

Ted's News

November 2021

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[More Shelter Shed Designs Available](#)



[Three months ago I introduced the first three shelter shed designs](#), [This was followed up each month by a further three](#) and now with this month there are a total of twelve designs available and more to come. The lead image is of a toilet block first used at the all-ability playground in Gympie. The other designs featured above are for a "+" shaped shelter and the other is for a two-post steel framed shelter.

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.](#)

[Galvanised Fasteners can be a Recipe for Disaster](#)



[In November 2020 I had an article showing why correct detailing does matter.](#) There, a boardwalk on a canal development was being replaced. The 50 mm joists had split and the structure was unserviceable as a result. [Parker Carpentry Contractors](#) replaced the galvanised bolts with stainless. The image above shows the galvanised bolts they took out after 27 years with the galvanising is still in place! I couldn't help thinking that I was being overcautious saying only use stainless in exposed situations but still, I knew I was right.



Galvanised fasteners from the same boardwalk

Recently, Simon Parker sent me some images of fasteners his team removed on the next stage of the very same boardwalk refurbishment. You should find this frightening! I am not going to even hazard a guess why this would happen with one lot of bolts and not the other.

When I was writing the chapter on galvanised or stainless fasteners in my [guide to timber joints](#) I found conflicting specifications for where to use galvanised and where to use stainless. There is a very detailed argument for using stainless unless you are up in a dry roof or in the middle of the Simson Desert. However, I found some very helpful papers by Samuel Zelinka, Project Leader, Building and Fire Sciences at US Forest Service which guided my recommendations. Below is an extract from my guide drawn from his work.

"Because the coating works well in the one application it was assumed that it will perform equally well in others and this has not proven to be a safe assumption.^[1] In the case of atmospheric corrosion of zinc, specific oxides form (hydrozincite and smithsonite) on the surface and protect the zinc from further corrosion. When installed in timber, different oxides form (namuwite, simonkolleite and sometimes hydrozincite) which do not give the protection layer seen with atmospheric corrosion. Without this passivating layer, wood corrosion on galvanised fasteners can even be faster than non galvanised steel fasteners.^[2] To complicate matters, under different exposure conditions galvanised fasteners have been shown to corrode more slowly than steel."^[3]

[Contact me](#) for copies of his papers and other references I have but better still, [purchase my guide/s, it is money well spent](#)

^[1] Zelinka. *Corrosion* ..., 587.

^[2] Zelinka. *Corrosion* ..., 574-5. See also Zelinka, Samuel, Rebecca Sichel, Donald Stone. Exposure testing of fasteners in preservative treated wood: Galvanometric corrosion rates and

corrosion product analysis in *Corrosion Science* 52 (2010) 3947 where it is reported that several researchers have observed that zinc corrosion protected products can corrode more rapidly.

[3] Zelinka. *Exposure ...*, 3947.

[This Should Ring Your Chimes](#)



My bell tower at Dalby



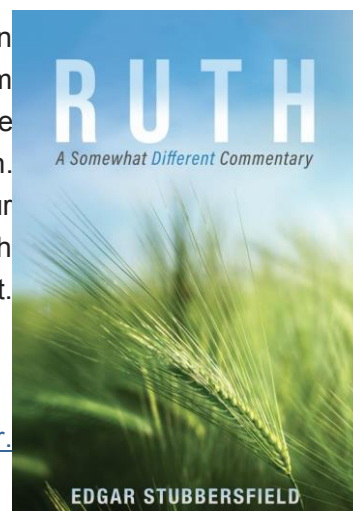
Dan's bell tower at Charters Towers

[Back in November 2020 I had an article](#) about how I detailed and built a bell tower in Dalby so it was durable. Not that there is any rivalry between my good friend Dr. Dan Tingley and myself but he has gone and outdone me yet again. The [heritage listed bell tower at St Columba's Church at Charters Towers](#) had become unsafe after 100 years fully exposed to the elements. My friends at [Wood Research and Development](#) did the assessment and the new tower was built and installed by [Timber Restoration Services](#). Here is a video made by the parish [Bell Tower reconstruction.mp4 - Google Drive](#)

[Something for my Christian Readers](#)

My commentary on the Old Testament Book of Ruth has just been released by the American Publisher Wipf and Stock. It is a story from the late bronze age of a stony-broke foreign widow who marries the richest man in town. It is an old story with themes that are so modern. You would be doing me (and yourself) a great favour by going to your local Christian bookshop and ordering a copy (it is available through Koorong). While there, ask them why aren't they stocking it. Incidentally, the ISBN is 9781666716313.

[Overseas readers can order direct from the publisher.](#)



This really is something special - see what award-winning authors have said about it:

Gary Crew, Professor emeritus of Creative Writing and Literature, University of the Sunshine Coast and four times winner of Australian Children's Book of the Year.

"This is an excellent exposition of the book of Ruth. It is logical, detailed, and readily accessible. I was both astonished and delighted by the research undertaken and how clearly it was expressed."

Stuart Piggin, Director, Centre for the History of Christian Thought and Experience, and author of Australian Christian Book of the Year in 2019 and shortlisted in 2020.

"Most Bible commentaries are so cluttered with technicalities and problems that they leave us with hot heads and cool hearts. Ruth has the reverse effect. It reveals the hidden God and how his loving-kindness is made manifest in a world of need, through respect for and practical care of the poor, foreigners, women, and children. Here a biblical story of consummate artistry receives profound treatment from one who is himself an exceptional storyteller and wordsmith."

Not bad for my first published nontimber book! Incidentally, the story centres around the barley harvest hence the cover image.

Full Day Courses



The Footbridge Purchasing and Inspection Course run by Edgar (Ted) Stubbsfield is intended for those responsible for the specification, purchasing and ongoing maintenance of footbridges. The course will enable participants to:

- 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

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.

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.

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 understanding of the issues relating to designing, supplying and constructing fully weather exposed timber and steel structures including bridges.

Contact Details
Mobile: 0414 770 261
Email: edgarstubbsfield@gmail.com

Footbridge Course



The Coastal Deck Design Course run by Edgar (Ted) Stubbsfield 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:

- 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

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.

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.

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Coastal Deck Course

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](#).

We Can Start CPD Courses Again



Did you know that Wilson Timbers/Outdoor Structures will have me come to your office, subject to the ever-changing regulations, and deliver one or two of my CPD sessions for free? These are serious training times with real learning outcomes. The only condition is that, with travel, we can do it in a day from Gatton in Queensland. Here are the nine courses available:

Topic 1: Timber Preservation

Topic 2: Hardwood Grading

Topic 3: Timber Decks - Designing for Durability

Topic 4: Utilising Small Diameter Hardwood

Topic 5: The Seven Deadly Sins of Timber Design

Topic 6: Timber Joints

Topic 7: Architectural Timber Battens

Topic 8: Timber 101 (Optimally Topics 8 & 9 to be presented together)

Topic 9: Boardwalk Design (Optimally Topics 8 & 9 to be presented together)

[To learn more about these courses visit my website.](#) [Contact Stuart Madill by email to arrange a time](#) or call his mobile 0403 385 707.

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 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

Edgar Stubbersfield

Mail: edgarstubbersfield@gmail.com

Web: www.deckwood.com.au

Phone: 0414770261