Ted's News
September 2020

Timber Cladding in Multi-story Buildings

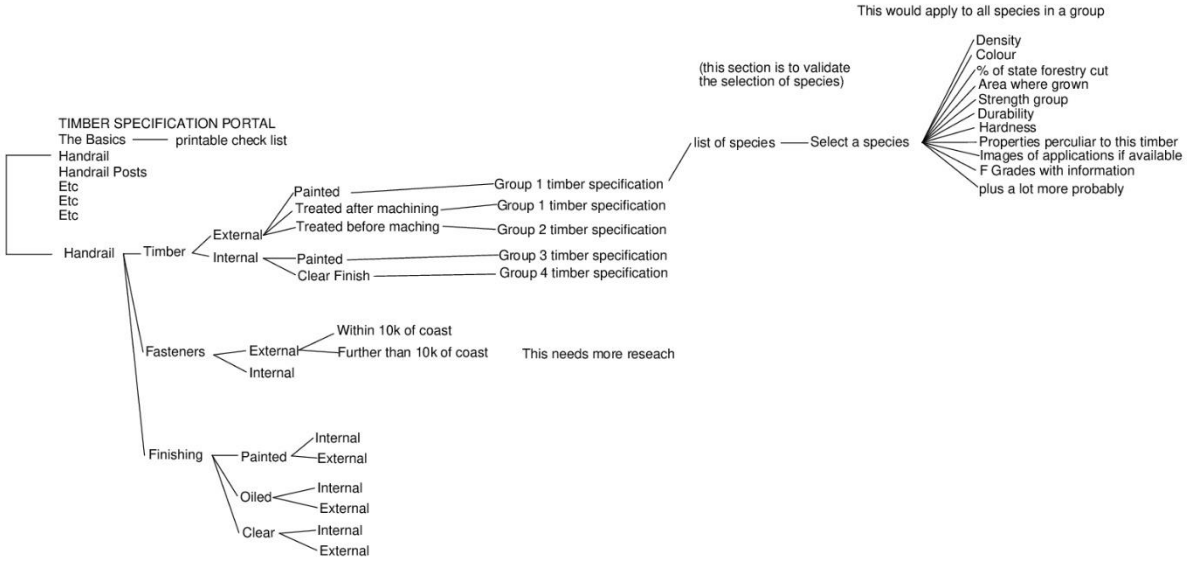
Image Copyright to Silva Timber.

Last month I had a section about a court win against plastic composite being used as cladding in a multi-story building. Now I think most people would agree that using a petroleum-based product that continues to burn after the fire source has been extinguished is not a brilliant idea, but what about timber? After the Grenfell Tower fire in 2017, the issue of cladding has come under intense scrutiny world-wide, and rightly so. Timber has fared well under the review undertaken in the UK

and is permitted up to 18 metres in height. Here is a link to the Wood Protection Association *Guidance to Amended Building Regulations*. Maybe I am biased but I think that the timber cladding in the image above looks a lot more pleasing than aluminium.

But what of Australia? The UK at least has a well-developed industry for treating with fire retardants. I simply do not know the answer other than to say that it should not be off the cards. If we can build a timber house in a bush fire zone there is no intrinsic reason why we can't use it successfully as multi-story cladding. After all, the timbers commonly available in the UK burn a lot more readily than our recognised bushfire resistant timbers (Blackbutt, Kwila (Merbau), Red Ironbark, River Red Gum, Silvertop Ash, Spotted Gum, Turpentine.) Wood solutions are working on a guide at the moment entitled *Alternative Solution Fire Compliance - Facades* but it is not available yet though it is being reviewed and should not be too far away. Until then, an accredited/registered Fire Safety Engineer will be able to walk you through this.

A Specification Tool that is Desperately Needed



Click here for a larger view

The classic example of poor timber design is specifying a piece of low grade F14 hardwood roof truss material and expecting it to perform well as a horizontal handrail in full sun. For some time, I have been mulling over what the design tool would look like that takes a professional through the decision process.

Take the case of that handrail, is it used inside or outside. That affects the species choice. Is it painted, or unpainted, if unpainted is it dressed before or after treating and how does that affect species choice? What treatment should that be? Is the timber I am thinking about readily available, what do the properties such as lyctus susceptible mean, is it grown locally or do I have to ship it across the country. How do I specify timber fit for purpose? (spoiler alert - it will not be F14.) What fasteners should I use, what finishes should I be specifying? Now, all of this is second nature to me as I have been doing it for so long and have researched it for my guides but I have

to agree it is not straightforward for a new hand. I started putting a decision flowchart together a while back (see above) and in the end I thought, this is going to be a lot of work that I won't get paid for so the idea was stillborn. Sorry, but I am getting commercial in my old age still, someone needs to do this. It would be a good opportunity for a paint and fastener company to promote their products, but it needs to be the right products. I would love to receive feedback on this.

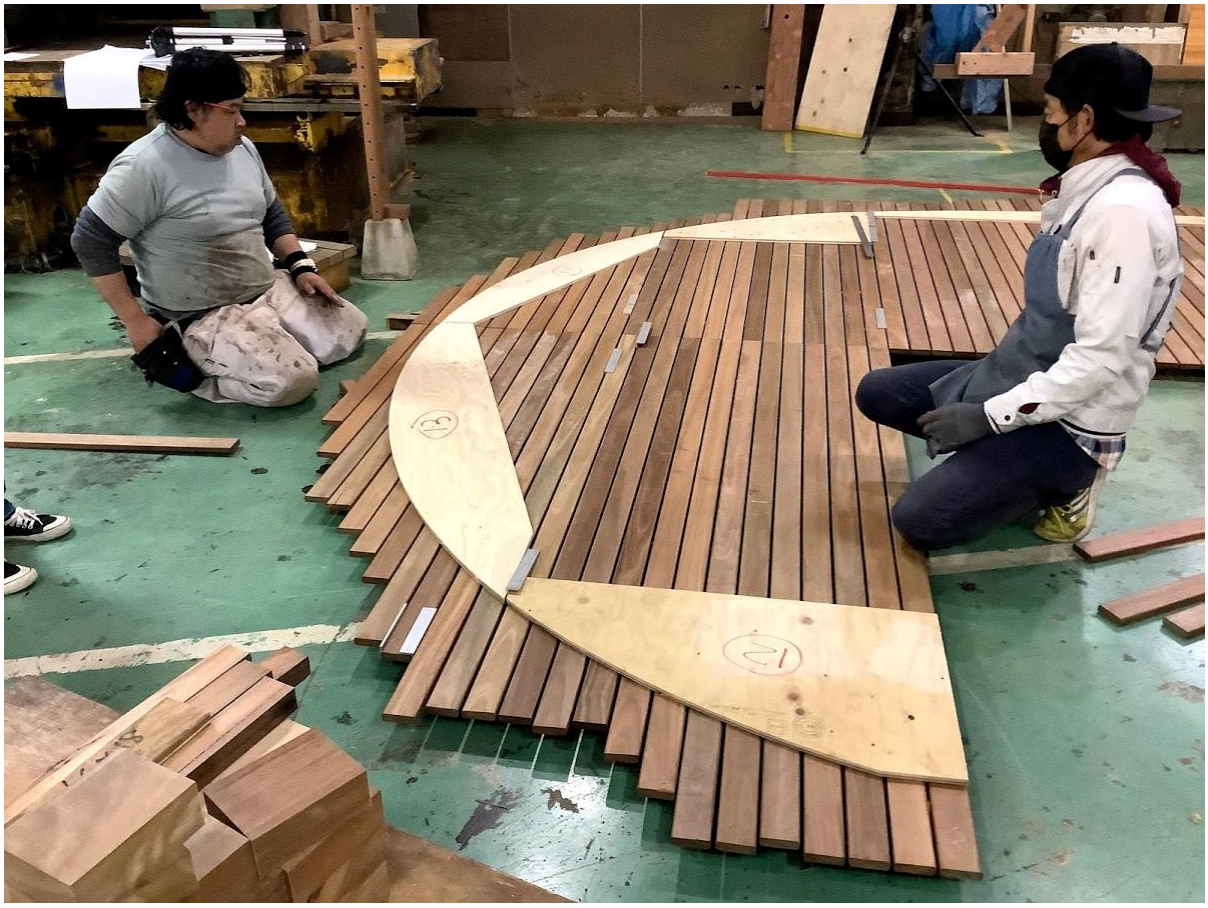
Spotted Gum Projects in Japan

My friend Aki-san of Kurata Co sent me some fairly recent images of older projects they built in Japan from spotted gum. Enjoy.

Built 2001 **Utano Path** https://www.ecowood.or.jp/case_00563.html

(The TSUTANO Bridge on the narrow path (HOSOMICHI) to the Castle. Tsuta no Hosomichi is an old road in Shizuoka prefecture. It is located on the west side of Maruko-juku on the Tokaido, and is the oldest road that crosses the Utsunoya Pass on the border between Utsunoya in Shizuoka City and Okabe Town in Fujieda City. It was used as a **public road for about 700 years** until Fujieda City designated cultural property (historic site))

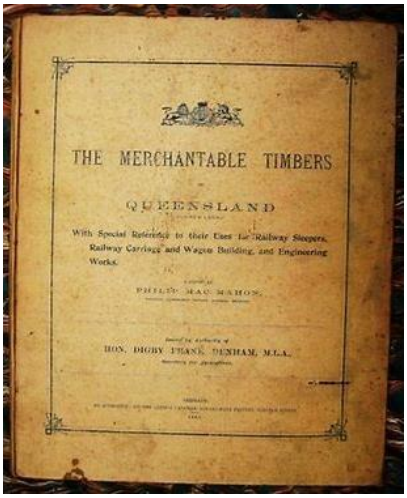
Built 2001 **Zenpukuji Line a highway leading to Kambara Castle** https://www.ecowood.or.jp/case_00109.html



In case you missed it, in May I featured a prefabricated deck they built and shipped 900 km and installed in the snow in an earthquake prone area.

A Treat for Wood Lovers and Railway Buffs

I am indebted to John Huth for a scan of the historic book from 1905, *Merchantable Timbers of Queensland*. The subtitle is *With Special Reference to their Uses for Railway Sleepers, Railway Carriages and Wagon Building and engineering Works*. It is well worth downloading and saving for a later day. Download here, warning, it is a big file. I saw that one sold for $1500 recently on eBay.


THE MERCHANTABLE TIMBERS

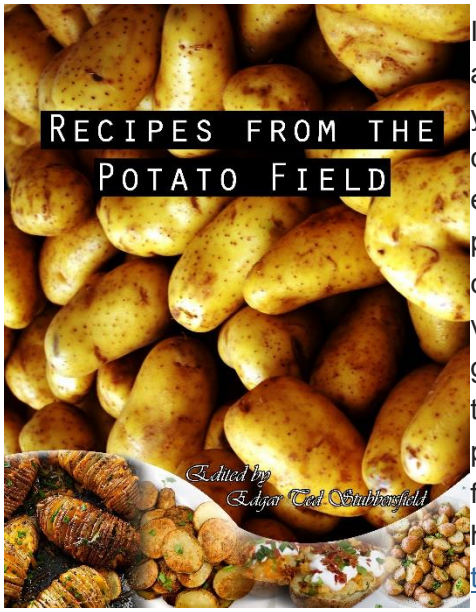
QUEENSLAND

With Special Reference to their Uses for Railway Sleepers, Railway Carriages and Wagon Building, and Engineering Works.

PHILIP MAC MAHON.

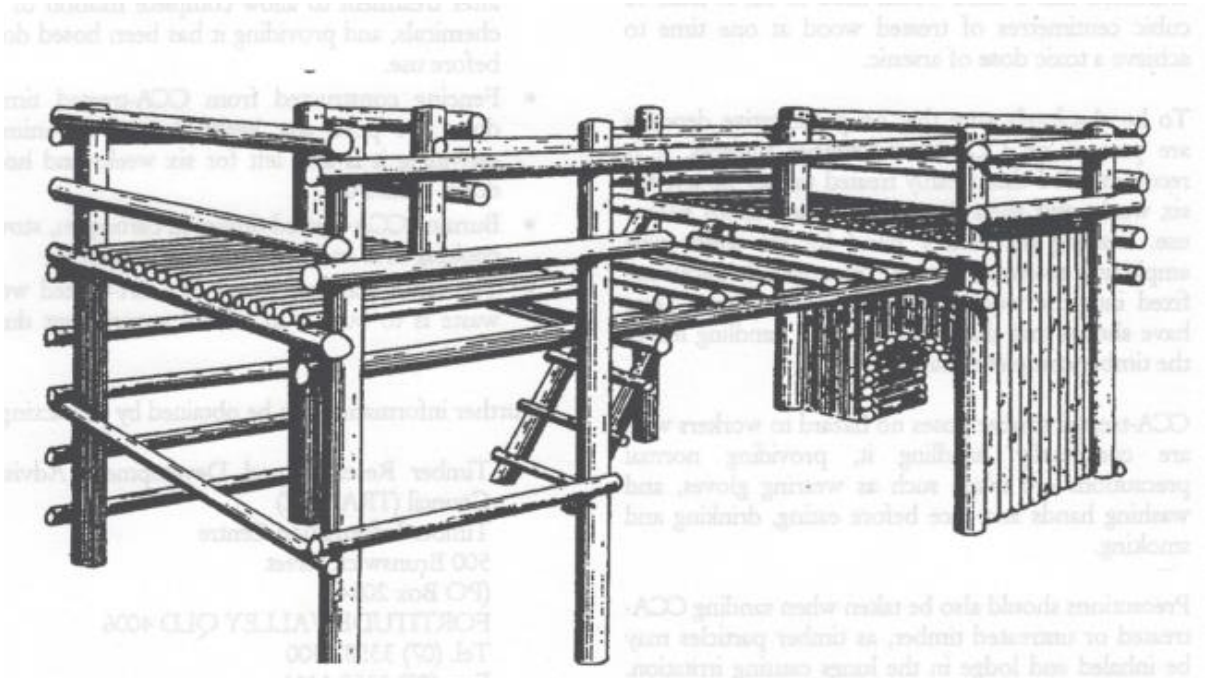
HON. DIGBY FRANK DENHAM, M.L.A.

Recipes from the Potato Field



I said last month that my latest book is from out of left field, and yes, a cookbook is about as far removed from timber as you can get. I am probably the most domestically challenged person in the country so it was a surprise to everyone that I would dust off the old Kenwood and bake a packet mix cake to take to morning tea at our little Baptist chapel. Well, the ladies, who are all incredible cooks, were very gracious but suggested I bake a cake from scratch and gave me a recipe. It worked a treat. They then suggested that I edit a cookbook for them and it became a COVID project. It is not finalised but I have about 64 recipes so far. The building is situated in the middle of a potato patch hence the title of the book. These are good practical and tasty country recipes but each recipe has a short devotion so you may not wish to access it (it is after all a church cookbook). Give me some feedback. We will probably sell a hardcopy when it is completed at a cost that will recoup our expenses.

My Next Project - Playground Timber?



If you are getting to a certain age you will remember when many of the children's playgrounds were made from CCA treated logs. Now playgrounds have become, well what have they become? Words fail me, I am just glad I grew up in the 50's when there weren't many playgrounds at all and you could climb trees and take risks and learn how to play. Following last month's newsletter on robinia and larch in Australian playgrounds I was asked to consider writing a book on playground timber and a leading Queensland Architect has offered to help me. Playground

timber requirements are different to house framing, for instant, the timber has to be splinter resistant. I will probably weaken and say, "yes".

I would like to hear from you about what you need to see included in this guide, I have a fair idea. I also would like to see images of good and bad things you have seen.

Earn CPD Points through eClassroom

New Course - the Seven Deadly Sins of External Timber design

Outdoor Timber Design

Architectural Timber Battens

The Seven Deadly Sins of External Timber Design, which explains how to avoid many of the common problems that beset timber design, has recently gone up on the eClassroom website. You will be surprised how easy it is to design timber structures and landscaping that ages gracefully. It is time to start earning CPD for the next year points with what is proving very popular

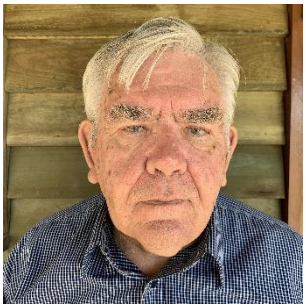
course. Face to face training is going to be difficult for a while yet but the three courses now on eClassroom which include Outdoor Timber: Design and Specification, and Architectural Timber Batten can be undertake in the safety of your home. Coming soon to eClassroom will be two additional new courses - *Timber Joints* and *Designing for Durability.*

Need a Timber Consultant or Expert Witness?

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

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. I have recently completed inspections on boardwalks, bollards, support beams and external timber furniture.
Grading - Quite literally, I have written the book on the subject. Recent experience has shown that up to 30% of timber supplied may not be to grade.
Design - I can provide detailed technical drawings and advice. I can also review already prepared drawings.
Reports - I have authored many books on timber and can prepare a report providing recommendations and practical instructions on to how to rectify issues.

Please note as I am now employed a Senior Timber Consultant with the firm BCRC all large and complex consultancies and requirements for an expert witness will be handled in conjunction with them. Existing consulting arrangements remain unchanged and I am also available to assist on small projects. For more information see www.bcrc.com.au



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