



Crawford Bay Elementary-Secondary School | Crawford Bay, BC

KMBR Architects Planners Inc.

Crawford Bay is a small logging community in the heart of an important lumber-producing region. By designing the new 30,000 sq ft school to incorporate a maximum of locally-produced wood products, we were able to meet two important sustainability objectives. First, the use of locally-produced wood products avoided the shipping of materials from afar, thereby reducing the new school's environmental footprint. Second, the use of wood was an intentional, socially responsible move because it created local employment in the lumber industry and for local carpenters, thus helping this economically-challenged community by fuelling the local economy.

We selected wood as the primary structural and finishing material for this project for its aesthetic and structural qualities as well as its characteristics as a truly sustainable building product according to the three tenets of sustainability: environmental stewardship, economic feasibility and social responsibility.

The beauty of wood as well as its tactile qualities was seen to be particularly appropriate in creating a healthy, comfortable and friendly learning environment. Much of the structural glulam posts and beams were left exposed to enhance the interior aesthetic appeal.

The ability of wood to serve double duty, i.e., as a structural member and as finish material, was exploited to the greatest possible extent. For example, roof overhangs were constructed of stacked alternating 2x4 and 2x6 lam stock material, laminated into panels that spanned between cantilevered glulam roof beams. These panels were prefabricated on the ground then lifted into place to serve as structural roof elements. The underside of the stacked plank panels was left exposed, providing an attractive soffit finish.



Wood materials used:

- Douglas fir glulam structural members
- Douglas fir lam stock – alternating 2x4 and 2x6 for stacked-plank roof panel construction
- Dimension lumber SPF – wall infill and floor/roof framing
- Plywood sheathing
- Larch 1x6 T&G exterior siding
- Hemlock slats – interior ceilings
- Larch 1x4 slats for interior acoustic wall panelling
- Veneer plywood for casework
- Edge-grain solid fir entrance doors
- Vertical grain veneer fir interior doors
- Glulam student benches and seats (corridors)
- S4S firm trims, baseboards



Project team:

Client:

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