Ted's News September 2016

More on Galvanised or Stainless Fasteners

Difference Between Hardwood, Pine and Cypress

Plastic Decking with Termites

Brief Trip to the Philippines

Courses from Wood Research and Development

The Two Henry Fords of Housing

CPD - You Know You Have to do It

Difference Between Hardwood, Pine and Cypress

Recently I was asked to explain why a specification for a timber bollard has to be different depending on whether it was was from hardwood, pine or cypress. I prepared the table below which clarified for him for guidance. For detailed specifications contact the author

Timber	Sapwood	Truewood	Heart/pith
Hardwood	Not durable – can be treated	Sometimes durable – cannot be treated	
Cypress		Durable – cannot be treated	Structural – durable cannot be treated
Pine		Not durable – cannot be treated	Structural – not durable cannot be treated

Plastic Decking with Termites



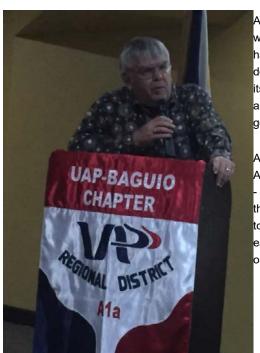
One of my readers sent me these images of a well known brand of plastic timber composite decking. The deck had failed for the second time and was being replaced with timber. Most of us would not go back for a second helping. The builder noted when the decking split it swelled and locked in water which eventually attracted termites, note on the photos the splits in the sides of the decks which are cupped, split etc.

I am amazed how all reason goes out the window when choosing this type of product. It must stand the same rigorous scrutiny that a hardwood deck must pass. Contact me for the university testing I have had done. It will shock you. I am disappointed when people do not detail timber decks well and enforce good supply and construction details and then complain when when timber does not perform.

I know of a footbridge where plastic decking was used and then someone rode a horse on it. The poor animal fell straight through the decking. If it is a commercial application the decking must be able to withstand a commercial load with a minimal commercial deflection. It's all in my books







As I drove around Baguio, a resort city high in the hills of Luzon, I was surprised at how much concrete "timber" there was. When you have sent all your best logs to Japan and the US what else can you do but make concrete look like timber. This land, once renowned for its rainforests, now has a logging moratorium and only lesser species are being cut. My Australian readers should be very thankful for the good stewardship we have here.

As I love to talk, I gave two CPD sessions, one in Baguio on Architectural Timber Battens and in Manila on Building for Resilience - an Australian perspective. I met a bright young architect in Baguio that did his masters in Sydney and who is trying to reintroduce timber to that city. Baguio was very badly damaged in 1990 by an earthquake and the only buildings that withstood it were the timber ones.



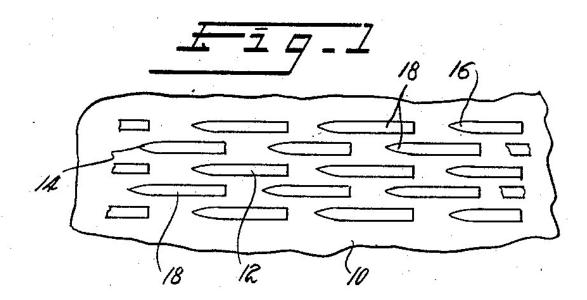
The second speaking engagement was at a seminar in Manila run by the Emergency Architects division of the United Architects of the Philippines. The subject was building for resilience and the topic was Materials and Construction Technologies Through Timber. Special thanks to Michael Rayner for his assistance. There were very informative presentations on coco lumber bamboo and panels that used the strength of the loo roll (not the musician) centers. Habitat for Humanity a worthy organisation also gave very interesting reports. The picture on the left above is one of twelve homes built after Cyclone Yolanda by my host Pastor Galzote from coco lumber for \$450 AUD each. A blessing for families that had lost absolutely everything.

Have you booked a CPD session yet?

The Two Henry Fords of Housing

Part 2 of 2

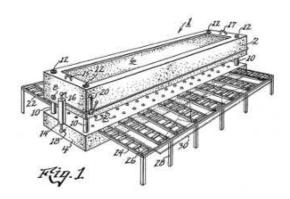
Researching my new book on timber joints I came across two men, William Levitt and John Calvin Jureit who would both be likened to Henry Ford in the way they transformed housing from being crafted one at a time into an assembly line construction that we are familiar with now. <u>Last month I wrote about William Levitt.</u>



John Wesley Jureit, the other "Henry Ford" was another man influenced by World War 2 prefabrication in the Pacific. In 1949 he took on the first of two roles as the chief engineer in laboratories that tested building materials including trusses. In the first role, which was in a commercial laboratory, Jureit found he spent most of his time advising clients on how to improve their trusses rather than testing them. Despite the limitations of pre-nailplated trusses he could see that that "builders were already warming up to the fact that trusses were the way to go. I could already see it was going

to be a big industry. We just needed a better way to do it". The "better way" came to him in a reflective moment in a church service after he had gone into private practice in 1955. His idea which revolutionised the construction industry was the first nailplate that did not require supplementary nailing. The name "Gang-Nail" came soon after. This nailplate shown in above had single straight teeth pressed from the plate which were long enough to secure the plate to the timber.

Many sawmills wanted to value add to their own wood but needed to set up at low cost though starting a truss plant in the beginning was not easy. The equipment needed to install plates simply did not exist or if they did exist the delivery times and cost precluded their use. Jureit became not just a plate manufacturer but also built the equipment to use them. He initially used a concrete vertical hydraulic press and steel table precision jigs to install them. The business was based on the razor blade principal — "give 'em the razors and they'll come back to you for blades"



Continuing Professional Development Sessions

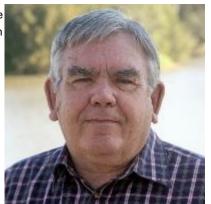
You know you have to do CPD so why not avail yourself of a an expert in the timber industry who has written several books and given many presentations on the subject? The full range of subjects I have available are:

Timber Preservation.

Hardwood Grading.

Timber Decks – Designing for Durability,
Utilising Small Diameter Hardwood.

The Seven Deadly Sins of Timber Design.
Joints and
Architectural Timber Battens



These are informative seminars with serious learning outcomes and, if required for CPD points, I can provide a test and a certificate. Call me on 0414770261 to arrange a mutually convenient time for your personalised "Ted talk".

Need a Timber Consultant or Expert Witness?

I have over 40 years experience in the industry and can assist you with any of your timber needs.

Design - I can provide detailed technical drawings and advice.

Inspection – I can assess timber products on their performance, fitness for purpose or cause of failure. I also examine whether best practice was used in design and construction.

Reports - I have authored many books on timber and can prepare a report to meet your needs.

Here is a link to my CV.