



The Seed House
Image by John Gollings

ANNUAL REPORT

2020



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Dean Anderson
TDA Chairman

The need for the Timber Development Association has increased in Calendar Year 2020 as the nation looks to provide worthwhile employment for people during a global pandemic. Timber in all its different forms, whether solid wood, plywood or reconstituted forest products is a crucial material for the building stimulus activity currently occurring.

The Timber Development Association's ability to be across and understand the needs of the Timber community is due to the diversity of the Board covering multiple facets of the industry from growing and importing to processing and engineering.

I would especially like to thank our CEO, Andrew Dunn, and Office Administrator, Mariela, for their quick response in managing the Timber Development Association's expenditure as our revenue sources were significantly curtailed due to the reduced face to face engagement necessitated by the COVID-19 pandemic restrictions. This year's financial result, while not as good as previous years, is a solid result and we have appreciated and benefited from the Government's support packages.



Andrew Dunn
Chief Executive Officer

The previous year saw some of the most challenging conditions experienced by the Australian timber and construction industry. From bushfire, floods and pandemic, the unusual situation meant business, as usual, was not possible. TDA has made its way through this tremulous year, continuing to provide services that have become expected by its members.

The Australian Timber Design Awards continues to be the association's foremost event, seen this year with the winning design for The Seed House by fitzpatrick+partners. A spectacular house-made from cross-laminated timber and decorated with the finest Tasmanian decorative timbers. The award night was held at The Crown in Melbourne, with 240 architects, engineers and timber industry attended, to help celebrate the absolute best in timber design. This year's Awards continues the shift from the timber being predominately used in houses to timber being used in commercial buildings. A shift in the thinking, seeing an expanding of the markets for timber and wood products.

Research work continued to be a focus for TDA seeing the completion of an investigation into the perpendicular to grain, characteristic values of commonly available construction timbers, and an extensive fire testing program on timber connectors. Both of these projects were completed during the financial year.

TDA continues to conduct building professional tours but was constrained to a single tour in the southern regions of NSW, due to COVID19 travel restrictions. Twenty-four design professionals visited Xlam CLT plant, Hynes sawmill as well as an operating pine forest during the tour.

TDA continued to undertake WoodSolutions' seminars, workshops and guest speaking spots to design professionals in NSW and ACT. More recently limited to conducting webinars but achieving large audiences of over 500 to 700 participants.

Finally, I would like to thank TDA's staff for their passion for enabling TDA to achieve its outcomes during the year because without their dedication; this outcome would not have been possible.

Andrew Dunn
Chief Executive Officer



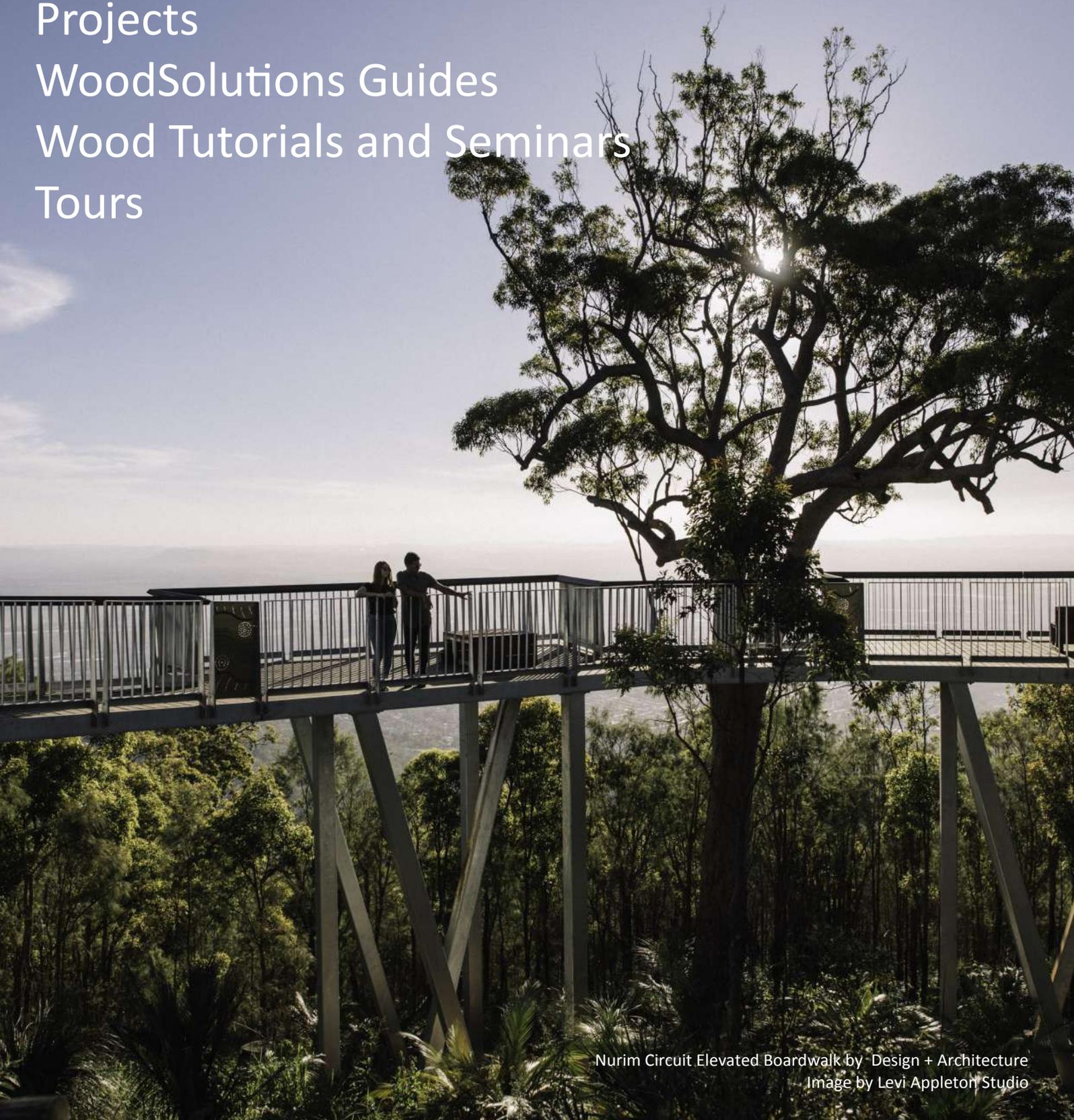
Operations Report

Projects

WoodSolutions Guides

Wood Tutorials and Seminars

Tours



Nurim Circuit Elevated Boardwalk by Design + Architecture
Image by Levi Appleton Studio

Projects

Project work represents two-thirds of TDA's business, and we continue to carry out work for the benefit of the Australian timber industry. Project funding is through many sources, but the predominate source being the Forest and Wood Products Australia. Other sources are timber and building companies directly, as well as other government funding programs. The following is a summary of major projects conducted by TDA during the financial year.

Research Projects

Forest and Wood Product Australia Supported Projects

Measuring Moisture and Axial Displacement in Australia's First 6 Storey Timber Framed Building

This research's objective was to obtain real data on the temperature, relative humidity, moisture content of timber and vertical displacement of an actual, six-storey timber-framed apartment building, located in Sydney, during its construction and occupation.

The research was successful in obtaining seven months of data; however, the monitoring has been extended for twelve months to capture the changes that occur during the occupation of the building and seasons throughout a year

Characteristic Perpendicular to Grain Bearing Test on Common Australian and Imported Timber Species

The research aimed to re-establish the characteristic perpendicular to grain values for common timber species used in construction from Australia and overseas and to develop a method to calculate deformation due to perpendicular to the grain compression. This work's purpose was to inform the design methodology used in the WoodSolutions Mid-rise Timber Building Structure Engineering guide, in calculating the axial shortening of lightweight mid-rise timber-framed buildings. The research was completed in August 2019.

Lake Tahune Hut by Warren French Architect
Image by Penelope Haley, Terry Reid, Chris Crerar



Fire Resistance of Modern Timber Connector

The available information on fire rating of modern timber connectors is generally limited to 30 and 60 minutes fire resistance, a common requirement in Europe and North America. Fire-resistant requirements in Australia are generally higher, around 90 to 120 minutes, and for this level of fire resistance, there is very little information available to support this concept.

Practice in placing beams with intimate contact between supports is problematic, as either there are tolerances in the element themselves or gaps left to allow more effortless movement during installation or rotation of the joint due to load on the elements. The result of this is the loss of intimate contact between the beam end and its support, exposing the metal connector to some extent. Once intimate contact between the encapsulating elements is a loss, the metal connector may be exposed to heat flow, reducing its capacity to transfer loads.

The research aimed to develop building code compliant solutions that are cost-effective and readily available. The research concluded at the end of the financial year with the objective being met.

Test 1 – beam end connected to a CLT wall, investigating the effect of gaps, and insulating methods

Image by TDA



Test 2 – Outside view of load-bearing test setup of a beam to beam connector fire-resistance test. Image by TDA



Test 2 – Inside furnace view of the test setup
Image by TDA



WoodSolution Guides

TDA assisted in the revision of eight WoodSolutions Guides:-

- Guide 1: Timber-framed Construction for Townhouse Buildings Class 1a
- Guide 2: Timber-framed Construction for Multi-residential Buildings Class 2, 3
- Guide 6: Timber-framed Construction - Sacrificial Timber Construction Joint
- Guide 15: Fire Design
- Guide 21: Domestic Timber Deck Design
- Guide 28: Rethinking Aged Care Construction - Consider Timber

2018-2019 Wood Tutorials and Seminars

TDA continues to deliver the WoodSolutions Tutorial and seminar program to ACT and NSW. Due to COVID19 restrictions, only three major events were held, with audiences mainly made up of architects, engineers, building designers, certifiers, and students. In lieu of the seminars, TDA managed two webinars.



WoodSolutions presentation All About Timber Frame Buildings – Surry Hills NSW
Images by TDA



Pingelly Recreation and Cultural Centre by iredale pedersen hook architects with Advanced Concepts Studio
Image by Peter Bennetts

Tours

During the year only one tour was conducted to southern NSW investigating the manufacturing process of timber and cross-laminated timber. The tour visited Xlam's cross-lamination plant in Wodonga, Hyne's sawmill in Tumbarumba and harvesting of a softwood pine plantation. Twenty-three building professionals attend this two-day tour.



TDA Tour of Working Pine Plantation
Image by TDA

Other Activities



The Seed House
Image by John Gollings

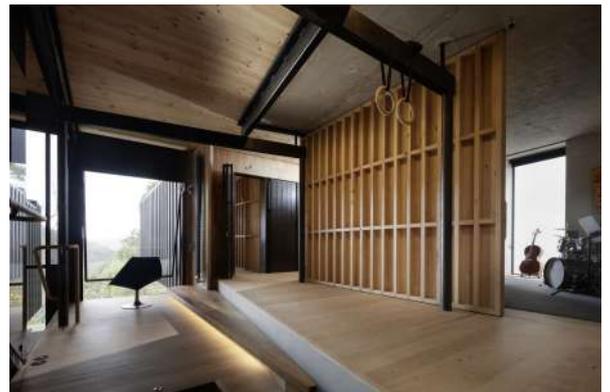


The 2019 Australian Timber Design Awards

The 20th Australian Timber Design Awards were announced at a dinner function at The Crown, Melbourne. Around 240 design professionals attended the night that saw the overall winner of the Awards was Fitzpatrick + partners for The Seed House, a luxury residence on the Sydney's Northshore, made entirely from Cross-laminated timber.



The Seed House
Images by John Gollings



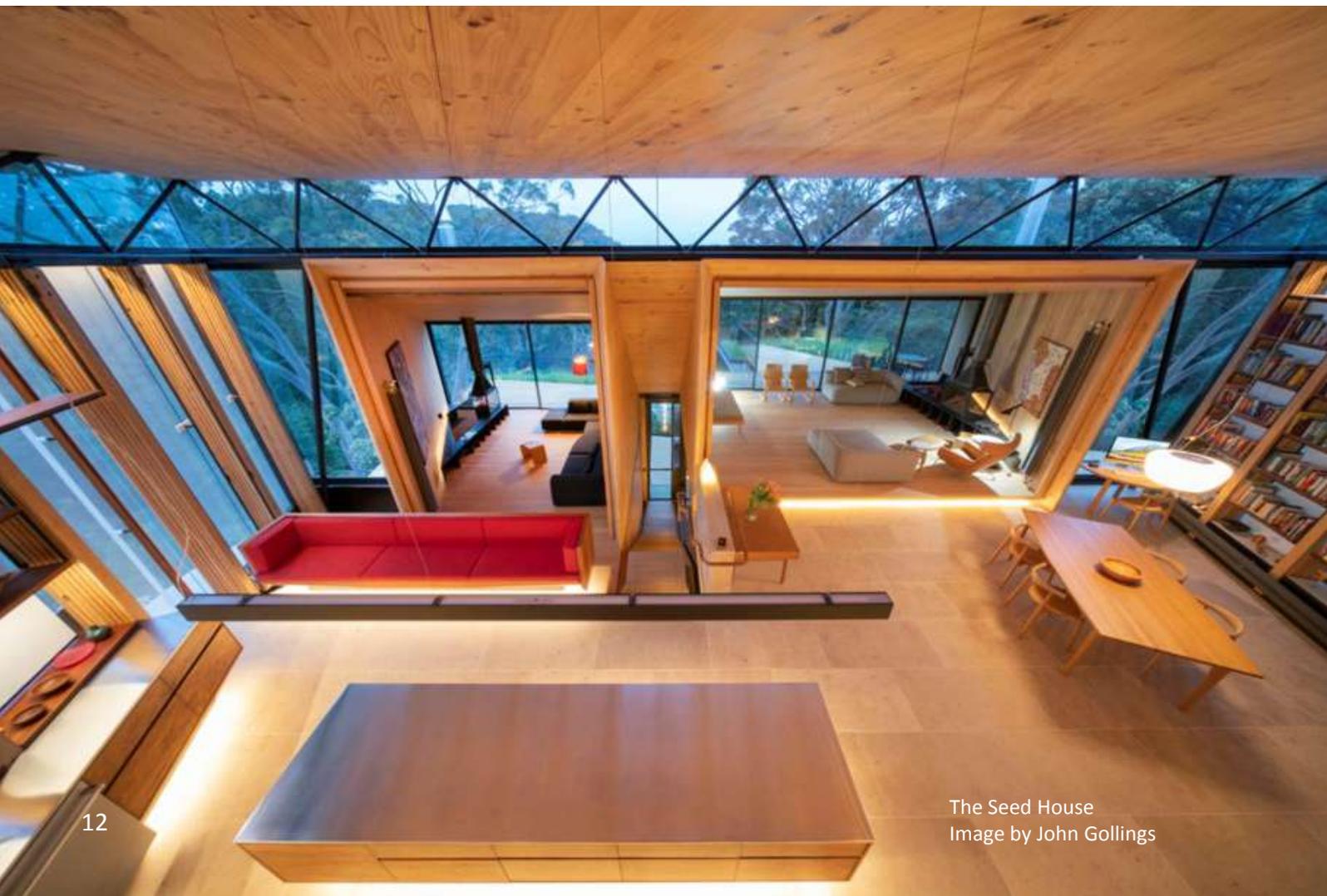


Australian Timber Design Awards 2019
Overall Winner

James Fitzpatrick from fitzpatrick+partners
and Ms Newbury from WoodSolution

Image by TDA

The Seed House, Sydney





Our Lady of Assumptions Catholic School by BVN
Image by Brett Boardman / Michael Nicholson / Stefan Hefele

Websites

TDA owns and manages a number of websites for the timber industry, these include:

TIMBER ARCHITECTURE

www.timber-architecture

- Weekly E-news service of timber architecture



www.timberawards.com.au

- Australian Timber Design Award dedicated website



www.tdansw.asn.au

- This is TDA's member website aimed to keep members informed of TDA activities.

TDA administers some other industry sites for committees that it belongs to. These include:-

www.timberduediligence.com.au

- This website contains the Due Diligence tools developed by TDA of the timber industry. The tools assist timber companies in demonstrating compliance that timber is legally harvested.

Directory



Timber Development Association (NSW) Ltd

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Registered Office

Unit 6 / 281 Pacific Highway

North Sydney NSW 2060

Staff (as at July 2020)

Andrew Dunn – Chief Executive Officer

Mariela Amarante – Office Administrator

Valentin Reabar – Exchange Student from Bern University of Applied Science (Left February 2020)

Casuals and Contractors

Elizabeth Whittle – Accountant

Catherine Lao – Audio Visual, Timber Design Awards

Chris Michael – Visual Designer