

## The Future of Prefabrication in Construction is....Prefabrication!

**DATE:** Tuesday, November 16<sup>th</sup> – LIVE in-person event with livestream option!

**TIME:** 8:00am – 4:30pm Pacific

**LOCATION:** Fairmont Waterfront Hotel, 900 Canada Place Way, Vancouver and online

**REGISTRATION:** \$129 regular, \$109 early bird before Nov 1<sup>st</sup>!

<https://www.eventbrite.ca/e/198340861857>

**ATTEND IN PERSON FOR NETWORKING AND MEALS; ATTEND VIRTUALLY FOR IMMEDIATE ACCESS TO THE SESSION RECORDING!**



Photo Credit: Entekra

The future of construction is increasingly moving toward more advanced prefabrication systems. Labour shortages, building performance expectations and regulations, new materials, and the growing ability to integrate the design process directly with the manufacturing facilities, is enabling buildings to be built smarter, faster, better performing and, more cost-effectively. This workshop will bring together manufacturers, end-users, contractors, and researchers to highlight the advances in prefabrication methods as well as provide guidance on current trends, correct misconceptions and identify options when considering how to design and build your next project.

### Participants will learn the following and more:

- Different levels of prefabrication will be introduced and their advantages and disadvantages discussed.
- See examples of successful projects and how problems were addressed.
- Digital technology to increase productivity and quality.
- How to incorporate offsite components in city buildings.



Photo Credit: Intelligent City

### Who Should Attend?

This workshop is designed for contractors, designers, developers, manufacturers and building officials.

#### MORNING AGENDA – 8:00AM – 12:00PM

8:00am	Registration & Breakfast for in-person
8:30am	Welcome – Lynn Embury-Williams
8:35am	Speaker Introductions – Peter Moonen
<b>8:40am – 9:30am</b>	<b>Hansbert Ott, WEINMANN</b> Holzbausystemtechnik GmbH / HOMAG GmbH
9:30am – 9:40am	Q&A
<b>9:40am – 10:30am</b>	<b>Dr. Guido Wimmers, Master of Engineering</b> program in Integrated Wood Design, UNBC
10:30am – 10:40am	Q&A
10:40am-10:55am	15 minute coffee break
<b>10:55am – 11:45am</b>	<b>Gerry McCaughey, Entekra</b>
11:45am – 11:55am	Q&A
12:00pm – 1:00pm	<b>LUNCH BREAK: lunch included for in-person</b>

#### AFTERNOON AGENDA – 1:00PM – 4:30PM

1:00pm	Session Resumes – Peter Moonen
<b>1:05pm – 1:55pm</b>	<b>Leith Moore, R-Hauz</b>
1:55pm – 2:05pm	Q&A
<b>2:05pm – 2:55pm</b>	<b>Francisco Villarroel, ACQBUILT</b>
2:55pm – 3:05pm	Q&A
3:05pm-3:20pm	15 minute coffee break
<b>3:20pm – 4:10pm</b>	<b>Oliver Lang, Intelligent City and LWPAC</b>
4:10pm – 4:20pm	Q&A
4:20pm – 4:30pm	Closing remarks – Peter Moonen

**VISIT WOOD-WORKS.CA/BC TO REGISTER NOW!**

Event Partners:



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## Presentation Outlines and Speaker Bios:

**Why is prefabrication of wood houses increasing around the world?:** Around the world, cities, designers and contractors are facing increased density expectations in urban centres while working to improve both performance and affordability of residences. Coupled with a general shortage of both labour and skilled trades, the construction sector now realizes that prefabrication will play an essential role in their future – if they invest in the technology to make that happen.



**Hansbert Ott, Managing Director (ret.), WEINMANN Holzbausystemtechnik GmbH / HOMAG GmbH:** Hansbert Ott studied mechanical engineering at the University of Reutlingen, Germany, and worked as a project engineer for the automotive, steel and aluminum industries before joining WEINMANN Holzbau-system-technik GmbH. He was appointed Managing Director and shareholder of WEINMANN in 1992, which has grown from a small engineering company in 1985 to become a global market leader. As a leading manufacturer of high-performance machines and systems for timber work, WEINMANN develops innovative, powerful and customized solutions. While he retired at the end of 2020, since January 2021 he has been operating as a consultant using his long-time experience in the field of prefabrication to strengthen the timber construction worldwide.

**Prefabrication – to be, or not to be!:** This session will analyze the impact of recent and upcoming building code changes on the methods of construction in BC, in particular why the increase of energy efficiency and the allowance for taller wood buildings is pushing the industry relentlessly towards prefabrication. Different levels of prefabrication will be introduced and their advantages and disadvantages discussed.



**Dr. Guido Wimmers, Master of Engineering program in Integrated Wood Design, University of Northern BC:** Dr. Guido Wimmers was the inaugural Chair of the novel and unique Master of Engineering program in Integrated Wood Design at the University of Northern British Columbia. He holds a Masters Degree in Architectural Engineering and a Ph.D. in Engineering Science from the University of Innsbruck. Guido is a Registered Architect in the EU and a Professional Engineer in British Columbia. His first Canadian project, the Austria House for the Olympic Games in Whistler, was a milestone in Canada’s construction history by introducing Passive House, CLT and DLT for the first time to the country. Guido has over 20 years of professional and academic experience in Passive House, Building Physics and Prefabrication in multiple countries.

**Off Site Construction, the profit is in the process:** This presentation will discuss current challenges facing the construction industry in particular with offsite methods becoming a part of the solution. Some of these challenges include labor shortages, scheduling issues and the cost of building. From this presentation you will learn how a correct building system can help create profit for builders.



**Gerard (Gerry) McCaughey, founder and chairman, Entekra:** Gerard “Gerry” McCaughey is Founder and Chairman of Entekra, an off-site construction company headquartered in Northern California. An internationally respected business leader in the sector, he was named “Industry Entrepreneur of the Year” by Ernst and Young and was an influential force in Europe’s transition to off-site construction. McCaughey was the Co-Founder and Chief Executive of Century Homes in Ireland, and later named Chief Executive of Kingspan Century following the \$100 million acquisition of Century by the European building materials giant Kingspan Group Plc. By focusing on fully automating the construction process with integrated technologies, McCaughey propelled Century from a small start-up operation of four employees into Europe’s largest off-site provider. In late 2016, he founded Entekra with key members of Century Home’s management team to transform the way houses are framed in the United States with its Fully Integrated Off-Site Solution® (FIOSS®). The company has made significant inroads deploying FIOSS, as it is already working with, or in discussions with, a majority of the nation’s premier home builders.

**CLT for Midrise Residential Construction:** Leith will speak about R-Hauz’s six-storey mass timber pilot in Toronto. Using CLT to provide midrise residential building solutions has its challenges. The session will cover the planning and building process as well as lessons learned, and an overview of what’s to come for wood building at R-Hauz.



**Leith Moore, Co-Founder of R-Hauz:** Leith Moore co-founded R-Hauz in 2018 to provide affordable and sustainable housing solutions for urban families. Leith also founded Waverley Projects Inc. in 2016 as a project management and development company focused on creative ground-oriented infill development and midrise transit-oriented development opportunities in the GTHA. He is also Past Chair of BILD, Past President of OHBA and Past Chair of Evergreen.

**Off Site Construction steps forward:** This session will cover off-site construction misconceptions, what off-site construction offers to the different residential markets and will showcase the planning of a 6-storey, non-stacking, mixed-wood and steel building. The session will also cover some of the design pitfalls to avoid and cover the planning for infill condo projects.



**Francisco Villarroel, Project Manager, ACQBUILT:** Francisco’s project management skills started in automation field in the automotive industry, working on a global scale on production lines. In 2013 he joined ACQBUILT team to lead the technical team. As the production variation stabilized and the production lines were geared to produce, Francisco focused on the product development to expand ACQBUILT’s reach in the industry.

**Mass Timber Prefabrication and the Future of Urban Housing:** Mass timber construction and prefabrication technologies change how the materialization of buildings are integrated in the design, engineering, and planning processes. Oliver Lang will introduce a more integrated approach to urban housing using a suite of technologies from software automation to manufacturing automation, in the context of production-scaled mass-timber prefabrication.



**Oliver Lang, Co-Founder and CEO, Intelligent City:** Oliver Lang is an architect, urban product designer and technology entrepreneur with over 28 years of experience. He is the Co-Founder and CEO of Intelligent City, a housing technology company that takes an adaptable product- and scalable platform-based approach to simultaneously address climate change and housing affordability, across varied markets and broad customer needs. Intelligent City is a winner of Breakthrough Energy Solutions Canada and has been awarded the Solar Impulse Foundation Label. Oliver is also the Co-founder and Principal of LWPAC, a Governor General's Medal winning architecture practice based in Vancouver BC since 1999. He is a graduate of Columbia University and the TU Berlin.

#### EVENT HOUSEKEEPING NOTES:

**If you select the online attendance option** on your registration, a zoom link will be emailed to you prior to the event.

**If you are attending in person, please note:** To comply with the BC Provincial Health Officer's latest order, our in-person events require proof of two vaccinations. Face-coverings/masks must be worn in public indoor settings. We ask that you come prepared with your official proof of vaccination and government-issued photo ID, otherwise access may be denied.

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