

TECHNOLOGY MEETS BOUNDLESS DESIGN

Nicola Logworks

The words "Log Home" are evocative, and conjure up unique images in the minds of different people. And those images that come to mind will inevitably vary greatly, ranging from small, simple or cozy to the sprawling luxury residence and everything in between. The appeal of log homes will also vary. Some may see them as dark, drafty and lonesome, others view them as the epitome of hearth, home, comfort and warmth.

And all of the above can be true.

However, whether the log homes are modest or extravagant, the success of any log structure will depend on the skills of the builder and their commitment to sound workmanship. It will also depend on the quality and size of the materials, and the often over-looked practicalities of design. Good design takes into consideration the organic characteristics of the logs or timbers and works with those characteristics rather than forcing a design that will compromise the integrity and longevity of the structure.

Location, and therefore climate, are also important factors and may influence the species of wood that will be used. An often cited example of successful log structures are the Stave churches of Norway — some as old as 700 years. They were built with the climate in mind and that, among other considerations, governed their design.

Nicola LogWorks, located in Merritt, British Columbia, sets out to build useful and beautiful structures, keeping the above-mentioned factors in mind. Spotlight on Business Magazine spoke with owner John Boys about how the structures he builds celebrate both form and function and efficiently serve their intended use, to be enjoyed by generations to come.





By John Allaire

John Boys admits that log homes and working with wood has become a complete and all-consuming obsession. And not just building beautiful structures, but also in developing methods and hybrid technologies through strategic partnerships to build beautiful wood creations.

How did you get started in log home building? Take us back to the beginning.

The beginning! I grew up in Ottawa and went to Trent University in Peterborough. I got a degree in Economics and Computer Science. But my summer job while I was at university was building a stone building for some friends of mine south of Montreal in the Eastern Townships.

When we finished the stone walls after three summers worth of work, we didn't know what to do next. We had a vague idea that there needed to be some kind of a timber roof on there. But we didn't know how to make it or attach it.

So we left the stone house for a while and I got a job out west in the oil fields.

During some down time, I saw an ad for the Allan Mackie School of Log Building in Prince George. On a whim, I signed up for the course, and when I finished, the instructor offered me a job. I didn't really even know there was such thing as a career in log building. My intention on taking the course was to figure out how to put a timber roof on the stone house we had built in Quebec.

I quit a really good-paying job in the oil field for a really poor-paying job in the log building industry and I really never looked back. This was way back in 1984.

How long has Nicola Logworks been around?

1989. We started in Merritt, BC. Actually, we came to Merritt to help a friend of mine build some log houses and I met a girl! And that was it. I never really left.

And now Ingrid is my partner in the business.

Ah, there's a girl in every story! So, there are some very compelling pictures of your work on your website. What were your first structures like?

When we started in the late 80s, almost 100% of what we built went to Japan. A niche market was created at that time for handcrafted log homes

destined for the emerging Japanese market. In fact, because of the same Mackie School that I went to, a number of Japanese students had enrolled and they went back to Japan and created an industry.

One of the Japanese students went back home and started a log home magazine and it created a buzz about log homes. The demand for the homes just exploded.

And they weren't able to meet the demand in Japan themselves. So they came back to British Columbia and found some log home builders hanging out building one or two homes a year, like I was, and started ordering homes to be built here and shipped there.

“The Japanese market was key to the creation of the log home building industry in British Columbia.”

The Japanese market was key to the creation of the log home building industry in British Columbia. The Japanese reverse wood, especially wood from other countries.

They always drove us hard on quality and design. So we were focused entirely on the Japanese market in the early days.

Your target market has changed significantly at this point though. When was the shift and why?

To be honest, we started finding scribe-fit structures — you know, what you would stereotypically think of when you think log homes — we were getting kind of bored with them. We were building and shipping them all over the world, but I started to find there were too many logs being used in them for my taste.

We want to build buildings that are really responsive to the way people live and responsive to the environment they live in. So we started switching more to a style called log post-and-beam. The Japanese market collapsed around the time of the big Kobe earthquake, and it never really recovered. So we sat down with our key people and figured out that we don't want to be a large log building company. We wanted to stay small enough to be responsive to our customers.

The second thing was we decided we didn't want to grow up! And that was a business strategy! And it has served us quite well. You can see it in the variety of the work we do. We want to enjoy our work every day. Or at least 9 days out of 10...

So explain “log post-and- beam” and why that appealed to you more than the traditional scribe log building?

Well, we switched over to mostly log post-and- beam, but we still used organic shapes. But often mixing square timbers in with it. This kind of construction may have less log in it. But I love a mix of stone and plaster and glass and views. It allows

for quite a bit more expressive design because you're not constrained by the need to notch horizontal logs at corners. You can create octagonal shapes or whatever.

Post-and- beam got more and more sophisticated. We did a whole bunch of buildings for an interesting development North Carolina where we hooked up with a really creative architect who was good at doing sketches, but not much else. So we tried to realize his vision without him having to know how timber works or how log homes are built. So it worked out really well for both him and us.

What is the process like when you meet up with client? Do you generally get drawings from them? Or does the creative generally come from you?

It varies from client to client. Quite often we're the first point of contact. They know they want a log or timber structure, so rather than going to search for an architect who might be specialized in log and timber, which is hard-to- find, they'll come to us. We will have a discussion with them and send them our design questionnaire to try and elicit what they need by the way of design assistance. Do they have sufficient budget? Are they thinking about the project in a practical way?

We are there for the clients in the early days in whatever capacity they need us to be. Some need a lot of help right off the bat, others have a good idea of what they want. It really is different project-to- project.

Your website shows a number of commercial buildings. Was that a conscious decision to move into the commercial market? Or did that kind of fall in your lap?

Well we sort of got bored doing the log structures. Complacency is your worst enemy in any business. One of the first jobs we did was for Thompson Rivers University in Kamloops. It was their auditorium and it was a circular structure. No square corners. It was a great job to do, but it really taxed our abilities. We learned quite a bit from it, mostly in process and how to deal with publicly-funded projects.

The challenge with commercial work is it tends to be high stress, high risk — and the low bid gets it, especially if it's public construction. And often the low bid does not serve the public purse well. It's not a smart way to build.

You often refer to working smarter by employing new technologies. What's new in technologies and materials that has revolutionized what you do?

One of the things that is transforming the building industry around the world — it started in Europe — is engineered prefabricated timber. So, what I'm talking about here is cross-laminated timber. Basically you take lumber, 2x4s, 2x6s, and you glue it up into big sheets in alternating layers. Three ply, five ply, seven ply, nine ply, whatever you need. The result is, we can use an 8" x 40"

"Proud to Serve North Central Ontario's needs since 1999 as your supply, repair and problem solving partner."

Near North Industrial Solutions

12 Mill Street, Sundridge, Ontario • 705-384-1389
sales@nearnorthindustrial.ca

www.nearnorthindustrial.ca

Hydraulics • Pneumatics • Industrial Supplies • Steel Sales
Power Transmission Components • Cleaning & Janitorial
Supplies • Welding & Fabricating • Equipment Design/Build



roof panel and place it on top of a commercial building, and we can secure one of these every 15 minutes. So you can imagine how quickly we can get a roof done with this kind of advanced material.

And the precision it is cut to over that length is about a millimetre. We were able to put up substantially large buildings that performed really well structurally, in a lot less time than we could previously.

So you have done standard log construction, you have done multi-material construction and commercial building. What is Nicola Logworks doing today?

We're trying to make log homebuilding more accessible and efficient. And also to recognize that my crew is closer to 50 years in age than 20. Hanging onto a chainsaw for a nine-hour shift just isn't an option anymore. So our latest employee is called ABBY, and she's a robot.

A while back, we developed what we call The Machine, which is basically a very large shaping machine where we could put large heavy logs in and turn, notch and shape them with the assistance of automation. This Machine became so useful to us that it became our major bottleneck. So we partnered with a fellow who is really into robotics, and we decided to take the two elements and have them work together.

"We want to build buildings that are really responsive to the way people live and responsive to the environment they live in."

So one of the things we are doing now is, we are able to scan logs with extraordinary detail — we have actually patented this process — and then we can merge the logs together. And the technology creates the scribe path with amazing accuracy. The contour of one log can be imprinted onto another through the scan and then cut with incredible accuracy. The robot was actually able to do things we couldn't do by hand, or at least, not in an

acceptable timeframe.

Is the future of Nicola Logworks in licensing your technology? Or is the need to get your hands dirty in interesting projects too strong?

It's funny, I think I would rather teach my people to learn robotics than find someone who understands robotics and try to teach them how to build a log home.

We have people here who are committed to the company, and building is what we do. So we are going to keep doing that. But we will find or create tools that will assist us. It keeps us relevant. ●

KET Construction Ltd

"We're Built On You"

PO Box 704, Kentville NS B4N 3X9

Office: 902-679-0020 • Fax: 902-847-2636

ket@ns.sympatico.ca



21 YEARS OF
BUSINESS

**GENERAL
RESIDENTIAL CONTRACTOR**

New home construction

Log Homes completion

Decks / Renovations / Windows & Doors

WE CARRY FULL LIABILITY INSURANCE & ALL
EMPLOYEE'S ARE COVERED BY WCB OF NOVA SCOTIA