



Rebuilding Capacity

Addressing Australia's Construction
Trade Labour Shortage Through
Productivity, Innovation and Pathways



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Executive Overview

Australia's housing shortage is not simply a demand problem, it's also a delivery problem. Despite ambitious targets under the National Housing Accord, construction costs, approval delays, financing pressures and low productivity are all impacting the rate at which projects can move from pipeline to completion.

At the heart of the issue is one key constraint: **skilled labour**. The construction sector simply does not have the workforce to build at the pace required. Skilled trade capacity remains tight and productivity has not evolved fast enough to convert demand into completed homes.

Productivity across the sector is falling short of requirements and an ageing workforce adds further complexity to labour supply. Traditional workforce pathways - apprenticeships, training pipelines, and education systems are struggling to entice the next generation of trades to keep pace with growing demand.

These restrictions, however, can be addressed if industry partners work together to reset the approach and recruit the next generation of trades to keep Australia building.



This paper explores how Australia's housing sector can respond, not by relying on a single solution, but by combining workforce reform, productivity improvements, and innovation to rebuild capacity at scale.

Working alongside builders, designers, educators and trades across the country, James Hardie is focused on one central question:

How can Australia build more homes more efficiently in a way that best utilises the workforce we already have, while also creating a wider trade base? Importantly, how does the industry do this without compromising on the quality and durability of homes required for Australian conditions.

01 People

Rebuilding Australia's Construction Workforce



A system under pressure

Construction is one of Australia’s largest skilled labour industries, employing approximately 9% of the national workforce - a total of 1,371,500 workers.¹ The number employed in core residential construction trades, however, is sitting at just 277,827 and capable of delivering 184,000 homes per year.² Crucially, this capability falls 30% short of national demand.³

Australia’s independent labour market and workforce planning agency, Jobs and Skills Australia, considers all occupations within the Construction Trades Workers sector as falling under a national shortage,⁴ with residential construction trades ranking among the most in-demand occupations nationally.⁵

Australia needs to build more than 274,000 homes each year to meet the National Housing Accord target. The number of workers employed in core residential construction trades are capable of delivering 184,000 homes per year, 30% short of national demand.



While the Australian Government has announced a goal of increasing housing to 1.2 million new homes by 2029 under the National Housing Accord, current construction vacancies show the industry is lacking in prospective entrants.⁶

This gap between project delivery and workforce availability continues to put pressure on builders. As of June 2026, national forecasts showed Australia is more than 112,000 homes behind the National Housing Accord target of 1.2 million new homes.⁷ With latest data showing Australia needs to build more than 274,000 homes each year, or about 69,000 each quarter to catch up.⁸

This gap is observed broadly at a national level. The Productivity Commission reports a decline in dwelling construction productivity in the past three decades.⁹ Contending with ambitious housing delivery goals, builders are vying for the services of a small pool of skilled tradespeople, but there are less and less new entrants to trades to offset this demand.

The current level of housing demand is creating a high-pressure environment for builders who are expected to deliver high-quality projects with insufficient labour resources across multiple key trades.

1 Jobs and Skills Australia
2 Housing Industry Association - 2026/2027 Federal Budget Plan
3 Housing Industry Association - 2026/2027 Federal Budget Plan

4 Jobs and Skills Australia - Current Skills Shortages
5 Jobs and Skills Australia - Occupation Shortage List

6 ABS - Job Vacancies Survey
7 ABS

8 AAP
9 Productivity Commission - Housing construction productivity



The workforce demographic challenge

One of the key challenges the industry is currently faced with is that it increasingly relies on an ageing workforce, and too few qualified new entrants to meet the growing demands.¹⁰

As a result, efforts to gain entry level participants, in addition to the ageing workforce means supply continues to fall further behind demand.

ABS data shows that as of February 2026, **16.9% of Australia's construction workforce is aged 55 or older, up from 14.8% in 2014.**¹¹

Australia is projected to need an additional 116,000 housing construction workers by 2030, yet the number of construction apprentices in training has fallen to a five-year low¹² limiting the ability to support the industry long term.



In a complicating factor, the apprenticeship system treats those aged over 21 as 'mature aged', meaning they need to be paid an adult wage, which can be up to a 40% increase in per hour wages.¹³ The absence of specific governmental financial support and incentives for employers to hire adult apprentices has increased the likelihood of older workers being overlooked in favour of those whose labour costs are cheaper for businesses,¹⁴ further compounding the issue of low volume of new entrants for an industry with a workforce shortage.



The persistent challenge of managing workforce demographics is being closely monitored by key industry players including the Housing Industry Association (HIA). According to Mike Hermon, Executive Director of Future Workforce at HIA, "A reasonable retention rate must be established and maintained to ensure industry is able to plan for the national pipeline of work over the next decade."

These issues won't be resolved on their own. The industry needs new approaches and greater support to secure a strong, future-ready workforce to close the growing labour gap.

¹⁰ Master Builders Australia - National Centre for Vocational Education Research (NCVER) quarterly data

¹¹ ABS - Labour Force data

¹² Master Builders Australia - National Centre for Vocational Education Research (NCVER) quarterly data

¹³ Fair Work Mate

¹⁴ Housing Industry Association media release

Apprenticeship decline and retention issues

While the industry grapples with an ageing core workforce, national conversations point to a rising cost of living, wages and long training periods as discouraging younger people from becoming apprentices.¹⁵ High dropout rates, particularly within the first 18 months of commencement, are also reducing the number who go on to complete their qualification.¹⁶

NCVER's 2025 Apprentice and Trainee Outcomes Report found 27.7% of trade non-completers said dissatisfaction with pay, working conditions or the workplace was the main reason they did not complete their apprenticeship or traineeship.¹⁷ Other recent figures from the NCVER show a 4.2% decrease in apprenticeship contract commencement in the construction sector in the 12 months to March 2025.¹⁸



With high attrition rates affecting the industry, attracting new entrants into construction is critical. It does, however, continue to present challenges. Of the 100,000 construction apprentices and trainees started last year, just 21,000 of those were in one of the key construction trades required for home building.¹⁹



Those that do train in key trades are faced with a further barrier - the cost to builders of taking on apprentices. GAN Australia notes that a four-year apprenticeship takes 1.6 to 2.6 years to be financially beneficial to a business taking on an apprentice, a factor that adds complexity to builders' willingness to hire apprentices.²⁰ The cost versus productivity gap compounds for mature aged students who already see limited opportunities and less builders willing to take them on due to higher wage requirements.²¹

Understanding the challenges faced by new entrants is important in considering the path forward to address both retention issues and declining apprenticeship rates. However, intervention and resources are necessary to make meaningful change. Industry bodies including the HIA recommend incentives that help more builders bring on apprentices, support to bridge the mature age wage gap and targeted programs for recent school leavers to promote trade programs.²²

¹⁵ ABC
¹⁶ [Housing Industry Association - Government Incentives media release](#)

¹⁷ [National Centre for Vocational Education Research](#)
¹⁸ [National Centre for Vocational Education Research](#)

¹⁹ [Housing Industry Association media release](#)
²⁰ [GAN Australia - Quality Apprenticeships in Action](#)

²¹ [Housing Industry Association media release](#)
²² [Housing Industry Association media release, Building Connection](#)



Expanding workforce pathways

Full trade qualifications are required for workers in key construction trades - i.e. carpentry, bricklaying, electrical etc - to work on construction sites and traditional pathways are the only way to obtain these and start in the industry. It's clear, though, that these pathways don't always measure up to expectations for entrants.

The industry stands to benefit greatly from introducing expanded training models that offer additional pathways to prospective trades. Solutions including flexible training delivery that can be scheduled around full-time work, apprenticeship training that doesn't require continuous employment, or the addition of interim training modules for specific construction techniques must be considered to encourage more commencements.



Faster job readiness can be achieved with training courses that are tailored to certain products or systems, like AAC solutions, that would otherwise require a longer education program to obtain qualifications in carpentry or bricklaying.



The use of alternative materials allows for a different approach. For example, swapping brick for an autoclaved aerated concrete (AAC) panel opens up a new labour pool. Installers can be upskilled through targeted training programs, with pathways that combine short introductory courses and supervised on-site experience, creating a more accessible entry point into construction. While not contingent on the completion of an apprenticeship, AAC installation training allows for installers to be trained and supported to deliver high-quality work with one highly specific building material.

Equipping new entrants with the skills required to make an immediate impact in the residential construction industry is key to addressing gaps in labour.

While not a complete solution, this can allow trainees to make productive contributions to the industry that demonstrate their value while continuing to obtain the other qualifications to take additional roles within residential projects.

Industry-Government collaboration

Development of industry labour capacity needs to mirror the collaborative operating approach of the construction industry. Programs like the Australian Government’s Key Apprenticeship Program²³, the Australian Apprentices Incentives System²⁴ and those implemented by multiple state governments²⁵ are already focusing on accelerated apprenticeships, financial support for small businesses employing apprentices and completion incentives.



It is critical that private industry across the sector works in tandem with state and federal governments if the labour shortage is to be addressed in a meaningful way. Bridging the gap between training and industry will require builders and manufacturers to play an active part in the training ecosystem. Disjointedness between tertiary educators and the labour market can not only hamper productivity, but limit the ability of new entrants to join or transition within the workforce.²⁶

Ensuring there are programmes dedicated to supporting the growth of the workforce is essential to rebuilding capacity. James Hardie currently undertakes a range of real-world training programs to help improve growth prospects for the residential construction industry.

One example is James Hardie’s support of carpentry training delivered through TAFE NSW’s Certificate III qualification, where cladding installation forms part of the curriculum. Following a successful pilot program, James Hardie now supports practical training opportunities across NSW through the provision of Hardie™ fibre cement products, power tools, PPE and consumables. In addition, training materials and technical expertise are made available to approximately 300 carpentry educators, helping to strengthen exposure to current industry practices and support consistent, quality trade training outcomes.

Elsewhere, James Hardie partners with the Parramatta Eels to encourage young Australians both within rugby league pathways as well as local school catchments to consider trades as a viable option as they look to enter the workforce.

A collaborative approach between public sector and private industry holds the key to strengthening site readiness and supporting consistent, quality outcomes across residential projects with newly-qualified tradespeople.



²³ [Australian Apprenticeships - Key Apprenticeship Program](#)
²⁴ [Australian Apprenticeships - Incentives System](#)

²⁵ [Queensland Government media release](#); [Government of South Australia media release](#); [Government of Western Australia media release](#)

²⁶ [Jobs and Skills discussion paper](#)



02

Product

Building More
With Less Labour



Building differently to build more



Despite the industry's workforce challenges, there are practical ways to ease some of the pressure. Advances in modern building materials are continuing to help construction teams deliver more with the labour they already have.

Advanced building solutions, including fibre cement, autoclaved aerated concrete (AAC) and panelised construction, are increasingly

becoming essential tools for delivering high-quality residential builds at a pace and cost that meets contemporary demands.

These building materials can help reduce complexity and improve delivery outcomes by requiring fewer trade touchpoints, making installation processes repeatable and helping to enable consistency and quality.



Designing systems to reduce trade bottlenecks

In industry, system-based approaches are already demonstrating measurable productivity gains. Major builders like Henley Properties Group point to AAC as one of the key systems developments allowing them to navigate labour availability. The ability to integrate AAC into projects versus brick has reduced reliance on a diminishing workforce of ageing bricklayers, allowing Henley Properties Group to continue delivering homes at scale.

Lightweight cladding products can also be easier to transport, handle and position during installation, while products manufactured with tight tolerances can help minimise adjustments and rework during installation. Durability, fire performance and design versatility are also important considerations, helping builders balance productivity with long-term building performance.

These efficiencies that can be achieved through advanced building solutions are also key to help easing the pressure on builders. For example, the use of Hardie™ Gravis™ AAC Panel on a project can allow builders to streamline elements of installation, helping to reduce time overall on site for trades and give builders an improved opportunity to expedite construction schedules.

Efficiencies delivered through advanced building solutions can help significantly reduce installation time, simplify construction sequencing, and minimise the number of trades required on site. By reducing handovers between trades and enabling more repeatable installation processes, implementing these systems can improve build speed, coordination, and overall project predictability.

Henley is also expanding its adoption of AAC systems as part of a broader focus on construction efficiency, build consistency and contemporary design outcomes.

Antony Blackshaw, CEO of Henley Properties Group, says, “Products like Hardie™ Gravis™ Panel help simplify construction while maintaining the quality and finish our customers expect. The consistency of the system supports build efficiency, improves predictability on site and helps us maximise the productivity of available trade resources.”



03

Process

Modern Methods
of Construction:
Unlocking Capacity



Prefabrication and modular construction

While national housing stock cannot meet demand, the government remains encouragingly focused on new solutions to mitigate supply challenges.

The Australian Government has already invested \$49.3 million to support state and territory governments to grow prefabricated and modular home construction, with a further \$4.7 million made available to develop a voluntary national certification process for offsite construction.²⁷

Although official statistics on construction methods are not yet collected nationally, the best available evidence indicates that modern methods of construction - including prefabricated dwellings and modular housing - account for approximately 15% of Australia's construction market.²⁸



²⁷ Former Ministers media release
²⁸ Mordor Intelligence - Australia Construction Market and Share Analysis

Modern methods of construction also require product portfolios that are fit for purpose across factory production, transport and on-site assembly. Lightweight yet durable building materials, including fibre cement and AAC, can support modular and prefabricated construction by improving handling, reducing on-site installation complexity and supporting more efficient construction workflows.



²⁹ PrefabAUS - PanelTech Industry Spotlight

Prefabricated construction allows builders to reduce on-site labour requirements of fully qualified trades, typically resulting in shorter construction schedules.²⁹ The increased scope for standardisation can also improve safety and quality control, critical considerations in project delivery for residential construction.



Scaling through offsite manufacturing

As prefabricated and modular construction continues to grow, attention is increasingly shifting from potential to practical implementation. Builders, manufacturers and industry bodies are beginning to demonstrate how offsite manufacturing can support more efficient project delivery, reduce reliance on constrained labour resources and create greater certainty across the construction process.

Early examples highlight the role these approaches can play in expanding capacity while maintaining the quality and performance standards required for Australian homes.

Damien Crough, Executive Chairman of PrefabAUS, also adds that, “What we’re seeing now is coordinated momentum. Governments are engaged, lenders are on board, and the ecosystem is coming together in ways we haven’t seen before.”



The Modular Barn Home project illustrates how fibre cement cladding integrates with modular construction methodologies, supporting energy-efficient performance, streamlined installation and design flexibility.



Boosting supply chain resilience

Increased adoption of modern methods of construction is dependent on the industry’s ability to strengthen domestic supply chains. Ensuring availability of product helps reduce downtime on worksites and improves their viability in residential projects, giving builders greater confidence in their adoption.

As housing demand continues to outpace supply, confidence in the availability of materials and systems becomes increasingly important. Local capability can help support more consistent project planning, reduce disruptions associated with supply constraints and provide builders with greater certainty when investing in new construction methodologies.

Importantly, prefabrication presents as a potential long-term pathway for builders to balance labour shortages. Forecasts predict an annual growth of 8% in these construction methods through to 2029, outstripping the wider construction industry’s projected YoY growth of 3-4%.³⁰ The value of imported prefab dwellings was reported as \$326.4 million in the twelve months to November 2025, highlighting the opportunity to develop domestic capabilities and reduce reliance on imported stock.³¹

Ensuring supply reliability is key to allowing more builders to adopt these innovative systems across residential construction, with benefits from streamlined processes extending beyond labour to project delivery.

A stronger domestic supply chain also provides greater certainty for builders looking to incorporate modern methods of construction into long-term project pipelines.



³⁰ [The Good Builder](#)
³¹ [Forest and Wood Products Australia](#)



Conclusion: From Constraint to Capability

Australia's construction labour shortage is not a temporary disruption. It is the result of long-term structural shifts across demographics, productivity and workforce development.

Its impact is clear: **housing delivery is constrained by capacity.**

Addressing this challenge requires more than a single solution. It necessitates a coordinated response across workforce development, construction system advancement and industry collaboration.

As an industry leader, James Hardie recognises their responsibility to begin coordinating a path forward for multiple stakeholders across private and public sectors. Work on trade pathway expansion, systems innovations and educational programs is already underway to help ensure that current and prospective trades are equipped with the tools they need to succeed.

Critically, overcoming a nationwide shortfall will also require a shift in mindset.



The challenge is no longer just building more homes - it is **building them with the workforce available.**



In this environment, productivity becomes the most powerful lever available to the industry.

By simplifying construction, improving predictability, and enabling faster workforce participation, the industry can help to bridge the gap between demand and delivery.

The path forward will not be defined by any one solution, but by the ability to bring these elements together, at scale, and with practical application on site. Providing the right solutions to drive efficiencies and develop the next generation of construction workers is central to meeting future demand. The foundations we lay now will help to shape what comes next for the residential construction industry.

Ultimately, the future of housing delivery will depend not just on how many people the industry can attract, but on how effectively it can enable them to build.



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