

THE DOCK BUILDING

LOCATION

Vancouver, British Columbia

SIZE

465 m²

COMPLETION

2017

ARCHITECT

MGA| Michael Green Architecture Inc.

STRUCTURAL ENGINEER

Equilibrium Consulting

GENERAL CONTRACTOR

Heatherbrae Builders

**GLULAM SUPPLIER/
FABRICATORS**

Western Archrib/FraserWood Industries Ltd.

PROJECT OWNER

Royal Vancouver Yacht Club

PROJECT OVERVIEW

Proving that practical can be beautiful, The Dock Building is a simple, functional structure designed to add modest grace to the Royal Vancouver Yacht Club. While the facility itself was intended to be used as an everyday, utilitarian building by Club members, architects felt compelled to create a sophisticated design. The design team used wood to both honor the industrial heritage of the site and build an affordable yet elegant building, creating a rich environment simply by leaving the wood exposed.

The structure is formed by two intersecting wedge volumes that mirror each other. From the water side, large doors open to the shop bays, providing easy access for boats and other watercraft. On the opposite side, a translucent wall allows light into the interior by day and allows the structure itself to glow by night.

Inside, wood provides warmth and character in a sleek, simple form, providing richness through grain and colour. The decision to feature glue-laminated timber (glulam) beams and columns and leave plywood walls exposed helps the building stand out in simplicity and form.

The Dock Building houses lockers, washrooms, showers and offices for the Harbour Master, along with space for workshops on maintaining boats, sails and gear. Built at the water's edge, more than half the project's total cost was spent on the concrete pilings and foundation, which meant the design team was challenged to meet budget with the structure itself. Wood was chosen as a simple, economic material in a clean, minimalist design; wood also provided other benefits in terms of its light weight and ease of installation.



“It is always possible to deliver thoughtful, elegant architectural design, regardless of budget. This is what we set out to do when designing The Dock Building for the Royal Vancouver Yacht Club.”

Michael Green

Principal, MGA / Michael Green Architecture

WOOD USE

The structure was built using spruce-pine-fir (SPF) glulam posts and beams with 2x6 Douglas-fir tongue-and-groove plywood in-fill decking. Walls were framed with 2x6 dimension lumber, and both ceilings and walls were clad with construction-grade plywood, which provided an attractive yet tough, easily-replaceable interior finish. In some cases, the plywood was used to provide structural support and in others it served as a finish material. A portion of the exterior of The Dock Building was clad with western red cedar, which weathers to a natural grey.

Wood was a logical, cost-effective framing material for the difficult-to-access site. All building materials had to be brought in via boat or by truck on adjacent docks and constructed quickly in the busy marina, so wood's light weight and ease of installation was advantageous.

In addition, a heavier structure would have required more substantive pilings, so the lightweight wood structure saved money both above and below sea level.

Durability of wood was also a benefit, since wood handles high humidity without compromising its structural integrity, and resists corrosion found in the marine environment. None of the wood members were treated with preservatives, however, designers raised all the wood materials up from the floor onto curbs to avoid prolonged contact with water. Plywood provided a durable surface that can withstand damage when people bump masts, boats or trolleys into walls.

The resulting structure is both simple and utilitarian; natural light with the natural wood creates a beautiful space that is both functional and graceful.



Photo courtesy of Ema Peter Photography

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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