



WoodTALKS at the GBM
Whistler Conference Centre
September 8-10, 2016

WoodTALKS Program Agenda

Thursday, September 8 - 2 LU's

1:30pm	Registration: Whistler Conference Centre, Main Lobby
2:30pm	Welcome to WoodTALKS, Rainbow Theatre
2:45pm-3:45pm	WoodTALK 1: Conserving the Expedition Huts of Scott & Shackleton <i>Presenter: Gord Macdonald, Partner, Macdonald and Lawrence</i> - Rainbow Theatre
3:50pm-4:50pm	WoodTALK 2: Pulling The Limits Of Wood <i>Presenter: Darryl Condon, Architect AIBC, AAA, SAA, OAA, FRAIC, LEED AP – Principal, HCMA Architecture + Design</i> - Rainbow Theatre
6:30pm-9:30pm	Welcome Reception - Roundhouse Lodge, Peak of Whistler Mountain

Friday, September 9 - 3.75+ LU's

8:00am-9:00am	Breakfast & Grand Opening Ceremony – Whistler Conference Centre Foyer
9:00am-12:00pm	13 th Annual GBM & Networking Tradeshow - Whistler Conference Center
11:45am-1:00pm	WoodTALK Lunch & Learn: Material Operations <i>Presenter: John Patkau, Principal, Patkau Architects</i> - Garibaldi Room
1:30pm-3:30pm	WoodTALKS Mini Seminar Sessions - Whistler Conference Centre
4:00pm-5:00pm	Site tour of Audain Art Museum- Whistler, BC
6:30pm-10:30pm	GBM Evening Networking Dinner/Reception - Audain Museum

Saturday, September 10 - 1 LU

8:00am-9:00am	Breakfast – Whistler Conference Centre Foyer
9:00am-12:00pm	13 th Annual GBM & Networking Tradeshow - Whistler Conference Center
11:45am-1:00pm	WoodTALK Lunch & Learn: Carbon, Construction And Cop 21 – What Designers Need To Know About Wood And Carbon To Address Global Climate Change <i>Presenter: Peter Moonen, Wood Works, BC</i> - Garibaldi Room

*Please note, free wifi can be accessed by connecting to 'BC Wood Wifi'. There is no password required to connect to the network.

Thursday, September 8

1:30pm	Registration: Conference Centre, Main Lobby
2:30pm	Welcome to WoodTALKS - an introduction on the WoodTALKS Program and the GBM - Rainbow Theatre
2:45pm-3:45pm	WoodTALK 1: Conserving the Expedition Huts of Scott & Shackleton Presenter: Gord Macdonald, Partner, Macdonald and Lawrence - Rainbow Theatre
3:50pm-4:50pm	WoodTALK 2: Pulling The Limits Of Wood Presenter: Darryl Condon, Architect AIBC, AAA, SAA, OAA, FRAIC, LEED AP – Principal, HCMA Architecture + Design - Rainbow Theatre
6:30pm - 9:30pm	Welcome Reception - Roundhouse Lodge, Peak of Whistler Mountain

SEMINAR INFORMATION

WoodTALK 1: Conserving the Expedition Huts of Scott & Shackleton

Presenter: Gord Macdonald, Partner, Macdonald & Lawrence

Antarctica is the only continent on Earth where the first human dwellings still stand today. As the lead building conservator for the Antarctic Heritage Trust, Gord Macdonald has spent over a year 'on the ice' as part of an international effort to conserve these modest wooden buildings in the Ross Sea of Antarctica. These huts are the legacy of the so-called 'Heroic Age of Exploration', when polar explorers Scott, Shackleton and Borchgrevink made various attempts to explore the previously unknown continent and attain the South Pole. The \$35M project is the first of its kind, representing an extraordinary collaboration between government and non-profit organizations, involving more than 60 experts from around the world.

The presentation will provide an overview of the speaker's twelve-year history with the project, and explore some of the most significant technological advancements of the Trust's work. As we all know, the impacts of global climate change are dramatically revealed in the Polar Regions, and there are many lessons that can be learned from this project and applied to the evolving circumstances of the Canadian Arctic.

Credits: AIBC: 1.0 Core LU; AIA: 1.0 LU/HSW; AAA 1.0 Structured Learning Activity

WoodTALK 2: Pulling the Limits of Wood

Presenter: Darryl Condon, Architect AIBC, AAA, SAA, OAA, FRAIC, LEED AP – Principal, HCMA Architecture + Design

This presentation will focus on structurally innovative uses of wood in public buildings. Case studies will include public library, community centre, fire hall and aquatic facilities. This seminar will outline the design process and decision making that led to unique and innovative buildings that integrate innovative structure with strong architectural expression. Included will be a detailed case study of tensile roof of the newly completed Grandview Heights Aquatic Centre, in Surrey BC.

Credits: AIBC: 1.0 Core LU; AIA: 1.0 LU/HSW; AAA 1.0 Structured Learning Activity

Friday, September 9

8:00am-9:00am	Breakfast & Grand Opening Ceremony – Whistler Conference Centre Foyer
9:00am-12:00pm	13 th Annual GBM & Networking Tradeshow
11:45pm-1:00pm	WoodTALKS Lunch & Learn: Material Operations Presenter: John Patkau, Principal, Patkau Architects - Garibaldi Room
1:30pm-3:30pm	WoodTALKS Mini Seminar Sessions - Whistler Conference Centre
4:00pm-5:00pm	Site Tour of the Audain Art Museum
6:30pm-10:30pm	GBM Evening Networking Dinner/Reception - Whistler Conference Centre

SEMINAR INFORMATION

WoodTALKS Lunch & Learn: Material Operations

Presenter: Presenter: John Patkau, Principal, Patkau Architects

This course will focus on a series of ongoing research projects which are gathered together under the umbrella title of 'Material Operations'. Material operations are centered on the simple manipulation of conventional materials to create remarkable structures and volumes. At a most basic level they follow the formula: Material + Force = Form. Three key interests will be covered in this session. First is the nature of specific materials, second is their response to different applications of force, third, and ultimately, the integral relationships between form, structure and space. The presentation will include research into both wood and sheet metal with a strong emphasis on the unconventional use of lumber, timber, and engineered wood products.

Credits: AIBC: 1.0 Core LU; AIA: 1.0 LU/HSW; AAA 1.0 Structured Learning Activity

Mini-Seminar Series with Exhibitors

1:30pm-3:30pm

The mini-seminars will be held on the Whistler Conference Centre Trade Show Floor. There will be eight accredited mini-seminars, each lasting 20 minutes and covering a variety of products and issues. In total, the 8 seminars will cover 8 different topics including: engineered wood products, timber frame & connectors, millwork products, and more. Chairs and refreshments will be provided at each seminar station which will be held at exhibitors booths. There will be 5 minute breaks between sessions and a 15 minute break after session 5.

Credits: AIBC: 1.75 Core LU; AIA: 1.75 LU/HSW; AAA 1.75 Structured Learning Activity

Stream A

- Woodtone
- Western Red Cedar Lumber Association
- Western Reclaimed Timber
- Structurlam Products
- Barker Manufacturing
- Fenstur Windows and Doors
- Brisco Manufacturing Ltd.

Stream B

- StructureCraft Builders Inc.
- FraserWood Industries
- Terminal Forest Products
- Westeck Windows and Doors
- Sansin Corporation
- Viceroy Houses (2015) Limited
- Daizen Joinery



STREAM 'A' MINI-SEMINARS

MINI-SEMINAR PROGRAM: 1:30 – 3:30 PM

EACH OF THE 7 SEMINARS LASTS 15 MIN; TOTAL 7 X 0.25 HOURS = 1.75 LU's

MAXIMIZING LIFE SPAN AND MINIMIZING MAINTENANCE ON WOOD SIDING

Presenter: Ben Good, Woodtone

As the West Coast Contemporary design trend continues, today's building professionals are on the look-out for siding substrates and coating systems that achieve the desired aesthetics at a reasonable cost and offers a manageable maintenance schedule. This year's presentation by Woodtone will compare some of the industry's top products and coating options in exterior wood siding. We will look at each product in terms of appearance, cost and life cycle characteristics. You will learn:

1. Understand the characteristics of products available to achieve a stained wood siding appearance
2. Learn the options available in coating systems which extend the life span of wood cladding
3. Review a case study from a current project under construction

STN #1

REAL CEDAR - A TRULY GREEN BUILDING MATERIAL

Presenters: Paul Mackie, Technical Advisor, Western Red Cedar Lumber Association

This seminar will present the benefits of designing with sustainably harvested western red cedar. You will learn:

1. Environmental management & certification
2. Emotional characteristics of western red cedar
3. Western red cedar grades and sizes
4. Finishing and installation best practice

STN #2

DESIGNING WITH RECLAIMED WOOD

Presenters: Amika Scott, Western Reclaimed Timber

Designing and using reclaimed wood has increased in popularity in recent years in projects both large and small. Demand for wood from deconstruction of iconic buildings is high but there are issues anyone designing or sourcing reclaimed should know. This seminar discusses the reclamation process and descriptions of the types of reclaimed materials which are commonly available and the benefits and difficulties of reclaimed wood. In this seminar, you will learn:

1. Learn the advantages of reclaimed wood (environmental, quality, aesthetic)
2. Discover some of the unique constraints when working with reclaimed wood
3. Learn how to plan a project incorporating reclaimed wood
4. Learn how to properly design a project with eventual deconstruction in mind

STN #3

CROSS LAMINATED TIMBER – CONSTRUCTION'S MISSING LINK

Presenters: Ron McDougall, Structurlam Products

This seminar will discuss Cross Laminated Timber (CLT) and the advantages of designing and constructing with it. Also discussed will be the advantages prefabrication offers the architect, builder and owner. In this seminar, you will learn:

1. Learn the benefits and risks of designing with mass timber
2. Learn how and where to source certified mass timber products
3. Learn about linking and coordinating design through manufacturing models
4. Learn how to speed up process on shop drawings by using 3D digital information modeling

STN #4

SOLUTIONS FOR WOOD

Presenters: Jim Barker, Barker Manufacturing

This seminar will cover several types of appearance finishes available today that will both extend the life of wood while providing the aged or reclaimed look including weathered, burnt or hand hewn on almost any wood size and profile from heavy timber to millwork to cladding. In this seminar, you will learn:

1. Learn about designing with the increasing popular burned wood (millwork and cladding) look, advantages
2. Learn about boutique textures available on a wide variety of materials including but not limited to wood
3. Learn how the new wood is made old with faux weathered coating technology
4. Learn about wood design trends popular in other jurisdictions

STN #5

CONSTRUCTING WINDOWS AND DOORS FOR THE WEST COAST

Presenters: Braden Gierc, Fenstur Windows and Doors

This seminar will discuss features to consider when specifying user friendly wood windows and doors for West Coast applications. In this seminar, you will learn:

1. Learn about construction and joinery details to look for when choosing quality wood windows and doors
2. Learn what species and grades will provide maximum performance
3. Learn about design options and constraints when specifying custom windows and doors
4. Learn how factory finishing, modern coating technology and appropriate hardware will insure maximum window and door performance and longevity

STN #6

ALTERNATIVE MASS TIMBER WITH EXTRAORDINARY AESTHETICS AND STRENGTH

Presenters: Christoph Loesch, Brisco Manufacturing Ltd

This seminar will introduce Laminated Veneer Lumber (LVL) as a reliable structural element to the growing Mass Timber Construction Industry. As a result of this seminar attendees will:

1. Learn about manufacturing processes and mechanical properties of LVL-based Mass Timber products
2. Learn about visual aspects of this contemporary engineered wood product
3. Learn about the various design characteristics and applications of this innovative product

STN #7

STREAM 'B' MINI-SEMINARS

MINI-SEMINAR PROGRAM: 1:30 – 3:30 PM

EACH OF THE 7 SEMINARS LASTS 15 MIN; TOTAL 7 X 0.25 HOURS = 1.75 LU's

MODULAR SYSTEMS IN TIMBER

Presenter: Lucas Epp, StructureCraft Builders Inc.

This seminar will introduce Laminated Veneer Lumber (LVL) as a reliable structural element to the growing Mass Timber Construction Industry. In this seminar, you will learn:

1. Learn about the benefits of constructing with prefabricated timber
2. Learn about different types of mass timber products and prefabricated panels, including CLT, NLT, Stressed Skin, and Timber-Concrete Composites
3. Learn where and when each product is most suitable
4. See efficient design applications for each product

STN #1

UNDERSTANDING TIMBER DRYING

Presenters: Kai Kornith, FraserWood Industries

This seminar will give an overview of the parameters to consider when specifying the moisture content of timber. In this seminar, you will learn:

1. Learn about moisture-related wood movement (shrinkage, splitting, checking, etc.)
2. Find out about challenges and solutions related to wood shrinkage
3. Learn about the options for specifying the moisture content and drying methods for architectural timber

STN #2

INTRODUCTION TO ENGINEERED WESTERN RED CEDAR

Presenters: Mike McInnes; Sarah Fryer, Terminal Forest Products

This seminar will discuss Engineered Western Red Cedar, and its superior performance, serviceability, and appearance. In this seminar, you will learn:

1. The characteristics of Engineered Western Red Cedar as a superior building product
2. Western Red Cedar grades / finishing / installation guidelines
3. Why choosing Engineered WRC increases structural performance and longevity
4. How engineered WRC promotes strength and sustainability, durability and environmental sensitivity

STN #3

MODERN DAY STAIN SOLUTIONS: UV PERFORMANCE AND QUALITY

Presenters: Darwin Ortis, Westeck Windows and Doors

In a world of changing climates and changing design trends, the wood industry has had to keep up to these demands.

Between hot summer suns and dark, black colors with little or no protection it is close to impossible to keep wood fenestration products from cracking, drying out, and failing. Water based products have been developed to levels where Low Heat-built pigments help reduce these effects. In this seminar, you will learn:

1. Makeup of water based paint and stain
2. Benefits of water based products
3. Makeup of low heat built pigments
4. Final outcome of low heat built pigments on wood products

STN #4

BENEFITS OF WATER-BORNE WOOD PRODUCTS AND TECHNOLOGIES

Presenters: Quinn Brown & Eric Bos, Sansin Corporation

This seminar will explain the benefits of building with wood and how to properly maintain and protect it from the inside out. In this seminar, you will learn:

1. The difference between hybrid and full-frame construction
2. How to specify timbers – grade, species, finishes and joinery
3. How much timber frame will cost

STN #5

BC'S WINEGRATION OF PRE-BUILT AND PANELIZED WALL STRUCTURES INTO ARCHITECTURAL APPLICATIONS

Presenters: Bob Hammell, Viceroy Homes

This seminar will cover the "how's" and "why's" of specifying prebuilt structures. In this seminar, you will learn:

1. Discover solutions for architectural design integrating panelized systems
2. Understand advantages of precision manufacturing and quality control in a factory setting as opposed to on-site framing construction
3. Learn how prebuilt structures significantly reduce building material waste
4. Learn how prebuilt structures substantially reduce site disturbance and build time

STN #6

UNDERSTANDING HOW TO SPECIFY AND CONTROL TIMBERFRAME MATERIAL

Presenters: Dai Ona, Johnny Matak, Daizen Joinery

This seminar will cover key timberframe issues from - how to specify the material through to designing concepts and the key benefits of working with properly kiln dried material. In this seminar, you will learn:

1. Learn about which timber grades are best suited for specific applications to ensure a projects safety
2. Learn about the latest Kiln Technology and the importance of Kiln Drying to the proper moisture content
3. Learn how new technology has impacted joinery design
4. Learn about structural cladding timber - Steel and Glulams

STN #7

SITE TOUR OF THE AUDAIN ART MUSEUM

Overview:

Designed by Patkau Architects, the Audain Art Museum located in Whistler, BC, is an iconic 55,230-square-foot museum that houses a unique and permanent collection of British Columbia art and hosts exhibitions from leading museums around the world.

Built on a floodplain, the distinctive hockey-stick shape and look of the building was designed and constructed to respond to the site, environmental issues, and to the art collection art it houses.

The museum provides a great example of integrating the aesthetics of wood with the strength and mass of a concrete and steel structure including the walkways and the entry — anything you see from the outside — is covered with wood that is illuminated to act like a lantern which is designed to give the building a 'warm glowing character.' Also notable, above the entry porch is an oculus ribbed with strips of Hemlock and is designed to allow natural light into the interior of the museum.

The tour and seminar will provide attendees with a first-hand inner look into the challenges and solutions the architect faced in designing a museum specifically for Native Art while integrating the building seamlessly into its surroundings.

- Learn how the building was designed to respond to both its surroundings and purpose of specifically housing BC Native Art
- Learn about the challenges and ultimately successful solutions in designing and constructing a building on a floodplain that will withstand the most extreme flood expected in the next 2,500 years.
- Learn how the unique design of "illuminated wood" on the walkways and entry – anything seen from the outside - provides warmth to the building
- Learn how the building was designed and constructed to meet international humidity and temperature control standards (HVAC) and secure protection for the art.

Credits: AIBC: 1.0 Core LU; AIA: 1.0 LU/HSW; AAA 1.0 Unstructured Learning Activity

Presenters:

- JOHN PATKAU, ARCHITECT AIA, AIBC

Duration: 1 hour



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9:00am-12:00pm	13 th Annual GBM & Networking Tradeshow
11:45am-1:00pm	WoodTALKS Lunch & Learn: Carbon, Construction And Cop 21 – What Designers Need To Know About Wood And Carbon To Address Global Climate Change Presenter: Peter Moonen, Wood Works, BC - Garibaldi Room

SEMINAR INFORMATION

WoodTALKS Lunch & Learn: Carbon, Construction And Cop 21 – What Designers Need To Know About Wood And Carbon To Address Global Climate Change

Presenter: Peter Moonen, Wood Works, BC

Embodied Carbon footprint reduction of construction, while not in every nation's commitments, has been increasing in some national, regional, and local government policies. Embodied impact reduction becomes an increasingly critical factor in material selection since these impacts have both immediate and long-term effects – positive and negative. Building performance improvements further skew the value of recognizing embodied emissions by changing the relative balance between embodied emissions and operational ones.

Designers can expand the use of wood in a variety of building types by understanding the carbon aspirations of jurisdictions and contextualizing the benefits of using wood within these regulations and policies. New life Cycle Analysis and carbon assessment tools can provide designers with messages about wood that are both science-based (to diminish conflicts with other material sectors) and understandable by key influencers, users and regulators.

Credits: AIBC: 1.0 Core LU; AIA: 1.0 LU/HSW; AAA 1.0 Structured Learning Activity



PRESENTER INFORMATION



Gordon Macdonald, Partner, Macdonald and Lawrence

Gord Macdonald is the CEO of Macdonald & Lawrence Timber Framing. He is a master carpenter and building conservator with more than 30 years' experience working with historic timber buildings, design through to build of custom homes, and public buildings and structures. He has delivered projects on six continents including Antarctica where he spent nine seasons 'on ice' restoring the expedition huts of the early polar explorers, Scott and Shackleton.

Gord has led his carpentry teams through a range of interesting and award-winning projects including the Kinsol Trestle rehabilitation project (the Kinsol Trestle is one of the tallest free-standing and most spectacular timber rail trestle structures in the world). Gord's achievements also include the restoration of medieval houses, the re-creation of a 30-ton Roman war machine for BBC Television, and the construction of a 10,000 square-foot timber space frame to support Europe's largest solar array.

Gord has delivered a variety of presentations to groups ranging from local interest, all levels of government, to the 'Association for Preservation Technology International'. He is an instructor with the Cultural Resource Management Program at the University of Victoria where he teaches practical building conservation and is also the President with Heritage BC.



Darryl Condon, Architect AIBC, AAA, SAA, OAA, FRAIC, LEED AP – Principal, HCMA Architecture + Design

Darryl Condon is Managing Principal of Vancouver based Hughes Condon Marler Architects. Darryl graduated from McGill University in 1990 and subsequently began his professional career with IKOY Architects in Regina. He joined Vancouver based Hughes Baldwin Architects in 1994 and in 1999 became a partner in Roger Hughes + Partners Architects, the predecessor of Hughes Condon Marler Architects.

For the past twenty years he has been engaged in the process of community building through his ongoing work on a wide variety of community building types, particularly community centres, libraries, aquatic centres, fire halls and other municipal facilities.

In addition to his professional work he is an active volunteer with several not-for-profit organizations as well as serving as a Councillor and Vice-President of the Architectural Institute of British Columbia.

At HCMA, Darryl has spearheaded the firm's Community Responsibility initiatives as well as its highly successful Intern Architect development program. Darryl completed his architectural education at McGill University.

His work, which includes competition wins in both British Columbia and Quebec, has been recognized nationally and internationally with approximately 50 awards for design excellence.



John Patkau, Principal, Patkau Architects

John Patkau and his wife Patricia are principals of Patkau Architects a firm which they founded in Edmonton in 1978, and then moved it to Vancouver in 1984. In over 35 years of practice, the studio has been responsible for a wide variety of project types, ranging in scale from art installations to major urban buildings.

Current work includes the Polygon Gallery in North Vancouver; the Audain Art Museum in Whistler, the Yasodhara Ashram in Kootenay Lake; the Capilano Library in Edmonton; the Faculty of Music in Winnipeg, and several private residences.

The practice is also actively engaged in architectural research. Their current work explores the potential resulting from the response of materials to applications of force. A compendium of these investigations will be published in Material Operations, a forthcoming book by Princeton Architectural Press.

Patkau Architects has received numerous awards for its work, including several Governor General's Medals and awards from the Royal Architectural Institute of Canada and the American Institute of Architects.

John has taught and lectured extensively in Canada, the United States and Europe. He and Patricia were appointed Members of the Order of Canada in May 2004.



Peter Moonen, Wood Works, BC

Peter Moonen is National Sustainability Manager for the Canadian Wood Council, the national association representing manufacturers of Canadian wood products used in construction and which provides technical support to build a strong wood culture in Canada through education, training and awareness.

He regularly presents on achieving greater sustainability and the appropriate use of wood in Asia, Europe and throughout North America to design professionals, educators and building officials. His work supports various industry associations, export marketing groups and both provincial and federal government departments including support of Canada's Corps of Trade Commissioners and overseas marketing groups in their work to sell Canadian

products and services and opportunities for investment in the sector.

Peter was an organizer and session facilitator at the UN Timber Committee and market reviewer specializing in wood and the green economy for the Forest Products Annual Market Review published by the UNECE Forestry and Timber section. Peter has a degree in Marine Biology and zoology from UBC and has used that as a technical communications specialist to advance wood and the forest sector. He has more than 30 years' experience dealing with regulatory, environmental, sustainability and operational issues.

