



Community Success Story

Building for the future with Skeetchestn Dodeca-Homes

Community Context

The Skeetchestn Indian Band (“Skeetchestn”) is a member of the Secwepemc Nation, whose traditional territory lies in south-central British Columbia. Within Skeetchestn territory are four reserves. The main reserve is located approximately 10 km west of Savona in the Deadman’s River valley, while the other three reserves are located near Snohoosh Lake and Hihium Lake, northwest of Kamloops, BC.

Before the establishment of the reserves, Skeetchestn ancestors wintered in many pit house villages near Kamloops Lake. During the spring, summer and fall they would travel throughout their territory to gather important resources. The current population of Skeetchestn is approximately 559 people.

Skeetchestn is involved in the sustainable management of ecosystems and their forest, range and water resources within Skeetchestn traditional territory. Skeetchestn has also been a policy leader in the region. They implemented a nationally recognized Housing Management Plan which has been in place and updated since 1997. In 2020-2021, the Skeetchestn community engaged in the creation of a Comprehensive Community Plan, *Roadmap to a Bright Future*.

Over the past 20 years, Skeetchestn community members have worked to develop Skeetchestn Dodeca-Homes, a business which sells kit homes based on a traditional Secwepemc design. The units are energy efficient, robust, durable and quick to assemble. The business is 100% Skeetchestn-owned, and Skeetchestn hopes that these units will help to provide much-needed housing on First Nations reserves across Canada.

Project Description

Mike Anderson, the former CEO of Skeetchestn Natural Resources Corporation, started designing the Dodeca-Homes about 20 years ago off the side of his desk. At the time, Skeetchestn had a license from the Ministry of Forests to harvest pine beetle-killed wood. While most of this wood was destined to become 2x4s or chips, Anderson hoped to use it for something of higher value.

Front view of a Dodeca-Home. Credit: Skeetchestn Dodeca-Homes



Dodeca-Home interior
Credit: Skeetchestn Dodeca-Homes

Collaborators

Skeetchestn Natural Resources Corporation

A. M. Anderson Farm and Woodlot Inc.

Funders

First Nations Forestry Program

Western Economic Diversification Canada

Canada Mortgage and Housing Corporation

Project Leads

Mike Anderson
Founder and CEO
Skeetchestn Dodeca-Homes

Jada Britton
Marketing Agent
Skeetchestn Dodeca-Homes

Calvin Draney
Journeyman Carpenter
Skeetchestn Dodeca-Homes

“We’d love to see these units being used across Canada on First Nations reserves, hopefully to deal with multigenerational housing, just giving people better quality of life, on reserve, off reserve, rural,” – Jada Britton, Marketing Agent, Skeetchestn Dodeca-Homes

Milestones

2003

Original prototype design constructed

2006

Second prototype design constructed

2013

Value-added manufacturing facility (incubator) built

2016

Demonstration house built

July 2023

Celebratory ribbon cutting and open house held near the building show home

For more information about First Nations Home EnergySave, visit: www.fnenergy.ca



Celebratory ribbon cutting and open house in July 2023. Credit: Skeetchestn Dodeca-Homes



Living room in a Dodeca-Home. Credit: Skeetchestn Dodeca-Homes

The design is a unique 12-sided post-and-beam building based on a traditional Secwepemc pit house design. The first one built was used as an Elders Centre for Skeetchestn, and others are currently in use as offices, a community centre and a meditation centre. In 2016 a demonstration house was built to showcase how the design can work as a home.

Throughout the years, Skeetchestn Dodeca-Homes has iterated on and fine-tuned the original design. Currently they offer two basic 520 and 1020 square foot modules and are working to design a larger module.

The modules are constructed of locally sourced, sustainably managed Douglas fir posts and beams, along with highly efficient structural insulated panels (SIPs). The SIPs provide a virtually airtight building envelope with minimal thermal breaks around the timber frame, enhancing energy efficiency. Round buildings are also more energy efficient than square buildings as they have 25% less wall area to floor area compared to square buildings.

The modules include a steel roof to help with fire resistance. Skeetchestn Dodeca-Homes hopes to eventually offer a fully fire-resistant option as well.

Skeetchestn Dodeca-Homes modules are manufactured locally, creating jobs for Skeetchestn community members. They can be shipped via container and can be assembled in three to four weeks by a trained construction crew. The modular nature of the kits also reduces waste, which is ideal in remote communities where it can be difficult and expensive to bring materials in and out.

In 2023, Skeetchestn Dodeca-Homes was shortlisted for the Canadian Mortgage and Housing Corporation (CMHC)'s Housing Supply Challenge. They hope to continue working with CMHC to ensure the kit homes can be scaled and replicated. Skeetchestn Dodeca-Homes plans to work with other local communities to develop related businesses to supply doors, windows and panels for the homes. They are also planning to train contractors on how to construct the kits through a 5-week hands-on training course at their manufacturing facility.

In addition to selling the kits, Skeetchestn Dodeca-Homes offers blueprints, a building manual and technical assistance to help with construction. Their eventual goal is to ramp up production to 100 kit homes per year, while also keeping them at a reasonable price.

Lessons Learned

1. Developing a business can take a very long time. The first designs for Skeetchestn Dodeca-Homes were created 20 years ago.
2. It can be difficult to get materials in and out of remote communities, and these communities may also have a short building season if they are located in the north. Skeetchestn is trying to address these issues by ensuring their modular kit homes can fit into a shipping container and be erected very quickly.

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