Tiny Hemp Home
*Bowen Built*
Modular Sustainable Portable
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We are pioneers in the green building industry, and co-founders of Hempcrete Natural Building, a Bowen based business whose mission is to create ‘Homes for Everyone’.
WHAT IS HEMPCRETE?

We believe that a home should keep us comfortable without endangering the people living there nor the environment. This is the main reason why we have developed hempcrete.

Hempcrete is a fibre reinforced lightweight concrete, wrapped around a traditional timber frame. It is primarily comprised of hemp hurd, fibre, lime, sand, clay, with about 2% cement. It is mixed and poured into forms, then plastered with natural plaster and finally, coloured with natural pigments.
BENEFITS OF HEMPCRETE CONSTRUCTION

- Energy efficient. Thermal mass assists temperature control in both low and high temperatures
- Insect and rat resistant (proof!)
- Fireproof, earthquake and water damage resistant
- Natural plaster creates a waterproof, breathable shell around the house
- Carbon neutral/negative construction
- Low maintenance - The natural pigment never needs re ‘painting'
- Cost effective construction. Long term value
- Exceptionally quiet from both interior and exterior noise
- Reduced/eliminated off-gassing - no petrochemicals or allergens
- Aesthetically pleasing with other materials; stone tile, wood
Here are examples of some of the projects that we have completed using our hempcrete and collaborating with experts globally for 16 years. We have an impressive repertoire of custom projects and consulting, in Western Canada and beyond.
Modular Sustainable Portable

This particular project was a turning point for us: This modular house in Alberta is a huge hit, and we had always planned to build more. With the housing shortage within our community, we saw the need to design a house that we could build in large quantities to offer a viable solution for Bowen. Our Version #2 design is a 530 sf modular cottage using a timber frame structure with a Hempcrete high performance building envelope. Also with state of the art energy, mechanical and septic technologies.
Here is our version #2

The THH is a wood framed structure built into a metal skid, so it can be winched on to a truck and delivered to your site. The exterior dimensions are 14 x 24'.

The house is designed to accommodate an extra, outdoor covered-living space of another 500 sq. ft.

The home is tucked under a gable-end design with a metal roof, enabling rainwater catchment.
The central area is 1.5 stories, with 2, full-height lofts, one over the bathroom and another over the living room. The two loft areas are open and flexible as bedrooms, office or library space. The stairs are full size, for ease of access and the loft has comfortable ceiling height for standing.

There is a full bath tub - “Spa room” and a separate, private W/C across the hall. There is possibility of a second W/C in the upstairs.

The kitchen is complete with stove, fridge, and rolling island.

The living room is a cozy haven around the tiny fireplace with flexible room of the usual comforts. Windows are placed strategically to ensure maximum solar gain, natural light and privacy and light pours in from all sides. Recycled materials are used whenever possible, such as for the double French doors in the entry. Downstairs ceilings are 7 foot 8 inch high, and walls are plastered throughout with our natural plaster which comes in a range of beautiful colours.
Clean Green Energy Solutions

The home is designed to be highly energy efficient;
Can be self sufficient and taken off-grid
OR
Fully connected to the standard electrical grid and sewer systems
OR
Any multitude of hybrid-variations

• Thermal Condenser panels generate electricity
• Heat pump
• Energy efficient multi-mode appliances; AC/DC propane
• Ventilation of the building uses “Natural Ventilation” techniques, in combination with the high efficiency envelope, and can be combined with 12V assistance and HEPA filtration.

Energy consumption and greenhouse gas reduction are key to our collective future. Our houses conserve resources, utilize minimal energy even beyond Net Zero, and do not resources.
Mechanical, electrical, water systems and appliances are highly innovative and efficient. Appliances can be switched from AC/DC or propane.
Air quality and moisture are modulated by the natural wall material as well as a “Passive ventilation” system that takes the house’s specific design into consideration.
Not only do these solutions make great economic and environmental sense, but when the power goes out- no problem.
Our homes are designed to eliminate waste intelligently, safely and actually add value rather than the costly and inefficient systems commonly used. While it’s a hard subject for some to consider, ignoring the problem is not a solution. We think it’s time to get serious about alternatives.

We have designed a pre-engineered septic and wastewater package for our Tiny Hemp Home, and included in the package is 3 hours consulting time with our renowned septic expert will aid with the approval process from Coastal Health.

You can select our ‘green’ solution or your system can be fully traditional, with BC Hydro and regular flush toilets using traditional septic fields.

Our septic solutions are designed to accommodate your situation and preferences.
Moving your new home

If you are ready to move ‘down the road’ your home comes along for the ride.

Settled onto a gravel or concrete pad, or secured into a traditional or screw pile foundation. It’s just like any other home. Until you decide to move.
The challenge of the nuclear family model

Hemp Hamlets? Tinytopia?

Our concepts on ownership and housing are based on nuclear family models in that are proving challenging on many levels. A key concept toward affordable housing requires an open candid and creative look at other ways we can live. Uncoupling property ownership from the single family dwelling in an important step. Our tiny house can be installed on leased, strata or shared land to create small communities. There is significant economy of scale in this approach. Even a ½ acre lot could accommodate several families, with room left over for food production and social areas. Sharing the costs for the land purchase, rain water and greywater systems etc., gives folks a chance to leverage limited resources to create private yet affordable and friendly communities.
Potential Ownership Options

The new “Pad”

With secondary buildings now allowed in many districts, so current property owners can offer a ‘pad’ for Tiny Hemp House owners to lease. This would provide supplemental income to property owners with minimal investment—far less than building a suite in your home. One party buys the house, the other provides the land for lease.
Our team of engineers and other experts are working together to ensure the safety and effectiveness of every part of our design. Their stamps will be on all our innovative solutions, including structural, mechanical, electrical, and our septic engineer who is currently on the board that is rewriting the septic code for our Provincial government in Victoria.
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Coach-house, adult children, in-law suite
Change your mind or when its time to move- Take it- or Leave it!

The Tiny Hemp Home will set a new standard for housing in our community and will demonstrate that it is possible to live in comfortable, ‘right sized’ homes which are healthy for both the people who live in them, and for the planet we live on-now and in the future.

As the homes are both portable and scalable, we enable diversity and sustainability of our community.
Clusters of these homes will foster a sharing economy and bring a more effective use of resources. Building communities of small homes could relieve our housing shortage.
We think that our Tiny Hemp Homes are soulful, and reminiscent of the’ white picket fence’ of our collective consciousness.