

2013 Wood Design Awards - Project Fact Sheet

Klahoose First Nation New Relationship Centre (Inst)

Location: Squirrel Cove, Cortes Island, BC

Height	Size		Completion	Construction Budget
2	13,380	1,243	2010-12	\$6,860,000
<i>Storeys</i>	<i>sq ft</i>	<i>sq M</i>	<i>Date</i>	<i>\$ Cdn</i>

Project Description:

The Klahoose First Nation commissioned the design and construction of a new facility to house their current and growing health care, administrative and community based functions. The Nation has a large population dispersed across BC with the main reserve located on Cortes Island, on the shores of Squirrel Cove.

The construction of the Klahoose Multi-Centre was financed by the Nation's extensive economic developments which contribute to services for the community. They had outgrown their existing aging facilities and had a desire to create an accessible and welcoming place for the Klahoose people, and the local island community, that would establish a permanent home for the Nation's various cultural, economic and development ventures. The project was tasked with creating a strong physical presence for the Klahoose First Nation, placing them firmly in today's society and looking forward to new horizons. The design drew upon traditional indigenous wood building forms and construction techniques for initial inspiration.

The straightforward assembly of a heavy timber frame supporting a series of single pitched roof forms is a response to the local conditions of climate, resources, and culture, and the constraints of the remote and rocky site. An extruded building form created by a modular framing system of exposed bents with a structural insulated wood wall and roof panel system was designed to accommodate a number of different uses and create a variety of interior and exterior spaces through the composition of two basic framing elements. The cadence of the bent frames orders interior spaces and circulation areas and creates a material consistency throughout the different programmed areas. Using a repetition of identical heavy timber frames also acted to reduce the number of components and connection details, simplifying off-site pre-manufacturing and facilitating quick on-site construction.

Cortes Island is located on the eastern edge of Desolation Sound. Semi remote in nature, the project required careful consideration of building siting and construction techniques in order to minimize impact on the forested site. The Multi-Centre is sited within the second-growth forest next to the Klahoose community settlement. The building stretches along a granite slope above the shoreline, resting on the existing topography to create floor levels and an exterior gathering space. To the western, forested side the building presents itself as a long, low, wood-clad volume nestled into the existing vegetation. From the eastern, ocean side the building reveals itself as a strong, transparent structure lightly touching on the rocky slope. Expansive glazing opens the building to natural lighting and views across Squirrel Cove. The dominant use of wood enhances both the design theme. Wood is used for as much of the building as possible; cladding, exterior fascia and barge boards, exterior trim and joinery, ceilings, stairs and railings, architectural woodwork and furnishings, and the main structural elements. As well as being a renewable resource, wood allowed the use of local materials and labour, along with higher efficiency pre-manufacturing. The building is oriented to make use of natural lighting and ventilation throughout the interiors, minimizing energy needs and creating a more comfortable working environment. Interior and exterior finishes are selected for durability, easy maintenance, and easy replacement.

In addition to environmental sustainability, the Klahoose Multi-Centre contributes to social and economic sustainability by providing a facility that accommodates the Nation's current and future needs and encourages connections within the community.

Project Images



Where the Wood Was Used:

	Primary Structural System	
Primary Structural System	Columns, Beams & Braces	y
	Floor Structure	y
	Exterior Walls	y
	Foundation	
	Shear Walls	y
	Bearing Walls	y
	Fire Walls	
	Roof Structure (inc. columns and braces)	y
	Stairway & Elevator Shafts	y
Secondary Structure	Convenience Stairs	y
	Entrances & Canopies	
	Fire Separations	
	Enclosures for Mechanical Equipment	

	Architectural	
Architectural	Partitions (interior)	y
	Exterior Curtain Walls	
	Ceilings	y
	Exterior Cladding	y
	Parapets	
	Ceiling Bulkheads	
	Flooring	y
	Doors	
	Windows	
	Skylights	
	Trim, Paneling & Features	y
	Millwork	y
	Wall and Corner Guards	
	Other Architectural Woodwork	y
	Hard Landscaping & Structures	
Perimeter Fencing		

Building Project Team Members:

Merrick Architecture - Borowski Sakumoto Fligg Ltd		
Other	Darryl Jonas	
Victoria, BC	djonas@merrickarch.com	604-480-7811

Ledcor Construction Ltd.		
Contractor	Peter Stefanski	
Vancouver, BC	peter.stefanski@ledcor.com	604-669-2520

The AME Consulting Group Ltd.		
Mechanical Engineer	Tom Wilson	
Victoria, BC	tomwilson@amegroup.ca	250-382-5999

Spearhead Timber Works		
Other	Ted Hall	
Nelson, BC	ted@spearheadtimberworks.com	877-815-1932

Klahoose First Nation		
Owner Developer	Kerry (Marion) McKellar	
Cortes Island, BC	mmckellar@klaoose.org	250-935-6535

Herold Engineering Ltd.		
Structural Engineer	Greg Beaveridge	
Nanaimo, BC		250-751-8558

RB Engineering Ltd.		
Electrical Engineer	Les Brown	
Nanaimo, BC	les@rbengineering.ca	250-756-4444

Peter Powles Photography		
Photographer	Peter Powles	
Vancouver, BC	peter@powlesphoto.com	604-837-3601

