JOHN M.S. LECKY UBC BOATHOUSE

LOCATION
Richmond, British Columbia

SIZE
1,300 m²

COMPLETION
2006

ARCHITECT
McFarland Marceau Architects Ltd.

STRUCTURAL ENGINEER (SUPERSTRUCTURE)
Fast + Epp Structural Engineers

STRUCTURAL ENGINEER (FLOATS)
All-Span Engineering and Construction Ltd.

BUILDER (SUPERSTRUCTURE)
Kindred Construction Ltd.

BUILDER (FLOATS)
International Marine Flotation Systems Inc.

WOOD FABRICATOR
Island Timber Frame Ltd.

PROJECT OWNER
University of British Columbia

Project Overview

The John M.S. Lecky UBC Boathouse is nestled on the banks of the Fraser River in Richmond, B.C. Its wood design captures the spirit of rowing and is an ideal material to build a floating structure. The boathouse offers spectacular views of the North Shore Mountains from its spacious, modern interior.

The form and structure of the building intentionally captures the dynamic quality of rowing, as that is its key use. The building houses four boat bays that service the Thunderbird rowing teams, St. George's School's rowing program, and active community rowing and paddling programs.

The boathouse is named in memory of John M.S. Lecky, a former UBC rower who passed away suddenly in 2003. He won an Olympic silver medal in Rome in 1960.

The 1,300 m², two-tiered structure was built in dry dock up-river in Delta, B.C., before being towed in two sections to its permanent home. The modules are joined on the second storey by a flexible bridge.

The upper area features the event hall, which can hold 150 guests for a seated dinner or up to 180 for network-style events. The lower areas are for boat-storage. Floating the structure makes launching boats much easier with the changing tide.

Photo courtesy of www.naturallywood.com

"The architecture reveals its purpose by evoking the essential qualities of the rowing experience: a gentle presence on the river, the luminous properties of the water environment, and a refined athletic technique —requiring smooth movement, balance, power, cadence and efficiency."

***Craig Duffield**, Lead Design Architect, McFarland Marceau Architects*

Wood Use

The desire was to make this a building that would not only respond to its site in a unique and dynamic way, but would also be energy efficient and have a minimal impact on the surrounding environment.

Wood was chosen for both practical and aesthetic reasons, and it is used throughout the building.

The boathouse's two modules were prefabricated offsite so they could be floated down the river into place.

Made of locally sourced, durable material—including western red cedar—the structure was built on concrete floats with Styrofoam cavities. The building is moored by steel anchor pilings and accessed by aluminum gangways.

Building the modules offsite and floating them into place ensured the process had a minimal impact on the area's sensitive wildlife.

The boathouse features exposed cedar beams and floor-to-ceiling glass walls that allow natural light to flood in. The event hall opens on to a 13.5-metre by three-metre balcony overlooking the Fraser River.

The lower level is framed with a primary structure of solid Douglas fir posts and Parallel Strand Lumber (PSL) beams. Secondary support for the upper floor is provided by TJI floor joists. The frames on the exterior walls are connected by steel-rod cross bracing that provides lateral rigidity to the structure.

The second storey includes glue laminated timber (glulam) posts. The roof structure comprises curved glulam purlins that vault lightly over an elliptical steel beam located at mid-span. The exposed roof decking is Douglas fir with plywood sheathing above.

The windows on the southeast and southwest sides of the building are protected by screens made of western red cedar slats that provide shade and frame views of the river and mountains.

Photos courtesy of www.naturallywood.com

The wood grain featured in this profile is lodgepole pine.

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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