Ted's News
February 2020

LVL and Common Sense
Feedback on "A Lesson From the Recent Bushfires"
A Good Use of Recycled Timber
Full Day Courses
Timber Resources

Timber Consultant

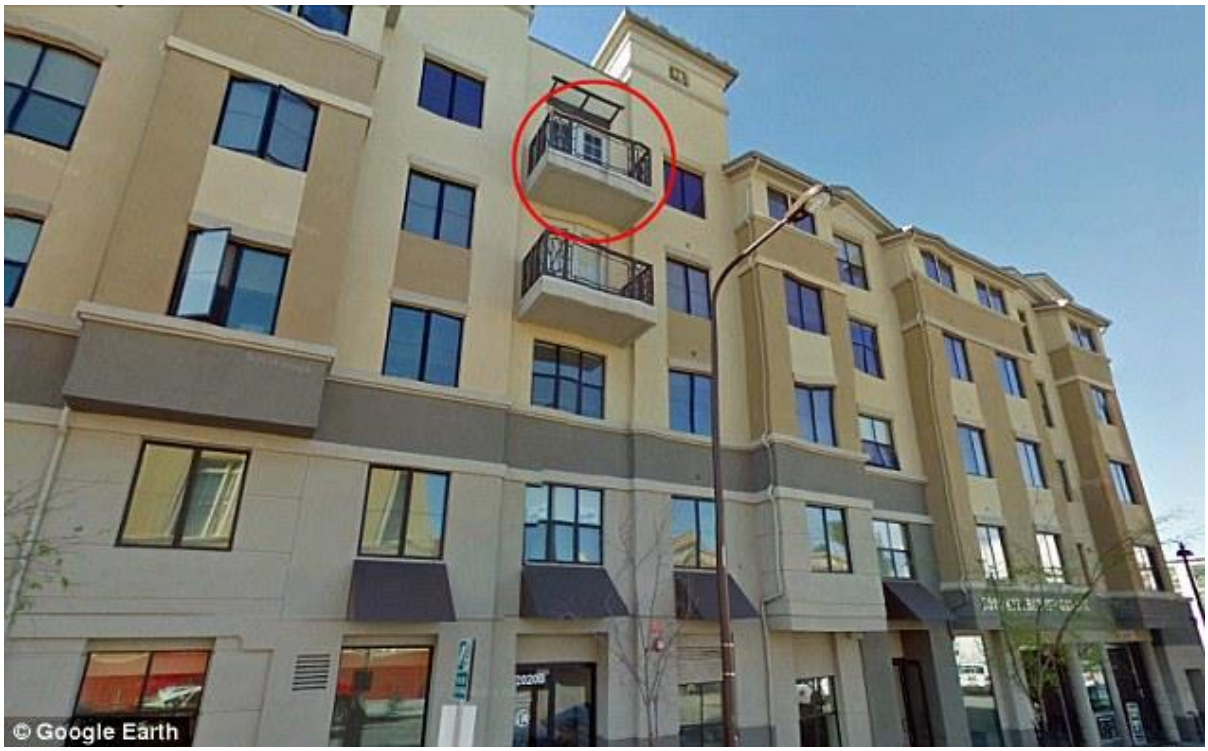
LVL's and Common Sense

These three images are from a consultancy last year where I looked at the timber decking on a private residence. I had a look underneath and what I saw was a disappointment but I can't say I was shocked. Look at the image directly above, the screws missed the LVL joist and when you see that level of care (not even a dampcourse) you need to take a very close look.

The image on the top row shows a row of LVL joists and they are all green indicating a H3 treatment but one joist, the one I have shown the close up of, has no colouration or any branding what so

ever. It looks untreated and it probably is because there is nothing to say otherwise. They are secured with galvanised hangers (should be stainless) onto an LVL branded H2. The application is, of course, H3. This is not going to succeed but to be fair to the manufacturer, it is not his fault if material is used outside of its clearly branded (or otherwise) use category and when his technical guides are not followed. At least when it does fail it probably won't hurt anyone too seriously

Far be it for me to tell you not to use LVL joists on a verandah, but a spotted gum joist takes a lot of beating. You just have to eat an extra Wheet-Bix for breakfast. If you see your joists branded H2, call in a consultant and get them tested to ensure they have enough chemical. I can do it as can Tim Evans 0417 726 741



But let's look at another case where, sadly, six young people were killed and a further seven were injured on a balcony collapse at Berkeley in the US. Unfortunately, all the images I could find were copyright but if you do a web image search for "Berkeley balcony collapse" you will see some shocking images. The tragedy occurred when a small, fourteen-year-old balcony, built on untreated LVL joists cantilevered from the building experienced decay and the whole balcony with students on it fell floor stories to the ground. They were specified treated but it appeared that nobody checked. I have some information I can share privately with permission.

So LVL's used appropriately are a good product but you have to have your wits about you and if you are specifying them do the necessary checks, just as you should any other timber product.

Feedback on lesson from the Recent Bushfires

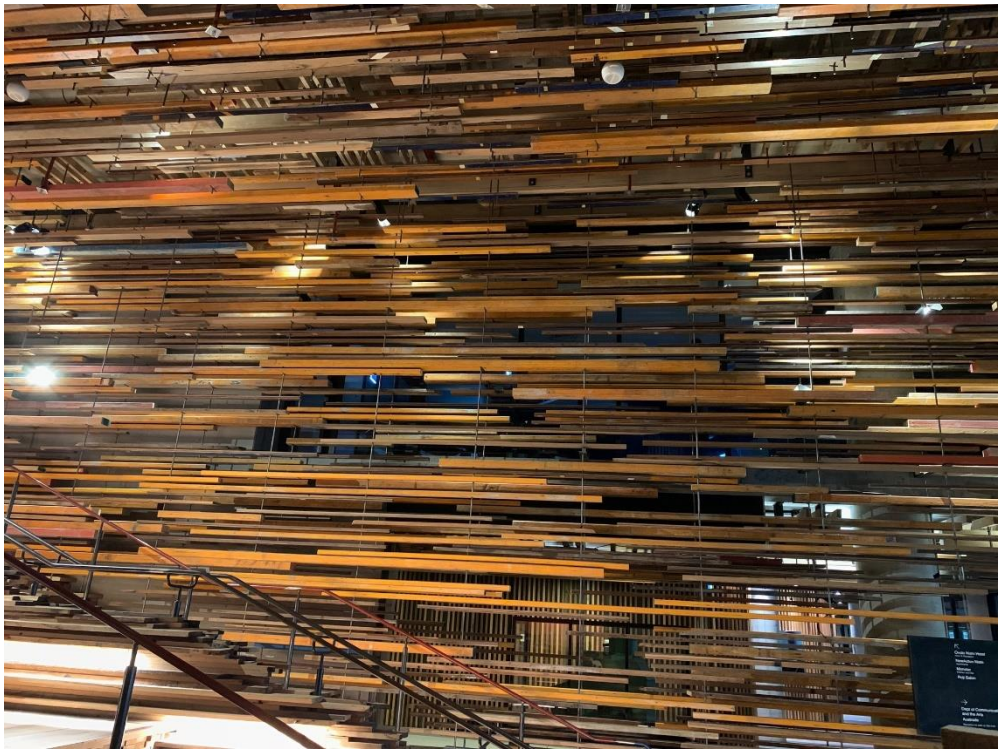
Last month I included a different image of fire damage to the fences on property our family sawmill once owned at Ravensbourne near Toowoomba. It prompted an article about CCA and fire and how to deal with it. Click here for the article. That, in turn, prompted the following response from Professor Philip Evans, BC Leadership Chair of the Faculty of Forestry, Department of Wood Science at The University of British Columbia.

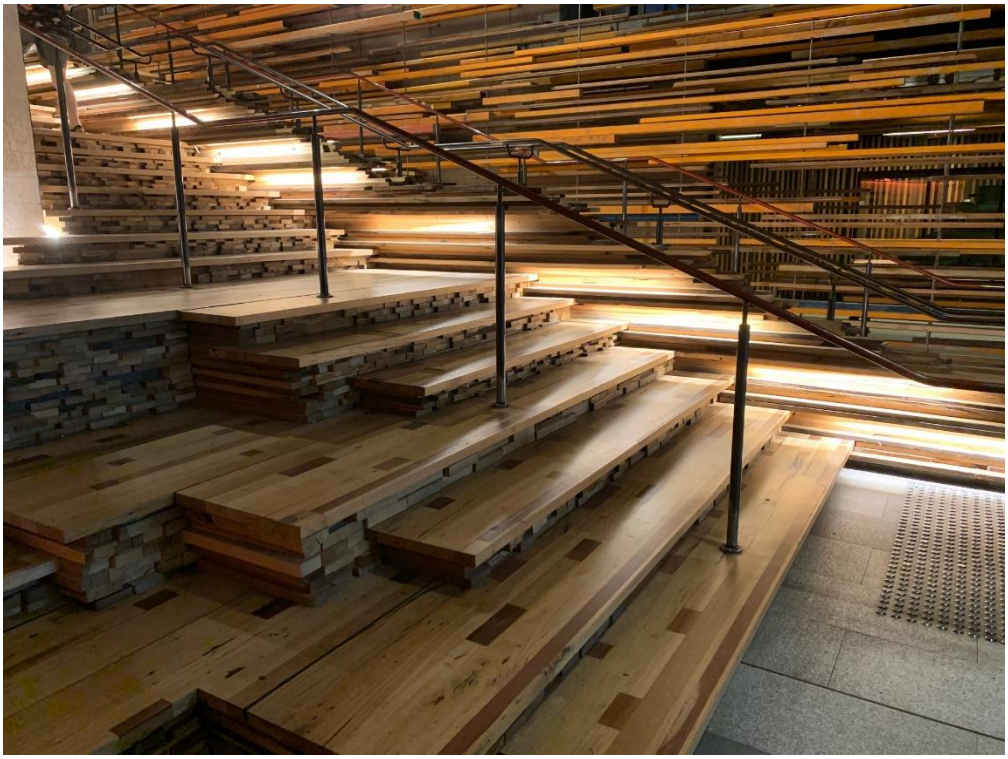
I saw the piece you wrote about smouldering CCA-treated fence posts in your latest newsletter. I did some work a very long time ago on fire resistance of fence posts. We confirmed earlier findings from CSIRO that CCA treated posts smoulder to destruction after a simulated grass fire. CCA-modified with oil was a little better. Creosote treated fence posts were quite a lot better. We noted a significant effect of fuel load on fire resistance of the fence posts. [Ted here, the owners at Ravensbourne were unable to get a permit to undertake a hazard reduction burn for 3 years]. The work was funded by Koppers (the old Koppers Australia).

CSIRO developed a phosphorous fire retardant additive for CCA. It worked but never took off. I heard that products treated with it were less decay resistant than those treated with CCA. Please find attached the small technical note I wrote on our experiment and a few pictures of our test, which you are welcome to use.

Report on burning CCA posts
Images of burning posts

A Good Use of Recycled Timber





When recently in Canberra, I saw this wall and set of steps at a cinema and I thought what a very appropriate use of recycled timber this was. There is no UV, or moisture and the poorer quality it

is the more interesting it actually is. Where I see recycled timber going wrong is when it is used in applications when it actually has to perform such as decking. There is a discussion of this in my book grading hardwood. It is too easy just to say "recycled" without understanding the implications of using tired and worn out timber in places it should not go.

Full Day Courses

I have been collecting images and case studies of good and bad practice for over 20 years and learning from those images. I now have an unmatched library of do's and don'ts of external timber use. This vast collection of images allow me to clearly explain design issues in my two full day courses, one deals with footbridges and the other with coastal decks. These are incredible resources going into the close attention to detail that is required for a weather exposed timber bridge or deck to succeed.

These are serious courses 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.

Click here for footbridge course brochure

Click here for coastal decks brochure

Call me to discuss you 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 email me.

Need a Timber Consultant or Expert Witness?

I have over 40 years' 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.

Please note as I am now employed 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 www.bcrc.com.au

Edgar Stubbersfield
Mail: edgarstubbersfield@gmail.com
Web:www.deckwood.com.au
Phone: 0414770261