Leading Experts in Engineered Wood Design and Architecture

Unlimited Versatility of Wood Construction

Wood WORKS! Toronto Wood Solutions Fair - Thursday November 22, 2018
Learning Objectives

1. Why to use wood
   This resource does not have inherent limitations. It is BC’s most natural and readily available resource in construction.

2. When to use wood
   This presentation will endeavour to stimulate the desire to build with wood by illustrating its potential in a selection of representative construction examples.

3. How to use wood
   Examples the broader application in wood construction will be explored.

4. Advantages of wood in large span structures
WHY TO USE WOOD
East Coast of Canada
West Coast of Canada
Forests in Canada

Area of Canada: 9,984,670 sq.km
Total Forest Area: 54%
Harvested annually: 1%
Population: 34.88 million

Economy: $25 billion to the GDP
# Employed: 190,000
Wages: $9 billion

Population: 4.6 million

Map - Google Maps

Area of BC: 944,735 km²
Forest Coverage: 62%
Population: 4.6 million
Steel Production

Wood Production
WHEN TO USE WOOD
The successful use of wood by First Nations as their prime construction material for shelters, canoes and all necessary utensils of daily life dates back as far as 10,000 years. Canada is home to more than 20,000 individuals educated and engaged in architectural endeavors and probably twice that many in structural engineering.

Nuxalk First Nation
Historical Sketch
On Site Lumber Yard
Bella Coola, BC
Concept Sketch
Bella Coola, BC
Acwsalcta – A New Cedar Place of Learning
Bella Coola, BC
Acwsalcta – A New Cedar Place of Learning
Bella Coola, BC
Acwsalcta – A New Cedar Place of Learning
Bella Coola, BC
Acwsalcta – A New Cedar Place of Learning
Bella Coola, BC
Port Alberni Location Map
Source: Google Maps
Tseshaat Shewish House of Learning (Ha-Ho-Payuk School)
Port Alberni, BC
Tsesháht Shewish House of Learning (Ha-Ho-Payuk School)
Port Alberni, BC
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Port Alberni, BC
Tseshaaht Shewish House of Learning (Ha-Ho-Payuk School)
Port Alberni, BC
Kitsumkalum Location Map

Source: Google Maps
Copper
Historical symbol of wealth, status and power in First Nation communities

Source: Edward S. Curtis via Wikipedia
Kitsumkalum Health Centre
Terrace, BC
Kitsumkalum Health Centre
Terrace, BC
Kitsumkalum Health Centre
Terrace, BC
HOW TO USE WOOD
Laurel and Hardy
Typical Wood Frame House Construction

Canada
Tseshaht Location Map

Source: Google Maps
Tseshahaat Tribal Multiplex - Construction
Port Alberni, BC
Tseshahaht Tribal Multiplex - Construction
Port Alberni, BC
Tseshahaht Tribal Multiplex - Site
Port Alberni, BC
Tseshah Tribal Multiplex
Port Alberni, BC
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Port Alberni, BC
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Port Hardy, BC
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Port Hardy, BC
Kwakiutl Wagalus School
Port Hardy, BC
Kwakiutl Wagalus School
Port Hardy, BC
Rocky Pines Community Centre
Lower Nicola, BC
Rocky Pines Community Centre
Lower Nicola, BC
Rocky Pines Community Centre
Lower Nicola, BC
Rocky Pines Community Centre
Lower Nicola, BC
Ka'yu'k't'h'chektles7et'h' Location Map

Source: Google Maps
Ka'yu'k't'h'chektles7et'h' Health and Community Centre
Kyuquot, BC
Ka'yu'k't'h' chektles7et'h' Project Site
Kyuquot, BC
Ka'yu'k't'h'chektles7et'h' Health and Community Centre
Kyuquot, BC
Ka'yu'k't'h'chektles7et'h' Health and Community Centre
Kyuquot, BC
Ka'yu'k't'h'chektles7et'h' Health and Community Centre
Kyuquot, BC
Tseshahit Shopping Village
Port Alberni, BC
Tseshaht Shopping Village
Port Alberni, BC
Lhtako Dene Health Centre
Quesnel, BC
Lhtako Dene Health Centre
Quesnel, BC
Lhtako Dene Health Centre
Quesnel, BC
Skeesht Health and Wellness Centre
Lytton, BC
Skeesht Health and Wellness Centre
Lytton, BC
Whistler Chalet
Whistler, BC
Cowichan Ts’ewulhtun Health & Wellness Centre
Duncan, BC
Cowichan Ts’ewulhtun Health & Wellness Centre
Duncan, BC
Cowichan Ts’ewulhtun Health & Wellness Centre
Duncan, BC
WOOD IN LARGE SPAN STRUCTURES
South Surrey Ice Arena – Design – 50m x 64m Engineered Wood Roof Structure
Surrey, BC
South Surrey Ice Arena – Design – 50m x 64m Engineered Wood Roof Structure
Surrey, BC
South Surrey Ice Arena – Assembly
South Surrey Ice Arena – Testing Details
Concealed Steel Connections
Surrey, BC
South Surrey Ice Arena – Design – 50m x 64m Engineered Wood Roof Structure
Surrey, BC
Tsleil-Waututh Administration and Health Centre
North Vancouver, BC
Tsleil-Waututh Administration and Health Centre
North Vancouver, BC
Tsleil-Waututh Administration and Health Centre
North Vancouver, BC
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Tsleil-Waututh Administration and Health Centre
North Vancouver, BC
Thank you!

Lubor Trubka Associates Architects
(LTA Production Ltd.)