

Residential Wood Design

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Solar Crest, Sidney Island, BC



Stunning building. That was the conclusion of the jury, which noted the use of different kinds of wood, wood products and a variety of wood applications including custom bent, curved and turned.

High resolution images available. Please e-mail mmclaughlin@wood-works.ca

Embracing a rugged rocky ridge on a remote island in Juan de Fuca Strait, Solar Crest is a completely off-grid home and garden.

In section and plan, it combines a studied geometric formality with organic and sensuous elements that merge with its surrounding landscape of rounded glaciated granite. The plan of the house is an arc following the sun and the hill's crest opening to southern light and views across the Juan de Fuca Strait to the Olympic Mountains in Washington State. In section, the roof undulates, a living sculpture responding to the hierarchy of spatial use, the opportunities of sun, air, views and the shape of the land itself. On the entrance garden side, lower arched roofs maximize light penetration into the house's centre and assist the natural ventilation throughout.

Wood is the main construction material in the building. The laminated Douglas fir timber frame creates a warm and sensuous form that is durable and connected to the site. Curved glulam beams sweep through the main space following the dynamic lines of the architecture. Wood windows, doors and floors frame long distant and close views with a warmth and colour palette that matches the landscape. The remote island has only private boat access and no local services, so all construction materials had to be moved by small barge with all

attendant difficulties of weather, tides, and off-loading onto a small ramp. Being relatively light weight, wood is an easy-to-move and easy-to-use material.

Most of the fir and cedar used in the house is local, harvested and milled on nearby Vancouver Island. The simplicity of building with wood building products makes it an appropriate material for this remote site. The boundary between nature and the home is creatively blurred by the use of local wood and the architecture that makes connections, both natural and human.

The building is off all energy grids and is oriented to maximize solar gain. Twenty-six solar photovoltaic panels power the home and five cisterns collect rainwater from roof surfaces for all domestic and landscape uses and for fire-fighting. Other sustainable features are a wind turbine, on-demand hot water, radiant in-floor heating, LED lighting, energy efficient appliances, low-flush toilets and on-site vegetable gardens. The inclusion of alternative energy systems enable the home to be situated in a stunningly beautiful, remote landscape completely free of organized energy grids and dependent only on the natural cycles surrounding it.