

# OUTDOOR STRUCTURES

Outlasts and outperforms

## January 2014 Newsletter

Written by Ted Stubbersfield

## For Infrastruxion Pty Ltd

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Dear Reader

### [Plain talking about Plastic Decking](#)

I was contacted recently by an engineer who advised me that he is going to specify Deckwood as a replacement for a plastic composite deck that had failed. Next issue I hope to have he images, (cropped so as not to identify the location) which show the present state of the deck that is only about six years old. I simply cannot comprehend why people are coming to the conclusion that using this type of material is an advance over using correctly detailed, correctly supplied and correctly installed hardwood.

It all comes down to doing your homework and checking what you are told and being very sceptical. Take this chart below as an example of the information available on composite decking.

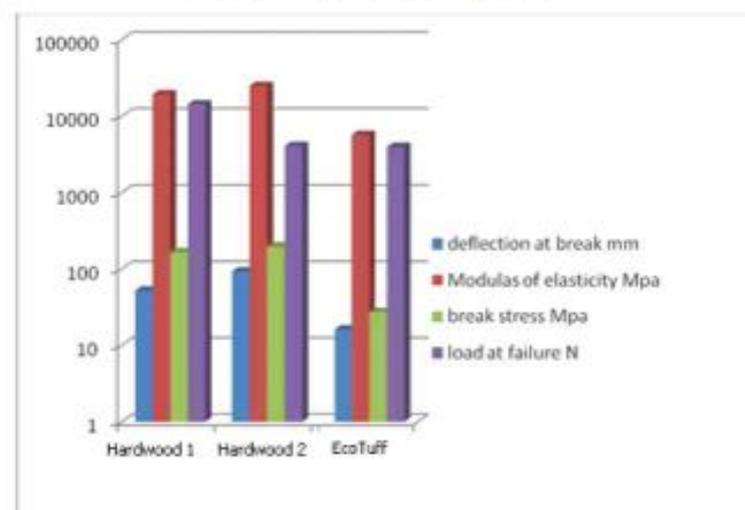
When we were doing our research on plastic decking one company said that they had a product ideal for our needs and sent through comparative test results of our product against theirs (Deckwood is Hardwood 1 and LifePlus is Hardwood 2 in the bar chart above).

I had to stop and think as this showed a very good comparison of this particular plastic decking against hardwood which I knew from everybody else's figures could not be right.

Then I had another look, the scale is logarithmic, there is the same distance between 1 and 10 as there is between 10 and 100 as there is between 100 and 1000!!.

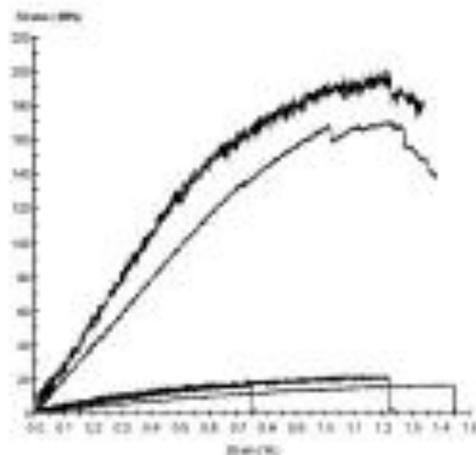
### EcoTuff™ Comparison Chart

EcoTuff™ V's Hardwood Samples 1 & 2\*



If you want a true visual comparison look at the following graph showing a 3 point bending test showing LifePlus (at top), Deckwood, (second top) and three common brands of plastic below.

We found one product that did impress us. It was not because this composite decking would carry the commercial load but because the company owner was extremely honest about the shortcomings of his products and had excellent design support but only for domestic applications. He had a similar philosophy to me. He said straight out, this product is not suitable for commercial applications. Sadly I see this product now advertised by a reseller for commercial applications.



We can understand a specifier wanting to have a replacement for timber but imagining a perfect replacement product in your mind does not make it a reality. (Now we are going a bit deep as it sounds like the Ontological Argument for God's existence and this is not a newsletter on philosophy). In your commercial applications you have to apply the same rigour to plastic decking as you should be applying to timber. You have to be able to say that it will carry a 4.5 KN and 5 KPA load. You have to be able to say that no board will deflect beyond a serviceable limit when fully loaded. Ask yourself, "What will happen if someone rides a horse on this deck" - and yes it has happened and yes, the horse went through it? If you are contemplating plastic decking contact us and we will tell you what questions you have to ask.

[If you missed it, click here for a discussion on decking alternatives by Ralph Bailey of Guymer Bailey Architects.](#) [Click here also to go to the newsletter on boardwalks and fire from June 2011](#)

## Two Happy Customers

We prepared this fence for a council in NSW. We guarantee that it will not rust despite being coastal and because the posts are installed according to our instructions it will age gracefully.



The client said "We are really happy with the product and result. You are welcome to use these photos in promotional material if suitable".

It differs from our standard 3 rail fence in that the rails are ex 150x50 instead of 175x50, there is a custom spacing and the spotted gum timber is dressed after treating. The tops of all the rails are rounded to shed water which is standard.

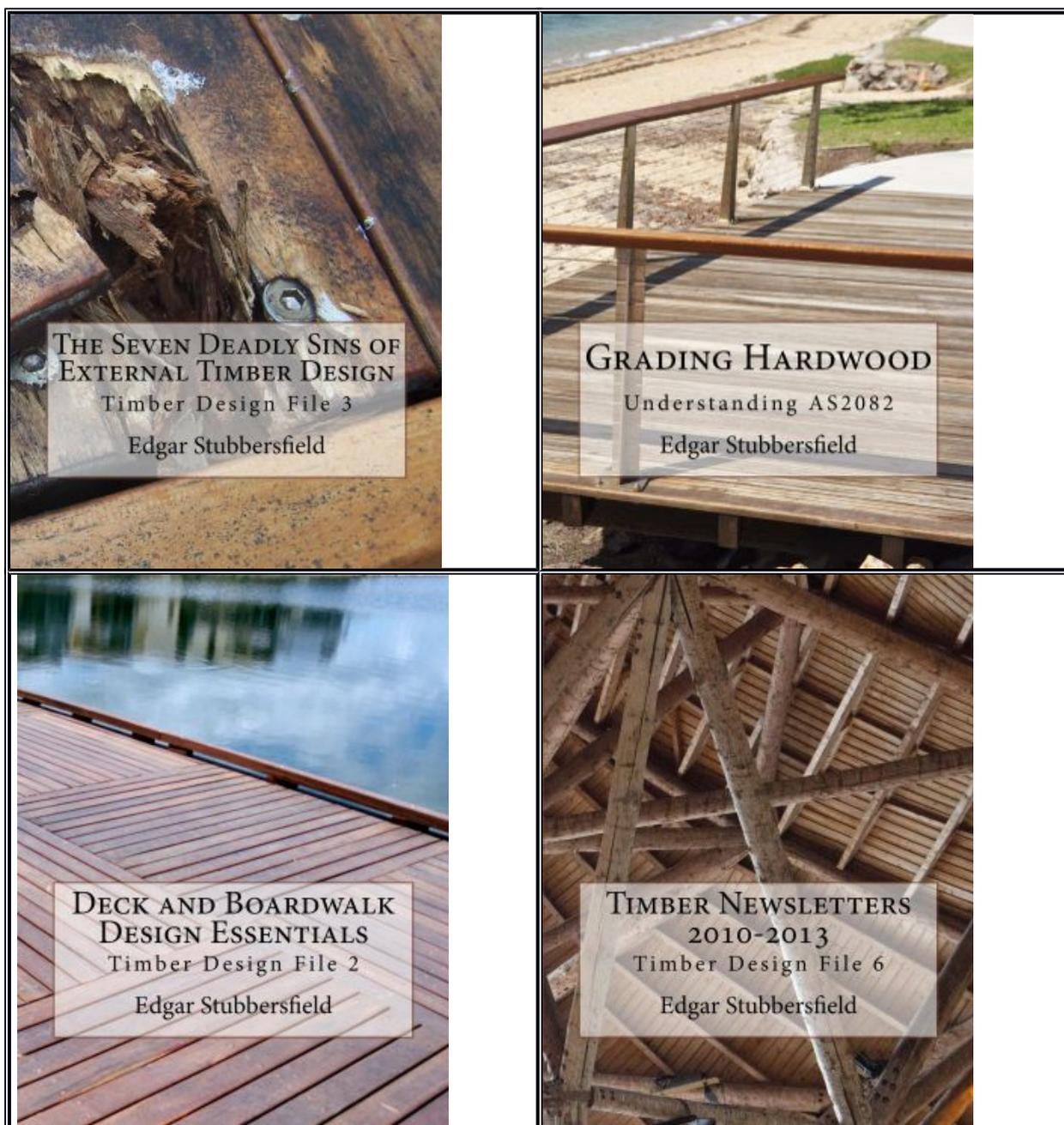


Unfortunately there isn't a before and after picture here to show the staggering transformation. My old friend, Ray Ferdinand, (in a different life quite an accomplished builder and former Mayor of Gatton) came to me to supply replacement decking for a pool in the hills outside of Gatton. The material is 145x45 Deckwood. He was delighted with the finished result.

If you are not convinced about Deckwood by now you never will be, what is important to notice here are the joists and the screws. The 50 mm joists are split from end to end which has to happen as the screws cannot be staggered. The 75mm joists were also split as the screws in these also were in a straight line. Remember never to use 50mm joists with 14# screws.

Ten years of drought was the only thing that saved these timbers. The screws on the original deck were badly corroded - perhaps they had the yellow zinc finish, maybe they were galvanised but I doubt it. Remember - within 8-10 K of the sea it HAS to be stainless and for other applications it is not worth the price difference using galvanised. Read my Timber Preservation Guide for the reasons.

## The Holidays have not been Wasted



Over the break I reformatted four of my Timber Design File books and published them on Amazon. They are not as pretty as the treatment guide and one day I hope I will have them redone professionally but they look a lot better even though the text is the same. You can still purchase the PDF from me but if you want a hard copy you can order them from Amazon. [Click here for the link](#). If you have already purchased the original unformatted file return to the Dropbox file and download the later "prettier" file.

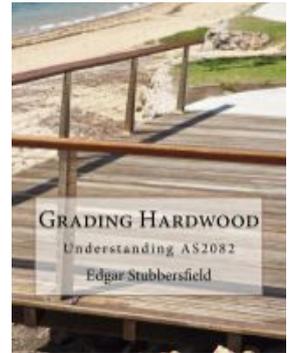
The timber newsletters are a bit expensive as a hard copy (\$60 US) but there are 250 pages, most with multiple colour images but you can still download the unformatted contents for free from my website and purchase the PDF for \$33.

## Feedback on Hardwood Grading Guide

If you have ever written a specification that says F14 or F17 you need to understand what it means. I will guarantee it does not mean what you think it means. If in doubt, read the feedback on the latest guide from Bill Thorne, Wholesale Manager at Parkside Timbers.

*Ted,*

*We both thought that it was just what we need in an industry that is fast losing it most experienced people, with the current trends of more “one shop “ building supply centres, the lack of timber knowledge in the staff is becoming a real problem as they are unable to give good advice on timber as they have not been properly trained. Your grading book should at least give them a working knowledge of what is required. I can see it becoming a standard tool for most places to have so that their staff have a recognised industry standard to which they can refer for the basic knowledge needed.*



## Index to Newsletters 2010 to 2013

I have now prepared an index to the different articles over the last four years put it up on my website. This will make the back issues of the newsletters more user friendly. Here is the link <http://www.outdoorstructures.com.au/pdf/osa-newsletter-index-12-13.pdf>