

CONVERSING ABOUT THE WOODWORKS 2022 CONFERENCE

Georgia Bartley
Meta Architects, Christchurch

William Roberts
Logic Group, Christchurch

Georgia and William, two very grateful recipients of the TDS support grant in 2022, met to discuss the key takeaways of the conference.

Georgia's professional education is in Architecture. She has been working in mass timber and prefabrication over the last few years within NZ and abroad.

William has recently progressed to an Intermediate Quantity Surveyor. Over the past few years he has been working in the Mass Timber Industry, pricing projects all over New Zealand.

I thought there was an underlying theme of well being, both in the 'hi, how are you' sense but also in the 'let me tell you why building in wood is good for your workplace, your home, and your general environment' sense. WAM's Fiona & Emily called out some biogenic points in particular as they presented a calculated and measured approach to life-cycles, carbon and construction.

What were some key learnings for you, Will?

Two points that David Kingham expressed when building in Mass Timber were; Protection of materials and Installation processes. Protection was crucial from a cost & time perspective, from weathering and UV protection and protection of the sub-trades. The product needs to be protected to avoid delays on site and cost implications throughout the project. Many hours can also be lost if the installation process takes too long. Work smarter, not harder! A minor change to substituting larger fixings for smaller ones can have a drastic effect on installation times. Plate sizes, sequencing, and lifting accessories also need to be thought about early on in the design stages.

It was also good to see the process of mock-ups in the presentations by Holmes, who are an international player in this game. They have adapted to the changes in the construction industry and are always

on the lookout for efficiency when constructing mass timber structures. Their tried and tested approach of innovative fixing details, different installation methods, and standardisation of components will pave the way for the mass timber industry.

What were some of your key takeaways, Georgia?

The fire discussions were present, as expected. ARUP's David Barber's presentation was supportive in a 'if you've got it, flaunt it' approach, great to hear calls for visible timber! The important lessons were that fire behaves differently in a timber structure compared to a concrete and steel one. That small spaces will flash over where big ones might not and that such 'flash-over' heats might subsequently cause delamination or glue-failure! A new concept to me was Viridi Groups' 'mega floor' fire break presented by Nick Hewson. Stretching that visual horizontal band into the height of a full floor and using it to break rising travel of fire was very interesting. My key takeaway from the fire engineers was that there was no better time to call in the experts and that they definitely can keep their seat at the table.

Who else would you invite to the table, Will?

Collaborating with all trades at the table in the design stages assists with project delivery. Their input can

mitigate downtime spent on site. This allows for clash detection which when solved early on, everyone has the capability and time to think of a solution before it gets processed into the design documents. Darren Kho highlighted the advantages of working in BIM, from design coordination to clash detection and Integrated Procurement Delivery (IPD). IPD is key for completing a project on time and on budget. Having all parties involved during the design stages can limit the number of variations found on site, while all stakeholders share the risk and reward.

Speaking of collaboration, what was your take on the governance of it all?

Yes, it was good to hear from Antonia Reid who explained the MBIE thought process is to keep everything consistent, transparent, set out by a technical methodology and most importantly - understandable - which will bode well for the passionate early adopters of the Timber Design Society readership. Time to set a good example, share key learnings and useful insights! If we can record a clear pathway forward, others might be less hesitant to follow. In terms of sharing key learnings, didn't

Adam Jones have some useful insights!?

Adam's been working for Xlam for 10 years and knows the in's and out's of the manufacturing and design process. His presentation delved into the design constraints some clients come across as well as alternative design options used.

"Design it once, build it many times". Sometimes the simplest design can be the most achievable, the more complex the design is, the higher the risk will be. Sometimes a full mass timber design can become unfeasible, instead of heading down the traditional concrete & steel path, we need to keep in mind these materials can work hand in hand with each other while keeping the Co2 values low as well as tracking on budget.

There were 16 excellent presentations at WoodWorks. We would like to thank the Timber Design Society for taking us to the 2022 conference. Coming from professions left and right of engineering, we both found each presentation highly educational and very interesting. If we could wrap up one idea to take home it would be this - listen, and learn.



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