

Shorts

Profile

A creative approach

Bernie O’Fagan from award-winning RM Designs tells *Build* about the business and his thoughts on CLT construction.

RM DESIGNS, a small dynamic Christchurch company, took out the engineering innovation award in the NZ Timber Design awards for a ground-breaking cross-laminated timber (CLT) application of solid timber and structural engineering. Notable was the project’s use of CLT that complied with the New Zealand Building Code and local construction practices.

Q. Tell me about RM Designs.

RM Designs has traded for almost 20 years. It started as a hospitality design and manage business and shifted to a more architectural studio focusing on light commercial. We retained the feasibility approach to projects, that is, the best outcome for the use of money. At the same time, we developed into a creative hub, perhaps from working with entrepreneurial clients. We have been as big as 20 people but have found eight or so sits very well with our company philosophy. We believe no one of us is as smart as all of us.

Q. Tell me about the award-winning project.

Bealey Lodge, or All Stars Inn as it’s known now, started life as a feasibility study in terms of method of construction versus return for our client. Concrete and steel were simply too heavy for the site conditions, and for speed, we considered an offshore modular, steel boxes approach. While considering the



Bernie O’Fagan (left) with the RM Designs team, including Archie, the office dog.

risk to reward of that, we happened across CLT and a YouTube video of a German school built in under 30 days.

So, instead of flying to Vietnam, we went to Nelson and matched notes with Xlam. We took with us Julian Addington and Tim Niven from engineering company Engco. Sam Leslie, a bright, Canterbury-trained engineer saw that modules we had conceptualised suited CLT perfectly. We had a light solution locally available and internationally proven. All previous data assured us we had a great opportunity on our hands, even if testing was not complete to our Building Code.

Ultimately, it took 9 months from vibrating our first timber pile to the project trading (as a backpacker hostel) with 250 beds over 2,000 m².

Q. Given our timber industry, CLT should appeal locally. Do you see this?

CLT does not suit all projects. Repetition and dimensions relevant to the panels leads to a real niche where it’s well suited.

An entire project does not need to be CLT, for example, our Springfield Road project, an award runner-up, was a successful hybrid. Melbourne has some excellent CLT projects. At Monash University, we saw two levels of CLT construction built onto an existing five-level structure without any remedial foundation work. CLT’s light weight can be a great advantage.

Q. You are keen on local manufacture. How can this extend to timber fabrication?

I see excellent potential in the production of product, and byproduct, rather than simply exporting the raw timber resource. I’m sure you’ve seen the logs going out of our ports and wondered if we are maximising our resources. Timber is natural, and it’s part of our heritage. Watching visitors enter a building like All Stars, you can see them wanting to touch the raw panels.

Q. What are your thoughts of and experience with off-site construction in terms of the New Zealand market?

The accuracy we have seen with CLT has changed our perspective regarding off-site construction. There must be a better way than having builders out in the weather constructing every element. We have a project with 40 ‘tree’ houses for a Franz Josef resort and are still working through options. At the very least, we expect to land panellised walls, flashed and with windows installed and clad. ◀