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A Reminder About Pine



The two images above are from a recent consultancy where I was asked to advise what was happening to 13 year old pine that was only being held together by the paint. The thing is, it was not all decaying and the post and beam next to failed members might be perfectly sound. When the correct level of preservative chemical is used, and appropriate building practices are also used, timber treatments work well but they only work on sapwood, whether it be pine or hardwood. The failed pieces simply had insufficient sapwood and should never have been sold as "treated". Untreatable heartwood should not make up more than 20% of the cross section. How do you know how much preservative is present when it is pink primed and especially if a clear LOSP is used?

If I had a project which had to succeed, I would require the pine to be preconditioned, incised to a

depth of 10 mm and treated preferably to H4. The incising process allows the chemicals to penetrate the heartwood and the extra chemical cost for H4 is not significant when weighed against the cost of failure. Unfortunately, no one is supplying timber to this specification and there are only two incisors in the country. Until such material is available, I would recommend that you use royal species hardwood over pine for external timber structures.

My guide will assist you to understand more about timber preservation.



Choosing Timber by Colour - A Lesson from Japan

Specifying timber to achieve the colour you want can lead to very unsatisfactory results. Let me explain. In the past I sent a lot of spotted gum to Japan and was proud to be part of projects with aethetics, the likes of which I had not seen in Australia. The landscape architects were fearless in spending their client's money but in return delivered projects that were outstanding. The was one criticism I was constantly receiving was that my spotted gum was not red!

The Japanese love the colour red and because of that, job after job was going to Jarrah from Western Australia and for no other reason than it was red. Then the failures started. An example is the the Takashimaya Boardwalk project in Shinjuku, Tokyo illustrated above (since largely demolished and replaced with plastic). The boards were placed without gaps and despite shrinkage the gaps filled up causing water to form puddles (some quite large) on the decking on rainy days. (This is not a problem with Deckwood) Also, at times, poorer quality Jarrah was used. It all but killed the export of Australian hardwood to Japan.

Now for many Japanese specifiers, all Australian timbers were labelled with the same brush as jarrah. I have featured the work of Kurata Co a number of times, a Japanese company specialising is well built spotted gum structures in Japan. Kurata Co did not want to hear the word Jarrah associated with Eucalypts at all since it had such a bad image in Japan — its poor performance exacerbated by the poor way it was installed. In the end a once lucrative market has had to be slowly re-established.

On dressed timber, Tanacoat with a suitable stain goes part way towards getting the colour you want

Here is link to a Kurata Co project

Here is a link to a newsletter showing how to avoid end decay seen above.

City of Gold Coast Builds an Outstanding Deck



Asset Owner: City Of Gold Coast Location: Southport Broadwater Parklands Engineers: Aecom Prime Contractor: Glascott Civil Carpenter: Top Knot Carpentry Senior timber Consultant: Ted Stubbersfield The City of Gold Coast wanted to build a high quality, trouble free deck in one of their premier parks, Broadwater Parklands at Southport. The deck is intended to play a part in the upcoming Commonwealth Games but they were apprehensive as, like many authorities, they were having difficulty with the great variability of timber decks and boardwalks. Unlike some others, however, the City was also aware that alternatives to timber had as many if not more problems. I was asked by Major Projects, Economic Development and Major Projects Directorate if I could assist the City with their problem.

I suggested that they inspect the deck we detailed and supplied at <u>Calypso Bay at Jacobs Well</u> as you can't build a better deck than that and, being well over ten years old, they could see how well a deck should age. It was told that, despite the deck being 7.2 metres wide and 450 metres long, there was only one board that was commented on. After establishing timber can meet the City's expectation, I followed that with CPD sessions on timber design to raise awareness of external timber issues and then a number of my technical guides were purchased.

The specification for Deckwood was followed along the need for wide joists and designing the join. Critically, on my advice they ensured that every piece of timber was inspected for compliance to grade. We assisted at every stage of this project which involved looking at the plans (the Devil is in the detail), inspecting construction, grading some of the hardwood and giving a final inspection. Most importantly, I believe that, with a more complete understanding of the issues, knowing where to obtain good design information and having checklists, this standard of timber structure is achievable every time going on into the future. As this project demonstrates, having knowledge of how timber operates in an outdoor environment, employing good design, quality materials and quality construction processes ensures a successful outcome.

Top marks to the City of Gold Coast for being proactive about raising standards. It is worth driving to the site to have a good look. For more information about this outstanding project contact <u>Jeremy</u> <u>Hall</u>, Principal Project Officer for the deck.

What Decking Profile is That



One of my readers asked me what the profile was in last month's newsletter about deck maintenance. It is very common in the UK and is used as an anti slip product. I looked at it years ago and considered it would be unsuitable for Australian conditions as the top is dressed and moisture will sit in the grooves. These two factors lead to premature degrade.

I my experience the best profile for external decking is Deckwood as it has a rough sawn face for durability and slip resistance, and a cross section designed to give maximum air flow.



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