Ted's News

November 2018

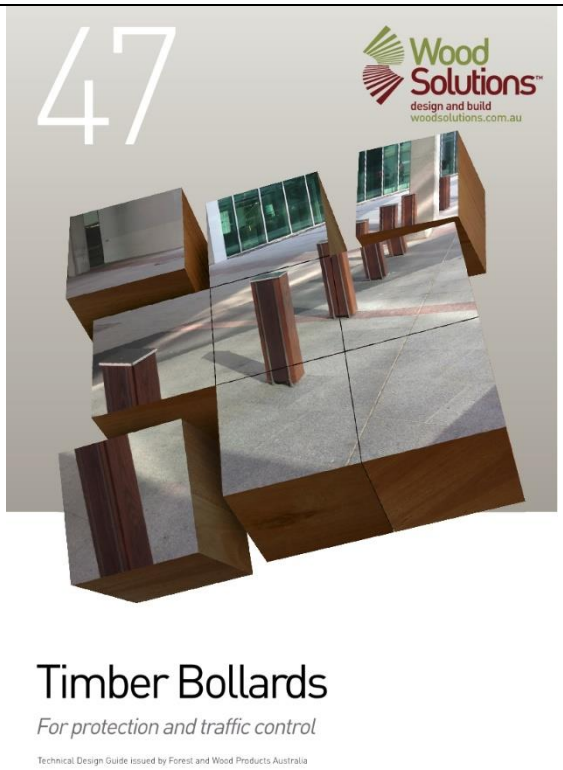
Inspecting the Timber in a Venetian Palace

Ok, it might not actually be in a palace in Venice, but it is as close as you will get to one in Australia. In the latter part of the 19th century in Melbourne, business owners wanted to display their great commercial power and prestige, so they built their office buildings in the style of Venetian palaces. One of these is now being restored. As a Senior Timber Consultant to BCRC, the durability experts, I graded the timber floor joists for the developer and, in this, I was admirably assisted by Shane Connolly, the then BCRC Victorian Manager.

The significance of the age of the building is that it was built in a time when stress grading of timber was unknown. Modern fasteners and connectors were either just starting to become available, as in the case of wire nails, or simply unknown. The timber is mainly Douglas Fir so the logistics of getting if from the USA back then must have been a nightmare. The lead picture shows the floor joists to the upper floor and the effect of a leaking roof. Incredibly, the upper floors had 6.0 m ceilings! As expected from old timber, the quality was brilliant. Top marks for a remarkable project.

For more information or discuss your durability needs in Victoria, email Professor Marton Marosszeky

Don't Specify Another Bollard Till You Read This Guide



I have attempted to wax lyrical about the rapid advances in timber technology in recent years but there are times when I despair for the future of timber when we can't even get the basics right. The only consolation is that I am told it is the same with every material!! Take these bollards I saw on a recent drive where every one is set in concrete. Knowing not to do this is not secret men's business - the information has been out there for a long time. This is such a common bad practice that I have included it in my book and CPD course The Seven Deadly Sins Of External Timber Design. Further, at a recent CPD session one Landscape Architect told me that while some batches had no issues, they were in other cases making the contractor replace up to 30% of the timber bollards prior to handover. This would be because of included heart.

Don't despair, it is just as easy to get it right as it is to get it wrong. Before you specify another bollard or have one installed you need to read and put in practice what is contained in Wood Solutions new guide *Timber Bollards*.

This guide includes information I just took care of in the background that protected you from inappropriate timbers, grades and practices. A lot of this is distilled in Appendix A which has a section *Timber Selection and Construction Notes for Bollards*. It will take you through the design considerations size by size and species by species. Images in the guide will also make you aware of inappropriate quality and

installation practices. To download this free guide, go to the Wood Solutions website, log in then go to resources and then technical guides.

If you would like more information about bollard styles and products that I have had good experience with then my Bollards, Traffic Control and Fencing Guide will also be of assistance. This just represents standard supply from Outdoor Structures Australia.

A Reminder About Steel Joists

Some Designers think that steel joists are better than timber.

Recently, I was asked to comment on a deck which a previous report had slammed as being substandard because the screws were countersunk too deep. It completely missed the point that it was fastened to lightly galvanised (125 grammes per m^2) steel joists right up against a swimming pool. The screws, while an issue, were the least of the problems.

	
Badly rusted steel joist	Broken screws in steel joists

When you go from timber to steel you swap well known problems that are easy to design around with a totally different but also less known and harder set of problems. A "C" section has less torsional stiffness than timber, the lip holds water, flexing of the timber and the joists snap the screws. Further the galvanising is too light to deal with the acidic species that may be used let alone the new treatments which are also more of a corrosion issue than CCA. If you read the technical data you see that the joist manufacturers say do not screw timber to the joists but use hardened steel nails. See here for more info on this subject

If you are an advocate of steel joists you need to read Bluescope Steel's Technical Bulletin CTB-13 Corrosion With Timber. Your only response should be, "How do I do it well with timber?" You will find that in my LifePlus Decking Guide for only $22.

National Centre for Timber Durability and Design Life

For years, I have felt like a voice crying in the wilderness with my message that appropriate timber species, used correctly were durable. Finally, a National Centre for Timber Durability and Design Life has been established at the University of the Sunshine Coast under the direction of Jeff Morrell. One of the Centre's goals is not just reversing the decline in research but revitalising it. I remember when Australia was a hub of world class-research on timber durability from the 1970s to 1990s with organisations like TRADAC and CSIRO. Due to poor government decisions and some key retirements, there was a quick decline in research capacity. The centre's second major goal is to train up the next generation of timber specialists, something that was lacking in the past.

While the Centre's partners are all Queensland-based, the Centre is national in scope. The initial support for the Centre is for five years, with the expectation of continued support as the Centre grows and matures. The centre has twelve initial objectives but the one I think is vitally important is working with the timber preservation industry to regain the assurance that used to be there when our plants were monitored by the government.

If you have an interest in timber durability, Jeff would welcome your email or phone call 0423 348 160. Learn about Jeff and the centre from their newsletter.

Footbridge Fundamentals Course

The image is of two magnificent footbridges leaving the old OSA site. I have been asked to prepare a full day seminar on footbridges and that is now complete. The

course covers the fundamentals of what to look for in the design, why the tender process is important, what to look for when inspecting the structures and lessons learned from several case studies Phone me on 0414 770 261 to arrange a session or email.

Content of bridge fundamentals course

Module 1
Grading Hardwood
Buying well to avoid problems
Doing the inspection

Module 2 - Case histories
Lessons from London Millennium bridge
Berrinba Wetlands
3 bridges closer to my home
Sundry horror images

To have a single CPD session, *Buying well to avoid problems* in your office contact me.

Edgar Stubbersfield
Mail: edgarstubbersfield@gmail.com
Web:www.deckwood.com.au
Phone: 0414770261