pablo Crespell, Ph.D., Research Scientist FPIInnovations, Building Systems Department</i>
9:20 - 9:40am	20 min	<b>CLT - Manufacturing</b> <i>Speaker: Brad Wang, Ph.D., Research Scientist FPIInnovations, Composites Department</i>
<b>9:40 - 10:00am</b>	<b>20 min</b>	<b>Coffee Break</b>
10:00 - 10:40am	40 min	<b>CLT - Structural Design</b> <i>Speaker: Sylvain Gagnon, P.Eng., Research Scientist FPIInnovations, Building Systems Department</i>
10:40 - 11:30am	50 min	<b>CLT - Seismic Performance</b> <i>Speakers: Marjan Popovski, Ph.D., P.Eng., Research Scientist FPIInnovations, Building Systems Department And, Univ.-Prof. Dr. Ario Ceccotti, Director IVALSA, Italian Trees and Timber Research Institute, Italy</i>
11:30 - 12:05pm	35 min	<b>CLT - Connections</b> <i>Speaker: Mohammad Mohammad, Ph.D., P.Eng., Group Leader Structure FPIInnovations, Building Systems Department</i>
<b>12:05 - 1:25pm</b>	<b>1 hr 20 min</b>	<b>Lunch (Lobby - Buffet/Sandwiches)</b>
1:25 - 2:10pm	45 min	<b>CLT – European Experiences</b> <i>Speaker: Univ.-Prof. Dipl.-Ing Dr.techn. Gerhard Schickhofer Graz University of Technology, Austria</i>
2:10 - 2:30pm	20 min	<b>CLT – Duration of Load and Creep Factors</b> <i>Speaker: Ciprian Pirvu, Ph.D., Research Scientist FPIInnovations, Building Systems Department</i>
2:30 – 2:50pm	20 min	<b>CLT – Vibration Performance</b> <i>Speaker: Lin Hu, Ph.D., Research Scientist FPIInnovations, Building Systems Department</i>
<b>2:50 – 3:10pm</b>	<b>20 min</b>	<b>Coffee Break</b>
3:10 – 3:45pm	35 min	CLT - Research and Testing at UBC <i>Speaker: Frank Lam, Ph.D., P.Eng., Professor University of British Columbia, Faculty of Forestry, Department of Wood Science</i>

## Co-Chairpersons:

Erol Karacabeyli, P.Eng.,  
*Manager, Building Systems Department, FPIInnovations*  
Mary Tracey,  
*Executive Director, Wood WORKS! BC*

3:45 - 4:05pm	20 min	<b>CLT – Acoustic Performance</b> <i>Speaker: Sylvain Gagnon, P.Eng., Research Scientist FPIInnovations, Building Systems Department</i>
4:05 - 4:30pm	25 min	<b>Durability by design: CLT construction</b> <i>Speakers: Jieying Wang, Ph.D. and Constance Thivierge, P.Eng. MASc, Research Scientists FPIInnovations, Building Systems Department</i>

**4:30 - 6:00 1hr 30 min Lobby Reception**

### Day 2 - Wednesday, February 9, 2011

<b>7:45 - 8:25am</b>	<b>40 min</b>	<b>Continental breakfast</b>
8:25 - 8:30am	5 min	<b>Opening Remarks/Introductions</b> <i>Moderator: Brian Hawrysh, CEO, BC Wood Specialties Group</i>
8:30 - 9:20am	50 min	<b>CLT - The Norwich Academy and other European projects</b> <i>Speaker: Tristan Wallwork, CEng, MIStructE, Associate Director Ramboll UK Limited (Structural Engineers)</i>
9:20 - 9:55am	35 min	<b>Fire Performance of CLT Assemblies</b> <i>Speaker: Steve Craft, Ph.D., Research Scientist FPIInnovations, Building Systems Department</i>
<b>9:55 - 10:10am</b>	<b>15 min</b>	<b>Coffee Break</b>
10:10 - 10:50am	40 min	<b>CLT - Research and Testing at TU Graz</b> <i>Speaker: Univ.-Prof. Dipl.-Ing Dr.techn. Gerhard Schickhofer, Graz University of Technology, Austria</i>
10:50 - 11:10am	20 min	<b>CLT – Environmental Performance</b> <i>Speaker: Jennifer O'Connor, Group Leader Energy and Environment FPIInnovations, Building Systems Department</i>
11:10 - 11:45am	35 min	<b>CLT - Projects in British Columbia</b> <i>Speaker: Robert Malczyk, MASc, P.Eng., MBA, Principal, Equilibrium Consulting Engineers</i>
<b>11:45 - 12:00pm</b>	<b>15 min</b>	<b>Closing Remarks</b> <i>Co-Chair: Mary Tracey, Wood WORKS! BC Co-Chair: Erol Karacabeyli, FPIInnovations Moderator: Brian Hawrysh, BC Wood Specialties Group</i>

## Registration

	General	CWC, FPIInnovations, BC Wood members
Fee	\$325.00	\$275.00
HST R106868797	39.00	33.00
<b>Total</b>	<b>\$364.00</b>	<b>\$308.00</b>

## Pre-Order your CLT Handbook now!

**The handbooks will be available for pick up at the Symposium.**

Cost: CLT Handbook	\$150.00
HST R106868797	18.00
<b>Total</b>	<b>\$168.00</b>

**Information: Lorna Malone, 1-877-929-9663 ext 4  
lmalone@wood-works.ca**

### On-line registration:

**www.wood-works.org/BC/Timber**  
Secure payment using a credit card (Visa or MasterCard).

Registration includes food and beverages (a \$100 value before tax and service).

### Cancellation policy

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

### Registration deadline:

**Wednesday, February 2, 2011 at 5:00 p.m.**

**No registration on-site.**

## Cross-Laminated Timber (CLT) Symposium, Vancouver, BC February 8-9, 2011

Vancouver Convention Centre - West, Level 2, Vancouver, BC

General  CWC, FPIInnovations, BC Wood member

last name

first name

title

company/organization

address

city

province

postal code

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fax

e-mail

**Please send your cheque or postal money order, made out to the Canadian Wood Council, to the following:**

### Cross-Laminated Timber Symposium

Attention: Adrian Groza, Canadian Wood Council  
Suite 400 - 99 Bank Street, Ottawa, Ont., Canada K1P 6B9