

ALBERNI DISTRICT SECONDARY SCHOOL

LOCATION

Port Alberni, British Columbia

SIZE

12,820 m²

COMPLETION

2012

CAPACITY

Serves 1,000 students;
500-seat community theatre

ARCHITECTS

Meiklejohn Architects Inc. &
Atelier Pacific Architecture Inc.

BUILDERS

StructureCraft Builders Inc.

GENERAL CONTRACTOR

Yellowridge Construction Ltd.

ENGINEER

Equilibrium Consulting Inc.

BUILDING CODE CONSULTANTS

LMDG

PROJECT OWNER

School District No. 70 Alberni

B.C. GOVERNMENT MINISTRY

Ministry of Education

PROJECT OVERVIEW

Port Alberni on Vancouver Island's rugged Pacific Coast has enjoyed a forest-based economy for more than half a century. So when the decision was made to replace the city's only secondary school, the Ministry of Education turned to cutting-edge wood technology to achieve environmental benefits and celebrate the city's strengths.

The new Alberni District Secondary School, which opened in 2012, has more than 1,000 students and is a local centerpiece – with two gymnasiums, a 500-seat community theatre, a First Nations gathering place, a youth health clinic and a Neighbourhood Learning Centre.

Wood was used extensively throughout the school. For one of the two gyms, the designers adapted the WoodWave Structural Panel system created for the award-winning

Richmond Olympic Oval. Efficient and cost-effective, it provides a beautiful wood ceiling inside the gym, and a majestic exterior wood wave design that can be viewed from two of the classrooms on the school's second level.

The Richmond Olympic Oval was a signature structure for the 2010 Winter Games in Vancouver, and its WoodWave roof was a precedent-setting example of advanced wood engineering and design. Its wood-steel arches have a hollow triangular cross-section to conceal mechanical, electrical and plumbing services.

The scaled-down adaptation used for Alberni District Secondary School offers a structurally sound, acoustically efficient and aesthetically pleasing solution with significant commercial benefits.



Photo courtesy of Fast + Epp

“The use of wood for structural and aesthetic purposes is a stunning example of how design influences form and supports use. The building works extremely well. It’s also pleasing to work in and to show off to visitors. The use of wood completely enhances the ‘wow factor.’”

Mike Ruttan, Principal, Alberni District Secondary School

WOOD FEATURES

WOODWAVE ROOF: A MADE-IN-B.C. SOLUTION

Alberni District Secondary School has a WoodWave roof panel system, conceived and engineered by B.C.’s StructureCraft Builders for the Richmond Olympic Oval. Lumber and plywood are fastened together in a wave-like form to serve as a structural roof, a finished ceiling and a noise-reducing panel.

RELAXED LEARNING ENVIRONMENT

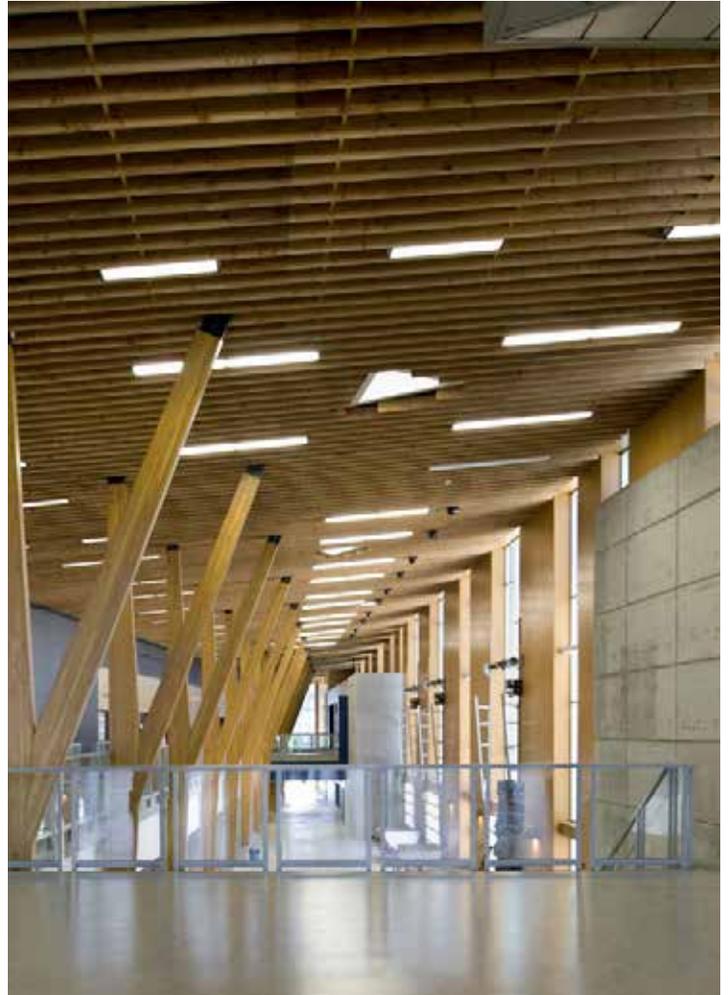
– The use of wood throughout Alberni District Secondary School provides students and teachers with a productive and high-quality learning environment. Research by the University of British Columbia and FPInnovations has found that wood interiors reduce stress.

EFFICIENT AND COST-EFFECTIVE

– Prefabrication and shop-based preassembly saved time, and ensured precision and consistent quality; Alberni District Secondary School’s roof system was installed in one day. The wood supplied to the manufacturer came from the Alberni Valley.

ADVANCING COMMERCIAL VIABILITY

– The school received a grant from the Canadian Wood Council/ WoodWORKS! and forest industry groups to demonstrate a commercially viable use of innovative wood-based products.



Photos courtesy of Laura May

FOR MORE INFORMATION

This profile is published by Forestry Innovation Investment, the Government of British Columbia’s market development agency for forest products.

For more examples of innovative wood building projects throughout British Columbia, visit:

naturallywood.com