

# OUTDOOR STRUCTURES

*Outlasts and outperforms*

## August 2013 Newsletter

Written by Ted Stubbersfield

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Dear Reader

[Riverstone Rise, Boyne Island Rd, Boyne Island](#)

(Not a paid advertisement)



**Client:** Devine Limited

**Landscape Architecture:** Saunders Havill Group Pty Ltd

**Landscape Contractor:** Naturform Building Pty Ltd

**Structural and Civil Engineering:** Covey Associates Pty Ltd Consulting Engineers

**Civil Contractor:** Shadforths Civil Engineering Contractors Pty Ltd

Seen one boardwalk you have seen them all? Not with this remarkable structure that utilises 120x35 Deckwood and our standard tapered deckers to gracefully negotiate a curve.

The boardwalk structure forms part of the landscaped entry sequence to the first stage of Devine's Riverstone Rise project in Gladstone. The boardwalk offers pedestrian access and a shaded viewing platform across the constructed lake. Saunders Havill's landscape design has aimed to use water and landscape features to establish a high level of public amenity and presentation as the benchmark for this master planned community. The lake provides a focal point within the dedicated parkland network but also incorporates water polishing and treatment for stormwater overland flows leaving the site.

Saunders Havill have worked closely with Coveys to resolve structural details in blockwork, steel and timber that are designed for longevity and visual impact. Naturform fabricated all steelwork off site which meant the main final assembly of steel and timber work was completed in approximately two weeks after footings were installed.

For more information about the design aspects of this boardwalk contact: **Glen Challenor**, Senior Landscape Architect / Associate Partner, Saunders Havill Group direct line (07) 3251 9435 email [glenchallenor@saundershavill.com](mailto:glenchallenor@saundershavill.com)

For more information about the construction and how Deckwood performed contact: **Lindsay Toppenberg**, Director, Naturform Pty. Ltd. Ph 0438 649 409 email [lindsay@naturform.com.au](mailto:lindsay@naturform.com.au)

### Swale Drain Bridges



Infrastrucxion make a very robust swale drain pedestrian bridge and many of our readers obviously think so from the quantity we sell. They are also very competitively priced. [Click](#)

[here to be directed to a list of standard sizes on my website](#) The model designation works this way SD = swale drain, 31 (example only, length in decimetres at hold down bolts) 23 (example only, overall length in decimetres of deck board). the overall length of the bridge is about 500mm longer. the bridges overall length works to multiples of 120mm. Call Chris or Ted on 07 54624255 to discuss your swale drain requirements.

### [Feedback on the Sleep Easy sleeper](#)

#### [Unsolicited comment slightly modified for publication](#)



We had some good feedback on our article on sleeper wall problems from Koppers Wood Products. Well on the way to being the solution

Hi Ted,

Agree with your comments about the Sleep easy sleeper – have you seen Koppers Roundback sleeper? – [Click here for the link to the July Newsletter if you missed it](#). these are a premium grade sleeper. Highly durable and ideal as a structural sleeper for two reasons. Firstly they are cut from smaller diameter 175mm perfect rounds and therefore have a smaller

heartwood (heartwood being the impenetrable timber in the centre of the log, which cannot be easily treated with preservatives, and in softwood/pine has low natural durability) content than most other sleepers on the market, and secondly they are supplied from slash/caribbean hybrid species pine sourced from renewable plantations in Queensland.

We have a brochure and retaining wall design literature on them – available at [www.koppers.com.au](http://www.koppers.com.au) – and they are included as an option in our retaining wall design guide (<http://www.koppers.com.au/KW-Technical-Data-Sheets/default.aspx>) . Compared to the price of unsuitable alternatives on the market they a bit more expensive, which has impeded market distribution as we would have liked, but as you say doing the job right with quality product the first time will always be the most cost effective choice particularly when it comes to critical end-use applications such as retaining walls.

Consumers should be made aware at ‘point of sale’ of the grade of product they are considering – most of the sales people ‘selling’ them also don’t know the risks! Most of the pine sleepers on the market are cut from high heartwood content logs (eg radiata pine) on the market should be marketed as ‘non-structural grade’ – restricted from ‘critical end use’ retaining walls such as anything over a certain height such as say 900mm and anything on a property boundary – they are really only good for ‘vegie patch’ / garden edges. Incising would help – but needs to be a high density incising system, pre-treatment steam conditioning also works well for treatment penetration but strength is compromised, so agree characteristic strength proof testing would help.

Kind regards

Damian McCue

**Koppers Wood Products Pty Ltd**

Phone: (02) 9900 6175

Mobile: (0418) 615 385

Fax: (02) 9900 6122

Email: [damian\\_mccue@koppers.com.au](mailto:damian_mccue@koppers.com.au)

Did you see the comment about impenetrable heart? You will find this explained in my Timber Preservation Guide. Prefer Hardwood? Talk to Chris on 07 54624255

[Grantham Community Centre Completed](#)



Bill Mason (R), Chairman of the Grantham Redevelopment Project, Governor of Queensland, Ms Penelope Wensley AC, Errol Wildman (L)

View of floor in the reception area of the old butter factory. A second area suitable for emergency accommodation is behind the left wall.

Image courtesy of Graham Christensen

Image courtesy of Lockyer Valley Regional Council

The community centre at Grantham was officially opened recently. Most of my readers will remember that the township, just a short distance from our business, was hit by an inland tsunami in 2011 with a number of fatalities. Should the community ever be devastated again there will be a refuge and commercial kitchen for the residents. This was a \$2M project of Toowoomba South Rotary Club. The floor is stunning, why would you ever want carpet. It is made from white cypress with bands of red ironbark. We dried and processed the ironbark for my friends Errol and Janna Wildman. They had prepared it for their own new home but gave it instead to the restoration project. Philanthropy, not a big thing in corporate Australia but is not totally dead. There is still a shortfall and the Rotarians can still use your donations. Contact Errol on 0428 583 008

**[Links to previous newsletters about Grantham and its reconstruction](#)**

Update on Grantham reconstruction

[http://www.outdoorstructures.com.au/pdf/osa\\_newsletter\\_10\\_11.pdf](http://www.outdoorstructures.com.au/pdf/osa_newsletter_10_11.pdf)

Post Flood development of Grantham

[http://www.outdoorstructures.com.au/pdf/osa\\_newsletter\\_01\\_12.pdf](http://www.outdoorstructures.com.au/pdf/osa_newsletter_01_12.pdf)

New park with OSA products

[http://www.outdoorstructures.com.au/pdf/osa\\_newsletter\\_08\\_12.pdf](http://www.outdoorstructures.com.au/pdf/osa_newsletter_08_12.pdf)

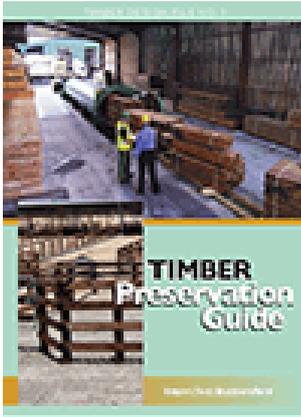
Community Centre

[http://www.outdoorstructures.com.au/pdf/osa\\_newsletter\\_01\\_13.pdf](http://www.outdoorstructures.com.au/pdf/osa_newsletter_01_13.pdf)

We had been working on a new profile for tongue and groove flooring that solved the issues with that product which is virtually unchanged after hundreds of years. Unfortunately we were hung out to dry by a couple of solicitors over an ambiguity in the Australian standard for grading dressed seasoned timber so I thought, I do not have to make flooring for a living

so the idea never progressed. It is a pity as there was a lot of room for improvement with solid timber flooring.

## [Technical Guides Written By Ted](#)



### [Table of contents](#)

There are four ways to purchase the Timber Preservation Guide.

#### **Using a Credit Card:**

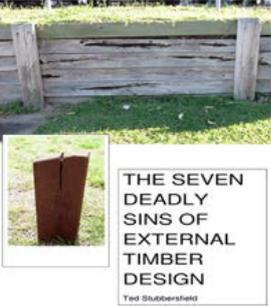
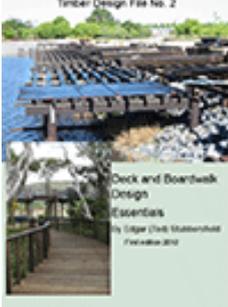
1. As a [Amazon Kindle eBook](#) for US\$33.00
2. As a [Amazon Paperback](#) for US\$33.00 + postage from US.
3. Not a member of Amazon? Purchase from [Createspace Estore](#) for US\$33.00 + postage from US.

#### **Direct Deposit:**

4. Paperback posted from Australia for quicker delivery \$37.50 + \$10.00 Express Postage (within Australia). Email [edgarstubbensfield@gmail.com](mailto:edgarstubbensfield@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 has had its final edit and is awaiting the professional formatting. I am fairly well advanced on "Understanding AS2082."

<a href="#">The 7 Deadly Sins of Timber Design</a>	<a href="#">Deck and Boardwalk Design Essentials</a>
	

<a href="#">Table of contents</a>	<a href="#">Table of Contents</a>
<a href="#">Order Guide</a>	<a href="#">Order Guide</a>

All our guides can be seen at [http://www.outdoorstructures.com.au/timber\\_guides.php](http://www.outdoorstructures.com.au/timber_guides.php)

### [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. to ensure you receive good performance from your next timber project.

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](mailto: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](#)

### **Infrastrucxion Pty Ltd**

E-Mail: [Chris@Infrastrucxion.com](mailto:Chris@Infrastrucxion.com)  
 Web:[www.outdoorstructures.com.au](http://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

[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](mailto:dant.tingley@gmail.com)