

December 2011 Newsletter

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What Species is That?

It is relatively easy to tell what species timber you are dealing with when you see a standing tree with its bark and leaves but sawn timber is a totally different matter.

When freshly sawn there can be very little colour difference separating species with very different performances and there is nothing at all when it has all turned a uniform silver grey. How do you tell what species you are dealing with? A quick guide is the burnt splinter test.

While timber may burn, each species has a characteristic way of burning. The image above shows how effective and simple this test is. The table below lists the burning splinter tests for a number of species.



What species is that?

RESULTS OF BURNT SPLINTER TESTS				
IRON BARK		TALLOWWOOD		BLACKBUTT
SPOTTED GUM		FOREST RED GUM		

Burning splinter test

Species:	Results of Burning splinter tests
Spotted Gum	Burns to a complete white ash
Tallowwood	Charcoal tip with grey or white ash
Forest Red Gum	Burns slowly to charcoal with no ash
Blackbutt	Burns to charcoal with no ash
Red Iron Bark (narrow leaf)	<i>Generally</i> Burns to Charcoal

Source: DPI Forest Service Timber Species Notes 14, 16, 37, 9, 57

The word *generally* in front of the iron bark results indicates that the test is not foolproof. Our sample of Iron bark burnt almost like spotted gum but it remains a useful test. To be absolutely certain what species you are dealing with you can engage the services of what was the old Forestry Department in Queensland which will identify samples. To avail the services of their botanists simply send a matchbox sized sample to Dept of Employment, Economic Development and Innovation, 50 Evans Rd Salisbury 4107. The fee is \$181.45 inc GST. The phone number is 07 3274 1849.

Those who are more adventurous could carefully prepare a sample of the end grain and compare it to the pictures of end grains of Australian hardwoods on the North Carolina State University Inwood database

Links

North Carolina State University Inwood database

<http://insidewood.lib.ncsu.edu>

A Job I Could Have Done Better

I recently drove past one of my early boardwalks and even from a distance I was reminded again that I could have done a much better job. The boardwalk was all certified and remains structurally sound and it is only a matter of the handrail aesthetics. The condition of the timber used in handrail was fine, it was just that every piece had taken a set downwards.

This was despite the handrail being our Custom Rail 1 (ex 125x100) and the span only 2.4m! This unfortunate situation occurred soon after the boardwalk was completed. The visual effect is compounded as it is an unbroken line and eye tends to magnify the effect of the set. When I look at the image above and reflect on what my eye saw, it appeared much worse.

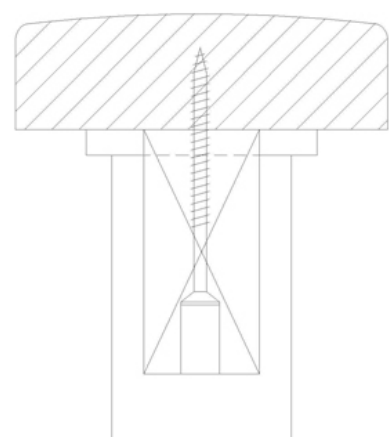
After first seeing what had happened we changed the way we design and supply our handrails. For this model boardwalk we now use our handrail model VH14544 (a horizontal rail with a domed top) extending over 2 spans and then secure a 100x50 on edge underneath as a stiffener. This has proved stable.

We generally don't supply handrails without a centre support. This means that handrails are generally 4.2m or longer assuming a 2.0m centre on posts. If there is an unequal number of spans, the last rail has to span 3 posts. Alternatively an intermediate post rectifies matters.

Basically most timber handrails should always have a centre support. It cannot always be achieved and we have observed that it is unnecessary with VH14544 (a vertical rail) 100x100 and 125x75 on edge. When using the latter two we still recommend breaking the line at the post.



Each handrail has taken a set downward



Later Versions use a multiple span with a stiffener under

Links

Commercial Barrier Guide

<http://www.outdoorstructures.com.au/pdf/commercial-barrier-guide-10b.pdf>

Boardwalk Design Guide

<http://www.outdoorstructures.com.au/pdf/boardwalk-design-guide-3.pdf>



Breaking the line of sight at a posts (rail size 125x75)

A Job I Could Not Have Done Much Better

Sorry, this will have to wait till next month when I can get detailed images. The Grantham redevelopment has allowed those affected by the inland tsunami that devastated the Lockyer Valley to swap low lying land for elevated blocks is now officially open.

After only 11 months the first residents moved into a new home. In this time the land purchase, planning approval, design and construction has been completed which is truly amazing considering normal timelines.

The timber work was extensive and all from OSA. It also is truly amazing. Next months pictures will be great.



Grantham redevelopment park shelter and seat



Grantham Redevelopment public orchard and entry



Grantham Redevelopment park area

Links

Background to Grantham Development

http://www.outdoorstructures.com.au/pdf/osa_newsletter_10_11.pdf

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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 2010 Newsletter](#). Refer to the May OSA Newsletter when assessing the suitability of quotes.

Steel Bridge Quotation Request Form

http://www.outdoorstructures.com.au/bridge_request.php?Mode=st

Timber Bridge Quotation Request Form

http://www.outdoorstructures.com.au/bridge_request.php

More information:

If you have timber road/rail/heritage bridge issues, we suggest you talk to:

Mr. Dan Tingley
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Wood Research and Development
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