## **Ted's News**

### **April 2016**

Recycled Timber - Political Correctness?

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Dear Reader

#### Recycled Timber - Political Correctness?

I am afraid I have been around for too long because I am getting cynical in my old age, especially when it comes to fashions in timber specification. Take treated pine, we went through a period when political correctness drove the specification of treated pine for boardwalks in Queensland. But being politically correct did not make it correct and now the large majority of these have been replaced with hardwood. Now as an example of political correctness in specifying, we are seeing plastic decking used in commercial applications, a practice, to me, is beyond comprehension and specifying recycled timber as a throwaway line without working through the issues of such a request.



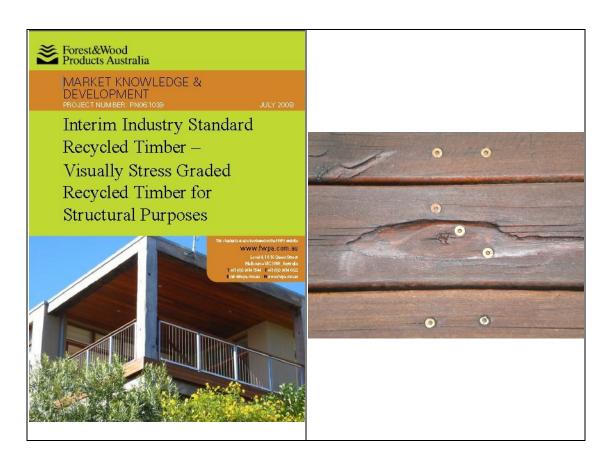
Don't misunderstand me, there is certainly a place for recycled timber. Consider the image above (courtesy of Guymer Bailey Architects) where the recycled timber isn't really doing anything structural and for what it is doing it is well oversized. You could look at this and quite rightly have a case of the warm and fuzzies, which of course it was intended to do and does so very successfully. But while some timber applications just have to look good, other timber has to perform well and/or have very different aesthetic requirements.



The poor owner of a home in residential subdivision in Brisbane had a rude shock when his timber driveway failed. It was built from recycled timber and would have been very expensive but the timber was worn out before a single tyre passed over it. A situation like this needs the performance, species and grades that we associate with new timber. It will involve limiting the amount of heart in sawn members.



The bollard on the left has a starburst split (remember how much end split you can have from last month's newsletter) and so is of an unacceptable quality for sale as new timber. Despite this someone probably paid twice the going rate for this piece compared with new high quality timber. Now, the heart could easily have been tamed with expansion grooves. The bollard on the right is new timber supplied and processed by me. Its relevance to the discussion is that it was the reply to a call for help. The original material chosen for this project was recycled Durability 1 hardwood. It was supplied in turpentine (old marine piles) and in a couple of months had shrunk 10% and was of extremely poor quality. The expansion joint is on the water side. Regrettably there is no image of the offending material. Remember, if it is cut from a round piece it is going to behave like unseasoned timber because the the original piece was too large to season.



There is a standard for recycled structural timber which is suitable for the types of applications that it illustrates, oversize decorative conversation pieces having some structural load. However you need to keep in mind that the standards for visually grading sawn hardwood and pine recognize four different grades, the structural recycled standard only recognizes two grades - Recycled Grade 1 and Recycled Grade 2. The better grade, Recycled Grade 1, is basically the same as Structural Grade 2 in AS2082 (or 60% of the strength of defect free timber). This is too low a grade for decking and external battens and cannot give you the required high quality weather resisting face and edge. This is particularly the case with smaller pieces. Take the piece of recycled decking on the right, that defect will slice a foot open. No amount of green points can make up for the injury this can cause.

Things like decking and architectural battens need a specification no less demanding than that of new timber. For example, a specification for a recycled batten should be as follows - the top and weather side should be graded to Structural Grade One; the back and bottom should be graded to a minimum of Structural Grade 2. This is irrespective of species. So use recycled by all means but please be aware of the intricacy involved and do not be persuaded by slick talking salesmen.

#### Large Timber Structures Followup

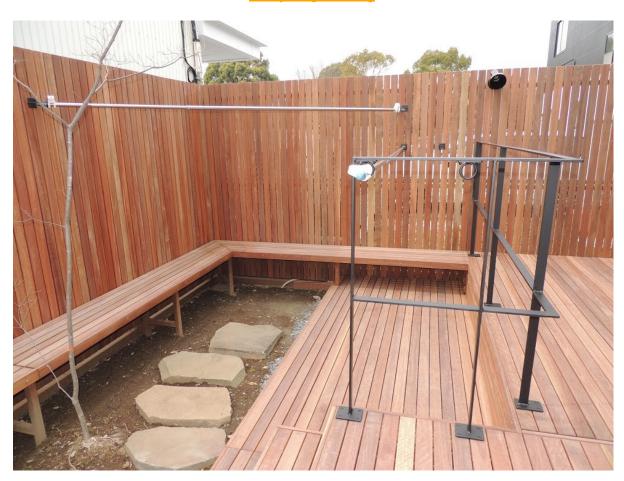


There was a lot of positive feedback about the two newsletters on large timber structures. Did you miss them? Here are the links - March Newsletter April Special Edition

Newsletter. What created the most interest was the Tillamook blimp hangar covering 7 acres. I found the plans to a sister hangar in the library of congress. It is worth a look. If you are still of the view that timber is yesterday's material look at the proposed timber skyscraper for London. Will it get built, probably not, but the point is that while we are agonising about eight story

buildings here in Australia, people overseas are already thinking of 80 story buildings!

# **Everything Fencing**





I received some images of two very amazing fences built by our Japanese friends at Kurata Co using spotted gum. I have included two of them above. This is how good fencing and workmanship can be. I have used another of their fences as a case history in my fencing book. Now I am supposing you are thinking, what do I need a book on fencing for, why do i need to spend \$33? Well follow this link to an extract from the book showing an Australian residential estate and compare it to this work. It is money well spent just to get a material specification.



On the subject of fences, we had a wind storm pass through a narrow area of my Lockyer Valley a few weeks back and fences were very badly hit, particularly the Colorbond style ones. Some timber fences did not fare very well either, particularly when the rails were checked into the posts for the full depth. Checking posts into rails is such common practice that I can't imagine we will ever be able to stop it but on these large blocks it is a pointless exercise trying to economise on space. Just screwing the rails to the post would be a much better option especially with stainless batten screws.