

## February 2015 Newsletter

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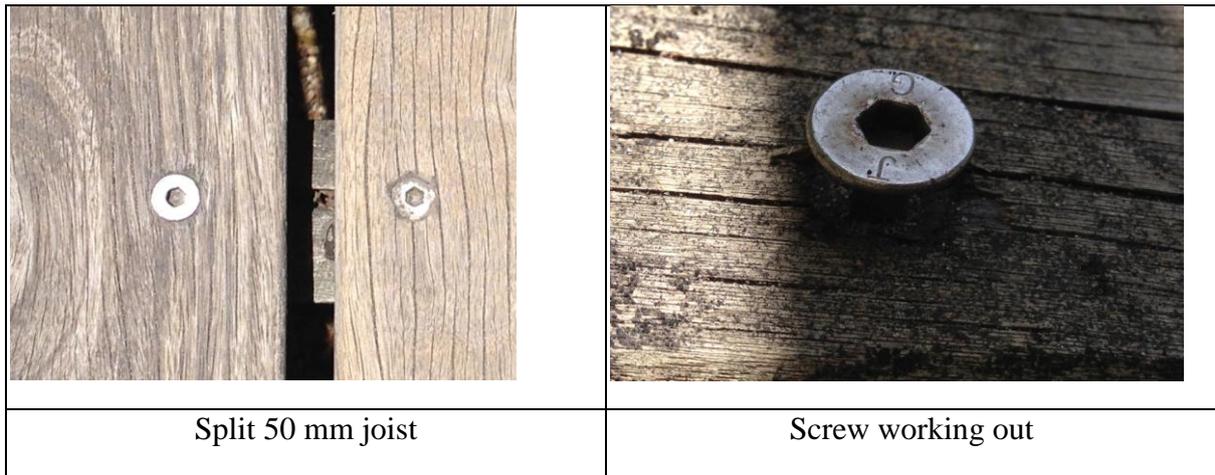
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### 3D Printing Explained in 60 Seconds

As many readers know I am excited about the potential for 3D printing. Dr Jennifer Loy has sent me a link to her 60 second introduction to 3D printing to share with you. [Here is the link](#) It is going to be an everyday part of your profession at least for my younger readers. [Click here for a back issue dealing with 3D printing showing bollard tops.](#) [This link has advice from Dr Jennifer on how to get started on 3d printing.](#) Her contact details are in the back issues.

### 50 mm Joists - A Reminder



Following a recent consultancy involving a structure with 14# screws and 50 mm joists it is prudent to raise the subject of narrow joists again. My guides are very clear - If you are face fixing Deckwood it goes on a 75 mm joist, the screws are in a staggered alignment and fully predrilled. No ifs but or maybes. Still I see people trying to re-invent the wheel and substitute 50 mm with a case just last month. If 50 mm was suitable we would have said so. It not that the narrower joist is not strong enough it is just that they do not work. The screws are in a straight line and so split the joist.

In the left hand images above taken at a boardwalk that is about 11 years old you can see how badly split the joist is. You will never fit another deck on it as internal decay will have started. The right hand image shows a screw in the same deck that is coming out (not clear -

granted but trust me). The boardwalk has to be regularly inspected for these raised screws which are replaced with longer screws to avoid trip hazards. The cost of a trip and fall insurance claim causes the expense of an upgrade to a 75 mm joist to pale into insignificance.

But why lay out your joists at 450 mm like a domestic deck when the decking will normally span at least 600 mm? Use less joists with a wider spacing and the impact at construction is not significant. Alternately, use 50 mm and fasten from underneath (which is probably better).

### **Timber Induction Course eligible for CPD Points**

The guidelines for Engineers Australia and the Board of Architects Queensland allow me to award CPD points for the induction course or individual presentations. The same goes for landscape architects. These are available to deliver at your office or university. Ring me for a quote on 0414 770261

*Timber Preservation.*

*Hardwood Grading.*

*Timber Decks – Designing for Durability,*

*Utilising Small Diameter Hardwood.*

*The Seven Deadly Sins of Timber Design.*

and a new one *Joints.*

### **A Special Note for my Baptist Readers (and Historians)**



I have recently edited some documents for some friends and put them in book format. These documents cover the journey in the 1870's from Hamburg to Brisbane and then from Brisbane to the "howling wilderness" of Kalbar in Queensland by the Rev, Herman Windolf. The journals are fascinating reading and the emigration Museum in Hamburg couldn't believe their good fortune when they received a copy. Herman was the first German Baptist pastor to come to Queensland. The struggles and heartbreaks of our pioneers and their fortitude is beyond my comprehension. The Queensland State Library was a brilliant source of images - all free. [The book can be purchased from Amazon](#)