

ZIRNHELT TIMBER FRAMES

Healthy business, healthy homes

story and photos by Judy Jenkins



Sam (left) and Damon Zirnhelt at the family sawmill.

A new family business thriving in Beaver Valley in the Central Interior is green and growing, just like the forest surrounds the timber frame building site.

Brothers Damon and Sam Zirnhelt, partners who started Zirnhelt Timber Frames three years ago, are growing their business slowly and carefully in order to have a healthy business and produce healthy homes, Sam said. Innovative, high-quality, functional, attractive, long-lasting and environmentally friendly houses are the goal for the family operation.

So far we have focused on a local market. We think that is particularly important when you are growing a business. It gives us faster response to clients and allows possible synergistic efficiencies in working close to home. But we have sent timber frame homes to the Kootenays, the Okanogan and Vanderhoof.

Building green is a tradeoff between humans, the environment, health and energy efficiency, Sam said. Sometimes companies advertise green building systems because they have the best insulation value and are energy efficient. But that energy efficiency comes at a cost like the prolific use of Styrofoam to get the high R value. Sometimes the systems even seal the building so tight it doesn't breathe, he said.

We are fortunate to live in an area where we have some of the world's best wood for timber frame. Our source is close; a lot of our wood gets trucked only 10 miles, he said. It comes from the family wood lot and other nearby woodlots and salvage licences. At one time the company did some horse logging to harvest the trees they required, but decided to give that up, opting to use other logging operators in the area.



Framer Damon Zirnhelt at the sawmill site with trim ends.

Our real interest is working with people who want to make buildings that fit with their lifestyle and with the environment. We want to work with clients who look at their houses as a long-term asset. Putting more energy into the design and resources can increase the longevity of the building as well as increase the costs.

We try not to be trendy. Hopefully our buildings are timeless. You can look at regular frame houses and say they are 60s or 70s or 80s houses, or maybe 2000 condos. But with a timber frame house, how can you tell the age?

The two brothers started young in the forest industry, running their custom sawmill and kiln since 1994 on the family ranch near Williams Lake to finance their post-secondary education. It helped Damon earn a Master's degree in Development Economics and Sam, a Registered Professional Forester, earn his Master's degree in Forestry Science. Their younger brother, Robin, started working with them on the sawmill when he was 11, and now he's developing skills that will be a huge asset in the timber frame business. A recent graduate from the University of British Columbia, he is a Structural Engineer in Training for Cascade Engineering group in Canmore, Alberta. He holds the log and timber frame portfolio for that firm.

Damon's background is in community economic development, so it's important that their business model fits with rural economic development. He is also interested in natural building products and alternative energy, from passive solar heating to solar electricity. They strive to limit the energy demand of the house itself, Sam said.

Damon is also the main timber framer, blending elements from North American and European design to produce a style that incorporates the best of log buildings and timber frames.

Sam does most of the marketing as well as co-ordinating a lot of the finishing. He also works with the customer on the initial concept, design and floor plans, and as a forester looks after the wood supply.

I get to pick the logs. We use lots of beetle wood. We use Douglas fir beetle-killed trees for the frame and Mountain Pine beetle and spruce beetle-attacked trees for the infill logs, the roof and paneling, Sam said. They utilize both dead and green attack trees.

Part of building a green structure is using all or most of the wood waste left over from building. For example, they mix the sawdust with manure to produce topsoil for the family ranch. The slabs are also burned to heat the three family homes on the property and to make birch syrup. We give away free firewood, and we are looking at alternative products. In the scheme of things, it's a small amount of waste, but we are definitely searching for solutions. It could also heat the kilns and work shops, and we also hope to use it for alternative building products. Getting green building materials in Canada is a definite challenge, he added. The industry is not well developed, and the mainstream industry hasn't taken it on. Environmentally friendly products like denim and cotton insulation are hard to find. The company does use a lot of Roxul, a mineral wool insulation. Wool insulation is good, but using it for large spaces like roof systems and walls is cost prohibitive for most buildings. The Zirnhelts also are interested in alternatives to Gyproc and find that nice stains used on the wood panels are especially attractive. Timber frame buildings benefit from their thermal mass, which offsets the lower R value wood has, as compared to fiberglass insulation. Log and timber frame homes are warm in winter and cool in summer because of their thermal mass, he pointed out. They absorb and re-emit heat. Their houses are light and bright with a modern style and easy to finish, since the flat walls make it easier to hang a picture or mount cupboards. Timber staircases and decorative, functional railings can be incorporated into the design. The houses are built with a minimum of metal plates and fasteners, using traditional mortise and tenon joinery and securing the joints with oak dowels. Posts and beams are detailed with routers and hand tools to make them attractive and functional. This

enterprise is truly a family business. Sam and his wife Jill, live in the company show home, a compact and beautiful house just a few kilometres off the Likely Road. Damon and his wife, Cherie Lynn, occupy the original ranch building, now near the mill site, while parents David and Susan, who raise cattle and horses, live in a log home nearby.

Cherie Lynn and her business partners operate Sweet Tree Ventures, a birch syrup business, and Jill pitches in to guide visitors and clients through the show home as well as design-ing the website.

Our business is on my parents land. They ve been extremely supportive and contribute to the business whenever they can. They accommodate guests or workers, and we share Dad s trac-tor between haying times. Our log yard is in his winter feeding pen for his cows, Sam said.

Hayes Zirnhelt, a cousin, does custom blacksmithing for the com-pany, providing beautiful and functional pieces. Scott Zimonick, Jill s father, does cabinetry and builds the kitchens.

The company employs two finishing carpenters and will add a third this year, a fulltime sawyer and two timber framers in addition to family members. Employees also have a say in the designs and in working with customers, and their suggestions often are incorporated.

They expect to build about 10 houses this year, and already have contracts in place for eight. Slow, steady growth is their aim, and they are able to do any type of building, from cabins to hotels.

We want to be a really flexible company that can do affordable housing for those with lower incomes as well as build people s dream homes.

Building has to be fun, Sam said.

If it s not fun, you should be doing something else.