

OUTDOOR STRUCTURES

Outlasts and outperforms

June 2014 Newsletter

Written by Ted Stubbersfield

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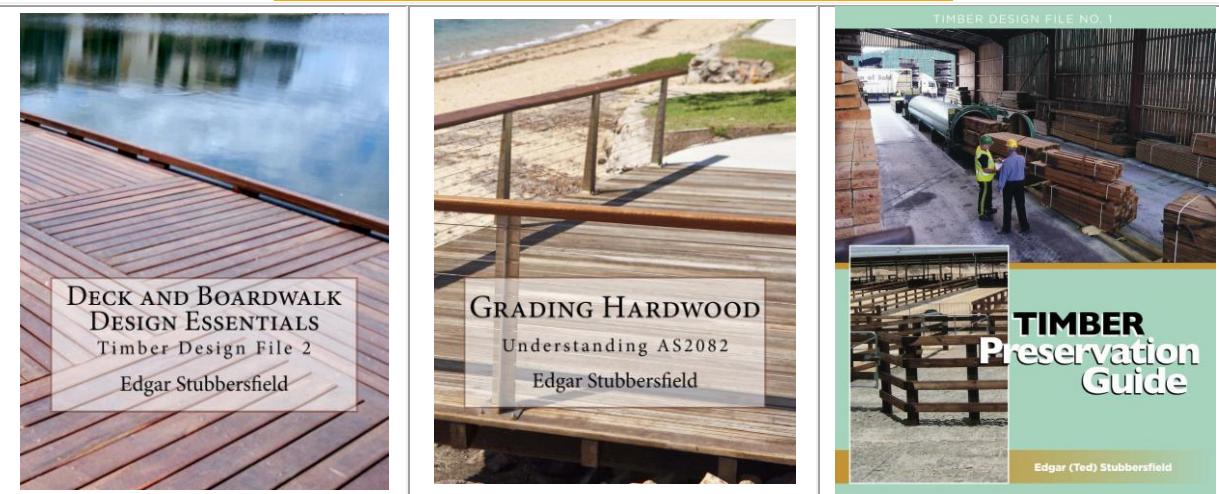
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Dear Reader

[Guides Available from Timber Queensland](#)



Up till now, if you had wanted a hard copy of my guides, as opposed to the PDF, you would have had to purchase them from Amazon, then wait up to three weeks for them to arrive. My younger readers seem to prefer PDF's but we older ones still want to have a book in our hands. Fortunately, relief is at hand. Timber Queensland has just started to stock three of my books. This will save you a lot of time. To order the books visit [Timber Queensland's Online Shop](#) and they will be shipped to you within 24 hours.

[Unauthorised use of OSA images on Another Website](#)

Some of the best images of our products are not to be found on my website! We had found Recycled Timber NSW (A division of Ironwood Taree Pty Ltd.) [had six of our projects up on their website and passed off as theirs](#). A letter from the photographer's solicitor saw that taken down but no payment was made to the photographer despite it being requested. If you want to see some more of our products visit Ironwood Australia's website and look through their [Recycled Australian Hardwood Bollards](#) page and scroll through their images. When I visited the site on June 18 they were all my images taken by Dennis Clarke Photography and none were of recycled hardwood. In fact there are not far short of 30 of my images on that site including two on the [lead in page to their products section](#).

[Our Image Gallery is There to Help You.](#)

Getting the right image for a report can always be a problem. My website has a very large image gallery which is there to help you (but not my competitors). Have you discovered it yet. [Here is the link](#). They

are sorted into the different categories and then into different projects within that category. Select a project that seems interesting and click on that hyperlink. You will find a series of thumbnails and often information about the project. Find an image you need in the thumbnails and double click and a higher resolution image pops up which can be saved. Need an even higher resolution image, contact us.

What do you do with it then. You are free to use it providing you acknowledge copyright. some of it is held by my wife and some by a Dennis Clark Photography. The agreed wording is Copyright Outdoor Structures Australia, used with permission.

A reminder on Dressed Decking

One of my first consultancies was to look at a large public deck built by a developer as part of the council requirements. Some years after construction I was called in to look at it as there were problems and it needed certification. All our design information had been ignored. The decking was dressed face spotted gum. I advised that the deck could not be certified as it could not meet the slip resistance required under the disability code. Recently a pendulum tester was bought in to check my advice. The decking failed miserably, as it had to, though a higher reading would have been achieved if they had tested using the inclined ramp method but still not high enough.

I know dressed face decking looks prettier but it is dangerous. When I tested 145x45 Deckwood with a coating of Tanacoat it went R12.

Springsure Truss shows why our Bridges are Different





Thin steel damaged by mower

Thin steel needs stiffener to attach braces

When you purchase footbridges you must remember that they can and do fail. The [truss bridge that failed during the Maccabiah Games](#) in Israel is infamous. [Here is a link to a collapse in China](#). This just doesn't happen overseas. A few months ago I saw a trussed bridge in Australia that had also collapsed. The deck portion just dropped into the creek! It was not an old bridge either! The fact that it had an engineers certificate would have been of little comfort to anyone that could have been hurt.

The recently supplied 22 metre OSA Design Warren Truss that was delivered to Springsure is a good example of why the OSA bridge is a wise choice. The two smaller images underneath the images of our truss being installed show portions of trusses from two different manufacturers. They illustrate how light the steel in a kit truss bridge can be. In one, the council mower had buckled and put a large hole in the bottom cord. In the other the steel has to be reinforced to allow the webs to be welded in place. The steel in an OSA truss starts at 4 mm and is usually heavier. This all equates to longer life and better vibration characteristics

The paint used in the truss is [PPG's PSX700](#), not powdercoating. Because the truss is a one piece welded frame (which is why it doesn't shake) it is too large to fit in the galvanising bath so we use a hi-tech paint system equal to galvanising. It is brilliant. Graffiti wipes off. This product is a [spinoff of the space industry](#), PSX700 was developed to paint the steel at Cape Canaveral that has to take not only salt air and the 5000 degree flames of a shuttle launch. The deck of course is Deckwood and the handrails are a robust custom designed system, not pool fencing which is unsuitable for footbridges.

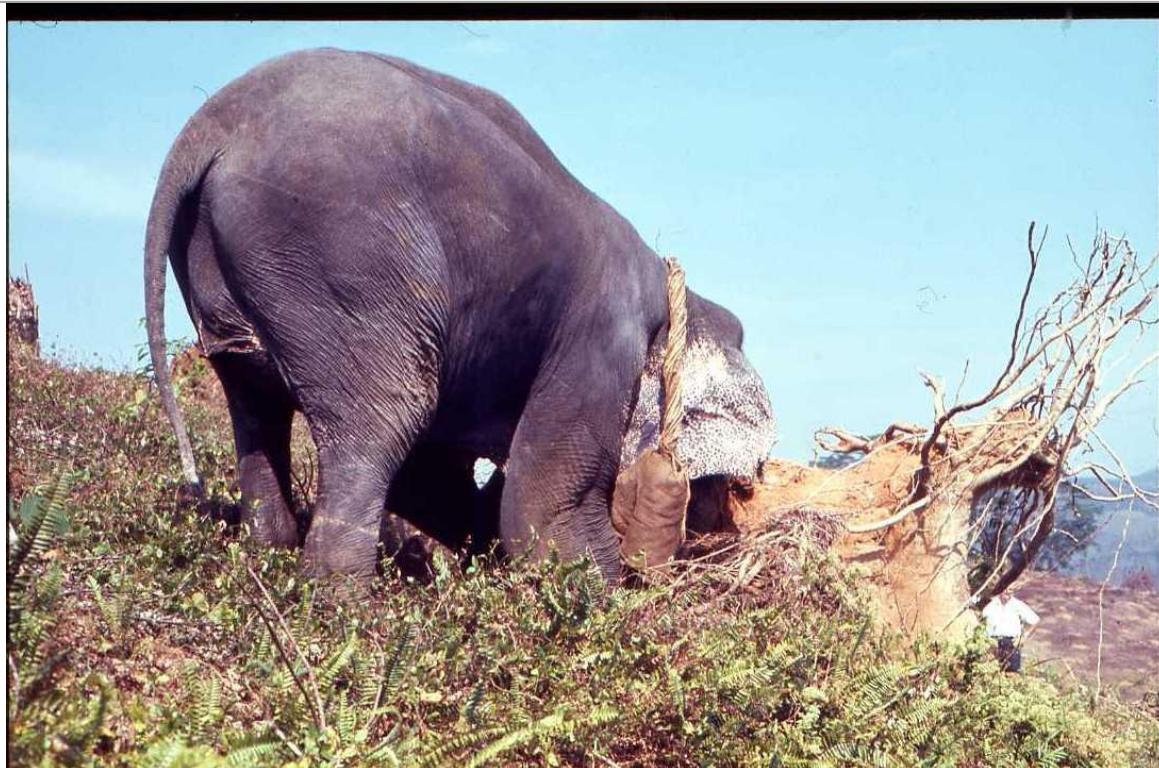
Never purchase your bridge on price but always on specification. The links below help you write an appropriate specification and assess the bridge offered. Follow them closely and you avoid the common pitfalls with kit bridges.

Links

[Recommended specification for a footbridge](#)

[Recommended specification for a bikeway](#)

Timber - Find the Right Application for the Species



Back in 1970, when I was a young man of 19, I spent three months on a rubber estate in Ceylon (as everybody still called it back then). It was a great life at the top if you did not weaken. The culinary delights of Sri Lanka in my humble opinion are not surpassed anywhere in the world. The words, string hoppers, egg hoppers, dahl, curd and jaggery, Maldivian fish and saffron rice still bring visions of delight to my mind. But one day the discussion strayed from what was on the table to the table itself. The superintendent thought it was quite funny, and so did all his friends at the planters association. It was made from rubber wood. At that time, when the rubber tree became uneconomic it was simply ripped out by the roots by an elephant and burnt. It wasn't valued and there was little infrastructure to mill the timber. There were still pit saws in operation

But the superintendant was before his time. The strength properties of rubberwood are similar to radiata pine so you could build a house with it, but furniture was what rubber wood was ideally suited for. Ikea and the likes could not survive without this low priced and large resource. Having a resource led to an industry that capitalised on that resource's properties.



These are my bookcases, the frames are made from rose gum and the shelves are brush box. Now rose gum shrinks more than the better hardwoods (over 7% officially, ours seemed to be more) and was only Durability 3 in ground so it was unsuitable as a green off saw product for many applications. When we were milling it was usually cut into roof battens installed the next day and never seen again. The timber shrank and held the roofing screw more firmly. But who uses timber roof battens these days? But now if you go to Harvey Norman furniture shops you are likely to see furniture made from it. It is a perfect match of species to application

Brush box (almost 10% shrinkage) is unstable when it dries and so has to have the stickers that separate each layer during drying placed very close together. Despite it being Durability 3 there was a time when it was used for decking because in one of the Queensland Forestry Department's Technical Pamphlets it said you could be used that way. It was a disaster. Despite it easily reaching F17 you would not want to build anything from it. It does, however, after drying with care, excel as a decorative timber. It is excellent in solid and laminate flooring as it is so hard that high heels do not mark it

The weakness of the Australian timber and specification industry is that there is little effort to match the resource and the grade of that recourse to structural applications. Under a roof and hidden by plasterboard you can get away with a lot, but frequently you can't when exposed to view internally. Sins of omission are never forgiven when used externally. If you are still specifying your external timbers by F grades only you need to have a serious talk to us. Timber is a wonderful product but strength (i.e. the F rating) is only one consideration, and probably not the most important.

[Blog being written for Timber+DESIGN Magazine](#)

[My Third blog written for Timber+DESIGN web magazine is on whether Plastic Decking is all that it is cracked up to be \(Click here to go to article\)](#). I maintain that it is not a suitable product for commercial applications.. Timber+DESIGN is a very useful magazine for those interested in timber that has been used imaginatively.

[Click here for a link to the website of Timber+DESIGN magazine.](#)

[Last months blog on H4 and H5 treatment](#)

[Click here to go the blog on whether to use stainless or galvanised fasteners.](#)

To be on the mailing list, contact Kay Phillips [through this link](#).

Next month's blog will be whether decking should be considered as generic timber or a product.

Bridge Quote Requests

If there is any doubt that OSA make the best kit bridges in the country look at the [Berrinba Wetlands Project](#). Not all bridges are equal. After encountering three bridges in one month that did not meet the Bridge Code I wrote the [May 2012 newsletter](#). Refer to it when assessing the suitability of quotes.

[Steel bridge Quotation Request Form](#)

[Timber Bridge Quotation Request Form](#)

More information:

If you have timber road/rail/heritage bridge issues,
we suggest you talk to:
Mr. Dan Tingley
Senior Engineer
Wood Research and Development
1760 SW 3rd Street,
Corvallis OR 97333
Office 0011 1 541 752 0188
Fax: 0011 1 541 752 0195
Cell: 04 5957 6314 or 04 28983328
dant.tingley@gmail.com

Deckmaster

E-Mail: Ted@outdoorstructures.com.au
Web: www.outdoorstructures.com.au

Phone: (07) 5462 4255
Fax (07) 5462 4077
Old College Road Gatton, Australia
PO Box 517 Gatton Q 4343
Australia

ABN 90 234 979 738