

TimberTrader

news



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**BUILDING WITH TIMBER
IN BUSHFIRE AREAS**

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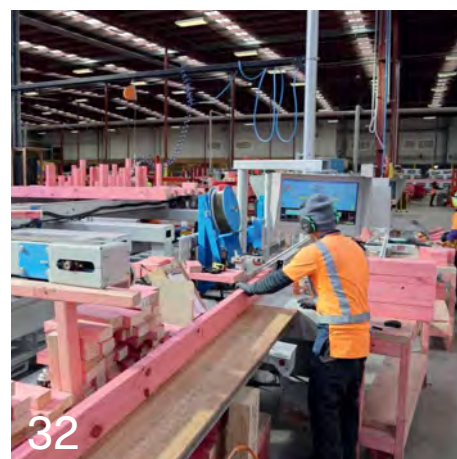


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Association news

ATIF

John Halkett

INCREASED IMPORTS OF CHINESE TIMBER PRODUCTS MANUFACTURED FROM RUSSIAN-SOURCED LOGS

ATIF has worked in consultation with the Federal Government in relation to imported Russian product policies, including timber. ATIF has made it clear on a number of occasions that it unequivocally condemns the atrocities being perpetrated by the Russian invasion of Ukraine.

Since the illegal invasion of Ukraine, the European Union and a number of other countries have placed bans or trade restrictions on the importation of Russian products, including timber and logs. The Australian Government has not taken this policy approach, but has flagged the prospect that the deferred 35% additional tariff on Russian imports could be reimposed from 24 October 2022.

The previous announcement by the Russian Government of a ban on the export of logs in 2022 in favour of processing these logs domestically has not been implemented.

While many countries have banned log imports from Russia, China has not.

Along with logs from other countries China has always utilised significant quantities of Russian logs in manufacturing a wide range of timber products that have been subsequently exported. Evidence suggests that increasing volumes of logs are currently being exported from Russia into China and manufactured into timber products that have then been exported.

The Australian Border Force has confirmed the current practice of relying on Country-of-Origin declarations in Bill of Lading and other import documents. In the case of timber products manufactured in China utilising Russian-sourced (or other) logs declaring the Country-of-Origin as China continues to be the established lawful practice. Of course, under Australia's illegal logging regulations, importers continue to be required to attest that the logs utilised in the manufacture of imported timber are obtained from lawful forest harvesting operations.

ATIF acknowledges that individual companies will continue to make their own decisions on the importation of Chinese timber products knowing they are, or likely to be, manufactured from Russian-sourced logs. However, it is ATIF's position that it does not endorse practices that attempt to circumvent current trade sanctions widely imposed on Russia because of its illegal invasion of Ukraine.

ATIF strongly encourages member companies to verify with suppliers that timber products imported from China are not knowingly manufactured from Russian logs in contradiction of international sanctions aimed at restricting product imports that directly or indirectly support the widely condemned Russian military aggression in Ukraine.

MALAYSIAN TIMBER MISSION TO AUSTRALIA

The Malaysian Timber Council (MTC) led a trade and marketing mission to Australia in late September that was supported and assisted by ATIF companies. The mission

Evidence suggests that increasing volumes of logs are currently being exported from Russia into China and manufactured into timber products.



Above: Pre-mission briefing for the MTC Board in Melbourne from key forest industry bodies: (L-R) Khairul Anwar, director, International Business Development; Chris Lafferty, FWPA; Marie-Claire McKiernan, Timber Merchants Australia; John Halkett, ATIF; George Yap, managing director, Weng Meng Industries; Noor Ateeqah Abdul Rahman, executive, Industry Development and Transformation; Datu Haji Hashim Haji Bojet, general manager, Sarawak Timber Industry Development Corporation, and Omar Ali Sepian, assistant general manager, International Trade and SME Division, STIDC.



Above: Participants who've completed TABMA's Timber Knowledge Workshop in Sydney recently. The course was rated as relevant and excellent by 100% of attendees and will help them to confidently recommend the correct timber products to their customers.

delegation consisted of executives from MTC, managing directors and other senior executives from a wider range of Malaysian timber product producing companies.

The delegation visited timber product manufacturing companies, timber importers, sawmills and hardwood plantation projects in Victoria and NSW. In addition, business-to-business seminars were held in Melbourne and Sydney that attracted timber importers, wholesalers and others from across the timber supply chain. The mission commenced with a valuable briefing from Forests and Wood Products Australia, the Australian Timber Importers Federation and the Timber Merchants Australia.

An important aspect of the mission was to learn more about the opportunities to establish hardwood plantations and related wood processing ventures. This followed the joint venture initiative by Tilling Timber, the Sarawak Timber Industry Development Corporation and Woodsfield Glulam to develop an engineered wood products manufacturing capacity in Sarawak utilising acacia magnum plantation timber.

MTC's CEO Muhtar Suhaili said he was confident that the timely and important mission would assist in stepping up the Malaysian timber industry's promotional efforts in Australia given the positive outlook within the next several years.

"It is my hope that both governments and business communities will continue to work together for the mutual benefit of both our

We have relaunched our Timber Knowledge Workshops and have now delivered the first of these workshops to nearly 60 students.

countries. Malaysia is poised to become a strategic business partner especially in the wood-based industry post Covid 19".

MTC's Director of International Business Development Khairul Anwar said he was confident the bilateral trade between Malaysia and Australia will continue to flourish.

"While trading has been the traditional business activity between the timber-based sectors of Malaysia and Australia, I believe that other initiatives, such as potential discussions on joint-ventures in the manufacturing of timber products and tree plantation programs, could all be further developed," he said.

For further ATIF-related information contact John Halkett at: john.halkett@bigpond.com or 0417 421 187.

TABMA
David Little

TIMBER WORKSHOPS RELAUNCHED

It has been a long two years of lockdowns, restrictions and zoom training classes.

TABMA Training is excited to be back delivering industry-based classroom training. During September and October, we have relaunched our Timber Knowledge Workshops which commenced in Queensland. TABMA Training has now delivered the first of these workshops to nearly 60 students over the past six weeks, across Brisbane, Sydney and Adelaide.

Pai, TABMA's Training and Development Manager says it's good to be back face-to-face and encourages timber workers to join these "engaging and informative sessions to develop and enhance your timber knowledge".

TABMA Training's three-hour Timber Knowledge Workshop educates those in the timber industry to confidently recommend the correct timber products to customers.

One of our attendees, Aidan from Gowan Lea Timbers told us that workshop would be an "excellent induction tool" and is encouraging his team to attend upcoming workshops.

We're also really proud to say that 100% of the students who attended the Timber Knowledge Workshops stated it was relevant >>



Above: Participants at the TABMA Timber Knowledge Workshop learned about various qualities of timber, including measuring moisture content, and how these affect the final product.



Above: TABMA's course was considered an "excellent induction tool" by participants.

Best wishes for a safe and Merry Christmas from all of us at TTIA to Members and readers of this industry publication.

to their workplace, rated the course excellent and would recommend them to others.

More courses are scheduled for Brisbane, Tamworth, NSW and Newcastle, NSW in the next few months. We'll also be bringing new workshops to cover Hardwood or Softwood Grading, and Essential Supervision Skills. Keep your eye on the TABMA events page to see what's coming or if you're interested in finding out more email our RTO General Manager, Louise Kinloch at louise.k@tabmatraining.edu.au.

TTIA

Brian Beecroft

ANNUAL CLOSE DOWN

Employers are again reminded that your applicable award provides for annual close-downs and if you are requiring your employees to take annual leave during the close-down, awards contain notice requirements, e.g. Timber Industry Award 2020:

Clause 28.10 - Annual close down

Notwithstanding section 88 of the Act and clause 28.7, an employer may close down an enterprise or part of it for the purpose of allowing annual leave to all or the majority of the employees in the enterprise or part concerned, provided that:

- the employer gives not less than 4 weeks' notice of intention to do so;
- an employee who has accrued sufficient leave to cover the period of the close-down, is allowed leave and also paid for that leave at the appropriate rate in accordance with clauses 28.4 and 28.6;
- an employee who has not accrued sufficient leave to cover part or all of the close-down, is allowed paid leave for the period for which they have accrued sufficient leave and given unpaid leave for the remainder of the close-down.

END OF YEAR FUNCTIONS

With regard to the close down at Christmas/ New Year, should your company be hosting a



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party/function for staff, Members are reminded that TTIA has a sample Social Function Policy available. Please contact the TTIA either by email at ttia@ttia.asn.au or by phoning (02) 9264 0011 if you require a copy. Alternatively, Members can access a copy on the TTIA website www.ttia.asn.au under Member Resources.

CHRISTMAS GREETINGS

On behalf of myself and the staff at the TTIA, best wishes for a safe and Merry Christmas from us all to Members and readers of this industry publication. We look forward to being of service to you in 2023.

Brian Beecroft, CEO

MGA TMA

Marie-Claire McKiernan

NEW MGA TMA TEAM MEMBERS

MGA TMA is pleased to announce the appointment of David Inall as our new Chief Executive Officer. David commenced with us on 10 October 2022.

David has 30 years' senior experience providing strategic and operational direction within the not-for-profit sector. With extensive global experience in political advocacy and policy development for primary industry, David comes into the role after five years as CEO of the Australian Dairy Farmers.

David is taking over the reins from Jos de

Bruin. Jos has lead the MGA TMA team as CEO for 16 years and has made the decision to retire. David is a dedicated supporter and advocate for family and private businesses and will naturally be very keen and enthusiastic to meet as many MGA TMA members and industry stakeholders as possible, and as such, David and Jos will together be attending meetings, forums and industry engagements around Australia during this transition period.

MGA TMA is well regarded in the industry for the advice and support provided by our in-house employment lawyers. Our team has been incredibly busy – especially over the past few years with so many different COVID-19 restrictions across the states, changes to wages, adjustments to the Fair Work Act and other general enquiries.

We are therefore excited that Martin Stirling has joined our Employment Law team as Head of Legal. Martin commenced his employment with MGA TMA on 17 October 2022.

Martin has a diverse background and has experience across both private firm and in-house legal environments. He is looking forward to getting to know our members and providing strategic employment law support.

MGA TMA INDUSTRY EVENT

After a long hiatus, we returned to face-to-face events in June with an industry update and breakfast. Our next, and final, event of the year will take place on 16 November in Port

Melbourne. Guest speakers include Deb Kerr, CEO of Victoria Forest Products Association and NAB Senior Economist, Brien McDonald.

We welcome both members and industry friends to attend. Please register via <https://www.trybooking.com/CDMQK>

MGA TMA AGM

For reasons beyond our control, the past two MGA TMA AGMs have had to be held virtually. We are therefore very excited to be able to host the AGM face-to-face this year. Details are as follow:

Date: Friday 25 November 2022

Time: 7.00am for 7.30am (start) to 10.00am (including a fully catered breakfast)

Venue: Leonda by the Yarra, 2 Wallen Rd, Hawthorn VIC 3122

RSVP: Tuesday 22 November 2022

The AGM guest speakers are Doug Jones, Metcash Group CEO and Gina Cass Gottlieb, ACCC Chair.

Book your tickets now at <https://www.trybooking.com/events/landing?eid=958539&>

MGA TMA wishes all our members and industry friends a very happy and safe Christmas and a prosperous New Year.

We will continue to be available to assist our members over the Christmas & New Year period (with the exception of Christmas, Boxing and New Year's days and their relevant public holidays) with your enquires. **T**



Above: TTIA has a Sample Social Function Policy available for members to download and adapt for their own firms to keep everyone celebrating safely.

News in brief

National asbestos awareness month

A new awareness campaign urges homeowners and tradies not to be casual about asbestos risk.

The dangers of asbestos exposure are well known but many tradies and DIYers are still either overly casual when it comes to handling materials containing asbestos or don't realise that's what they are.

Since 2011, November has been named National Asbestos Awareness Month in a bid to improve education on the topic. This year, home renovators are the focus, as tightening budgets and a shortage of tradespeople are seeing more homeowners turn to DIY.

An easy-to-use Asbestos Product Database is available at www.asbestosawareness.com.au/asbestos-products-database. The database has been constructed for both novice and expert users. If you don't know enough to search directly, you can click through to a general location such as 'bathroom' and the database will bring up a list of locations where asbestos-laden products might be. Some are expected, such as lining boards, others aren't, such as adhesives, mastics, seals and dry powder mixes. Listings identify the product, where you're likely to find it, brand names it was sold under and when, what it looks like (including images), the types of asbestos it contains and whether the asbestos is friable (and hence extremely risky) or non-friable.

Renovation expert Cherie Barber is the long-time ambassador for the campaign. For her it's personal as she lost her grandfather to asbestos-related disease. "Many homeowners wrongly believe that asbestos-containing products are only found in fibro homes made from asbestos-cement sheeting," said Barber.

"In fact, asbestos was used extensively in the manufacture of more than 3000 building and decorator products that can still be found in brick, fibro or weatherboard clad homes,



apartments or sheds built or renovated before 1990. Many of these products could be lurking under floor coverings including carpets, linoleum and vinyl tiles, behind wall and floor tiles, in cement floors, internal and external walls, ceilings and insulation, eaves, roofs, around hot water pipes, fences, extensions, garages, outdoor toilets, backyard and farm structures, chook sheds and even dog kennels. It was everywhere!"

If undisturbed, well maintained and in a stable, sealed condition, these products are considered unlikely to pose health risks. However, if disturbed during maintenance, renovation or demolition, invisible fibres are released that can be inhaled, potentially leading to asbestos-related diseases including malignant mesothelioma, lung

cancer, asbestosis and benign pleural disease. More than 4000 Australians die per annum from asbestos-related diseases, many of which appear decades after exposure.

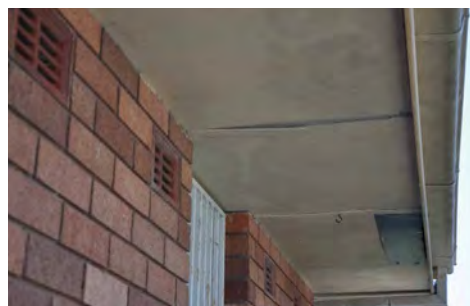
"Australia was among the highest consumers of asbestos products in the world so it's not surprising that a broad range of these potentially hazardous products are still commonly found in at least 1 in 3 Australian homes in some form or another," said Barber.

"Because there is no known safe level of exposure to asbestos fibres, people could be playing 'Renovation Roulette'. We want to ensure people renovate safely. We don't want people to take the 'she'll be right' approach and start work without first checking to see if asbestos might be lurking in their home."

Clare Collins, chair of the Asbestos Education Committee and director of the national campaign said, "While asbestos-containing materials remain in any home built or renovated prior to 1990, the significance of this dedicated month-long campaign to the ongoing health of Australians cannot be overstated."

The campaign, which had Federal Government funding until 2018, is run pro bono by Insight Communications with support from I-Nex and Gemma Waite of Moth Creative, working in partnership with Advocacy Australia. Funding partners are being sought to continue providing resources including fact sheets, guides to identifying asbestos in the home and checklists for both DIYers and specific trades to identify common asbestos-containing products you're likely to encounter and where you'll find them.

For more details and resources, visit www.asbestosawareness.com.au



Above: Fibro sheeting and boards found under eaves and as linings are places you might expect to find asbestos, but it can also be in the adhesives and seals.



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In March 2019 we moved into a 1200m² warehouse in Hallam as a trial to see how customers would respond. They embraced the availability of product right on their doorstep and the fact they could capitalise on the extra stock available.

It was so successful that we decided to build our own purpose-built warehouse in Dandenong South (2800m²), during the height of Covid in Melbourne. It's a credit to the builder, who started the job in July 2021, that we had handover in December 2021. We moved into the warehouse in

mid-January 2022 and since then we have gone from strength to strength.

Melbourne is a great addition for McKay both as a hub for new and existing products and as an export centre for packed timber. In 2023, we'll be expanding our offer to the sector and delivering even more opportunities in the future.

Now, we joke about how long we'll be able to stay here before we outgrow our new home!

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McKAY TIMBER

Topping out at The Bond Norwest

CLT stars in this showpiece.

Sydney's Hills District is a step closer to a new health and medical precinct, with the recent topping out ceremony at The Bond, Norwest. This is the first of three planned healthcare and commercial buildings being developed by Norwest's parent developer, Mulpha. The development will support and add critical service extension to the adjacent Norwest Private Hospital and meet growing local demand for health and medical services.

The Bond is made up of seven storeys-worth of 1630m² floors, which are already mostly rented out in whole or in part to a variety of healthcare and allied sector tenants. It was designed using state-of-the-art CLT for the floorplates, walls and stairs, as well as traditional laminated timber columns and beams for the frame, plus full-height glazing for natural light.

The fabric of the building was chosen in large part for its biophilic properties, with visible timber known to increase feelings of wellbeing and optimism as well as improving concentration for people working within such buildings. The materials and connections were tested at the CSIRO Fire Testing lab in North Ryde to make sure they achieved full 90-minute FRL.

Mulpha's head of developments Tim Spencer said, "In addition to offering design



Above: Representatives from Mulpha, Buildcorp and Centuria in front of The Bond, Norwest.

flexibility and unique aesthetics, these new-age timber technologies have incredible strength and efficiency, and the potential to be carbon-neutral over their lifecycle, something increasingly attractive to blue-chip clients.

"For patients, it means they have a more comprehensive one-stop shop for their healthcare needs where they don't need to travel too far for multiple specialist treatments."

The building will also feature a ground floor retail environment, a childcare facility,

end-of-trip facilities (showers, changerooms and bicycle storage), basement carparking, short-term visitor parking and service vehicle and loading facilities.

Centuria Healthcare has secured eight strata titles within the building. Managing director Andrew Hemming said: "Centuria Healthcare invests in high-quality, fit-for-purpose real estate that is tailored to our tenant clients' needs. In particular, we look to secure modern, new-generation buildings that employ flexible designs so they can potentially be adapted in the future for newer equipment, robotic procedures or the latest sterilisation plant and equipment.

"The Bond ticks a lot of boxes for us in addition to providing exceptional sustainability credentials through its CLT structure. Its location in proximity to other public and private healthcare infrastructure is also very appealing."

Buildcorp has managed the construction; managing director Tony Sukkar AM said: "The Bond is Buildcorp's fourth mass timber project. Our team has developed and implemented more than 20 proactive safety and quality initiatives for The Bond, while navigating all the impacts of Covid-19 and wet weather. Our enduring relationship with valued partners Mulpha and Centuria has gone from strength to strength, with this state-of-the-art building establishing a new industry benchmark."

Due for completion in the first quarter of 2023, The Bond is part of a masterplanned health and medical precinct that will deliver allied healthcare as well as specialist services not currently available in the Hills.

For more, visit www.norwestcity.com.au/property/the-bond/



Above: A render of the completed building, which is due to be finished early in 2023.

Housing affordability still a major issue

An affordable housing plan promises strong economic rewards.

Jim Chalmer's October 25 budget is still a week away as we go to print, but a need for major investment in social housing and other reforms around housing affordability is at the front of many minds in the lead up.

While house prices have eased notably across most of Australia this year thanks to rising interest rates, years of soaring rises have left home buying out of reach of many. At the same time, investors who underpin the private rental market are raising rents. Figures compiled by housing advocacy group Everybody's Home show that Sydney renters have been the hardest hit, with *quarterly* increases to September 2022 of 14.3% on the worst-hit Lower North Shore – a jump of \$107 a week (data from average rents for houses and units in the region monitored by SQM Research) and 4.9% or \$23 a week in the least-affected Canterbury-Bankstown. Official interest rates lifted 1.5% across the same period.

Meanwhile, vacancy rates are low across capitals, with SQM giving a national vacancy rate of 0.9% and only Sydney, Canberra and Melbourne coming in slightly above average.

Now, government subsidies under the scrapped National Rental Affordability Scheme (NRAS) are coming to an end. The most recent quarterly federal government report on the scheme shows 27,422 allocations will expire by 2026.

Everybody's Home has launched its Budget Position Paper (download at www.everybodyshome.com.au/everybodys-home-a-plan-to-fix-australias-housing-crisis-federal-budget-2022/) calling on the Commonwealth to commit to finance, construct and deliver net growth of 25,000 social and affordable homes per year to tackle our current national shortfall of more

than 650,000 dwellings in the social and affordable housing sphere.

The paper outlines the social case clearly but, interestingly, it also cogently details the 'bang for buck; economic case of more government-backed housing. Regional Australia's worker shortfall is strongly tied to a lack of affordable housing, for example. Disadvantaged groups such as those fleeing family violence and First Nations peoples are currently disproportionately experiencing homelessness, which costs government agencies more than housing and delivers worse outcomes. Key workers in major cities are often priced out of areas close to their jobs, adding to their mental health load and travel costs, as well as seeing them arriving at work already tired: not great for a nurse.

More importantly for our sector, there is a direct economic stimulus from investment in affordable housing, made up of both the work done to supply and construct the housing itself. UNSW modelling puts the benefit-to-costs ratio at 4.80:1 and SGS Economics and Planning estimate that the 25,000pa homes plan would generate an economic output of \$12.7bn and create 15,700 jobs.

It's not rocket science: Australia previously did this under Menzies and to a lesser extent in the Rudd years. New Zealand's Kāinga Ora program affordable housing scheme has been very successful in delivering new builds, many of them prefabricated, including by Victoria's Timber Building Systems (TBS), which constructs panels for a NZ builder client. It's not a perfect program: Kāinga Ora has funding issues at the moment thanks to materials costs and a high demand as yet unmet. But it is a different, more whole-picture approach to housing that is worth investigating.



TTN is going bi-monthly!

Like everyone in the timber sector, we've been facing soaring production and delivery costs at TTN. Rather than compromise on the quality of the magazine, we're moving to a bimonthly schedule for the moment. We'll have all the regular content and special features you love in our issues, now every second month. Subscribers can be sure you'll get the number of issues you've paid for! In between, stay current by subscribing to our free electronic newsletter using the one-step side panel on the right at www.timbertradernews.com

Mental health tool

SafeWork NSW has recently released a new digital Workplace Wellbeing Assessment Tool (WWAT) to help improve the understanding and management of workplace mental health.

"The free self-assessment tool helps set up a survey which businesses can use to confidentially survey their staff, with the results informing businesses how to plan and respond to risks and create workplaces where mental health thrives," says Natasha Mann, head of SafeWork NSW.

The goal is to create workplaces where mental health thrives, and as well as pinpointing areas where businesses can improve and reduce risk, the tool lets businesses compare themselves with others across NSW. Find it at www.nsw.gov.au/mental-health-at-work/workplace-wellbeing-assessment



Above: New Zealand's Kāinga Ora program has relied on prefabricated buildings, like this at New Lynn from TBS.

In brief

Window specialist Paarhammer has recently had a new type of BAL FZ windows tested and found to meet the standard. This is the second BAL FZ window available from the company: no minor achievement, and vital to help protect homes in bushfire areas, as research has shown windows and doors to be significant weak points when it comes to heat-driven ignition. Read all about the testing here www.paarhammer.com.au/blog/new-product-30min-bal-fz

On the topic of fires, and floods, it's been a very ordinary year again and so the donation of a new 37kVA generator to the response facility shared by the Tumbarumba SES, Rural Fire Service and the Forest Corporation NSW firefighters by Hyne Community Trust is more than welcome! During the 2019/20 fires in the region, power and communications were lost, hampering responses and making life harder for the teams – including in ways you might not consider, such as aircon for volunteers and keeping food, drinks and medications cold. For the full story, visit www.hyne.com.au/article/289/hyne-community-trust-delivers-generator-for-ses-volunteers

As we go to print, floods are rising across large parts of Victoria, threatening access to logs and potentially washing out roads and bridges that will be needed for supply. Meanwhile, NSW is still trying to recover from its major floods earlier in the year. Bronwyn Petrie from the NSW Farmers Conservation and Resource Management Committee has slammed the NSW Government, saying \$2 bn a year is being spent on importing timber to rebuild homes while barriers to harvesting send timber prices soaring and prevent local workers from doing their jobs. "Australian forestry is all about sustainability, it makes no sense to be importing timber from unregulated overseas forests when our own heavily regulated forests are available on the doorstep, providing high-quality timbers while supporting farmers and local industries, and importantly delivering economic and environmental outcomes," Petrie said. Read the full story at www.newsofthearea.com.au/timber-shortages-and-red-tape-hindering-flood-recovery-efforts



Fundraising PPE

This collaboration helps kids while keeping workers safe.

Leading Indigenous workwear company, Bunji Workwear has teamed up with one of Australia's largest and most trusted PPE brands, TRu Workwear to release the first Bunji Indigenous Range.

The first items off the rank are a hi-vis shirt and trousers displaying the artwork of award-winning artist and co-designer of the first Indigenous Queensland Maroons jersey, Jyi Lawton. The artwork elevates the symbol of helping hands and shares a message of family, connection and respect.

Bunji business development manager, Darrin Cross said they were proud to launch a range that directly impacts and shapes the new generation of Indigenous businesses.



"The Bunji Indigenous Range is more than just a beacon of awareness or a conversation starter, it's making a physical impact in Indigenous communities," Cross said. "From the garment artwork through to the distribution and sales, we are engaging Indigenous talent and businesses however we can and will inject a portion of the profits back into these communities by donating a portion of the profits to Dreaming Futures."

Five dollars from each garment sold will go to this national Not-for-Profit supporting Indigenous children and young people to strengthen their educational outcomes and employment pathways.

Managing director at TRu Brands, Tony Urquhart, said the company was pleased to be able to offer their quality garments as the foundation of the new range: "TRu Workwear has been developed to combat Australia's harsh environment and conditions to ensure the utmost safety, comfort and reliability. Over the years the business has really solidified its position as an innovative force in the development of unique and task specific Workwear and PPE. So, when Bunji Workwear reached out with the idea for the new Indigenous range, we had to be involved and together, we were able to turn this around in less than six weeks."

In coming months, Bunji Workwear plans to expand the range with items including winter wear, PPE from gloves and glasses through to hard hats and corporate wear. To order, visit www.bunjiworkwear.com.au or for custom orders, email sales@supplyaus.com.au

UPCOMING EVENTS



NOVEMBER

SUSTAINABILITY SUMMIT AND AWARDS 2022

An all-day summit kicking off at 7.30am will investigate the latest topics in sustainable building including new NCC changes, circular economy and social housing. Then celebrate those achieving in the sector with the 2022 awards. 10 November at the Shangri-La Sydney or join the seven panels

virtually. Tickets from \$149. **Book at www.sustainablebuildingawards.com.au**

MGA TMA INDUSTRY EVENT

An industry update and breakfast featuring guest speakers Deb Kerr, CEO of Victoria Forest Products Association and NAB Senior Economist, Brien McDonald.

We welcome both members and industry friends to attend. To be held 7.15–9.30am, 16 November in Port Melbourne. **Please**

register via <https://www.trybooking.com/CDMQKe> ticket

MGA TMA AGM

MGA TMA's renowned AGM/industry breakfast will be held on Friday 25 November from 7–10am at Leonda by the Yarra. From \$90/single ticket. **Details at <https://www.trybooking.com/events/landing?eid=958539&>**

DECEMBER

TIMBER DESIGN AWARDS

The best timber buildings of the year, plus a three-course meal, all hosted by The Ultimate Renewable brand ambassador Adam Dovile – Perfection! On 8 December from 6pm at Crown Sydney. **More info and tickets available at www.timberdesignawards.com.au**

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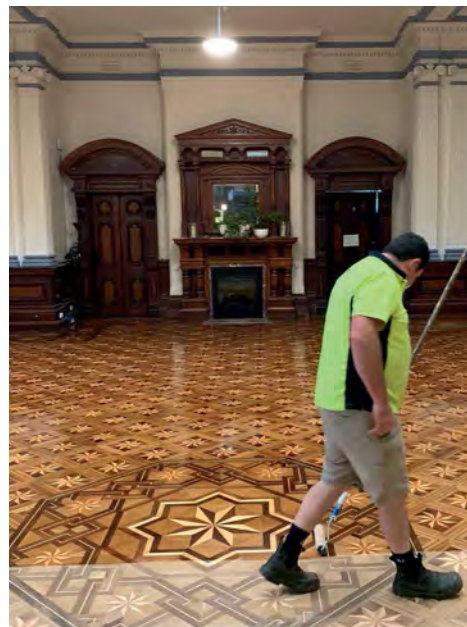
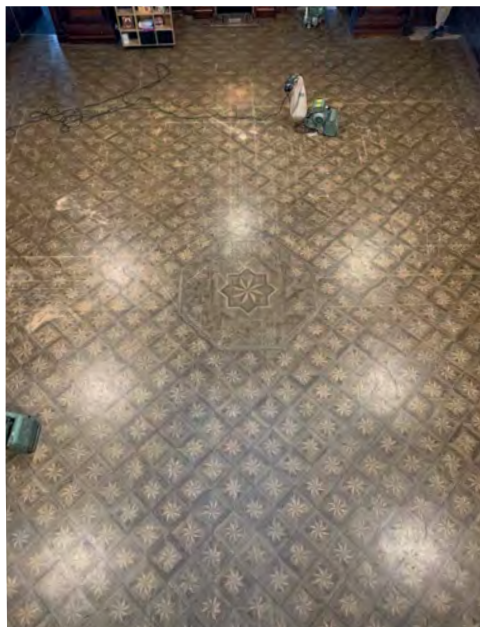
Always in demand

TRUST

Ecwood®

TREATED TIMBER PRODUCTS

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Above: Built in the 1890s, Valentines Mansion has been used as a school since 1923, and thousands of little feet have had an impact on the beautiful parquet floor of the Main Hall. Borthwick Timber Floors managed the sand and finish job step by step, returning it to its former glory and ready for the current 426 young students!

Sand and finish

Polished results at ATFA's awards.

After two years of Covid delays, the Australian Timber Flooring Association (ATFA) recently held its annual awards. Entries were open to projects completed in Australia or New Zealand between 1 July 2019 and 15 June 2022, and the competition was fierce in all categories.

Among a suite of well-deserved wins, the victor in the Sand and Finish category stood out. Borthwick Timber Floors won for its project refinishing the intricate Main Hall of Valentines Mansion at Caulfield Grammar School's Malvern Campus and restoring the worn parquet to its original glory.

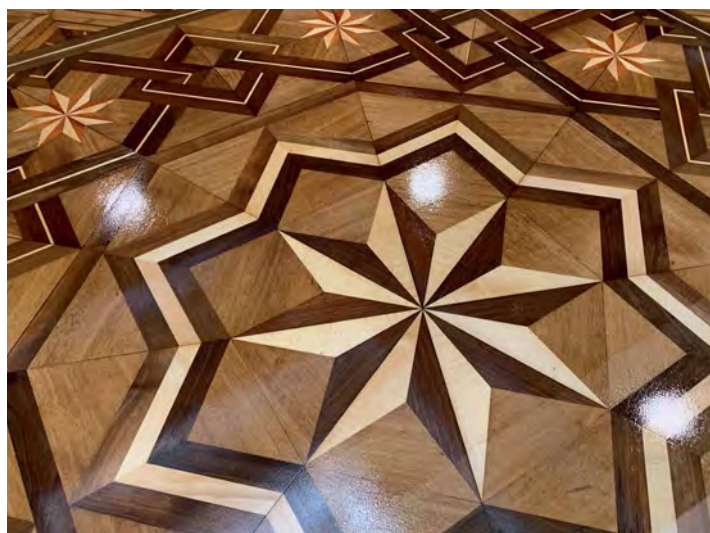
Clinton Borthwick, co-director of Borthwick

Timber Floors, says, "Being one of the oldest companies within the timber flooring industry, we're fortunate to get to work within these amazing buildings, and experience the sense of grandeur when you walk into these amazing spaces. The company was established in 1948 by our grandfather, Andrew, who passed on his knowledge to our dad, Douglas. Now my brother Scott and I carry on the techniques they perfected on these heritage floors."

The job began with handcrafted repairs to small areas of parquet that had been damaged or worn away, particularly at the entrance to the room. This was followed by the whole floor being carefully cleaned and then sanded with a series of machines that first removed scratches and then gave a smooth finish to the parquets. Finally, an application of oil protected the timber and revealed the colour contrasts of the parquets.

The Borthwick team fully enjoyed the job, but had to keep it quiet. "When restoring these handcrafted floors, we enjoy documenting the process with photos/ images to share and to record history," Clinton says. "However, one of the conditions of entry to the awards was 'Promotion of your entry via social media, to further your chances of obtaining votes is not permitted' so we couldn't post to our social media accounts before the awards night!"

The awards are voted on by ATFA members – essentially expert peers, so the award has real meaning. "We were honoured to have our work recognised in this way by the Association," says Clinton. "Many hours went into restoring the floor at Valentines Mansion and it means a lot to Borthwick's that the work we are so passionate about also resonates with our colleagues. We've previously won the



Above: The refinishing process uses multiple machines and grades of abrasive to first remove scratches and other imperfections in the parquet before polishing it to a smooth level finish. Finally, a protective coating is applied manually to both let the floor shine and feed the timber parquets.

PHOTOS: COURTESY BORTHWICK TIMBER FLOORS



Above: The completed floor after its careful process of restoration, sanding, polishing and oiling. It was originally laid by Italian craftsmen using European walnut, oak and sycamore.

ATFA 2014 Commercial Floor of the year award, which was also an honour."

ATFA is the peak body for timber floors and the timber flooring industry in Australia and is a not-for-profit run for the benefit of members. It implemented the awards as both a showcase for members and to show new trends in designs and techniques to the wider industry. Every year, it promotes the work of award finalists in multiple categories and, in between awards, it runs multiple education campaigns to encourage more timber flooring and better upkeep of existing floors.

Members gain access to a wide range of services, including technical support, and the public can use the member website to learn about caring for timber floors and book inspections, or find ATFA members to hire at www.floorchoices.com.au

"We appreciate the support given by ATFA and all its members," says Clinton. "We'll continue to support ATFA and the industry for many years to come, and are excited to participate and see the entries for 2023!"

View the full awards presentation slide show with all the winners and runners-up at www.atfa.com.au/2022-awards-presentation/

"We're fortunate to experience the sense of grandeur when you walk into these spaces."



Above: Scott Borthwick making his acceptance speech at the recent ATFA awards.



Fresh starts at Hyne

Skilled inmate workers are helping to fill sawmill needs.

Regional worker shortages combined with an unprecedented demand for timber meant Hyne was facing problems operating its Tumbarumba sawmill at capacity. The solution was at nearby Mannus Correctional Centre, which runs a work release program at local businesses to help minimum-security inmates near the end of their sentences develop skills for life after release.

Mannus Correctional Centre classification and placement officer Anna Hjelmroth said eligible inmates are allowed to apply for the coveted positions, which provide them with paid employment and work experience prior to their release. "It's a fantastic opportunity because they get to feel normal, reintegrate and take on that responsibility before leaving prison with a bit of money in their account to set up for a law-abiding life," Hjelmroth said.

"Inmates take really valuable skills to Hyne that they've gained here at Mannus by working in our onsite timber processing unit or gaining qualifications like a forklift ticket through our programs with TAFE NSW."

So far, 11 inmates are working at the sawmill, including John* who earned his place on the team 18 months ago. "At Mannus I've learned how to operate machines and be part of a normal workplace," he said. "This job is giving me a good work ethic, confidence to go back into the working world and financial stability for when I get out. You feel good about yourself and I think it helps you progress back to a normal way of life."

Hyne Timber Tumbarumba Sawmill site manager, Darren Wright, said inmate employees are proving essential to the sawmill. "Our experience has been very positive," Wright said. "Our Mannus Correctional Centre team members are hard-working, appreciative of the opportunity and paid equitably." **T**

* Name has been changed for privacy.



Plantation investment

The Victorian Government and Hancock Victorian Plantations have finalised a \$120m agreement. We talked with HVP CEO Stephen Ryan about what this will, and won't, mean. **By Donyale Harrison**



Above: Stephen Ryan, CEO at HVP.

Supply has been perhaps the biggest issue discussed in the timber sector in recent years. The Victorian State Government's \$120 million investment in new plantation estates is a step in addressing the issue long-term.

Hancock Victorian Plantations (HVP), which currently manages about 165,000 ha of mostly pine plantation, won the tender process and has had their initial plan to manage the planting of 16 million new trees accepted. We spoke with HVP's CEO Stephen Ryan about the plan's impact.

"We're excited about it," Ryan says. "This was a proposal that the State Government has been working on for a couple of years. Part of the Victorian forestry plan is to shut down native forestry logging and expand plantation forestry, particularly in the Gippsland area. There was a public tender process that commenced last year and went for quite some time, and we were the successful party."

He notes that there is a certain circularity here, saying: "The genesis of HVP was the sell-off some 24 years ago by the state government of the plantation pine resource.

We've run that resource on a commercial basis very well for the last 24 years and will continue to do that. The issue has been a lack of expansion of the plantation resource, not just in Victoria but, really, across Australia. The projections by 2050 of the demand on wood products are through the roof. And unless we start planting trees, we're not going to be able to meet that demand."

ABARES figures looking at plantation growth over the past 25 years show a brief lift during the peak Managed Investment Scheme (MIS) years, then an abrupt decline after the GFC, which saw several major MIS companies go bust. Since then, the softwood plantation area (essential for both building timbers and EWP) has remained fairly stable while hardwood has begun to decline.

"The MIS model was flawed," Ryan says "and it resulted in a sell-off of some of that land. Since then, there's been no further developments and then the main reason for that is down to the initial cost of land, which is quite prohibitive. Forestry is a long term crop: it's at least 15 years before you start getting

PHOTOS: COURTESY HVP



HVP teams take Radiata pine cuttings to grow on for future tree stock.

your first return and 25 to 30 years before you get your major return. Add in pests, disease and bushfires, and it's a risky business.

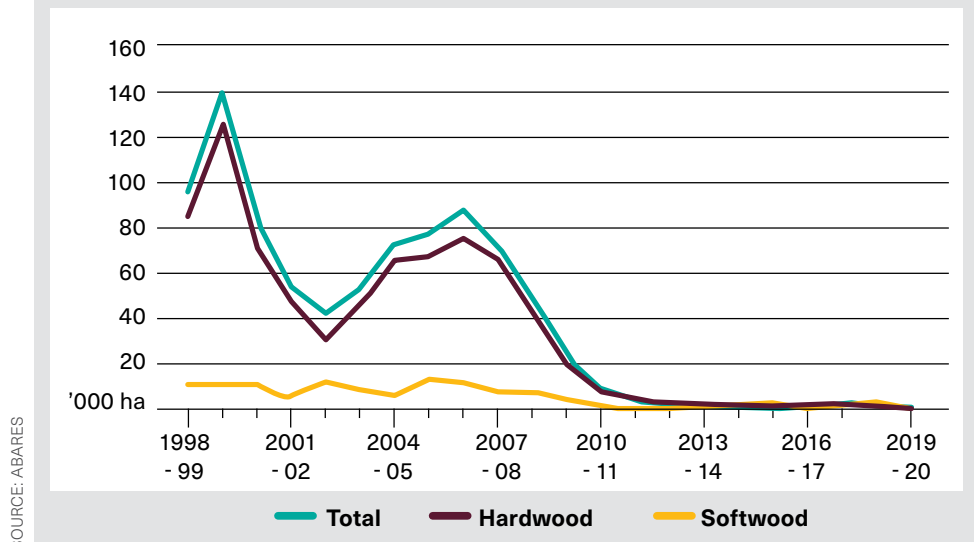
"There needs to be a reasonable return on investment for people to take on that commitment over that length of time. It needed government support, and that's where the Victorian Government is to be commended on taking this initiative. Because it's the first real support for plantations that's taken place in the last 20 years in Australia."

The funding seeks to expand the existing plantation estate. Ryan says HVP is looking at a mixed model for achieving that, made up of some new land purchases from current private landholders, but also – helping to get the best value from the investment given the high cost of land – going into a range of partnerships with landholders.

"So we may lease the land or there could be private landowners who are interested in entering into farm forestry arrangements with us," says Ryan.

This ties in with a parallel push from the Department of Agriculture, FWPA and more to lift the rates of farm forestry, in part because it provides an additional (if long-term) source of cash-flow to farmers, but also because of significant productivity and financial benefits thanks to increased shelter

Minimal new plantations have been established in recent years



Above: Australian Government research has shown extremely low growth in plantations this century.

for stock, biodiversity improvements and land restoration benefits. At one location noted in FWPA's 2020 report *Lifting farmgate profitability through high value modular agroforestry*, tree planting helped increase pasture productivity by 30%.

Ryan emphasises that HVP is open-minded when it comes to the how: "It's not about land

acquisition; it's about the expansion of the plantation forestry estate," he says.

"We've seen these models work well overseas and there have been successful Australian pioneers who've seen the benefits on their farms, too

"I believe the state government has also provided some funding to VicForests to >>



Above: A recently planted Radiata pine plantation managed by HVP. The Victorian Government plan will see an additional 14,500 ha established.

“There’s not enough wood fibre resource now, and the demand will only increase. Unless we increase the number of trees in the ground, we’re not going to be able to meet that demand.”

set up models and to explore those opportunities with farmers for farm forestry. And that’s something that we would like to support them in. We’re not educationalists ourselves, but there’s been a lot of good work done by the University of Melbourne, FWPA, Australian Forest Products Association and even over in Western Australia as well as the Gippsland Forestry Hub. It’s just a matter of pulling it all together.”

CATCHING UP

So far, it’s all a good news story, but Ryan, while rightly proud of the work HVP will be doing, cautions that it is “a drop in the ocean”. He says, “This should all have happened 20 or more years ago. The industry has needed and wanted this sort of investment for so long. There’s an adage in forestry that the best time to plant trees was 25 years ago. The second best time is now – and we’re getting on and

doing it. That’s the good news. The bad news is, it’s going to take 25 years before we reap the benefits of it, and the industry is going to struggle over that time to be able to increase wood supply.”

The plantation establishment plan currently stretches over the next eight to 10 years, with plantings scheduled to begin in 2023. “The trees that we plant will take 25-30 years before they’re available for wood product purposes,” says Ryan.

“Meanwhile, the timber industry is doing a great job of showing that wood’s a far better product to use versus steel and concrete in building resources, certainly much better for the environment, but all those products require your basic wood fibre supply. There’s not enough of it now, and the demand will only increase. Unless we increase the number of trees in the ground, we’re not going to be able to meet that demand.”

While imports will always be part of the story, the past few years have shown the problems with relying on imports that may not be available to our market, may not be at a price the local market wants to pay and may not have any way to get here.

“The future is definitely in plantation forestry,” Ryan says. “And it does need this sort of support. All plantation forestry had its start in government – whether established as a public resource or government-funded programs – because of the high risk and the length of time it takes to actually develop before you get a return. All of the companies that operate today started off one way or another in that manner. So anyone thinking plantation forestry is going to expand without some sort of support from the government is really kidding themselves.

“However, it doesn’t need a *lot* of government support. The main thing the industry needs is access to land and now good support from under the emissions reduction schemes as well. Because with the benefits of growing trees for carbon sequestration and the availability of carbon credits, that’s now actually helping to bridge that economic gap to make it worthwhile to expand plantations.”

Ryan hopes that more state governments will follow in Victoria’s footsteps to offer real

financial support when it comes to expanding the plantation resource available to the Australian timber industry. This initiative represents 14,500 ha of additional plantations, while FWPA estimates Australia requires 468,000 ha of additional softwood plantation by 2050 to meet projected demand.

However, the very size of that demand argues in favour of government investment. It will be underpinning a resource needed to meet the large shortfall in the national housing stock as well as to feed the growing number of local engineered wood product manufacturing plants and all the jobs that rely on this manufacture and construction. About 8.7% of the Australian workforce is employed in construction

"And there are jobs at every stage of this process, over the entire life cycle of the trees," Ryan says. "There's the work that we engage with contractors to do site preparation, road work, site establishment works... we then maintain the property right through to when it's ready to harvest. Then we'll have harvest contractors and haulage contractors and of course, that will all be supplied into the local mills. So we won't only generate additional jobs, but it will help preserve and protect existing ones."

The other major benefit of plantation growth to the timber industry is side-stepping the debate around native forestry as resource versus habitat. The undeniable sustainability of timber-based construction is a very strong argument for the industry, but one that historically hasn't outweighed the cuteness of a koala in the public mind. Victoria's investment comes off the back of a plan to phase out harvesting in native forests by 2030. In WA, native logging will cease from 2024 (the McGowan Government has announced a record \$350 million investment in new softwood plantations across South-West WA).

"All wood products start with either native forestry or plantations," says Ryan. "I don't have a view one way or the other on native forestry. But when it comes to convincing the market of our environmental credentials, plantation forestry growers are certified under internationally recognised schemes that have very strong community and environmental standards and requirements that must be adhered to. I think that's a very clear sign that plantation forestry has been developed in a very responsible way."

"We're plantation forestry growers and that's what we focus on. But whatever view you have on native forestry and whether it should continue or not, we still need to grow plantation forestry. And that's what I think is being lost in the debate that parts of the sector is having at the moment. Regardless of what happens with native forestry,



Above: Plantations lessen public debate around native wildlife habitats and timber harvesting.

"There are jobs at every stage of this process, over the entire life cycle of the trees."

says Ryan, "which is our species of choice. So this will all be new greenfield development of Radiata pine."

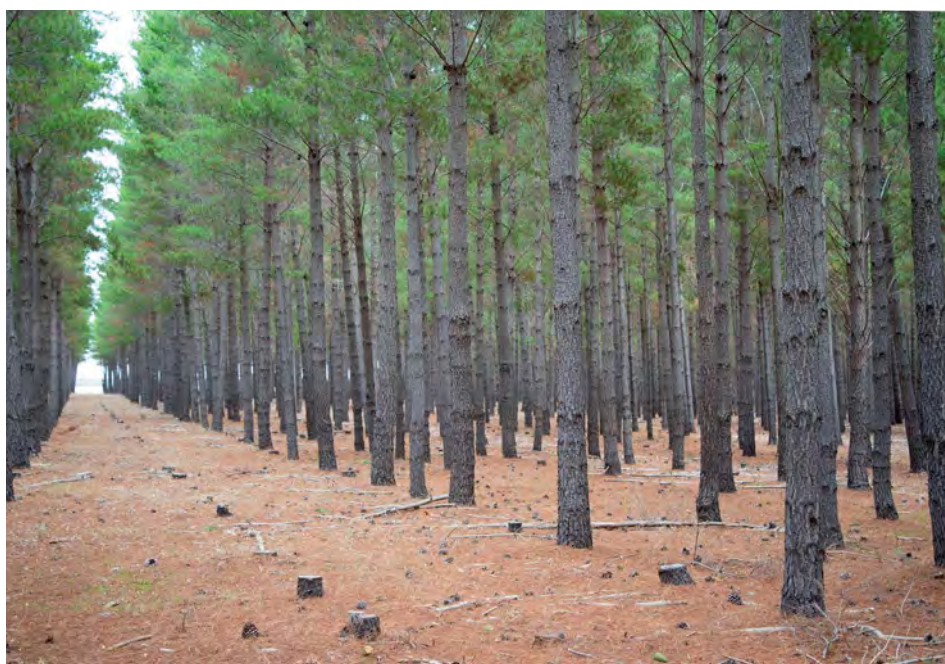
The Victorian Government, with an eye on the looming State Election, has announced the new plantation resource will underpin 2000 new and existing jobs in regional Victoria. The numbers are up for debate, but it is a solid investment in future sustainable forestry.

For Ryan, though, it's an investment in much more than that. "We need to increase the number of trees in the ground," he says. "It's the only way we can hope to meet demand. That's the problem we need to tackle. It's been talked about for too long; we need action. I'm pleased that this is a start. But as I said before, it really is just a drop in the ocean of what's needed." **T**

plantation forestry still needs to grow to support the building industry and most of the building products we use."

The proposed new HVP-managed plantations focus on Gippsland, where supporting industries including pulp mills for thinnings already operate and the infrastructure and workforce are both well established. "All the mills and processors there are geared up to process Radiata pine,"

For more, visit www.hvp.com.au. Download the reports mentioned in this story at www.agriculture.gov.au/abares/research-topics/forests/forest-economics/plantation-and-log-supply and www.fwpa.com.au/resources/reports/market-access/2441-future-market-dynamics-and-potential-impacts-on-australian-timber-imports-interim-report-released.html



Above: Mature Radiata pine plantation in South Australia after thinning.

Work positive

A new 'positive duty' approach raises the bar for workplace wellbeing. **By Peter Maguire**

We all know that employing people comes with a wide range of responsibilities for compliance with employment, workplace health and safety and various other laws and regulations.

Organisations have been subject to those laws for decades, yet recent investigations and enquiries have repeatedly confirmed that Australian workplaces are far from free of improper and, in some cases, illegal conduct such as discrimination, harassment, bullying and victimisation.

The landmark Respect@Work Report by the Australian Human Rights Commission recommended, among other things, that organisations should be subject to a higher standard of compliance than they currently are. The Federal Government has announced that it will be legislating this change.

It is proposed that the 'positive duty' that underpins this change will be modelled on that which already applies under the Victorian Equal Opportunity Act – that requires employers to "take reasonable and proportionate steps to eliminate discrimination, sexual harassment and victimisation as far as possible".

Additionally, the Victorian Government is introducing a positive duty on organisations to safeguard people's mental health through the elimination of psychosocial hazards.

WHAT DOES POSITIVE DUTY LOOK LIKE FOR BUSINESSES?

Rather than having to just demonstrate that they have taken steps through policies and procedures to prohibit such conduct, to communicate that to staff and to act on complaints, they will now also have to exercise a positive duty aimed at preventing such conduct in the first place.

That means adopting a systematic approach to identifying risks and taking proactive and appropriate action to eliminate or control that risk.

The Victorian Equal Opportunity and Human Rights Commission has a comprehensive Guideline on preventing and responding to sexual harassment which prescribes six standards for doing that. These are:

Standard 1: Knowledge Employers understand their obligations under the Equal Opportunity Act 2010 and have up-to-date knowledge about workplace sexual harassment.

Standard 2: Prevention Plan Sexual harassment is prevented through the development and implementation of an effective sexual harassment prevention plan.

Standard 3: Organisational Capability Leaders drive a culture of respect by building organisational capability.

Standard 4: Risk Management

Employers have built a culture of safety and address risk regularly.

Standard 5: Reporting and response

Sexual harassment is addressed consistently and confidentially to hold harassers to account, and responses put the victim-survivor at the centre.

Standard 6: Monitoring and evaluation

Outcomes and strategies are regularly, reviewed, evaluated and improved.

Each of these standards has additional content on specific steps to be taken to satisfy that standard, download the full content at www.humanrights.vic.gov.au/resources/sexual-harassment-guideline/

THE BAKERS DELIGHT HOLDINGS REPORT

The Victorian Equal Opportunity and Human Rights Commission also recently released a report on an investigation that it had undertaken over the past two years in relation to Bakers Delight Holdings' compliance with the positive duty to eliminate sexual harassment.

They chose Bakers Delight Holdings because the retail sector generates a comparatively high level of complaints of sexual harassment and because the business is both a significant employer and a head franchisor.

They used the six standards noted above to undertake the compliance assessment and identified a number of gaps, some of which the business remedied as a result of its own internal investigations and some of which were stated in a Compliance Agreement that was entered into with the Commission. These included commitments to:

- developing a sexual harassment prevention plan;
- developing sexual harassment training for all Bakers Delight employees and training to assist managers to respond to reports of sexual harassment;
- updating sexual harassment policies and procedures for responding to sexual harassment;
- regular communication to Bakers Delight employees about how they can make a complaint of sexual harassment;
- developing a central register of reports of sexual harassment.



ADDITIONAL MENTAL HEALTH SUPPORTS

WorkSafe Victoria has produced a suite of materials to assist businesses to implement effective mental health and wellbeing programs. It is called Workwell and is accessible at www.worksafe.vic.gov.au/workwell

That program identifies 11 psychosocial hazard causal factors (ie workplace attributes that can negatively impact on peoples' psychological safety). These are:

- Low job control
- High and low job demands
- Poor support
- Poor organisational change management
- Poor organisational justice
- Low recognition and reward
- Low role clarity
- Poor workplace relationships
- Poor environmental conditions
- Remote and isolated work
- Violent or traumatic events

Employers need to take proactive action to assess whether any of these causal factors exist or are at risk of developing in their workplaces and make any adjustments that need to be made to eliminate or control any risks identified.

SOME PRACTICAL CONSIDERATIONS

The statistics tell us that 1 in 5 workers has a mental health issue to deal with in any given year and that the frequency of people experiencing sexual harassment is even higher than that.

So the first thing that you need to do is to be honest – the odds are that some people in your workplace are in one of those boats and, if they are feeling sexually harassed, they won't be feeling psychologically safe, either. Educate yourself about the issues and your obligations and explore the tools that are freely available, like those referred to above.

Ensure that you have access to sound professional advisors (internal or external) who know the subject matter and have a positive mindset aimed at delivering real change rather than just ticking boxes.

Frame your policies in positive language eg talk about a Respectful Workplace, not just bullying and harassment.

Educate your people and engage them in the conversation in a positive way to make it a psychologically safe place for people to share their experiences, feelings and perspectives.

Learn from and act on them.

Also have a good hard look at yourself and all of your people to ascertain whether your or another's behaviour might be a problem when it comes to preventing sexual harassment or safeguarding mental health. Then deal with it in a positive way. This is especially important for anyone in a leadership role.

So the bottom line is: adopt a positive mindset and positive language to change the conversation in your workplace – the best way to meet your positive duty. **T**

Peter Maguire is the owner and practice leader of Ridgeline HR, an award winning HRM consulting practice which he founded in 2000. Peter is an acknowledged expert in workplace relations compliance and also a high-performance leadership coach with over 40 years' experience in HRM. Ridgeline HR's byline is Helping PEOPLE in BUSINESS and that is essentially what Peter does – help business people with their people business.



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AUSTRALIA'S MOST RELEVANT AND WELL-LOVED TIMBER INDUSTRY MAGAZINE

EWP choices

It's been a rough few years for supplying many EWP options. We spoke with three Australian suppliers about the different ways they've delivered to their customers. **By Donyale Harrison**

Complex problems usually require complex solutions, which is why the response to the shortage of many engineered wood products (particularly LVL) since the advent of Covid has taken multiple forms.

Whether thanks to Chinese production shutdowns, soaring shipping costs, losing stock to Northern Hemisphere markets or the impacts of Russia's invasion of Ukraine, some of the previously high-demand EWP coming into Australia has been much less available over the past two years. At the same time, building demand has been intense.

Suppliers have been squeezed in the middle, chasing product and managing customer needs. What's emerged has been some clever ways of permanently solving the problem, from new manufacture to innovative use and managing relationships.

NEW PRODUCTION

"In 2020 we made the strategic decision to invest in our own I-joist production," says Leon Quinn, national sales and marketing manager at Tilling Timber. "It was a significant investment, but a much-needed one to underpin the necessary volume for the industry moving forward."

That plan was put into action with the commission of a new I-joist plant to manufacture SmartJoist at Tilling's Kilsyth, Victoria branch.

"This is a significant change for us," Quinn says. "It's been about two years in the making, the planning and implementation. We wanted to have more production capacity and more flexibility in what we produce and how we produce it."

"And we also wanted to see some more

manufacturing and the jobs associated with that coming back to Australia."

After Carter Holt Harvey closed its South Australian plant in 2018, Wesbeam was the only remaining I-joist manufacturer in Australia. "Australian EWP supply was seriously impacted when CHH pulled out," says Quinn. "They withdrew their I-joist and between 40,000 and 50,000m³ of Hyspan LVL from the Australian market very quickly. And then Covid and all the follow-on issues associated with it followed."

"The timber community needs to keep bringing solutions to the market, or risk losing some of it to steel. So we strategised about where we could get the most for our investment. I-joist was a clear winner. The company's SmartJoist range is well known and supported by huge design and technical support teams."

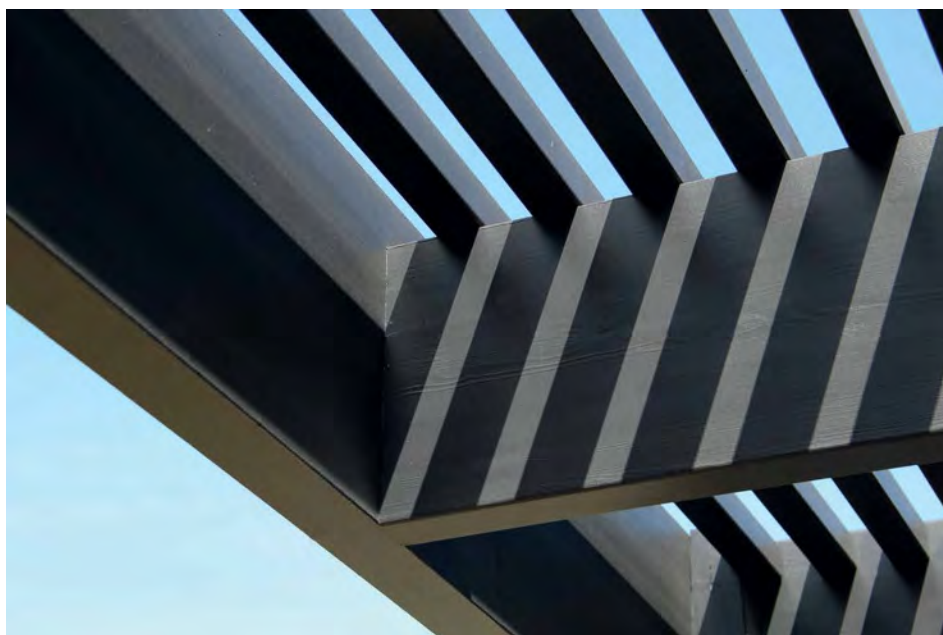
The new plant has been designed with an inherent ability to modify its output.

"This works both ways," Quinn says. "We're using the latest technology equipment, which gives us a lot of flexibility, so we can take large LVL billets up to 1.2m wide and cut them into the sizes we need for flanges. This gives us the potential to custom-make I-joists for commercial projects that require specific properties or sizes, allowing us to expand beyond our usual residential market."

"At the same time, the set-up means that, if we need to, we can change our inputs to meet changing conditions. The Kilsyth production line offers us more security because we can quickly adjust inputs if and where necessary."

Because Tilling has its own engineering and in-house manufacturing testing, it is able to respond quickly to changes in materials and sizes. This also opens up a range of options to supply to larger builds.

The machinery comes from several suppliers, with a lot of it being fabricated by »

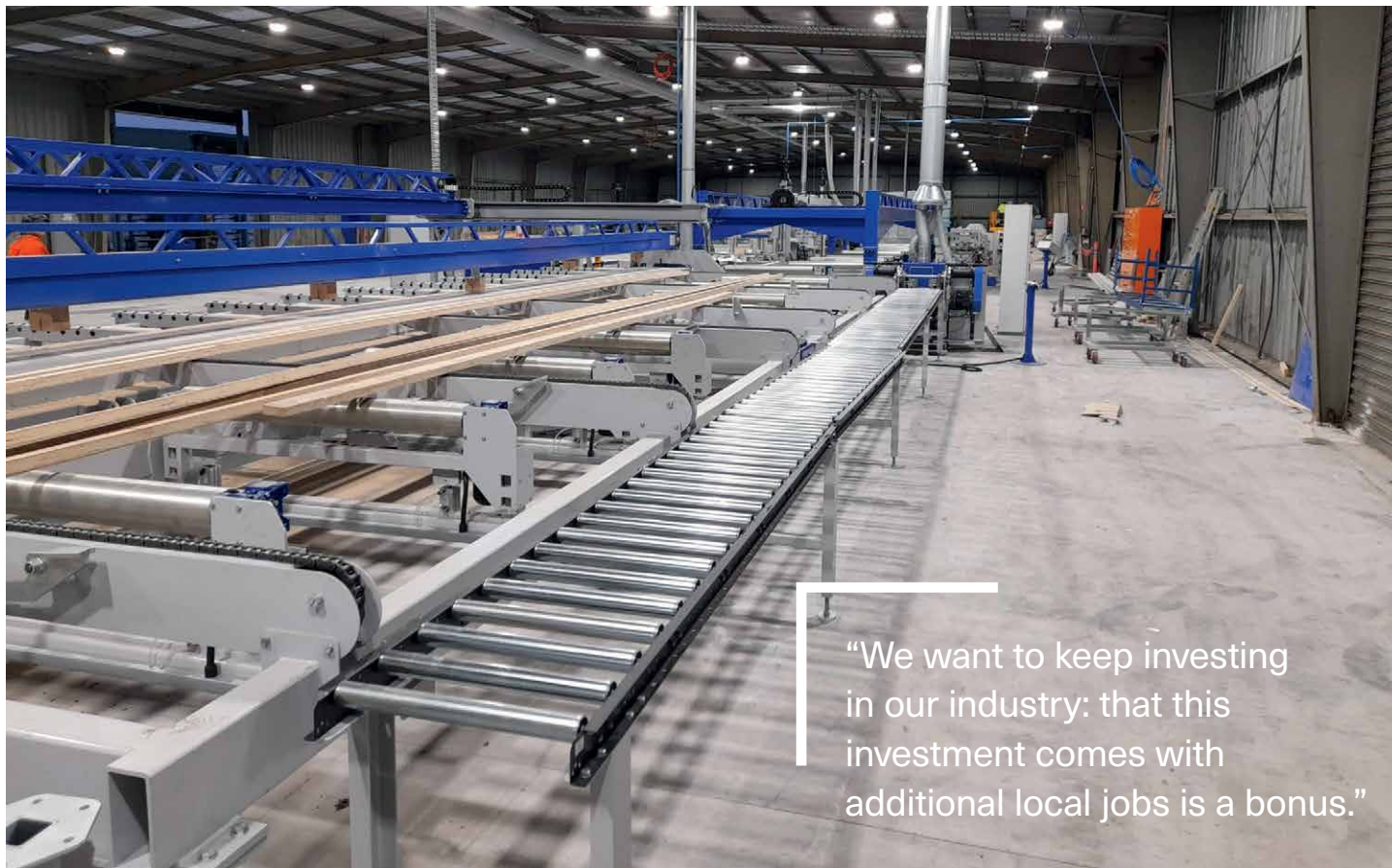


Above: Pölky glulam beams used in the pergola at Ashley Wright's home.

"In the face of shortages, we knew that we had to keep driving the market, or risk losing some of it to steel."



Clockwise from top: This large portal frame at Maddingley was braced with meyBRACE after most of the structure was already completed; Pölkky glulam is strong enough to guarantee long, straight spans; The portal frames for this island build were prefabricated then barged to site – the timber keeping the loads lightweight.



"We want to keep investing in our industry: that this investment comes with additional local jobs is a bonus."

Above: Tilling's new I-joist facility at Kilsyth will be able to adapt to changing materials and will also be able to manage custom sizes.

MPB Engineering in Dandenong. "So we have a local manufacturer for that, as well," says Quinn.

"It's a very positive story to tell our trading partners; that now have access to made-in-Australia SmartJoist.

"This new production underpins ongoing growth in this space and brings much-needed supply security to the market."

Tilling has been one of the biggest EWP suppliers in the Australian market for a long

time and Quinn admits he's never seen as many difficulties hit the sector at the one time before.

"Before Covid and the geopolitical upheavals thanks to Russia, we saw ourselves as the company who could always say 'yes' to supply," he says. "It's over two years in the making, but we are very pleased that we made this decision early, and put the plan into motion.

"The new line gives us more control and

help to underpin our growth over the next five to 10 years. We want to keep investing in our industry: that this investment comes with additional local jobs is a bonus."

CLEVER ADAPTATIONS

"For Meyer Timber, getting through the tough times has been all about the overall service we've been able to offer our customers," says Afzal Laphir, principal engineer at Meyer Timber.

"Where we've had shortages, we haven't told our customers to go away, we've given them alternatives to get their job done promptly with what's available."

George Dolezal, also principal engineer at Meyer Timber, agrees. "Our customers have been coming up against a lot of roadblocks. We've been innovating to help them achieve that build, get their floor system... We've worked hard to be the one link in the chain that they don't have to worry about."

This innovation has taken several forms. The first is meyBRACE, an LVL-based bracing solution that provides high lateral capacities.

"We came up with this pre-Covid," says Laphir, "as an economical alternative to steel bracing. In fact, Covid somewhat negated this benefit, but we realised that even then, there was still strong demand for it."

The fact meyBRACE was almost as strong as steel and much lighter attracted engineers to the product, as well as builders looking



Above: SmartJoist with holes pre-cut for services. It's a hugely popular product and will now be made locally.

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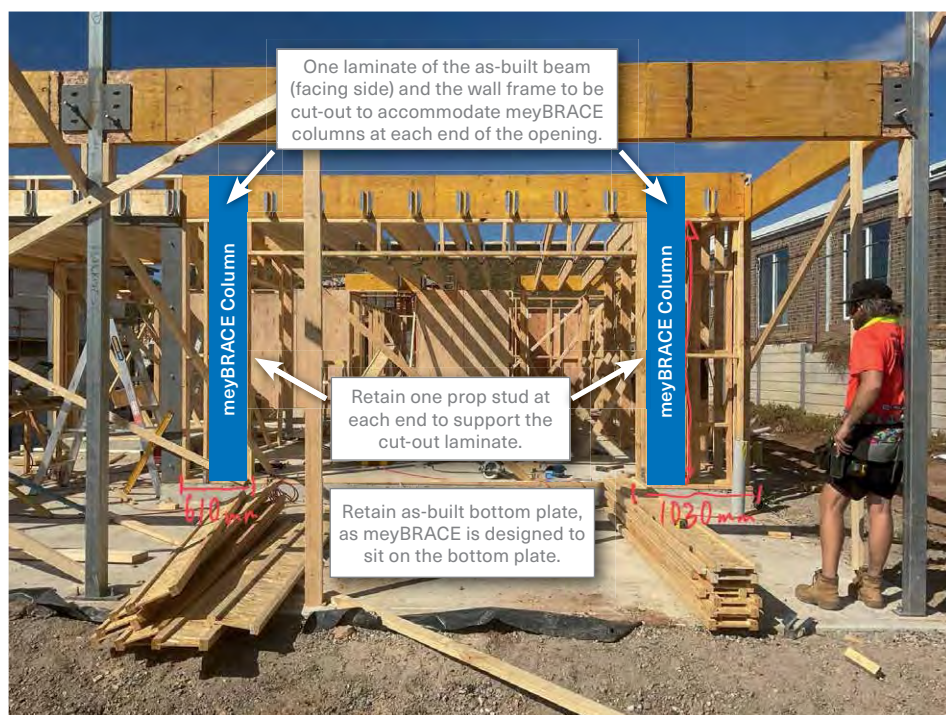


Above: The finished installation of meyBRACE from the solution planned in the image below.

to remove steel from a project. Laphir and Dolezal note that being able to drop steel out of a build is strongly appreciated by their customers. Not only does it make connections easier and better, it lowers follow-on costs such as cranes.

"And you only have to deal with the one

supplier," says Dolezal. "So if there are any issues, it's clear who's responsible. One major benefit of the meyBRACE is its suitability for difficult circumstances. We supplied it for a build on Macleay Island in Queensland, as part of a package that included meyJOIST, meySPAN13 and GL17C



Above: Meyer's solution for replacing steel bracing on an already-installed wall and floor system.

ridge beams – everything had to go over on barges, so the fact this was much lighter than steel saved the builder a lot of money."

The meyBRACE-supported portal frames were prefabricated and the structure went up quickly. "Sadly, he missed the window to get a roof on before the rains set in, so there's some weathering on that frame but it is still fine structurally and looks great in the finished build," Dolezal says.

"The other thing is that because those portal frames are designed to take the full bracing loads of the structure, the internal layout was quite modular and could be moved and changed up to the last minute with minimal adjustment to the external structure. So he could have swapped the order of the rooms or added an ensuite without needing to re-do the whole engineering design."

Laphir also recently supplied the product into a difficult build: "I had an unusual request from a builder to supply our meyBRACE timber portal to fit within an already installed wall frame and floor system," he says.

The project engineer had specified a steel truss brace, but this couldn't be sourced in time because the height of the wall was non-standard. "We ended up supplying the columns only, pre-fabricated as usual with stiffeners and pre-drilled holes to receive screws that form the knee joint," says Laphir. "These columns were fixed into as-built floor beams to complete the meyBRACE 3640 to the satisfaction of the builder. In fact, it solved more than one problem: we also saved him the trouble of connecting a timber beam to the originally specified steel truss brace. The timber column that formed the meyBRACE gave a convenient face to connect this timber beam using standard joist hangers. The site supervisor told us 'we want more of this!' because of the ease of the meyBRACE."

Meyer Timber's engineering team has come up with other solutions specifically to deal with recent shortages, including fabricating their own wind beams in house. "They're not high-tech," says Dolezal, "We're just getting pieces of 90 by 35 pine, putting glue on top, and building them up one by one, but because the forces are working in the horizontal direction, the glue line isn't critical, what matters is the thickness of the beam."

"They can have up to seven laminates," adds Laphir, "and while they're not as sophisticated in the glue line engineering as glulam, they do this job very well and they free up LVL and I-joist for use in more essential applications."

Delivering more product to customers with the same amount of LVL has been key for Meyer Timber's recent innovation. "We're always talking about new concepts," says








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Above: Pölkky glulam creates a precise, durable exterior feature in this Northcote home, designed by Victoria's Ola architecture studio.

Laphir. "How can we improve things? How can we do better? Or how can we eat into the market better, both for us and for timber as a whole? We won't die wondering."

The solutions have even extended to slow moving stock: Meyer Timber has been supplying a customer with I-joist offcuts for use as lintels in builds, replacing LVL, which can then be used in more critical applications and making use of short lengths of I-joist that aren't really useful in floor systems.

"A lot of ideas end up on the floor very quickly," says Dolezal. "And some get through testing and *then* end up on the floor, but we just keep looking for solutions so our customers can keep building. As the saying puts it, if you don't keep going forwards, you're actually going backwards."

TRUSTED RELATIONSHIPS

Ashley Wright's family has been selling timbers since 1853. "My Dad and I spun this business out of the old family business when it closed in 1998," he says. "Compared to Tilling and Meyer Timber, we're a little squirt, but one backed up by five generations of experience, expertise and close relationships with our international suppliers."

Remarkably, Wright Forest Products has made it through the last few years without

major disruptions. "That's mostly down to the fact we purchase from a core of suppliers with whom we've cultivated strong relationships, going back many years. It keeps us at the front of the queue," Wright says.

One of those core products is Pölkky glulam from Finland. "I first visited there about 2000," says Wright, "and I saw the Finns had put gigantic amounts of investment into technology and processing. I said to myself, Australian builders would absolutely love to get their hands on some of these products."

It's been a process. He decided to start importing Pölkky posts and beams, which are ACQ pressure-treated to H3 or H4 depending on end use, as well as Lunawood thermowood in multiple lines including cladding. "Neither was really available here at the time and so neither was covered by the standard or the NCC," Wright says. Instead, he began with small batches that were trialled under local conditions, cautiously using European standards as a basis for determining the equivalent local grade.

"We've been selling these products Australia-wide for 15 years now and there's never been a failure," he says. "So we're quite comfortable it meets the fit-for-purpose test."

Pölkky timber's ACQ treatment is supplied by Koppers and the high-pressure

application sees it penetrate through all the sapwood, making it highly suitable for external applications.

"It adds to the cost, because it requires a longer drying process than a LOSP treatment," says Wright. "But our customers have builders wanting timber for their higher-end and architect-designed projects where they need both aesthetics and reliable strength. We can recommend this product with confidence."

"My personal expertise in timber has always focused on outdoor timbers. I've seen a lot of inappropriate choices over the years, then there was a time when people tried not to use it externally. Now the market has come full circle to celebrating visual timber in high-end builds and we can offer a product with excellent durability that's guaranteed to stay straight. I've even used it in my own home."

The other feature that has been driving designers towards Pölkky is that the treated board is a rich dark-honey-brown in colour, rather than the green of many other treated timbers. "To my knowledge, we're the only people selling brown treated timber," Wright says. "The customers just love it. Because it's different. You can give it a clear coating and it is good to go!"

As with any timber used in an external application, Pölkky still requires good design.

"Things like eaves and some weather protection for sunlight, wetting and drying give the timber a very long life expectancy," says Wright. "This product can be directly exposed to the weather but needs to be painted or to have a good quality coating or it will weather and deteriorate. The design of a job is really critical to get a result that's going to last forever, as is really skilful installation – not leaving areas where there can be failures."

Wright's main customers are large independent merchants who specialise in delivering quality timbers to professional builder clients. They've talked with him about the projects that Pölkky has been bought for.

"It opens up opportunities of using very large posts and big beams that can span long distances," he says. "A lot of the big tract housing builders like Metricon incorporate it into their designs because we have the sizes and lengths that suit their needs. But the main market is architectural design builds, especially rural and seaside homes where you need that hardness as well as the spans. It's also suitable for all sorts of commercial applications, including health and childcare, because the treatment is ACQ."

Wright carries large stocks so that any delays won't impact his customers. "That

"People would ring up and say 'Have you got that? Really? I don't have to wait 18 months for it?' And we'd say, 'No, we can get it to you tomorrow.'"

helped us with the shipping issues and the fluctuating prices over recent years," he says, "but on the whole, the trust we built with our suppliers meant we had very few issues. People here were shocked. They would ring up and say 'Have you got that? Really? I don't have to wait 18 months for it?' They were amazed when we'd say, 'No, we can get it to you tomorrow.'"

Wright makes light of this, but there has been a lot of work on his part to make sure these imported products are acceptable under the various Australian building codes as certified performance solutions.

"We would like to be bringing in more products from these bigger markets where they have the money to do more in the way of product development and testing," Wright says. "There is a move, I believe, in terms of the BCC and Australian standards for harmonisation of some of the rules. If we can

use more of the data from testing and standards in Europe or the UK, that will open the doors for Australian builders to have a lot better choice of products that haven't typically been available here."

Until then, Wright errs on the side of caution, converting down from European and English strength ratings to the comparable Australian GL rating.

"On the upside, we have the sizes and lengths the factory in Finland manufactures specifically for us here in Australia," says Wright. "So they're the metric sizes and sections that we use here domestically, which makes them fully interchangeable with other products that are available in the market. It's all about making things as easy as we can for our customers." **T**

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Planning for fires

Regulations around building in bushfire areas and fire protection for all domestic builds are changing around the nation. WoodSolutions is helping the industry to keep up.

While floods are definitely not a real improvement, it is nice to not worry about a repeat of Black Summer this year. One positive legacy of that grim time is improvements in a wide swathe of fire regulations for Australian buildings.

Between the 2019-20 fire season and the Grenfell Tower fire, Australian regulators had all the impetus they needed to make sure codes were both fit for purpose and also able to be understood by end users. The result is a set of changes for both fire protection in standard buildings and in bushfire zones, as well as resources to help builders and homeowners understand what's needed. The following is only the tip of the iceberg.

The Australian Building Codes Board has a set of fire-related changes in NCC 2022, which comes into effect 1 May 2023. These include enhanced fire safety provisions for

early childhood centres (ECCs) and primary schools located in multi-storey buildings and bushfire provisions for non-residential buildings. Additionally, more changes are being researched for implementation in NCC 2025, including Quantified Performance Requirements for fire safety, a review of combustible materials on Class 1 and Type C construction and changes to the smoke alarms provision made in conjunction with work from FRNSW's testing program.

The NCC also now requires all passive fire systems to be tested to the latest standards. From 1 September, all new buildings need to have passive fire safety systems with a fire resistance level (FRL) that complies with AS1530 Part 4 – 2014. Previously, products that had passed earlier, less stringent standards did not need to be retested and so had been grandfathered in. This changed in

the 2019 NCC update and that change has now come into force. In some states, including NSW, construction certificates will not be issued until the design makes clear the materials conform to this requirement.

The Victorian Government has been engaged with stakeholders on making planning provisions in bushfire areas clearer and better. The consultation period closed in February, but a date for the engagement summary is yet to be announced. Meanwhile, the NSW government has recently been consulting with stakeholders on fire safety regulation reforms. Although the consultation period has recently closed, you can find the details here: www.haveyoursay.nsw.gov.au/more-compliant-and-fire-safe-buildings

In short, the trend is for legislation that requires designers, builders and maintenance workers to be more accountable for fire

safety systems, to reduce risk to residents and occupants of buildings and also to make the legislation surrounding building and building in bushfire prone areas less opaque and easier for all users to comply with. This last is a nation-wide push, as is the move to incorporating research and data from various fire agencies.

GETTING THE NEWS OUT

There's a lot going on. To navigate it, WoodSolutions has recently updated its *Fact Sheet 19 Building in bushfire prone areas*, which is a good starting point, especially for builders working with timber. It contains an overview of the legislation around materials – with a reminder that even in high-BAL rated areas, timber framing is acceptable when coupled with external walls, roofs, windows and doors that meet the standard.

The fact sheet links out to several major resources including a BAL calculator, which is a design tool that enables building designers, builders, regulators and homeowners to determine the relevant Bushfire Attack Level (BAL) for a specific building site. Councils offer rough calculations for areas, but specific sites within those areas can attract higher ratings than the overall.

The trend is for legislation that requires designers, builders and maintenance workers to be more accountable for fire safety systems.

There is also a summary table of construction requirements in different BAL areas, a link to WoodSolutions' free Expert Advice online service and a link to the Timber Framed Housing in Bushfire-prone Areas flyer that can be printed out for clients and gives a handy run-down of requirements, including a list of bushfire resistant timbers (BRTs) that meet various levels of requirements.

Finally, the fact sheet links to the WoodSolutions Design Guide 4, *Building with Timber in Bushfire-prone Areas: NCC Compliant Design and Construction Guide*, which is a comprehensive technical guide, researched by Boris Iskra, a leader in the field. This gives a more comprehensive overview of all the details touched on in the above, particularly timber selection.

The design guide explains the differences in fire retardant treated timbers and natural BRTs (Blackbutt, Kwila/Merbau, Red Ironbark,

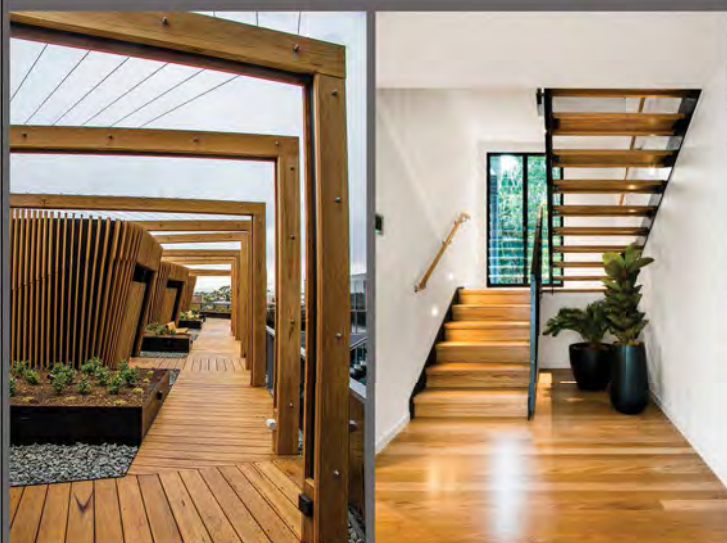
River Red Gum, Silvertop Ash, Spotted Gum and Turpentine) and those timber species that are able to be used at lower BAL ratings, as well as specifics for high-risk parts of buildings, particularly decks, windows, doors, subfloors and roofs.

On a related note, a new national warning system has also come into play this year with consistent use of icons around the country for apps and other warnings. The yellow Advice icon alerts users to a fire in the area, the orange Watch and Act means a response is required and the red Emergency means an urgent response is required. The same system will shortly be rolled out for other disasters including flood, storm and cyclone. It's hoped this will at least help lower the human toll for disasters. **T**

Download WoodSolutions Fact Sheet 19 at www.woodsolutions.com.au/publications/fact-sheets



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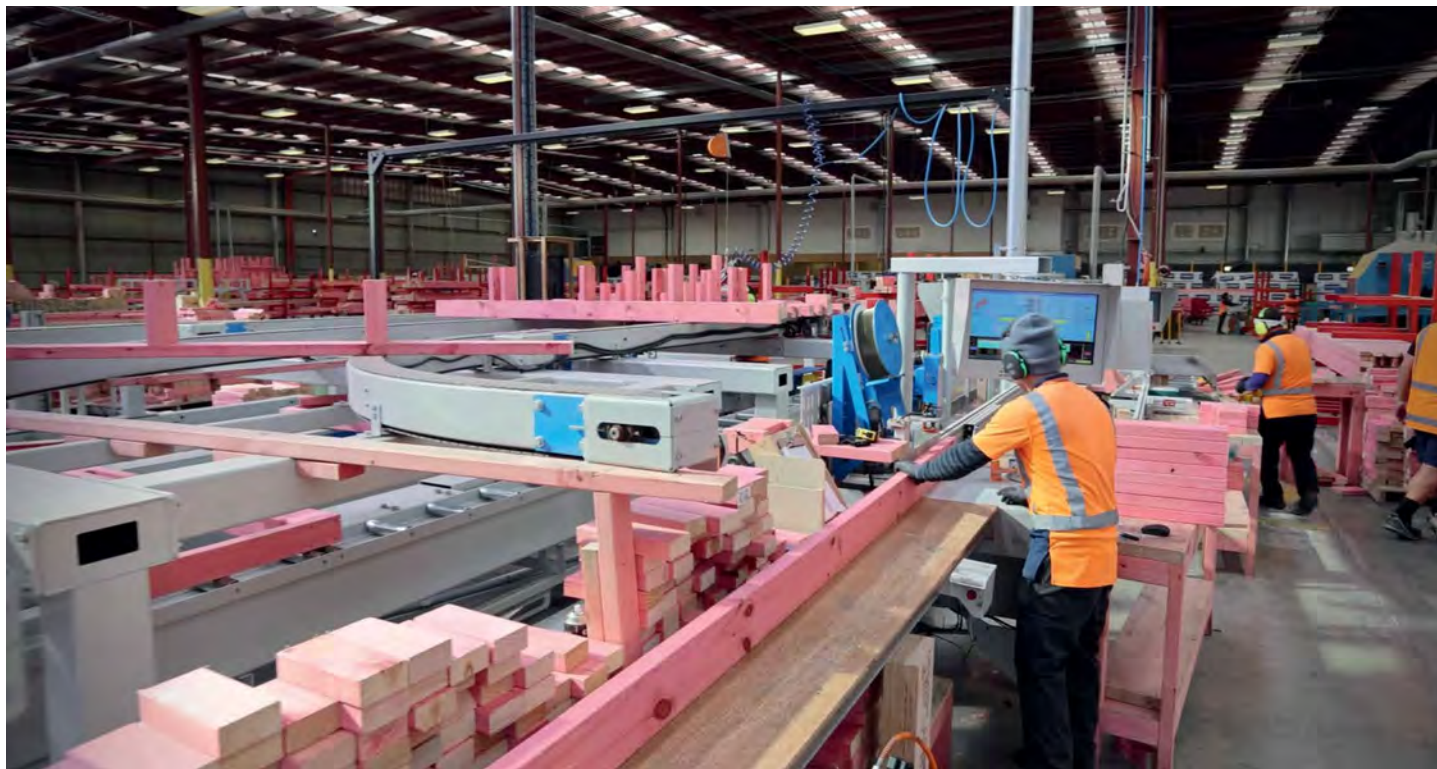
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Above: Multinail's Curved Conveyor delivering components in order of need to a Raked Wall Extruder, so the job can proceed seamlessly.

Wall to wall profits

A lack of labour, whether due to employment crunches or Covid, needn't slow down your wall frame productivity thanks to these innovative machines from Multinail. **By Warwick Porter**

Prefabricated wall framing isn't new, but the game is changing, with revolutionary systems taking productivity and profits to a whole new level.

Traditional methods of prefabricating wall frames are manually intensive processes that have inherent productivity challenges. Currently, widespread labour shortages and the lack of certainty around labour being

available are making it particularly difficult to ramp up production.

Our customers have told us that efficient wall framing production is constrained by several underlying issues. The availability of labour is front and centre: if you are fortunate enough to find the staff you need, your output is still limited by the amount of timber the operator can pick up and down in a day. While

this can be improved by placing more people on the line, improvements run up against the hard limits of the physical capacity and endurance of your staff, and the increase in productivity may not cover the extra cost.

Multinail has worked with our customers on an alternative approach, dividing the framing process into smaller elements. By installing a sub-component station at the side of the wall line, you can dramatically increase the meterage output – to the extent that the cost of extra labour is fully justified.

After monitoring this new approach to wall lines at our customers' workplaces, we've seen impressive outputs achieved, but they still run into the limitations of a process that's heavily dependent on the physical capacity of staff and the attendant issues of absenteeism, productivity and quality.

This led us to assess the various work areas on the frame line: we realised the introduction of sub-component assembly areas had simplified these work flows to a point where it was possible to introduce robots to replace some of the manual workers.

From a machinery supplier angle, that's when things started to get exciting for us. Our new Auto Framer can increase output and decrease labour needs, producing a dramatic increase in the metres-per-person metric.

Precut components are moved across the machine to programmed positions and nailed



Above: The new Raked Wall Extruder from Multinail dramatically speeds up a previously awkward job.

We see this as the future – making more walls with less labour.

in place. The Multinail Auto Framer can manage frame heights from 1800mm to 3600mm and lengths up to 6000mm in timber from 70 x 30mm to 140 x 45mm. The operator is kept safe away from the nail gun and clamps, while override mechanisms allow for final adjustments if required.

At Multinail, we see this as the future – simpler machines with strategically positioned robots moving a large mass of timber through the manufacturing process and making more walls with less labour.

Having provided solutions at the cutting and wall assembly ends, the next stage for us is the transition from cutting to assembly.

The logical way most people work is: do the cutting, put it on a trolley, store the cut product for a period, move it to the work area, unstack it and start making a wall. All these are time-consuming manual tasks that don't directly equate to metres of walls produced.

The next project under development for us is robotic conveyer systems that will work automatically with the other machinery in the line to deliver timber from the saw to the work areas. Not only will this remove the need for trolleys and the associated labour, but it will speed up production as each station gets the



Above: Multinail's new Auto Framer speeds wall frame production and lowers the strain on labour.

component they need when they need it, reducing overall labour and increasing output.

RAKING WALLS

For many frame fabricators there is another challenge which can derail other gains in productivity: the increased demand for raking walls. These walls can be so difficult to make they can slow or even stop production lines. Some plants refuse to make them, leaving builders with no option other than to stick frame them on site.

This has been on our radar for some time, with the Multinail development team focused on not just a raking frame solution but one that brings a dual benefit to a fabricator's operation. The Raked Wall Extruder is a machine that automatically sets the wall

height and length to follow the contours of the wall that is being made, taking the hard work out. It can even move directly from straight walls to raking walls at approximately the same speed in many cases.

Feedback from plants using the Raked Wall Extruder says it also makes a standard frame faster than many framing machines out there, as well as solving a major bottleneck in the wall framing production process.

This machine is the latest step we've taken on our journey to improve the profitability of wall frame manufacturing. It's a journey we're making in conjunction with the wider industry, so talk with the team at Multinail about your needs to find ways in which we can help each other continue to develop and innovate. **T**

For more, visit www.multinail.com.au



Above: The new Raked Wall Extruder simplifies frame production with the fast and automatic assembly of both raked and standard wall frames.

Managing bushfire risks in timber buildings

La Niña may be hanging around but fire season looms on the horizon. Good timber choices can help mitigate worries.

By Afzal Laphir, Principal Engineer, Meyer Timber

As we head into another warm summer, some will look forward to the festivities around Christmas/New Year, some others might say “bring on those juicy mangoes” and some cricket nuffies like me will wait in earnest for Test cricket to start. But there will be some others who may not be able to think beyond bushfires.

However, if you prepare well and do the right thing for your house and your surroundings, you can lessen your worries. For those who plan to build in a bushfire-prone area this summer, you can think timber! There are effective solutions even for the most bushfire-prone areas. Let’s explore the intricacies of a ‘bushfire-compliant’ timber building and also discuss the key role the property owner plays in protecting it.

We should start by understanding the intent of the Australian Standard AS 3959:2018 – *Construction of buildings in bushfire-prone areas*. The primary concern of this standard is to improve “the ability of buildings in designated bushfire-prone areas to better withstand attack from bushfire thus giving a measure of protection to the building occupants, until the fire front passes, as well as to the building itself.” This standard is referenced in The National Construction Code (NCC) as a Deemed-to-Satisfy means of compliance when building in a designated bushfire-prone area. This means if your home is designed and built as per AS 3959, you comply with the Performance Requirements of the NCC.

BUSHFIRE ATTACK LEVELS

The Bushfire Attack Level (BAL) is a “means of measuring the severity of a building’s potential exposure to ember attack, radiant heat and direct flame contact”. This serves as the basis for establishing the construction requirements to improve the protection of building elements from attack by bushfires.

AS 3959 divides the individual sites into six BAL ratings, determined by factors including the fire danger index (FDI), wind speed, nature of surrounding vegetation, the slope of the land and the distance of the house from vegetation. As explained in Table 1 (below),

the ratings range from BAL LOW (no need for special requirements) to BAL FZ (flame zone), which are categorised based on the measure of exposure to heat flux. Each BAL rating has different construction practice requirements that we will briefly discuss below.

RATING	RISK OF EXPOSURE				Heat flux exposure
	Ember attack	Burning debris	Radiant heat	Direct flame	
BAL LOW	Insufficient risk to warrant specific construction requirements				N/A
BAL 12.5	Low To Medium	No	No	No	12.5 kW/m2
BAL 19	Medium	Medium	Likely	No	19.0 kW/m2
BAL 29	Increased Level	Increased Level	Increased Level	No	29.0 kW/m2
BAL 40	High	High	High	Likely	40.0 kW/m2
BAL FZ	Extremely High	Extremely High	Extremely High	High	>40.0 kW/m2

Above: Table 1, adapted from Appendix G, AS 3959

Element	Condition	BAL-19 ⁴	BAL-29	BAL-40	BAL-FZ
All enclosed framing	All	AT			
Unenclosed sub-floor framing	≤ 400mm from ground	BRT		SP	
	Otherwise	AT	AT ²		
All decking (enclosed or unenclosed)	< 300mm from glazing that are <400mm from deck surface	BRT ¹	BRT		
	Otherwise	AT			
Verandah posts	≤ 400mm from deck surface/ ground	BRT	BRT		
	Otherwise, if mounted on galv stirrups with >75mm ground clearance	AT	BRT		
Balustrades or handrails	< 125mm from any glazing or combustible wall	AT	BRT		
	Otherwise		AT		
Fascia, barges and eaves linings	All	AT	BRT ³	SP	
External cladding	≤ 400mm from deck surface/ ground	BRT ¹	BRT ³		
	Otherwise	AT			

Notes: (1) Timber species given in Appendix E1 can be used in addition to BRT. (2) Use BRT for framing of unenclosed subfloor spaces of verandahs, decks, steps, ramps and landings. (3) BRT can be avoided for eaves linings and external cladding if a suitable FC sheet is provided. (4) BAL-12.5 to use the same requirement as BAL-19.

ATAny Timber

BRTBushfire Resisting Timber

SPSpecial treatment required using a system approach

Above: Table 2 – Timber usage in varying BAL zones

CONSTRUCTION REQUIREMENTS

Bushfire Resisting Timber (BRT) can be solid timber, laminated or in a reconstituted form that meets the test specified in Appendix F of AS 3659 and is deemed to be acceptable to withstand exposure up to a BAL 29 level. There are seven BRT species listed in this appendix, of which the easiest to source is Merbau (Kwila), then Blackbutt, Spotted Gum, and Red Ironbark. The other three, Silvertop Ash, River Red Gum and Turpentine, are no longer readily available in large quantities.

As the BAL rating increases, the restrictions in building materials, design and construction also increase. Table 2 (opposite page, bottom) may be used as a convenient guide on what type of timber is allowed. For more information, refer to the code itself or the WoodSolutions Technical Design Guide 4 - *Building with timber in bushfire-prone areas* (Feb 2020, www.woodsolutions.com.au/publications) or the Meyer Timber Factsheet *Timber in Bushfire Zones* (https://meyertimber.com.au/wp-content/uploads/MeyerTimber_Bushfire_FactSheet.pdf).

Although BRT can only be used up to BAL 29, timber can still be a construction material in BAL 40 and BAL FZ zones through a systems approach by conducting fire

tests as per AS 1530.8. As an example, Appendix H of the standard incorporates two timber-framed roof systems, which are fire tested and approved as deemed to satisfy BAL FZ requirements.

Another example is the use of 16mm fire-rated plasterboard as external cladding on a timber frame in BAL FZ, which easily satisfies the requirements of AS 3959 (CI 9.4.1) where the exposed components of an external wall in BAL FZ require a system with a fire resistance level of only 30 minutes when tested from the outside.

PROPERTY OWNERS' RESPONSIBILITIES

Property owners should bear in mind that the construction of the building is only one of several measures of mitigating damage from bushfires. A combination of other measures such as planning, siting, water supply, access, landscaping and maintenance also play a crucial role in protecting your building.

While it is important to use the correct materials and construction details to achieve compliance with AS 3959, it is just as important to pay emphasis on these other measures including maintenance. A fully-compliant building of today may not necessarily provide you with protection in the future unless measures are taken to maintain the bushfire resilience of your home and garden. The responsibility falls on the

homeowner to ensure simple things are done. For example, a well-constructed building will not protect you from flying embers if you haven't cleaned your gutters.

As part of the risk management process, an understanding of the vulnerable areas of your house is important. These include roof gutters, gaps in roof or wall cavities, sub-floor areas where embers can enter, corners or horizontal surfaces where embers can gather, and even vertical surfaces (windows, doors etc) that are exposed to ember attacks.

However, it must be noted that when your well-maintained and fully compliant building is subjected to the unpredictable behaviour of fire and extreme weather conditions, it may still not survive a bushfire event. Hence a reminder that the property owner must remain vigilant and follow instructions from authorities on a suitable survival strategy when these extreme events occur.

That being said, timber houses can be designed and constructed with the approved materials and systems to withstand the most extreme bushfire conditions. If you plan well and take the right measures to mitigate damage from bushfires, wherever you live or intend to build your new home this summer, you should be able to rest easy and enjoy the juicy mangoes or the cricket just as much as the rest of us. **T**



For more information on this topic, contact Afzal Laphir via email at AfzalL@meyertimber.com.au

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Above: Responsible Wood CEO Simon Dorries (centre) with Jason Ross Marketing and Communications Officer (right)

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DTS: the holy grail

Updates to current deemed-to-satisfy solutions are urgently needed to keep timber products a first choice. **By Craig Kay, national product engineer, Tilling**

In the last decade of the 20th century, (it sounds so long ago, doesn't it?) the major reference document for the design and construction of stand-alone timber residential structures, the AS 1684 series, underwent a substantial review.

An enormous amount of industry-wide work was undertaken in this review which culminated in the 1999 edition, including the recreation of 45 sets of supplementary span tables. There were four parts to this edition of the standard:

- 1684.1 Part 1: Design criteria
- 1684.2 Part 2: Non-cyclonic areas
- 1684.3 Part 3: Cyclonic areas
- 1684.4 Part 4: Simplified - Non-cyclonic areas

It was this 1999 edition that incorporated, among other things, provision for limit state design methods, revised/new structural grades for timber and special 'engineered' and fabricated timber products. AS 1684.1, Part 1: Design criteria sets out the design methods, assumptions and other criteria used in the preparation of the Span Tables, uplift forces and racking pressures contained within AS 1684.2, AS 1684.3 and AS 1684.4.

The fundamental principle behind the creation of this document was that a stand-alone residential dwelling frame could be fully structurally designed using the supporting span tables for the timber types listed. Further, provided that the frame was then installed in conformance to the

acceptable construction details contained within the standard, the timber frame then became a deemed-to-satisfy solution (DTS) under the National Construction Code (NCC). Voilà, happy days. No need to involve those pesky engineering types who like to complicate things.

However, at an adoption rate far quicker than the standard could keep up with, the introduction of EWP elements and building methods using prefabricated systems such as roof trusses was changing the way the 'typical' house was being constructed very rapidly. While many of the acceptable construction details within AS 1684 are equally applicable to rectangular solid cross section EWP, there is a growing range of other EWP such as I-joists and prefabricated truss applications where there are no DTS options contained within the document to cover this scenario.

Even though the acceptable construction details within the document can be used for the construction of rectangular solid section EWP elements within the frame, there are no

Provided the frame was installed in conformance to the acceptable construction details within the standard, it became a deemed-to-satisfy solution.

DTS span tables within the document to allow users of the standard to design some of these elements. Little by little, the original purpose of the document has been progressively diluted, with building designers now having to utilise proprietary span tables or software from EWP manufacturers, and/or outsource parts of the design to others.

In the 2010 edition of this standard, there was an (informative) appendix added which did give readers of the document some typical construction details for EWP such as wood I-joists. The term 'informative' in a standard means that it is there for advice only and is not an integral part of the standard.

Some industry work had also been carried out to amend the properties of MGP grades to reflect the resource that was currently available, with MGP now almost universally seen as the generic wall stud and plate material. While this was certainly a step forward, by this time much of the document now was reflecting a building construction methodology of a bygone era, and while it was not incorrect, it really dated the document and reduced its application as a standalone DTS.

RECENT CHANGES

Some may disagree, but I think by and large industry had generally accepted many of the limitations in the standard and had become used to the addition of proprietary EWP and the necessity for an ever-increasing role of structural engineers in the design of more and more complex contemporary dwellings.

These products typically were certified as conforming to the NCC by the use of part A5.2(e) of NCC 2019 (Part A5G3 – NCC 2022):

(e) A certificate or report from a professional engineer or other appropriately qualified person that—

(i) certifies that a material, product, form of construction or design fulfils specific requirements of the BCA.

and

(ii) sets out the basis on which it is given and the extent to which relevant standards, specifications, rules, codes of practice or other publications have been relied upon to demonstrate it fulfils specific requirements of the BCA.

Because the allowable spans or, in the case of OSB bracing, the racking resistance of these products could not be referenced directly from a DTS document like AS 1694,

This change in the NCC has been a massive wake-up call for the timber industry and reinforces the need for a NCC-referenced document of some sort.

under the NCC they are deemed as a 'performance solution'. For many years this combination of engineer-certified performance solutions complemented the DTS AS 1684, and one could argue, filled in the gaps.

That symbiotic relationship all changed when Part A2.2 (4) was introduced in the NCC 2019-Amendment 1, becoming effective in July 2021.

From this date, to comply with Part A2.2(4), it is now mandatory for any performance solution to be supported by a project-based comprehensive four-stage process. Ouch! As an industry we certainly sleepwalked into that one. Industry is now rushing to have many more products that currently fit into the NCC as a performance solution referenced in a DTS document like AS 1684.

This change in the NCC has been a massive wake-up call for the timber industry and reinforces the need for a NCC-referenced document of some sort, whether it is an Australian standard or even an industry standard, that provides a DTS that a person can use to design and construct a standalone timber framed dwelling without the need to include the now more difficult to deal with performance solutions.

If we as an industry want timber framing to be the generic first choice building material, we need to make it as easy as humanly possible to design safely with, in this very litigious age.

The FWPA carried out a large survey over December 2021 and Jan 2022 of building professional groups regarding the current AS 1684, to investigate its current usage, and to explore in more detail what users wanted the framing document to do, how they wanted to use it and what new features an updated version might include. Issues addressed included:

1. AS 1684, was developed in an age where everything was in book form. Does a replacement need to be a printed document, or should it now be only in digital format?

2. Building styles have changed and the current AS 1684 is limited to 3m eave height. Does a replacement need to consider DTS options for a three (3) storey structure? In a three-storey structure, earthquake design now has to be considered. Does this require a simplified approach for earthquake design?
3. EWP now plays a significant part in house construction. What EWPs should be included in a new DTS document?
4. Generic software/app resources. What capability should these have and what should they look like?

A story I love is called 'Whose Job Is It, Anyway?'

This is a story about four people named Everybody, Somebody, Anybody and Nobody. There was an important job to be done and Everybody was sure that Somebody would do it. Anybody could have done it, but Nobody did it. Somebody got angry about that because it was Everybody's job. Everybody thought Anybody could do it, but Nobody realised that Everybody wouldn't do it. It ended up that Everybody blamed Somebody when Nobody did what Anybody could have.

We are now competing with an aggressive steel framing industry that has been given a massive break thanks to the shortage of timber framing. The takeaway from all this is that our Industry, from one end to the other, needs to participate in some form to help the timber industry develop a contemporary DTS solution for timber framing that allows new wood-based materials to be added in a timely manner.

History tells us the once ubiquitous timber floor was replaced by a concrete slab; do we wait until timber framing has lost out to steel framing by our failure to innovate before we do something? I hope we do *not*. **T**



Craig Kay is the national product engineer for Tilling.
For more information on this topic, contact Craig Kay and the Tilling engineers via email at techsupport@tilling.com.au





Above: Shaun Harper at work designing at Alpine Truss in Wangaratta. Simple modifications to the office have made it accessible.

Rebuild & Design

Disabled employees show their strength and productivity. **By Kersten Gentle**

There is no doubt that our industry, along with all industries in Australia, is going through an employment crisis. No matter where you go or who you talk to, fabricators and suppliers are struggling to find workers.

We have the lowest unemployment we have had in half a century, so to attract people, employers need to be more open and look outside the box.

The FTMA Rebuild & Design program is focused on attracting builders who:

- Have been injured and can no longer work on the tools;
- Are fed up working in the elements, or;
- Are simply looking for a new career.

Today, we share the journey of two builders who both had significant injuries, resulting in them now needing wheelchairs to get around. Both have found new careers

in the frame and truss industry as timber systems designers, because an employer gave them a chance.

FROM CHIPPIE TO DESIGNER

Scott McKay finished his apprenticeship as a chippie in 1991. In 1996 he was in a car accident that resulted in him needing a wheelchair for mobility.

While in rehab, Scott met a few blokes who got him into wheelchair racing. He was doing 250km a week in the wheelchair and three gym sessions a week in the hope of reaching the Paralympics. Unfortunately, he didn't quite make the team, but he was fit and ready to find new work.

In 2001 he saw an advertisement for a job at Trusswall in Mornington. Given his building knowledge, Scott thought he would apply and was super excited when Wilson

Bond, Truswell's director, gave him the job.

Scott says the young blokes he was up against were 10 times quicker on the computer, but they didn't have the building knowledge that he has. Even knowing the components made a huge difference and Scott felt it was the perfect role to put his chippie training to use.

"I used to hang shit on my mates working in offices," says Scott, "teasing them that they were suits and pen pushers, but now I'm working in the office, I realise it's not as boring as I thought it would be."

"Having building knowledge helps fix problems before they become a problem on site, as I know how it all goes together."

Scott's partner picked up a job in Bendigo and they had to relocate, however, with truss plants all around the country and good designers being hard to get, Scott applied for



Above: Shaun Harper playing wheelchair rugby – sometimes called ‘murderball’ for its intensity.

“Having building knowledge helps fix problems before they show up on site.”

a job with the Bendigo Truss Plant and again met a good boss, Geoff Holland, who wasn't put off by the presence of his chair and gave him the job.

Scott can't believe how great everyone at Trusswall and the Bendigo Truss Plant has been. “They are ace people,” he says. “I've been able to help some of the other designers with my building knowledge and they in turn have helped me learn my way around the software.”

Scott believes that if you've got building knowledge, you have a bright future within the frame and truss industry even if accident or age means your body's not happy getting on the tools anymore.

Continuing his fitness, Scott now plays wheelchair rugby and you can imagine his surprise when talking to one of his fellow players, he found another designer who worked for Alpine Truss in Wangaratta.

KEEPING IT CHALLENGING

Shaun Harper is a young man who also was a chippie until 2014 when he fell off a roof, landing on his head, damaging his C6 & C7 vertebrae, resulting in quadriplegia.

Shaun was in hospital for seven months before going home to work out what was next for his career.

He found a job as a supervisor for the local ‘work for the dole’ project, where he had 20 participants to whom he taught general building, painting, paving and gardening skills. He did this for a year before the program was closed by the government.

Shaun then went out and bought himself an excavator and began working for the same chippies he used to sub-contract to when he was a builder himself. He would dig footings, stump holes, post holes, general demo, cleaning sites and other work.

As a result of his quadriplegia, Shaun has trouble regulating his temperature, so when he got hot in the excavator, it took longer to cool down and when he got cold, he struggled to get warm. On top of the practical issues, he found the work boring.

“I knew I needed to find another job,” says Shaun. “I had a few mates working at Alpine and the bloke I did my initial apprenticeship with knew Ronnie, the manager.

Shaun was unsure whether to apply for the job: he didn't want to hide the fact that he was in a wheelchair but was nervous that it would be deterrent.

Luckily, George Prothero, the managing director at Alpine Truss, is the type of person who will give anyone who tries a go and he gave Shaun the job.

“The Alpine team began teaching me the software,” Shaun says. “They were great: there was no stupid question and nothing was ever a drama for the team. I wasn't really tech savvy at all – I'm still not to this day – but I was a blank canvas, with no bad habits, so I could be taught from scratch.

“Knowing the terminology such as hips and jacks, top and bottom chords and what load-bearing walls and lintels were helped make >>



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Above: Simple modifications like electronic doors and ramps at Alpine Truss were supported by JobAccess.

the training a lot easier and meant I also had knowledge and experience to contribute in return."

As a chippie, Shaun says, you're always problem solving, so your mind is always stimulated, whereas, when he was driving the excavator he was bored. In his new role as Timber Systems Designer, he says there is so much attention to detail, you don't get bored and he once again feels like his mind is stimulated by his work.

The JobAccess program assisted by installing ramps.

WORKPLACE ADAPTATIONS

Shaun was fortunate to be working with a brilliant occupational therapist, who helped

do an assessment of the workplace for accessibility, equipment and so on. The Federal Government's JobAccess program also assisted by installing ramps and electric doors at Alpine Truss.

Shaun and Scott are grateful to Wilson, Geoff and George for looking outside the box when it came to their vision of an F&T employee. As Shaun says, "As soon as someone gives me an opportunity, they are going to get 110% back from me."

Employers need to know there is funding available for workplace changes and other support to help make it easier to employ people with a wide range of disabilities available through JobAccess (www.jobaccess.gov.au). Most importantly, we need to remember that there is no barrier whatsoever for employing someone in a wheelchair or with other disabilities.

I have no doubt there are many other builders who have been injured and as a result have mobility issues or are in wheelchairs. FTMA wants them to know that our sector has a great career waiting for them.

As an industry, we need people like Shaun and Scott who are ready to rock and roll as valuable employees, but without employers giving them a chance, nothing will change. We encourage all employers to look past the lack of something that can be easily learned (like software skills) on the resume, to look past the wheelchair or back injury and get these people in for a chat, as they could have the sort of expertise and energy that makes them your next gun designer. **T**

Kersten Gentle

PHOTOS: COURTESY ALPINE TRUSS

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**EMBRACE THE NATURAL
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Portal frames

This elegant engineering solution can solve some dire structural problems. **By Paul Davis**

Somehow I managed to study five years of Latin even though I went to a State School and it was an unusual subject to study even way back then. It's not been hugely useful in my engineering career but I suspect it's probably a main reason why I've got this gig at *TimberTrader News* – understanding the Latin language is a gateway to a fuller appreciation of the English.

As well as the language, which I wasn't very good at, the best thing about Latin was learning about the Romans and, for a young teenager, particularly about the famous battles, conquests, methods of torture and evil weaponry. Come to think of it, they must've been very good engineers as well as violent; 2000 years later, the Pantheon dome in Rome still holds the record for the world's longest span unreinforced concrete dome.

So, my very modest Latin skills tell me that *porta* is the Latin word for gate and it's where we get the name *portal* frame from. A portal frame is simply columns forming a gate with a beam across the top. A modern portal frame gains its lateral stability through rigid connections of the beam to the columns. A version of not-a-portal-frame would be to stand two dominoes up on their end with a domino across the top; give it a little nudge and it slides over sideways.

There are several very common applications in domestic framing where a portal frame is pretty much the only solution.

An entry canopy built at the front of the house, aka a *porte cochere* (see, that's Latin again) or an *alfresco* roof (yet again more Latin) projecting from the back of the house is laterally unstable at its outer edge in a direction parallel with the house wall. A timber picnic shelter roof or a *cabana* (Surprise! That's from the Latin for cottage) supported on a few posts that sit into steel post base brackets is another.

There is another class of building use that also needs a portal frame; that is when you have a window that occupies the full length of a wall at one end of the building. We are typically talking about a wall with a water view, the downstairs front of a terrace building or, commonly, a small shopfront.

Think of these like a shoebox with one end cut out – they just want to slide over sideways. I quoted on the engineering for a job once where I told the developer it couldn't just be all glass along the shop front running right from left to right boundary walls – it was unstable. He went to another engineer who didn't have the same 'issues' as I did. To his credit the developer ended up sending me a video showing that he could rock the finished front of the building from side to side by hand!

When it comes to a typical, narrowish but otherwise normal house, sometimes you have a garage on one side of the front elevation, a front door, then a large window

at the front of the lounge room. There is nowhere to put bracings into walls until you are maybe six or seven metres back into the house.

This front edge can't be effectively braced and the standard AS1687 says, if you can't brace an external wall, you need an engineered ceiling diaphragm – and I have never seen one built yet.

And of course, any number of building designers will draw what should have been a straightforward house, for no particular reason, in such a poor way that it is not really possible to brace it effectively. They just don't think about the practicalities of how it would be designed and built.

A portal frame across openings is a structural solution for these types of unstable structures, whether they be an architectural feature with a Latin name or just a house.

So, our first task is to identify where this structural challenge arises. Preferably you will want to pick that up at quoting stage and throw the design responsibility back to the project engineer. They are typically going to come up with a steel portal. But other portal solutions are possible using timber and that will be the subject of next issue's column.

I still think back fondly to my Latin teacher Mr McMurtrie. Although he dressed and talked as a very conservative old-school teacher, he had a wicked sense of humour. One student, Parker, who was not really interested in the class got asked, with a grin, just one question every lesson; "What does *ut* mean Parker?" and with a grin Parker gave the same answer back "*Therefore*, Sir".

When we were in year nine the movie *Caligula*, set during the reign of the despotic emperor, was released. Although the film was released in cinemas it was definitely R and quite pornographic. Mr McMurtrie, to his eternal credit, wanted to take a bunch of 15-year-old boys to see it "for the culture". Sadly, for those then 15-year-olds, we were stopped by the education department.

To Mr McMurtrie – *bona fide major kudos* – and that's all Latin! **T**



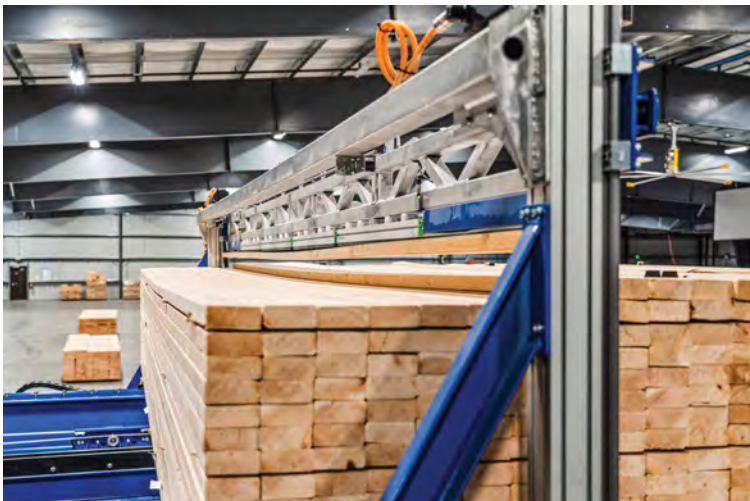
Paul Davis is an independent structural engineer managing his own consulting firm Project X Solutions Pty Ltd. The views in this column are Paul's and do not reflect the opinions of *TimberTrader News*.
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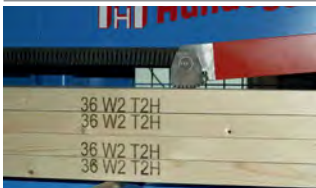
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