SOUTHERN OKANAGAN SECONDARY SCHOOL

LOCATION
Oliver, British Columbia

SIZE
11,100 m² (new construction)

COMPLETION
2014

ARCHITECT
KMBR Architects Planners Inc. &
HDR | CEI Architecture Assoc. Inc.

STRUCTURAL ENGINEER
CWMM Consulting Engineers Ltd.

GENERAL CONTRACTOR
Greyback Construction

ENGINEERED WOOD FABRICATOR
Structurlam Products

PROJECT OWNER
School District No. 53
Okanagan-Similkameen

B.C. GOVERNMENT MINISTRY
Ministry of Education

Project Overview

From the outset, the renovation and expansion of this school and community theatre complex was an important event in the life of this small interior town. However, as construction neared completion, it suddenly assumed even greater significance.

A major fire destroyed the much-beloved Art Deco Frank Venables Theatre - originally constructed in 1949 - together with the contemporary classroom block and the newly renovated library. Only the new gymnasium, science labs and multipurpose room survived.

Very quickly, the client, design team and the community developed a new strategy, transforming this disaster into an opportunity. It was decided that the classroom block and library would be reconstructed, a new theatre would be built with contributions from the community, and a neighbourhood learning centre would be added to the program.

The plan takes the form of an open-ended, south-facing courtyard, with its wings terminating in the freestanding neighbourhood learning centre to the southwest, and the new 395-seat community theatre to the southeast. Between these wings, the central block of the building is anchored by the new multipurpose room which acts as both the physical and social focus of the school.

The school is designed for maximum flexibility, with a primary post and beam structure enabling non-loadbearing partitions to be reconfigured should the requirements of the program change. Both the gymnasium and science 'super-lab' can be subdivided for multiple simultaneous use, while large and small meeting rooms suitable for groups of various sizes are dispersed throughout the building.

Photo courtesy of Ed White Photographics

"This is a grand building; I haven't seen any school built like this in the last 20 years. It will be a jewel of the province."

***Marcus Toneatto**, Principal*

Photos courtesy of Ed White Photographics

Wood Use

Wood plays an important role in defining the character of this project. Although the exterior of the building makes reference to its Art Deco predecessor, the interiors feature expressive wood structures that include glue laminated (glulam) post and beam elements and solid wood decking.

The multipurpose room is circular in plan and two storeys in height. It features six turned Douglas-fir glulam columns that rise from concrete bases to support a hexagonal arrangement of glulam roof beams. Two slender glulam members spring at an angle from each glulam column, like branches from a tree, to brace the structure. A triangular lattice of secondary beams supports an inner hexagon, also composed of glulam beams, which in turn supports a central lantern skylight.

Steel knife plate connections are concealed within the glulam members, both for aesthetic reasons and to protect them from fire. A similar structure is used for the lobby of the Frank Venables Theatre.

The glulam post and beam construction continues throughout the school, but with a simpler rectilinear geometry. The structure is highlighted in certain areas: for example, the science labs feature exposed glulam roof beams and timber decking.

Along the corridors, and in some high-impact spaces such as the science labs and gymnasium, birch plywood paneling is used on the walls as a hardwearing yet aesthetically pleasing finish. Similar paneling is also used as both a wearing surface and an acoustic finish in the Frank Venables Theatre.

The wood grain featured in this profile is Douglas-fir.

FOR MORE INFORMATION

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

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