

Ted's News

October 2021

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[More Shelter Shed Designs Available](#)



[Two months ago I introduced the first three shelter shed designs, This was followed up last month by a further three](#) and now with this month there are a total of nine designs available and more to come. The lead image is for an eight metre square Hume (hip) shelter which was first used in the rebuilding of Grantham following the devastating 2011 inland tsunami. The other designs featured

above are for a 7.8m wide curved roof shelter and the Gregory (gable) range of 4m wide shelters. There is a range of post options available.

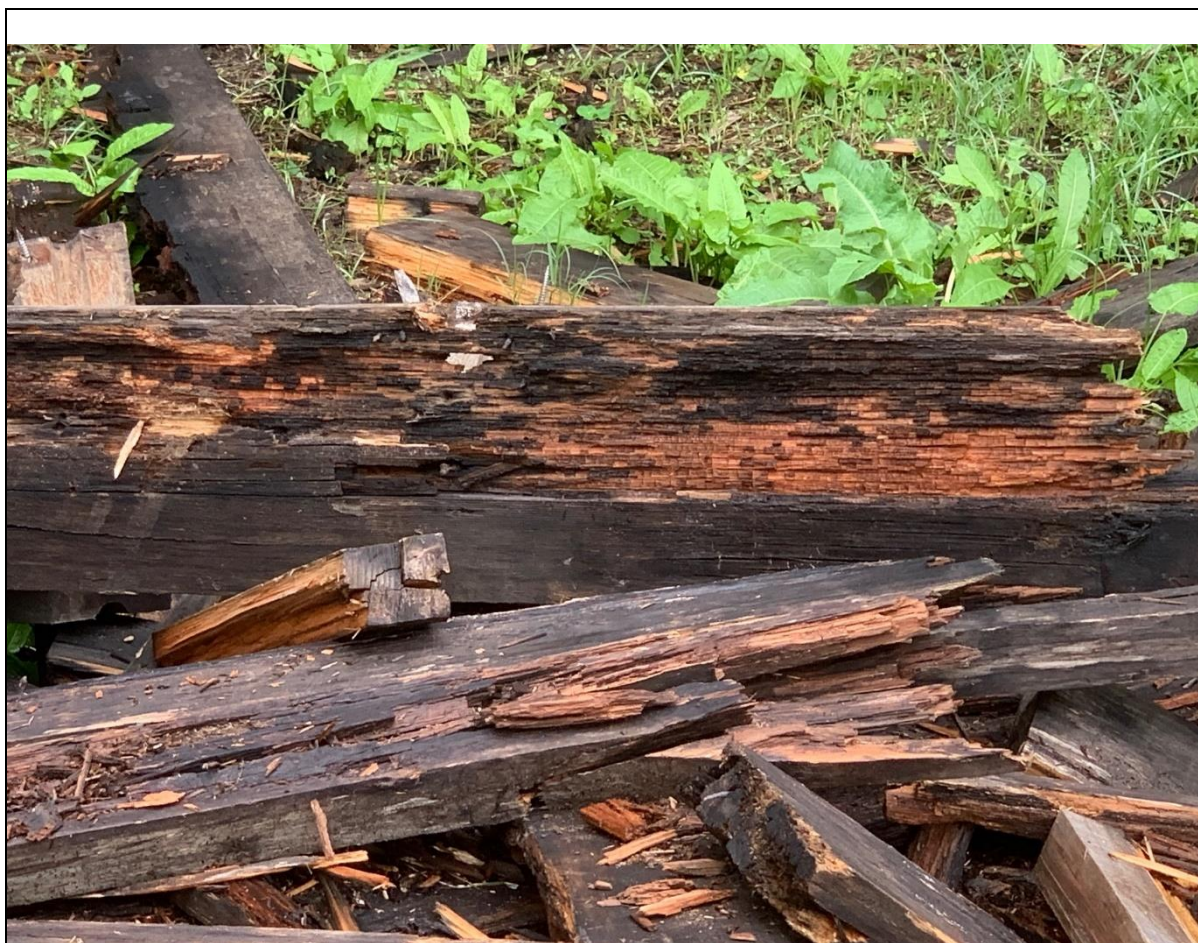
When operating Outdoor Structures Australia, my previous business, I developed a range of very impressive public structures such as park and bus stop shelters as well as toilets. When designs were prepared, almost all had a materials list and full cutting details. My philosophy was that the plans had to be "bulletproof" so I could point a contractor to a pile of material and ask him to prefabricate it and erect it without them having to ask a question. You can now have access to these plans, not just as PDFs but also in CAD format that can be modified for your own needs. They incorporate all of my superior detailing that set our product apart from our competitors.

[Here is the link to my website with more information including purchasing options and prices.](#) Even more designs will be added over the coming months.

[Index to past issues](#)

If you are a new reader or just want to find details on a particular topic such as 150x150 mm posts. [here is a link to an index to articles back to 2015.](#)

[Case History: Deck Replacement - Gold Coast](#)



1. Decayed joists which are being replaced



2. decay in joists



3. Decay in the ends of decking

Builder - [BWC Constructions](#)

Contract Carpenters – [Parker Carpentry](#)



Engineer – **Design Sirs (Ross Power)**

Timber Supply - [Wilson Timbers/Outdoor Structures Australia](#)

Scaffold/Platform design and install – [Elite Access Solutions](#)

Last month I had an article [warning about specifying F17 KD for deck and verandah joists](#). The deck I illustrated failed after 13 years and frankly, it could not have done anything else. It is now being replaced by conscientious contractors following a skilled re-engineering of the deck using our guides. I remember the plans for this one passing over my desk and advising someone that it had no design certainty but what would I know. A specification of F17 KD is meaningless when it comes to decks. It is just a measurement of strength and says nothing at all about durability. Unfortunately, a report was prepared by a non-specialist on how to rectify the deck and it could have performed even worse if followed. Sadly, the wheel is always being reinvented. Fortunately, the parties involved turned to Stuart Madill at Outdoor Structures Australia and in turn, I provided assistance.



4 bearers needed stiffening	
	
5 Replacement joists	6. Replacement joists

The bearers were 50 mm wide spotted gum or similar and were in excellent condition but it appeared the deck was only designed for a domestic load and it was being upgraded to 4 kPa. This meant that the bearers were undersize and needed to be stiffened. A few had a galvanised channel bolted to the side but most only needed a KD Spotted gum or similar screwed to the side. This was relatively low cost. The new joists are all 75 mm wide spotted gum which allows for a staggered screw line after fully predrilling.

Note in 4 above a double joist and in 6 the decking ending in the middle of what is another double joist. This allows the screws to be away from the end and for a gap between the abutting board as the run continues. in 3 above you can see the resultant decay when moisture can enter the end grain. There should be about a 5 mm gap between the board ends. All the fasteners are stainless. In 25 years' time, the deck will be looking at being replaced but that is all that will need to be replaced. It is a matter of personal taste whether the joins are in a straight line or staggered.




That is a long way to fall if the deck collapses

What was good about this job was the way that everybody listened, [Ross Power, the Structural engineer](#), [Brett Walker, the principal contractor](#), and [Simon Parker the carpenter](#) all took on board our design principles and followed them very closely. What was particularly disappointing for me about the original deck was that no one listened and a knockoff of Deckwood was used. Sure, it had a tapered side and an anti-warp groove but was sufficiently modified to avoid my patent and registered design. Whenever someone spoke to me about using Deckwood, I walked them through what had to be done to succeed. I would never have sold decking into this job. It could only fail and you don't want to have any association with a 10-metre-high deck that collapses!

Should you be using Deckwood, we supply all the technical support you need. Often times it is just a matter of sending our design guides but this project saw me driving to the site and writing a detailed report explaining what had happened and how to rectify matters. I also went to the site a second time to check and report on progress. It is all part of the service. If you need assistance with a deck, contact [Stuart Madill](#) 0403 385 707 or [myself](#) 0414 770261.

Here is the link to my [Deck and Boardwalk Design Essential guide](#).

Fixing Handrail

	
1. top fixed handrail will give trouble	2. result of top fixing
	
3. Domestic handrail fixed from underneath	4. good commercial fixing

Recently I was at my favourite watering hole, a café in [Forest Hill](#) when I saw the new handrails (1 above) that had been installed. The builder just screwed the rail through the top face into the end grain of the post. Not a good idea as you can see from 2 above. Moisture eventually destroys the connection Handrails should be either side or top fixed for longevity. Luciana, you should have spoken to your best customer. Later that day I visited a friend and I noticed that he had replaced

his cypress handrails. They had decayed as they were probably full of sapwood. I noticed that he had used a good hardwood and fastened from underneath (3). Personally, I would have had something heavier than 2 only 10# screws but it is all stainless and will be trouble-free. A heavy stainless bracket I use on commercial rail is shown in 4 above. There are three 14# screws and they are well back from the end. Want to know more? [Here is a link to order my Commercial Barrier Guide.](#)

Full Day Courses

 <p>The Footbridge Purchasing and Inspection Course run by Edgar (Ted) Stubbersfield is intended for those responsible for the specification, purchasing and ongoing maintenance of footbridges. The course will enable participants to:</p> <ul style="list-style-type: none">• Prepare an appropriate specification• Assess suitable product to purchase• Recognise where corners are cut• Ensure value in purchasing• Know quickly where to inspect• Recognise suitable timber for bridges <p>I can offer valuable assistance to your organisation by empowering your people to recognise an appropriate low maintenance footbridge from one that requires expensive rectification over a shorter life span.</p> <p>On retiring from Outdoor Structures Australia, a company I founded in 1997, I have been concentrating on publishing guides on external timber and steel use and educating professionals in that field. You can now take advantage of my experience gained building low maintenance steel and timber bridges.</p> <p>I have extensive expertise in exposed timber applications. This knowledge was developed initially through a number of formal research projects followed by years of observation. I acquired a deep of understanding of the issues relating to designing, supplying and constructing fully weather exposed timber and timber and steel structures including bridges.</p> <p>Contact Details Mobile: 0414 770 261 Email: edgarstubbersfield@gmail.com</p>	Footbridge Course	 <p>The Coastal Deck Design Course run by Edgar (Ted) Stubbersfield is intended for those responsible for the specification, purchasing and ongoing maintenance of boardwalks and decks with emphasis given to the more difficult coastal environment. The course will enable participants to:</p> <ul style="list-style-type: none">• Prepare an appropriate specification• Assess suitable product to purchase• Recognise where corners are cut• Ensure value in purchasing• Know quickly where to inspect• Recognise suitable timber for decks <p>I can offer valuable assistance to your organisation by empowering your people to recognise an appropriate low maintenance deck or boardwalk from one that requires expensive rectification over a shorter life span.</p> <p>On retiring from Outdoor Structures Australia, a company I founded in 1997, I have been concentrating on publishing guides on external timber and steel use and educating professionals in that field. You can now take advantage of my experience gained building low maintenance steel and timber bridges.</p> <p>I have extensive expertise in exposed timber applications. This knowledge was developed initially through a number of formal research projects followed by years of observation. I acquired a deep of understanding of the issues relating to designing, supplying and constructing fully weather exposed timber and timber and steel structures including decks.</p> <p>Contact Details Mobile: 0414 770 261 Email: edgarstubbersfield@gmail.com</p>	Coastal Deck Course
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Don't embark on any major footbridge or coastal deck project before you do my full-day courses. These are serious courses that are unmatched in the value you will extract from them by delivering expensive infrastructure that ages gracefully and with little maintenance. They both start by going through a design checklist and explaining, line by line, why you must attend to that point. They then look at a number of case studies, showing good and bad practice.

[Click here for footbridge course brochure](#)

[Click here for coastal decks brochure](#)

Call me to discuss your training needs. These courses, which are eligible for CPD points, will give you an incredible understanding of good timber use. Call 0414 770 261 or [email me](#).

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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