TimberTrader

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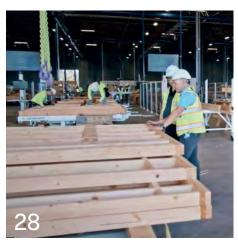


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Association news

MGA TMA

Marie-Claire McKiernan

TIMBER PRODUCT KNOWLEDGE **TRAINING**

MGA TMA has held three Access and Provide Timber and Wood Product Information Training sessions in Melbourne during 2022.

With each of these courses selling out well before the dates, it's testimony to how valuable our members see this training for

Expertly led by Rob Rule of Timber Training Creswick, the participants are educated on the different types of timber and their applications during theory content on day 1. A number of students said that their heads were full of the knowledge that Rob had imparted on them that day!

Day 2 sees the group venture out of Melbourne and complete a field trip. This enables the students to put theory from day 1 into practice.

During the June course, after meeting at David's Timber in Dandenong, the first stop on the tour was to A.G. Brown. Graeme Brown took everyone on a guided tour of their location. He explained the lengths of Vic Ash timber and went through how they make

the most of every piece of timber. It was a cold and rainy day, so the group relished the opportunity to step inside the kiln for a short period of time. There is a staggering amount of timber processed by A.G. Brown!

The afternoon visit took the group to the purpose-built site of Drouin West Timber and Truss. Keith Dunham, the CEO, spoke about the history of the business and explained that the business expansion had led them to build the facility the group was at.

Drouin West Timber and Truss has a unique product called FutureFit. It's a panelised building system that they say, "Saves time, money and worries". On a tour of the factory floor, the group got to witness the panels being built.

We extend our appreciation to the Hoo Hoo Club for facilitating day 2 of the three courses. We also thank our members and those that allow our groups to tour your facilities and grow their knowledge.

After Covid impacted our opportunities over the last couple of years to run this training, it was wonderful to have the frequency that we did this year (without any sessions being cancelled).

Students are asked to complete a survey at the completion of the session and their feedback was wonderful. It further cements just how important this training is.

We will soon be reviewing the calendar and planning dates for 2023, so stay tuned to our website www.mgatma.com.au for the announcement of dates.

MGA TMA INDUSTRY EVENT

After a long hiatus due to Covid, we returned to face-to-face events in June with an industry update and breakfast. We are delighted to announce that our next, and final, event of the year will take place on 16 November in Melbourne.



Above: Trainees with some of the huge amounts of timber processed at A.G.Brown.

Participants are taught the different types of timber and applications.

We welcome both members and industry friends to attend and will be publishing details on our website for tickets to be booked. Please visit www.mgatma.com.au

TABMA David Little

RETAINING TRAINEES

These days I find it hard to remember what I was like when I first left school. I do remember not being sure what I wanted to be and really having no idea of what was possible out there.

Members from all over the industry are reporting higher than ever churn rates, citing poaching, burnout and "not the job for me" as primary reasons for departures. Young people in particular are in high demand, they see offers for more money, flexibility or a more glamorous environment every day. Many move from job to job (often before they have developed any real skills in the business) leaving employers frustrated with young or unskilled workers and instead looking for those with more experience. More poaching ensues. The cycle continues.

Developing your future leaders is a long game. Most of the Trainees and Apprentices TABMA provides are fresh from school. Members of our recruiting team have spoken to the Trainee, their parents, the school and careers advisor extolling the benefits of a formal qualification, in an industry we love. Once they get to site, however, they experience, for often the first time, what it means to have a job with all the realities which go with it.

We know that the first 24 hours, then the first week, then the first six months are the critical periods for settling a fresh face into their new role. Once through that first six



Above: Industry experts helped the MGA TMA group expand their timber product knowledge.

We know that the first 24 hours, then the first week, then the first six months are the critical periods for settling a fresh face into their new role.

months, most go on to complete their training and become valued members of their business and the industry at large.

Here's what you can do in the short term, to make an investment in a trainee, work in the long term.

- 1. Ensure your team is on board with having a trainee in the workplace. Everyone should be invested in the idea and understand that the trainee is there to learn the skills and knowledge that they themselves have had years to acquire.
- 2. Allocate an experienced team member to be the trainee's mentor. Having a singular person that the trainee can approach confidently with any issues that they face will improve their own confidence quickly, especially if they can be assured that the
- mentor will not belittle them when they make a mistake or ask the same question a couple of times. The mentor can also ensure that the trainee quickly assimilates into the team by making sure they do not end up sitting alone at lunchtime, are invited to after work gatherings etc.
- 3. Provide the trainee with a set time each week to do their studies in a comfortable, guiet location, with the equipment they may need. Show them that you value their traineeship and the knowledge that they will gain from it to ultimately benefit your business.
- 4. Regularly review the trainee's progress. Whether it be with the TABMA Field Officer when they do a monitoring visit, or, if you are employing the trainee direct, have that regular review taking note of how they are progressing with their on and off the job skills development and knowledge attainment. If there are any red flags, make sure they are addressed.
- 5. And lastly, make sure the trainee's mentor and the rest of the team all understand that the trainee will make mistakes. When these mistakes happen the trainee's progress will hugely depend on how the mistake is addressed. Yelling and belittling the trainee is not going to ensure that they learn from the mistake: more often it leads to resentment and ultimately losing them. Constructive assessment of why the mistake happened and then further training will result in a better trained, more productive team member in the long run.

These are just a few points that our team >>>



Above: Trainees taking a break at MGA TMA during the theory component of the course.



Above: Joshua Ralph is a TABMA trainee at Westview Frame and Truss.

has learnt over the years are critical to trainees and apprentices gaining the most from their time completing their qualifications and then progressing to become skilled contributors to the industry.

TTIA Brian Beecroft

NEW LEGISLATION - PAID FAMILY AND DOMESTIC VIOLENCE LEAVE

Employers may be aware from recent widespread media reports that the federal government has introduced a bill to create a

The proposal replaces the current NES five days unpaid FDVL.

national entitlement to 10 days paid family and domestic violence leave (FDVL) into the National Employment Standards (NES).

The proposed entitlement replaces the current NES entitlement of five days unpaid FDVL and is available where an employee

with the impact of family and domestic violence in circumstances where they cannot attend to matters outside of work hours. It is not uncommon for entitlements that were initially introduced by government on an unpaid leave basis to be converted to paid leave entitlements at a later date.

needs time off work to do something to deal

Key points:

The proposed bill is seeking a form of paid leave which is broader in scope, is available 'up front' and is paid out at a higher rate than the entitlement determined by the Full Bench of the Fair Work Commission.

The bill would give rise to a new form of paid leave under the NES which:

- is accessible by all employees including casuals who have been 'rostered' (e.g. have accepted an offer to work),
- is available 'upfront', meaning the leave does not accrue and is available in full (i.e. 10 days of pay) at the commencement of every year,
- is payable at the rate that the employee would have earned had they worked instead of taking the leave (instead of being payable at base rates).

It will also allow all employees including casuals to take paid leave from the commencement of their employment. In a number of other changes, the definition of Family and Domestic Violence has been extended to include conduct by a member of a person's household and a current or former intimate partner, and the entitlement has been extended to non-national system employees.

As the Bill introduces a new entitlement to the NES, the new form of paid leave will apply to all national system employees, including employees under enterprise agreements which already have paid FDVL entitlements. The Bill includes an avenue for the Fair Work Commission to resolve ambiguities and inconsistencies between the new NES entitlement and existing enterprise agreement entitlements.

What this means for your business

Employers should be prepared for the proposed new entitlement to commence on 1 February 2023 for employees employed by other than a small business employer. To recognise the unique needs of small business with limited human resources, an additional transition period of six months will be provided for employers who meet the definition of small business employer in the Act as of 1 February 2023 (i.e. fewer than 15 employees).

TTIA will remind Members of the changes again closer to the operative date. **T**





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News in brief

Responsible Wood community grants

Applications for this year's funding round have opened.

n 1 September 2022, Responsible Wood launched its 2022/23 Community Grants Program. This is the program's third year, following the successful 2020/21 and 2021/22 programs. The aim of the program is to support local communities develop, design and implement small community-based projects in their local area in conjunction with their local Responsible Wood certified company.

Community Grants are awarded for

collaborative, community-based projects, activities or events that connect communities to certified forests and forest growers.

The key benefits of this program are; supporting Australian communities to better access and enjoy their local sustainably managed and certified forests; and providing an opportunity to build community connection through planning, completing and benefiting from community projects. Funding available per project is between

\$2000 and \$15,000. Applications will only be accepted from local community groups, not-for-profit organisations, registered charities or schools or education institutions. An independent judging panel will assess and judge all of the applications.

Experienced forester and engagement manager Megan Graham (pictured) will administer the community grant program. She said that she's excited to see what ideas will be proposed in this round of funding. Over the past two years, she has been "really impressed" by the interesting and creative applications that communities from all over Australia have submitted.

Successful projects have included installing nesting boxes in NSW primary schools, restoring a 19th century shepherd's hut in SA and creating a forestry career pathway program, working with the local education sector and employment agencies to train, up-skill and promote opportunities for employment in Gippsland.

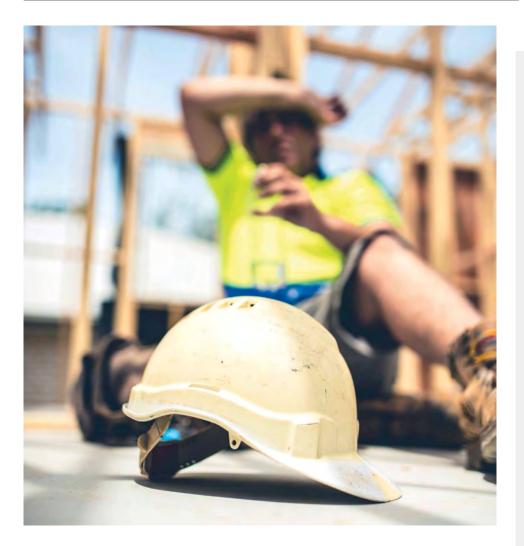
This year, Graham is anticipating applications from a wide range of groups or clubs seeking assistance to help build forest tracks, build and install picnic facilities, forest-based art installations, habitat features for native animals which will help people better access and enjoy their local forests and or create a better local forest environment.

The scope for the community projects really is open and Graham encourages communities to think about their needs and get in touch with their local Responsible Wood certified forest owner to work on and develop a project idea and apply for the grant by 31 October. Applicants will be notified of their application status on 15 November and projects will be developed and completed between that date and 31 May 2023.

Further information including the 2022
Application Form, Eligibility Checklist and
Judging Checklist please visit www.
responsiblewood.org.au/what-we-do/our-

collective-impact/community-grantsprogram/ or email communitygrants@ responsiblewood.org.au





Construction concerns

An Optus report on the industry finds the good and the worrying.

he Optus Business Construction Industry Pulse 2022 was recently released, part of an annual series that provides insight into small business sentiments and perspectives. Over 400 respondents were interviewed, 79% of them business owners or CEOs of businesses with 0-300 employees.

To start with the good news: 82% of respondents were very confident or quite confident about business conditions over the next 12 months. This result was consistent from small to large companies. While there were concerns about increased operating costs, most companies expected to grow in the coming year: 36% planned investment on capital expenditure and 35% plan to invest in technology.

Questions about technology spends were detailed, with 60% seeing digital operations as key to their business strategy. Here, the figures differed strongly depending on business size: 90% of businesses with 101-300 employees rated technology as important or very important while only 58% of those with 0-4 did. Unsurprisingly, lack of time was cited as the second biggest barrier to implementing new technologies.

Cyber security emerged as a broad concern, with many acknowledging they could be doing more to lessen the threat.

Mental health was an even bigger worry, with 45% of construction businesses reporting staff experiencing mental health issues during the pandemic, though it's unclear whether these were related to the pandemic or ongoing issues. Nearly twothirds of the decision makers surveyed were concerned about their personal mental health, with nearly one-quarter (22%) being very concerned. Only 26% gave mental health days when required, with no questions asked.

Find the report at https://tinyurl.com/ bd3prz2v

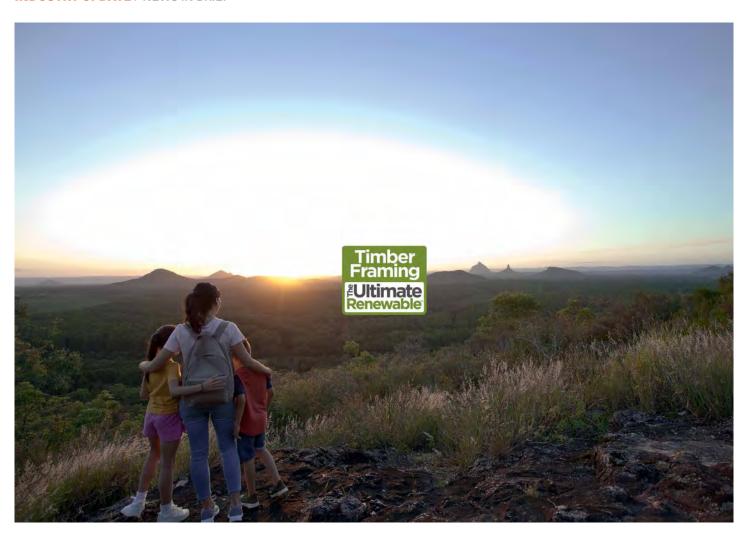
> Mental health was an even bigger worry, with 45% of businesses reporting staff experiencing issues.

In brief

fter resigning in July over concerns about a now sacked minister, NSW **Building Commissioner David Chandler** has been persuaded to stay on in the role and has delivered bombshell testimony to the NSW Budget Estimates hearing on 7 September. Chandler revealed that in a meeting with Toplace Group, held after the developer had been hit with a prohibition order, an unnamed person from Toplace had suggested Chandler wanted \$5 million to 'go away', a story which was later repeated to a journalist and politician. Read the full story by Kate McClymont here: www.smh.com.au/ national/nsw/building-commissionersays-developer-toplace-falselyaccused-him-of-asking-for-5m-bribe-20220908-p5bge3.html

fter eight years as a Director and Independent Chair of Hancock Victorian Plantations (HVP), Adrian Kloeden is stepping down. After an extensive process, the HVP Board has welcomed Therese Ryan as a Director and Independent Chair. Ryan is an experienced senior business executive and commercial lawyer who has worked in widely diversified businesses in Australia and internationally. Ryan said, "These are exciting times. The business is well placed to continue its prime position as a provider of sustainably managed Australian grown plantation timber into the Australian market, and to increase its contribution to climate change mitigation, supporting Government policy to reach emission reduction targets at national and state levels."

wo woodworking clubs in Victoria's Gippsland region have reaped the benefits of an unrelated crime. Member Don Ferguson saw a news piece in 2016 describing an AFP drug bust that found more than 150kg of methamphetamine hidden in logs imported by a West African crime syndicate. He wrote, asking if the clubs at Warragul and Moe could have the logs once the case was settled. It took a few years, and the actual smuggling logs are still in police custody, but two truckloads of padouk have been delivered to the clubs and turned into decorative pieces including a shield commemorating the AFP bust. Find the full story at www. abc.net.au/news/2022-09-02/afpdonates-timber-from-drug-bust-to-



Build a better world

New creative resources from the Timber Framing Collective.

fter its successful launch earlier this year, the Timber Framing Collective is introducing a suite of easy-to-use creative resources to help share the remarkable green story of Timber Framing.

Carrying on the industry-wide tagline of The Ultimate Renewable™, the campaign flags that timber is one of the only building materials that's 100% renewable and sustainable, with each timber-framed house offsetting the CO₂ emissions of roughly three family cars per year.

The resources include brochures, a fact sheet, posters, logos, social assets, videos and more that can be shared with customers. There's even a Certificate of Installation, to congratulate consumers on choosing timber framing, the environmentally-proactive choice, for their new home. Through these new resources, the Timber Framing Collective aims to empower the entire supply chain, from growers to consumers, to proudly stand up for timber and their craft.

Timber Framing Collective spokesperson, Richard Hyett, said, "By equipping everyone involved, these videos and assets provide the



tools and knowledge needed to guide people back to a deep-seated love of timber framing."

The assets are a part of a new campaign, 'Let's Build a Better World', for the Timber Framing - The Ultimate Renewable brand. It's designed to celebrate the contribution our industry is making to help our planet, as well as the practical benefits of timber framing (its durability, reliability, the ease with which it can be worked, etc), the innovation of our industry and the people involved in the industry throughout production and supply.

The campaign and assets were developed after research showed that despite timber framing being one of the most eco-friendly building materials, research has shown that many consumers still think cutting down trees is a bad thing. And despite most builders and fabricators preferring to work with timber, many have been steered to other materials due to consumer demand.

It's a wicked problem, because as a rule, plantation-grown timbers of the type common in house frames represent significant carbon capture that lasts for the lifetime of that timber and a lower environmental cost when it comes to wildlife or soil health than the average bunch of kale or cotton T-shirt.

Hyett said, "Our research also showed that 78% of consumers would like an eco-friendly

The resources help builders, suppliers and more to help their clients make an informed decision.

building material option from their builder or supplier, but less than half of builders and suppliers are likely to discuss sustainable materials with their clients."

The resource package is designed to help builders, suppliers, designers and more give their clients access to engaging and educational content to help them make a more informed decision—which is exactly what consumers are asking for.

Anyone in the entire industry has unlimited access to all the assets that can be shared across social and digital platforms, presented to prospective clients, displayed in offices and display suites, and used to proudly share the message across every touchpoint—whenever and wherever best suits each organisation. These assets also enable anyone in the supply chain to learn more about timber framing and what makes



it the obvious choice when it comes to building a better world.

The Timber Framing Collective is supported by some of the biggest businesses in the sector. All industry members are welcome to join the evergrowing group of supporters: all it takes is sharing these resources far and wide, putting timber squarely in the frame for Australian

home builders and building a better world for the next generation.

Download the resources at www. renewabletimberframing.com.au/ resources/

For more details on the campaign, visit the updated Timber Framing - The Ultimate Renewable website: at www. renewabletimberframing.com.au



OCTOBER

WOOD SOLUTIONS WEBINARS

Every second Tuesday morning or lunch, free webinars on Timber topics. For more or to find past webinars, visit www. woodsolutions.com.au/events/calendar

FORESTRY AUSTRALIA 2022 SYMPOSIUM

With a theme of Leading, adapting and reimagining - the future of forestry, the Forestry Australia 2022 Symposium will be held in Albury-Wodonga and simultaneously online from 20-22 October. Keynote speakers include Dr Lyndall Bull and A/Prof Michael-Shawn Fletcher, plus a long list of expert speakers. For in-person attendees, a reception on Day 1 and dinner on Day 2 will offer networking opportunities, plus there are field trip options. Registration costs from \$650 for in-person attendance and \$250 for virtual and hefty student discounts are also available.

Details at www.forestryconference.com.au

2022 TABMA NSW AWARDS

Join all the peak names in the timber industry at TABMA's annual award ceremony, celebrating the year's best in multiple categories. To be held Friday 28 October 2022, 6:30 pm to 11:30 pm at Le Montage in Lilyfield. Details at www. trybooking.com/events/landing/941993

NOVEMBER

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. With guest speakers Gina Cass Gottlieb, ACCC Chair and Doug Jones, Metcash Group CEO, there will be insights galore, from \$90/single ticket. Details at www.trybooking.com/events/ landing?eid=958539& T

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Vale Denis M Cullity

A lifetime spent in the timber industry leaves behind an enormous legacy.

The Board of Wesbeam sadly announces the passing on Monday 5 September of its major shareholder and founding Chairman, Denis M Cullity AO CMG BSc FAIM FAICD, aged 94 years.

he Cullity name and the timber industry have a long association.

In 1928 Thomas Cullity, the son of Irish immigrants, started Cullity Timbers in Perth, Western Australia.

It was the beginning of an association

between the Cullity name and the Australian timber industry that endures to this day.

Thomas's son Denis completed school in 1945 at Aguinas College where he was Head Prefect and Captain of the College in his graduating year.

He went on to the University of Western Australia and completed a Bachelor of Science (majoring in Chemistry) before commencing his first role at CSIRO in the forestry research section in Melbourne.

In October 1951, Denis married Ann Meagher and that union continued for the rest of his life.

Denis is survived by Ann, seven of their nine children, as well as many grandchildren and great grandchildren.

In the 1950s, after his marriage, Denis returned to Perth and commenced working in the family company Westralian Plywoods (which had built Australia's largest plywood plant) and subsequently built in the late 1950s, under Denis's stewardship, Australia's first particleboard manufacturing plant.

In 1971, Westralian Plywoods was listed on the ASX as WESFI Limited, and Denis was appointed WESFI's Executive Chairman.

Denis was Executive Chairman of WESFI Limited from listing until 1996, a director from 1996-1999 and Chairman from 1999-2001.

During his time as Executive Chairman of WESFI he presided over a period of vigorous growth of the company and its building of three major greenfield softwood processing plants in Western Australia and a large wood panel resin manufacturing plant.

This included the construction and commissioning in 1976 at Dardanup in WA, of what was (until recently) Australia's largest single line particleboard plant (WESBOARD), the building of a large pine sawmill at Dardanup in 1982 (which in 1992 became Wespine in a joint venture between WESFI and Wesfarmers), the building of a resin manufacturing plant at Dardanup in 1985 (Dyno Industries WA) – a joint venture between WESFI and Dyno Norway and the construction of a medium density fibreboard plant in Kewdale in 1990 (WESWOOD).

In February 2001 WESFI merged with Laminex, a member of the Amatek group. Under the merger agreement Amatek acquired all the shares in WESFI from its then shareholders.

At the same time WESFI's ownership of Wesbeam Pty Limited (a prospective greenfields laminated veneer lumber manufacturing company) was transferred to a new unlisted public company Wesbeam Holdings Limited.

Denis became the founding Chairman and major shareholder of Wesbeam Holdings Limited in 2001.

This change led to the successful completion of a feasibility study into the potential of building a world scale laminated

This led to the successful completion of a feasibility study into the potential of building a world scale laminated veneer lumber plant at Neerabup in WA.



Above: Denis M Cullity (former chairman of Wesbeam) with Mr David Gray (former chairman of Australian Made) at the presentation of Wesbeam's Australian made certificate in 2012.

veneer lumber plant at Neerabup in WA.

Denis signed a Wood Processing (Wesbeam) Agreement Act with the Premier of WA, the Hon Dr Geoff Gallop in 2002. The State Agreement with the government of Western Australia underpins Wesbeam's wood security and was instrumental in ensuring Wesbeam's commencement.

During the period 2005–2013, Wesbeam moved to continuous plant operations 24 hours per day and 7 days per week.

The plant was increased in capacity in 2008 and a large scale I joist manufacturing plant was established at Neerabup.

During the GFC, Wesbeam expanded its operations to sell its high quality, innovative products directly to merchants and fabricators across Australia from its own company warehouses located in each mainland capital city.

Denis retired from Wesbeam's Board in August 2013.

During his substantial business career Denis held a number of major national and international positions in the forestry industry and a number of directorships in other commercial and civic enterprises.

He was a co-founder and director of Swan

salesnsw@simmondsgroup.com.au

Denis was a man of intelligence and ethics, a dedicated family man who believed in the importance of being a positive contributor to the community.

Television (Channel 9 Perth) from 1962-1984, a Director of Bankwest (1988-1995) and was the Ernst & Young Champion Entrepreneur

He was also founding Chair of the Forest and Wood Products Research and Development Corporation from 1994–2000 (now the Forest Wood Products Australia).

He was appointed a Companion of St Michael and St George (CMG) in 1981 and an Officer of the Order of Australia (AO) in 1993 for his services to the forest industries and to the community.

Denis was appointed as a Knight of the Order of Malta in 1997 and Knight of the Order of St Gregory the Great in 2008.

He received an Honorary Doctor of Letters from his alma mater, the University of Western Australia, in 2006.

Further to this he was awarded the Gold Medal of the WA Division of the Australian Institute of Company Directors in 1996 and the Distinguished Service Medal at the Washington State University Symposium on Wood Composite Materials in 1998.

Denis also held positions as a Governor of the University of Notre Dame Australia and as Vice President of the WA branch of the Scout Association of Australia.

Denis was a man of intelligence and ethics, a dedicated family man who believed in the importance of being a positive contributor to the community.

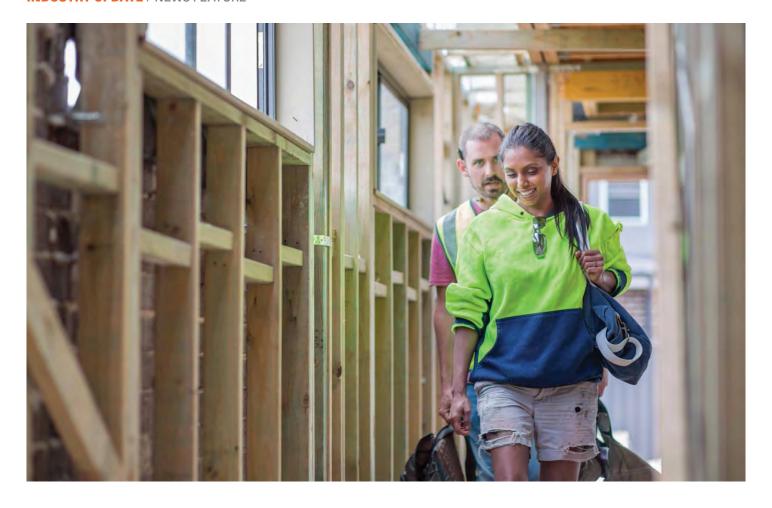
The tradition of innovation and growth led by Denis M Cullity continues to drive Wesbeam forward today.

Vale Denis Michael Cullity AO CMG.



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Jobs and skills

The recent summit in Canberra identified some of the major problems facing Australian industry, but solutions still need work. By Donyale Harrison

either the great success it was hailed by the Government nor the union gabfest it was dismissed as by the Opposition, the Jobs and Skills Summit held at the start of September brought together a diverse range of voices and has resulted in a start being made on addressing some of the major problems affecting Australian workplaces.

While the limited number of attendees didn't give everyone a place at the table, there was a reasonable cross-section of stakeholders from multiple layers, including major business groups and employers, unions, academics, community groups and finance as well as several layers of government, both capital and regional. Representing our sector, Simon Butt from Master Builders Australia was one of the delegates, as was Kate West from Arup.

No one walked away perfectly happy, which is usually a fairly good sign when there are competing interests. The general consensus post-event was of a positive start being made to address some of the major issues holding the Australian economy back on the jobs and skills front, and optimism that the needs flagged will be addressed in concrete, ongoing ways. The Albanese Government has committed to producing an Employment White Paper over the next 12 months and has made a call for submissions.

At the end of the summit, 36 initiatives were identified for immediate action. Ones that are particularly pertinent to timber and construction include:

A \$1 billion one-year National Skills Agreement that will provide additional funding for fee-free TAFE in 2023, while a longer term agreement that drives sector reform and supports women's workforce participation is negotiated.



- Accelerate the delivery of 465,000 additional fee-free TAFE places, with 180,000 to be delivered next year, and with costs shared with the states and territories on a 50:50 basis.
- Increase the permanent Migration Program planning level to 195,000 in 2022-23 to help ease widespread, critical skills shortages.
- Provide \$36.1 million in additional funding to accelerate visa processing and resolve the visa backlog.
- Widen the remit of the National Housing Infrastructure Facility, making up to \$575 million available to invest in social and affordable housing. The funding can be used to partner with other tiers of government and social housing providers, and to attract private capital including from superannuation funds.
- Establish a tripartite National Construction Industry Forum to constructively address issues such as mental health, safety, training, apprentices, productivity, culture, diversity and gender equity in the industry.

Additionally, updates to the Fair Work Act were flagged to "create a simple, flexible and fair new framework" that:

- Ensures all workers and businesses can negotiate in good faith for agreements that benefit them, including small businesses, women, care and community services sectors, and First Nations people.
- Ensures workers and businesses have flexible options for reaching agreements, including removing unnecessary limitations on access to single and multi employer agreements.
- Removes unnecessary complexity for workers and employers, including making the Better Off Overall Test simple, flexible and fair.

Several of the larger industry groups represented were wary of the increased potential of multi-employer agreements, seeing them as potentially leading to a return to the days of industry-wide industrial action. However, with that caveat, they remained open to the discussion and there was even broad agreement when ACTU secretary Sally McManus said in her address, "Employers and unions agree that bargaining is not simple and that it should be. There are too many hurdles, many for employers and even more for workers. We should aim to remove as many of them as possible."

The final part of the outcomes document focuses on reducing barriers to employment, including allowing pensioners to work more with no effect on their pension entitlements, requiring larger employers to commit to

measurable targets to improve gender equality in their workplaces, improving pay equality, making workplaces friendlier to a more diverse range of people (including those with disabilities and carer needs) and helping to remove other barriers to employment.

Some expected outcomes didn't eventuate: many had been pushing for a focus on early childhood education and care, and multiple groups had pushed for the promised childcare reforms to be brought forward, which would help many women return to the workforce. Alas, no. Perhaps because, as Treasurer Jim Chalmers has said

in reference to the country's record debt, "We can't even afford the good ideas that people put to us."

Coupled with Jobs and Skills Australia, the new statutory body designed to put employment issues higher up in the government pecking order, the Summit outcomes represent a step down the path to securing a stronger future for Australian workers and workplaces. T

For more, or to read the full outcomes or watch video of the summit, visit www. treasury.gov.au/employment-whitepaper/ jobs-summit

"Employers and unions agree that bargaining is not simple and that it should be. There are too many hurdles, many for employers and more for workers."





Enterprise agreements

If your business doesn't fit neatly under a modern award, there are many good reasons for taking a different approach. By Peter Maguire

ouldn't it be great if you could simplify compliance with modern awards and related matters?

If you could tailor their content to your workplace? If you could have everyone on the same terms of employment?

Guess what? Notwithstanding all of the negative commentary about enterprise bargaining, you can do all of those things and more in an enterprise agreement.

WHAT IS AN ENTERPRISE **AGREEMENT?**

An enterprise agreement is an agreement made between an employer and a group of employees on wages and conditions of employment for that group of employees.

They can be made with all or some employees in a particular enterprise (or multiple enterprises in a specific industry or with a common interest) and each agreement has to be approved by the Fair Work Commission.

They can incorporate modern awards that have application to the group of employees or they can exclude those modern awards, totally replacing them.

They can be made for periods of up to four years but continue to operate after that time until formally terminated or replaced by a new Agreement.

REASONS FOR DOING AN ENTERPRISE AGREEMENT

There are a variety of very good reasons that might apply depending on the particular award coverage and the circumstances of the business. These include:

1. Simplification: modern awards try to cover whole industries or particular occupations across multiple industries and we often find that much of the content in modern awards has little or any relevance to particular businesses. So we can trim it back to what is relevant.

- 2. Flexibility: all modern awards have Individual Flexibility Clauses which allow some flexibility with existing employees in a limited range of matters and Facilitative Provisions which also allow some room for negotiation on some things. However, they won't necessarily provide the sorts of flexibilities that employees might want and the employer is happy to offer and that can be addressed through an enterprise agreement.
- 3. Customisation: modern awards are largely a one-size-fits-all approach and we know that one size doesn't fit all. For example, classification structures in modern awards are often difficult to apply to a particular business because they lack definition or they just don't make sense. In most cases, they were developed decades ago and really don't take account of technological and other changes to

the way we work and the skills that we use today. If you pay people sufficiently above award, you can make your own structure that makes sense for your business and your people.

- 4. Standardisation: because different categories of employees may be covered by different Awards, you can have situations where employees working in the same business have different legal entitlements under the respective Awards which isn't really fair. You can fix that in an Enterprise Agreement.
- 5. Employer Value Proposition: all enterprise agreements are published on the Fair Work Commission's website and you can use that to publicly demonstrate your employer value proposition to prospective employees because it is locked in by law.

HOW ARE THEY MADE?

There are strict procedural steps that have to be followed to ensure that:

The Agreement is substantively fair – i.e. employees are actually better off under the Agreement than they would be under the relevant Award(s) and no employees

- or categories of employees have been unfairly excluded from the Agreement
- The Agreement is procedurally fair i.e. the prescribed procedural steps have been followed, employees have been properly informed about their bargaining rights and the effects of making the Agreement, the special needs of prescribed classes of workers such as those whose first language is not English, young people, women and others have been considered and a majority of the workers covered by the proposed Agreement who voted genuinely approved the Agreement.

Employees nominate one or more people to represent them and they can nominate themselves if they wish to.

If an employee is a member of a union, the union has default bargaining rights unless

that employee nominates someone else as their bargaining representative.

If a majority of the employees to be covered by the proposed Agreement vote in favour of it, it is then submitted to the Fair Work Commission

NEXT STEPS

The process for making an enterprise agreement is complicated and the Fair Work Commission's approach to them is complex. Additionally, individual Commissioners can have their own way of dealing with them.

That means that you do need professional assistance in developing and implementing one and we can assist with that. Equally, if any of the scenarios described above fit your business situation, it can be a very worthwhile exercise that can deliver real positive change in workplace flexibility, fairness and employee engagement. 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.







Easy decks

Clients love a deck, but don't always treat them right. Timber suppliers have responded with highly durable but still wholly attractive options. By Donyale Harrison

mooth timber underfoot; the gentle warmth of lying on wood in the spring sun; eating dinner outside as the daylight lengthens – everyone has a good memory associated with decks, whether at home, on holiday or even in public spaces and schools. It's no wonder they're ubiquitous here.

But, to quote Matthew Dix, Victorian state manager at Mortim, "You know what you're meant to do in yearly upkeep. I know what I'm meant to do. Neither of us is actually doing it." He's right. My partner and I lived in our old house with its large undercover deck for eight years: I oiled it once.

Accepting that people are people, leading suppliers have increased their range of decking offerings that are resilient and durable, even with a lazy end user.

There's a wide range of choice on offer, from timber species, to appearance, to upkeep needs, even price points.

Sustainability concerns are being met both by high-quality recycled or sustainably sourced hardwood timbers from companies like Kennedy's Timbers and also by certified hardwood plantations, which deliver a

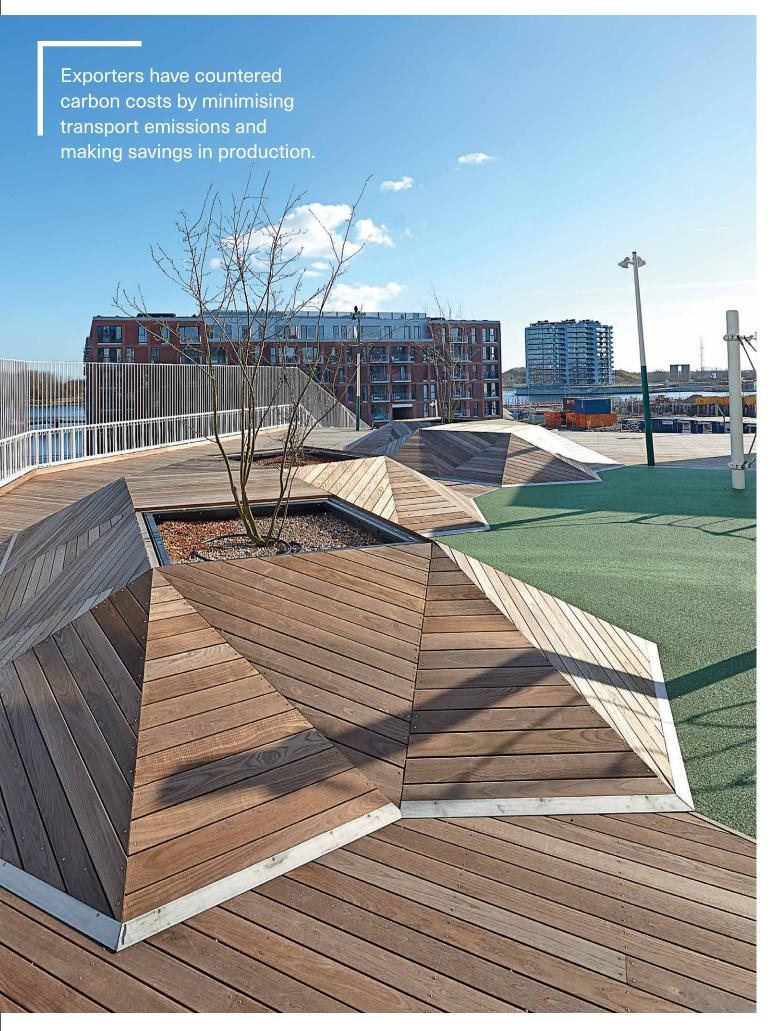
reliable supply. Alas, Australia is lagging in the latter, and so imports have taken up the slack. While this does add to carbon costs in transport, the exporters have countered this with strategies designed to minimise emissions in the transport itself and to balance this cost with savings elsewhere in production. Additionally, the longer service life of the product itself is a mitigation.

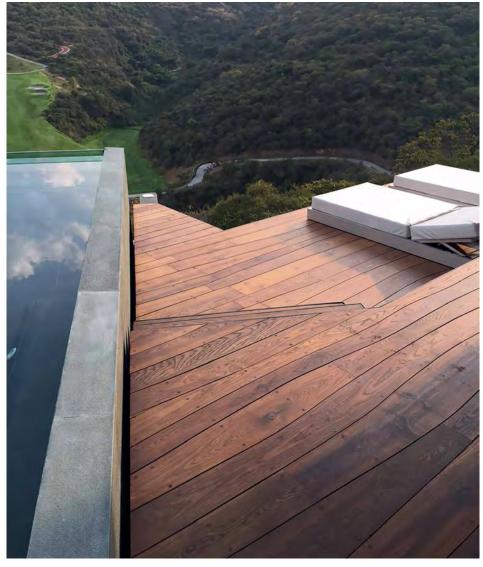
Working alongside timber suppliers, preservative and coating suppliers have lowtoxicity treatments that are highly suitable for structures like decks, which are in close contact with people, and easy-to-use oils and touch-up formulations for cut ends and holes. Coupled with a push from many suppliers for pre-oiling decking product so there is full-envelope protection before it's even installed, suppliers like the following are making decks as user-proof as possible.

ESTONIAN EXPERTISE

Based in Estonia, Thermory offers FSCcertified timbers that are treated using heat and steam to change the internal chemistry of the timber, with no additional chemicals.







Above: Thermory Ash decking cut in the special 'Flow' pattern. It can be used poolside as here in Mexico.

Thermowood is lighter than the natural wood, highly resistant to pests and rot, has improved dimensional stability and an attractive appearance and fragrance.

The resulting Thermowood is lighter than the natural wood pre-treatment, highly resistant to pests and rot, has improved dimensional stability and an attractive appearance and fragrance. The process also improves the heat and sound insulation qualities of the natural wood by up to 30%, meaning decks stay cooler in the summer sun.

"Odd as it sounds, Estonia and Australia have a lot in common when it comes to decks," says Oksana Skorbatjuk, Thermory's marketing manager for exteriors. "We're both nations that like to live outside and so our decks get a lot of use and we both have some challenging weather."

The stresses of the local conditions meant that when the 25-year-old company went out



Above: Flooded Gum decking from Mortim.

to non-Baltic European markets, it was confident Thermowood would perform well. But Thermory still backed this up with in-depth testing that continues around the world.

"We've been testing across Europe for many years," Skorbatjuk says, "for durability, for rot and for fire, especially as we've moved into cladding big public buildings. So, before we moved outside Europe, we could show it performed well everywhere from the far north to Spain, which is a huge range of climates.

"We've been in the US for 10 years and Australia for about two-and-a-half years and in both of those markets we began testing product there before we started selling."

The thermal modification treatment is key to this adaptability, as it gives the timber superior stability in multiple environments. It significantly lowers the moisture content of the boards, meaning they can be used in areas around pools, even in showers and saunas. "As long as it dries out, it can get as wet as you want," says Skorbatjuk. "The only thing you need to do is wash it regularly, because, as a natural product, it can get slippery or stained with algae or pollen."

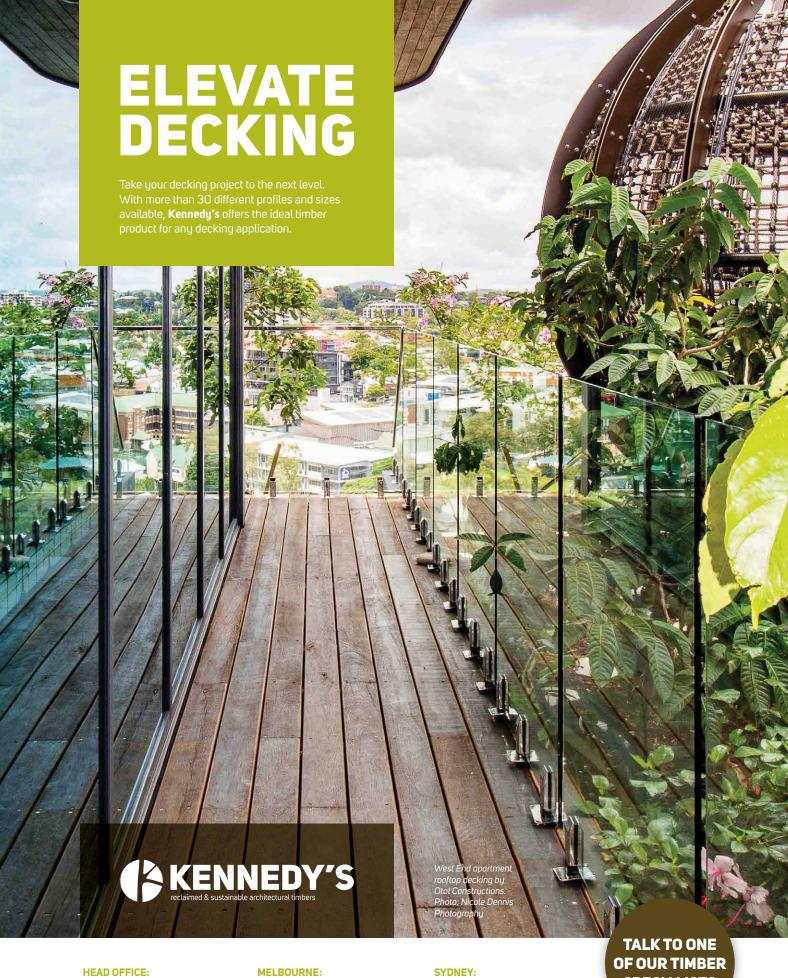
The thermal process itself is far from simple: "We start with careful selection of the timbers we buy," Skorbatjuk says, "and then the thermokilns are monitored by skilled specialists who treat each species individually and know the best rates of warming and cooling to suit. We're not the only company using heat treatment, but we're proud that our product stands out from our competitors on quality."

Deeon Otto is managing director of Australian Timbers, the local supplier of Thermowood. He's a solid convert, so much so that he's used it in several projects around his own home. "The main things we've seen customers attracted to are the environmental side - they love the company's commitment to minimising carbon and using certified timber and that the treatment gives a 25-year life with no chemical additives - and also the look of it.

"The heat cooks the sugars in the wood, changing the colour and giving it a very appealing fragrance. The Ash becomes rich and dark and the Pine becomes a beautiful caramel colour. If you choose not to coat it or oil it, over time, the Ash in particular weathers to a beautiful silver colour without deteriorating the timber. As it ages, the surface stays smooth and splinter-free."

This silvering happens more quickly in Thermowood than natural timber. For customers who want to maintain the original colour, an annual oiling with a UV-resistant product will keep the original tones.

"It also doesn't get hot underfoot on hot days, which is especially helpful in a country like Australia with scorching summers,"



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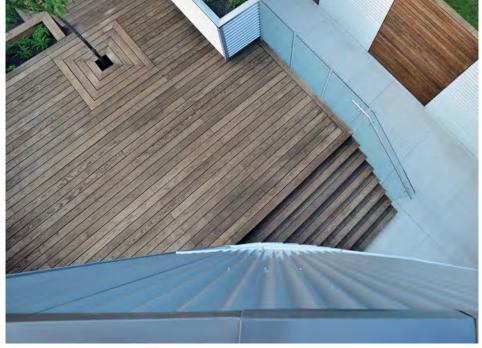






Above: Rough-sawn decking from Kennedy's Timbers used in the rooftop club at Treehouse by ARIA in Brisbane's West End.

"It doesn't get hot underfoot, which is especially helpful in a country like Australia with scorching summers. It stays comfortable to walk and sit on."



Above: Themory Benchmark Ash with hidden fixings – losing the screws helps the timber to shine.

says Skorbatjuk. "It stays comfortable to walk and sit on, unlike most options."

Despite Thermory being comparatively new in the Australian market, Otto has found his customers drawn to the product. "They might come in to buy something else, but then they see these timbers and they ask about them," he says. "I show them pictures of some of the projects it's been used on - including my home gate and dog's kennel - and they start talking about using it on their next project.

"Part of the attraction is the pricing. The Ash is at the higher end, but it's a boutique product, and it's certainly competitive with similar hardwoods. The Pine is very well priced, particularly when you consider its appearance and its quality. We stock the two species so we can make Thermory available to as many of our customers as possible."

Otto has found Thermory a reliable partner when it comes to supply. "We haven't had any problems and they're very efficient at delivery, as well as having excellent marketing and research teams."

All Thermory products come with detailed information sheets for end users, including an installation guide. "If you're screwing directly to the spacers and joists, you must use stainless-steel screws, as the acidity level in the Thermowood will affect other fixings," Skorbatjuk cautions. "Alternatively, you can use our hidden fixings, which give >>>

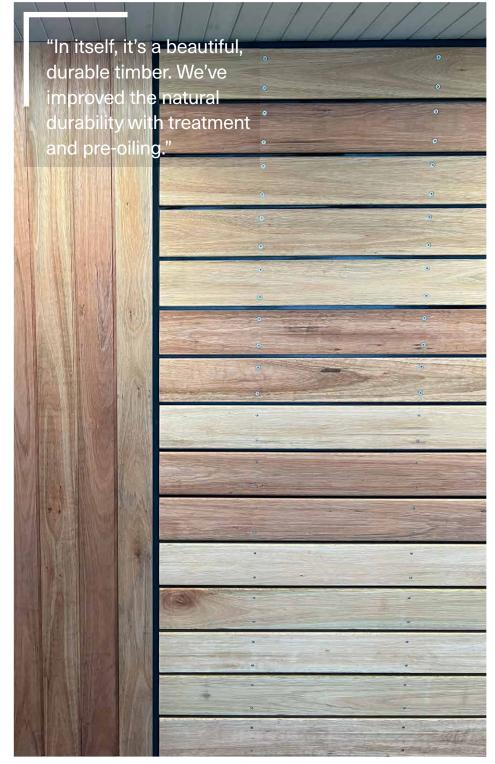


Designed to meet the style demands of indoor/outdoor living, it offers a finished look similar to hardwoods and merbau with no initial staining. Unlike some other outdoor treated timber formulations there are no restrictions on its uses which include landscaping, flower beds, decks and children's playgrounds.

The MicroPro treatment process has been successfully used in Australia and globally for some 15 years.

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Above: Flooded Gum decking from Mortim is supplied pre-oiled with Intergrain's Universal Oil.

a beautiful uninterrupted timber deck. You don't have to think about what the screw line looks like, and it's really easy to install."

The clips attach to the edges of the decking boards and are then screwed into the substructure, so they don't need stainless-steel screws. Otto adds: "Once you line up the first board and get that in place, the system allows for very quick fixing because all your gaps are set by the clips."

Australia is a growth market for Thermory, with products currently undergoing testing in Europe planned to arrive here in the next few

years. "The timber looks, feels and smells so beautiful, it doesn't need all its other features to make it worth using," Skorbatjuk says. "And then it stays that way because it has them."

AUSTRALIAN TREASURES

Sustainability and supply are also major factors in timber choice at Mortim, a leading timber wholesaler operating out of Adelaide, Melbourne and Brisbane. "We were looking for a durable, certified hardwood that we could reorder with confidence," says Matthew Dix. "We didn't want to be in a

position where we could only get it for six months and then have to start looking again."

The company had previously offered spotted gum decking and was hoping to source another Australian hardwood, which Dix and his team found - in Uruguay.

"We find it quite amusing that we're buying an Australian species from a South American country. We're bringing it back home, basically," Dix says.

Flooded Gum, also known as Red Grandis (Eucalyptus grandis) was one of the major timber species planted when Uruguayan forestry decided to focus on hardwood plantations, a project begun in the late 1980s.

"We're buying from URUFOR, and they've been very good with supply," says Dix. "We wanted that assurance that it was going to be a long-term product.

"The other major criterion we had was that it be sustainably grown and URUFOR sources all its timber from partner COFUSA, which is FSC certified. In fact, Mortim has also become FSC certified as we've gone through this process. COFUSA has also been running a genetic program to enhance the quality of their timber since they started and both partners have worked on carbon capture and conservation tillage."

While this sustainability is important to Mortim, the deciding factor was Flooded Gum's suitability for decks.

"In itself, it's a beautiful, light, durable timber," Dix says. "It's very stable, and we import it raw and then improve its natural durability with a careful choice of treatment and pre-oiling that gives decks the best chance of a long service life without problems like swelling or cupping."

Mortim uses Fisher's Timber Treatment H3 Tru-Core process for the Flooded Gum. "We know that ASH use the same process for their hardwoods and so it made sense to us," says Dix. "The big advantage is that the treatment penetrates throughout decking boards, so there's no need for brush-on preservatives when you cut or drill the boards. It's the same reason we've chosen to pre-oil - it gives a little bit more protection to the product both before and after installation and it seals the timber all the way around, so there's less risk of moisture penetrating from below."

Here, Mortim uses Intergrain's Universal Oil, an open-system oil that can be followed up with a water-based or oil-based product for final oiling. Dix says, "We get the preoiling done down at Melbourne Timber Coaters: they do an excellent job and they repack it for us into smaller sizes and re-wrap it for us. So it's a good process that delivers ready-to-sell decking that's gone through these value-adding steps but is still at a very competitive price, especially for hardwood."

Decking timber treated with the Tru-Core process comes with a 25-year guarantee against insect attack or fungal decay if it's installed in accordance with the relevant building codes. "That's the biggest problem we see with decks," Dix says. "The retailers we sell to tell us stories of decks that are installed too close to the ground, or without adequate gaps between boards or in other ways that are just inappropriate when it comes to the amount of moisture the timber will be exposed to.

"It's one of the reasons we've done everything we can to make the Flooded Gum decking as durable as possible, but at the same time users need to exercise a bit of sense. The various standards and codes set out clear guides and the builders should ask suppliers what they recommend. For example, we always suggest you put a hardwood deck onto a hardwood substrate. My experience is that doing so gives a bit more stability."

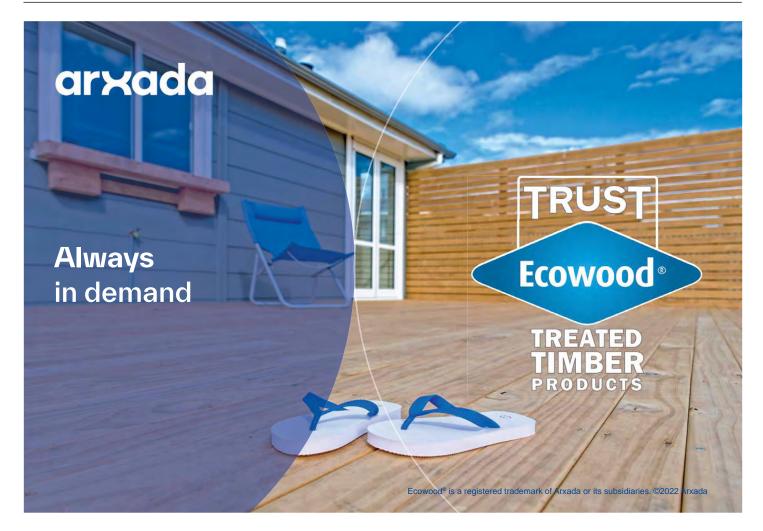
Mortim is another company that tests thoroughly before bringing a product to market. "We've been selling the Flooded Gum for about six to eight months here, especially in the decking and the claddings,"



Above: Thermory's Benchmark Ash also comes in cladding, delivering a seamless transition at this eco lodge.

says Dix. "It took us a little while to bring it to market because we wanted to get the product just right, especially with the treatment. In some of our early trials, we found we were over treating it, so we've just had to refine a few steps in the process."

The result is a beautiful blond board sold in a mid-sized 125 x 22mm. "It's naturally a soft pink-red colour, but the treatment makes it a bit lighter," Dix says. "It's very similar in looks to blackbutt or tallowwood and similar light hardwoods. For people who prefer a >>>



"Repeat orders are a sign that the product is going well and builders are very happy with what the Flooded Gum is doing for them."

darker wood, it takes a tinted oil beautifully and you get the lovely soft grain of the gum in a darker tone. We used to stock treated pine decking, spotted gum, merbau and more. The only species we do now for decks are treated pine and the Flooded Gum, because the gum is appropriate for use in such a wide swathe of the market."

Despite being new to the market, there is already strong feedback from Mortim's customers, who are passing on very positive responses from their clients. "The proof is in the re-ordering," says Dix. "Getting the first orders is relatively easy. Repeat orders are a sign that the product is going well and builders are very happy with what the Flooded Gum is doing for them. This is a core species and board size for UROFOR, so we have no stumbling blocks when it comes to ramping up supply down the track."



Above: Flooded Gum is imported raw, then treated at Fisher's in Gippsland before pre-oiling.

DECKING BASICS

Despite the best efforts of suppliers, and merchants, rectifications or failures on decks are still more common than we'd like. Usually the problem is a DIY job gone bad, but even a good builder can sometimes get it wrong, or have a client who wants the impossible. Timber merchants and hardware stores with timber yards may find it helpful to have flyers (which builders can hand on to their clients) that cover key points, such as:

- The number one enemy of decks is moisture, which can cause a litany of problems. Combat this by making sure vour deck has:
 - a. sufficient clearance from the ground to allow adequate airflow beneath it:
 - b. recommended spacing between boards so moisture isn't trapped.
- Outside, above ground timbers (the deck itself) should have natural or modified high durability or be treated with a Hazard Class H3 or above preservative.
- CCA-treated timbers can't be used for decks in Australia. Treatments based on ACQ, MCA and some LOSP formulations and a variety of proprietary brands, such as MicroPro, the Tan-E Ecowood range and



TruCore are all highly suitable for decking.

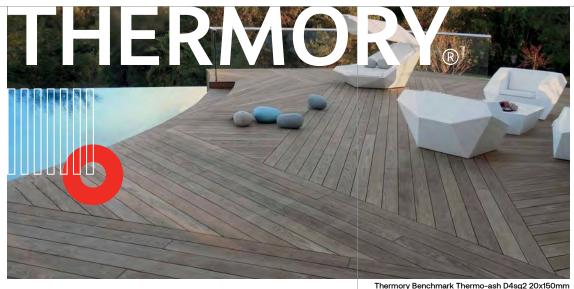
- For treatments that don't penetrate the entire thickness of the board, cut ends and holes should be treated with a suitable brush-on preservative.
- Pre-oiled timbers require an application of a quality decking oil, such as Tanacare Timbercoat (which contains mould inhibitors) after laying, unless your timber is suitable to leave uncoated to weather.
- In areas subject to BAL ratings, these also apply to decks, and timber used in decks and deck substructures must meet the appropriate rating for the location.
- Decking substructures in areas rated BAL 12.5 and above must be enclosed to prevent embers being blown underneath.
- In NSW, the Rural Fire Service requires that timbers used in BAL 12.5, BAL 19 and BAL 29 areas for decking (and related structures) should meet a minimum BAL 29, rather than the lower ratings.
- Decking substructures must be able to deal with wetting or have steel or similar in-ground components. Preservative treated H4 and above timbers are suitable for outside in-ground use. Not all timbers with natural Class 1 and 2 Durability are



suitable: despite being a hardwood merbau will not cope with in-ground use, while other hardwoods including spotted gum and blue gum require H4 treatment.

The biggest problem our sector faces is misinformation about timber performance, based on poor practice. Educating your customers - including on coatings, pre-oiling and which timbers are best suited to various conditions - can only help. T

For more product details, visit www. arxadawoodprotection.com/apac/, www. australiantimbers.com.au, www. kennedystimbers.com.au, www. kopperspc.com.au, www.mortim.com.au and www.thermory.com



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Above: William Kirkpatrick, senior vice president, FIOSS Integration at Entekra, working with his team to digitise the building so the company can 'build twice'.

The system matters

Gerry McCaughey is a pioneer of modern offsite construction. In his talk to the Timber Offsite Construction audience, he delivered advice the industry should be heeding.

t the recent Timber Offsite Construction conference, Gerry McCaughey was the much-anticipated speaker for a talk titled The Future is Off-Site. One of the main proponents of FIOSS (fully integrated offsite solutions), McCaughey is the CEO of Entekra, having previously taken Century Homes (later Kingspan Century) from a small startup with four employees to Europe's largest FIOSS provider, dominating the market in both his native Ireland and the UK.

He opened by confessing that he loved talking about offsite construction. "It's all I've

ever known," McCaughey said. "Not only have I been at it for 40 years, my family has been in offsite construction for close on 60 years. So while to some people, it's a relatively new thing, in my family it's just the way we've always done it, as that famous expression in construction says."

He had one quibble with the description of his speech, which highlighted the idea of 'panelisation'. "I have to say you'll probably find that I'm not a fan of that terminology," said McCaughey. "And the reason why I'm not is because I don't think people get the proper

understanding of what it is that's actually bringing the benefits to the builder if they focus on the panel. Hence why we call what we're doing a fully integrated offsite solution."

He recapped his and his family's 60 years in offsite construction. The three different companies they've begun in that time are all still going, despite the traditional boom and bust cycles of construction and the fact they have invested heavily in automation. "Many people think that heavy investment is a risk, but what actually happens in many situations is that people don't understand the business model they're getting into."

He warned against specialising in only single family, or multi-family or ADU (accessory dwelling unit/granny flat) construction: "With offsite construction, to make it successful in the long term, one thing you have to realise is you actually have to be very, very flexible."

The expense of automation and the fact most automated plants have far more capacity for jobs than will be met by simply working in one type of construction means that, "If they put all their eggs in one basket and think they're only going to do multi-family, say, because they're big, large projects, that actually is the downfall because they're very 'lumpy' in terms of production going through a manufacturing facility," he said.

"And that doesn't allow you to keep your assets sweating most of the time. So you have



Above: Extensive automation keeps the workplace at Entekra safer for staff.

to be able to do ADUs, single family, multifamily, hospitality, hotels, nursing homes and other projects all at the same time."

McCaughey touched on various methods of offsite construction such as panelised, volumetric and more before announcing they were the wrong place to focus: "I want to highlight that in reality, 80% of the benefit that offsite construction brings to a builder is derived not from the building components or panels, but from the process improvement that is required to deliver those components to site, to build the building faster."

He shared a slide of a house graphic, with 80% labelled as Process Improvement and the remaining 20% as Building Components. "The components should be thought of as merely an output of a very detailed process. And it's the process that's delivering the benefits," McCaughey said. "It's going into that building, creating a 3D model, working out the problems, the clashes, doing the correct quantities, working out the logistics all up front before you ever go on a job site. Only 20% of the benefit is delivered by the actual panels when they arrive on site.

"The one thing about true offsite construction regardless of whether it's modular or the advanced offsite panelised system that we use is: it's a system. And it's the system that brings the benefit."

"The one thing about true offsite construction regardless of type: it's a system. And it's the system that brings the benefit."

Quoting Aristotle's 'the whole is greater than the sum of the parts', McCaughey outlined the differences between being able to offer a complete building system and being able to offer quality components. In the latter case, the builder is buying from multiple suppliers, which adds cost and worse, "nobody's totally responsible, and nobody's totally in control," he said. "When you have that holistic view and somebody is responsible for the totality of that building, that's what forces the efficiency into the process. FIOSS is a process, it's not a product. We don't think of it as selling a product to a builder, but as a massive change in the processes he uses to build the building."

DESIGN TO BUILD

McCaughey broke down offsite construction into five different parts: design, engineering, offsite manufacturing, delivery or logistics, onsite assembly and finishing, flagging design as the most important.

"Everything we do derives from this: figuring out the problem that the builder is otherwise not going to figure out using any other system or any other process until he gets on site," he said.

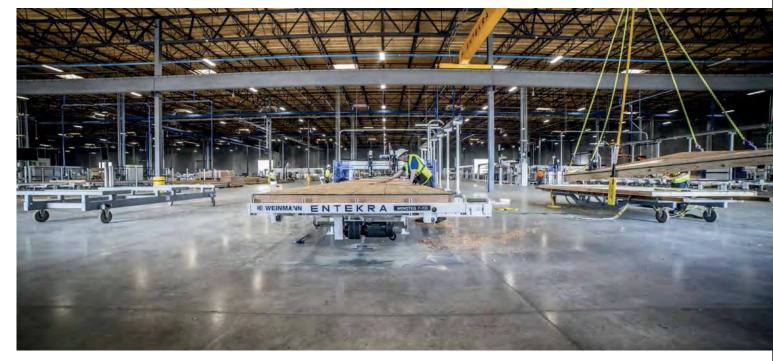
He described the process the Entekra team goes through during the design phase as building a "digital twin" of the building: "Everything comes from that 3D model. Because we have the building built twice, first on a computer screen and then later on a job site. And everybody can probably agree, it's a hell of a lot cheaper to figure out a problem on the computer screen than it is to figure out when you're standing on a job site with a crane, equipment and people and your costs are already running."

Century Homes was one of the first companies to invest in a high level of 3D modelling, which was basically unheard of 30 years ago. "It allowed us to produce a quality of building and an efficiency that



Above: Multiple jobs can be run through the Entekra manufacturing facility at the same time, with automation helping to maximise material efficiencies.

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Above: Entekra delivers panels at the end of its design process, but it's the process itself that delivers the major benefits to its customers.

nobody could touch," McCaughey said. "So it's the most critical stage and the most collaborative stage of the whole process. It takes out that 'not my job' mentality. Because what we're doing there is we're bringing in all of the people who are connected to that building. If you touch off or you connect to that frame, then we need to have a discussion with you before we ever make that frame.

"That's what I mean about changing the process, because in many cases this normally doesn't happen until you're on the job site."

At Entekra, during the production of the model, Oculus virtual reality goggles are used to 'walk' through the frame model of the building. And it's not just the architects and engineers. Everybody, including the plumber and the electrician, sees what is planned to happen in reality long before it gets to the job site, to spot any issues, from structural problems to conflicts for services to details like power points in inconvenient spots.



Above: CAM files are sent directly to the automated manufacturing machinery once the design is signed off.

Oculus VR goggles are used to 'walk' through the frame model.

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Above: Gerry McCaughey speaking remotely at the Timber Offsite Construction conference.

"Taking that time upfront to do that speeds up the process on site and saves thousands," said McCaughey. "Particularly in multi-family buildings, we have on multiple occasions saved builders tens of thousands of dollars solving problems that would not have been found until they got onto the job site.

"This is the most critical part of the process. Once everyone signs off, that 3D model then sends the CAM files directly to the automated machinery. There's no human input after that point."

PRECISION TIMING

While there are lessons for all fabricators in what McCaughey has to say about upfront planning with partners, Entekra is at the leading edge when it comes to automation. A sophisticated factory management system makes decisions about what will be cut in what order and to what tolerances, and the saws and manufacturing equipment work directly off the 3D model.

The productivity generated by the machines

is astonishing, McCaughey said: "Each CNC machine does five-and-a-half metres per second at a tolerance that could not be achieved by humans. It can make walls 12m long, plus or minus two millimetres - absolute and utter precision. So when you get onto a job site, you know it will go together."

Just as important is the delivery or logistics. McCaughey knows it's a tough environment to secure follow-on trades, his solution is to "make yourself the most attractive job site there is, so the trades want to go to you first."

The first step here is simply treating workers and trades well. The second is helping them to make a profit. McCaughey does this by delivering a consistency of framing so that workers can both be more comfortable and more productive on site and also feel confident in their scheduling.

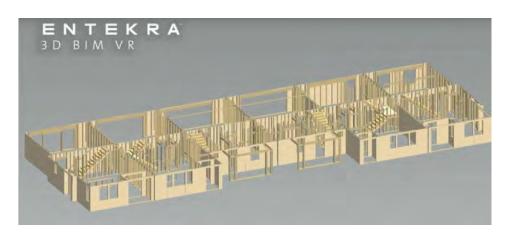
"Make sure that when you say to the trades, 'This will be ready for you on Tuesday,' it's always ready on Tuesday," he says. "That means they don't have to turn their workers around to go somewhere else. They know that their workers are going to be fully utilised.

"They'll want to come to your job site first, because they know they can make more money on your job site because your logistical planning is better than everybody else's."

He prides himself on the fact that at an Entekra job site, when the trucks pull up in the morning, it means 4000 square feet of that house will be up to plate level by five o'clock that afternoon. "No question. Happens every day, multiple times a day," McCaughey said. "And we hear repeatedly from customers in California that the trades love working on the job sites with offsite construction, because of the ability they have to make more money and the predictability is second to none."

Once on site, the assembly is the easy part. Essentially it's a kit of parts that goes together using the very detailed drawings, no different to Lego or IKEA except in scale and detail. Everything from doorways and

It's a tough environment to secure follow-on trades: "Make yourself the most attractive job site there is, so the trades want to go to you first."



windows to ducting and cable paths are already cut and even the crane lifting points are attached to the panels.

"That happens as an output of everything else that takes place," said McCaughey. "I think that's where a lot of people who invest in this industry fail to understand where the money should go. We see people who've gone out to raise money to set up advanced automated factories, and they'll invest millions in equipment then go and buy the cheapest piece of software that they can.

"In reality, the automation won't do anything it's not told to do. It's the software that's driving the automation, not the other way around, so, QED, software is more important than automation, because it's what delivers the accuracy."

Accordingly, Entekra invests nearly as much into design and engineering software to ensure they have the most efficient process for getting that data from the design engineer and other design stakeholders to the factory equipment.

BETTING ON DELIVERY

McCaughey concluded with a short video, showing a house being assembled to plate level in a single day. It was the first job done for a new Californian client, called Beazer Homes. The trades employed on that job were so impressed with the experience, they slightly lowered their fee for every house on the next offsite build for that builder.

"It's about productivity and profitability," said McCaughey, before describing another case study. This was the first, 272,000 square foot, phase of an apartment project with a builder who had not used offsite construction before. "He was very reluctant, and he had a good relationship with the stick framer who had built two previous apartment complexes with him. He said to us, your price is slightly more expensive than the stick framework >>>





Above: Because Entekra can reliably lift a home to plate level in a day, following trades choose their job sites by preference as they know there won't be delays.



Above: Access for ducting and services is planned early on and built into panels, which are shipped in the order they will be erected for a fast build.

and I don't really know who you are.

"So we put our proposal to him: if we cut the cycle time to frame the building on site, is that worth anything to you? Obviously it was: he could get rental income faster, because it'd be completed faster. And he could convert it from his construction loan to his permanent loan faster, which is a significant difference in interest rate. Plus there was a significant reduction in waste."

McCaughey offered to share the risks; they would do the job for the same price as the stick framer, the builder would calculate the financial benefit in completing the framing in 14 weeks instead of 42 and they'd split that benefit if Entekra made the deadline.

"Typically, that job would have required 100 framers on site," McCaughey said. "We did it in 14 weeks with a total of 20 framers. We significantly reduced the amount of construction traffic and CO₂ emissions on site, plus also reduced his workers comp liability insurance, because he had fewer people on site. There was no storage of materials required, which meant there was less pilferage and less risk of fire.

"I am very happy to report we split the money: \$600,000. And we are now working on the second phase of his project."

This isn't the first builder to tell McCaughey that offsite is more expensive. "I always want to ask them, 'are you telling me that every

builder I have converted to stay with me over 42 years has decided to stay with me because they like spending more money building their projects?" he asked. "No, they don't. They stay because of the offsite process.

"What you can't do as a builder with offsite construction is overlay your stick framing process on top of our offsite process and think you're going to deliver savings. It's about process improvement. You need to change the way you do things. You need to bring in a collaborative approach at the very beginning, to bring the trades in early and have all the information done upfront. If you do that, and you follow the process through, offsite will always deliver savings to the builder." T



Above: The efficiencies of the Entekra process lower the costs of homes, increasing affordability.



Above: Successful offsite is 80% process improvement.



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LVL markings

The branding on quality LVL can tell you everything you need to know, as can its absence.

By Craig Kay, national product engineer, Tilling

graphic illustration conveys a stronger message than words. The phrase "one picture is worth a thousand words" was invented by an advertising executive. Fred R. Barnard. To promote his agency's advertisements, he took out an advertisement in Printer's Ink in 1921 with the headline "One Look Is Worth a Thousand Words" and attributed it to an ancient Japanese philosopher. Six years later he changed it to "Chinese Proverb: One Picture Is Worth Ten Thousand Words", illustrated with some Chinese characters. The attribution in both was invented; Barnard simply believed an Asian origin would give it more credibility. Never let truth get in the way of a good story and a bit of a lesson about advertising.

Whatever variant of the phrase is adopted, the wisdom in the message is still equally valid. While the mandatory marking on LVL in conformance to the AS/NZS 4357 LVL standard is not a 'picture' per se, the few words and numbers selectively placed are communicating to the trained observer a far bigger story.

Below is a typical marking on some LVL marketed in Australia. Many manufacturers may add some further marketing type data such as a reference to the product being equivalent to a common F grade of timber or highlighting a proprietary short term water repellency coating or similar.

DECODING THE MARKS

We can read the story being told here by expanding the individual elements.

Where compliance to AS/NZS 4357 is claimed, the branding of the LVL must be in conformance to clause 1.8 of that standard.

The manufacturer's name or registered mark: The registered brand or marking that, in conjunction with published literature, clearly identifies the structural properties that apply to that product. This information is vital so that anyone using the product knows where to get further information.

Grade: There is currently no codified standard for LVL grades, so it is vital that there is corresponding published literature that gives users the necessary characteristic design strength and stiffness to use in any design calculations. It is unfortunately common to see LVL product with just a numeric descriptor, but in the absence of supporting data, this number is at best meaningless and at worst possibly deceptive.

Marketing: Logos for other certifications/ accreditations the product may meet.

Reference to the standard: The referencing of the standard is a mandatory requirement if compliance is claimed. It is mandatory that

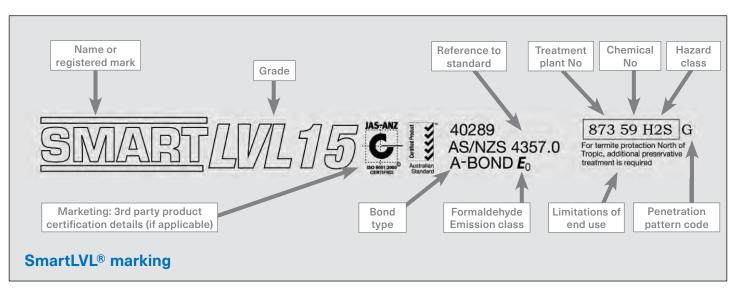
manufacturers making a statement of compliance with this Australian/New Zealand Standard on a product, packaging, or promotional material related to that product are required to ensure that such compliance is capable of being verified.

Bond type: Bond types for LVL are defined within AS/NZS 2751.1 Adhesives for timber and timber products Part 1: Adhesives for manufacture of plywood and laminate veneer lumber (LVL). Notwithstanding the reference to AS/NZS 2751.1 which lists different glue types, clause 2.5 of AS/NZS 4357 prescribes only a phenolic type of resin from that standard.

Formaldehyde emission class: AS/NZS 4357.4 specifies three (3) formaldehyde emission classes, E₀, E₁ and E₂ along with the test methods to allow determination of the corresponding value.

Limitations of end use: This is a marking requirement of the LVL standard, and in this case indicates that the H2S preservative treatment applied during the production process is suitable for use south of the tropic of Capricorn only, and that additional treatment needs to be applied if the hazard level rises to H2.

Preservative treatment: If preservative treated, the marking must conform to the AS/ NZS 1604 standard series. The series of



numbers and letters (in this case enclosed in a rectangle) all convey important data about the type of preservation and the hazard class it is deemed suitable for.

- 1. Unique Identifier for the treatment plant: The first three-digit number is a treatment plant number, this number is allocated by the Timber Preservers Association of Australia (TPAA) who maintain a database of treatment plant numbers that can be accessed on their website at www.tpaa.com.au/ treatment-plants/. Visitors to this site can search to find who has completed the preservative treatment
- 2. Unique identifier of the preservative (chemical No): The second two-digit number in the rectangular box in the illustration is a preservative number referenced in Appendix E of AS/NZS 1604.1-2021. Only those chemicals listed in Table 3.3(C) and 3.3(D) conform to the above standard for H2 hazard classes.
- 3. Hazard class: Hazard classes shall be used as the basis for specifying the preservative treatment of the LVL. The H2S hazard class in the above example is defined in Table 1.5.2 of AS/NZS 1604.1-2021.
- 4. Penetration Pattern: LVL shall be additionally marked with the penetration pattern code in

Each component of the marking tells the experienced user a great deal of information about the product in a shorthand or coded fashion.

conformance with Table 1.5.3.3.5. in the above marking example, the "G" outside the rectangle indicates that the H2S treatment has been achieved by a glueline additive of the active chemical. For LVL with a cross section ≤18,000 mm², conformance to the standard may be met with a 5mm envelope treatment, in this case the penetration code would be "E".

In a perfect world every stick of LVL offered for sale in the Australian market would be manufactured in accordance with the applicable standards and therefore be appropriately marked.

To produce LVL that is:

- 1. in every aspect conforming to AS/NZS 4357;
- 2. accompanied by comprehensive design guides, engineer certified span tables and free design and take off software tools;
- 3. accompanied by a distributor offering sophisticated technical support

functions along free take off services; requires a significant level investment, not just in manufacturing but also in product support.

Unfortunately, in this period of short supply of LVL, the market is witnessing an influx of new, inexperienced operators, who in many cases demonstrate that they have limited or no understanding of what does or does not meet the relevant standards.

The first hint of this lack of knowledge is often identified in the marking of the product being offered. As described above, each component of the marking tells the experienced user a great deal of information about the product, but in a shorthand or coded fashion. The lack of some important information can cause the product to be inappropriately used which in the worst-case scenario, could present a safety risk.

The markings on LVL are there for a valid purpose, and although brief, actually do tell a larger, important story. 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







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



FTMA heads West

Western Australia's F&T fabricators face an awkward market, but have top timber and machinery supplier support. By Kersten Gentle

or the first time since Covid, FTMA headed to Western Australia for a week full of visits to fabricators and suppliers, travelling just shy of 2000km to fit in our 16 visits.

It never ceases to amaze me how big the state is. On this trip we travelled from Perth to Albany, via Busselton, and way up to Geraldton to see new FTMA members Coral Coast Homes, the new owners of Geraldton Roof Trusses.

The Western Australia market for timber fabricators is like nothing else in Australia, and I'd reckon the WA designers have one of the hardest jobs in the country, as very few roofs are the same, featuring so many hips and valleys. It will shock those in the East that builders claim it is more affordable to have their roofs stick built, due to the complexity of the roof design. WA's market is definitely still a double brick, stick built environment, however, slowly, but surely the offsite prefabrication market is growing.

Now, when I say it is more affordable to stick build, there are many contributing factors as to why this could possibly be the case. Firstly, as mentioned above, every roof is different. Once you see it in the estates, you can't unsee it and I was shocked with the huge variations in roof designs.

There are many other issues that timber fabricators have to battle in the West such as:

· Chippies wanting the same money to erect prefabricated trusses as they do for stick built roofs.



Above: FTMA Member Gary King of the Midland Timber Co (Big River Group) with Kersten.

- There are no legal requirements to have building works certified, like they do in the East, which, in my opinion, benefits stick built over our quality engineered products.
- The proposed WHS changes around falls from heights have been pushed back to March 2024. These laws would have brought WA in line with the rest of the country, and this is something we believe will have a real impact on the builders' decisions between stick and truss roof construction methods.

The decision to push back the introduction of these important WHS changes, was predominantly pushed by building associations, which is extremely disappointing, as safety should always come first.

Driving through various new estates to get a good look at the construction methods, I was surprised by the amount of lightweight steel I saw. Some say this is a good thing, as it shows builders are moving away from double brick towards lightweight construction, however, what about the environmental footprint from these steel homes which are literally 'steeling' our children's future.

What I was impressed with, was how much

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Above: Nikita and Kersten Gentle with Shane Watling of Staxa (Wespine).

our industry has progressed since my last visit and even though many of us expected the prefabrication market to grow quicker, it is slowly happening, due to the innovative approach fabricators are taking.

I should also point out the work being done by the nail plate companies with Chris Shaw (Pryda) and Brad Ridolfi (MiTek) providing outstanding support for fabricators and the wider industry.

During the visit we also managed to catch up with Silver Sponsors Wespine and Vekta Automation, where we toured both facilities.

I last toured the Wespine facility during my TCA days (nearly 20 years ago), and I was blown away by the investment made and the lengths Wespine goes to in order to maximise the structural timber cut from every log processed in the mill.

As for Vekta, WOW. Their new factory and office are huge and well laid out. You can understand why they are so busy manufacturing new equipment for our industry with many orders being finalised in the factory.

In the past three months, FTMA has had four new WA members, first with Coral Coast (Geraldton Roof Trusses), then in August we welcomed Clint Wells of Worldwide Truss & Frames in Mundijong and Kenny McGonnell of Pinelock Systems in Albany and finally in September we were pleased to welcome Nick Steens at Independent Timber Supplies in Rockingham to the FTMA family.

There is no doubt the passion and the drive for change is there, and FTMA looks forward to working with fabricators and suppliers to address the many issues facing the industry and later this year will be hosting a seminar to bring all together.

Thank you to those who took the time to see us and congratulations to all, for their innovative approach to driving change in the Western Australian construction industry. T

Kersten Gentle



Above: New FTMA Member Kenny McGonnell of Pinelock Systems in Albany with Kersten.



Above: Ed and Shelena Serrano of Vekta Automation with Nikita and Kersten Gentle (centre).



Sweat the small stuff

Paying attention to detail can make all the difference in trusses – and in boots. By Paul Davis

y ski boots fit me pretty well – except in one spot on the instep. I'm a week back from an eight-day trip and it turns out that that little misfit turns into an enormous discomfort in the long run. Days later my feet are still tender.

There are of course many little things that make a big difference; the trigger to the bomb, the seed that makes a plant, the "thank you" that makes a day. And, you guessed where I am going, there are many little things that make a trussed roof work; the span that fits the walls, the nailplate that carries the load, and the certification that gets through council.

In the modern world's highly competitive environment, there is always a pressure to cut production costs. As my grandmother used to say, "Look after the cents and the dollars look after themselves." So, quite reasonably, you may want to look at your nailplate sizes and attempt to lop a few dollars off each truss by reducing nailplate size. However, some plates are more critical than others, and it is worth getting a feel for the most critical ones where a reduction in size can more readily lead to trouble.

No doubt, your truss software lets you adjust the minimum plate size, probably in ways that may account for several different factors. There is, of course, a theoretical line that cannot be crossed, where the plate must be strong enough to resist the applied theoretical forces. However, if a plate is sized purely on these considerations, it may not take into account real world issues like plate misplacement, gaps between the timbers, incomplete pressing, timber variability, stresses set up during handling and imperfect truss plumbness in the roof. All of these factors can dramatically affect the strength - and so safety - of a nailplate.

So, if you are designing at minimum plate sizes, what are the most highly loaded and vulnerable truss plates? There is no universal

Some plates are more critical than others, and it is worth getting a feel for the most critical ones where a reduction in size can more readily lead to trouble.



Above: This apex plate failed when it was located too high, putting too much load on too few teeth.

answer, but in the majority of trusses, it will be the heel plate and apex plate.

These plates carry the highest loads in a truss. For example, a 20°-pitch truss has a force through the apex and heel plate equal to roughly three times the vertical load onto the top plate - that's more than the weight of the whole roof on that truss!

Timber trusses sometimes amaze me with their ability to stay up in adverse circumstances (say, when butchered by a following trade). Nonetheless, when you are dealing with real forces equivalent to many hundreds of kilograms of weight, this can show up any weaknesses.

The failed apex plate in the image (above) is a classic example. The nails located near

the very end of the web are largely ineffective because they can split out of the end of the timber. And, in fact they have done just that. So, there are only five teeth per side that are effective to carry load. The plate is vertically misplaced from its centre by two rows of teeth. If it had been correctly located centrally, then eleven teeth would have been effective and almost certainly the plate would not have failed. So, a reasonably small misplacement leads to a massive change in capacity and a dire outcome.

In the real world it is not possible to eliminate all fabrication inaccuracies. I'm guessing this was a 2.50pm on a Friday job. It was only due to luck and then some temporary props that this truss and the roof it supports didn't catastrophically collapse over what is a nursing home lounge room.

This truss failed years after it was built. It is one of the quirks of timber that it is stronger in the short term than in the long. So, it may be that your business is occasionally putting out trusses with misplaced plates but you don't know this is a major drama yet because these haven't started failing yet. Nobody wants this, so, to limit the risk, I recommend not designing your plates right to the very limit.

Benjamin Franklin said "Little strokes fell big oaks". This is a case where little stuff-ups collapse big trusses. Put in a more positive

way, being a truly good truss fabricator means being great at the little things! 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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