

OUTDOOR STRUCTURES

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March 2013 Newsletter

Written by Ted Stubbersfield for

INFRASTRUCTION PTY LTD

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Dear Reader

[Decking Alternatives Special Newsletter](#)



If you did not open the special edition of our newsletter sent earlier in the month you missed something that would have greatly benefited most of my readers. We had a brilliant article from a guest contributor, the highly respected Architect Ralph Bailey of Guymer Bailey Architects. Ralph wrote the beginning of a discussion on the pros and cons of hardwood, plastic and aluminium decking. We are still seeking submissions and comments from our readers so he can write an "authoritative" guide. We want to assist professional designers weigh the alternatives and make an informed choice and advise their clients correctly. Let us know your experiences good and bad. There has been some very insightful

feedback. I stress that this is not a document that says "Do not use plastic".

Go to http://www.outdoorstructures.com.au/pdf/osa_newsletter_03_13_special.pdf to read the original document, please comment. If you do not know Ralph, here is a link to his page on the Guymer Bailey Website http://www.guymerbailey.com.au/PDF/CV_RALPH1pg.pdf

[Yet Another Deck Collapse](#)



Image from Archicentre press Release



Image courtesy of BSA

Late in February, we had a fireman in at the office looking for decking. We started to impress upon him the importance of building his deck well but it was a waste of time! This time it was not because he did not want to spend the money but because he was already strongly convinced. You see, he had attended the deck fatality in Ascot a few years previously. - see an image gallery at <http://www.couriermail.com.au/news/gallery-e6frer9f-1111120582596?page=8> **That fatality was caused by an error in construction 90 years previous!!** The link to the deck inspection guide below shows how this deck was built.

I would never have thought that just a couple of days later we would be hearing of yet another deck collapsing, this time in Lane Cove. The details are not available yet but it looked like a fairly new construction. It is virtually impossible to overload a domestic deck so invariably failures are simply because the decks are not built correctly. One US researcher went so far as to say that the majority of decks in that country were not built correctly. He observed that most failures were at the ledger where the deck attached to the house. This is exactly where the Lane Cove deck appears to have failed. One report said there were just 12 **nails** attaching the deck to the house.

For a gallery of lanecove images see <http://www.dailytelegraph.com.au/news/ten-hurt-as-family-meal-ends-in-balcony-collapse/story-e6freuy9-1226587276051>

I have written a few times about decks that could be life threatening and will not repeat myself. Here are links:

These newsletters deal with collapsed decks

http://www.outdoorstructures.com.au/pdf/osa_newsletter_10_12.pdf

http://www.outdoorstructures.com.au/pdf/osa_newsletter_02_10.pdf

These newsletters deal with the use of inappropriate material for decking and framing

http://www.outdoorstructures.com.au/pdf/osa_newsletter_01_13.pdf

http://www.outdoorstructures.com.au/pdf/osa_newsletter_12_12.pdf

Coroner's reports

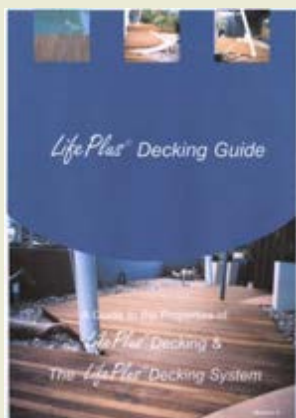
Ascot Deck http://www.courts.qld.gov.au/__data/assets/pdf_file/0008/86885/cif-spencer-al-20100628.pdf

Yeppoon Deck http://www.courts.qld.gov.au/__data/assets/pdf_file/0019/163027/cif-diefenbach-iw-20120919.pdf

Here are guidelines for inspecting decks which probably needs adjusting after the Yeppoon fatality.

<http://www.hpw.qld.gov.au/SiteCollectionDocuments/deck-balcony-guideline.pdf>

Please take this matter seriously. Archicentre have said that there are in their opinion 8,000 life threatening (not dodgy) decks in the country. That represents 2% of all decks. I recommend that you purchase my Life Plus decking Guide to see how it is supposed to be done.



Source of US Comments:

Woeste, Frank. **Virginia Tech Researchers Work To Help Prevent Balcony And Deck Collapses.** URL <http://www.vtnews.vt.edu/articles/2003/10/2003-300.html> Date accessed March 1, 2013.

Reference to Nailing:

<http://m.smh.com.au/nsw/balcony-held-on-by-just-12-nails-20130302-2fd1m.html>

[A Note on Copyright](#)

I have always taken copyright and IP very seriously, it is a pity that those who copied my products did not. I wanted to bring you actual images of the decks in question but that would have cost \$300 to license the images. When we do not charge for the newsletters I could not justify the expense. It would have cost another \$375 for images that I wanted for for the advance notice of the article below **Natural Rounds in Architecture**.

[Do Not Play With the Deckwood \(TM\) Specification](#)

As you know OSA spent a lot of time and money first developing the Deckwood (TM) product, and to then putting high quality technical publications in the hands of designers. It is frustrating to then find the design certainty embodied in them being removed through attempted "improvements" by those specifiers. Many will not specify a proprietary product so write a specification couched in terms drawn from different Australian Standards and so think they have protected their client. A recent example is "Timber decking shall be F17 hardwood, 140x50 Durability Class 1, with tapered sides and pencil round edges, anti cupping groove and treated to H5. All timber framing to be F17". Rather than protect the customer it has opened the possibility of inappropriate timber being supplied. If you want Deckwood, talk to us and we will help you write a specification that means you are only permitting a true alternative without complications. Mind you, getting some people to take note of a specification is another matter as we will see two paragraphs below.

Regarding just one aspect of this specification, F17, see http://www.outdoorstructures.com.au/pdf/osa_newsletter_01_13.pdf

[Tanacoat and UV](#)

I wrote last month about UV being much higher in Australia than in the corresponding latitude in the northern hemisphere. I should have twigged to that when some friends from the UK came out with SPF10 sunscreen! UV protection (and moisture repellency) is what Tanacoat is for. Some people think that Tanacoat is a preservative but it isn't! The durability of our timber comes about through the correct choice of natural durability and preserving the sapwood with Tanalith E. Tanacoat is a water repellent and UV blocker. to reduce the effects of weather exposure It is not an either/or option but utilise both. Australian timber applications need this additional protection.

[150x150 Repeated Warning](#)



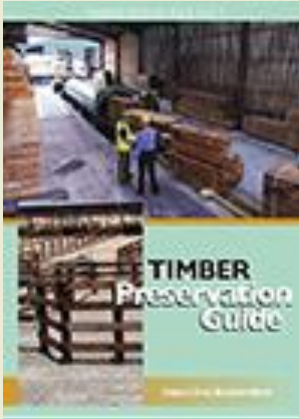
I have been constantly advising against using 150x150 hardwood in landscaping unless you are prepared to specify and detail it correctly. Last month I had a phone call from one of our regular contacts. He specified 150x150 **and DID specify it correctly**. The landscaper did not receive material that matched the safe specification. (The above image is not an actual image of that particular job but illustrates the problem that you have to avoid in your specification). The timber has behaved as we have been warning it could. Mercifully the designer is now in the driving seat as far as rectification is concerned.



The use of 150x150 is covered in my small book, the 7 Deadly Sins of Timber Design. It is only \$22.00 for the advanced draft file. This is a very small amount of money for the knowledge and power it gives.

To order this guide please email me or call 0414770261

[A Reference from Someone who Knows](#)



This reference for our timber Preservation Guide was received by a senior and respected person in the timber preservation industry. Timber preservation is not simple and I have developed the guide to timber preservation to assist you in understanding and specifying timber treatment. Read this book and you will not be specifying H5 treated decking.

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"It's great to be able to refer someone to a publication that deals with treated timber products, presented in such a useful format. Ted's book contains a wealth of knowledge and I recommend it to everyone involved with treated timber products."

Regards

Greg Jensen

Commercial and Regulatory Manager

Lonza Wood Protection

Arch Wood Protection (Aust.) Pty Limited

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<http://www.lonza.com>

<http://www.tanalised.com>

There are four ways to purchase the Timber Preservation Guide.

Using a Credit Card:

1. As a [Amazon Kindle eBook](#) for US\$33.00
2. As a [Amazon Paperback](#) for US\$33.00 + postage from US.

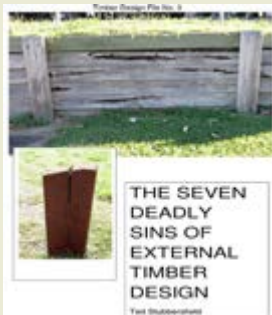

3. Not a member of Amazon? Purchase from [Createspace Estore](#) for US\$33.00 + postage from US.

Direct Deposit:

4. Paperback posted from Australia for quicker delivery \$37.50 + \$10.00 Express Postage (within Australia). Email edgarstubberson@gmail.com or call 07 5462 5532 and we will advise payment details.

Already purchased a draft? Go to the Dropbox folder and download the latest file. Do not release the file outside of your office. I am only releasing the file to earlier customers.

The Deck and Boardwalk Design Essentials guide is having its final edit. I am fairly well advanced on "Understanding AS2082."

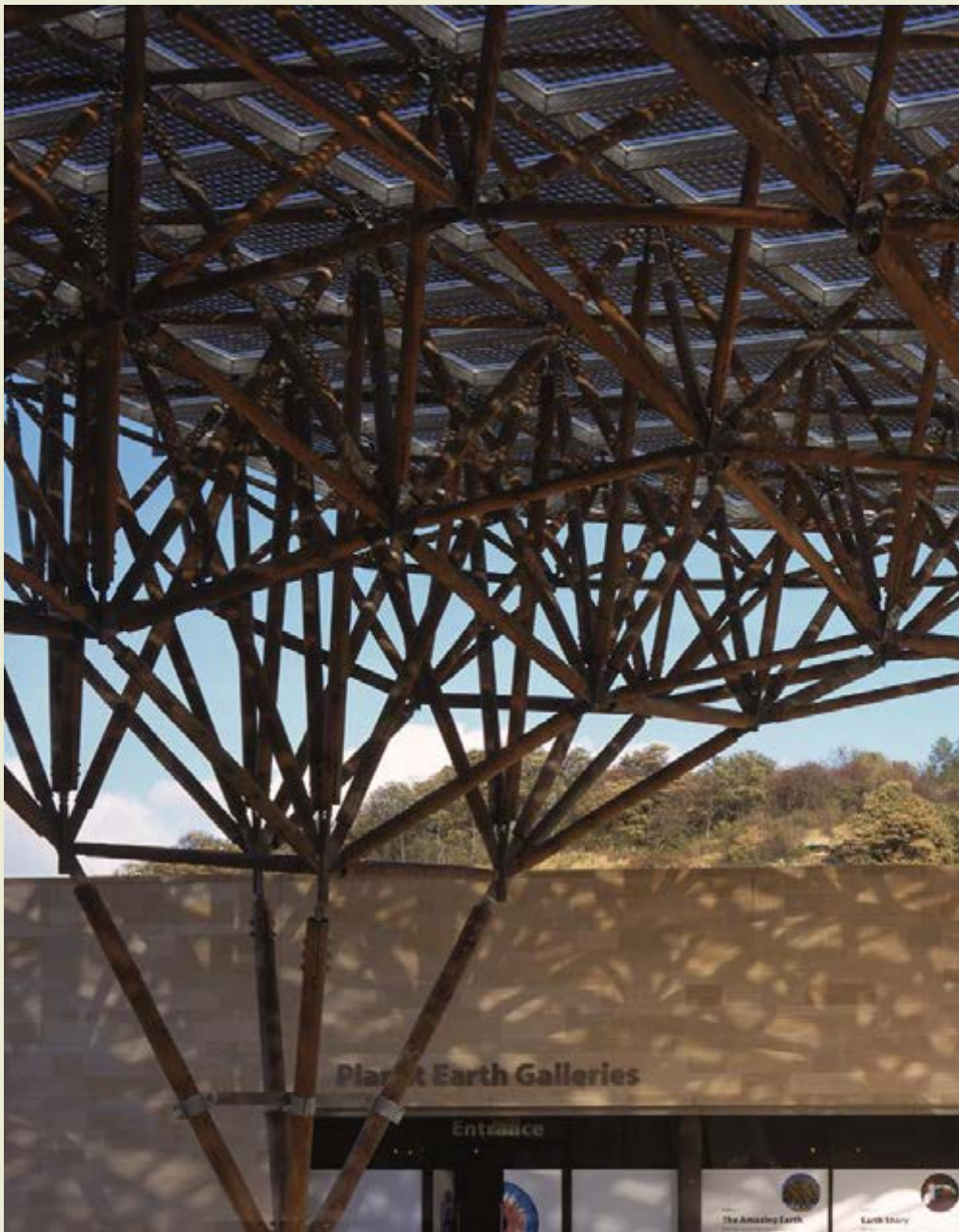
The 7 Deadly Sins of Timber Design	Deck and Boardwalk Design Essentials
	
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All our guides can be seen at http://www.outdoorstructures.com.au/timber_guides.php

Natural Rounds in Architecture

When writing for the book **Le Memento du Forestier** I had to look at the architectural use of natural round timber. I do not imagine that one of my readers has seriously considered it. I could not believe what I was seeing in terms of the imaginative use of of natural round timber. I am in the process of trying to obtain copyright for some of the images that I found on the net. Hopefully I will have them next month. (I am trying to avoid yet another \$375 in fees for a free newsletter). Do you know of any attractive uses of natural round timber in Australia or elsewhere? There are three of us working on related subjects and we all need images and text.

One outstanding example of the architectural use of natural rounds is the Earthcentre in Doncaster UK. This amazing spaceframe was designed by the Architects Feilden Clegg Bradley Studios LLP. The image is copyright to Feilden Clegg Bradley Studios LLP and is used with permission.



The fifth book in my series of Timber Design Files hopes to deal with the use of natural round timber. I am working through Book 4, Understanding AS 2082 at the moment but it is slow going.

[Consultancy Services by Ted Stubbersfield](#)

The stories I am now hearing about substandard material and performance are frightening. If you are looking for quality materials and good performance I can work with you from the design stage through to final completion.

In our area of expertise, often it is the art that proves more important than the science. Weather exposed structures normally do not fail because of incorrect member size calculations, but because a myriad of small points of detail are not taken care of.

As a timber design assistant we offer:

The provision of high quality technical guides on timber design. (accessed from our website on a pay per view or membership basis)

- The review of professional drawings to identify potential timber design issues that may impact service life
- The preparation of proposed AutoCAD cross sections of structures
- To be a sounding board for ideas
- Lectures and presentations
- The assessment of best practice in construction.

As a grader I can assist with grading for confirmation to a nominated grade but more importantly I can assess whether timber is graded to an appropriate grade. Often these are not the same thing. Contact me on 07 54625532 or by email (edgarstubbersfield@gmail.com) to discuss how I can be of assistance to your organisation.

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

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