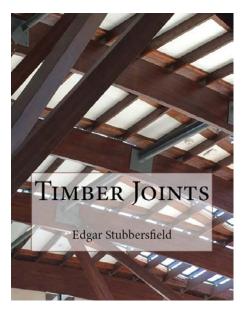
Ted's News March 2017

New Book on Timber Joints All but Complete <u>A Decent Garden Wall</u> <u>How Long Will a Timber Deck Last?</u> <u>Stump Caps</u> <u>Case History - RothoBlass Headquarters - Italy</u> <u>Continuing Professional Development</u> <u>Newsletters 2014-16</u> <u>Timber Resources</u> <u>Timber Consultant</u>

New Book On Timber Joints All But Complete



Apart from two images where the copyright is alluding me, my book on timber joints is complete. Despite those two images I am offering it for sale now particularly as it contains a very useful section which guides you in the selection of stainless or galvanised fasteners. Each chapter has all been checked by experts in the field. Price \$50.

A friend wrote back after reading the relevant chapter and said "I have read, with interest, the extract from the book. The references to suppliers of special screws and wood rivets is useful.In particular, I have identified a screw by Rothoblaas suitable for the external metal gussets that I

am designing to repair a 740 x115mm laminated beam portal frame in Brisbane."



A Decent Garden Wall

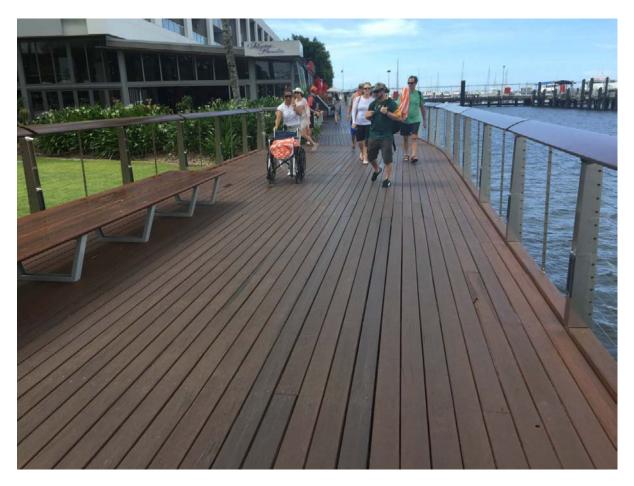
I recently had a phone call from another consultant looking for a picture of a decent garden wall to illustrate a guide he was writing on the subject. He was like me, having plenty of images of "dodgy" work but a dearth of success stories. I really had to think, but the answer was staring me in the face, my own garden wall. I followed the Timber Queensland guidelines for fences and garden walls and it worked. It is not rocket science. My garden wall which also incorporates a fence was built c. 2000 and the sleepers, which predate 1992, were simply reused from an earlier wall. The posts are F17 ironbark, heart free, from Muckerts Sawmill in Laidley. They are 900 mm in the ground and are set in no fines concrete. There is no decay. The poor fencing contractor had never heard of no fines concrete or used timber of that quality (and he is probably the lowest tenderer for your next job). The rails are spotted gum (I think). I knew what I needed, I knew where to get it, I was not afraid to pay what it cost and I did not let the contractor purchase the material. All I would do differently now is use stainless steel fasteners.

You are not likely to have that control for your garden wall. In last July's newsletter I suggested that you are probably better of with concrete. <u>Here is the link.</u>

Because it is also difficult to produce timber fencing of consistent quality, and it would look dreadful in concrete, I wrote the timber fencing guide to help you bring them in successfully, time after time. <u>Here is the link.</u> It might even inspire you to deliver work like that by my friends at Kurata Co in Japan. Here is an image of gate they recently built in Japan using spotted gum.



How Long Will a Timber Deck Last?



Recently I was in Cairns doing CPD sessions for Ports North. After the session we went and had a look at their timber decks. Now you have to admit that portside in Cairns is about as hard an environment as you would expect to encounter. The deck shown above is about 14 years old and is in great shape and replacement is not on the horizon. I was told that they expected to achieve 30 years with an acceptable level of maintenance. But they give their deck love, treating



it regularly but, very importantly, they love it with the right kind of love, they ensure there is no film buildup on the surface to trap moisture. Incidentally, I have commented on the handrail before. It ticks all the boxes for best practice in handrail design.

Here is a very different deck built in 1986 and photographed in 2012. From the day it was put in it had no love at all, but, being here in Gatton which seems to be in perpetual drought, they still only replaced the deck after 29 years. So longevity is dependent on where the deck is and whether it has the right amount of love. The factors that I have found essential for a long deck life are:

- Use the most durable species and the highest grades. Specifications like F14/F17 lead to heartache (Deckwood takes the mystery out of it)
- Ensure the width the thickness ration does not exceed 3.5 to 1 (no 145x35)
- Use a rough sawn face
- Oil regularly but don't allow a film buildup (Tanacoat is brilliant)
- Fasten from underneath if at all possible, and
- Get as much airflow at the joist/decking interface as possible (my patented profile does this)

Stump Caps



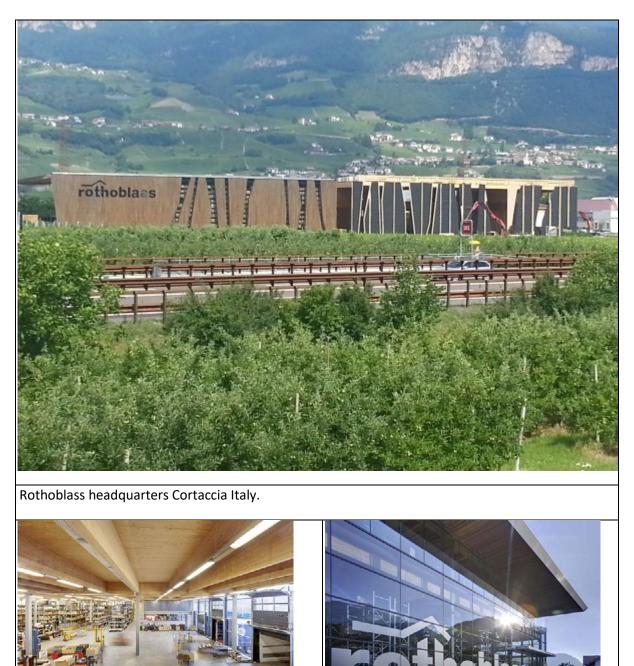
A friend recently had a problem with termites in some house stumps as illustrated above. Fortunately there was no damage done to the building which was saved by the stump caps. The caps don't stop infection but, to gain entry to the building, the termites have to leave the centre of the post and build a very obvious mud bridge over the cap - on the right image you can see where this was done. Check annually to ensure there are no problems.

Problems arose when builders used to drive a clout through the cap to keep it in place and then the cap rusted around the nail.

Here is a link to the NAFI datafile on protecting buildings from subterranean termites.

Case History - RothoBlass Headquarters, Italy Using Cross Laminated <u>Timber</u>

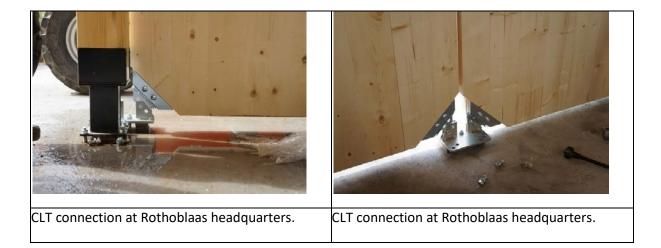
My new book, Timber Joints, contains a number of case histories and here is a particularly interesting one involving cross laminated timber (CLT). I am impressed with the range of connectors available from Rothoblaas.



Inside the warehouse

Exterior of building showing cantilevered roof.

The former headquarters of Rothoblaas was a conventional building but when the time came to build a new headquarters in Cortaccia, Northern Italy, the opportunity arose to construct a structure showing the use of modern fasteners and membranes in the construction of large timber buildings. By using standard Rothoblaas product throughout it allowed an easy reference point for the history and performance of all the structural products. The building was designed with the architectural intent of reflecting the main activity of Rothoblaas in the form of a box of screws.



The envelope of the rectangular building, constructed in three stages between 2004 and 2016 utilises glass on two sides and CLT panels on the other sides. European softwood is used throughout combined with steel columns, some of which are concrete filled for fire resistance. The softwood glue laminated beams are connected with Rothoblaas's own Alubrackets which are a concealed connector. The method of fixing the CLT panels allows the dismantling and reassembly with future expansion.

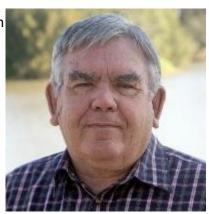
The facade is mostly clad with vertical wood, Also utilised are Rothoblaas membranes which gives a deeper effect of the facade. The roof is plain and on the south side overhangs 5 m past the wall like an open screw box which allows light in winter and reduces heat in summer. The roof also supports 1000 m2 of solar panels which supply 80% of the energy needed for lighting (LED), power, cooling and warming.

Continuing Professional Development Sessions

You know you have to do CPD so why not avail yourself of an expert in the timber industry and a skilled public speaker?

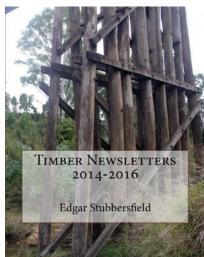
The full range of subjects I have available are:

Timber Preservation. Hardwood Grading. Timber Decks – Designing for Durability, Utilising Small Diameter Hardwood. The Seven Deadly Sins of Timber Design. Joints and Architectural Timber Battens



These are informative seminars with serious learning outcomes and, if required for CPD points, I can provide a test and a certificate. Call me on 0414770261 to arrange a convenient time for your personalised "Ted talk".

Newsletters 2014 to 2016



If you enjoy reading my newsletters and find them helpful you can now own a copy of all the newsletters from 2014-2016. Purchase a hardcopy from <u>Amazon</u> or download a Kindle version. Just search under "Edgar Stubbersfield".

You can also purchase a PDF from me for only \$33.00. The PDF is searchable which makes it very easy to find something that you may have recalled reading years ago. Go to:-<u>deckwood.com.au/timber-technical-design-guides</u>

The first book of newsletters from 2010-2013 is also available.