# Ted's News September 2022

Lessons in Equilibrium Moisture Content of Timber Presentation on Timber in Playgrounds Free Update to Grading Hardwood Guide Footbridge and Coastal Decks Full Day Course Signup for One of my Ten CPD Courses Contact Me

Lessons in Equilibrium Moisture Content of Timber



Surprisingly, the top three web searches that bring the most people to my website are not boardwalk design or boardwalk construction but are all related to the equilibrium moisture content of timber. This is all the more surprising as I advocate using unseasoned timber for many applications. I am critical of specifiers that just say KD about any size e.g., 200x200 KD without even asking if it is available. Commercially you can only dry up to 50/55 mm thick.

Many people think that once timber has been kiln-dried that is the end of the matter, and it can be. However, consider the image above. The timber was laid with a gap but because it was close to the ground, without a waterproof membrane, and with no airflow, the moisture on the underside had risen from the 10-12% as supplied to over 20%. Rather than repeat what is on my website, here is a link to a very good article by Andy McNaught from what was the old Queensland Forestry Department. (It is hard to keep up with departmental name changes now.)

## Presentation on Timber in Playgrounds



On the ninth of September, I was a speaker at the Sports and Play Industry Association (SAPIA) national conference in Brisbane. My subject was *Timber in Playgrounds*. I advised the delegates that if I could do no more than put the fear of the Good Lord into them about using timber in playgrounds I have done well. I stressed that if you were not prepared to do it well then don't use timber, (though it is not hard to do well.) I said that everyone is an expert till it goes wrong and that the standard, in its references to timber, is dangerous. After all, <u>why spend \$55 on a guide to learn best practices</u> when playgrounds are a litigation nightmare?

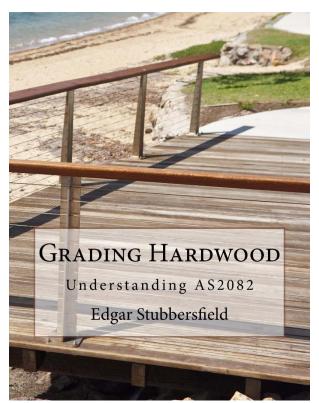


The image above is of a Dhow made from spotted gum and installed at the National Museum of Qatar. It was built in Brisbane by UAP. That is how well they can be done, they have both the aesthetics and the detailing correct.

<u>Here is a link to the presentation</u> Here is a link to purchase the guide.

The presentation only warns, but could be developed into a CPD session that explains how to do it safely. Is there any interest?

### Free upgrade to Grading Hardwood Guide



My guide, <u>Grading Hardwood: Understanding</u> <u>AS2082</u> was recently updated to include a comparison to AS3818.7. AS2082 Timber -Hardwood - Visually stress-graded for structural purposes is a very useful code for determining the strength of a piece of timber when milled. Use it undercover in a roof and you need no more as the timber does not deteriorate unless there is a leak. Weather exposed timber is an entirely different matter where I advocate that a specification should describe what the timber looks like as well as its species.

AS3818.7 Timber - Heavy structural products -Visually graded Large cross-section sawn hardwood engineering timbers does just this. It describes what a piece of timber looks like to perform adequately in a structural and an appearance situation and then allocates an F

grade depending on species, i.e., the reverse process of AS2082. Unfortunately, it is only meant for sizes over 200x75 and AS2082 is the standard called up in the National Construction Code.

If you have purchased a copy in the past, contact me for an upgrade. If you haven't purchased a copy, <u>you really should purchase it</u> along with the rest.

## **Full-Day Courses**



Don't embark on any major footbridge or coastal deck project before you do my fullday courses. These are serious courses run through BCRC, the durability experts, 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.

#### <u>Click here for the footbridge course brochure</u> <u>Click here for the coastal decks brochure</u>

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 <u>email me</u>.

## Signup for one of my ten CPD Courses



Learn from my four decades of experience with these CPD training sessions, some of which are available in eClassroom.

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	eClassroom link
Topic 6	Timber Joints	
Topic 7	Architectural Timber Battens	eClassroom link
Topic 8	Timber 101	eClassroom link
Topic 9	Boardwalk Design (recommend delivered with Timber 101)	
Topic 10	Timber Handrail Design	

#### Click here to learn more about these courses

Are you aware that <u>Wilson Timbers/Outdoor Structures</u>, who I am affiliated with and are suppliers of quality timber, will have me come to your office (in person or remotely) and deliver one or two of my CPD sessions for free? The only condition for in person presentations is that, with travel, we can do it in a day from Brisbane in Queensland. <u>Contact Stuart Madill by email to arrange a time</u> or call his mobile 0403 385 707.

# Need a Timber Consultant or Expert Witness?

I have over 45 years of 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 to how to rectify issues.

**Trainer and Presenter –** I can provide tailored training to meet your CPD needs and also have experience at lecturing to universities and presenting at conferences.

Please note as I am now employed as 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 <u>www.bcrc.com.au</u> or <u>download their capability</u> <u>brochure here.</u>



