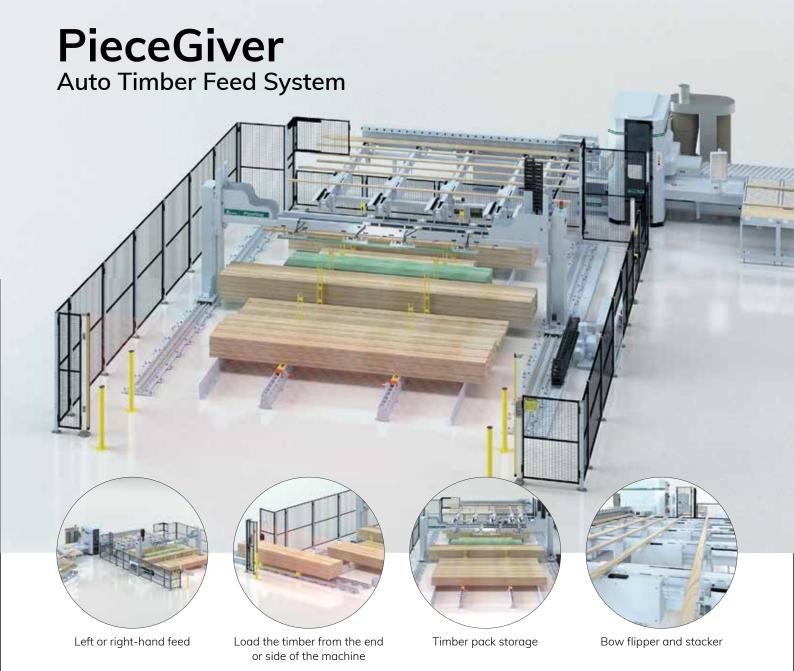
Timber Trader 1

news





Compatibility: The PieceGiver can be easily retrofitted to work seamlessly with your existing PieceMaker saw, saving you time and money. Additionally, it can be configured to feed two PieceMakers at once, reducing your sawing labour.

Increased Productivity: Many linear saws have their output limited by the operator. The PieceGiver ensures uninterrupted operation throughout the day, significantly increasing productivity.

Increased Output: Experience a remarkable improvement in the output of your saw, enabling you to complete more work in less time.

Single-Person Operation: Efficient operation with just one person, making production more cost-effective.

Minimised Risk: Manual handling is significantly reduced, resulting in fewer injuries and accidents.

Production Reliability: PieceGiver delivers dependable and reliable performance day in and day out.

Options:

- Feed two saws with the one PieceGiver for enhanced speed and efficiency
- Choose left or right-hand feed
- Load timber from the end or side to customise your floor plan and material flow
- Timber storage options: 3350mm, 5975mm, 8600mm, 11225mm
- Includes bow flipper and stacker
- Adjustable system length and pack capacity
- Optional extra pack trolleys

Scan for more information





TimberTrader₁

PUBLISHING DATA

Publisher

Timber Media Australasia query@timbertradernews.com.au

Editor

TTN Editorial team editor@timbertradernews.com

Editorial Contributors

Nicky Ainley, Paul Davis, George Dolezal, Kersten Gentle, Donyale Harrison, Craig Kay, Afzal Laphir, Peter Maguire, Campbell McInnes, Chris Parker, Michael Smith and Dean Wilson

Art Director

Julitta Overdijk julittao@ttnews.com.au

Sales and Advertising Director

Campbell McInnes campbellm@ttnews.com.au Mob: 0406 223 007

Accounting, Corporate Director & Subscriptions Manager

Chris Parker cparker@ttnews.com.au

Printer

IVE Group Unit 1/83 Derby Street, Silverwater, NSW 2128



Timber Media Australasia Pty Ltd

ABN: 50 626 345 088 PO Box 3001 Maraylya NSW 2765

Email: query@timbertradernews.com Circulation: proprietors, managers and executives in all sectors of the timber and building materials industries including merchants, building material centres, hardware stores, timber window and door manufacturers, truss and frame manufacturers, timber flooring retailers, stair, balustrade and solid timber furniture manufacturers and their associated suppliers and industry associations throughout Australia.

Established October 1985 ISSN 1035/4298

Print Post Approved: 100002694

Email: query@timbertradernews.com Website: www.timbertradernews.com

Subscriptions for 6 editions:

Australia: \$72 (incl GST) within Australia









Contents

Industry update

News

Claymark acquires Mortim, Housing commencements lower still, Aurecon investment, ADM Shipping, Vale Ron Eddy, John Cook & Sons merged into ITI and more.....4

WH&S

Challenges for Timber & Hardware.....12

People business

The right to disconnect......14

Association update16

Features

Timber trends

Aust. structural supply and demand dynamics..24

ITI - Cover feature

Providing solutions, building partnerships with a dynamic and loyal workforce.....26

Giant, majestic trees of the NZ forest30

COVER CREDIT: Courtesy ITI. Inset: Courtesy Porta.

Lining boards

Exploring the options and choices to enhance any wall or ceiling, using timber.34

Woodwise

Western Red Cedar......40

Fabricator news

Hvbrid

Mass timber assisting with the transition to a low emission economy......42

Lawmans frame and truss

This family business has multiple members spanning across 3 generations 44

In the frame

Frame it right with Craig Kay.....46

FTMA newsletter

Prepare now for headwinds with Kersten Gentle48

Truss talk

Lateral torsional buckling with Paul Davis....50

Timber Trader acknowledges the Cammeraygal people, Traditional Custodians of the land on which this publication is produced, and pay our respects to their Elders past and present. We extend that respect to all Aboriginal and Torres Strait Islander peoples today.

Disclaimer Unless explicitly stated otherwise in writing, by providing editorial material to Timber Media Australasia Pty Ltd, including text and images you are providing permission for that material to be subsequently used by Timber Media Australasia Pty Ltd, whole or in part, edited or unchanged, alone or in combination with other material in any publication or format in print or online or howsoever distributed, whether produced by Timber Media Australasia Pty Ltd and its agents and associates or another party to whom Timber Media Australasia Pty Ltd has provided permission.

Publisher's note

e are delighted to announce the team at Timber Trader News is growing. We now have an increased number of writers, professional contributors, and experienced editors, including Nick Ainsley. Nicky has more than 20 years' experience in the media industry, working both locally and abroad. Nicky is experienced with print, digital, radio and television, has held the senior editor position for a number of digital news platforms and is currently working live on radio, including the fastpaced breakfast role.

Nicky holds a Master of Journalism and a Bachelor's of Med Sci. Psych and is already the senior editor of our sister publication, Timber and Forestry Enews. We welcome Nicky to the TTN team.

We appreciate all our regular Association's news contributors. In this issue we have received articles and updates from 8 associations and had to allocate an additional two pages to include the plethora of important news and information. We hope you enjoy the extensive update from these association.

We are delighted to have ITI Australia as our front cover feature. ITI have truly grown into a significant supplier since commencing in the late 80's. Continuing to

strive to be a one-stop-shop to the industry, ITI have continued to grow the product range they offer. One of their flagship products, Design Pine, which is a treated LOSP and primed pine product, with an extensive range, has had its 20th birthday this year. More recently they have added James Hardie to the list of supply partners, as they continue to widen their product offering. ITI continue to go from strength to strength and find innovated solutions to the supply of quality products to the market.

The timber feature, linings and internal feature walls, sees two quality suppliers in Timbeck Architecture and Porta sharing their insight into this specialty timber areas.

Timbeck Architecture, a private family operated business, specialize in the supply of Western Red Cedar and Australian hardwood timber and timber products. Proudly, Timbeck have been supplying topquality timber to the Australian construction, building, and renovation markets for more than 50 years. They supply only the best sustainably sourced local and imported timber species.

Porta with over 90 years of excellence in the Australian timber industry, nurtured under the vision and leadership of the late John Pizzey, and carried forward by five generations of family commitment. Specializing in high-quality timber products,

they serve the home improvement, building, trade, and commercial sectors.

Porta embodies a legacy of passion and innovation, sharing every piece of timber with a sense of pride and responsibility. They look to the future, remaining dedicated to bringing the market the best timber solutions, today, tomorrow, and for generations to come.

Porta is dedicated to excellence in timber, committed to sustainability, and driven by a passion that spans generations.

A Family Tradition of Quality, TTN visited Lawmans Frame and Truss in the outer western suburbs of Sydney. A family run fabricating business with three generations currently working in the business. Delving into areas of supply, quality, products, machinery and the effects of Covid-19, we gain some insight to some of the key factors to success and challenges faced today by frame and truss fabricators.

As Australia continues to face housing shortages, and ongoing change, it will be vital that we have timber suppliers who source sustainable compliant timbers that meet the standards, quality and demands of the Australian marketplace.



News in brief

Claymark distribution grows with acquisition of Mortim

NZ manufacturer and Australian distributor together form a powerhouse operation.

laymark Group Limited, New Zealand's ✓ largest manufacturer and distributor of premium pine products have expanded their global distribution reach with the purchase of Mortim (Australia) Pty Ltd.

Family-owned and operated, Mortim is a multi-generation wholesale business distributing wood products across Australia from its Melbourne, Adelaide, and Brisbane distribution centres. The acquisition means the Mortim pedigree and established networks are bolstered by the renowned "Ingrained Precision in everything we do" culture brought through the Claymark relationship. In turn it allows Claymark and Mortim to increase their service offering excellence and delivery to the timber manufacturers, merchants, and frame & truss businesses.

Claymark Executive Director Paul

Pedersen says welcoming the Mortim team to Claymark will positively affect the Australasian wood products market through creating an integrated supply chain for a large range of wood products. "It's a truly exciting time within our industry - bringing together the strengths of both businesses allows manufacturing and distribution to be closer than ever before". This is new direction within the Australian wood products sector, and we're well positioned to deliver what the industry needs, says Paul.

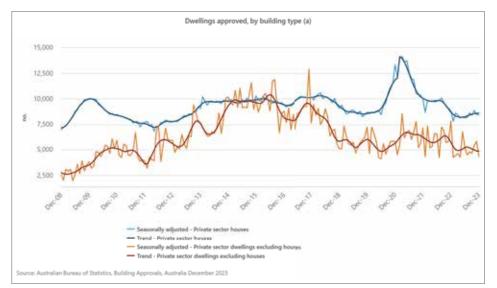
Mortim have created an enviable reputation built on integrity and transparency across the Australian timber industry making them the preferred supply partner to many successful timber manufacturers, merchants and frame & truss businesses.

Managing Director Ron Goldschlager says

the company had been looking into succession options and was pleased to find a perfect fit in Claymark. We have a wonderful, dedicated team and many highly valued long term trading partners, so it was essential we found a successor with similar values.

"Claymark's "Ingrained Precision in everything we do" mantra resonates with our core philosophy of trading with integrity and service excellence" says Ron. "Claymark will add additional strength to the Mortim product range and supply chain, so we will be able to even better serve our existing and new customers, now and into the future."

The business will continue to trade as Mortim and retain their valued staff across the business to ensure business as usual as we grow the supply chain with additional and exciting new products.



Housing commencements still down

Economist and timber sector experts both sounding the alarm bell.

uring 2023, the Federal Government set an ambitious housing target to build 1.2 million new homes over the next five years commencing mid-2024. State premiers got on board - but we need to ask do we have any chance of achieving it. The ABS data shows the September Quarter, Australia commenced construction of just 23,058 new houses and now the final quarter has recorded just 22,741. It's the 2 weakest quarters in over a decade.

Tom Devitt, HIA senior economist suggests there is a clear connection between this drop and the rise in interest rates, saying, "Since the RBA's first cash rate increase in May 2022, sales of new homes

We need to go up not down, and the latest 2 quarters are the weakest in over a decade!

have tumbled. A number of earlier projects are also being cancelled, with banks withdrawing finance in the face of soaring building costs and shrinking homebuyer borrowing power."

"This lack of new work entering the construction pipeline is expected to produce a trough in new house commencements in 2024, when Australia will start construction on just 95,400 new houses, the weakest year in over a decade."

Multires commencements are similarly weak, which is bad news, because the national housing targets depend on thriving private construction.



In brief

ederal Govt - Round one grants for forestry plantations are in full swing with the majority of \$3.2m being awarded to NSW ready plantations. Round 2 opened on Feb 9th and will close on June 27th.

The total fund pool is \$74m and as previously reported, experts are calling for a lot more. To apply or for further information: www.argiculture.gov.au

Incase you missed it, latest unemployment numbers increased to 4.1% (RBA expectation were 4%) with some economists looking for signs of an interest rate decrease in HI 2024, the RBA Governor, Michele Bullock was quick to point out in her statement on monetary policy, inflation remains to high (currently also at 4.1%) and the board remains committed to ensuring this returns to their target ban of 2% -3%. UK and Japan are now both in recession. We are watching the USA still the largest economy.

ot that gut feeling a business could be a problem? In most State and territories, the Government has a public warning list. In NSW for example: www. fairtrading.nsw.gov.au/news-andupdates/updates/public-warnings

aster 2024 is from Good Friday 29th March to Monday 1st April Australia wide.

planning to undertake some training, thinking about a certificate of competency or qualification following successful completion. Make sure the provider is a Registered Training Organisation (RTO) and displays their registration number, otherwise it could be worthless.

s it a scam? From phone text emails, links, dating apps, Facebook, adjusted videos, to old fashioned calling are just a handful of scam approaches used, and are on the rise. Scammers are investing in technology to catch you off guard. The Australian Government established acma (Australian Communications and Media Authority) to help. The website has lots of helpful information with a dedicated reporting area if you find you are a target. You may think you are ok but think about elderly and vulnerable family and friends. Refer to: www.acma.gov.au



Above: Aurecon team at the Arc Timber hub launch

Aurecon commits to research hub to advance timber in the built environment

Our significant investment is key to our desire to remain at the forefront of innovation. By Corey Monk - Group Director, Brand, **Marketing & Communications**

urecon has committed AUD 200,000 in funding and in-kind support as a Principal Partner of the AUD 16.5 million ARC Industrial Transformation Research Hub to Advance Timber for Australia's Future Built Environment, administered by the University of Queensland.

The aim of the hub is to develop the resources, enablers, and drivers to advance timber, as a natural resource, to be the material of choice, leading towards a net zero future for Australia's built environment. Aurecon is involved in various nodes including Performance of Building Components, Manufacturing Innovation, Towards a Low Carbon and Circular Economy and Building Performance for Occupants.

Aurecon's Major Project Director, Ralph Belperio, who is on the Hub's Executive Board and Hub Partner Investigator, said that Aurecon has identified that timber has a key role to play in decreasing both embodied and operational carbon as we move towards a net-zero future.

"Several of the research nodes that the Hub is tackling are directly relevant to the decarbonisation pursuits of many of our key clients," Belperio said. "We have assembled a team of our most eminent practitioners to focus on each of the relevant nodes that can help guide the research strategies to ensure that the outcomes remain industry focussed

and meet the needs of the broader construction community."

"Our significant investment is key to our desire to remain at the forefront of innovation, both in the efficient and effective use of timber in our efforts to decarbonise the built environment, and in our broader drive for more sustainable outcomes". Aurecon has an enviable track record of designing and delivering mass engineered timber structures, including Murdoch University's Boola Katitjin, which won the 2023 Engineers Australia Project of the Year; 25 King St, which is Australia's tallest mass-engineered timber commercial building; and Gaia, one of the largest massengineered timber buildings in Asia.

Aurecon also contributes to massengineered timber advocacy as a partner of the Forest and Climate Leaders' Partnership Coalition on Greening Construction with Sustainable Wood and the Materials Embodied Carbon Leaders' Alliance.

The research support for the ARC Advance Timber Hub is just one of a number of research and development commitments that Aurecon is currently undertaking, including the development of sustainable alternatives for sand in shotcrete, improving design through Al-assisted stakeholder engagements, and reducing wastage through a circular economy approach to building retrofits.



INTERNAL SOLUTION

INTRODUCING meyFC19+meyFC22

Get the
EDGE with
meyEC

Lightweight fibre cement flooring

Width (mm)	Length (mm)	Thickness (mm)	Mass (kg)	Edge Colour	Sheets per pack
600	2700	19	36.7		40
600	1800	22	32.2		40









MAP SOURCE: DREWRY HTTPS://WWW.DREWRY.CO.UK/

Exploring contemporary shipping trends and challenges

Rina McLaughlin, an international logistics specialist from ADM Global, provides an update on the current state of shipping and anticipated developments in the near future.

hallenges within the Global Supply Chain are ongoing factors for Importers and Exporters to consider. Our most recent challenges have been proven unprecedented, akin to the peak of the pandemic.

The first issue is the Red Sea Crisis, where there are continued attacks from the Houthis in Yemen on commercial shipping wishing to utilise the Suez Canal, this has led to an exodus from the Red Sea by most of the major shipping lines. The rerouting of vessels via the Cape of Good Hope will have a flow on effect which will add weeks, perhaps months, for goods to arrive at Australian ports. This also means that vessels will be in transit longer resulting in more containers on the water for a longer period.

This inevitably means there will be a global shortage of equipment available, this has already commenced and will escalate the longer the Red Sea issue remains unresolved.

Asian ports will also have delays as volumes increase though major transhipments ports in the region, congestion at transhipment ports is increasing, not only due to the Red Sea issue but also due to blank sailings and schedule recovery with an estimated lull time of 4-5 weeks. The increase in throughput into major Transhipment Hubs such as Singapore, Port Klang and Tanjung Pelapas is being felt and as the congestion increases, the recovery time will also as more pressure is placed on infrastructure.

The delays and disruptions come at an additional cost. Shipping lines are using more fuel due to increased transit, equipment is displaced for longer periods of time and as demand begins to exceed

supply, rates will increase. The ongoing RED SEA situation has resulted in GRI's/RR/PSS as well as recovery charges – E.g., MSC has imposed a 1500.00 per CNTR CAC charge on EU trade lanes.

There is some good news, the dispute between DP World and The Maritime Union of Australia has finally been resolved and Protected Industrial Action (PIA) has ceased. Both parties have agreed in principle to a new agreement, however, this needs to be voted on by employees and the approved by the Fair Work Commission.

In addition to the above, DP World have decided to increase Terminal Access Charges (TAC's) at all their ports by as much as 52%. This has been understandably met with much contention from Importers and Exports.

Following on from this Patricks and VICT have also increased their terminal access charges. This is an ongoing issue with the ACCC monitoring such fee increases.

Even though there is a current Productivity Commission Report that recommends changes to the way these fees are introduced and a restructure of the current system, there has been little development in the favour of Importers and Exporters with ADM and our Industry Associations petitioning on behalf or clientele for total reform.

The new charges will commence on the 1st of February 2024 and the 1st or March 2024

Please consider the outlined issues as disruptions to supply chains are inevitable, as usual, plan accordingly and consider that additional charges will apply and these need to be factored into landed cost calculations and lead times.



Above: Demonstration of congestion at Major Global Transhipment Hub – Singapore.

HIGHLIGHTS

GLOBAL SERVICES

- Transhipment delays/congestion are on the rise due the ongoing Red Sea Crisis as well as the less impactful Panama Canal Drought
- Omissions/blank sailings are occurring on a regular basis as the downturn destabilises global volumes and disruptions/congestion continuing – as carriers are unable to fulfil their capacity, they will initiate blank sailings as well as schedule recovery due to delays
- Equipment is imbalanced globally with demand increasing and a multitude of equipment displaced due to disruptions/ congestion
- Record cuts to container shipping costs have been experienced in Q1 2023 but began to increase further in 2H 2023 – whilst rates have been relatively stable in FEB 2024, ongoing disruption to the Global Supply Chain can and will determine increases

AUSTRALIA LANDSIDE

- Terminal increases across the board increasing by as much as 52%
- The recent DP World PIA (Port Industrial Action) has had a large impact on Australia ports productivity with an estimate 62000 containers displaced. Now this has been resolved the terminals are in recovery to process backlog through DP World Terminals
- BMSB season from Target Risk Countries continues until the end of APR 2024, with the season beginning again in SEP 2024 – BSMB for Heat Treated product ex Canada as now been revoked
- DAFF processing delays are minimal at this time as volumes have downturned significantly
- India FTA (ECTA) has been finalised and is now in full effect
- UK FTA has been finalised and is now in full effect
- Investment in the Newcastle/Port Kembla/VICT terminals continues with these terminals anticipated to become higher functioning container terminals in the future.

For further information, visit admglobal. com.au or contact our specialists at info@admglobal.com.au





Vale Ron Eddy

Ron Eddy, 73, was far-sighted strategist in wood preservation.

Ron Eddy passed away in Auckland, aged 73, was a respected and farsighted strategist in the field of wood preservation. Ron's contribution to the timber industry over many decades is legendary, especially the high goals he set and achieved over a long career that included roles as managing director of Koppers Hickson Timber Protection and founder and managing director of TimTechChem International Ltd.

Ron's legacy spanned 40-plus years with the timber treatment and protection industry. His driving force behind TimTech from 2001 to 2020 opened new horizons in the marketing, research and application of wood treatment technologies on both sides of the Tasman against competition from two major global companies. He retired in 2020.

His education included a national diploma in analytical chemistry (University of the Witwatersrand); Post Graduate Diploma in management, science and technology and Master of Management, strategy, (University of Auckland).

Ron was appointed to the executive council of the International Research Group on Wood Protection at the 47th meeting of the IRGWP in Lisbon in May 2016. He was chosen from a list of international candidates to take part in leading the group's future over the next three years. Ron is survived by his wife Lynn, two daughter Janine Stewart and Angela Burgess, four grandchildren, a brother Clive in South Africa and a sister Sheldene Crookes in New Zealand.

John Cook and Sons merged into ITI NSW

This was a strategic business decision as we are so closely aligned.



- Enhanced services: with combined expertise and resources, they will offer a wide range of products and improved
- Greater efficiencies: the merger enables them to streamline their processes, ensuring faster and more efficient service
- A stronger company: together, they will hold a stronger position in the market,

allowing them to better meet the needs and expectations of their customers. John Cook and Sons has expressed that

"Our commitment to providing our customers with exceptional service and products remains our top priority. While our customers will notice improvements and new offerings, our core values, and dedication to our customers will not change.

We are incredibly excited about this merger and the opportunities it presents. We believe that this change will allow us to serve our customers better, and we look forward to continuing our relationship with each of our customers in this new and improved structure."

Independent Hardware Group expo

Expo, training and awards night.

icky Ainley was in attendance on the Queensland Gold Coast where more than 2000 delegates descended for this showcase event. Training included the latest Point of sale applications, sales margins and marketing.

Key speakers included Metcash CEO Doug Jones, saying their purpose continues to be 'championing successful independents." Metcash only recently made the acquisition of the South Australian Bianco construction and Victorian-based Alpine Trusses, considered to be one of the largest frame and truss operations in the country. Jones told the packed auditorium he believed these acquisitions would only further strengthen Metcash's (and IHG's) position as a power player in the hardware sector." Next speaker





was Anette Welsh, CEO of the Independent Hardware Group, saying she was excited to spend the week with members and suppliers as the nation marks 65 years of Mitre10 in 2024. The co-op based group originated in 1959 with 8 founding members who joined together to build their collective power while maintaining their independence as businesses. It's an ethos that has continued with the group which is now sports 800 hardware and professional tool stores operating under Mitre 10, Home Hardware, Thrifty Link, True Value and Total Tools.

More than 220 suppliers were showcasing their latest and greatest and offering expo only deals to the members in attendance over a day and a half. From race tracks and Mitre 10 building block, through to kitchen displays, outdoor garden settings, plants and even the giant Dulux dog, suppliers went above and beyond as members time networking and wheeling and dealing. With the likes of ITI and James Hardie on site, the timber and building industries were well

At the Independent Hardware Group expo annual awards - 2 special industry recipients were awarded first place in their categories:

- Hume Doors build supplier of the year.
- Dulux exterior supplier of the year. Congratulations to you both for this great achievement!

UPCOMING EVENTS

MARCH

FTMA NATIONAL CONFERENCE

For the first time in 10 years the nation's fabricators will be descending on Victoria for this biannual event. A true must-see event for FTMA members, the conference not only brings together experts to inform, educate and inspire, but also provides unmissable networking opportunities and a chance to relax at the Red Activities Day and dinner. Built around the theme Looking Outside the Triangle, the conference will be held in Geelong on 18-19 March. For more information and to book, visit www. conference.ftmanews.com

MAY

SYDNEY BUILD EXPO

Australia's largest construction and design show features 20,000+ attendees, 600+ speakers across 12 CPD stages, 500+ exhibitors, Meet the Buyers, Government Hub, Architect's Hub, live music, entertainment, DJs, celebrity guests and more. Best of all, general entry tickets are



free. At the ICC Sydney, 1-2 May. For full details of the program and speakers and to book, visit www.sydneybuildexpo.com

AUGUST

TIMBER CONSTRUCT **CONFERENCE**

Rydges, 186 Exhibition Street, Melbourne on August 12th and 13th. The Timber Offsite Construction Conference and Exhibition has been rebranded as the Timber Construct

Conference to encompass the full spectrum of timber building. The conference provides an invaluable forum to address pressing challenges and opportunities influencing timber's role across the built landscape. Technical sessions will cover research updates, emerging products, building code enhancements, and best practice case studies. For more information, visit https://timberoffsiteconstruction.com



Want the full story? Subscribe to the TimberTrader News regular e-newsletter via our website www.timbertradernews.com



WH&S 2024: challanges in timber & hardware stores

Brought to you by Graeme Burchall, Workplace Health and Safety Specialist, NTHA In the dynamic landscape of workplace health and safety.



In the dynamic landscape of workplace health and safety (WHS), the timber and hardware sector faces unique challenges that demand constant attention and adaptation. Graeme Burchall, the newly appointed Workplace Health and Safety Specialist for the National Timber & Hardware Association (NTHA), sheds light on crucial WHS issues, overlooked areas, emerging concerns, and evolving safety practices for businesses in the industry.

INCREASED PENALTIES FOR BREACHES:

One of the pressing concerns in 2024 is the awareness of heightened penalties for safety legislation breaches, including the grave consequence of Industrial Manslaughter. Since the 2015 Dreamworld tragedy, regulators across states and territories have been working on legislation to criminalise such incidents. Burchall notes that South Australia and New South Wales are expected to finalise this legislation mid-year. Penalties, varying from state to state, could reach up to \$20 million or a prison sentence of up to 20 years for Persons Conducting a Business or Undertaking (PCBU).

EMERGENCY MANAGEMENT PLANNING AND WORKPLACE **FIRE SAFETY:**

Burchall says there is significant gap in emergency management planning, specifically in workplace fire safety. While training is often inexpensive and conducted by local fire stations, Burchall highlights the necessity for all workplaces to have a welldefined emergency plan. This plan should be easily accessible, regularly reviewed, and communicate clear instructions for workers and visitors during emergencies.

RISING CONCERNS: ABUSIVE CUSTOMERS AND WORKPLACE VIOLENCE:

A concerning trend identified by Burchall is the increasing incidents of abusive customers, aggression, and violence in the workplace. Acknowledging the primary duty of care for a person conducting a business or undertaking (PCBU) is to provide a safe environment, Burchall recommends a focus on ensuring all staff "feel" safe at work. Online resources can aid in creating a safe and healthy workplace for everyone.

PROACTIVE SAFETY LEADERSHIP:

Burchall advises business owners and managers to be actively and visibly involved in safety tasks and projects. Delegating safety responsibilities to Health and Safety Representatives (HSR) or supervisors may seem tempting, but visible engagement by senior managers establishes a culture where safety is a top priority. This, according to Burchall, is a crucial step in creating a robust safety culture.

ADVANCEMENTS IN FORKLIFT SAFETY:

Reflecting on the evolution of workplace safety practices, Burchall acknowledges the ongoing risk posed by forklifts in factories and warehouses. He highlights significant developments, such as Toyota's Al technology-based safety systems, which are capable of detecting people in the truck's path, driver fatigue, and potential distractions.

ENSURING MACHINERY AND EQUIPMENT SAFETY:

For the timber and hardware industry, Burchall notes the importance of comprehensive training programs. Operators must be trained, qualified, and competent for each piece of machinery. Training content should be specific to the machine's make and model, and a Training Needs Analysis should identify ongoing training requirements.

DAILY INSPECTIONS AND PERIODIC SERVICING:

To ensure safe operation, Burchall recommends daily pre-start checklists for equipment, including a lockout system to prevent unauthorised use. Regular periodic servicing by qualified technicians, at least every six months or as specified by the manufacturer, is crucial. Detailed service reports should be provided after each

As the timber and hardware industry navigates the ever-evolving landscape of workplace health and safety, proactive

measures, constant vigilance, and adapting to emerging concerns will be paramount. Business owners and managers must prioritise safety, fostering a culture where every team member feels secure and valued. In doing so, they contribute not only to the well-being of their workforce but also to the overall success and sustainability of their business.

To find out more about NTHA's WHS services, visit www.ntha.com.au/whs/ whs-servcies/, email info@ntha.com.au or call Graeme on 1800 822 621.

NAVIGATING POSITIVE DUTY

In a transformative move to foster safer and more inclusive workplaces, the Australian government introduced new positive duty laws under the Sex Discrimination Act in December 2022. Regardless of the size of your business, these laws mandate employers to proactively and meaningfully address and prevent unlawful conduct in the workplace. This includes discrimination based on sex, sexual harassment, sexbased harassment, creating a hostile workplace environment, and acts of victimisation.

This significant shift in legal obligations

requires immediate action from businesses in the timber and hardware industry. Positive duty obligations are a forward step in creating safe workplaces, and a failure to deliver against these responsibilities could expose your business to financial and reputational risks. It is crucial to note that this legislation is not only applicable to larger enterprises but is equally important for sole traders, small businesses and medium-sized enterprises. Many members may mistakenly believe they are too small to be affected, but the legislation applies across the board.

Positive duty goes beyond mere compliance; it demands that employers take 'all reasonable and proportionate steps' to eliminate unlawful behaviour from the workplace. This encompasses a range of actions, from education and awareness to

the development of policies and procedures.

At the National Timber and Hardware Association (NTHA) we recognised the importance of helping our members understand and meet these legal obligations. Therefore, in collaboration with Australian Business Lawyers & Advisors (ABLA), NTHA is offering an educational series to guide businesses through the process.

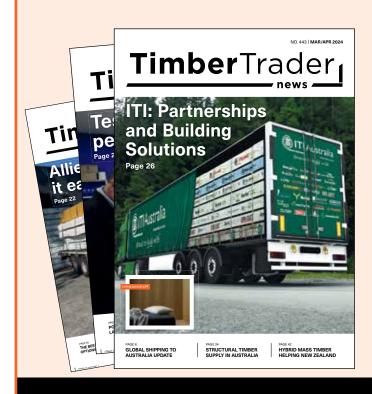
Scan and access the Positive Duty toolkit below

To help keep on top of important legislation matters that impact your business, become a member of NTHA today at www.ntha. com.au. T



Graeme Burchall has a wealth of experience in safety coordination, incident investigation, and property maintenance with a particular focus on fostering secure work environments. His professional journey includes roles such as a Maintenance Officer and WHS Coordinator, reflecting a diverse skill set in analytical skills, safety auditing, and strong leadership abilities. Graeme's role at NTHA supports members with their WHS auditing, standards and training.





TimberTrader₁

GROW YOUR UNDERSTANDING

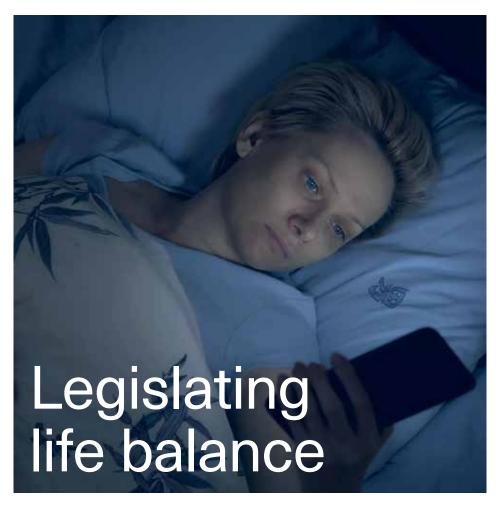
Every issue, we put key industry issues into context, share new products and techniques and support the people and campaigns that matter. Keep up to date with what's happening in the timber world with a subscription to TimberTrader News.

Scan the QR code and subscribe



TimberTrader News is the industry's top resource, including sector news, profiles on industry personalities and in-depth features. 12 month subscription (six issues) is only A\$72 and includes GST and postage within Australia. Contact Chris Parker on cparker@ttnews.com.au

AUSTRALIA'S MOST RELEVANT AND INSIGHTFUL TIMBER INDUSTRY MAGAZINE



The right to disconnect – what is fair and reasonable.

By Peter Maguire

here has been a lot of noise about the potential challenges for employers arising from employees getting a legislated "right to disconnect" form work. The truth is that a lot of that noise is just that - noise.

Let's have a look at what this 'right to disconnect" really is and why it might actually not be a bad thing.

SO WHEN DOES THIS ALL **HAPPEN?**

The legislated right takes effect for businesses with 15 or more employees 6 months after the legislation receives royal assent and for smaller businesses 12 months after that. So we have a bit of time to work through the implications for our own businesses.

WHAT DOES "DISCONNECT" **MEAN?**

What it essentially means is that an employee can decide not to monitor, read or respond to unreasonable contact (actual or attempted) outside their contracted working hours from their employer or a third party like a customer or supplier.

That doesn't mean that their employer or a third party can't send them a communication outside their contracted hours - it just means that they don't have to make themselves available to receive or respond to it.

WHAT DOES "UNREASONABLE" **MEAN?**

As always with these sorts of things, there are a few factors that come into play under the legislation like:

- Why the contact is made.
- How it is made.
- What disruption it causes to the employee.
- If the employee is compensated for being on call or for working additional hours.
- The role the employee performs and their level of responsibility.
- The employee's personal circumstances like family or caring responsibilities.

The more senior a role is and the more that remuneration is structured to compensate for out of hours contact, the less likely it is that there will be a problem. Similarly, where roles are involved in out of hours contact because they require them to deal with people in different time zones, that will be OK, provided that the contact is not unreasonable having regard to the factors noted above.

There are also exemptions where contact is due to an emergency or for welfare reasons.

Some operational considerations like contacting workers to see if someone can fill in for someone who hasn't come in are also OK.

WHAT HAPPENS IF THERE IS A **DISAGREEMENT?**

There is a requirement that employer and employee try to work it out first.

If they can't, either party can take it to the Fair Work Commission which has the power to order an employer to stop or modify contact or an employee to stop refusing

Additionally, if the employee perceived that they had been penalised or subjected to disadvantage for exercising that right, they could make a claim of adverse action to the Fair Work Commission under the General Protections provisions of the Fair Work Act.

THE WORK AND CARE REVIEW

On 29 January 2024, the Fair Work Commission announced that it is to undertake a "Work and Care" Review of modern awards on the instructions of the Minister for Employment and Workplace Relations to address a number of recommendations arising from a Senate Inquiry into Work and Care.

What this really means is that we can expect the legislative changes in relation to the "right to disconnect" to be transitioned into modern awards with the prospect for further expansion of the Commission's role in dispute resolution and further prescription of employer responsibilities under modern awards as well as legislation.

SO IS ALL OF THIS GOING TO BE A PROBLEM FOR ME?

For the vast majority of workplaces, the answer is probably "no, other than in the case of an emergency or for welfare purposes" which is of course allowed under the legislation.

The qualifier on that is that we are yet to see what the Fair Work Commission does under the Work and Care regime.

Sure, there will be times when you are working into the night and want to get an email off to an employee for their attention when they come in in the morning. So it doesn't matter if they don't see it tonight - as long as they do see and act on it in the morning. Of course, you can minimise the potential for issues if you delay sending communications or use the scheduling facility on your email service for it to

automatically go to the employee's inbox at the time that you want them to know about it.

It really should be that easy to manage in most cases.

DO YOU REALLY WANT TO BE CONTACTING YOUR EMPLOYEES OUTSIDE THEIR CONTRACTED HOURS?

Because we live in such a digitally connected "look at it now" world, if you send something to an employee outside their contracted working hours, there are many who will not be able to resist having a look.

If, by having a look, that raises something for them that creates some level of anxiety and that in turn interferes with their state of mind and/or their sleep and/or their leisure time/rest and recovery and/or the relationship with their partner.....well, do you really want an anxious, tired, sleep deprived employee coming into work the next day?

That is why I suggested the scheduling function for emails and try to avoid phone calls and texts.

CONNECTION TO PSYCHOSOCIAL HAZARDS

Around the country, State and Territories are

progressively legislating a positive duty on employers to eliminate or control psychosocial hazards. These hazards include remote work, unreasonable job demands, lack of job control and inadequate reward and recognition – there is a clear connection to the "right to disconnect".

So, if it isn't managed well, there could be a WorkCover claim or worse as well as the exposure to an adverse action complaint noted above.

WHAT DO YOU NEED TO DO?

This is a great opportunity to have a bit of a reality check – are you or your customers or suppliers making unreasonable demands on your people?

Do they feel under pressure to respond even though it might be disruptive to their

personal lives and needs?

Is that affecting their wellbeing because the contact has caused them to lose sleep or impacted on family or personal time and relationships?

You need to understand what the situation is for your people and put in place the right measures to minimise the impacts of out of hours contact on your people, always ensuring that where it is necessary, it is reasonable, and they are properly remunerated for it. And you need to engage your people in the conversation as an organisation, in teams and with individual employees.

So, in closing, is this really just about legislating a right to life balance? And is that a bad thing?

I don't think so. 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.



TimberTrader

What our readers say...

As one of the leading insurance brokers for the timber businesses in Australia we subscribe to *Timber Trader News* to ensure we are keeping abreast of all the exciting things happening within the timber industry. *Timber Trader News* is read "cover to cover" by our staff and it's always enjoyable to see and read about clients and the various events occurring within the timber industry. Reading *TTIN* keeps us informed and updated on all things timber which is important to ensure our services are evolving to meet the various challenges and opportunities which arise.

David Keys - Director Corporate

Winner of the Austbroker of the year award 2023

Scan the QR code and subscribe today!



Subscribe now for your own copy delivered right to your door. Annual subscription investment is just \$72 includes GST and postage within Australia. Visit us at www.timbertradernews.com/subscriptions

AUSTRALIA'S MOST RELEVANT AND INSIGHTFUL TIMBER INDUSTRY MAGAZINE

Association news



EMPOWERING YOUR TEAM: NTHA'S SHORT COURSE ROADSHOW PAVES THE WAY FOR TIMBER AND HARDWARE **BUSINESSES**

Announcing the National Timber & Hardware Association's (NTHA) Short Course Roadshow, an initiative tailored to meet the specific needs of timber and hardware businesses. Recognising the dynamic nature of our industry, the roadshow is designed to equip teams with essential skills and practical knowledge to stay competitive.

Currently, the Roadshow is commencing in QLD and NSW, featuring online training events in response to demand and feedback from members in these states. If you're a member in an alternative state or territory and would like NTHA to extend the Roadshow to other locations, please inform the training team via info@ntha.edu.au.

The roadshow encompasses an array of courses, from the fundamental "Introduction to Plan Reading and

Estimating" to the more advanced "Coaching Leaders for Performance" and "Timber Take Offs." We understand that different roles within your organisation require distinct skill sets, and our courses are tailored to address those specific needs. The aim is to enhance your team's capabilities, ensuring they contribute effectively to the success of your business.



Above: Louise Kinloch, GM – NTHA Training (RTO

One of the cornerstones of our approach is the emphasis on on-the-job training. We believe that fostering a culture of continuous learning directly impacts both morale and skills. Investing in your team's development not only boosts their confidence and job satisfaction but also results in a highly skilled workforce that positively impacts your bottom line.

In an industry as fast-paced as timber and hardware, it is crucial for businesses to invest in their team's development. The NTHA Short Course Roadshow provides a unique opportunity to acquire the skills and knowledge necessary to stay competitive in the market. By doing so, businesses not only ensure the growth of their employees but also fortify the industry as a whole.

NTHA is proud to offer nationally recognised vocational qualifications (RTO #5343) across all sectors of the forest and timber industry. Our expert trainers bring industry-specific knowledge to the table, understanding the intricate details that professionals in this sector need to excel. The Short Course Roadshow is a testament to our commitment to advancing the skills and capabilities of your workforce.

These courses are available until May 2024, giving you ample time to plan and invest in the development of your team. To learn more about the courses offered and to secure your spot, visit our website at https:// www.ntha.com.au/events/training/.

The NTHA Short Course Roadshow is not just a training opportunity; it is an investment in the future success of your business. By arming your team with the right knowledge and skills, you not only elevate their individual performance but contribute to the overall growth and sustainability

of the timber and hardware industry.

Book a course today!

Louise Kinloch, General Manager - NTHA Training (RTO #5343).





R&D. INNOVATION & AUSTRALIAN FOREST AND WOOD INNOVATION (AFWI)

We all appreciate that industries need to evolve and improve their products and

services partly through implementing research and innovative ideas. However, as Thomas A. Edison once said "To have a great idea, have a lot of them." Investing and engaging in collaborative industry research, not just occasionally but on an ongoing basis, and having a lot of great ideas is essential for a vibrant and agile timber

Australian Forest and Wood Innovation (AFWI) is a new national forest product R&D institute that has been established to deliver on the Australian government's previous commitment to establish an Australia-wide National Institute for Forest Products Innovation, and produce Australian solutions . AFWI's objective is to drive vital national forestry research, development, and engagement, coordinating and delivering Australian-made solutions to national challenges. AFWI will have Australian government funding of \$100m over 5 years, with all activities being completed by 30th June 2030.

The Australian government's investment in AFWI is clear recognition of our renewable industry's' huge potential to reduce emissions, store carbon, provide jobs, and manufacture essential and innovative timber products used to build new homes and businesses with the goal to improve housing capacity, affordability, and sustainability. Timber is a renewable biological resource which should be recognised as a preferred building material in a low emissions and circular future, that can also provide many social, environmental, and economic benefits.

WHERE IS AFWI UP TO?

- The Australian government has sought expressions of interest to establish two additional research centres under AFWI to deliver innovative forest product research and development. These centres are in addition to the existing Launceston centre based at the University of Tasmania (Launceston campus).
- To ensure appropriate governance of the Institute's activities, AFWI has sought qualified and experienced people to sit on a Board and a full-time director will lead AFWI's operations and direction. Additionally, experts will be invited to form a Research Advisory Committee, who will look closely at the potential R&D projects.
- It is understood, the three centres will have specialised research themes that include:

climate change solutions, sustainable forests for our future, and making the most of our available wood fibre.

This is an exciting time for forest product research and innovation, but our renewable timber industry will need to provide expertise, guidance, additional funding, and actively engage in AFWI's operations to fully realise the potential opportunities that will be produced over the next 5 years. The importance of collaborative engagement to ensure value and high-quality research outcomes cannot be overstated.

As always, ensuring timber building product compliance is essential. A reputable product certification mark is a great way to have confidence that the manufacturing facility, the timber building product, and associated claims have been inspected, audited, tested, and reviewed against the product standards by independent experts. EWPAA has you covered! See www.ewp.asn. au and EWPAA's technical notes.

Gavin Matthew - EWPAA CEO



NEW STRATEGY. BUSINESS PLAN. FINANCIAL MODEL AND GM CONFIRMED

The ATIF has confirmed that the contracted management arrangements with Natalie Reynolds and her team from Hikari Solutions will continue for the foreseeable future and at least until end March 2025. Chair Jacinta Colley has confirmed the appointment following the Committee of Management Meeting held on 23 January 2024 "Natalie and her team have really assisted ATIF since the passing of John Halkett and jumped in to keep the Association running and working through all the issues that arose. We are seeing membership attendance and engagement increase significantly as ATIF embarks upon confirming a new Strategic Plan, Business Plan and Financial Model, representing true member value".

In association with this a number of activities occurred. This commenced with a member outreach and connection event exclusively for members that were available immediately prior to the AGM held on 30 November 2023. These included the



Above: (From left to right) Sarah Downey, Natalie Reynolds, Jacinta Colley, Chris Lafferty and Andrew Leighton.

following topics:

- 1. The Illegal Logging Prohibition Act -Intentions, the Legislation and Enforcement
- 2. BMSB changes for Canadian Heat-Treated **Wood Products**
- 3. The Timber Framing Collective and ATIF activities to ensure timber framing is specified over and above alternative means of construction
- 4. FSC/PEFC Certifications and the Modern Slavery Act
- 5. The Plethora of Employment Law Changes and the Impact upon Member Businesses.

The AGM then proceeded with having to go to vote twice in order to elect the new Committee of Management. ATIF is pleased to announce the new Committee of Management being:

- Jacinta Colley Vidawood (Chair)
- David Meyer Meyer Timber (Deputy
- Chris Woodhouse Woodhouse
- Darrin Wheeler Stora Ense
- Germano Tomasetti ITI Group
- Leon Quinn Tilling Group
- Robert Cairns Independent
- Simon Evans Forest One
- Natalie Reynolds Public Officer

The ATIF Constitution was also amended to ensure that importers from other States of Australia can be admitted to membership and anomalies arising from deep in ATIF's history amended. You can have a look here: https://atif.asn.au/governance/

The renewal has led to significant

Priority tasks and new management committee.

discussions as to the future direction of ATIF and the needs of its members. The Committee of Management are pleased to have been inundated with an influx of new member applications to consider, but is now considering how it will ensure the integrity of current and new ATIF members considering the Association's stance against the import of illegally logged timber and in particular, conflict timber of Russian origin. Natalie has been tasked to recommend a new process for admission and vetting new member applications to be considered at the next meeting.

ATIF picked up the new year meeting with FWPA and discussing one of the strategic imperatives of ATIF, ensuring that the timber importing industry is continually updated and able to comply with the significant change happening both in the market, at customs level, and when facing all the new legal challenges and requirements. ATIF is growing and changing and will leverage off John and the former Committee of Management's invaluable work to provide new offerings to members in the very near future.

Natalie Reynolds GM >>>

THE COURTS ARE WAKING UP TO THE LATEST EXTREME GREEN ATTEMPTS TO SHUT DOWN LEGAL **BUSINESSES ACROSS THE COUNTRY**

Recently, the High Court of Australia shot down an attempt by the Environmental Defenders' Office (EDO) to decimate local communities across regional NSW by forcing an end to sustainable native logging in that state

While not directly affecting Tasmania, the decision exposes the latest tactic of green groups - using legal cases as warfare, or "lawfare", to shut down our respected industry. The courts made it clear they are aware of their tactics and that their plans are doomed to fail.

Then, just a few days later, the High Court also dismissed a further attempt by extreme green lobbyists to use the courts to disrupt another legal business, when they tried to stop the development of Santos' Barossa Gas Project.

The extreme greens have been caught out, twice, using vexatious litigation to try and stymie building Australia's prosperity and sovereign capability, and our learned justice system has shown they are not going to fall for their untruths.

In Tasmania, our forestry industry is legal, respected across all sides of politics and an important part in growing our state's economy and environmental credentials.

We have bipartisan support from both credible sides of politics. In response to the High Court's decision, Labor's Federal Forestry Minister, Murray Watt, has backed our industry, saying "our Government, the Albanese Government, has always said that we support a sustainable forestry industry in our country".

He added: "The reality is we do need a forestry industry to supply the timber products, the trusses for homes, the paper and pulp that we use to operate businesses and homes. We need a forestry industry."

Liberal Senator for Tasmania Jonno Duniam has also backed our industry, saying "native forestry is sustainable and should

He went on: "Instead of repeated and vexatious attempts to shut down this industry and to interfere with decisions and laws made by the country's parliaments, environmental groups would be better actually doing on-ground works, and conserving and repairing the environment, than clogging up our courts and wasting taxpayers' money on green lawfare".

Tasmanian forestry is also essential for our state to meet its lofty environmental goals. It's well known that sustainable regrowth forestry is key to sequestering carbon.

In fact, in its Fourth Assessment the Intergovernmental Panel on Climate Change (IPCC) said: "A sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit."

When the world leaders fighting climate change are willing to back forestry, it seems the extreme green groups are either unaware of the science, or conveniently ignoring it.

But more than just positive environmental outcomes, the forestry industry is key to our economic success and keeping our rural communities alive.

Forestry creates jobs, especially outside our metropolitan regions. Our forestry businesses allow families to stay in the communities they grew up in, providing an income for thousands of local Tasmanians, in the places their families and support networks are.

In fact, over 5,000 people in Tasmania are employed by forestry either directly or indirectly. And that doesn't include the thousands of workers who can support themselves in our forestry communities.

Supermarkets, childcare, schools, restaurants, plumbers and electricians are some of the jobs created in rural and regional Tasmania when forestry jobs exist.

And while the extreme green groups want to lock down the forests for certain industries, when forests are managed for forestry, they are available for a wide range of activities. Take Derby for example, where permanent timber production lands are shared with some of the world's best mountain tracks. It's this multi-use which would disappear if these extreme groups got their way.

By being against forestry, these extreme groups are admitting they are against building a stronger Tasmania, protecting our sovereign capability and locking up carbon in the most efficient way. It's pleasing to see the legal system has highlighted their inconvenient truth.

Nick Steel is Chief Executive Officer of the Tasmanian Forest Products Association

A Timber Development Association







letup with lots planned. Below is a quick highlight of what is planned for 2024.

The Timber Offsite Construction Conference and Exhibition has been rebranded as the **Timber Construct Conference to encompass** the full spectrum of timber building. This premier industry event will now convene August 12-13 at the newly renovated Rydges Melbourne.

The conference provides an invaluable forum to address pressing challenges and opportunities influencing timber's role across the built landscape. Technical sessions will cover research updates, emerging products, building code enhancements, and best practice case studies.

One highlighted presentation - "Timber's Potential to Meet Housing Demand" - will examine strategies to leverage timber's affordability, sustainability, and construction speed advantages to help fulfil urgent housing targets.

Gathering leading stakeholders from architecture, engineering, construction, and manufacturing, the Timber Construction Conference facilitates insightful knowledge exchange around innovation to elevate timber as a renewable, high-performance building material. Participants will experience firsthand the technological advances positioning timber at the forefront of modern design and structural engineering.

We look forward to welcoming you to Rydges Melbourne this August for two days of productive networking, upskilling, and inspiration around the bright future of timber construction.



The excellence of award submissions continues rising with each passing year, now in the 24th year running. This ever-increasing calibre demonstrates timber construction's rapid advancement across Australia. The innovation and artistry on display reinforce that our nation leads the global charge for timber design.

It's incredible to reflect on how far timber capabilities have progressed, as showcased by the stunning multifamily buildings, commercial structures, and pedestrian bridges entered. We eagerly anticipate what the next wave of sustainable, high-performing timber projects from 2024 will bring.

The awards affirm Australia's rightful status as a trailblazer. But even more heartening is the passion and creativity that builders, engineers, and architects bring to realise timber's potential. As we prepare for another batch of outstanding submissions. it's clear the most renewable construction material is in very good hands for generations to come

WOOD SOLUTION TOUR

This year, two tours are planned. The first is a homage to the European Cross laminated timber sector, where a tour is planned to go to where CLT was first commercialised in the





This 24 storey timber hotel in Vienna will be our first stop on an extensive tour of manufacturers and building under construction as we make our way to Milan.

early 1990s. Commencing at a 24-storey timber hotel in Vienna, Austria, the tour party makes its way through the heart of Austria and CLT country to Milan, Italy. Along the way, participants will stay in timber hotels, see CLT and Glulam manufacturing, visit buildings under construction and visit standout recently completed buildings. We finish with a bit of shopping in Milan but under massive timber framed roofs.

Also planned is a visit to the new NeXTimber CLT plant in South Australia, Australia's latest CLT fabrication plant. To round out the wood experience, the tour will also visit a forest and sawmill.

RESEARCH - FUTURE FRAMING

We have embarked on a strategic initiative alongside industry partners to modernise and refine timber framing standards, enhancing fabrication and onsite assembly productivity. This collaborative effort aims to overhaul outdated technical specifications, removing impediments that have gradually

ceded advantages to competing building systems over the decades since standards underwent comprehensive review.

By optimising prescriptive solutions to leverage contemporary materials, equipment, and design practices, the project seeks to re-establish timber construction as an innovative, streamlined framing method.

Additionally, digitising compliance procedures will bolster quality assurance and minimise non-conformities. The resulting refinements to standards and compliance processes will showcase timber framing as an agile, high-performance construction technique suited for the 21st century through consumer-facing design flexibility

Our steadfast intent is for Australian Timber to reclaim its standing as a construction leader through a reimagined code framework tailored to new realities across manufacturing and building sites.

Andrew Dunn

NEW IR LAWS - CRIMINALISING UNDERPAYMENTS

The Federal Government continues its campaign targeting employers who underpay employees according to the relevant employment legislation.

Commencing from 1 January 2025, intentional underpayments of wages by a business will be a criminal offence.

Employers may commit an offence if they owe money to an employee under the Fair Work Act or an industrial instrument (like an award or an enterprise agreement), and intentionally engage in conduct that results in a failure to pay on or before the money is due. This can include failure to make required superannuation contributions.

A Voluntary Small Business Wage Compliance Code will be established before the changes take effect, and compliance with this code means a small business won't be prosecuted if they underpay their employees. TTIA will ensure our Members that are defined as a small business have some support through this compliance code.

Companies prosecuted face penalties three times the amount of the underpayment, if a court can determine it, or \$7.825 million, whichever is greater. If the court can't determine the underpayment, the maximum penalty is \$7.825 million.

Individuals can be imprisoned for up to 10 years, be fined either three times the amount of the underpayment, if the court can determine it, or up to \$1.565 million,

whichever is greater; or be both fined and imprisoned.

Whilst the new laws arguably seem to be quite heavy handed, particularly in relation to imprisonment, the Fair Work Ombudsman has attempted to reassure employers that these laws don't apply to those who unintentionally underpay their employees, or inadvertently pay the wrong amount due to an error. That remains to be seen and as an Association, we will put the spotlight on any future prosecutions.

In summary, the Fair Work Ombudsman will, once the offence takes effect in 2025, investigate suspected criminal underpayment offences.

These developments once again highlight the absolute importance of TTIA Members arranging an appointment with our Legal Officer for an up-to-date TTIA wage audit of all your wages, policies, and templates. Contact our office on (02) 9264 0011 or Janet Gilbert on 0414 557 235 to arrange an appointment.

DO YOU NEED TO RECORD MINOR **INJURIES?**

Members often ask the TTIA's National Timber Employers Hotline the question, 'how serious does an injury need to be before there is a requirement to record it?'

For instance, if an employee suffers a minor cut at work that only requires a bandaid, should the incident be recorded?

Minor cuts that can be fixed with a bandaid are not explicitly mentioned in relevant legislation or in the Workplace Injuries and Disease Recording Standard - AS 1885.1-1990 - which sets out good practice

regarding injury recording. The wording of relevant workers compensation legislation and the Standard do imply, however, that even minor cuts should be recorded.

The Standard recommends all occurrences should be recorded, including 'no lost-time' workplace injuries or diseases - that is, those for which first aid and/or medical treatment was administered. Applying a band-aid would be considered providing first aid, so the Standard's recommendation would be to record such injuries, including while working at home.

Workers' compensation legislation contains the relevant legislative requirements. In New South Wales, for example, workers' compensation legislation requires employers to keep a register of injuries that is readily accessible in the workplace. The register is a record of any injuries suffered by workers, whether they result in workers' compensation claims or not. This, too, implies that minor injuries are not excluded from recording requirements.

Employers can draw up their own injury register; however, it must include:

- the name of the injured worker,
- the worker's address,
- the worker's age at the time of injury,
- the worker's occupation at the time of injury,
- the industry in which the worker was engaged at the time of injury,
- the time and date of injury,
- the nature of the injury, and
- the cause of the injury.

Recording minor injuries may help draw attention - and prompt remedial action regarding sources of injuries. Members should note that even minor cuts can become infected, especially in environments where workers may be exposed to bloodborne pathogens or other contamination.

Reporting of injuries is a different matter from recording them. Injury reporting or notification to WorkCover/WorkSafe is only required in the case of notifiable incidents those resulting in death or serious injury, or dangerous incidents such as uncontrolled spills, leaks, or explosions.

Minor cuts don't need to be reported unless your organisation requires those incidents to be reported within its own internal safety management system.

TTIA operates a fully functioning, in-house WHS unit. If you have any further enquiries regarding workplace injury reporting obligations, please contact our WHS

Manager, Ken Hocking, on 0418 280 335 or the TTIA Hotline on (02) 9264 0011.

Brian Beecroft - CEO





LIGHTER... Our Kerto LVL is half the weight of our competitors

STRONGER... Our Kerto LVL & Finnjoist is batch tested every hour of production

GREENER... Every stick is traced back to the tree from where it was harvested

FASTER... Complete floor systems direct to site in 24 hours

PHONE: 1300 255 433



Check out some of our partners...

















DIANA HALLAM ANNOUNCED AS AFPA'S NEW CHIEF EXECUTIVE **OFFICER**

The Australian Forest Products Association (AFPA) is pleased to announce that experienced government relations professional Ms Diana Hallam has accepted the Board's offer to become the Association's new permanent Chief Executive Officer.

Ms Hallam has a long and distinguished career working at senior levels of the Australian Public Service, as Chief of Staff to a former Deputy Prime Minister and in other senior political advisory and corporate roles with a focus on infrastructure, transport and agriculture.

AFPA Chair Stephen Dadd commended the Board's recruitment decision, "After a lengthy and thorough recruitment process, we are very pleased to announce that Diana Hallam will become AFPA's new CEO and take the reins of Australia's peak national forest products industry body, with the support of the AFPA membership, our Board of Directors and team of expert staff.

"Diana's breadth of experience across senior levels of government, politics and the corporate sector will stand her in excellent stead to manage the challenges and opportunities facing our sector. On behalf of the Board, staff and membership, I congratulate Diana and welcome her to the team."

Ms Hallam will leave her current role as a First Assistant Secretary in the Australian

New CEO commences 12th March, joining AFPA with a wealth of experience and qualifications to match.

Government Department of Agriculture, Fisheries and Forestry to commence as AFPA CEO on 12 March 2024. Diana served as Chief of Staff to Deputy Prime Minister and Minister for Agriculture, the Hon Barnaby Joyce MP from 2014 to 2017 and prior to that occupied senior roles at both Toll Group and Singapore Airlines.

Diana holds a Bachelor of Arts (Hons) and a Master of Science and Technology (Aviation) from the University of NSW, a Master of International Law from the Australian National University, a Graduate Diploma of Professional Communications from the University of Southern Queensland and is a graduate of the Australian Institute of Company Directors.

Ms Hallam said she was thrilled to be offered the opportunity to become AFPA's CEO, "I look forward to meeting AFPA's membership and working with everyone across the forest products supply chain. The industry is at the forefront of key policy challenges from climate change to economic development and sovereign capability. I look forward to getting out on the ground and talking to stakeholders about the industry's issues and opportunities."

> Joe Prevedello AFPA Communications Director



NEW NAME, BRAND AND WEBSITE

MGA announced the launch of our masterbrand company name and logo, and new website in December 2023. The MGATMA brand logo has been improved also as part of our continuing brand advancement.

Our new brand identity is MGA Independent Businesses Australia, comprising a new logo, colour schemes, and

MGATMA Timber Merchants Australia has now become Timber & Hardware Australia.

MGA MAS been evolving for many years, and it was time for a rebranding of our identity that represents our future.

We examined our organisational mission, purpose, and values and developed a brand identity that delivers those values. Our new brand identity represents a more contemporary name and modern appearance and encapsulates MGA's priority for inclusion across all our industry sectors.

To propel the brand forward, each industry segment now has its own sub brand logo, residing under the master brand, MGA Independent Businesses Australia. Our new sub brands, falling under the master brand, MGA Independent Businesses Australia, are: Timber & Hardware Australia, Grocery & Supermarkets Australia, and Liquor Retailers Australia:

David Inall CEO



THANK YOU

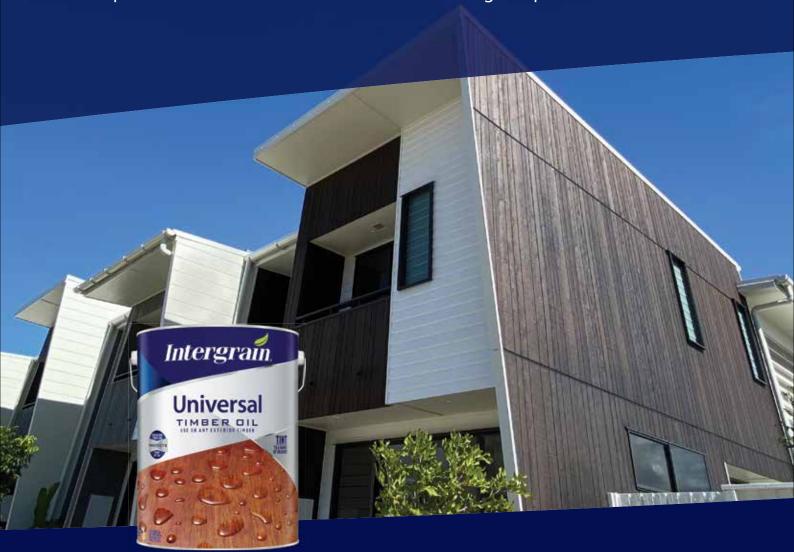
The publishers and editorial team would like to thank our 8 associations for their contribution to this issue of Timber Trader News. Collectively you all had a significant amount of news, announcements and progress updates and this has taken us out to 6 pages, which we believe is a new record! T

Weathertex & Intergrain® – A perfect match

The vision for the 49 terrace houses in the Bokarina Beach development was brought to life using Intergrain's Universal Timber Oil.

Weathertex natural timber cladding panels were selected to bring a warm coastal aesthetic to stages four and five of the terraces.

Our timber coating experts supported the architects in specifying Intergrain Universal Timber Oil, a product derived from natural ingredients. Universal Timber Oil protects, beautifies and delivers a natural organic appearance across different colour palettes for coastal and inland timber building components.



How are you protecting your timber?

Talk to our timber coating experts about your next coastal project. Call **1800 630 285** or scan the QR code to visit our project gallery intergrain.com.au/project-gallery/





Challenges in Australian Timber Production. By Phil Lindsay, Red Stag Timber

he Australian Timber Supply Summit in Melbourne last year highlighted the situation for the supply of structural timber for building over the next 25 years. There were a number of presentations showcasing the fluctuating level of expected building in the short and medium term based on economic factors, but the firm longer-term outlook was an increasing softwood timber demand as population inevitably increased.

Population growth to between 35m and 40m will increase demand by 40% to 50% which cannot be met by current Australian production. The 33% increase in the production of softwood sawn between 2005 and 2020 cannot be repeated as there are no more trees available. Worse, recent bushfires destroyed 10% of the softwood forests and the quality of the remaining trees has dropped leading to lower production levels of structural timber. The result is less structural timber is being produced than 15 years ago.

Structural timber production peaked in the mid-2000s at over 2.3m m3 p.a. before falling to under 1.8m m3 p.a. in 2020. However, demand for softwood structural timber increased in 2022 to more than 2.5m m3 p.a. with imported timber surging to more than 700,000 m3 (almost 30% of total timber demand). Timber shortages resulted in record prices for most of the year as a perfect storm of unprecedented building coincided with worldwide supply chain struggles.

Relying on imports for 30% of the timber demand drove prices to double when supply was disrupted. By 2050 more than 40% of structural timber will be imported leaving the Australian market controlled by import supply chains. Boom then bust pricing and availability doesn't provide confidence to customers and can drive product substitution. That doesn't help anyone.

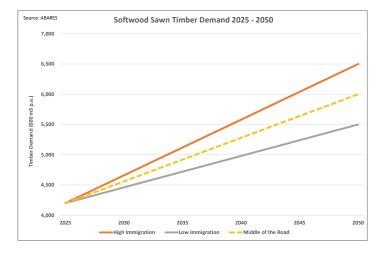
Simplifying greatly, my takeaways from the conference were:

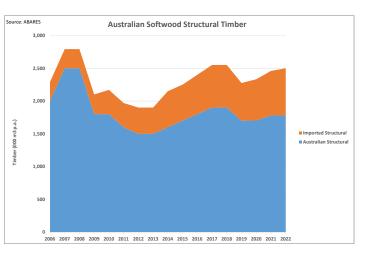
- Demand will increase,
- Australian production will remain static,
- So, imports will increase.

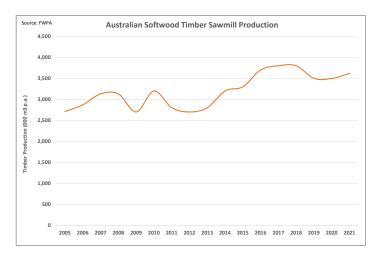
SO WHICH PART OF THE MELBOURNE PARADIGM CAN BE CHALLENGED?

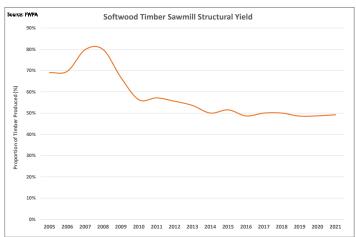
The only one is the assumption that Australian production of structural timber will be static. If domestic structural timber supply increases, it reduces the need for imports and reduces the impact of global supply chains and pricing. Without having any more logs available then the only option is to

The need for sustainable solutions in timber supply - and implications of population growth on timber demand.









produce a higher proportion of structural timber from the limited total already being cut.

There are two main ways to achieve this: introduce a lower grade as a by-product of the current grade(s) or adjust the current grade to fit the properties of the current forests. I've experienced both situations in New Zealand, and I have a definite preference based on what worked and what didn't.

The timber grades in New Zealand were revised in 2004 as sawmills moved from visual grading to mechanical grading; similar to what had happened in Australia ten years earlier. There was also the impetus of improving the building industries' confidence in timber after a less than stellar introduction of mechanical grading by some players, but that's another story. To keep things simple the three old visual grades were replaced with three new mechanical grades with new names. Standards bodies took the opportunity to update the design properties which hadn't been changed since the 1980s. Light timber framing Standards were updated so that all three new grades could be used in every part of houses so the total amount of timber available to be used for structural purposes would be maximized.

What happened? Almost no one used

anything but the main grade. Both the lower and higher grades had very little uptake. The higher grade was only used where the main grade required going up a size or couldn't be used at all. The lower grade gathered dust (or the New Zealand equivalent; it sat in the sawmills' yard and got soaked) as few customers wanted it at any price.

The outcome was that the effective supply of structural timber didn't increase one bit as merchants didn't want to complicate their limited yard space, the frame and truss plants didn't want to complicate their factories, the builders didn't want to complicate their building sites, and the much smaller market of Do-It-Yourselfers got what they were given.

It was a lost opportunity which New Zealand is paying for to this day.

About the only positive was the adjustment of the design properties of the main grade to fit with the forests available at the time. It allowed the stiffness property of the new grades to be kept the same as the older visual grades but adjusted the strength properties as these were where the forests had changed. This allowed the total amount of structural timber available to be maintained. Not great, but at least we didn't

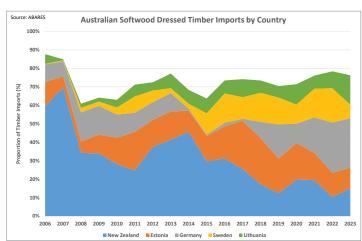
go backwards. With the benefit of hindsight, we lacked an understanding of our customers and tried to be too smart.

We missed the opportunity to increase structural timber production, we should have kept it simple. Those are about the only conclusions I had about the opportunity to increase Australian structural timber production:

- Understand the forest resource today and tomorrow
- Understand the drivers of customers' behavior
- Only adjust the design properties that will increase structural yields, and minimize those changes
- Keep it simple with one main grade T

Postscript: Some Australian sawmillers may see New Zealand as a threat, that NZ could swamp the Australian market. Nothing could be further from the truth. New Zealand has its own challenges with timber supply over the next decade as our total harvest will drop by over 25%, and by more than 50% in some regions. The long-trumpeted New Zealand wall of wood is over, and a lack of subsequent forestry planting has left a gap in the age classes which is now starting to hit home. Not every region faces declining harvests, but some sawmills will face a hard road for the next decade.





The ITI story: Building partnerships and innovations

The future is bright for ITI. An expanding product offering and growing business partnerships are key to ITI Australia's continued growth offering customers even more solutions. By Nicky Ainley

ince its establishment in 1987 by Paul Shadbolt, Independent Timber Importers (ITI) has been on a mission to redefine the timber industry and are continuing to pave their way forward by expanding their range of building and hardware lines.

Continuing their commitment to be a onestop-shop for its customers, ITI remains proudly privately owned and has been operating this way since its inception in the 80's in Sydney's Five Dock.

Throughout the decades, ITI has built a reputation of excellent service combined with the supply of high-quality brands to the market. The company's mission remains to 'enrich their customers businesses on multiple levels', and they achieve this by supporting them in any way required. ITI believe that partnerships with both suppliers and customers are key to creating value in the supply chain and as they continue to grow the core values of servicing the customer are still what makes the business tick.

ITI has worked closely with industry suppliers, customers, and associations to promote the strength, beauty, and environmental benefits of using timber. Over time ITI has redefined the role of the wholesaler with their distribution and service models. ITI's investments in distribution centres, racking, product development, people, and service standards has set a standard industry not seen anywhere else.

In early 2002 ITI dropped the name

Independent Timber Importers and replaced it with simply 'ITI' while introducing a new logo along with the "Innovative Timber Ideas" phrase which they believe more accurately describes the attitude of the company.

Furthermore, recently ITI has merged its two Sydney-based businesses, ITI Sydney and John Cook and Sons, into one entity operating out of a sprawling site at Dunheved Road and Links Road St Marys precinct.

This has streamlined the Sydney operation and will further improve the service offer for their NSW customer base'.

Today, ITI consists of eight distribution sites across Australia with 130,000m2 of undercover storage, with a 9th distribution centre currently under construction in Tasmania. Along with its Australian operation, ITI has a state-of-the-art remanufacturing, treating and priming plant in Chile, an office in Indonesia, and growing sales in the USA. With three distribution locations strategically positioned in NZ, these distribution facilities allow ITI to be a true national distributor in both countries. With close to 450 staff worldwide it is clear that from its humble beginnings the growth of ITI is not like anything else the industry has seen before or will see again.

PROVIDING SOLUTIONS

Much of the success and growth of ITI lies in its commitment to innovation in both service and product development.

"At the heart of what ITI has always done has been to provide a solution to a problem that exists in the market," national marketing manager Justin Newman said.

This is indicated by the company's premier brands such as Design Pine which is celebrating 20 years of service to the industry.

"Design Pine was invented as the first product to be produced using a genuine primer over LOSP to alleviate the paint problems that existed in the market some 20 plus years ago. With over two decades of service and no paint failures, Design Pine is an example of industry disruption that raised the bar or all products that followed," Newman said.

While Design Pine occupies the premium number one position for outdoor pre-primed timber, ITI also developed in house the Ezitrim Plus brand for internal applications.

Newman said this brand development strategy is key to ITI's success and is all built on the premise of providing solutions that are fit for purpose and solve industry problems.

BUILDING PARTNERSHIPS

Developing brands that offered solutions is something ITI pioneered in the Australian market and many national and international brands now call ITI home and distribute exclusively via the company. Initially, the company focussed on building partnerships that increased its access to timber-based products in line with its core competencies. However, as ITI grew it identified the need to expand beyond timber.

ITI set out to become a "one stop shop" for its customers by expanding beyond timber into a range of building and hardware products and partnering with quality suppliers to achieve this. Most recently, ITI was named a national distributor for James Hardie fibre cement. ITI continues to drive this expansion and is close to signing another large Australian brand, showing this space is just continuing to grow for ITI.

Company Chief Executive Germano Tomassetti said the development and growth of these partnerships is at the core of providing more value to ITI's customer base.



Above: ITI has been focused on unlocking efficiency at each of its eight distribution centres around the country, including a 9th distribution centre being built in Tasmania



Above: Design Pine has just celebrated its 20th year of industry service.

"The James Hardie partnership continues our push to partner with suppliers of highquality products and well recognised brands," Germano said.

"This partnership enables our customers who previously struggled to access the brand to purchase it by simply "adding it to the next truck" going to them from one of our distribution centres. Over the 25 years I have worked at ITI I have seen significant rationalisation at the customer level (and wholesale level), I have watched the emergence of large retailers and seen the demise of the old fashion timber yard.

"This has meant that ITI has had to continue to grow and adapt in an effort to support its customers," he continued.

"Our product offer has grown from three major timber products when I joined to a price catalogue of near 80 pages. Our service standards have changed from ex-wharf trailer loads to one-piece same day. All of this has only been possible by building true partnerships with our supply partners and the James Hardie partnership is a continuation of this commitment to our customer.

"We understand that for ITI to succeed our customers need to succeed and so we continue the expansion into new products in an effort to reduce channel cost for our customers, by allowing them to consolidate deliveries, the "one stop shop" model, reduce internal costs, one supplier one invoice and allow them to access products that previously they could not.

"Some will say that this is self-serving and there is truth to that, true business partnerships are about win-win, but anyone who knows us and partners with us at both the supplier and customer level understand our commitment to our customers, suppliers and this industry," Germano said.

PROCESSING

More often than not when people think of ITI they are thinking about structural pine, building materials, decking products and more, being distributed to merchants, and frame and truss plants. However, a large part of ITI's focus over the past 12-18 months has been the increase in its Hardwood capability which is consolidating its place filling a niche servicing the joinery, window and stair manufacturers. ITI are fast becoming a leader in this space with new and innovative products designed to fill voids where traditional hardwood products are no longer available.

Products such as Eurobeech, Grandis, and American Hardwoods such as Red Oak have all been integrated into the ITI range, these offer a variety of advantages over traditional hardwoods used in the joinery and staircase industry. Recently ITI launched a brand that

encompasses all its Australian Hardwood species called Eucalypt. Under this one brand ITI will produce a range of cladding, decking and flooring, some of which will be processed in house through ITI's own processing facilities in Queensland, while other products will be produced by local suppliers. Available as pre-oiled if required is another convenience ITI are offering in this range and this service is already proving very popular to the customer base.

Recently ITI invested heavily in its Western Red Cedar program which will offer a range of internal and external products, some of it will be processed and machined at the Queensland facility. Western Red Cedar is a highly sought after species amongst architects and building designers due to its beauty and durability.

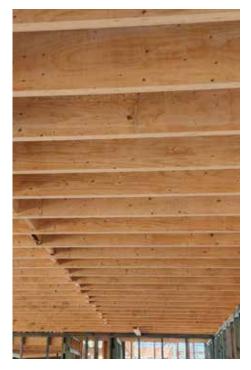
EWP GROWTH

ITI has successfully ticked over 10 years in the engineered wood product (EWP) space, an offer that started with just laminated veneer lumber (LVL) has grown to encompass all engineered timber including design and take off services spread throughout its branches. The company says its partnership with Metsä is key to our success as is the continual improvement to the systems that underpin the design and engineering of the products.

"The threat from non-fit for purpose product is a significant factor that the market must now consider, add to that the threat from green washing product that is sourced from Russia or Belarus and having a supply chain that is able to navigate this is a competitive advantage for ITI." Hayden Slatter National Engineered Wood Products Manager.



Above: ITI recently appointed as a National Distributor for the James Hardie range of product; these partnerships are crucial to ITI's vision of offering more value to their customers.



Above: The recent update to the Design Spec software has added greater value to ITI's customer base.

As part of ITI's commitment to its customers and wanting to offer them the best possible support on their EWP range, ITI has its own design software known as ITI Design Spec, this has just had v2 released which is powered by Clear Calcs and this encompasses many more additional features.

The ongoing relationship with Metsä is one that is very important, and this key partnership is integral to the success ITI is experiencing nationally in the EWP space. Being a premium distributor for the Metsä brand has given ITI a continuous high-quality supply of LVL and I Joist that from a quality and engineering perspective is considered the best in the market.

DECKING

ITI has a well-known, long history in the composite decking field, distributing the countries two leading brands, ModWood and Eva-Last. Both products have come a significant way in their product life cycle, with ModWood starting as a single version, hollow product many years ago and is now dominating the decking space. There are a number of different decking options now available from ITI including the recent addition of the FLAMEFixx product. Flamefixx was the first and remains the only treated pine product to comply with BAL 40 requirements to the Australian standards and has revolutionised exterior decking and sub frame options for properties in bushfire zones, with more products being added to the range this year.

dFx® is a patented, industry-leading technology that combines a globally

approved, durable (d) wood preservative and a proprietary fire-retardant (fx) into a single working solution. Once the timber is impregnated with the dFx® solution, the active ingredients are fixed in the wood for the life span of the timber. FLAMEfixx products have been extensively tested to ensure optimal protection against Australian Bush fires. FLAMEfixx dFx® timber products meet the requirements of BAL-40 set out in the Australian Standard AS 3959-2018.

Recent product developments have also seen a brand-new entrant through Eva-Last take the market by storm. The Pioneer product that uses a unique world first technology that can take scans of real wood and use the image in the hard-wearing cap. Eva-Last offers the beauty of timber, but in a hassle-free, durable option that's longer lasting, virtually maintenance free, and ecofriendly. Cutting-edge engineering is bringing even greater structural advancements and lifestyle benefits to composite, and thoughtful detail to aesthetics now gives it an even more natural appearance in an expanded range of products, colours, and textures.

This board, exclusive to ITI, is currently being launched and is being welcomed by customers due to its unique story.

PANELS

Along with the extensive ranges that are available, ITI also do a huge range of panels. The ITI range of panel products encompasses a full range of structural and non-structural plywood along with Particleboards and MDF sheets. The inclusion of the DIY panels range to the business has proven to be popular with ITI's Panelit product proving to be a major success.

ITI has maintained a long-term partnership with Weathertex which it distributes nationally. Additionally, the company's partnerships with both Borg and Laminex on their particleboard flooring ranges has been

instrumental in both supplying merchants and as part of their EWP design service and floor supply.

The most recent addition to the panels range is a unique offering exclusive to ITI called ClicWall, produced by global panels giant UniLin. This unique internal wall panelling product compliments ITI's existing internal panel product in EasyCraft. These 2 products will give ITI a significant edge in the interiors market with a panel solution for both painting and pre-finished. While not well known for their panels, ITI offers extensive value and continues to grow in this space.

BUILDING THE FUTURE

ITI has grown from humble beginnings into the largest wholesaler/distributor in the country however, what hasn't changed to the company is the importance of its relationships with the customer. Built on service and trust, ITI has and always will put the customer first. At the heart of its strategy is ITI's people, without the culture that exists within the business and the hard work and dedication of the whole team the leaders of the business say it would not have grown to what it is.

"ITI has for the last twenty years run a successful cadet program with what was TABMA and now NTHA. Because of this cadet program we have people who have worked their way up through the business, and although our team is a young team, they are very experienced with many of them exceeding 10 to 15 years of service whilst a couple of these cadets that have been with business for 20 years' whilst still being under the age of 40," managing director of ITI Group Michael Shadbolt said.

"This longevity has helped build a successful culture within the business, ultimately this is a family business at heart, and we consider our staff to be our family." T

For more, visit https://itiaustralia.com.





TIMBER & BUILDING PRODUCTS WHOLESALER / DISTRIBUTOR

ITI NSW - Newcastle: 02 4953 7666 ITI QLD - Brisbane: 07 3436 8400

ITI SA - Adelaide: 08 8447 0400 ITI WA - Perth: 08 9256 5700

Exploring the majesty New Zealand Kauri tree. By Campbell McInnes

he great New Zealand Kauri Trees (Agathis australis) are renowned for their timber quality, natural grandeur and are one of the longest living trees in the world. These giants can reach staggering heights of over 50 meters, and boast massive trunks, some exceeding 5 meters in diameter, establishing them as true giants of the forest. Their smooth grey-brown bark and expansive, spreading branches create an aura of grandeur and something I have always wanted to visit, it was one of those bucket list items. On a recent trip in January this year, I made the effort to visit these wonders of nature which are nestled in the lush Waipoua Forest located in the North West of the North Island about a three-and-ahalf-hour drive from Auckland.

The Waipoua Forest is the major home of the Kauri trees where it is estimated that 75% of the Kauri trees left in New Zealand can be found. Nestled within the 2,500-hectare (6,177 acre) forest is home to the largest Kauri tree in New Zealand, which the local Maori call Tane Mahuta, named after the Maori God of forest and of birds, also known as the "King" or "Lord of the Forest". Waipoua Forest is also home to the second largest Kauri tree which the Maori people call Te Matua Ngahare also known as the "Father of the Forest". Both these trees have thrived in an environment shaped by centuries of ecological balance.

Beyond their sheer size, Kauri trees play a vital role in shaping the ecosystems they inhabit. These trees have a unique relationship with their surroundings, influencing the composition of the forest and supporting a diverse array of flora and fauna. Kauri-dominated forests harbor an intricate web of life, providing habitat for various species. The Kauri's massive branches and towering canopy create a distinctive microenvironment beneath them. This



microenvironment is crucial for the growth and survival of an array of plant species, including ferns, mosses, and epiphytes. The fallen leaves of the Kauri contribute to a nutrient-rich forest floor, fostering a complex ecological balance that sustains life throughout the forest ecosystem.

MEETING TANE MAHUTA, KING OF THE FOREST

Traveling from Russell on the East Coast. over to the West Coast would mean I would enter the Waipoua Forest from the North side. Not long after passing the signage to advise I had entered the Waipoua Forest on State Highway 12, nature decided it was time to water the trees, just as I was pulling into my first stop and the entrance to the walk to meet Tane Mahuta.

At the entrance to this walk is a cleaning station, which all visitors must pass through before they can enter. These innovative cleaning stations, of which there are six in the region, have been introduced to help prevent the spread of Kauri dieback. The stations have two bristle pads to scrape any mud from your shoes and followed closely by two metal plates with holes punched in them to stand on. As you apply pressure downwards on the metal foot plates your shoes and lower legs are sprayed with a disinfectant to ensure no contaminated material adjoin you on your journey!

The walkway to meet Tane Mahuta was along a timber decking structure, raised slightly off the ground, built to keep visitors from straying off into the forest areas. Whilst it was still raining, the canopy of the forest created a natural umbrella which soaked up much of the rain, only allowing a small amount of rain to filter through the canopy. It was very surprising how close Tane Mahuta was to the roadway with the walkway only being 170 meters long. A short distance into the walk, I could see glimpses of this majestic tree. Reaching the first viewing location was only a 5-minute stroll.

Being in the presence of this tree was an awesome feeling and I can totally understand why it is known as the King of the Forest, as it stands towering through the top of the canopy to keep an eye over the entire forest area. This is the closest point you can get to this tree which is about ten meters away. Timber hand railings have been erected to prevent visitors getting too close and potentially damaging the root system of the tree, which are fragile and can be quite shallow.

I have seen many photos of Tane Mahuta and like my own, they do not do justice to its grandeur. In 2002, Dr. Robert Van Pelt, a forest ecology researcher and affiliate assistant professor at the University of



Above: Te Matua Ngahere, Father of the Forest with its wide trunk. The mature kauri's providing visible homes to flora of the forest.

Washington measured this tree with the following results: Height 45.2 m, Girth of 15.44 m, Trunk height 17.8 m, Trunk volume 255.5 m3 and Tree volume 516.7 m3. To put the volume of this tree into context, a 40-foot shipping container can load an average of say 40 m3 of Radiata Pine, this would mean that Tane Mahuta's volume would be equivalent to 13, 40-foot shipping containers. It should be noted that the sign at the viewing platform has different measurements to those of Dr. Robert Van Pelt's findings. On the sign from the Department of Conservation it states: "The dimensions of Tane Mahuta are; Trunk height 17.7 meters. Total height 51.5 meters. Trunk girth 13.8 meters. Trunk volume 244.5 meters.(3)". Regardless of which figures are correct today, this tree is massive. Tane Mahuta is said to be around 2,000 years old with estimates ranging from 1,500 to 2,500 years.

Moving around to the second viewing location, takes you further away and allows you to peer through the forest to capture the tree in its more natural surroundings. While there were a number of visitors coming and going, everyone appeared to be mesmerised and silent. Other than an occasional whisper between two people, all you could hear were the sounds of the forest, the wind rustling the leaves and an occasional bird noise. I notice there were also a number of people who had walked in barefooted. Having spent some quiet time just being in the presents of the King of the Forest, it was time to head off to visit another amazing specimen.

A journey through the ancient native waipoua forest: Encountering tane mahuta and te matua ngehere through the green world of towering trees.



Above: Some younger Kauri trees straight and tall reaching to the canopy layer on the Te Matua Ngahere walk.

ABOVE) CAMPBELL McINNES; (BELOW) CAROLYN McINNES

THE KAURI WALKS IN THE **WAIPOUA FOREST**

Travelling by car just 1.5 kilometres down the road is the entrance to the Kauri walks carpark. Here there is a trail that leads to three kauri walks being: 1) Yakas, seventh largest Kauri, 2) Four Sisters, as the name suggests a close cluster of four trees, and 3) Te Matua Ngahere, second largest Kauri of New Zealand. Unfortunately, both the Yakas and the Four Sisters walks are "temporarily closed", however they appear to have been closed for quite some time, based on the amount of re-growth there is enclosing the entrances to these walks.

The main feature however being the Te Matua Ngahere walk to the second largest Kauri tree was still open and well worth the 40 minutes it takes to get to this tree. Once on the main path to Te Matua Ngahere, like the earlier walk it is a timber decking walkway that whines its way through the forest. As the feeding roots of Kauri trees are shallow and delicate, the elevated timber walkways have been erected to protect these root systems and are present along the entire walk.

This walk is much longer than the earlier one and as you walk through the forest you past many Kauri tress of all ages from saplings to rickers, emergents through to very large mature specimens. This trail gives you a much better look and understanding of the habitat and the surroundings the Kauris thrive in. Upon turning the final bend on the path Te Matua Naghere reveals himself in the surroundings of the natural forest in where he grew. While Te Matua is much shorter than Tane Mahuta, at 29.9 meters (around 15 meters shorter), he is actually wider with a girth of 16.41 meters (around 1 meter wider).

Due to its width, there is no doubt this tree is enormous and well worthy of being the second largest Kauri of New Zealand. On the slight incline walking back towards the carpark, you get a different perspective of the forest. Perhaps because the main events were completed, there was more time spent on exploring the rest of the forest. While I had seen one dead Kauri on my way down to Te Matua Naghere, I noticed two more dead kauri trees on my way back up the path. From what I have read and seen; these dead Kauri's looked like they had fallen victim to the Kauri Dieback disease!

Now on my way back to Auckland, in the afternoon. I stopped at the Kauri Museum. which is located in Matakohe, around oneand-a-half hours' drive from the Waipoua Forest. The Kauri Museum was well worth the visit, although I do wish I had more time there.

KAURI TIMBER CHARACTERISTICS

The timber from the Kauri tree has been highly sort after for its exceptional quality versatility and aesthetic appeal. Its Characteristics include: a straight grain, with a fine even texture, both heartwood and sapwood are pale yellowish white to golden brown in colour, the average dried weight is 540 kg/m3, which gives it an impressive strength-to-weight ratio. Kauri timber is known for its stability and resistance to warping, shrinking and cracking, even in fluctuating conditions. The timber generally has a lack of knots, due to the trunk of the mature tree having little to no branches. The timber is used in a wide variety of applications, from fine woodworking and furniture through to construction.

KAURI DIEBACK THREATENS THE SURVIVAL OF THESE **ANCIENT GIANTS**

The existence of the Kauri timber industry is now under threat and has a battle against Kauri dieback disease, caused by the soilborne pathogen Phytophthora Agathidicida. First identified in the 1970s, Kauri dieback has spread rapidly, posing a severe risk to the survival of these ancient giants.

Once a tree becomes infected, the disease progresses with no known cure, leaving scientists and conservationists with the challenge of saving these iconic trees. This devastating disease attacks the roots and lower trunk of Kauri trees, leading to rotting wood and ultimately killing the infected Kauri. The rapid spread of Kauri dieback poses a significant risk to both the industry and the communities that depend on it.

Recognizing the gravity of the situation, New Zealand has implemented stringent biosecurity measures to curb the spread of Kauri dieback. Timber industry stakeholders have been proactive in adopting responsible logging practices, including the cleaning of equipment and machinery to prevent the inadvertent transmission of the pathogen. Additionally, there is a growing emphasis on sustainable forestry practices to ensure the long-term viability of Kauri timber resources.

The challenge lies in striking a delicate balance between meeting the economic demand for Kauri timber and preserving the longevity of this precious resource. The timber industry must embrace innovative solutions to navigate the complexities posed by Kauri dieback.

The plight of the New Zealand Kauri tree is not an isolated concern but reflects a global challenge of preserving ancient and endangered species. As the world continues to develop it has to come to terms with biodiversity loss. The lessons learned from



Above: Kauri tree that has died after falling victim to Kauri Dieback.

Navigating the threat of Kauri dieback: Balancing industry, conservation and global concerns.

the battle against Kauri dieback are relevant on a global scale. The need for collaboration, community engagement, and the integration of traditional knowledge is paramount in addressing complex ecological issues.

As I returned back across the ditch to Australia and reflected on my time spent among the ancient giants of the Waipoua Forest, I wondered if our generation will be able to do enough to protect Tane Mahuta, Te Matua Ngahere, and the other kauri trees! Will the timber industry be able to sustainably harvest Kauri for its various valuable uses? I sincerely hope these majestic giants will endure for future generations to visit, admire and appreciate. T



Above: Location: Kauri Museum NZ, author standing next to largest Kauri timber slab in the world at



VEKTA PACKFEEDER

The ultimate automatic infeed systemspeed, compact size, customisable and it completely eliminates picking errors.







The most common cause of downtime for an automated saw is a lack of timber on the infeed conveyors.

Feeding a linear saw can be a very labor-intensive process. Operators will fatigue and naturally slow down over the day and loading mistakes can cost a plant significantly in lost productivity. Vekta's Packfeeder solution addresses these issues in an extremely compact, clever manner - making it a viable option for both new and existing plants.

Packs of timber are loaded onto light-weight racks. Racks with longer timber are loaded on an upper row while those with shorter timber are loaded on a lower row. A vacuum head gantry then scans the location of each rack and the profiles of the timber in those racks. When called, a piece of timber of the correct length and grade is picked up with the vacuum head and delivered to the saw. Vekta Packfeeder requires 75% less space than any other system.





Good lines

Timber lining boards deliver timeless beauty to both commercial and residential builds, in addition to a host of practical and environmental benefits. By Donyale Harrison

acob Ferrow is telling me about his customers. "They understand that we source our timbers from sustainable forestry and that by choosing timber they get additional boxes ticked, ranging from natural insulation to health benefits," says the general manager of Timbeck, a Queenslandbased timber specialist.

"But when it comes down to it, most of them are making decisions based on looks."

Timber lining boards hold a special place in interior decoration. While there are trends in profiles and coating options or how they're installed, the choice of timber in homes, offices, schools and commercial spaces is driven by the material's timelessness. The one wall or feature can simultaneously hark back to age-old traditions, evoke crisp Mid-Century Modern and be utterly up to date.

I spoke with Ferrow and also the team at Porta about their ranges and how they can elevate your build. Both Timbeck and Porta are multi-generational family businesses with long histories in decorative timbers. Their lining board offers differ somewhat in focus, but both companies were happy to share key insights based on their expertise.

SOUNDING OUT NEEDS

"My grandfather started Timbeck stocking mostly Oregon framework," says Ferrow. "In the '90s, we shifted our focus into western red cedar and a lot of that was run as slats for venetian blinds and plantation shutters.

"As a result, we have a lot of specialised equipment and highly trained machinists in the company."

As western red cedar costs rose over the past 15 or so years. Timbeck looked to the local hardwoods that were on offer from their certified sustainable partners. Ferrow says, "We had access to Queensland spotted gum and blackbutt, and these are really beautiful timbers that were ideal for a different range

of products, so we moved into screening and panelling products, as well as cladding."

The new products found a ready market. "The hardwood is used all the way down the east coast in residential settings, particularly at the high end, because of how hard wearing and durable it is," says Ferrow. "It's a lovely product that ticks all the boxes on different colours and natural character and, importantly, meets a lot of the standards required in terms of durability as well as having a BAL 29 bushfire rating for the spotted gum and blackbutt."

Happily, they also found a ready market in commercial applications, where practical considerations play more of a role.

"Yes, looks are important there, too, but specifiers are also choosing timber boards for their impressive insulation. They keep cool air in over the summer and warm air in winter, plus they are much better with acoustics than hard screening surfaces.



Above: Clear lacquered spotted gum lining board, installed by Wainwright Facades.

"Again, these boards are naturally hard wearing. They're long lasting, you can sand them back and recoat if you want to change colours. So they're a very attractive option for those bigger builds."

In addition to the cedar, spotted gum and blackbutt that Timbeck have on offer, the company also regularly runs Victorian ash, American oak and hemlock.

"This means we're able to respond well to technical needs," says Ferrow. "Obviously there are weight issues: particularly if you're covering a ceiling, where you might use hemlock or cedar, which weigh much less than spotted gum, for example. But we've also supplied a lot of samples and then product into businesses who do their own acoustic testing for theatres and the like, where the designer is looking for different settings in the quality of the sound.

"We work quite heavily with a company based in Sydney called Screenwood, which designs its own ceiling and screening systems. They make panels with a range of timber screening sizes that come in alternate lengths for easy install, with an acoustic foam backing, so they can suit the acoustic needs of a space. We provide different species and sizes to get the right results."

This broad scope of technical options is matched with aesthetic choices. "We moved into the pre-coated side of things a little while ago," Ferrow says.

"On interior products we're usually using a lacquer and often that's just clear, because people love the natural qualities of these timbers. But we can do walnuts, darks, blacks, whitewashes... all different types of things. We

"We can seal the board all around, put it in a pack and at the other end they can literally take it out of the pack and put it on a wall."

use a low-VOC lacquer that goes through a vacuum coater. That means that we can seal the board all around, put it in a pack and at the other end they can literally take it out of the pack and put it on a wall. We've already done the sanding and coating. So a fit for purpose product arrives on site ready for use. By sealing the board all round before installation, we are creating the best possible protection for the product to ensure it performs in its intended application long term."

EASY DOES IT

Porta's history as a timber supplier is a few decades longer than Timbeck's, but quite similar. For many years the Melbourne-based business has been delivering decorative timbers Australia-wide. Famous for its Contours range of lining boards, which is a staple in both residential and commercial, the company has recently released Portaline, a primed pine range of lining boards.

"We've seen a huge increase in the number of people choosing to DIY," says Jessica Dinh, digital marketing coordinator at Porta. "Which is what led us to create Portaline, with its exceptionally straightforward installation process."

The Porta team pays close attention to feedback and data coming in on its products and had noticed an increase in special orders for Contour boards coming from non-trades customers, especially the pre-primed fingerjointed option. The Porta product team designed the Contours range specifically for easy, single-person installation, but despite >>>





Above: Classic western red cedar panelling in this sauna by SDS Australia for Wollongong's Saunaus.

this, it maintains its status as a professionalgrade product.

"Recognising the diverse range of skills and experiences among DIY enthusiasts, we've ensured that the Portaline range is accessible to all, regardless of their expertise level," says the Porta team.

Accordingly, Portaline is a pre-primed, finger-jointed pine board that is lightweight and has a meticulously designed, intuitive and practically foolproof installation process based on easy gluing and, like the Contours range, is simple to install on curves.

"It's all about speeding up the process for the DIY user," says Dinh. "The Contours range is exclusively available through special orders, with the majority of customers traditionally relying on tradies for installation. We know that at the moment, trades are booked up weeks or months in advance. With Portaline, it's available immediately in Bunnings stores and you can prep your surfaces, buy your boards, take them home

and install them and then paint them all in the one weekend.

"Even if you're not an expert DIYer, the installation guide available on our site and on the Bunnings product page will walk you through, step by step."

The Contours range informed the Porta team' choices when it came to the Portaline range: while many customers opted for the timeless beauty of natural wood in the Tasmanian oak and engineered American oak boards, the ready-to-stain clear pine and primed FJ pine boards were extremely popular. "These provide a versatile foundation for a bespoke colour selection, catering to those seeking to inject a personal touch into their spaces," says the Porta team.

It was a similar case when it came to the choice of available profiles. "Trends in profile preferences are largely driven by personal taste, however, we've noticed a distinct affinity for certain profiles within our Contours range and so reflected them in the

versatile 12mm Portaline," says the Porta team. "This offers an expanded palette for creative expression, catering to the evolving tastes and preferences of our customers."

Fans of the Contours Riverine profile will welcome the Portaline Dune, for example, while Strata is echoed in Mesa and the fashionable scalloped profile of Contours Cirque is available in Portaline Peak.

"And because the pine is so light compared to our traditional Tasmanian oak ranges, it's perfect for ceilings," says Dinh.

SUSTAINABILITY

For both companies, ensuring consistency and sustainability of supply are core goals. "We're famous for our Tas oak range," says Dinh. "But it's a finite resource, no matter how much we focus on sustainable production and harvest or diversify our supplier base. So that's another advantage of the Portaline, the pine allows us to keep more of the slower-growing species for applications where it's more vital. And we have FSC and PEFC certification for all our timbers, with a solid chain of custody process."

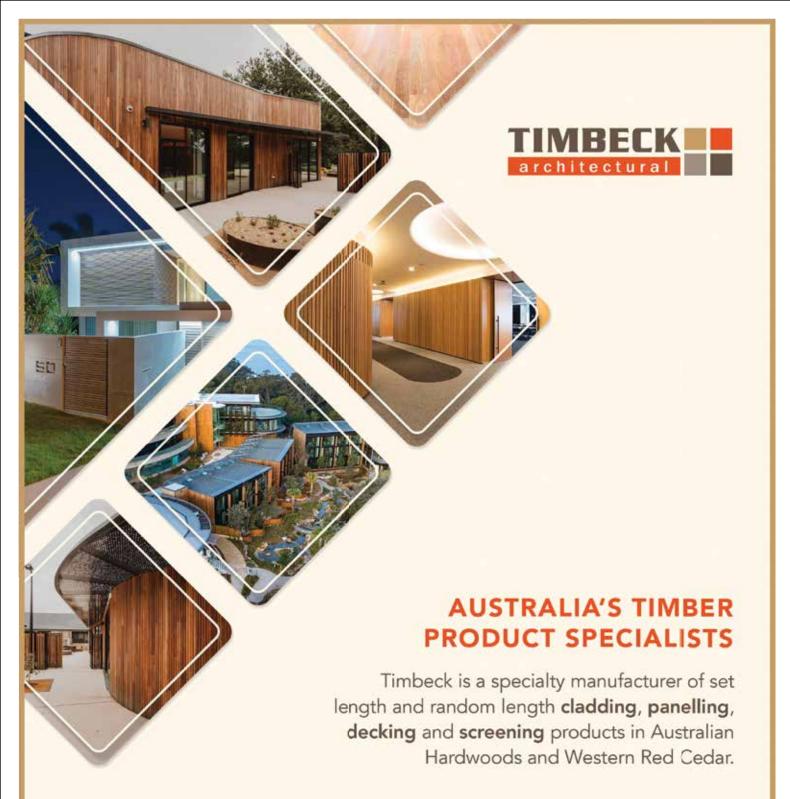
A similar concern has driven Timbeck. "Originally, we were concerned about rising costs for cedar," says Ferrow. "But when we started moving into local species, we realised the additional advantages when it came to controlling supply and lowering the carbon and monetary costs of the freight.

"Our cedar comes from Canada and while it's all PEFC certified, that's then shipped around the world. Our spotted gum and blackbutt come from within an eight-hour drive, often less. Yes, there are different issues that then come up, with it being harder to cut and taking longer to dry, but we're lucky that we have a large facility and so can hold onto our feedstock for that longer period of time and then we just kiln-dry the last 10% or so for a very stable product."





Above: Scallop-edges are popular; here in American oak custom screening by Timbeck for a new high-end office building, 100 Mount St, North Sydney.



Scan a QR code below to visit our website for more information and to see our full product ranges.



WESTERN RED CEDAR

Sustainable, certified Canadian Western Red Cedar.



HARD

100% Australian made and sourced.



PRE-FINISH SANDING & COATING

High quality timber coating and finishing.





Above: Subtle differences in Portaline profiles can change the mood; here Peak gives a crisp finish in the bathroom and Dune lends a timeless calm to a relaxing living area.

Just as Ferrow has found, aesthetics is a key driver for Porta's customers, along with ease of installation, "However, the last five years have seen a marked shift, with sustainability becoming a significant concern for our customers," says the Porta team. "We've responded by highlighting the sustainable nature of timber, emphasising its benefits for health, its role in carbon sequestration, and its overall environmental friendliness. This is part of a larger industry movement, with campaigns like The Ultimate Renewable playing a crucial role in changing perceptions."

EXPANDING MARKETS

Having created such versatile products, the natural next step is increasing their reach.

"We've developed a market in New Zealand over the last 12 months," says Ferrow. "They don't have a huge range of hardwoods, so we can supply hard-wearing products with great looks. We did a project last year on one of the Grand Designs homes over there with our local suppliers, which was a really good experience."

He notes that, just like supplying into WA, there are a few considerations to keep front of mind. "We're far more cautious on our drying practices to make sure that it suits the environment over there," Ferrow says. "If you have any issues, those distances make them slower to fix and we don't want to be putting our customers in that position. We make sure we move into these markets in the right way, trying not to over commit and forming good relationships where they can give us

"The video shows how much Portaline boosts their confidence tackling a project and helps them succeed."

feedback, and we can work with them on their projects to find the right balances."

And one old market has had a resurgence for Timbeck: as Ferrow says, "I can't explain why, but we're doing 300 to 400% more volume in saunas now than we were five or six years ago."

Here the traditional western red cedar is still the star, with a slightly changed profile to get more boards out of the feedstock and make them lighter and easier to install, plus some components also run in hemlock.

"We've got loyal guys in the sauna market that seem to just be getting busier and busier. At the moment, we're flat-out keeping up with their order increases!" says Ferrow.

At Porta, a popular influencer has joined forces with the brand to show just how easy Portaline is to install. "Velda Taylor-Chan did a collab with us," says Dinh (that's a collaborative project for all the older-than-Millennials among us).

"She's a stylist and photographer who has used our products before in her work. She and her husband are keen but novice DIY-ers, so when they wanted to put panelling around their kitchen bench, the Portaline was a great option for them."

The resulting blog post and video on the Porta site shows just how much effort is removed by choosing Portaline to deliver a seamless finish, even including around an awkwardly placed power point.

"We didn't have the experience or knowhow to make a perfect 90-degree cut, so we cut out a series of rectangular pieces to fit around the power point, much like a jigsaw puzzle," Taylor-Chan writes, and the product makes this work-around look professional.

A particularly relatable moment in the post is where Taylor-Chan admits she and her husband ignored one of the more optional instructions and just kept using a spirit level to check things hadn't gone wrong.

"It was a great experience working with Velda, and we plan to do more of these sorts of posts and videos in the future," says Dinh.

"It's a real complement to our traditional brochures, installation instructions and howto videos. We've sent a copy of it out to our customer base so they can see how much the Portaline boosts their confidence tackling a project like their kitchen island and how it empowers them to succeed."

And, at the other end of the market, Porta also runs a series of Biophilic Design CPD presentations for architects, building designers and the like. "These have sparked considerable interest, emphasising the significance of nature in architecture for enhancing well-being and sustainability," says the Porta team. "Aimed at bridging knowledge gaps, these sessions showcase the benefits of timber in creating natural connections and are grounded in case studies and research. Our motivation lies in promoting sustainable, health-oriented design practices amidst urbanisation that prioritise both human and ecological wellbeing."

That natural quality is the heart of the market. "We're always tweaking things for our commercial clients," says Ferrow. "A profile will be very popular one year and another one the next. People want light timbers, then dark, they need a specific timber species that we can source for them, they want something to work with a new clip system...

"We're lucky that we have a range of pretty handy wood machinists that are used to these types of things and Jason, who runs our coating side of things can run samples till he has the perfect result for these big commercial applications. But in the end, what they want is the beauty of timber." T

For more, visit https://timbeck.com.au and www.porta.com.au and follow the Blog link at top of Porta's page to see the Taylor-Chan post



PORTALINE

TIMBER LINING BOARDS

f aportatimber **o** aporta_timber

Portaline is your ultimate solution for DIY projects

Designed specifically for the practical DIYer, Portaline makes it simple to transform any space, easily acheiving professional-looking results.



1300 650 787 sales@porta.com.au

Porta.com.au



Timeless Elegance of Western Red Cedar: History, Building, and Furniture applications for this stunning softwood.

estern red cedar (Thuja plicata) stands as a testament to nature's gift to humanity, offering a perfect blend of beauty, durability, and versatility. This majestic tree, native to the western regions of North America, has played a pivotal role in shaping the history of indigenous cultures and, more recently, has become a cherished resource in the realms of architecture and furniture design. Looking at this most elegant timber, we delve into the rich history of Western Red Cedar, exploring its origins and cultural significance.

Western red cedar holds a sacred place in the cultural tapestry of Native American tribes along the Pacific Northwest, including the Coast Salish, Haida, and Tlingit. Revered for its abundance and versatility, the tree served as a cornerstone for their daily lives. Its wood was crafted into tools, canoes, and totem poles, while its bark found use in the construction of clothing, baskets, and shelter. The cedar tree was not merely a resource; it was a symbol of resilience and prosperity, deeply embedded in the spiritual and practical aspects of indigenous life.

European settlers, upon encountering this remarkable tree, quickly recognized its potential. By the mid-19th century, the timber industry had embraced western red cedar as a valuable commodity. Logging operations began in earnest, and the wood's popularity soared due to its exceptional qualities, marking the beginning of its widespread use in construction.

WRC is hygroscopic and will absorb or

discharge moisture to attain equilibrium with the surrounding atmosphere. However, it has a very low shrinkage factor and is superior to all other coniferous woods in its resistance to warping, twisting and checking.

CHARACTERISTICS

WRC's distinctive characteristics contribute to its enduring popularity in the construction and furniture industries. Its heartwood varies in colour, ranging from light brown to deep red, often displaying stunning streaks of darker shades. The sapwood, in contrast, is nearly white. The wood has a fine, straight grain and a uniform texture, giving it a smooth and elegant appearance.

BUILDING AND FURNITURE APPLICATIONS

From decks to fencing, roof shingles and exterior cladding, western red cedar was often selected for its durability, versatility, and aesthetic appeal. The wood has exceptional insulating properties making it an excellent choice for roofing materials.

The outdoor furniture market has witnessed a surge in the use of western red cedar due to its inherent qualities. Its resistance to decay and insects makes it an ideal choice for patio furniture, benches, and Adirondack chairs. The wood's light weight facilitates easy mobility, allowing homeowners to rearrange their outdoor spaces with ease.

Craftsmen and designers appreciate the wood's workability, allowing for the creation of finely detailed and intricate furniture

pieces. Cedar chests, dressers, and cabinets benefit from the wood's natural aroma, which acts as a mild insect repellent and imparts a pleasant scent, to the surrounding space. The fine grain and workability of western red cedar make it a favoured choice for craftsmen and artisans involved in intricate wood carving. From sculptures to decorative panels, the wood's smooth texture and stability provide a canvas for creative expression. Its lightweight nature allows for the creation of large and detailed pieces without compromising structural integrity.

ENDURING SUSTAINABILITY AND LONGEVITY

Because of the demand for this stunning softwood, sustainability of this resources has become a critical consideration. WRC has the industry's commitment to responsible forestry practices. Sustainable harvesting methods, such as selective logging and reforestation efforts, ensure the long-term viability of this valuable resource.

Western red cedar's journey from sacred symbol to a cornerstone of construction and beautiful furniture design is a testament to its enduring appeal and versatility and stands as a reminder of the delicate balance between human ingenuity and nature's bountiful offerings. T

Further information:

With special thanks to Real Cedar, specialising in Western Red www.realcedar.com for more information on ratings, including thermal, acoustic, fire safety and density of oven dried product.

source.















COMPLEXITY SIMPLIFIED



DELIVERING **AUTOMATED** PRODUCTION SYSTEMS FOR THE **PREFABRICATING** HOUSING INDUSTRY



Represented by

contact us:
ph +613 9850-6666
sales@blissandreels.com.au
randek.com
blissandreels.com.au





Hybrid systems: embracing the uptake of mass timber

Seminar hosts say hybrid structures will help NZ transition to a low emissions economy. **By Michael Smith**

Hybrid Buildings Seminar held in Auckland late last year generated widespread professional interest in improving best practice in the construction industry, especially as it relates to engineered timber.

Timber Trader News looks at some of the key points that emerged from the seminar, and considers two education sector projects that are pushing the boundaries of timber construction.

The seminar hosts, Dr Robert Finch, Director of Timber Unlimited (TU) and Dr Daniel Moroder, President of the Timber Design Society (TDS), pointed out that using timber as part of a hybrid structure can solve design challenges and create structurally efficient, robust, low-carbon solutions that will help New Zealand transition to a low emissions economy.

Among the impressive range of speakers was Andrea Stocchero from the Ministry of Primary Industries (MPI). He noted that a hybrid system which includes mass timber structural members can provide additional benefits to the performance of steel and/or concrete structures alone.

"When projects include timber, they not only add visual warmth to the finished build they can optimise strength and flexibility, provide improved durability, fire performance and support, and lower carbon emissions to address sustainability criteria. To achieve these potential improvements, though, optimising procedures at the early concept design stage is critical."

Andrew Hewitt of Red Stag TimberLab explained that designing for manufacturing and assembly (DfMA) is critical for engineered timber components. Local

manufacturing capacity is limited at the moment, sometimes leading to longer lead times for mass timber elements, which can interfere with smooth construction timelines.

An understanding of such challenges, designing efficient solutions, and the early involvement of manufacturing suppliers are essential to achieving a successful outcome.

Also speaking at the seminar was Nikki Vance (from Dunning Thornton Consultants) who presented a case study of 90 Devonport Road, Tauranga. When completed it will be an eight-storey curtain wall structure with lateral steel bracing and a CLT core.

A hybrid structure was chosen as the most efficient solution for the intended purpose and location, negating the unfavourable ground conditions where structural loads needed to be minimised.

(Given that timber weighs four to five times

less than steel or concrete, foundation systems and depths can be significantly reduced - something that is becoming increasingly recognised in the industry.)

Blair Tipler (Kobe Construction) talked of his firm's experiences when building Clearwater Quays Apartments - a precisionengineered, five-level residential block that featured a number of mass timber elements.

He emphasised the ability of mass timber to be prefabricated to extremely tight tolerances as part of a hybrid structure which led to shorter construction sequences and rapid on-site installation (resulting in minimal disruption to neighbouring properties).

Tipler noted that structural steel must also be specified to tight tolerances that match those of mass timber. Low precision welds can warp steel members by millimetres, which means contractors must spend additional time adjusting panels, beams and/ or columns to ensure correct jointing.

He added that it was crucial to manage the moisture content across all timbers delivered to site - for example, keeping the LVL under cover with good airflow and convenient access.

AUT A1

Among a number of innovative timber builds under way in the education sector is Auckland University of Technology's A1 project, due to be completed this year.

The architects (Jasmax) say A1 builds on the university's legacy of "highly sustainable development, placing student success and well-being at the heart of the design".

It comprises a new 5,000 sq m 4-storey timber building, plus the refurbishment and adaptive reuse of a 4-storey, 40-year-old



Above: The Living Pā features a low-impact engineered timber framework to help overcome geological and seismic issues.

"A globally renowned hub of environmental responsibility"

steel and concrete building - connected by a 5-storey LVL atrium with steel bracing.

Jasmax adds that A1 is an LVL posttensioned frame structure with a timber Potius floor system, which is similar to a timber Double Tee. "It all sits on a one-metredeep concrete raft foundation, which is enabled by the lightweight structure. The use of heavier materials would have required 50-m-deep piles to reach solid rock."

THE LIVING PĀ

Also scheduled for completion this year is the Living Pā, situated on Victoria University's Wellington campus - a pioneering example of mass engineered timber construction and green building "with deep-rooted connections to Māori cultural values".

A case study released by Mid-Rise Wood Construction says the project aims to transform Te Herenga Waka Marae "into a globally renowned hub of environmental responsibility". Further, it seeks "to embody Māori beliefs, values and passions, guiding countless individuals towards reconnecting with their natural heritage".

No less ambitious is the project's goal of achieving Living Building Certification under the International Living Futures Institute's Living Building Challenge (LBC) programme. Essentially, the Living Pā must be "energy, carbon, water and waste positive - and also actively contribute to the local ecology and community across a wide array of criteria".

Located in a high-profile urban location on challenging, steep terrain, the project features a low-impact engineered timber framework to help overcome complex geological and seismic problems.

Having now passed the halfway point in construction, the Living Pā has overcome a number of difficulties - including moisture management, supply chain issues related to the pandemic, and peer reviewing of sometimes unfamiliar mass timber processes.

But, as the case study notes, the project "exemplifies the potential for sustainable building practices to lead us into a regenerative future". T



Above: The Living Pā: a pioneering example of mass engineered timber construction and green building.

A family tradition of quality: Lawmans Frame and Truss

Navigating Challenges and Upholding Standards: Lawmans Frame and Truss Throughout 30 Years. By Campbell McInnes



Above: (Left to right) Manuel Mizzi, Frances Pearson, William Mizzi and Hayes Mizzi outside the Lawmans Frame and Truss office and factories, located in South Windsor, NSW.

ounded in 1994, by Lawrence and Manuel Mizzi, Lawmans Frame and Truss Pty Ltd the inception of the company arose from a vision to address the demand for exceptional frame and truss solutions in local and the wider metropolitan areas. With both founders being builders, Lawrence and Manuel's ability to comprehend and communicate effectively in the industry ensured accurate quotes and supply that met client expectations. Upon Lawrence's retirement in 2017, Manuel assumed full ownership, upholding the family legacy.

Maintaining a familial environment, Lawmans Frame and Truss proudly employs multiple family members across its office and factory floors. Currently spanning three generations, the family business sees Manuel's son William managing operations, daughter Frances overseeing finance and administration, and grandson Hayes, an estimator who worked his way up from the factory floor. Throughout its tenure, Lawmans has nurtured local talent and provided opportunities to young apprentices.

SUPPLY PARTNERS

One of the key's to Lawmans success lies in its partnerships with industry-leading suppliers like MiTek, OneFortyOne, Meyer Timber and NuPine. These partnerships have enabled Lawmans to ensure the high quality

and service upon which their clients rely. With a commitment to innovation, sustainability, and efficient logistics, Lawmans remains a trusted name in the timber industry.

MiTek who Lawmans partnered with at their inception, is a diversified global supplier specializing in software, engineered products, services and automated manufacturing equipment for residential construction industry. MiTek provides a technologically advanced, high-quality, and reliable approach to business workflow - as well as the design, manufacturing and construction of residential structures. This collaboration empowers Lawmans to deliver premium posi-struts, frames, and trusses, accompanied by unparalleled service and technical guidance, regardless of project size.

Lawmans have built strong relationships with OneFortyOne and chose them to be their main suppliers of MGP10 pine. OneFortyOne, is a forestry company, originated in 2012 after acquiring a lease of plantation assets in South Australia. Named after the 141st meridian east line, it is a major employer in the Green Triangle area, employing over 400 people directly and 1,000 indirectly. They acquired Mount Gambier's Jubilee Sawmill in 2018 and invested nearly \$40 million to enhance its efficiency. They also acquired Nelson Forests Limited and Kaituna Mill in New Zealand, known for their innovation and environmental certifications. Starting with just five employees, OneFortyOne now employs over 500 individuals across

Australia and New Zealand, emphasizing responsible and sustainable operations, care for employees, the environment, and regional communities. Teaming up with One-Forty-One proved to be the right decision. William advised, recently when the supply of MGP10 became extremely tight, Lawmans secured the MGP10 they required, underscoring the strength of their domestic supply chain loyalty.

Another critical partner, Meyer Timber (formally Structalam Timber Products) has facilitated Lawmans' access to a diverse range of timber products. Structalam was established in 1988, as an active participant in the N.S.W Engineered Wood Products. Priding itself on technical expertise and a logistical service to match, Structalam built an excellent reputation. Purchased by the Meyer family in 2007 the now "Meyer Timber N.S.W" has grown into a more diversified wholesaler of timber products. Meyer's commitment to efficiency and logistics aligns seamlessly with Lawmans' operations.

Manuel added, we could not leave out Glen Donegal from NuPine as he is a standout figure for Lawmans, especially during times when timber scarcity and skyrocketing costs were prevalent. It was a reassurance to have aligned us with individuals who actively supported our endeavours. For over 25 years, Glen Donegal has been a primary timber supplier for Lawmans, and more than that, a cherished friend to our team.

POSI-STRUT

Posi-Strut floor and roofing systems are manufactured in Australia, by a number of licenced fabricators, including Lawmans. Manuel explained, they are a little more expensive than the alternative I-Joist, however, are still preferred by many clients due to their ease of installation, are much lighter than a traditional solid piece of timber and create a cavity between the webs. For the trades that follow, like electricians, air conditioning installers and plumbers, the posi-struts are a welcome sight as they make their jobs of running cables, pipes and tubing a breeze. Lawmans also offers I-Joist or solid





Above left: Infeed leading to the computerised Razor 5 saw, supplied by Vekta. **Above right:** FrameQuip frame line, which has been a welcomed addition particularly with the improvements seen in safety.

timber products, providing clients with a range of choices.

EFFECTS OF COVID-19

Throughout the Covid-19 pandemic, it appeared that individuals involved in the timber and construction sectors fared relatively well, as these industries were among the few permitted to operate while others were not permitted to trade. However, this was not the reality for many frame and truss manufacturing businesses like Lawmans. Manuel recounted how the pandemic severely impacted their operations. Despite the challenges, they prioritized retaining their staff and continued to provide salaries throughout the crisis. Although the government offered some financial aid for employee wages, it fell short of covering all expenses. Manuel emphasized that they still had to fulfill obligations such as taxes, superannuation, and workers' compensation, along with other fixed costs essential for running the business.

During the lockdown, logistical hurdles arose as certain staff couldn't commute due to restrictions on travel between different areas. Additionally, several scheduled jobs were postponed or cancelled, because the project sites were inaccessible for various reasons. Manuel mentioned a recent incident where they were requested to revaluate a project originally quoted in 2019, which had been halted due to Covid-19-related issues.

While their workload significantly decreased, construction activities increased in other segments, causing a shortage of MGP10 timber in the market, due to overwhelming demand surpassing supply. Lawmans managed to secure sufficient MGP10 through their established loyalty within the domestic supply chain. However, the situation was different for Engineered Wood Products, primarily imported, where demand far exceeded available supply. Despite being able to produce posi-struts during this period, Lawmans still faced financial strain and found themselves operating at a loss, for the first time.

EMPLOYMENT CONCERNS

Amidst the post-Covid-19 environment. Lawmans and other smaller Frame and Truss plants confront a fresh wave of employment challenges. As the Australian market experiences a downturn, the jobs for all Frame and Truss companies have decreased. Larger fabricators, with higher overhead costs, require substantial throughput to reach their break-even point. Consequently, the softening market exerts significant pressure on prices. William disclosed that they are currently encountering competitors offering prices up to 25% lower than their quotes. Unable to match such steep reductions without sacrificing what margin they have; they are compelled to walk away from these jobs.

Manuel further elaborated that their typical success rate in quoting jobs stands at around 35%, which is commendable. However, this figure has plummeted to 5% amidst the current market conditions. Consequently, the Lawmans team is exerting extraordinary efforts to enhance their rate of successful bids.

Regrettably, in a soft market like the present one, many clients prioritize cost over quality and service. Despite being aware that cheaper frame and truss companies often compromise on quality and omit crucial elements from their quotes, some clients calculate a budget for their own builders to rectify any deficiencies from these lowercost suppliers. William expressed concerns about this approach, questioning whether clients can identify and address every issue or omission and pondering the integrity of the structures if any aspect is overlooked.

STAFFING

Staffing remains a crucial aspect of business management, demanding considerable attention and effort. Today serves as a prime example, as William noted that approximately fifty percent of the twenty staff members scheduled for the factory floor were absent, also noting it was a Monday.

To address staffing challenges and streamline production, Lawman's opted to

invest in a Vekta Razor 5 computerized cutting saw. While these machines entail significant upfront costs compared to conventional docking saws, they offer numerous advantages. William highlighted that the Razor is notably faster, safer, space-efficient, marks cut timber, and requires fewer staff to operate. Operated by one person, occasionally two during peak workloads, the Razor replaces 3 to 4 docking saws and their associated staff.

Additionally, Lawmans boasts two FrameQuip Auto-Nailing framing lines (FrameQuip recently acquired by Vekta). These machines offer a significant safety advantage over manual nailing, with the potential to prevent injuries among staff, which is a top priority for Lawmans. The Auto-Nailing framing lines have been warmly welcomed and have effectively reduced the occurrence of staff injuries while handling the roughly 188,000 nails used annually.

PASSING ON THE BATON

William emphasized the invaluable comfort of having Manuel remain involved in the business. Manuel's years of experience and industry knowledge have proven to be a priceless asset, offering insights into both successful strategies and lessons learned from endeavours that didn't pan out as expected.

Reflecting on his own journey, Manuel expressed gratitude for having a mentor during the business's early stages.

Transitioning into a more advisory role has presented challenges, particularly in relinquishing full control. Manuel acknowledged the diversity of approaches among team members and recognized that mistakes are inevitable. He emphasized the importance of learning from these experiences and moving forward collectively. Together, they will continue to grow and serve their customers with the highest level of quality and service.

In July of the current year, Lawmans Frame and Truss will mark its 30th anniversary, a remarkable milestone for a small, family-run enterprise. T

For more, visit www.lawmans.com.au

Frame it right! Back to basics

A well-built frame not only supports the building but also ensures its longevity and resilience against various environmental forces. By Craig Kay, national product engineer, Tilling.

he construction industry relies on a collaborative effort between architects, engineers, and skilled tradespeople to bring building designs to life. Among these trades, builders hold a pivotal position in translating architectural plans and engineering specifications into tangible structures. A well-built frame not only supports the building but also ensures its longevity and resilience against various environmental forces. This article serves as a guide for builders, emphasizing the importance of attention to detail, adherence to plans, and understanding of structural principles.

It is of utmost importance that the construction supervisor has a truly clear understanding of the requirements of AS 1684, because both the architectural and the engineering plans will invariably refer to the frame as being required to be constructed in accordance with that document.

The following are some guidelines for builders to follow to frame timber buildings correctly and avoid common pitfalls.

DOES THE FRAME MATCH THE PLANS?

Using the right materials and fastening schedules is critical. Watch for subtle changes in materials. Use the same grade and thickness of bracing panels that are specified in the plans. Table 8.18 in AS 1684.2:2021 provide capacities for some common bracing systems based on the wall framing having a JD5 joint strength group. The capacity of alternative bracing panels that are not listed in table 8.18 require proprietary design capacities available from the manufacturer, which may also require a specialised nailing pattern.

Framing details and fastening schedules often change from floor to floor, so doublecheck that the installed materials match the plans as the levels go up.

CHECK LOAD PATHS

A continuous load path is vital for the structural stability of a building. Builders must meticulously design connections and

framing alignments to prevent potential issues. The frame of a structure does its job—carrying the load of gravity, resisting wind or seismic forces—only when framing materials are correctly aligned and securely connected.

Anchor bolts and hold-downs are not interchangeable. Hold-downs prevent overturning of the entire wall assembly, while anchor bolts prevent sliding between the bottom plate of the wall and the concrete foundation. Builders should always follow the engineer's recommendations for holddowns. If the engineer does not specify the specific member fixing requirements, it is important that the builder designs the required fixing from Section 9 of AS 1684.

For anchor bolts, add large plate washers below the nut. A nut without a washer has little capacity, and large plate washers help reinforce the anchor bolt connection to prevent the bottom plate from splitting and/or failing.

Again, check the plans. Loads increase from the top down, and the framing, bracing walls and fastening may change to resist the load.

FOLLOW FASTENING GUIDELINES

Fasteners play a significant role in the structural performance of a building. Builders should adhere to specified nailing schedules, considering variations based on floor levels or specific structural requirements. Stagger nailing to avoid splitting the wood. Builders should double check AS 1684 for the nailing requirements of distinct types of bracing panels that may have been supplied, or if not referenced in that standard, the manufacturer's recommendations for alternative panel materials.

Prevent overdriving during construction and make corrective adjustments to the pneumatic nailer right away if overdriving is accidentally occurring. In some cases, consistent overdriving can reduce performance enough to require corrective action.

UNDERSTAND THE MATERIALS

Builders must have a comprehensive understanding of the materials they work with, particularly engineered wood products. Proper orientation and installation of panels, in alignment with their strength

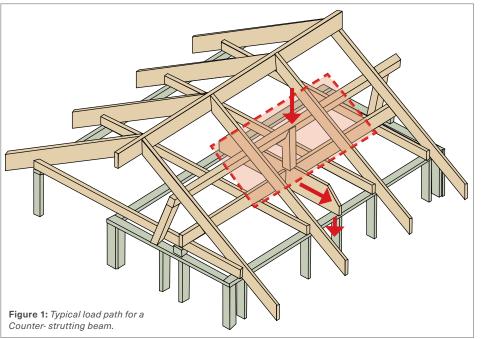


DIAGRAM: CRAIG KAY

axes and support systems, are essential for optimal performance. Particleboard, Plywood and OSB panels have a strength axis that typically runs parallel to the long end, but not always, so check the directional arrow on the panel to be sure. When building a floor, it is important to install the panel with the strength axis perpendicular to supports, and continuously across three or more supports.

Engineered wood products are extraordinarily strong when treated and installed correctly. But sometimes inexperienced builders compromise the structural integrity of these products with excessive or badly placed cutting, notching, or hole-punching. To avoid this, only alter I-joists, LVL and glulam according to manufacturer's guidelines, and never drill, cut, or notch the flange of an I-joist. For details on best practices with field alterations of these products, consult the relevant manufacturer.

LEAVE ENOUGH SPACE BETWEEN PANELS TO AVOID ISSUES LATER

Sheathing panels usually arrives on the jobsite in a very dry condition, and then the panels expand as the wood fibre takes up ambient moisture. When possible, acclimate panels before installation, allowing panels to respond to jobsite moisture conditions. To account for expansion, always space wood based bracing panels with a 2-3 mm gap, including at the ends of framing, when fastening.

'World leading resources about all aspects of designing and building with timber are available from the Wood Solutions website www.woodsolutions.com.au free of charge.'

CONTROL MOISTURE

Excessive moisture can impact wood products if care is not taken to keep materials dry. Do not let moisture accumulate and do not allow puddles to stand on wood panels for extended periods of time. Make sure that wood products are not in direct contact with concrete; concrete is porous like a sponge, and capillary action will pull water into wood that is in contact with it. Controlling moisture, including adequate ventilation of enclosed spaces, can prevent issues related to fungal growth, too.

TRAINING RECOMMENDATIONS:

Inexperienced builders benefit from comprehensive training and education on framing fundamentals. World leading resources about all aspects of designing and building with timber are available from the Wood Solutions website www. woodsolutions.com.au free of charge. Wood Solutions also provide free webinars on a regular basis and seminars in various locations over the country. These resources

provide practical insights and visual demonstrations to reinforce essential principles. Access to real time information has never been so readily available, and investing in ongoing training programs ensures that builders are equipped with the knowledge and skills necessary to uphold quality standards in construction practices.

CONCLUSION:

Builders play a crucial role in ensuring the structural integrity and longevity of buildings. By adhering to best practices in material selection, load path verification, fastening techniques, understanding of materials, moisture control, and ongoing training, builders contribute to the creation of safe, resilient, and durable structures. Collaboration between architects, engineers, and skilled tradespeople is essential for achieving excellence in building construction and meeting the evolving demands of the industry. 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







TimberTrader

ADVERTISE WITH US!

We work with our advertising partners to reach an audience of industry insiders with your message. Timber Trader News goes directly to suppliers, fabricators, architects, retailers and more to get you the best possible result, in print and/or digital.

Call Campbell Mc Innes for rates and opportunities. M: +61 406 223 007 E: campbellm@ttnews.com.au



AUSTRALIA'S MOST RELEVANT AND INSIGHTFUL TIMBER INDUSTRY MAGAZINE



Prepare now to face headwinds

Strategies, marketing and business planning. By Kersten Gentle

STRATEGIES FOR TIMBER FABRICATORS TO THRIVE AMID ECONOMIC TURBULENCE

In facing the challenges of a tough economic year, business owners must adopt a proactive and strategic approach, focusing on what they can control to ensure survival and readiness for a market rebound. Here's a few suggestions from FTMA Australia on how to navigate these turbulent times:

ASSESS YOUR BUSINESS VALUE AND MARKET FIT

Begin by thoroughly analysing your business to ensure you are targeting the right markets

> Focused financial and cash flow management is essential.

with a unique and compelling value proposition. Understanding your true competitive advantage is crucial for survival in a tough market.

METICULOUS FINANCIAL MANAGEMENT

A close examination of your finances will reveal areas where you may be unnecessarily losing money. Confronting these areas head-on enables you to plug the leaks and make strategic decisions that promote financial health. Operating with a zero-profit margin is unsustainable; identify and focus on profitable ventures even if that means scaling back on some activities.

PROACTIVE BUSINESS PLANNING

Do not succumb to complacency. Instead, leverage this period to explore new markets and business models, innovate processes, and improve efficiency. Planning for the

future during slow times allows you to pivot your business model swiftly and strategically when opportunities arise.

INNOVATION AND DIVERSIFICATION

Exploring new revenue streams or diversifying your offerings can be a gamechanging strategy. For instance, venturing into the timber flooring cassette market or the midrise construction sectors could open additional income sources. The FTMA Strategic Technical Committee is a resource available to members looking to break into these novel markets. Let us help you knock down the barriers to these new markets one by one.

MAINTAINING POSITIVITY

Tough times test the resilience of business owners. Maintaining a positive outlook can differentiate between capitulating to challenges or emerging stronger. Take inspiration from overcoming adversity rather than succumbing to it.

ENHANCED COMMUNICATION WITH STAKEHOLDERS

Clear, empathetic communication with customers and suppliers is more crucial than ever. Understand their needs, adapt to their feedback, and strive for mutual benefit even if it means reshaping relationships or service

models. This period is a chance to build stronger bonds with stakeholders based on trust and reliability.

CASH FLOW VIGILANCE

Cash flow issues are a common cause of business strain. Practices such as maintaining a cash reserve ratio from returns and securing comprehensive business insurance can provide the necessary cushion to tackle such challenges, allowing you to seize opportunities as they appear.

STRATEGIC INVESTMENT IN YOUR **BUSINESS**

Savvy investments in technology, training, and infrastructure—like enhancing your website—can energize your team and signal to customers that you're leading the field. FTMA can assist with affordable services like website designs to facilitate these upgrades without breaking the bank.

NETWORKING AND INDUSTRY COLLABORATION

Join forces with industry peers to exchange knowledge and strategies. Recognize that other fabricators are not the enemy; the real competition lies with alternative building materials like steel and concrete. Collective wisdom can be a powerful tool.

DEVELOPING A PLAN B

While optimism is essential, a pragmatic backup plan is prudent. Contemplate various scenarios and be prepared to implement contingency measures if the market disturbance persists.

During periods of economic hardship, it's crucial to stay tactical, innovative, and be adaptable. The FTMA 2024 National Conference, being held in Geelong on the 18 & 19 March, presents an invaluable chance for members to exchange insights and plot out a roadmap to a thriving 2025. If you haven't registered yet, please visit www. conference.ftmanews.com or contact Kersten Gentle on 0418 226 242.

If you are seeking additional information about FTMA's website design program, wish to consult with the Strategic Technical Committee, or need any extra support, please reach out. We stand ready to guide our members through the challenging and the prosperous times alike. T



email at kersten@ftma.com.au





Lateral torsional buckling

Know how to prevent lateral torsional buckling. By Paul Davis

ne of my young engineers recently had his 4WD Ute up on blocks and was using a very long lever out of a steel RHS to torque up the suspension. It didn't work so another RHS was sleeved on – and then another and another. It still didn't work so a flat bar was added, so in the end the lever was about five meters long! With he and his brother straining heavily down on it, suddenly, and in the blink of an eye, the lever simultaneously rolled over and viciously buckled sideways. All that pent up energy in the lever was released. Fortunately, nobody was in the way as the steel whipped sideways or else it could have done some serious damage.

HOW IT OCCURS

As a good engineer he instantly knew he had witnessed something that I had been banging on to him at work - lateral torsional buckling. Lateral torsional buckling occurs when a beam, subjected to bending about its major axis, experiences both lateral deflection and twisting.

If you want to get a feel for the timber equivalent, get yourself something like a 10m long, 300x45 timber I-joist sitting on bricks, block the ends from twisting and stand in the middle. Or, better still, don't do that because you will likely injure yourself as the beam lateral-torsionally buckles sideways.

PREVENTION AND DESIGN

This instability can compromise the overall structural integrity of any structure that includes beams. While the calculations are different for different shapes and material, longer span, deeper and narrower members are most vulnerable. However, that vulnerability goes away when the beam has intermediate restraints that stop it buckling; that timber I-joist is no longer unstable when it is part of a larger structure and flooring is attached.

Although you may not be designing or supplying them yourselves, steel beams often are part of an otherwise timber building structure. These timber elements provide lateral restraint. Steel floor beams depend on



Above: My youthful engineer applying his skills and about to learn a lesson.

the lateral restraint provided by the floor joists. Roof support beams benefit from lateral restraint by the roof rafters. Lintels, used above doors and windows, rely on lateral restraint from the surrounding timber

Steel lintels, however, are the most tricky one if they are not attached directly under the top plate but rather set down further in the wall frame. Whilst they may have timber jack studs attached to them, these studs are not capable of providing lateral restraint - in the absence of the beam you could just push a jack stud sideways. So, it is the beam supporting the jack stud, not the other way

End restraints are also critical for preventing lateral and torsional movement. If we went back to that example of standing on a long timber I-beam, and if the ends are not blocked from rotating then the whole thing will just roll over sideways. Like a domino sitting on its end, it is completely unstable. So, in the case of any beam, whether it is steel or timber, at some points along its length (generally at the ends) it must be restrained against rotating about is long-axis.

STRUCTURAL SAFETY

Structural safety in design is paramount. Designers of timber house components cannot overlook the interaction between timber and steel. These materials form a cohesive system, and any weakness in one affects the other. Therefore, even if the timber designer did not directly design the steel beams, they must consider the restraint needs of the entire system.

If in doubt, consult the steel design engineer. Collaboration ensures that both timber and steel work harmoniously, enhancing safety and preventing failures. The publication "Structural Steel in Housing" (third edition) provides valuable information on restraint practices.

If it's you that has designed the beam using some sort of software (it's out there), then one critical input that the software will ask you about the location of lateral and torsional restraints to the beam. Small changes in these distances can make for relatively big changes in beam capacity; so, your inputs must accurately reflect the real world situation of the beam. Remember, the strength of a structure lies not only in its individual components but also on the overall structural system that they form.

Archimedes said, "Give me a lever long enough and a fulcrum on which to place it, and I shall move the world." He was regarded as one of the leading scientists and greatest mathematician of ancient history. However, he

was wrong not to add that the lever should be suitably restrained against lateral torsional buckling! 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. Phone: 02 4576 1555 | Email: paul@projectxsolutions.com.au

SMART FRAME® POWERED BY INNOVATION

Smartlam GL19C

A higher stiffness means a more compact section.

SmartLam GL19C Keruing beams are high strength and dimensionally stable. GL19C beams have great load carrying capacity, superior fire resistance, and an excellent Appearance B finish.

Scan for specifications and conversion charts!





Ask your Tilling representative about our updated range of profiles.



Sales 1800 337 703 Technical 1300 668 690 www.tilling.com.au

HUNDEGGER

Innovationen für den Holzbau



Tactical superiority and production strategy.

Hundegger's TRUSSLinc® TACTical is more than a packaged "off the shelf" automated picking, cutting and material handling system.

TRUSSLinc® TACTical caters for:

- Timber storage
- Yield optimization
- Flexible and scalable
- Fast continuous processing

- Detailed marking
- Customized sorting
- Truss-by-truss delivery
- Data analytics, business intelligence and integration

Powered by Hundeggers CAMBIUM® software - this flexible, modular system meets the challenges of even the most demanding production environments.

To learn more, please see:

Hundegger Australasia

2 Hi-Tech Place Rowville VIC 3178 AUSTRALIA

Phone: +61 (0) 439 554 411 Office: +61 (0) 3 9763 5766 cph@hundegger.com.au Follow us on





More information incl. video