

J.W. SEXSMITH ELEMENTARY SCHOOL

PROJECT OVERVIEW

This two-storey, 3,770 square metre facility was built under the province of British Columbia's seismic mitigation program for schools. It replaces the original J.W. Sexsmith Elementary dating from 1912, that structural analysis had determined would be uneconomical to upgrade to current code standards. Located on a south sloping site in the Langara neighbourhood of Vancouver, the new school serves a diverse student population in an area that is transitioning from single-family to multi-family homes.

Designed to accommodate 380 students from kindergarten to grade seven, the building is organized along a central spine that curves to follow the contours of the site.

The classrooms are positioned on the south side of the building, following a gentle arc that embraces the playground.

LOCATION
Vancouver, British Columbia

SIZE
3,770 m²

CAPACITY
380 students

COMPLETION
2013

ARCHITECT
Iredale Architecture

STRUCTURAL ENGINEER
Iredale Architecture

GENERAL CONTRACTOR
Pro-Can Construction Group

PROJECT OWNER
School District No. 39 Vancouver

B.C. GOVERNMENT MINISTRY
Ministry of Education

A continuous porch runs the length of the building, providing protection from the summer sun and a covered play space for inclement weather. Skylights are used to bring natural light into the heart of the building.

In accordance with Vancouver School Board standards, the gymnasium is designed to an enhanced safety standard as it is a designated place for the community to assemble following a seismic event. The multipurpose space can be used for after-school childcare as well as for community events.

The material palette includes brick masonry for the walls, juxtaposed with wood elements finished in a variety of tones. Together with the shallow pitched roofs, this gives the school a residential character in keeping with the surrounding buildings.



“The wood finish in the school helps to create a warm and wonderful learning environment for our students. Sexsmith is also a really gorgeous looking school and the reason it is so visually attractive is the wood.”

Ross Cassie, Principal, J.W. Sexsmith Elementary School

WOOD USE

The school is constructed almost entirely of wood, employing a combination of traditional light wood frame with engineered wood elements where required for long spans or particularly heavy load conditions.

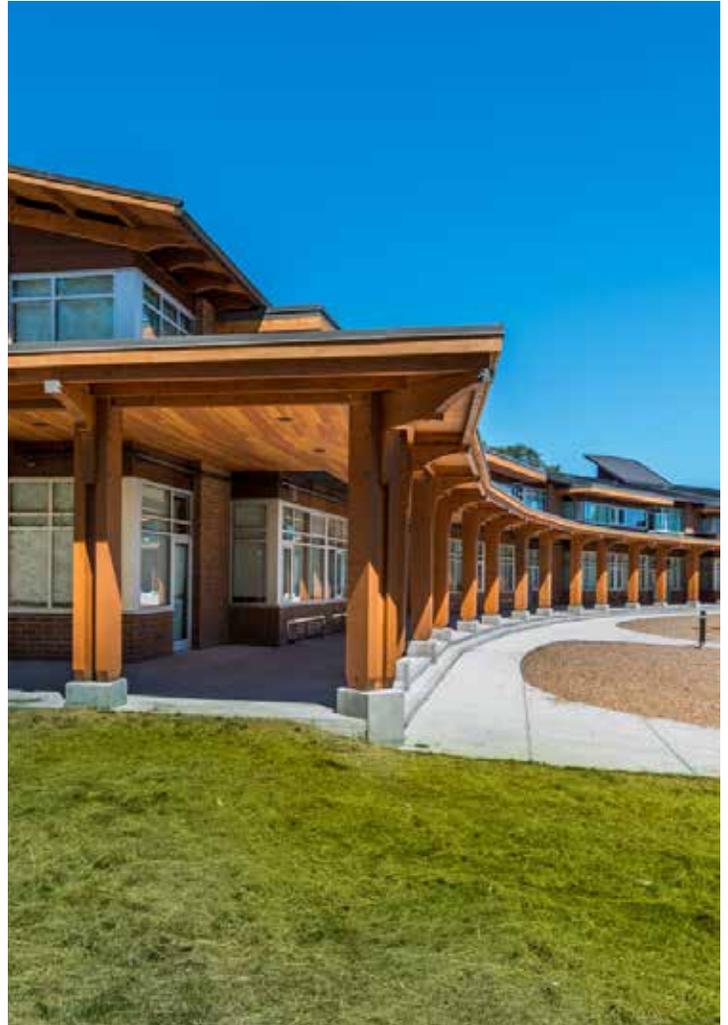
Glue laminated beams are used for large spans supporting roof and floor framing, and glue laminated columns are used for large loading conditions generally supporting the beams. The floors employ both wood I-joists with plywood webs, and solid sawn lumber, while the roof uses open web pre-engineered wood trusses, with solid sawn lumber joists and rafters.

The walls are of 2x6 construction with built up solid sawn or engineered wood lintels (laminated veneer lumber or parallel strand lumber) depending on span and loading requirements. The sheathing for floor and roof diaphragms is Douglas-fir plywood, and the shear walls are concrete.

Externally, the post and beam structure for the porch includes clear, non-heartwood Douglas-fir S4S (surfaced four sides) columns, beams and rafters. Outrigger beams cantilever beyond the paired columns and are supported on knee braces.

Exterior finishes in wood include: tongue and groove spruce boards for the porch soffit; small, square or rectangular sections of fir for the classroom intake grilles, casings and trim; western red cedar fascia boards; and stained and sealed ‘Silv’a’ western red cedar cladding panels mounted on fir battens.

Internally, the corridors feature continuous wood veneer wainscoting and a wooden chair rail to protect against damage. Wood slat acoustic ceilings are used in the library and other noise sensitive areas, and warm-coloured fir is used to line the upper level light wells.



Photos courtesy of Iredale Architecture and www.andrewdoran.com

FOR MORE INFORMATION

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