



ATS CONTINUING EDUCATION
ONLINE_SEMINAR
QWEB Symposium: Rebuilding Caribbean
Resilience with Offsite Wood Technologies
Thursday, March 18, 2021



11:00 AM **Introductions and welcome**

“Rebuilding Caribbean Resilience” will be an interactive virtual learning and networking experience dedicated to linking up northern wood structure experts with architects, developers, and NGOs working in the Caribbean region.

Speakers and attendees share common goals and explore new offsite wood technologies to strengthen the region’s resilience to disasters like hurricanes. Targeted focus sessions also explore “how-to” examples, success stories, and ongoing research.

Canadian expertise is being convened by the nonprofit wood structure trade group QWEB, alongside leading regional designers and stakeholders after a historically difficult year, both in terms of storm impacts and the economic disaster of the pandemic for destination travel industries. This first program will answer 2020’s call for a broader discussion of wood’s potential with climate solutions and community redesign, and how Canadian partnerships can help.

11:15 AM **Keynote Speaker - Mr. Donald Chong**

Donald Chong, a design principal in the mass timber practice group of the award-winning Toronto firm of HDR. Mr Chong's keynote will provide an inspirational kickoff with images and examples from a timber building portfolio that will reinforce what is possible with wood structure.

11:45 AM **Break**

12:00 PM **Best Practices for Wood Durability in Tropical Environments**

This course will outline fundamentals and principles of designing with wood systems in the tropics with a focus on the climatic and environmental conditions of the Caribbean region. Design for durability in both hot/humid and hot/dry climates will be considered, with strategies for protecting wood in the building envelope and interior spaces. Managing insect hazards will also be surveyed along the variety of practices and treatment technologies available for light wood, solid timber, and mass timber construction systems.

Eli Gould

Eli graduated with one of the first dual Architecture/Forestry degrees from Yale in the early '90s, with a conviction that the two fields would eventually be more linked. After a quarter century, this seems more true and even mainstream, but for many years it was an entrepreneurial effort in the small vertical wood prefab companies he ran in Vermont, and in the automated timber industry where he often consulted. For the last three years, Eli has brought those experiences into a nonprofit market development role for QWEB. When he’s not trying to transform the AEC industry into a positive climate force he enjoys small town and organic farm life in Vermont with his family.

QWEB (Quebec Wood Export Bureau) Provider #: 502111360

AIA #:TropicalEnv21 HSW | GBCI (USGBC/CAGBC) #:

01:00 PM **Break**

01:15 PM **Roundtable 1: “Wood on a Mission” - Ms Yanel de Angel Salas - Perkins & Will**

Yanel de Angel Salas will lead the roundtable with a summary of her work in the formation of [resilientSEE-PR](#), an alliance that provides long-term relief to communities in Puerto Rico through resilient design and planning. ResilientSEE has expanded to other geographic locations providing climate adaptation strategies. She will place wood design trends in a context that includes cultural heritage and resistance to not only hurricane but seismic events.

01:15 PM

**Roundtable 1: “Wood on a Mission” - Mr. Arnold Ponçon - AgroforestaleSA /
Simplemente Madera**

Mr Ponçon will bring the complementary business case of the Caribbean basin to the roundtable with case studies from his family’s wood-producing and agroforestry heritage enterprise in Central America. The companies AgroforestaleSA and Simplemente Madera are undergoing a post-pandemic retooling, to focus on bringing under-utilized timber into affordable housing through a “kit of parts” and optimization approach. He will also share what he gained strategically during a year of immersion in the Canadian wood prefab community.

01:15 PM

**Roundtable 1: “Wood on a Mission” - Canadian Expert Project Video: Mr Rene LeClerc-
AmeriCan Structures**

The work of one of Quebec’s most globally active light wood frame producers AmeriCan Structures will be related to the local producer case through one of the last pre-pandemic trade missions to Nicaragua. Founder Rene LeClerc’s prior work in Africa with wood/clay hybrids will be previewed. An artisan gluelam producer member Art Massif will also be represented with the perspective of an owner who is a forest engineer with experience in Central America. Genevieve Constancis will also highlight the limits of current glue and treatment technologies which will lead into the following technical roundtable.

02:15 PM

Break

02:30 PM

**Roundtable 2: “Timber Tech in the Tropics” - Mr. Mohammad Mohammad -
NRCan/FPIInnovations**

Dr. Mohammad will lead the roundtable with a presentation that includes some of the primary technical solution paths to the challenges of timber construction in the Caribbean region. He will include examples of wood elements that are used in traditional construction methods, introduce the modern concept of mass timber slabs which are made of mechanically laminated wood (DLT), and how this can specifically replace the use of concrete. This presentation will also lead up to the way that this modern method allows for use of wood that has been treated against termites.

02:30 PM

**Roundtable 2: “Timber Tech in the Tropics” - Mr. Stephane Rompré - Boralife & Mr.
Stephane Moirans - AG Bio Centre**

The inventors and developers of a naturally derived wood treatment process, with exceptionally low toxicity for humans and the environment, will be sharing their path through one of the most challenging testing and certification environments for treated wood (the United States’ Fire Resistant Wood approval process). They also will go into more detail on the way that borate impregnation technology has a unique lethal mechanism for termites and what the applications are that this treated wood will be best used for. Specific testing for salt resistant fasteners will also be shared.

02:30 PM

**Roundtable 2: “Timber Tech in the Tropics” - Canadian Expert Project Video: Mr. Pape
Diouf - Serex**

The wood science laboratory who worked behind the scenes to help the inventors prove out the science is called Serex, and as they also are now helping the Quebecois inventors to test the treatment’s effect on different local Caribbean species, a virtual tour of their testing capacities and science leaders will be shared as part of the expert panel.

03:30 PM

Break

03:45 PM Roundtable 3: “Offsite Wood in Tropical Design” - Eli Gould - QWEB

Eli Gould will introduce and offer a context of some of the design opportunities that lie within the challenge of rebuilding when not only hurricane or seismic events have passed by, but also the realities of a new set of conditions in the wake of a global pandemic. A need for new shapes of community, buildings that are more distributed and autonomous, is going to be required but the challenges of cost and delivery need bold solutions.

03:45 PM Roundtable 3: “Offsite Wood in Tropical Design” - Dr. Jean Luc Sandoz - Groupe CBS-Lifteam

A timber university case study in French Guiana will serve as a local variation of a much longer legacy of work in a variety of structural systems with direct relevance to Caribbean regions. Portfolio work in Europe will be shown with an eye towards how local materials and talent can be elevated when used in concert with advanced technologies and expertise.

03:45 PM Roundtable 3: “Offsite Wood in Tropical Design” - Canadian Expert Roundtable Conclusions with: Mr. Nicolas Auger - NA Structure

The prefabrication expertise and mixed structural system producer Nicolas Auger has been active in the Caribbean market with a variety of innovative high end projects. Because one of his job sites happened to be under construction during Dorian, he was on the first flight in to finish the mix of mechanically laminated slabs, structural steel, and light wood frame. His jobsite pictures and participation in Q&A will show the sort of offsite partnership and multi-material coordination that are necessary to succeed in rebuilding Caribbean resilience.

05:00 PM REMO Networking Session, Design competition announcements.

NETWORKING

06:30 PM End

