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Timber Trader

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Roof & Floor Truss Assembly



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Timber Trader

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COVER CREDIT: Courtesy Meyer Timber, inset courtesy FTMA

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.





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Association news

TABMA David Little

SAVE THE DATE

TABMA Australia has locked in the venue and date and we are excited to announce the 2022 TABMA NSW Awards Evening. After an interesting year, we will have the opportunity to celebrate our members' successes and catch up with each other. Please keep Friday 28 October 2022 free to join us in recognising and celebrating our members' hard work. This year the event will be held at the prestigious Le Montage, located in Lilyfield, which has beautiful views over the Parramatta River.

Nominations will open shortly with the usual categories, but we are also announcing two new categories. The REAL Difference Award and the Safety Culture Award.

The **REAL Difference Award** is open to any employer who would like to recognise one of their employees. The Award represents someone who is **R**egarded highly by their peers; **E**mbraces their company's values; **A**chieves goals and shows **L**oyalty to both their peers and their employer.

The Safety Culture Award, also new to this year's awards, is open to all TABMA Members and will be awarded to a workplace that has a positive safety culture. A workplace that demonstrates their leaders Nominations for the 2022 TABMA NSW Awards will open shortly with the usual categories, but we are also announcing two new categories.

are committed to the safety and health of their employees and a company that addresses WHS concerns and where *everyone* in the company feels committed and accountable for WHS.

For further information on the event, nominations or sponsorship, please contact **Alicia Oelkers alicia@tabma.com.au**

TTIA Brian Beecroft

ANNUAL WAGE REVIEW

On 15 June 2022, the Fair Work Commission minimum wage panel announced the 2022 annual wage review decision under the Fair Work Act 2009. The FWC has applied wage increases as follows:

- \$40 per week (5.2%) to the national minimum wage;
- \$40 per week to award wage rates up to and including \$869.60 per week;
- Increases of 4.6% to award wage rates

above \$869.60 per week.

This year's increase is the highest wage increase in more than a decade. In its decision the FWC took into account the position of various parties, the ACTU's claim of 5.5%, the 'peak' employer group positions – the AiG's 2.5% and ACCI's 3.0%, and the submissions of the new Federal Government, which argued for an increase of 5.1%. The FWC noted the 'sharp increase' in inflation, and the reductions in unemployment and underemployment. The FWC concluded that the changes in economic conditions justified the increase awarded, although noting the 0.5% increase in superannuation effective 1 July 2022.

The decision increases the national minimum wage by \$40.00 (or 5.2%) from \$772.60 per week to \$812.60 per week based on a 38 hour week, or \$21.38 per hour. For **award covered employees**, the minimum wage rates in modern awards up to \$869.60 per week were also increased by **\$40.00 per week**, and minimum wage rates above TTIA Members received updates to existing pay and allowance summaries outlining the impact of the wage review on awards that apply to the timber industry.

\$869.60 per week were increased by **4.6%**.

For most modern awards the wage increases were effective from the commencement of the first full pay period on or after 1 July 2022. Please note: The Superannuation Guarantee was increased to 10.5% from 1 July 2022.

TTIA Members received updates to existing pay and allowance summaries outlining the impact of the wage review on awards that apply to the timber products industry. If you are not a TTIA Member, you are invited to contact the TTIA Employers Hotline on (02) 9264 0011 or email ttia@ ttia.asn.au if you require further information re membership.



Above: Craig Kay advocating for better understanding of LVL at the MGA TMA industry breakfast.

MGA TMA Marie-Claire McKiernan

MGA TMA INDUSTRY EVENTS RETURN

After two-and-a-half years of COVID lockdowns and restrictions, it was great that MGATMA could return to face-to-face events and host our industry breakfast on June 22.

Members and industry connections attended the event which was held at The Views function centre in Port Melbourne. It



provided a picturesque venue as delegates arrived just in time to see the sun rise over Port Phillip Bay while enjoying their breakfast.

It was fantastic to see everyone warmly greet familiar faces and have in-person introductions to new connections. There were handshakes a plenty around the room – much better than the online platforms we've adjusted to using.

I welcomed everyone to the event and outlined several challenges that continue to disrupt the industry despite the country finally coming out of lockdowns and the easing of COVID restrictions.

I also talked to the important work that MGA TMA had carried out during the pandemic to support its members and to keep them operating in very challenging times, while also touching on the MGA TMA employment law team who continue to dedicate their time to assist members however possible.

President of MGA TMA's Management Committee, Peter Alexander, also addressed the group and spoke about the important role of the committee and how it continues to serve members by being an avenue for members to direct industry issues and seek resolution. Peter also spoke of the dedication that the MGA TMA team has for serving our members.

MGA TMA's Corporate Partners, AB Phillips and First Super have remained wonderful contributors to the industry and were invited to attend the event. First Super's Tony Papantoniou also addressed the group and spoke about voluntary superannuation contributions and changes to employer contributions.

We were lucky to have two guest speakers attend the event including Tim Woods from Industry Edge and Craig Kay of Tilling Timber.



Above: Getting together for networking was a key part of the MGATMA industry breakfast.

Tim is Managing Director of Industry Edge, which is Australia and New Zealand's only trade data and market analysis, intelligence and strategy firm in the fibre resources, wood processing, pulp, paper and paper products sectors. With more than 30 years' experience in the forestry, fibre, wood products and pulp and paper industries, Tim is a sought-after participant in strategic reviews, planning and implementation activities.

Tim expertly presented on Australia's current demand and supply issues, how inflation suppresses demand, the impact of low population on the industry and finding the bottom of the market, and then finished off with the outlook on timber supply and pricing.

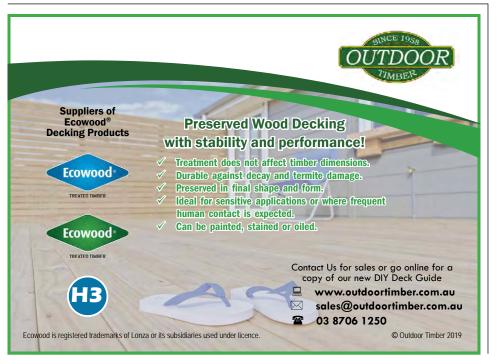
The audience was riveted to Tim's

presentation, with many great questions addressed by the audience at its conclusion.

The second and final guest presenter to speak during the breakfast was Craig Kay, Engineering Manager at Tilling Timber. Craig has worked for Tillings for over 27 years. He is incredibly well regarded in the industry with a number of our members personally approaching Craig for advice on timber issues.

Craig's content covered off LVL Australian Standards and NCC compliance. Craig believes that due to the emergence of new imported products into the Australian market, it is important that everyone is aware of the quality of products they are receiving.

He said: "Every piece of LVL from that manufacturer is a proprietary product and therefore must be accompanied with





Above: Tim Woods talking supply and demand.

comprehensive design information and span tables with the product. Simply quoting an E (stiffness) value is ignoring other mandatory characteristic values producers must provide for their LVL."

Craig also presented images of the contrasting ways LVL can be manufactured, from the fully CNC-controlled 'robotic' continuous flow production lines to the manual process production lines where small sheets of veneer are laid out before being cold-pressed and then hot pressed.

MGA TMA's next event is planned for late 2022 and it is hoped that more members and industry leaders are able to attend as staff shortages due to illness lessen.

After a significant hiatus from events thanks to the pandemic, it was great to be back together in a face-to-face setting, and we are excited about further networking opportunities for members in the future.

TIMBER PRODUCT KNOWLEDGE

MGA TMA in association with Timber Training Creswick (RTOid #4168), are excited to offer the short course: FWPCOT3302 Access and Provide Timber and Wood Product Information.

These are our final dates of the year and the 2-day timber product knowledge training will be held in Victoria on 8-9 September.

The course is designed for timber/wood product salespeople who need to provide comprehensive advice to customers on the correct timber to use for their applications.

Register today via https://www. mgatma.com.au/training/creswicktimber-training-access-and-providetimber-and-wood-product-information

ATIF John Halkett

CONTINUING TIMBER SUPPLY CHALLENGES

As previously advised, ATIF has been in discussions with officials from various Federal Government departments about timber product supply constraint realities that have arisen as a result of the invasion of Ukraine. In particular, softwood structural timber import shortages, not only from Russia but from Europe more broadly, are likely to result in a significant reduction in the capacity of the Australian timber supply chain to import sufficient quantities of both engineered wood products and solid softwood structural products for the foreseeable future.

To progress this issue, ATIF has had meetings with the Department of Industry, Science, Energy and Resources and the Department of Agriculture, Water and the Environment to discuss predicted softwood supply challenges, and possible government and industry actions related to both softwood and hardwood supplies. A meeting was also held with the Housing Industry Association to review timber shortages in the context of supply and building and construction trends.

The Forest and Wood Products report: *Future market dynamics and potential impacts on Australian timber imports* makes it clear that Australia will have a substantial shortage of softwood timber and says that on current trajectories Australia faces the prospect of being consistently unable to meet demand for new housing, because of a persistent and growing gap between demand and supply. By taking immediate action to establish new softwood plantations, Australia can mitigate the risk and increase its sovereign supply capability for its most critical and sustainable building resource.

ILLEGAL LOGGING REGULATIONS REVIEW

ATIF has also met with the International Forest Policy Branch of the Department of Agriculture, Water Resources and Environment over progress with the review of illegal logging regulations and related matters. Further advice will follow.

FWPA PERFORMANCE REVIEW

ATIF has made a submission on the performance review of the Forest and Wood Products Australia at the request of the Department of Agriculture, Water Resources and Environment.

The submission makes it clear that currently, and in the medium-term, issues around the ability of the timber product supply chain to meet the demands of building and construction activity will be the key issue for the industry. Work by FWPA in this area is considered to be essential. The ability of FWPA to articulate the benefits that plantations, natural forests and timber products to make a meaningful contribution towards the Federal Government's climate change targets deserves a greater focus and resourcing.

ATIF suggests that in the future the focus of FWPA should include:

- The need to identify additional international supplies of both softwood and hardwood timber products that are fit-for-purpose and comply with Australia's statutory requirements.
- The longer-term implications from the reality that when Australia needs additional timber product volumes, suppliers may have already found other more profitable markets, and may be reluctant to again revert to supplying the Australian market.
- 3. The need to address the lack of progress related to international linkages with researchers and timber industry bodies involved in standards and building codes. ATIF considers that significant benefits would accrue to the timber industry supply chain if greater effort was directed it 'harmonising' Australian standards with other comparable country specific standards.
- 4. Recognising the benefits of permitting Australian builders to be able to use alternate sizes, initiate research effort directed at allowing other than presently mandated dimension structural softwood timber to be utilised for building and construction.
- Additional work directed at the possibility of permitting timber grades to an overseas standard, but still meeting the requirements of Australian standards and building codes to be accepted for domestic building and construction use.

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



PHOTO: ALFIO MANCIAGLI/GETTY IMAGES

News in brief

Better homes are timber

TV favourite Adam Dovile is FWPA's new brand ambassador for The Ultimate Renewable campaign.

Trust is one of the most powerful forces for conveying a message. Forest and Wood Products Australia (FWPA) are counting on that with the choice of Adam Dovile, of Channel Seven's *Better Homes and Gardens* as the new brand ambassador for The Ultimate Renewable wood campaign.

Launched on 20 June, the \$2 million nationwide campaign emphasises the natural advantages and renewability of wood.

Dovile was chosen after a targeted search; his outgoing personality, popular television profile and hands-on experience as a builder securing the post. The resident builder on *Better Homes*, where his DIY projects regularly feature wood and wood products, Dovile won the fan-voted 2016 Logie Award for Best New Talent and is now an established audience favourite. Off-screen, Dovile is the director his own construction company specialising in renovations.

"I am excited and energised to be partnering with The Ultimate Renewable," said Dovile. "Promoting the renewability of the wonderful and versatile material we call wood has never been more important.

"As a builder, I'm passionate about encouraging people to explore the sustainable options in construction. What's great to see is the many architects, designers and specifiers already recognising the benefits of wood and embracing its use."

The campaign includes TV spots, social media videos, magazine ads, podcasts, billboards and advertisements in bus and tram shelters in locations across Australia.

FWPA is inviting all timber-related businesses to join The Ultimate Renewable Partner Program. This gives free access to exciting and easy-to-share assets to promote the natural and sustainable benefits of wood, as well as access to The Ultimate Renewable merch including t-shirts, chopping boards and bags for co-branding.

The TV ads will run across commercial networks, SBS and Foxtel and clearly explain the sustainable side of choosing wood for building to potential homeowners.

"Every piece of wood we use tackles climate change by storing carbon absorbed from the atmosphere by a growing tree. When wood is harvested today, it is replanted tomorrow. And that's why they call wood The Ultimate Renewable" Dovile explains in a voiceover.

An accompanying set of resources is available for download, reinforcing the video messages, such as the fact a softwood plantation can grow enough timber to rebuild a house frame in 150 seconds.



Above: One of the downloadable fact sheets to help educate customers on the benefits of wood.

FWPA's CEO Andrew Leighton says the decision to resume consumer advertising for The Ultimate Renewable was driven by increased interest in sustainability among Australians. "It is vital for our industry's competitiveness and longevity that we communicate the renewable benefits of wood. The Ultimate Renewable is a brand that equips companies operating in the forest and wood products industry with the marketing tools that help them achieve this," he says.

"We believe consumers are increasingly discerning when it comes to sustainability. Their ability to distinguish organisations that are genuinely committed will become sharper, and they won't be afraid to reject brands they consider to be unsustainable." **For more, visit www.tur.org.au**



Above: Magazine ads and billboards will also help spread the message of timber as a sustainable, renewable resource.

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Comfortable safety boots

The new Blundstone RotoFlex doesn't sacrifice comfort for protection and comes in a range of fits.

The number one reason most people give for not wearing proper PPE is that it's uncomfortable. Blundstone's new RotoFlex boot range has been designed to stamp out complaints, at least for footwear.

Lighter and more flexible than the standard boot and with a range of comfort features, RotoFlex comes in four Unisex models that are designed for feet ranging from petite to powerful and two Women's styles, which are designed on a narrower last for a more secure fit where needed.

"The RotoFlex boot system is unmatched in its combination of stability with the freedom to move," says Adrian Blandford, Blundstone's global work and safety range manager.

"This is achieved through biomechanic expertise, using the science of human structure and function and applying it to the requirements of a modern Australian work boot. The result is each component working together to create a new boot system that is safer, more comfortable, better performing and longer lasting. This is something the safety footwear market in Australia has been demanding for many years."

Designed in response to both customer feedback and a long research process, Blundstone breaks down the RotoFlex biomechanics system central to the design of each boot into four key elements: GripTek HD, Fortalite, Aircell and Softcell.

GripTek HD is Blundstone's all-new sole design, which provides all-day stability and comfort. Lightweight and durable, it's specifically crafted to make the RotoFlex boot suitable for hard surfaces and graded ground.

The Fortalite toe cap meets leading safety standards without compromising comfort or ease, or adding unnecessary weight. A patented polymer composite material provides compression-proof safety, so the toe cap retains its shape without restricting toe movement or all-day comfort.

The zoned AirCell footbed is constructed to activate ventilation, moisture control and

cushioning comfort as you walk and move. The material breathes and pumps air and is soft while still robust.

SoftCell, Blundstone's unique fit system, creates more room to move within a stable, comfortable foothold. It works with Blundstone's traditional half-sizes for feet that require added width to help keep you comfortable all day, no matter how much you have to do on site.

The six Rotoflex models with varied details, heights and colours are fit for purpose across a wide range of industries for hardworking men and women.

Available online and in selected stores from September 2022, Blundstone's RotoFlex are backed by a 30-day comfort and sixmonth manufacturing guarantee. And while the shoes are internationally famous now, the company is still based in Tasmania. **For more visit www.blundstone.com.au**



PHOTOS: COURTESY BLUNDSTONE

The six Rotoflex models with varied details are fit for purpose across a wide range of industries for hardworking men and women.



New Responsible Wood standard

Workshops around Australia and New Zealand will introduce the new standard to stakeholders.

ast December, Responsible Wood (RW) published the latest version of the AS/NZS 4708 standard for sustainable forest management – requirements. Now, RW sustainability manager Matt de Jongh is holding workshops and meetings throughout Australia and New Zealand introducing the new standard. So far, de Jongh has presented workshops in Tasmania, WA and Aotearoa/New Zealand, with upcoming events including Melbourne (3 August) and Mount Gambier (4 August).

"It is important to communicate with certificate holders on the key changes to the new standard and that there is a two-year transition period," de Jongh says.

These events have provided an opportunity for certificate holders to better understand the

new standard, but also facilitated important discussion and generated many questions and answers. RW has now updated its website, outlining the key changes to the new standard and a summary of questions and answers generated as part of the engagement with certificate holders – who are also encouraged to refer to the Transition Policy for the new standard at www. responsiblewood.org.au/resources/

"Certificate holders have until 10 March, 2024, to transition to the new standard," says de Jongh. In mid-May, PF Olsen Australia (pictured above) became the first RW certificate holder to be audited under the new AS/NZS 4708.

For more information, visit www. responsiblewood.org.au

Residential asbestos information

A new campaign is designed to protect buyers and renters.

The Asbestos Safety and Eradication Agency has launched a new information campaign informing residential property buyers, sellers, renters and landlords of their responsibilities and rights when it comes to asbestos when buying or renting a home.

Asbestos is still found in one in three Australian homes built before 1990, both inside and out. A known carcinogen, asbestos is dangerous when damaged or disturbed during renovation or repairs or when it's deteriorating. Knowing where asbestos can be in a residential property can help to keep owners and tradespeople safe.

Agency CEO Justine Ross says it is vital buyers, sellers, renters and landlords are aware of their rights and obligations when buying, selling or renting a home. "The campaign will encourage sellers to disclose the presence of asbestos in their properties, to minimise the health risks for buyers," she said. "Similarly, we want landlords to identify, disclose and manage the presence of asbestos in their properties, to minimise the health risks for renters. Landlords may also be eligible for tax deductions for asbestos testing and removal."

A series of downloadable factsheets and guides help all parties to find asbestos risks and sets out legal obligations in each state and territory, as well as how to arrange a residential asbestos assessment. **Find resources and more at www. asbestossafety.gov.au**

In brief

District Court Judge Wendy Strathdee has fined a timber company \$262,500 after a worker was fatally struck by a 580kg pack of timber at a central west NSW sawmill in 2019. While noting that steps had since been taken to prevent a recurrence, the judge recorded the conviction and sizeable fine because of "an inadequate system which did not properly address the risks." Find the full story at www.goulburnpost. com.au/story/7802443/timber-firmfined-262k-for-fatal-accident/

CoreLogic's Cordell Construction Cost Index (CCCI) for Q2 2022 showed national residential construction costs increased 10.0% over the 12 months to June 2022, the highest annual growth rate on record outside the introduction of the GST. The CCCI quarterly indexed growth rate of 2.4% is a repeat of the figures recorded in the first quarter of 2022, more than double Q4 2021 (1.1%) but below the 3.8% surge over the three months to September 2021 when lockdowns were having a more significant impact on domestic supply chains.

CoreLogic Construction Cost Estimation Manager, John Bennett, said Cordell figures show the cost of metal, structural steel, reinforcing, fixings and fencing are under pressure, adding to rising prices across timber products.

"Suppliers are frequently mentioning the impact of rising fuel, freight and electricity costs on their bottom line and these are significant additional challenges being faced by the industry," said Bennett.

CoreLogic Research Director Tim Lawless said, "Construction costs have increased more than 25% over the past five years, which has a knock on effect to builders' margins, budget blowouts for customers not on fixed price contracts and homeowners waiting for their projects to finish or even start in many cases... There's also no reprieve on the supply side either with a lack of materials, elevated fuel costs and broader inflationary pressures. All of these factors have an impact and are likely to push building costs higher for some time vet."

For more visit, www.corelogic.com. au/news-research/reports/cordellconstruction-cost-index.

Hyne celebrations continue

Key Hyne stakeholders came together in Brisbane to raise a glass in toast to the company's 140th birthday.



Above: Jim Bowden and Kelly Hyne at the Tattersalls Club, Brisbane.

As a salute to Hyne Timber's 140 years, timber industry stakeholders came together for a grand luncheon at the Brisbane Tattersalls Club. Representing Hyne Timber and the Hyne family, optimisation lead Kelly Hyne gave a short speech of thanks to the organisers, Jim Bowden and Dr Gary Bacon and recapped some of her memories.

"Reaching this milestone of 140 years is incredible and something I am extremely proud to be a part of," Kelly said.

"This is a year for my family to reflect on our ancestry, the trials and tribulations through wars, floods, financial crisis, bushfires and pandemics.

"More importantly, 2022 is our year to celebrate 140 years of growth, innovation and sustainability, all of which, could not have been done without the support and hard work of our team members, including those who have come before us, key stakeholders, and industry supporters.

"Personally, I have lived and breathed timber for as long as I can remember. When I was a young child, my father, Chris Hyne, used to pilot my siblings and I in a small plane to visit our sawmills out west. My father was there for work, we were there to explore; sawmills quickly becoming our playground, getting lost in the intrigue and adventure.

"We'd go on family walks through rainforests where my father would point out the various species, explain their identifying features and make a game of it, to entertain us along the way. And we'd hear stories, such as how my grandfather, Lambert Hyne used to send his young son, Uncle Warren, down the railway line to spy on barges arriving at the then Wilson Hart sawmill."

Kelly talked about the difficulties in previous decades of being a woman in a maledominated industry, and how it pushed her to follow a managerial career outside the company. "Just two years ago, I returned to Hyne where I believe I was always destined to end up," she said. "I currently work in a technical role as Optimisation Lead at the Tuan Mill where manufacturing is no longer a male dominated domain. I am proud that our 140-year journey is one of progression including embracing diversity with more and more women choosing great careers in manufacturing, some of these outstanding women I have the great privilege to work alongside and learn from."

The luncheon also championed retired Hyne Timber site manager Charles Achilles, 88, who was unfortunately unable to attend in person. A sawmiller for most of his life, Charles managed Hyne's hardwood and cypress sawmill at Chinchilla on Queensland's Western Downs from 1974 to 1984. He recalled Lambert Hyne, who joined his father in the company in 1921 and served until his death in 1985, had a "soft touch" for the Chinchilla mill.

"He was a constant visitor, chatting with staff and often driving out to logging camps," Charles said.

At the close of the event, Jim Bowden was presented with a fitting tribute: a handmade timber pen box in recognition of the many words of support he has penned for the industry in over 60 years of journalism and editorial. Jim fondly recalled interviewing Lambert Hyne in his office in Maryborough for Hyne's centenary, among many other milestones over the years.

"We'd go on family walks through rainforests where my father would point out the various species and explain their identifying features."



Above: Kelly Hyne addressing a group of Hyne's long-standing industry stakeholders.



AUGUST

HIA NCC SEMINAR

NCC 2022 features substantial amendments. HIA's Building Services team will present an in-depth analysis of the incoming changes in a series of seminars around major Australian cities, costing \$132 for members and \$187 for non-members. The first is on 18 August in Tweed Heads. **Find your nearest seminar** following the links from www.hia.com. au/awards-and-events

WOOD SOLUTIONS WEBINARS

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

SEPTEMBER

PREFABAUS 2022 CONFERENCE

Leading voices on prefabrication methods and technology as well as those excelling in the field will speak at the Brisbane Conference and Exhibition Centre, on 5–7 September. **Details at www.prefabaus.** org.au/conference-2022

AUSTRALIAN BUSHFIRE BUILDING CONFERENCE

After two years of virtual-only events, the only national event on building for bushfires is back on 14–16 September at Fairmont Resort & Spa Blue Mountains, Leura NSW. From \$495 (or \$275 for those who still prefer virtual events), it's two days of the country's best professionals talking planning, designing, building, landscaping, consulting, regulating and certifying buildings in bushfire-prone areas. **Full details at www. bushfireconference.com.au**

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arxada

Each generation will reap what the former has sown.



Timber offsite

The long-awaited 2022Timber Offsite Construction event delivered a wealth of practical advice and inspiration from a global set of experts.

Perseverance was the keyword for Kevin Ezard and his team organising the Timber Offsite Construction Event that recently ran in Melbourne. Multiple planned dates had to be put aside thanks to waves of Covid. In the end, a hybrid model of in-person and virtual speakers and attendees brought the widest possible audience to two days of up-to-the-minute inspiration around offsite construction, with opportunities and problems discussed along the way.

The sessions opened with Anthony Thistleton, James Fitzpatrick and Karl-Heinz Weiss delivering three addresses around the theme of Building Design Influences. All three focused on the fact that construction and its related industries represent a major carbon cost, and one that could successfully be lowered with better designs and planning, centring sustainable materials and working to better re-use at end of life.

Thistleton pointed out that around the world a huge number of concrete-framed buildings were nearing the end of their lives and that the cost of demolition and rebuild is going to be enormous. Instead, he offered a glulam and CLT solution that maintains much of the concrete frame but extends and renews the building.

A Building Project Panel looking at Galkangu Bendigo GovHub and The Bond Norwest followed, where putting theory into real-world practice was discussed, including James Fitzpatrick talking about calculating carbon for all the inputs in The Bond Norwest. His earlier talk had discussed the value of an accurate data set for common building products and the difficulties his team had found in getting authoritative figures when designing their own carbon calculator.

The afternoon sessions kicked off with Construction Productivity. Nick Hewson discussed how DfMA principles and an openness to hybrid construction has helped Viridi Group increase the amount of timber in projects it has been building and ease the transition for builder partners and clients. He described the value of Viridi's 'kit of parts'

Tips included the value of coating mass timber for UV protection in Australia. approach, which adds more steps but overall simplifies design and manufacturing processes and allows for faster builds.

Phillip Tondl and Mario Savva followed, both providing extensive practical insights. Savva's guides and warnings around installation alone would have been worth the ticket price for many.

The afternoon Building Project Panel looked at Geelong Civic Precinct and Adelaide Oval Hotel. Among the practical tips offered were the idea of a 'timber freeze' date after which no further changes to the timber design can be made in order to allow for procurement in these strange supply times and the value of coating for UV protection in most of Australia.

In-person attendees had the benefit of a catch-up/network with professional colleagues and perusal of the many exhibitor stalls between and after sessions over snacks and bevvies. Alas, those of us dialling in had to make do with whatever was in the pantry.

The second day was no less informationpacked than the first. Kicking off with a session specifically aimed at fabricators, Manufacturing & Technology opened with Entekra's Gerry McCaughey talking about



Above: Jo Lees from Hines Australia.



Above: Hines Australia's interior fitout for its 14-level prefabricated timber office tower at 36 Wellington St.

the way in which the company has grown to become a major producer of prefabricated homes, which can be framed to plate level by four men and a crane in just over six hours and complete and ready for following trades in three days. He made the cogent point that a major benefit of offsite construction is the worksite itself: that level of comfort can make your build the most attractive job for trades, who will choose you first in times of shortages.

Ola Skoglund followed with a discussion on Randek Robotics and how the company's scalable approach can deliver solutions for multiple needs, with John Bowen rounding out the session talking about Timbertruss's work (and making a series of excellent points around financing and investment).

The Building Project Panel that followed featured Tim Newman of Timber Building Systems and Ben Griffiths of Henley Ready Built Properties discussing how they have refined their offers to the local marketplaces and the very practical approaches they have found necessary to shift that market to a point where it understands what their businesses are offering.

This was followed by a set of principles from the major partners talking about their delivery of Oakhill College Innovation Hub, with Russell Garnett of Urban Revolutions frankly explaining what led to the hiring of the successful contractors, not because they were the cheapest – they weren't – but because what they offered showed real expertise and was demonstrably better.

The second afternoon took the program out to a broader overview with Global Wood Building Projects. Danielle Savio from Multiplex gave a run-down of the company's work in mass timber, including its goal of driving down the carbon costs of construction. Successful builds around Australia, many of them in the university sector, were discussed, as were some significant tall timber structures from other global firms.

Tyson Infanti, who has moved to Hasslacher/HESS Timber from XLam, described a series of their projects but also specialised products the firm has developed, including X-fix timber-to-timber connection system and Hasslacher BauBuche ultra-highstrength glulam, as well as their freeform glulam and CLT products. The rolling, organic structures produced with some of these materials were among the most impressive images of the whole event.

Jo Lees from Hine rounded out the session with a highly hands-on discussion of the company's 36 Wellington St build, notable for its strong emphasis on locally produced materials which resulted in 37%



Above: (from top) Anthony Thistleton talked on how timber can help save the planet; James Fitzpatrick pointed out the market for carbon data sets; Nick Hewson's 'kit of parts'.

less embodied carbon than a standard office building of similar size.

The final session looked at two of the biggest timber projects in the world, the Atlassian Tower in Sydney and Nanyang Technological University Singapore. Both show the benefits of hybrid structures, solving some issues with traditional steel and concrete while allowing timber to take a starring role that delivers both aesthetic benefits and marked construction/carbon savings. Current planning and procurement challenges were acknowledged on both builds, along with a series of innovative and adaptable solutions

For those who were unable to attend this year, several of the above topics will be covered in further detail in future issues of TTN. Meanwhile, keep an eye on our calendar pages for the next event. **T**



The state of work

The latest international Gallup report on global workplaces sheds light on worker engagement. **By Peter Maguire**

Global consulting organisation, Gallup, recently released its State of the Global Workplace 2022 Report, reporting on its latest findings from its annual survey of over 160,000 employees across over 160 countries.

It explores how employees feel about their work and their lives through the lenses of:

- Employee engagement;
- Life evaluation;
- Daily negative emotions;
- Environmental, social and governance factors and
- Job market and mobility.

Findings are reported on globally and by regions, one of which is Australia and New Zealand.

Gallup believes that bringing the voice of employees (on how they feel about their work and their lives) to the decision-making table is important in helping global leaders to solve their most pressing problems.

So how is life at work going for workers across the world?

Gallup CEO Jon Clifton says, "According to the world's workers, not well. Gallup finds 60% of people are emotionally detached at work and 19% are miserable." That means that only 21% of employees are identifying as being really engaged at work.

Gallup estimates that low engagement costs the global economy US\$7.8 trillion and accounts for 11% of GDP globally.

Clifton quips: "Improving life at work isn't rocket science, but the world is closer to colonising Mars than it is to fixing the world's broken workplaces."

Is that because of the pandemic?

Not surprisingly, there was a bit of an increase in the level of stress that people reported. Additionally, the trend of employee engagement incrementally improving that had been there pre-pandemic paused in the last couple of years.

So the pandemic has had an impact but there were also some significant regional differences – Australia and New Zealand experienced a 6% increase in thriving while Europe dropped 5%.

Then consider that the level of employee engagement had only reached 22% globally pre-pandemic and it has only slid back 1% through the pandemic years.

So the fact that we might have had more disconnection through remote working or challenges in hybrid working aren't

necessarily the biggest issues. As the report says: "It's not just the hours, imbalance or location that leaves workers unhappy. It's what's happening at work that makes them miserable."

Why is employee engagement low and what can we do about it?

Gallup says that the biggest factor is unfair treatment at work followed by unmanageable workload, unclear communication from managers, lack of manager support and unreasonable time pressure.

All of those factors relate to how you manage your people.

As for the fix, Gallup says that the real fix is simple – having better managers who:

- Are better listeners, coaches and collaborators;
- Help colleagues to learn and grow;
- Recognise their colleagues for doing great work and
- Make their colleagues feel cared about.

What's the payback if you do this? According to Gallup, business units with engaged workers have 23% higher profit than those with miserable workers. Investment in wellbeing is actually good for business.

How do Australia and New Zealand stack up? There are some interesting numbers.

On the positive side:

- The percentage of ANZ workers who are thriving increased by 6% to 63%, the highest in the world compared to the global average of 33%.
- 55% of ANZ workers are living comfortably on present income compared to the global average of 22%.
- 59% of ANZ workers feel that it is a good time to find a job compared to the global average of 45%.
- Only 38% of ANZ workers believe that there is widespread corruption in businesses located in our countries compared to the global average of 74%.
- Only 14% of ANZ workers felt anger for a lot of the day yesterday compared to the global average of 21% and
- 36% of ANZ workers reported feeling worried for a lot of the day yesterday compared to the global average of 40%.

So ANZ workers appear to be doing very well comparatively, have more confidence in business integrity and their job prospects and are marginally less worried. On the flip side:

Only 17% of ANZ workers are engaged

compared to the global average of 21%.

- 47% of ANZ workers said they felt stressed for a lot of the day yesterday compared to the global average of 44%.
- 45% of ANZ workers are satisfied with efforts to preserve the environment compared to the global average of 61% but notably the New Zealand figure was 62% and the Australian figure was 41%.
- Only 7% of ANZ workers felt that they were treated with respect all day yesterday compared to the global average of 11%.

So, notwithstanding the fact that ANZ workers appear to be better off than those in other countries, the level of employee engagement is lower among ANZ workers and they get a bit more stressed than others.

The environment figure shows Australia

lagging behind the world unlike New Zealand which is slightly ahead of the global average.

What should you be doing about it?

Firstly, believe the data – employee engagement and investment in wellbeing definitely make a positive difference to people's happiness and organisational performance.

Secondly, teach your managers to be coaches and implement a continuous feedback process rather than the traditional retrospective performance review processes that just don't work.

Thirdly, listen to your people and take on board their messages about the positives they see in working for your business and what could make it even better. **T** *Reference: State of the Global Workplace* 2022 Report, Gallup

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.



Timber Trader

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

Working togethe

TABMA WHS

With a focus on practical and worker-focused initiatives for the timber sector, TABMA's new GM for training explains what's on offer for keeping your staff safe. **By Louise Kinloch**

e all want to keep our staff safe, **V** improve productivity and reduce injury in the workplace. But workplace health and safety isn't as simple as that, there are so many things to consider and government regulations to follow. TABMA's services have a focus and have been developed to help assist industry with WHS. We offer short courses and formal gualifications, we have a WHS division to offer advice and help you understand your obligations and as the industries biggest employer of trainees and apprentices our group training organisation understands that looking after young people's safety in the workplace may take a little extra care

TRAINING IN THE WORKPLACE

TABMA Training focuses on quality training outcomes that lead to career pathways for

our learners and a skilled and capable workforce for our industry customers across Australia.

Workplace health and safety training is essential in every organisation, no matter how big or small. As a business owner or employer, you're responsible for maintaining your workers are accurately trained on how to do their jobs safely.

Through training your employees in WHS, everyone can have a better understanding of how their work environment is set up as well as their WHS responsibilities while at work. With this knowledge, workers will feel more responsible in performing their duties and take any safety precautions that will help them avoid accidents while at work. Furthermore, WHS training assists with creating a safer, better place to work, reduces stress levels and empowers

Wood dust and formaldehyde are classified as Group 1 carcinogens by the International Agency for Research on Cancer (IARC).



Above: Wood dust represents a major but under-recognised safety risk in the industry.

workers to feel safe and comfortable in their place of work. When workers know their employer cares and wants to protect their safety, they feel happier and more valued.

TABMA training can provide both accredited and non-accredited WHS training to your business. We can offer tailored training solutions to meet the Workplace Health and Safety needs of your business. TABMA training delivery methods include face to face, facilitated online or a blended delivery model.

For more information on how TABMA Training can assist your business please email us at info@tabmatraining.edu.au or call us on 1800 822 621

TABMA WHS - WOOD DUST

From our WHS officer's travels around Australia, he has noted that the relevant State WHS Regulators are taking a closer look at wood dust.

Wood dust and formaldehyde are classified as Group 1 carcinogens by the International Agency for Research on Cancer (IARC). When wood products are worked on, dust and formaldehyde are released into the air. Prolonged exposure and inhalation of these products may cause cancer of the nasal cavity, sinuses and nasopharynx, as well as leukaemia. It is estimated that around 16% of cancers of the nose and nasal sinuses in men and 2% in women could be due to exposure to wood dust.

Wood dust exposure is highest amongst woodworking machine operators, cabinet makers, furniture finishers, carpenters and workers employed in the manufacture of wood products. You may be exposed to wood dust and formaldehyde if your work involves cutting, sawing, routing, turning, sanding or milling wood, EWP or pressed wood products.

Our WHS Officer, Dean Wilson has put together a few tips to help assist you.

- Ensure your employees are wearing correct PPE. Depending on your processes, different control measures will need to be implemented to reflect the wood dust produced.
- Good housekeeping. Keeping the workplace clean and tidy is a control

measure to reduce dust in the workplace. Avoid using compressed air and sweeping, as this can disturb the dust. Where possible, use a filtered vacuum.

- Ensure that equipment that generates dust has sufficient extraction systems and where possible, conduct all wood processing in a well-ventilated area.
- If you are unsure if your levels of dust are safe or not, you can have your workplace air quality monitored.

If you would like more information on wood dust or anything WHS, **please contact Dean at dean.w@tabma.com.au**

LOOKING AFTER YOUNG PEOPLE'S SAFELY AT WORK

As a host or direct employer of young people, you must remember that young workers have no or limited work experience and so can often be at increased risk of workplace injuries.

While employees must take safety seriously as a part of their employment obligations, incidents can occur when they are rushing, distracted or haven't been inducted. It is the employer's responsibility to ensure their workforce is safe.



Above: Training young staff well and prioritising their safety encourages long, successful careers.

There were 120,355 serious workers' compensation claims in Australia in 2019-20. Employers who don't regularly review their procedures and keep up to date with Safe Work Australia recommendations and legislation are at high risk of staff injuries. Of those 120,355 claims in 2019-20, 31% were for illness and diseases. Of these, mental health conditions were the most common. It is important to have regular catch-ups with employees to check in on their safety and wellbeing.

Young people are at risk of injuring themselves in the workplace, as they are still learning what it means to be safe at work and how to identify hazards. They may need reminders why they need to wear PPE and on the importance of inductions especially when working with machinery and equipment.

Regular safety talks are an excellent way to remind young workers as sometimes it will take some time for them to fully understand what it means to be safe in the workplace and how to follow procedures. Please remember young people need supervision and feedback when performing tasks on the job.

To discuss the issues around apprentices and trainees further, or if you're considering adding a young person – or more than one – to your workplace, please contact TABMA on 1800 822 621 for further information. T





Silver linings

Magnum Board delivers a lining option that lives up to the higher safety standards of most timber buildings.

We're all familiar with the joys of working with timber: it's a fairly easy and forgiving building material and, aside from not inhaling dust and taking basic protective precautions, there are few worries around working with it.

McCormacks Australia has been supplying timber to the local market for over 20 years and recently added Magnum Board to their offer. The reasoning for the addition was simple: many of the lining boards on the market detract from the ease and safety of timber-framed building.

A large number of popular lining boards, particularly for walls and wet areas, are based on cement products. They're heavy to work with and, worst of all, have a high silica content. This means the dust from cutting them represents a cancer risk not just to the people working with them, but to those nearby on site and anyone later coming in contact with contaminated areas and clothes.

Curtin University recently handed down the results of a study commissioned by the ACTU. It looked at the roughly 600,000 Australian workers currently exposed to silica dusts (only 4400 of them stonemasons working with reconstituted stone) and showed more than 10,000 of them were expected to develop lung cancers from exposure to silica dust. Additionally, 103,000 are expected to develop silicosis, which has varying degrees of impact on lung function.

Victoria has new OHS regulations designed to cut the risk, but they are not Australia-wide and too many workplaces either don't understand the issue or think it's only related to composite benchtops.

Substituting non-silica-based boards, like Magnum Board, removes the problem at its source. Made from magnesium oxide and

"As a tradesman, if a product is half or twothirds the weight of what you've been taught to use, why wouldn't you use it?" wood fibres, with no harmful binding agents, it's a very low-risk material that can be used for walls, floors and more, in wet or dry areas. And, unlike standard plasterboards, it stays strong when wet and will not grow mould, even after floods.

LIGHTWEIGHT AND STRONG

Robert D'Ambrosio, managing director of D'Ambrosio Construction Group, has been using Magnum Board on many of his recent builds. He appreciates the improved dust safety, but has more basic reasons behind his preference for the product.

"It's just easy to work with," D'Ambrosio says. "In terms of weight, compared to competitors' materials, it's so much easier on your body and on your tools. I use my standard Festool track saws with the vacuums and a composite blade and it cuts perfectly. It's a pleasure to work with."

D'Ambrosio is currently using Magnum Board on a \$600,000 renovation and is in the process of testing it for use on a \$2 million rooftop garden project. "We do a lot of lining and cladding," he says. "We've used most of the products on the market: competitors' cementitious boards, composites, plaster, recycled hardwood...

"The Magnum Board is easy to work with and it's multifunctional. So instead of ordering a range of different products, you can do a single order and lay it where you would have used the old particleboard flooring and then transfer straight through to your wet areas."

For the upcoming rooftop garden job, D'Ambrosio plans to use the board in conjunction with root repelling and waterproofing systems, so currently has the product out for testing with two waterproofing suppliers. "One's already approved it and we're just waiting to hear back from the other," he says.

The one thing D'Ambrosio is baffled by is that magnesium oxide board isn't used more widely. "I can't believe it's taken so long for a product like this to come to the market," he says. "It's been around in the US and New Zealand for a while, from what I've been told. I think Australia is a little bit behind. It might be up to the younger generation of builders like me to drive it, because we're looking for the best option rather than sticking to what we know."

With a price point around or below the alternatives, the switch to Magnum Board has been an easy choice.

"I think it's like any tradesman, you've only got a short lifespan for your career," D'Ambrosio says. "And if a product is half or two-thirds the weight of what you've been taught to use, why wouldn't you use it?

Selling the change to his customers has been easy, too. "I'm a carpenter by trade, not just a builder," says D'Ambrosio. "So I'm quite hands on. I try to avoid products that have negative impacts or come from companies that are doing the wrong things for the environment or the wider industry.

"A lot of my customers are really conscious of the same issues, so it's something I can sell on. They really respond to stories like the Magnum Board linings and all the recycled and sustainable materials that I prefer to use."

HEALTHY HOMES

"We brought Magnum Board to the Australian market as part of our focus on health-based building," says Julia Hall, CEO of McCormacks Australia.

"But if builders are using it because it means they have less wear and tear on their bodies and tools at the end of the day, that's another good reason!"

The health-based building standard was developed by Robin Curtis in New Zealand and aims to deliver dry, mould-free, wellventilated and well-insulated homes that suit ANZ climates.

Health-based building aims to deliver dry, mould-free, wellventilated and wellinsulated homes.

Magnum Board plays a central role in the standard. In itself, the product is CO₂ negative and contains no toxins or other dangerous materials (magnesium oxide is a common health food supplement in its more refined form), but it's the board's qualities in a structure that really shine.

It's mould- and insect-proof, noncombustible, vapour permeable - so your walls will breathe, but still has a high water resistance. In the US, it's commonly used in flood-prone areas like Florida, because it can be simply hosed down and left in place after inundation, with no mould risk.

McCormacks supplies the product in a range of lining products, flooring underlay, weatherboard, rigid air barrier and more.



"What attracted us was the safety focus of the board, both for the homeowner, but also for the builders and tradies working on that home," savs Hall.

"Too often, building products are a danger to the people working with them, and we wanted to remove a major dust risk. The fact that we've ended up with a versatile, economical and extremely high-performance product is a bonus." T

For more information, visit www. mccormacksaustralia.com.au/ magnumboard, www.dcgrp.com.au or www.healthbasedbuilding.com.au



Phone: (03) 9701 2777 Email: sales@mccormacksaustralia.com.au

FEATURES / CASSETTES



Swift rafters

Roof cassettes are a valuable addition to the offsite production offer. We talked with Thomas Horsfall of Meyer Timber's NSW team about their forays into the field. **By Donyale Harrison**

What sent Meyer Timber into roof cassette fabrication? As Meyer project engineer Thomas Horsfall puts it: "The philosophy was to complement the existing F&T industry. What currently wasn't being prefabricated in terms of the whole house?"

This practical approach has both driven a new revenue stream for the Meyer team and improved workflow for their builder partners, all with zero major investment in new machinery or skills so far.

"They're an extension of what we've been doing with our floor cassettes," says Horsfall. "That first floor was an obvious gap we could fill, but then we started getting questions and realised there were other areas.

"That's where rafter cassettes came in. Rather than lugging up rafters to roof level one at a time, for many roofs, the simplest option is a cassette of rafters that are held together with roof battens. They have a rim beam at the end and are craned into place. You reduce all that manual handling, which has safety benefits, and you have a much, much faster install."

The cassettes use standard construction materials with I-joist or LVL rafters and can meet most structural design requirements.

Horsfall says, "One of the big advantages over trusses is you're not manufacturing a profile, you're just taking off-the-shelf profiles, and screwing them together into panels. If needed, as an optional extra we can prebrace them with 6mm OSB as well.

"In terms of whether you go with an I-joist rafter cassette or LVL, I-joists are a bit more cost effective and also a bit lighter. But then the advantage of LVL is, if you've got, say, complex eaves details they can be machined in pretty easily in a solid profile."

The cassettes are checked for accuracy before leaving the plant and then craned into position on site using a standard 20-tonne crane in most cases. In a matter of hours, the roof is done. "It's just a bunch of boxes that need to be dropped in place," says Horsfall.

"So it's a less-skilled job than a standard roof install. In terms of the roof types, generally you're looking at flat or skillion roofs. If there's a raked ceiling, that's even better, because then you can direct fix to the underside of the cassettes. But even if you've got a flat ceiling below, it's just a matter of running ceiling droppers down."

CLOSED PANELS

Standard roof cassettes remove several time-consuming steps on site and shift all the complexity into the planning stage where it is cheapest and easiest to work out. In addition, Meyer offers a closed panel option for specific customers.

"It's an 'advanced' version of the cassette, which we've developed to a recipe given to us by Blue Eco Homes," Horsfall says. "They use an insulated panel with a watertight membrane on top and a 15mm OSB4 airtight layer underneath. They're designed to meet Passivhaus certification, which is a very rigorous standard to meet in terms of airtightness. We need to achieve a very high standard for fit, which is where building as much as we can in the factory-controlled conditions really comes into its own."

Joe Mercieca, owner of Blue Eco Homes, started building sustainable homes about 20 years ago. "We saw issues with the current building stock in Australia: mould, poor thermal performance, homes that weren't comfortable and cost a lot to run," he says.

A hunt for the best solution brought his team to Passivhaus, then saw them refining their processes.

"We realised that prefab met a lot of our needs, but for a long time that meant going overseas, because no one here was doing what we wanted," says Mercieca. "Then I spoke to our framing supplier who buys their timber from Meyer and he told me they have a design team, so the three groups sat down and said, 'Let's give this a crack.' Now Meyer does our floor and roof cassettes and another company supplies our prefab walls."

Most of the work at Blue Eco Homes involves custom builds, so every project is a little bit different. Mercieca says, "When the projects are coming up, I send them the drawings in advance, then we sit down around the table and thrash it out, looking for the best ways to build the cassettes at the right price point that will also deliver the best results in the finished build.

"With the prefab, where making a building watertight was taking three-plus months, we're now doing it in three *days* on site for the majority of our builds."

The Blue Eco onsite crew of carpenters and apprentices fixes each panel into place once it is craned in. "It's just a matter of joining the sections together and we're watertight," says Mercieca. "We're not exposed to the elements, we're airtight, insulated and basically ready for services. It speeds up the whole build time and it makes a more pleasant site for the following trades."

In wet years, cassettes provide more than just comfort. Mercieca says, "I think in all the wet weather that we've had, we've barely had



Above and opposite: Roof cassettes are finished to order off site, then craned directly into place on site.

"With the prefab, what was taking three-plus months, we're now doing in three *days* on site for the majority of our builds."

a week of not being able to work. That's amazing. And that's an install team of six on most builds, or four or five on a smaller one.

"The other plus side of this is the health benefits of the actual house. I've seen wall frames and roof structures sitting in all this wet weather for six to nine months. And they're just black mould, whereas our frames usually won't see any water."

As with most offsite construction, there is more time spent in preparation, however, because everything is checked multiple



Above: Closed cassettes for Blue Eco Homes also include insulation, finished with a watertight membrane.



Above: Meyer's closed roof panels manufactured for Blue Eco Homes.

times before production commences, there is a high degree of certainty for the final fit.

"Then it's only a matter of weeks from production to landing on site," says Mercieca. "Like everyone else, we've had supply chain issues, but Meyer being a materials supplier and having a range of options has helped lessen the impact.

"Having people who are really experienced in timber builds, like Thomas, and with access to good engineers, like George Dolezal, has made them fantastic partners. We just sort out issues as they arise."

Mercieca points out that planning extends beyond the cassette design for the build team. On some sites there is room for full delivery and storage, but others are tight and require a finely planned delivery and craning schedule settled in advance.

"When it works nicely it's just seamless," he says. "We erected a whole house – walls and roof – in 12 hours. That's fantastic. And since the cassettes are still timber-based, any small misalignments are easily sorted on site by the install crew."

GROWING WITH THE MARKET

Ironically, closed panels have stayed a small part of the Meyer offer. "We're not offering them widely because we're not set up for it yet," Horsfall says.

"We wanted to see if we could get it to work, but they're best made on a butterfly table. Which we don't have. So we're doing it the hard way, at the moment."

The 'hard way' sees the panels put onto trestles and the underside of each worked on from below using mechanics' trolleys.

"It's not ideal, but it gets the job done," says Horsfall. "I'm glad to have an office job! If the demand is there, we'll tool up for this in the future with butterfly tables. It's still early days.

"The other thing that was challenging about what we've done for Blue Eco is adding valley roofs, which is much more complex geometry, because you've got compound cuts coming into the valley. But we were able to design that in 3D and send it straight to our existing CNC saw for cutting. That just needs good software and people who understand geometry."

For now, Meyer's standard rafter cassette market is open panels, which are a straightforward evolution from their existing floor cassette offer. "They just slot straight into typical construction methods," Horsfall says, "so it's the same story for the install crew, as it is for us: skills they already have, just a new system."

While the builders using the rafter cassettes have given glowing feedback, the wider market has been slow to adapt.

"We're a conservative industry," Horsfall acknowledges, "but I think that sometimes we need to look at the bigger picture. Site costs can be significant, and on some of our bigger projects we've heard their interest costs alone are in the order of \$5000 a day. Getting builders to think 'What's a day worth to me?' and then factor the cost of their time into their planning will be what sees this sort of construction grow."

Meanwhile, the Meyer team is excited about pushing the boundaries of what's possible. "They like innovating, so even when there are days where they're working on their backs, they're still excited and they're all still turning up," says Horsfall.

"We recently ran a barbecue for one of our builders and the guys from our production came on site to cook the snags and watch the install.

"It was great to see how quickly everything went up and how our cassettes took the roof from a specialty job to something more people could do. In busy periods like this, it frees up our F&T partners and specialist installers for the more complex jobs." **T For more on roof cassettes, visit**

www.meyertimber.com.au and for more on Passivhaus, visit www.blueecohomes.com.au



Above: Both closed and open roof cassettes fit onto a standard truck for delivery.



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FABRICATOR NEWS / FTMA



Above: Welcome at RACV Royal Pines Resort.

Above: The Ice-Breaker casino night saw Lady Luck abandon some at the roulette table.

FTMA Weekend Retreat

After a long Covid break, the 2022 FTMA National Conference was bigger and better than ever with a welcome chance for fabricators to share and learn. **By Kersten Gentle**



Above: (*L-R*) Ray Ferretti of Big River Group, Andrew Proctor, Peter Beverland and Shaun Donohue from Australian Timber & Trusses and Jason Howes of Arrow Executive Sales Consultants.



Above: Green Machine golfers: (L-R) Leon Cheney from Westruss, Trent Bucholz and Danny Fleetwood of Multinail and Westruss' Nikita Bourke.

The aim of the 2022 FTMA National Conference was to bring the industry back together for some interactive learning and networking on our first-ever weekend retreat. Run over 11-12 June, the event had an amazing buzz about it all weekend.

Red Activities Day is where everything commenced. Many conferences offer activities following the conference, but for FTMA members, the Red Activities Day, sponsored by Pryda, Meyer Timber and Vekta is all about bringing delegates together before the conference, to maximise networking. Just shy of 100 delegates registered for golf, a jet ski safari, indoor skydiving/FREAK VR experience or kayaking to South Stradbroke Island. Queensland put on the weather and delegates, many with partners in tow, had an action-packed day, all in preparation for the official Ice-Breaker Evening, which saw a casino set up on the RACV Tennis Courts.

The Queensland weather tested us with an unusually cold night, but with fires, blankets, great food and drinks, it had the feel of an industry reunion. After years of being separated due to Covid, fabricators and suppliers were back together with laughter and chatter filling the air.

CONFERENCE SESSIONS

You wouldn't have known it was a Sunday morning, with the 200 delegates arriving early to explore the 28 trade exhibits.

A lot of work had been put into the program ensuring a mix of speciality speakers and fabricator/supplier panels focusing on the key issues facing the industry, as the feedback from previous events had told us this talk-show style of



Above: (L-R) Nick Hinch of AAA Advanced Truss, MiTek's Mark Smiles, Ryan Goodes of AAA Advanced Truss, Kevin Labrooy from Multinail and Brendan Schneider of Sunbury Wallframes & Trusses.

Above: The giant Jenga Tower was back!

questioning creates a more interactive conference and easier listening for delegates.

The program was targeted at fabricators – and we've since received feedback saying that every topic was on point for the sector and some noting it was the best conference they have ever attended. Much of what was discussed will appear in future podcasts or *TTN* stories; here are some highlights.

How to attract and retain great staff was an informative session run by Kelli McDougall, General Manager of AgriTalent.

Kelli explained that the average Australian business experiences approximately a 23% turnover annually, with some industries, such as the construction industry, having significantly higher turnover where the figures can exceed 58%.

If we conservatively assume an annual turnover of 30% for our industry and use the figure of 67,000 people employed in our industry, we could be potentially losing 20,100 people per annum from the forest and wood products industry.

There is always a debate as to what the actual costs are to a business every time you lose an employee. Some estimates place the total economic cost of replacing staff members at two times their salary over the life of their replacement.

Kelli went through the employee turnover costs, as every time you lose an employee, your business suffers financially. She outlined common costs such as:

- Cost to hire (advertising, interviewing, screening, due diligence etc);
- Training and management time to undertake induction;
- Lost productivity as a new person may take one to two years to reach the full productivity of an existing worker;
- Lost engagement; and

Using conservative costings, the forest and wood products industry could be losing in excess of \$211 million in turnover costs alone.

• Customer service issues and errors. Even if we are drastically more conservative and assume a direct cost of \$10,000 per employee, and we multiply that by the turnover in our industry per annum, the forest and wood products industry could be losing in excess of \$211 million in turnover costs alone.



Above: L-R: Dave Morris (Timbertruss), Scott Nieuwenhuis (Timbertruss), Cameron Payne (TrussCorp) & Ross Glennie (TrussCorp)

So how do we recruit the right people, and retain their services? It's little things such as having a website, as there is a good chance someone is going to Google your business before they apply to find out more about you. If you don't have a website, you can be seen as a fake business.

What is your employer value proposition? Do you even have one? We are currently in the tightest employment market in 50 years, so as a business, you must do more than just advertise on Seek.

Kelli finished her session focusing on retention strategies such as onboarding and orientation, mentorship programs, employee compensation, perks, wellness offerings, communication, training and development, work-life balance and flexible work arrangements.

Following Kelli, we had our **first fabricator panel** exploring the programs fabricators have put in place to attract new workers and retain those currently employed. It was so refreshing hearing fabricators talk about Employee Wellness Programs and their focus on creating the right workplace culture. This isn't something that just happens but requires time. No matter whether you are a large or small employer, it takes time to work with your employees to find out how they are travelling and what their needs are.

FTMA is passionate about addressing safety and lifting safety standards within >>>

FABRICATOR NEWS / FTMA



Above: (L-R) Alvin Wong, Sam Jayasinghe and Andrew Nguyen from Timber Truss Solutions.

the sector and we're excited to join forces with our sister Association from across the ditch, FTMA NZ who has taken the lead with an exciting new Safety SOP Video program for respective FTMA Members.

FTMA NZ Executive Officer Peter Carruthers joined me to showcase the exciting new videos which will allow members to access professional videos for safety inductions created by Shutterspeed.

These universal safety videos are like none other with the FTMA Safety Essentials Pack breaking down the three key safety issues, including:

- Personal Protective Equipment
- Safe Manual Handling Techniques
- Lockout & tag out procedure

On top of this, the safety videos will cover rolling, pressing, pneumatic fasteners and

cutting techniques on a variety of machinery.

FTMA NZ will continue to work on the suite of videos with Shutterspeed and the program will officially be launched later in the year.

One of the key sessions was **Knowledge is power, so what do you need to know?** which was a facilitated session run by IndustryEdge's Tim Woods.

Conference delegates discussed the information needs of the supply chain and what fabricators wanted or needed to know for the sector which is the largest single user of sawn wood in Australia.

Initially we heard from a small group of people actively engaged in the supply chain: a timber supplier, a nailplate provider, a fabricator, an automation expert and our Association. Each told us what information they needed to make important decisions that



Above: Where's your wood at? panel discussion. (L-R) Shane Vicary from AKD, Warwick Drysdale of Programmed Timber Supplies, Leon Quinn of Tilling Timber and Jeff Gibson from Hyne Timber.

would support the fabrication sector and therefore the supply chain and its development. Their contributions were a primer as what we really wanted to know was what fabricators need to make better business decisions, and what information the supply chain needs about fabricators.

Tim asked fabricators in the audience the open question: What information do you and the supply chain need about your sector?

Over 35 sheets of paper holding about 130 separate needs statements were collected, some very detailed, others not so much. Tim has collated every statement and categorised them and the data showed we will need more than one approach to tackle this information.

There is a need for some externally focused research (e.g. on builders, housing types, land releases and so on) and the development of a report that perhaps is updated each quarter or year, to provide an ongoing series of advice to the sector.

Most of all however, there is a need to gather industry information from fabricators themselves to provide measures that allow for benchmarking and provide development guidance, so stay tuned, as there will be some exciting work on this in the future for the sector.

STRESS TEFLON

Our keynote speaker for the conference was Luke Mathers who spent over an hour talking to delegates about ways to RESET Stress and use it as a superpower.

FTMA wanted a keynote speaker who understood first-hand the stress involved in running a family-owned business. As one of the original directors of Specsavers in Australia, Luke understands what it takes to operate under pressure situations and wow, did he deliver.

Not only did Luke turn up on the Sunday to present, but he attended the Ice-Breaker on the Saturday night so he could meet delegates and talk to them about the stresses they are dealing with on a daily basis.

Luke has written a fabulous book titled, *Stress Teflon*, which FTMA has purchased to send out a copy for every member with your 2022/23 membership certificates.

Instead of talking about what Luke said at the conference, I'd like to talk about the real changes which have resulted from my involvement with Luke. I read this book before the conference and since the conference I have read his two other books and I actually believe I have achieved *Stress Teflon*.

I'm a bit of a hot head, or as Luke would say, I use my 'old brain' a fair bit, but after reading the book, I have realised that my 'new brain' has the ability to reassess the situation and settle down the anger or stress.

Scott and Nikita are looking at me wondering where the real Kersten is, as I no longer stress about issues I can't change. I have to be honest and say it feels great.

While members will be sent the book when they renew their membership, I encourage readers to visit lukemathers.com. au/books where they can download a copy of this and his other book, *RESET*.

We can all do with some less stress in our lives, and we believe the techniques Luke provided delegates at the conference will help them make some real changes in their workplace to reduce stress.

After a rewarding day of learning and sharing our issues – with a few laughs along the way – it was time for the jungle-themed dinner, including the announcement of FTMA's most prestigious award.

2022 CLIVE MARTELLA SERVICE TO INDUSTRY AWARD

FTMA Australia has always passionately celebrated the outstanding people within our industry, with our highest honour being the prestigious Clive Martella Service to Industry Award.

Clive Martella was an FTMA Board Member and Director of MB Prefab Framing in Geelong (now part of Big River Group). He was down to earth, funny, straight up, hardworking and such an honest person.

Clive was an essential person within the FTMA Board, being a founding director and a key player in setting up the National Association. Whether it was technical, production or business issues, Clive was always willing to support the association and The criteria for the award named in his honour is simply someone who goes out of their way to help people and businesses within the industry.



Above: Keynote Speaker Luke Mathers with FTMA Board Member, Christine Flanagan.



Above: A spot of relaxation saw attendees testing their speed, here Fastest of Day, Lachlan Young from Fortruss Frame & Truss and the slowest, Mark Hull of MCM Frame & Truss.

fabricators and he was always willing to share information to improve the standards of the industry and help his competitors.

Sadly, Clive Thomas Martella passed away on 28 August, 2016 at the young age of 62, after a short but courageous battle with cancer, leaving behind his beloved wife Ruth and three adult children, Catherine, Treina and Clive Jnr.

The criteria for the award named in his honour is simply to showcase someone who goes out of their way to help people and businesses within the industry. Someone who is honest and committed to seeing the national frame and truss industry innovate and grow and someone who has, themselves, made a great commitment to our industry, as this is who Clive was.

A group of four industry leaders who were all Clive's friends, Michael Read (Keith Timber & Hardware), Phil Ladson (former FTMA Director), Steve Collier (TimberTruss) and



Above: Over \$17,000 was raised for Mates in Construction at the FTMA National Conference Dinner.

Whether with new systems, saws or pressing jigs, Tom was always happy to be the guinea pig to maximise benefits for the whole industry.



Above: Pasta and marshmallows were some of the novel building materials at the dinner. (L-R Back Row) Adam Baxter of Dahlsens Building Centres, Nathan and Nikita Bourke from Westruss, Brett Martin from the Independent Hardware Group, Beau Griffith of Pryda, Peter and Lisa Wright from Precision Frames & Trusses) Front Row: Andrew Sternberg also from Dahlsens and Julia Melbourne from Pryda.

Phil McCormack (McCormacks Australia) are our selection committee.

The inaugural recipient of the Award presented in 2017 was Reg Owen of Owentruss and in 2019 Jim Cheney of Westruss received the award. 2022 was a tight contest with some outstanding nominations received. The runner-up for this year's Award is the impressive Bob Lang of Langs Building Supplies, who has made huge contributions to the frame and truss industry for many decades. The winner of the 2022 Clive Martella Service to Industry Award was Tom Donohue from Australian Timber & Trusses on the Gold Coast.

Tom Donohue began working in the industry at Wilkinson's in 1970 and within eight years, he started his own Frame & Truss business with business partner, Leon Hill. The business was initially called Tom's Trusses before being renamed Australian Timber & Trusses (ATT) a few years later and they are still based on the Gold Coast. In the 1970s, Tom was heavily involved in the Gang Nails EqA System. Tom promoted this system to other fabricators for accurate quoting, plant scheduling, output monitoring, employee incentives and what-if scenarios for new equipment purchases and cost monitoring.

By the early 1980s, this information was used for benchmarking against three other fabrication companies in different markets who were using different equipment. This was extremely beneficial to all fabricators, as everyone learnt where improvements could be made from sawing, pressing, storage, loading and delivery, and we heard today, how important this still is today.

Tom was instrumental in having the first six-bladed computerised saws made and put into production, so that improvements could be made before the machine was released to other fabricators. Tom was always happy to be the guinea pig to maximise benefits for the whole industry.

In the 2000s, a similar project was instigated in the pressing area, with the development of a fully computerised multipress head jig.

Throughout the years, Kersten was often told that no-one knows costs like Tom and many younger people in the industry say that Tom was someone they idolised and learnt so much from. Whether it was his articles in *TTN* or presentations at Frame Australia conferences, Tom was always willing to share his knowledge, in the hope of building a stronger industry.

Tom built his business from the ground up and today the company employs over 100 locals. Tom has always been a voice for the industry and was happy to put his hand up to serve on many committees in his pursuit of building a stronger industry.

He was chairman of the Gold Coast Timber Association for six years in the 1980s, was vice-Chairman of the Queensland Timber Board for five years and in the 1990s was President of the Brisbane Hoo Hoo Club (1994-96) and in 1996-97, he even served as JIV President.

Tom's support goes beyond the industry and he has passionately supported the Ronald McDonald House in Brisbane, where he is a major sponsor. He has also been a major sponsor of the Life Education Centre on the Gold Coast and is a sponsor of various Gold Coast soccer Clubs.

Tom's wife Terri has always been right by his side throughout the journey, as have his children Coby and Shaun, with Shaun joining the business 28 years ago and working his way up to production manager.

Unfortunately, Tom couldn't be present to accept his award due to ill health. Clive's

FTMA / FABRICATOR NEWS



Above: Tom Donohue's Facebook speech.

wife Ruth and daughter Treina presented Tom's award to Tom's son Shaun and daughter-in-law Deanna, but you can see Tom's acceptance speech on the FTMA Facebook page.

SO MUCH MORE

For all its length, this report doesn't come close to covering off the whole of the conference. Many more important topics were canvassed, members came together to raise much-needed funds for mental health support in the industry and there was fun silliness, too, when pasta and marshmallows were used to test structural design strengths at the dinner.

All of this was made possible through the support of members and in particular our sponsors. FTMA thanks:

Gold Sponsors: MiTek, Multinail and Pryda. Silver Sponsors: AB Phillips, AKD, Australian Panel Products, Meyer Timber, Timberlink Australia, Vekta and Wespine. Bronze Sponsors: Bliss & Reels, Combilift,



Above: Kersten Gentle addressing the conference attendees.

Daw Trading, Dindas, Hundegger, Hyne Timber, Independent Hardware Group, McCormacks Australia, OneFortyOne, Pinewood Products, Programmed Timber Supplies, Roadpod, Stora Enso, Tilling, VIDA and VTW.

Conference Sponsors: Carbon Warrior, First Super, ForestWorks, Mates in Construction, Responsible Wood, TABMA Australia, Timber Framing Collective, Timber Training Creswick and WoodSolutions.

The aim of the 2022 FTMA National Conference – Weekend Retreat was to bring the industry back together. The networking and learning made for an awesome weekend with outstanding feedback from all attendees.

Now for the planning to start for our 2024 National Conference! $\ensuremath{\mathsf{T}}$



Above: Shaun Donohue of Australian Timber & Trusses with dad Tom's 2022 Clive Martella Service to Industry Award, Treina Martella, Ruth Martella and Phil McCormack of McCormacks Australia.



Assumptions can be dangerous

When it comes to LVL, decisions should be based on solid knowledge. By Craig Kay

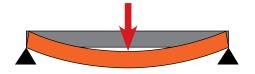
The definition of assume from dictionary. com is " to take for granted or without proof". We all make basic assumptions about things in life, but sometimes these assumptions are wrong. We must never trust in what we assume, only what we know. Perhaps the slang definition that goes something along the lines of "When you ASSUME, you make an ASS out of U and ME" is more apt.

With the current shortage of structural building materials, it is understandable that one product that is out of stock is being substituted with another. It is in this environment that people with limited engineering knowledge are making assumptions that one product can be substituted by another, without fully understanding the full ramifications of that action. Structural building products are subject to Building Legislation as well as Consumer Law.

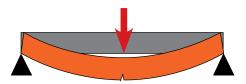
Given that structural grades of solid sawn timber have codified design strength and stiffness values that can be compared with one another, substitution is a little easier, but unless people understand the engineering jargon that makes up these design values, product substitution can be a trap for untrained personnel. While LVL sold in Australia needs to be manufactured in conformance to AS/NZS 4357 before it can be designed with AS 1720.1 Timber engineering standard, the LVL standard does NOT define standard LVL grades, acknowledging that each LVL has proprietary properties defined by the manufacturer.

The manufacturer defines a suite of design strength and stiffness values for their LVL, and to conform to the standard, these characteristic design values must be published for the purpose of engineering design in accordance with AS 1720.1.

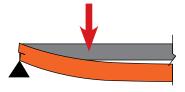
To better understand what the published values mean, below is a brief description.



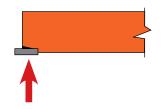
1. Stiffness (MOE) E: Stiffness is an indicator of the ability for an element to return to its original form after being subjected to a force. i.e., the greater the stiffness, the less the deflection under a given force. Many structural timber-based products are described by their stiffness e.g., MGP10, GL13 etc. Some manufacturers of LVL also mark their product with a numeric stiffness value descriptor, but in the absence of a codified grade for LVL, the user MUST search that manufacturer's published literature to determine the actual design stiffness value.



2. Strength (MOR) f'b: Strength measures how much stress can be applied to an element before it deforms permanently or fractures. While somewhat related to stiffness, there can be circumstances even in wood-based products that one species or LVL layup may exhibit high stiffness but low strength, and vice versa. This difference can be quite marked between species of wood and, as a general rule, LVL has a much higher bending strength than a solid sawn piece of timber with a similar stiffness. This makes substitution from LVL to a solid sawn element more difficult.



3. Shear f's: For most serviceabilitybased designs of timber elements in a domestic structure, the shear forces experienced are rarely close to their maximums. There are some, usually short span heavily loaded elements that may, if not correctly designed, experience a shear failure. In woodbased products where the grain is parallel to the span direction, a typical shear failure is in the horizontal plane evidenced by a translational movement of the upper portion of the element from the lower portion as shown in the diagram opposite.



4. Compression perpendicular to the grain (End bearing) *f*^{*}*p*:

Compression perpendicular to the grain capacity measures the ability of an element to support applied loads without deforming (crushing) more than 2mm, typically at a support. Each species has a different fibre capacity to these stresses, and while there is usually a correlation between stiffness, strength and compression perpendicular to the grain, a piece of hardwood with a similar stiffness and bending strength as some softwoods, will most likely have a significantly larger capacity in this area.



$5. \ \mbox{Joint strength Group (J or JD}$

values): The joint strength of the wood-based product is a measure of the load capacity of nails, screws and bolts when fastened into the element. This value is closely related to the density of material but is also affected by the grain direction in EWP. The tooth capacity for type C fastener (nailplates) is a proprietary value developed for each different manufacturer's nailplate. An experienced timber engineer can demonstrate many examples where sawn wood or LVL may present with relatively high stiffness values but have a relatively low density and thus have a low joint strength group. A good example is Picea abies (White Baltic, Norway Spruce) commonly used as wall framing. While it can correctly be graded to a MGP 10 and MGP 12 grade, it typically has a lower joint strength than other common framing material such as Radiata pine and Pinus sylvestris (Scots pine or Baltic pine).

For the sake of brevity, I will not discuss some other vital characteristic strength properties such as tension and compression parallel to the grain which are important if the element experiences any axial forces.

With sufficient knowledge of the intended function of the timber element, a suitably experienced and qualified person can reference AS 1720.1 or extracts from that document and thus compare the tabulated values for ALL the above strength and stiffness parameters between two solid sawn timbers, standard plywood and GLT grades, but NOT LVL.

As previously mentioned, the characteristic design values of LVL are proprietary to that manufacturer, so it is vital that any person seeking to substitute one LVL for another LVL, solid sawn or GLT, that the full suite of strength, stiffness and joint strength values for the particular LVL under consideration. The product simply marked with an E value (e.g., LVL 13) is telling a fraction of the story, and is actually either quite meaningless, or at

For substitution, it is vital to consider the full set of values.

worst, potentially misleading.

This is exacerbated by the recent phenomenon of volumes of LVL coming onto the market in response to the current severe shortage. While new entrants to the market adding extra supply is a good thing, there has been unfortunately guite widespread plagiarism of LVL product markings from existing suppliers, use of preservative chemicals that do not conform to any Australian standard and a general lack of supporting documentation mandated by AS/NZS 4357, and therefore creating a nonconformant product. And NO, it is NOT OK to recommend to prospective users that one can simply use the intellectual property and span tables from a competitor product to design the LVL.

Attempting a product substitution based upon only one or two structural properties out of a full suite of required strengths is perhaps best described by a line in *An Essay on Criticism* by Alexander Pope in 1709 which finishes with "fools rush in where angels fear to tread". Product substitution for structural materials that affect the overall robustness of any structure is a serious business and should only be undertaken by suitably

qualified and experienced people. 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**

Coming up in TimberTrader

TREATED TIMBERS

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Fly me to the moon

Great song, great adventure, but a terrible option for roofs. **By Paul Davis**

In late June, media reported that a rocket of unknown origin crashed into the moon. I have several theories: instinct suggests that it was Elon Musk landing his secretly designed spaceship at his lair on the far side of the moon. On the other hand, it may be Mr Squiggle heading home. Perhaps it is the Russians up to something, or perhaps it may be the rocket from the 1902 film by George Méliès, which crashed into the moon's eye.

But I have another theory. Maybe it's a roof. Last month I wrote about how freestanding roofs, where the wind is free to blow both over and under, are effectively a large wing. These structures can, for instance, be entry roofs, alfresco roofs or free-standing roofs such as picnic shelters, gazebos and cabanas. Even my own carport, as you can see in the photo above.

Once we have correctly assigned a wind load and designed the trusses, where do the uplift forces on the roof go to? How do we stop the roof taking off in a storm and, just maybe, hitting the moon?

In the case that the supporting structure is steel then typically that design is undertaken by an engineer. Typically, I would be designing a timber plate bolted to the top of the steelwork for you to tie down your trusses to. The fixings can then, as normal, be designed by your roof truss software. I hope other engineers are doing something similar. If the engineer is just doing a partjob and providing a beam size, then I suggest you push back and get the engineer to finish the job.



If you are using software to design a steel beam (effectively a lintel design and I believe some truss and frame packages do it) then I am afraid the design of this connection detail falls squarely on your shoulders. And so does the tie down of the steel beam itself. I suggest you seriously consider whether you want to take on that responsibility.

If you are sizing and supplying timber roof beams to support the trusses and the beam is supported on timber posts then I don't see anybody else putting their hand up for the design. Fortunately, AS1684, the Residential timber Framed Construction Code, in Section 9 provides pre-calculated capacities for these fixings. The post base uplift capacities can then be looked up in suppliers' literature.

But the tie down of the beams to brickwork or blockwork piers (or to masonry walls if the area under is partially enclosed) is one of those grey areas where it's never clear who owns the design. By default, the brickie generally supplies some sort of strap or a block worker some sort of cast-in steel cleat. But typically, you will have designed the timber verandah beam and so know the beam uplift force at each end. Certainly, your average brickie is not going to have the mathematical or software smarts to do that calculation.

Even if you were to take on the task then there are no published capacities for tie down to brick piers. However, there are capacities to brick walls, so I have reinterpreted the standard and provide the following:

For a 30x0.8 galvanized strap, taken 900mm down the centre of a 350 square brick pier and embedded into the bed joint, the uplift capacity is 5kN. See Figure 6.3a of AS4773 for context.

This capacity is really quite low (about that of a triple grip) so it's not a lot of use considering the wind uplift experienced by these sorts of wing-like 'free' roofs. The approach most likely to get a safe result is to run a booker rod down through the top of the timber beam, down through the brick pier and epoxy it into the slab/footings. (That is exactly what I did with the carport at my place.)

So, I come back to the point that you really need a skilled engineer's input to design the supporting structure if it's steel or brick construction. I know it may not be your job to engage that engineer, but at least you could flag the need to the builder – or to the engineer if the job already has one.

Now, you may think that my theories about the rocket that crashed on the moon are childish. But here's a fact – five mice went to the moon on Apollo 17. Fe, Fi, Fo, Fum, and Phooey and three astronauts were the last Earthlings to travel to and orbit the Moon. Having considered all options, I am now convinced that the mystery rocket was

crewed by the descendants of these mice – going back for more cheese! T



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Josh Wright V.P. of Manufacturing The Truss Company, USA

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