House Works: Northern Metal Framing Feeds the Tiny-House Trend

Ottawa Citizen, September 22, 2014

Builder/fabricator helps make cold-formed steel part of the trend toward downsizing into “Tiny Houses” because it is “strong, mould-free, efficient and fully recyclable.”

By Steve Maxwell

When I look at Canadian lifestyles, finances and homeownership, it’s obvious to me that we need more small, attractive, durable and economical homes. The trick is finding a builder with the vision and spunk to buck current preconceptions and build small in a world of monster houses.

That’s part of the reason why I took notice of a couple of guys creating tiny, modular houses from their home base in small-town Canada. As it turns out, they’re not just building small, they’re also building differently.

Frank LaCrosse and Jim Turner are two very different men. LaCrosse has 50 years’ experience building everything from residential projects to hotels, and Turner is the PR side of their business.

Coming together in 2009, they share a passion to create full-featured homes in the 600- to 1,000-square-foot size. Easy to heat, easy to maintain and easy to afford are what they think a sizable number of Canadians want but can’t find. That’s why they started Northern Metal Framing and affordablehousingcanada.com. But few new ventures are simple, especially when that venture is innovative.

“Banks insist that you own a chicken before they’ll consider loaning you an egg,” laments Turner. “Finding the capital we need for expansion has been one of the biggest hurdles we face.”

“Part of this reluctance is because we make homes of a size that haven’t been built in this country in meaningful numbers since the early 1950s. We’re also building in an entirely different way than most other builders, using modular methods and wood-free frames.”

LaCrosse began his building career with wood, but he’s been sold on the virtues of building with steel for decades. Most commercial buildings these days are made with steel frames, and that’s the way LaCrosse and Turner build small homes in their 10,000-square-foot plant in Little Current, on Manitoulin Island in Georgian Bay.

“Strong, mould-free, efficient and fully recyclable. These are some of the reasons we build with light-gauge steel frames,” explains LaCrosse. “The end result looks the same as a wood-frame house, but the cost and efficiency advantages are better. We pass these savings on to our customers.”

So how do LaCrosse and Turner make a steel-frame home energy efficient in our cold Canadian climate? By using all the best insulation technologies. Safe spray foam is applied to wall cavities between steel studs before drywall goes on, with an additional layer of rigid foam insulation added to the outside of the frame as part of the exterior Insulation finishing system. This high-performance stucco-like treatment is generically known as EIFS in the construction industry, and it’s one of the longest-lasting, most maintenance-free options for building exteriors. LaCrosse and Turner are the only builders I’ve seen using EIFS on small homes.

Finding labour is another challenge Turner and LaCrosse face. “Lack of skills isn’t the main problem because skills can be taught,” says LaCrosse. “The real problem is that too few people are willing to deliver eight hours of work for eight hours of pay.” All this said, passion is the one enduring thing that keeps these men going.

“I’ve listened to retired people in tears because they’re stuck in a much bigger home than they can afford, but can’t find a small, decent, efficient modern house at a reasonable cost,” says Turner. “I want to change this.”

Will Turner and LaCrosse succeed? I hope so and there are big things working in their favour.

A genuine need for small, efficient houses exists and is growing. The technology to build modular homes at lower cost than site-built houses also exists. All that’s needed is for more Canadians and lending institutions to realize that when it comes to houses, small is an exceptionally beautiful idea.