

# BUILDING TODAY



The official magazine of the Registered Master Builders Association

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November 2021

Volume 31 Number 10



**ANDREW LA GROUW:**

Locally-sourced products proving more crucial than ever



## Inside:

### **BUILD TO RENT:**

The new normal?

### **CONSTRUCTION INNOVATION:**

Suite of reforms to boost confidence in the industry

### **TOP APPRENTICES NAMED**

RMB CARTERS 2021  
Apprentice of the Year results

## WIN!

An Evacut Drill Set from Sutton Tools worth

**\$155**

Details, page 33



**ALSO INSIDE: CONCRETE'S CARBON CHALLENGE**

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# BUILDING TODAY

November 2021  
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## From the editor

**B**uild to rent is a relatively new concept in this country, but one which is becoming more and more relevant as the reality of house ownership becomes less likely for more and more people.

The model is based on rental stability and affordability, and you're going to hear more of it in the coming years.

In this issue, we profile two companies who have partnered up to fund and build BTR developments, and who have a long-term focus to do so for many years to come.

Elsewhere, columnist Mike Fox says it's time to create a sustainable, Kiwi-based, off-site manufacturing housing industry in New Zealand to help solve the country's chronic housing shortage.

Also in this issue we celebrate the success of the country's top apprentices in the annual RMB CARTERS 2021 Apprentice of the Year competition.

Andrew Darlington  
Editor

**PUBLISHER:** Taurean Publications Ltd  
PO Box 35343, Browns Bay, Auckland 0753

**EDITOR:** Andrew Darlington 021 90 11 56  
andrew@buildingtoday.co.nz

**ADVERTISING MANAGER:** Martin Griffiths  
021 662 228, martin@buildingtoday.co.nz

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## 10-30 News



## 4-9 RMBA News

All the results, comments and pics from the RMB CARTERS 2021 Apprentice of the Year National Finals; RMBA president Kerry Archer has been in "Weekend Warrior" mode at his Central Otago renovation — and it's provided him with a couple of unexpected insights.

## 10-30 News

Build to rent: Is it the "new normal?"; Site Safe awards finalists announced; Prefab NZ name change; Innovation encouraged by new regulations; Locally sourced products proving more crucial than ever; Hire company bags Eden Park outer oval naming rights.

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Ultra-low chemical emissions paint launched; Battery-powered rebar tying tool; Double-ended panel drills.

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Build solid flooring — and reduce noise; Synthetic fibre market share increasing; Pozzolans — the answer to concrete's carbon challenge.

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# The joy of being back on the hammer

RMBA president Kerry Archer and his wife have been renovating their recent Central Otago house purchase — and it's provided him with a couple of unexpected insights . . .

I have been in “Weekend Warrior” mode recently after we did what is typical of builders — purchased the worst house on a great street, with a plan to eventually relocate to Central Otago for the “quiet life”.

The property we bought had been partially demolished and was, essentially, a shell. The power and water had been disconnected, and all the internal wiring and plumbing removed.

There were no soffits, internal wall linings or floor coverings, and no kitchen or toilet — you get the picture.

Unfortunately, the previous owner had a medical event which meant that he could no longer carry out his plan of a major renovation and, therefore, decided to list it — as is, where is.

When my wife and I walked in we looked at each other and knew we were going to buy it. It has great bones and fantastic views, but needs a lot of work, to say the very least.

Once purchased, we proceeded to procrastinate for a few months about what we would do with it. We finally decided we would make it habitable again so we could at least have the use of it, and then figure out the rest later.

Then, of course, we decided to put a time frame on it, and are trying to make it liveable by Christmas. Nothing like a bit of added time pressure!

As a result, we have spent the past five or six weekends working on the place, trying to chip away at achieving this goal.

Interestingly, this has provided me with a couple of unexpected insights.

Firstly, I have thoroughly enjoyed having the nail bag on again. I may have had to extend the belt strap a little bit from the last time it was worn, but it still fits.

One of the main reasons I became a builder was my enjoyment of working with my hands and creating things. It's a far cry from where I'm at now, sitting at a desk for much of the day — and not where I

imagined I'd end up.

Many of you reading this will be in the same boat, as it can be a natural progression in this industry.

Secondly, doing this has also given me a renewed appreciation for my staff, because what they do daily is physically and mentally demanding — and it's easy to forget the physical aspect of the job.

I would challenge anyone used to being in an office all day to get out on-site and participate in some of the physical and practical aspects of your jobs.

Spend the time working beside your staff, and appreciate what it is they are doing on a daily basis for you and your business.

Back to the new house purchase, as I have no power on site yet, I have made myself known to the neighbour who is building a new house behind us.

He has kindly allowed me to run a power cord out in the weekends from his temporary supply — thanks Alan!

Our house was built in the 1970s, and the construction is so simple compared with the new build behind us. It got me thinking — when did building a house become so complex?

The amount of additional fixings, bracing, timber and steel in the new build compared to the older house is quite incredible.

Our old property is a bit like me — it has a few lumps, bumps and curves not in the correct places any more, but it's still standing strong after 50 years.

I know as building techniques and materials progress, we strive to have our new builds standing perfect in 50 years — perhaps except for a few cosmetic touch-ups to keep it fresh.

It makes me wonder just what building will look like in the future, and where all the advancements will ultimately take us.

Sticking with the topic of future developments, the RMBA has recently



announced it would support a mandate of compulsory vaccinations for the construction industry.

This topic was robustly debated at our last board meeting, and it was unanimously decided this was the way forward for our industry to be able to operate successfully under the current conditions.

While I'm aware this has not been received well by all our members and others within the industry, this is a case of making a tough decision for the greater good.

This decision was based on the overwhelming evidence presented, public health advice, feedback from members, and the general consensus on what is right for our industry and country as a whole.

After speaking to some members who don't necessarily agree with the decision but agree with the vaccination roll out New Zealand is currently going through, I challenge you to stand up for your beliefs.

And if you think that it's the right thing to be vaccinated then be vocal about this and show your support.

On a final lighter note, we had the Apprentice of the Year competition final in Wellington on Thursday.

It's unfortunate that under current restrictions we couldn't run the event as we normally would have, but this should not take away from celebrating the finalists' hard work in reaching this stage.

The House of the Year Virtual Awards are to be held on November 26. Again, all the best to the Top 100 finalists — a great achievement for anyone involved in these competitions.

The weather is warming up and, as I write this, it's 32 working days until Christmas.

So make sure the boat is serviced and the camping gear is ready — but also ensure materials are ordered to get those jobs finished so you can enjoy your break.

*The Central Otago site where you'll find RMBA president Kerry Archer in “Weekend Warrior” mode.*





# A holistic and integrated approach, results in a win

## Te Ao Nui

### CATEGORY

CARTERS Commercial Project Award

### ENTRANT

WSP

### PROJECT PARTNERS

McMillan Lockwood Central (Construction Company), Kaitiaki Property (Development and Project Managers), WSP (Design Manager), WSP New Zealand Limited (Architect/Designer), WSP New Zealand (Architect/Designer), WT Partnership (QS)



## Successes

Blair Stewart, Technical Principal Architecture at WSP, was incredibly proud to be a member of the Te Ao Nui project team.

“To be the National Category Winner was an unbelievable result, and this would have been impossible without an amazing collaborative project team. Winning a Gold Award was also fantastic recognition for all the hard work required to deliver a high-quality, resilient commercial building in the regions.

“The collaborative project relationships were the best part of Te Ao Nui. Across the entire team, we shared the same vision to meet our client’s brief and achieve the highly technical requirements of the tenants.

“For WSP this is a win-win for our client, staff and building users, and the general public. This award raises the profile of the WSP Property and Buildings team on a national stage to enable WSP to bring our work ethic and innovative solutions to new clients that share our goals and values.”



## Challenges

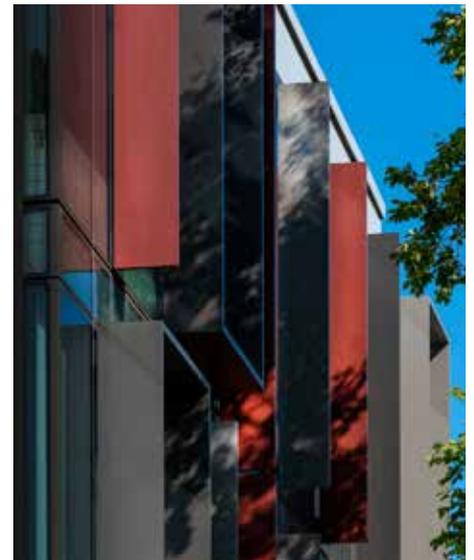
Meeting the project deadlines was a challenge for the Te Ao Nui team.

“To meet the project deadline a fully integrated programme delivery model was adopted. This meant a simple, yet innovative design approach was required from the beginning to ensure the building could be designed and delivered on time and within budget.



## Judges' comments

Te Ao Nui was built to bring “support to the region”. The project features an innovative low displacement concrete structural system providing uncompromising resilience. It allows the building to remain operational following a 1-in-500-year seismic event, and provides the regional Emergency Operations Centre response for the lower middle North Island. The building is designed to achieve a NABERSNZ 4-star sustainability rating, with energy-efficient features including on-site power generation, potable water storage, and sewage retention. This is an exemplar project to show what a modern and resilient civic office development can achieve through a holistic and integrated design.



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## Picture This

### Grant Stewart Building

New Home \$600,000 - \$750,000



### Successes

Anna and Grant Stewart, owners and directors of Grant Stewart Building, felt so proud when they won their award, knowing they had built something special and distinguished.

“To have our build recognised, not only at a regional, but at a national level, by a body such as Registered Master Builders, was a proud moment for us all. This build was so special due to the unique use of many different materials that traditionally you wouldn't see matched together. In the end, you can see for yourself how well they complemented each other.”



### Challenges

The team at Grant Stewart Building faced a few challenges along the way.

“The concrete tilt slabs were the key challenge for us. This was the first time we had encountered using these in a residential build. But the final result looks amazing and adds a truly unique feel to the home.

“There were so many stand-out features of this build — for example, the entrance to the house, through to the hallway. It shows the transition of polished flooring to tilt slab, to plywood raking ceilings with appealing curved wall and skylights. It's quite something!”



### Judges' comments

Set on 3.6ha of farmland, this home is the result of a vision between the owners and Andrew Bydder Creative Designs. Together with Grant Stewart Building, they worked to produce a dwelling that is modern and energy-efficient. The exterior cladding includes Corten steel, EZpanel and corrugate — all seamlessly integrated to produce a stylish, yet low-maintenance, practical home.

Ply ceilings with negative detailing line the living areas on the northern side of the house, with double-glazed bifold doors opening out to a sun-drenched patio area that is ideal for entertaining. The clever use of colour and materials throughout has made this spacious home cosy and fit for fun, family living.

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2021 National  
Apprentice of the Year  
winner, Jarred Badham  
from the Central North  
Island Region.



# NAILED IT!

## JARRED BADHAM WINS NATIONAL APPRENTICE OF THE YEAR TITLE

**JARRED BADHAM FROM THE CENTRAL NORTH ISLAND REGION HAS BUILT HIS WAY TO THE TOP, TAKING OUT THE TITLE AS THIS YEAR'S REGISTERED MASTER BUILDERS CARTERS 2021 APPRENTICE OF THE YEAR.**

In the final showdown against nine other apprentices Jarred Badham has been awarded the 2021 Registered Master Builders Apprentice of the Year, in partnership with CARTERS.

The top ten carpentry apprentices from all around Aotearoa came together in Wellington to complete the final stages of the competition - which this year looked slightly different due to COVID-19 restrictions. Those apprentices who were able to attend in person completed a 45-minute face-to-face interview with the judging panel, made up of leading building experts. In the interview the apprentices were asked to discuss a recent building project which they submitted in the weeks leading up to the national competition. Those who could not travel to Wellington, completed their interviews with the judges virtually.



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2021 National Apprentice of the Year finalists at the awards evening.



2021 National Apprentice of the Year finalists on a commercial site visit in Wellington.

As part of this year's National competition and to support their development, the apprentices toured a large-scale commercial construction site, a residential project, and a previous House of the Year winning home.

Proudly winning the title of New Zealand's 2021 Apprentice of the Year, Jarred Badham, 29, is from the Central North Island Region and is currently employed by Nailing It and completing his training with BCITO.

Judges were most impressed by Jarred's ability to go the extra-mile in all aspects of the competition and in his apprenticeship.

"Jarred has an extremely good understanding and knowledge of the industry and strong working relationships. What stood out was his experience in using innovative products. During his apprenticeship Jarred has already had the experience of working with transportable housing, and other alternative products.

"Prior to becoming a carpentry apprentice, Jarred trained in the Airforce as a helicopter technician. This is where he may have developed his hunger for product knowledge and his excellent technical detail. Jarred's presentation was impeccable, and he was well prepared. Jarred scored highly in all areas. A very well-deserved win," say Apprentice of the Year judges.

Registered Master Builders chief executive David Kelly was impressed with the group's talent and their resilience in the face of a very different competition to usual.

"It's encouraging to see these apprentices step up in a time where things can feel very uncertain. The competition did look a little different this year, however, I am extremely impressed with the level

of skill, knowledge, and dedication the apprentices have displayed. Learning new skills and applying themselves is challenging at the best of times but doing so under the conditions of the past 18 months is a real testament to their dedication and commitment."

Runner-up was Hayden Lambert, 26, from the Waikato region. Third place went to Joshua Fraser, 23, from Auckland.

The building and construction sector drives much of New Zealand's economic and social prosperity, stimulating our regional economies and providing jobs. We need more apprentices and more employers to meet the demand in front of us. Less than 20% of employers across the sector take on apprentices. This is not enough. The Government has provided additional support to both employers and apprentices. We encourage all employers to take advantage of the current settings and take on an apprentice.

Committed to supporting apprentices and the industry's future leaders, CARTERS Chief Executive Mike Guy says, "We're really proud to have been sponsoring the Apprentice of the Year competition for 17 years - and in that time, we've seen some incredibly talented apprentices go on to have really successful careers.

"CARTERS remains committed to supporting Kiwi apprentices as they build their future in the construction industry, partnering with the competition is a great way to celebrate emerging talent and our future industry leaders."

Before qualifying for the National competition, each of the top ten apprentices competed with other apprentices in their region. This involved a written project submission, a two-hour regional practical challenge, and an interview and site visit.

# Simplicity and NZ Living launch major build to rent housing programme

Unlike standard residential developments where units are built for individual sale, build to rent (BTR) developments are designed and built specifically as long-term rentals.

The properties are normally owned by institutional investors and managed by specialist operators. Tenants — including families, the elderly and those saving for their first home — are treated as customers, enjoying the benefits of living in high-quality dwellings with secure long-term accommodation, and the freedom to give notice when they choose.

Major home builder NZ Living has partnered with KiwiSaver provider Simplicity to fund and build as many high quality, affordable BTR dwellings as possible to help provide security to the growing number of people struggling to get onto the property ownership ladder in New Zealand.

Simplicity, a default KiwiSaver provider, has announced a significant build to rent housing programme, in co-operation with major home builder NZ Living.

The long-term intention is to build high quality, affordable homes for rent across New Zealand, providing many New Zealanders with another housing option.

“This is a very well proven model overseas. Pension funds in Europe commonly invest 5% to 20% of their funds this way, and achieve solid returns,” Simplicity managing director Sam Stubbs says.

“Within 18 months we’re aiming to build

and rent one home a day,” he says.

The homes will be built by Simplicity Living. Certain funds within the Simplicity KiwiSaver Scheme (not including its default fund), and the Simplicity Investment Funds, will own and provide funding to Simplicity Living through a wholesale funding arrangement.

The apartments and terrace homes will be Homestar 6-rated, with a 100-year design life.

The full NZ Living team, expertise and established subcontractor and supplier base will transfer to Simplicity Living. NZ



Living owners Shane and Anna Brealey will manage Simplicity Living on a pro-bono basis.

“We have decided to devote the next phase of our lives to building as many affordable, quality homes for rent as possible,” NZ Living managing director Shane Brealey says.

“Simplicity shares our long-term vision. With our skill in building and managing, and their ability to fund at scale, we are well placed to make a positive difference in the housing sector,” Brealey says.

“NZ Living has completed, or has in

*Simplicity Living's proposed Hinaki Street development in Pt England, Auckland.*



# 25,000 planned build to rent homes at risk due to government policy

The Property Council NZ says the Government needs to stop 'blocking the path to progress' in order to unlock large-scale BTR.



*Simplicity Living directors, from left: Shane Brealey, Anna Brealey, Sam Stubbs and Andrew Lance.*

construction, 700 new homes, selling at a discount to valuation of \$30 million, to assist mostly first-home buyers to get on the property ladder.”

Subject to necessary approvals, Simplicity Living will purchase NZ Living's two remaining developments in Auckland, including 159 apartments in Onehunga and Point England.

“We aim to rent for the long term, so families, the elderly and those saving for their first home can have true housing security without having to own a home,” Anna Brealey says.

Build to rent housing continues Simplicity's history of disruption of the finance sector. As well as very low fees on KiwiSaver and Investment Funds, it currently offers first home loans at a 2.25% floating rate.

“With Simplicity Living, we have a huge opportunity to offer high quality homes at long-term, affordable rents,” Shane Brealey says. “The returns should be very reliable too.”

Simplicity intends to offer its members the first option to rent the homes.

Simplicity was recently appointed a KiwiSaver default provider. It has \$3.9 billion of funds under management, and more than 74,000 members in its KiwiSaver and Investment Funds.

New data from the Property Council New Zealand (PCNZ) suggests that more than 6100 build to rent homes could be on the market within two years if the Government loosened the reins on the legislative barriers holding the sector back.

And further analysis suggests this number could swell to more than 25,000 new homes within a decade.

“This government has said time and again that they are focused on delivering more affordable housing, but history has shown that the private sector is often much better placed to build sustainably and at scale,” PCNZ chief executive Leonie Freeman says.

Unlike a standard residential development where units are built for individual sale, build to rent (BTR) developments are designed and built specifically as long-term rentals.

The properties are owned by institutional investors and managed by specialist operators, while tenants are treated as customers, enjoying the benefits of living in high-quality dwellings with secure long-term accommodation, and the freedom to give notice when they choose.

“We like to call it ‘renting for the Netflix generation’,” Freeman says, “where rent is treated as any other pay-as-you-go service, like Spotify or Netflix.

“Tenants can plug-in and plug-out of amenities as their life unfolds. They aren't buying the house — they're buying the living experience.

“A survey of Kiwi BTR developers shows that there are 853 BTR units either currently under construction or completed across 21 sites, with

an average of just over 40 units per development.

“Over the next two years we're estimating that, with the right policy settings, this figure could explode to over 6100 units across nearly 40 sites.

“These are credible, planned BTR developments that are currently in the pipeline for delivery, greatly expanding New Zealand's rental stock,” Freeman says.

“With government support, the BTR sector has the potential to deliver over 25,000 homes in just 10 years. Our members — who are primarily large scale commercial and residential developers and owners — tell us that delivery of these developments relies on several changes to government policy, including:

- Better clarity on the Overseas Investment Act, which could currently disincentivise large institutional investment in BTR in New Zealand.

- Further definition of BTR as its own asset class — similar to that of student accommodation or retirement villages — which would make it exempt from recent interest deductibility changes. Reclassifying BTR as a commercial asset class would also change depreciation application and provide a genuine incentive to help unleash large numbers.

“BTR has the real potential to house more New Zealanders comfortably, quickly and affordably.

“But if we want large-scale BTR to be unlocked, then the Government needs to stop blocking the path to progress, and accept that this could be a simple solution to help ease Aotearoa's housing woes,” Freeman says.

# Locally-sourced products proving more crucial than ever

One of New Zealand's most recognised and trusted brands, Lockwood Homes, believes one of the secrets to its longevity is its focus on local sourcing, which is proving to be more crucial than ever.

"In a world where many companies rely on global manufacturing chains to help produce their products, our capability to source our main manufacturing element – timber – has seen our business thrive," managing director Andrew La Grouw says.

"Not only have we forged enduring relationships with local suppliers, but the advantages of local sourcing have become even more relevant during these Covid times, allowing us to increase our manufacturing capacity to meet current demand," he says.

Keeping it local has always been important for Lockwood, which celebrated its 70th birthday last month. The nearby pine forest plantations and timber mills were the key driver for Lockwood to establish manufacturing in Rotorua.

One of New Zealand's most iconic and innovative manufacturing success stories,

family-owned Lockwood had humble beginnings, with its first home built as a fishing bach in Rotorua.

"We've now constructed more than 50,000 Lockwood homes and buildings around the world, and are extremely proud of our rich history," La Grouw says.

"Today we have a team of more than 50 people at our head office in Rotorua, where the components for our homes and buildings are still manufactured to exacting standards by our team of skilled craftsmen and women."

With its patented x-profile construction and solid wood insulated materials, Lockwood's innovative practices have helped to forge New Zealand's reputation as a nation of ingenious, No.8 wire go-getters that punch above their weight on the national and international stage.

"We have supplied Lockwood homes to all corners of the globe, and been involved in many interesting and challenging projects.

"But I am most proud of all the Lockwood homes that have been built in



*Lockwood managing director  
Andrew La Grouw*

New Zealand for Kiwi families.

"High-quality housing is important to family health and well-being, and I'm proud of our tradition of setting and maintaining our own quality standards."

La Grouw says no matter what the size or scale of the business' achievements, the most successful component of their business has, and will always be, its people.

"We are honoured to have shared the lives of all our employees, some of which have been with us for more than 35 years.

"We're proud to say that the average length of time our staff members stay with us is 11.5 years, compared with the national average of just four years."

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# Orams Marine celebrates marine village expansion

The ambitious Orams Marine development on Beaumont Street, which borders Westhaven Marina and Wynyard Quarter in Auckland, has reached an impressive milestone with the completion of its first stage.

With the completion of stage one (of two), the new site has an additional 12,000 sq m hardstand, a water treatment plant, three 90-metre marina fingers, and an 85-tonne and 820-tonne travel lift.

The new additions will allow Orams to triple its capacity and haul out up to 80% of the world's superyacht fleet.

The upgrade provides much needed maintenance facilities for a wide range of boats, including ferries, fishing boats and private and commercial vessels.

"This development is the result of numerous studies focused on adding sustainable value to the marine industry and Auckland's economy," Orams Marine chief executive Neven Barbour says.

"As the marine industry continues to grow, Orams Marine is in an advantageous position to cater to demand."

Eke Panuku is working with Orams to



build on Wynyard Quarter's maritime history, and to create additional infrastructure that enables Auckland, and New Zealand, to take a leading role in the competitive international marine market.

"We've always been clear that special and focused effort would be made to preserve and strengthen, over time, the marine business component of the waterfront," Eke Panuku chief executive David Rankin says.

"These elements contribute to Auckland's distinctive and unique waterfront environment, adding to the strong historical and cultural character of the area."

Wynyard Quarter has a long maritime history, and the marine and fishing industries continue to play a part in the next chapter.

This year marks 10 years into the redevelopment journey for Wynyard Quarter, and Orams has been there every step of the way.

Next for the company is to build an 85-tonne work shed for their travel lift. This will enable work on boats to be completed under cover and protected from the elements.

This will be followed by commercial buildings and a residential tower.

## DHBs join forces with university to provide project management solution

A shortage of qualified and experienced project managers could challenge the three Auckland region DHBs tasked with delivering significant capital and infrastructure programmes, so they have come up with an innovative and long-term solution.

Auckland DHB, Waitemata DHB and Counties Manukau Health have joined forces with the University of Auckland's Faculty of Engineering to develop a master's programme designed to meet a health project management shortage.

The Master of Engineering Project Management endorsed in Health (MEPM-H) is an extension of the university's existing Master of Engineering Project Management, and incorporates courses from the Faculty of Medical and Health Sciences on health system organisation and leadership.

"Strong project management skills specific to the health sector are critical to our ability to deliver the health facilities needed by the region over the next 15 years," says Mark Harris, Manager Regional Capital Programme, Northern Regional Alliance.

"While DHBs are committed to delivering their capital investment programmes, the

lack of experienced project managers could make it harder to provide the facilities and infrastructure needed so health services can continue to meet the growing needs of our population," he says.

There is a national shortage of construction project managers across various industries. Factors contributing to this include a lack of training in specialist areas, such as health project management, and Covid-19 border restrictions which have meant skilled project managers aren't coming from overseas.

The MEPM-H will give graduates with at least two years' relevant work experience access into specialist health-related infrastructure project management.

Supporting the MEPM-H programme is the Centre of Excellence - Health Infrastructure (CEHI).

This is an innovative internship programme initiated by the Auckland DHB, and designed to enable students to study part-time while working for the DHBs' infrastructure and facilities teams, and taking part in construction-related research projects.

There will be four fully paid scholarships offered by the DHBs.

"CEHI aims to provide students with a well-rounded work experience in health infrastructure — one where they are supported, nurtured and challenged, and able to use their health project management studies in a live environment," says Allan Johns, Director of Facilities & Development at Auckland DHB.

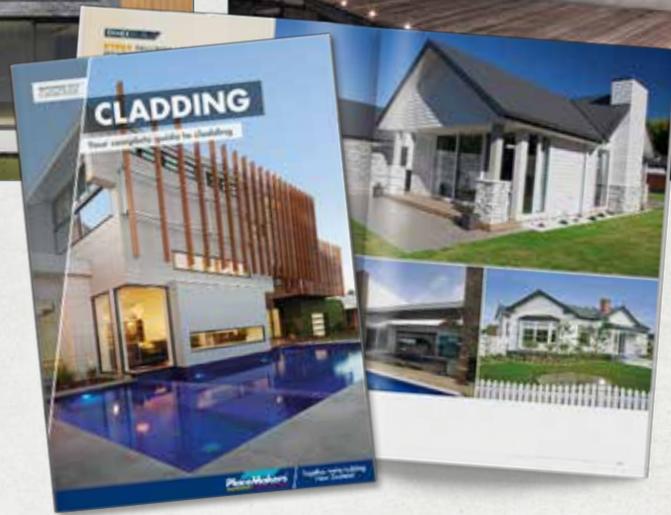
"We want to see these students thrive and, ultimately, pursue careers in an industry that ticks all the boxes when it comes to job satisfaction and making a difference,"

Lead developer of the MEPM-H is Dr Garry Miller, Director of the Graduate School of Engineering.

He says the request from the Auckland DHB for a specific project management programme was an opportunity for the university to focus on a real need identified within the health sector.

"Development of New Zealand's infrastructure is a huge challenge which needs a team approach of organisations working in partnership," Miller says.

"With the huge capital spend planned for health over the next two decades, this is an important sector where we can play our part."



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# Portaloo company lifts hygiene standards after female tradie request

When Chelsea Roper made the switch to the construction industry three years ago, it wasn't the fact that the industry is male dominated that made her reluctant — it was the hygiene when it came to the toilet facilities.

But Roper, who is undertaking a carpentry apprenticeship in Queenstown, says the smelly reputation portaloos receive isn't what she encountered at all.

She says they were clean and fresh smelling, which was a great start to her new career path. Now, Roper is taking portaloo service a step further to make them more female-friendly by becoming an advocate for all portaloos to have a sanitary bin service.

In New Zealand, 40,000 women are employed in the construction-related workforce. However, Roper says that what's provided in construction-related offices, such as sanitary bins, needs to be provided on site too.

HireKING, which supplies portaloos to construction sites across the South Island, couldn't agree more, and is one of the first portaloo companies to offer a sanitary bin (including the disposal service) in all of its loos.

Roper, who works for Queenstown Carpenters, approached HireKING about the issue because the company is a major provider in Queenstown — and she's always noticed how clean and tidy their portaloos are.

"As women, we tend not to really ask for what we need, but this is a basic necessity for women," she says.

"I thought I might as well ask the company because, to be honest, it's not something men are going to think about."



*Carpentry apprentice Chelsea Roper has advocated for sanitary bins in portaloos.*

HireKING general manager Fabian Kulpe says he was glad Roper brought the issue to his attention.

"We started to question why this wasn't provided as a service, and how can we make this happen. At the end of the day, it's a basic human right for women," Kulpe says.

"It's great to see more women getting into the construction industry, so anything we can do to make women feel more comfortable in their profession is great."

After crunching the numbers, HireKING has decided to provide sanitary bins (and disposal) by increasing the cost of portaloos by \$10 per service, solely to cover costs.

Kulpe says the conversation around providing sanitary bins for women in all professions, especially outdoors, is one that needs to be had more often.

"I don't think women in trades have really had a voice. But things are starting to change when it comes to women vocalising their needs and conversations around topics that were previously a bit taboo," he says.

"We are glad to be at the forefront of

this change, and we realise there is an overall social responsibility to providing this service."

The National Association of Women in Construction NZ (NAWIC) is also thrilled to see change happening within the industry.

"NAWIC is thrilled to hear the new initiative to include sanitary pods into site portaloos has been instigated by advocate Chelsea Roper and HireKING working together to find a solution," NAWIC president Stacey Mendonca says.

"It is a great way to normalise working on site for women tradies, and ensure we are all covered with the basics to do our job."

Roper says more women are getting into different trades, and there aren't any aspects of the job they can't do.

"In Queenstown, women working in trades is quite popular. I've worked alongside other female builders, tilers and plasterers. I even know a whole painting company made up of women.

"With more women keen to work in this industry, we just need a bit of thinking outside the box so we're comfortable on site from all aspects."

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# Site Safe awards finalists announced

As New Zealand's construction industry deals with the ongoing impacts of the Covid-19 pandemic, health and safety has remained integral to the ability of businesses to continue to operate.

Site Safe's annual Construction Health, Safety and Wellbeing Awards were created to promote health, safety and well-being in construction by recognising those companies that make a difference.

To continue to push health and safety as a top priority for business, the aim of the awards is to acknowledge people, sites and businesses that are demonstrating excellence in the areas of leadership, innovation, and contribution in New Zealand's construction sector.

Site Safe chief executive Brett Murray says to recognise initiatives that come from the wider workforce helps the organic buy-in to health and safety.

"The entries this year have shown that people are taking this seriously, and want to be recognised for the

great work they are doing in the health and safety space.

"Building support for health and safety initiatives from the ground up is key to achieving the culture shift we are undertaking as an industry towards a culture that values health and safety as a top priority."

This year the judges were particularly impressed with the calibre and maturity of all entries received. And while there were plenty of robust discussions about entries, they managed to reach a consensus on the finalists.

Award winners will be announced at Site Safe's annual Evening of Celebration at the Vodafone Events Centre in Auckland on March 3, 2022, an industry-wide celebration of health and safety excellence.

Also in attendance will be Site Safe scholarship recipients and graduates from their Health and Safety in Construction programme.

For further information about specific initiatives and entries, visit [www.sitesafe.org.nz/news--events/news/award-finalists-announced](http://www.sitesafe.org.nz/news--events/news/award-finalists-announced).

## Finalists are:

**Safety Innovation Award Small to Medium Business (organisation up to 50 employees)**

- Goom Landscapes Ltd
- Major Consulting Group Ltd

**Judges' special mention:**

- Safety 1st Removals Ltd

**Safety Innovation Award Large Business (organisations over 50 employees)**

- Piritahi
- Capital Journeys
- Fletcher Construction

**Safety Leadership Award (small, medium or large business)**

- Hawkins
- TopMark Electrical
- Brian Perry Civil

**Safety Contribution Award (individual or small team)**

- Rabo Construct Ltd
- The Roofing Specialist Ltd
- Pipeline & Civil Ltd

**The Kalmar Mental Health and Wellbeing Award (company, organisation, team or individual)**

- Dunlop Builders
- Accent Construction Interiors Ltd
- PFS Tiling Ltd

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# PrefabNZ announces name change to Offsite NZ

Name change will reflect the industry's expanding depth and breadth in providing much-needed sustainable solutions for all building sectors.

PrefabNZ is to be known as Offsite NZ to reflect the industry's expanding depth and breadth in providing much-needed, high-value, sustainable solutions for the residential, commercial and infrastructure building sectors.

Offsite NZ is a non-profit membership organisation that informs, educates and advocates for innovation and excellence in offsite design and construction in New Zealand.

In today's high-demand and increasingly expensive building climate, offsite manufacturing is growing in innovation and appeal, and is a far cry from the prefabricated buildings of the 1950s.

Various terminology is used to describe prefabrication, modern methods of construction, and offsite building.

The commonly-used term "prefab" conjures up images of temporary homes, tiny homes, flat pack and secondary dwellings. While this is an important and valid part of the construction sector, it



Offsite NZ chief executive Scott Fisher.

does not cover all parts of it.

Chief executive Scott Fisher explains why the name needed to change.

"When people hear the word 'prefab', their first thoughts might be of cold, damp classrooms. That kind of association is a stumbling block to starting credible conversations about the need for the construction industry to embrace innovative technology, systems and

processes," Fisher says.

"The name change comes after much consideration and broad discussion with stakeholders, including members, non-members, officials, policymakers, the public and the wider construction sector."

Board chair Toni Kennerley says the name change is a strategic move, and supports the organisation's vision for the sector.

"Our vision is for offsite construction in New Zealand to be mainstream, and that productivity is high, and value is created for clients and society.

"The change to Offsite NZ supports this vision and has broader appeal to the wider construction sector."

Offsite NZ will keep its existing modern branding with the strapline "The heart of innovative construction".

The organisation will continue to be the loudest voice promoting the benefits of offsite manufacturing to the wider construction sector, the government and public

## New platform launched for NZ specifiers

New web site features brand information, case studies, segment brochures, expert advice and support.

The Dulux Construction Solutions web site is a resource for specifiers and decision makers in the construction market, bringing together inspiration, advice and key information to help them through their projects.

Information across brands and business units within DuluxGroup are integrated for fast and easy navigation across the site.

It also offers the ability to access technical, colour and specifications across decorative paints, protective coatings, powder coatings, woodcare, textured finishes and plaster systems, construction chemicals, concrete repair and finishes, construction adhesives and garage doors.

"We are leveraging our expertise to support architects, interior designers, builders and engineers to design and build with confidence," Dulux New Zealand trade sales and marketing manager Shontelle Crosswell says.

The site features brand information, case studies, segment brochures, expert advice and support.

A dedicated section titled "Our Brands" shows many of the Dulux Group brands in one place, with the ability to access a range of information from colour and

specification information to product data sheets to ordering samples across multiple brands.

DuluxGroup brands such as Dulux decorative paints, Dulux Protective Coatings, Dulux Powder Coatings, Dulux AcraTex, Specialized Construction Products, Porter's Paints, Dryden, Dulux Avista, Fosroc, Intergrain, Admil, Selseys, Dominator and Garador are in one convenient resource for specifiers to access.

The Dulux Construction Solutions web site is now live at [duluxconstructionsolutions.co.nz](http://duluxconstructionsolutions.co.nz).

Case studies showcase group capabilities across multiple brands and product ranges on projects, while segment brochures highlight the diverse and broad range of industries Dulux Group services and supports.

Specification support and advice services are available via a Contact Us form, and via a live chat function from Tuesdays to Thursdays, between 2pm and 4pm.

The screenshot shows the Dulux Construction Solutions website. At the top, there is a navigation bar with the Dulux logo and menu items: "OUR BRANDS", "INDUSTRY SOLUTIONS", "SPECIFICATION SUPPORT", and "WHY CHOOSE DULUX". Below the navigation bar, the main heading reads "Welcome to Dulux Construction Solutions". A central text box states: "Dulux Construction Solutions helps you design and build with confidence." Below this, it says: "Created to provide specifiers with the tools, information and guidance they need to realise their projects' potential, it lets you access Dulux product solutions in one convenient place." and "View our introduction video." To the right of the text box is a photograph of a woman in a white lab coat working at a desk, with a small inset image of two construction workers in safety gear.



Engineered by Juken New Zealand, Triboard TGV is a three-layered panel, with a wood strand core, sandwiched between MDF outer “skins”. The result is a clean-lined panel that has great resistance to impact. The dimensionally stable core provides superior screw holding ability, and the tongue and groove system allows for fast and easy installation. For more information go to [jnl.co.nz](http://jnl.co.nz)



# It's a wrap!

Technically challenging, the roofer was an essential part of the design and install team when it came to achieving a successful outcome with this highly detailed, contemporary home.

A new subdivision in the foothills below the Christchurch Adventure Park features a number of high-end homes, one of which dominates its neighbours for size and complexity.

It's also the home chosen by RANZ as the Residential Roof of the Year, with roofing and cladding installed by tray specialist Matt McDougall and his apprentice Will Hannah of The Roofing Company Canterbury.

McDougall says the specifications for the home were extremely detailed from the outset and, on receiving a set of elevations and plans, it was clear to him that communication with the builder and architect would be key to the success of the project.

The contract proved to be challenging, and involved McDougall in a lot of consultation and design work, with him detailing cut-and-paste mock-ups of how the design could be successfully achieved.

The details were, in his words, "very busy", so he simplified them. He also re-measured the job carefully, as it was essential that all the trays lined up in terms of where the ribs were falling.

The house has insulated SIP panelled walls, wrapped 96% in Flaxpod Matte Colorsteel Espan 340 from Metalcraft.

The original design called for the roofing and cladding sheets to be run up the wall, over the roof, and down the wall on the far side.

However, it was McDougall's suggestion for a ridge through the roof with prickled wall junctions that resolved what promised

to still be "a very tricky job".

The windows also required special attention because instead of one head flashing, large "eyebrows" were specified off the building, meaning flashings for these design details required considerable effort to successfully achieve this aesthetic architectural feature.

The size of the site was another major consideration. It was a very tight location with little room to move, so every sheet — and there were plenty of them — was hand-loaded off the truck and onto the site, with closer vehicular access being impossible.

The six-month contract ran from October 2020 to April this year.

"As always, I do the job to the best of my knowledge and ability," McDougall says.

"If the details don't look right or achievable I will speak out. Sometimes you have to have difficult conversations to get a better result. After all, it is my name on the PS3, so if the details are incorrect I always speak my mind.

"This was certainly a challenging project, but it highlights again my love for resolving difficult details.

"As a general rule, I make sure there is good communication between the architect and builder, and whoever is running the job. These design challenges are what makes the job so exciting.

"I'm forever looking at new ways of doing things, and the more technical the job, the more I like it."

Entries for the 2022 RANZ members awards open in March 2022. For more information visit [ranz.co.nz](http://ranz.co.nz).

## 2021 RANZ Award winners:

- **Residential Roof of the Year**

The Damm House, Longacre Drive, Cashmere, by The Roofing Company Canterbury Ltd

- **Commercial Roof of the Year**

Puhinui Station Interchange, by Project Unite Ltd, Hamilton

- **Young Roofer Excellence Award**

Jared Balvers, CS Roofing Canterbury Ltd

- **Trainee of the Year**

(presented in association with Skills)

Adam Godsall, Project Unite Ltd

- **Training Company of the Year**

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**Roofing Excellence Award:**

Matthew McDougall, The Roofing Company Canterbury Ltd





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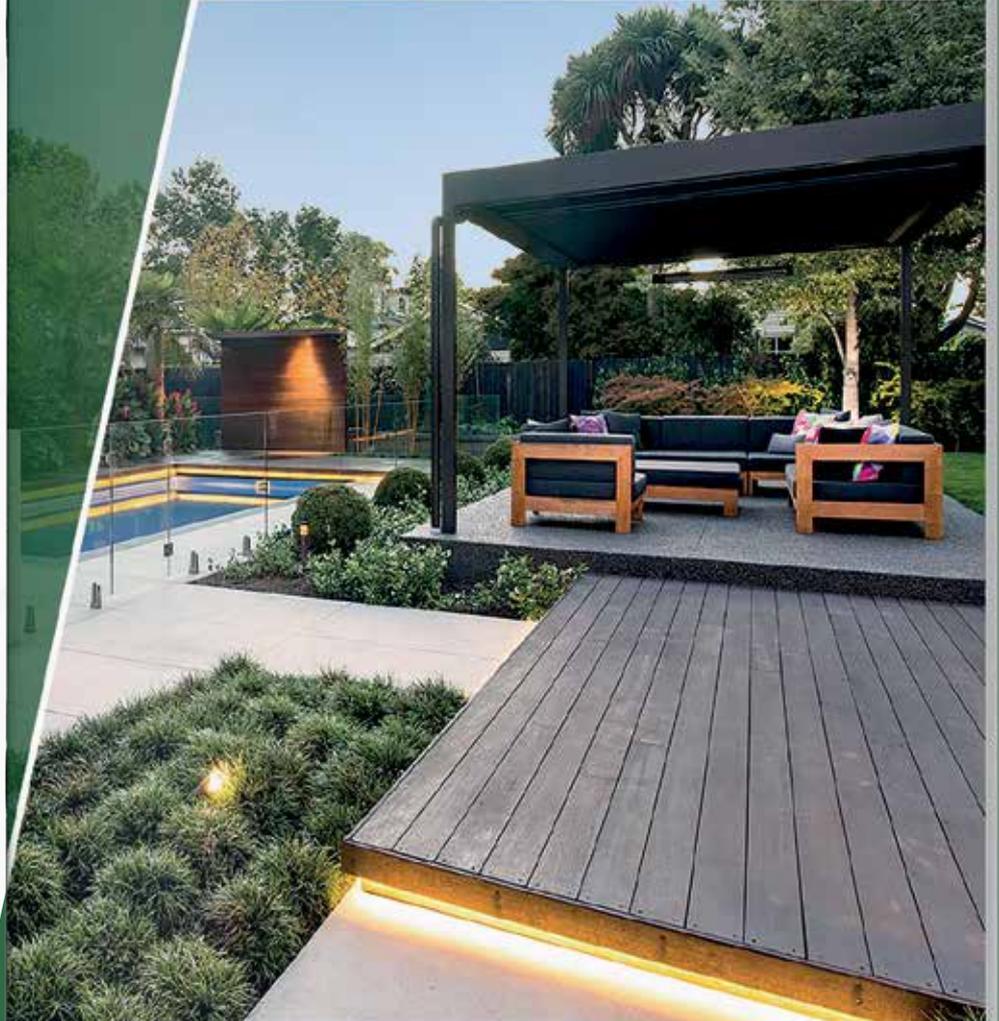
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# Hire company bags naming rights for Eden Park's outer oval

Kennards Hire is extending its support of New Zealand's largest sports stadium, Eden Park, with a partnership deal that will see the equipment hire brand given naming rights of the stadium's outer oval.

It will now be called the Kennards Hire Community Oval.

Kennards Hire New Zealand general manager Tom Kimber says he's proud that Kennards Hire is continuing its support of Eden Park, which has been a pinnacle of New Zealand sports and entertainment for more than a century.

"We've always believed in having strong ties to our local communities, a view closely shared with Eden Park," Kimber says.

"The Kennards Hire Community Oval is destined to be the place to be for a huge range of community activities. We're so excited to be able to be a part of the Auckland community, enabling everyone to create special moments together."

The Eden Park sponsorship is an extension of Kennards Hire's partnership with the stadium, which began in 2016.

It also builds on other successful



community relationships the business holds with organisations, including KidsCan, Springboard, and local schools and sporting clubs.

Eden Park chief executive Nick Sautner says the renaming of the oval was a historic occasion for the stadium as it entered the next chapter of its work with Kennards.

"The outer oval is an amazing community asset which is used for a

diverse range of cultural and recreational activities, including food truck nights and the Eden Park Christmas, as well as domestic cricket, with the Auckland Aces and Auckland Hearts playing over the summer months.

"We are thrilled they have agreed to continue supporting us as a naming rights partner," Sautner says.

A formal commemorative event will take place in the New Year.



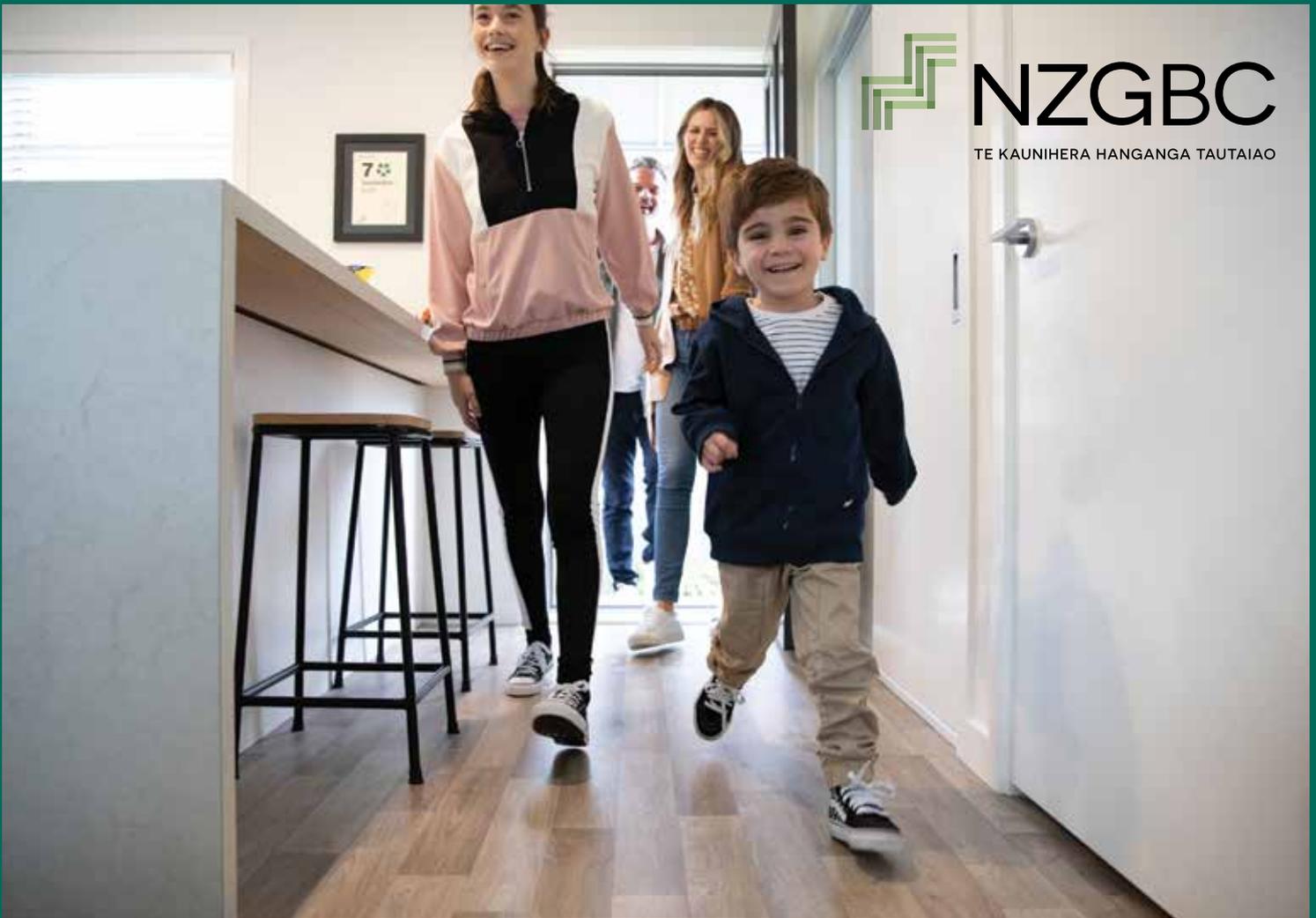
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# Innovation encouraged by new regulations

Cabinet has agreed on regulatory proposals developed by the Ministry of Business, Innovation and Employment (MBIE) to support greater opportunity for innovation and economies of scale, and improve trust and confidence in the building sector.

"In June, changes were made to the Building Act to support housing supply and affordability, and increase sector productivity and innovation," says John Sneyd, MBIE's General Manager Building System Performance.

"The regulations that Cabinet has agreed to make will support the implementation of these changes," Sneyd says.

"They will support more informed building product selection, and help the sector to take advantage of new ways of building homes and building components for homes."

Based on the policy decisions made at Cabinet recently, regulations are expected to be further developed for Cabinet's approval by mid-2022.

The Building (Building Products and Methods, Modular Components, and Other Matters) Amendment Act 2021 is the first phase of a suite of reforms to building legislation, which:

- introduced mandatory minimum information requirements for building products,
- enabled the creation of a new voluntary certification scheme for modular component manufacturers, and
- paved the way for a strengthened product certification scheme.

"The Government will be requiring that more information is made available about building products and how they should be used so that builders, designers and home owners can be confident in their choices.

"The new requirements will also support building consent authority decision-making, and reduce the chance of things

going wrong during or after the construction process," Sneyd says.

"The regulations will set out what information must be disclosed, when it must be disclosed, who must disclose the information and to whom, and how that information must be verified.

"We know from engaging with the sector that a one size fits all model for the many building products available in New Zealand isn't going to work.

### Three classes of building products

"Cabinet has agreed to create three classes of building products, with each class having slightly different information requirements."

The three classes of building products cover: batch or mass produced products, such as fixings, roofing and cladding; custom-made lines of products, such as external windows and doors; and gas and electrical products regulated under the Gas Act 1992 and Electricity Act 1992.

Other proposals agreed include the regulatory detail that will support the new voluntary certification scheme for modular component manufacturers, and regulations that will strengthen the product certification scheme known as CodeMark.

Sneyd says this new bespoke scheme for offsite manufacturers will support increased use of offsite manufacturing and prefabrication approaches, which have the potential to lift productivity, improve quality, reduce building costs and time, and contribute to better environmental outcomes through a reduction in waste.

For more information, visit [www.building.govt.nz/getting-started/building-law-reforms](http://www.building.govt.nz/getting-started/building-law-reforms).

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## NORTHBEAM

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# Registrations for BIMinNZ 2022 now open

BIMinNZ is a one-day conference on Building Information Modelling (BIM), representing an industry partnership between the New Zealand Institute of Building (NZIOB) and the BIM Acceleration Committee (BAC).

BAC was created out of the government-sponsored 2011 Building and Construction Productivity Partnership, which viewed BIM as a leading tool to enhance productivity levels in the sector.

The inaugural BIMinNZ Conference in 2019 drew an audience of 270 and was considered a great success. The second BIMinNZ Conference will be held in Wellington on Thursday, March 10, 2022.

With a Conference Steering Group comprised of active construction practitioners, the 2022 BIMinNZ Conference will deliver a programme that has been envisaged and delivered by industry, for industry.

## Conference theme

Building our Digital Community to

encompass the full construction supply chain is the overarching theme for the BIMinNZ 2022 Conference.

This theme is underpinned by the showcasing of New Zealand construction projects, as presented by the clients, contractors and consultants who designed and delivered them.

The common thread amongst the projects is the use of Building Information Modelling (BIM) and other construction technologies by the construction supply chain.

BIMinNZ will not only provide relevant and inspiring examples of where BIM sits within the project environment, but also a forum where New Zealand's existing and emerging BIM users can meet, discuss and engage with the country's BIM innovators.

## Programme

Under the session titles of Productivity, Risk-Mitigation, and Sustainability, projects to be showcased at BIMinNZ include:

- KiwiRail's pioneering "machine control and avoidance" system

- NZ Archives
- Christ Church Cathedral
- Waikato River to Redoubt (R2R)
- Wellington City Council, Rules as Code
- Foodstuffs Distribution Centre, Auckland Airport
- Wellington Convention Centre
- University of Auckland's B201 Building
- CLT/mass timber usage at Mary Potter Apartments.

The above topics, and a special presentation on how BIM can be used as a carbon accounting tool, will be bookended by digital community presentations from thought leaders TED Talk presenter (USA) Shawn Achor and Melissa Clark Reynolds ONZM (NZ).

The conference MC will once again be Petra Bagust.

## Registration

Registrations are now open. The cost is \$675 + GST, or \$575 + GST for NZIOB members.

Find out more and register at [biminznz.co.nz/conference](http://biminznz.co.nz/conference).

# GJ Gardner celebrates 20,000 family homes for Kiwis

New Zealand's most trusted builder, GJ Gardner Homes, began building its 20,000th family home, in Ngaruawahia recently. That's equivalent to the size of many New Zealand towns.

Grant and Ellie Porteous, the owners of the New Zealand master franchise of GJ Gardner, watched on Zoom from lockdown in Auckland as the concrete slab was poured for the new home of Jonathan and Rachel Tily and their two young children in River Road Estate, celebrating the milestone with their head office team.

GJ Gardner marked 10,000 homes in 2014, after 17 years in the market. Doubling that number only seven years later is a mark not only of the ever-increasing buoyancy of the property market, but also the "crawl, walk, run" strategy for sustainable growth that has led to GJ Gardner being the largest home builder in the country across 31 franchises.

"We never set out to be the biggest home builder in New Zealand," Grant says.

"Our ongoing goal is to be a great business, with good family values like keeping our promises, and respecting

everyone from customers to trade partners to the people in the supply chain."

That focus on values has endured as the business has grown to 31 franchises nationwide. In many instances, new franchisees have come from long-serving staff within the nationwide team.

The Hamilton franchise, like others in the group, is run by second-generation family members. Hamilton was one of the early franchises, and while achieving the honour of building the 20,000th home also recently celebrated building its 2000th home in the Waikato region.

Grant and Ellie both have no doubt those core values, and having a close-knit team, have helped GJ Gardner to be named year-on-year the most trusted builder in the Reader's Digest Trust survey, as well as putting them in a robust position in the post-Covid environment as supply issues challenge the industry.

"Many of our trades have grown their businesses with us over the past 24 years," Grant says.

"Equally, our relationships with suppliers are strong and

longstanding. Thanks to our industry-leading systems, we are working to try and secure materials six, sometimes 12, months ahead of time for our customers and our trades who we view as part of the wider GJ family.

"We must do everything possible to try to overcome the challenges of the current pandemic environment," he says.

"For most of our customers, building a home is a huge investment for their families, a responsibility we don't take lightly," Ellie says.

As one example, she and Grant last year invested in training in communication skills for staff members nationwide to ensure that every part of the business was able to effectively keep customers informed and reassured during the

uncertainty of the pandemic.

"Open and good communication is another component we see as critical in building trust between our team and clients," she says.

Trust is the absolute key, Grant adds. When he and Ellie joined GJ Gardner in 2002, according to a Master Builders' Association survey, fewer than 30% of people who had built new homes said they would ever do it again.

"Our vision is to have every customer recommend us to their closest friend, and we are fortunate the team nationwide strives to achieve this by their actions every day."

As an example of how the vision has been realised, the Hamilton franchise has built 11 homes for the members of one extended family in the region.

*Jonathan and Rachel Tily and their two young children on the site of their new home — and GJ Gardner's 20,000th build in New Zealand — in the River Road Estate, Ngaruawahia.*



# BIMINNZ.

## CONFERENCE 2022

# BUILDING OUR DIGITAL COMMUNITY

10 March 2022, Te Papa, Wellington

### KEYNOTE SPEAKERS



Shawn Achor (USA)  
New York Times bestselling  
author & Founder of  
GoodThinkInc.



Melissa Clark Reynolds (NZ)  
Serial Entrepreneur &  
IT Specialist

### POINT OF DIFFERENCE

The BIMinNZ Conference is a construction technology forum envisaged and developed by industry, for industry.

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# New ultra-low chemical emissions paint launched

Dulux New Zealand has launched the first Greenguard Gold-certified Ultra Low Chemical Emissions paint manufactured in New Zealand, Dulux UltraAir.

UltraAir is a premium water-based interior range that significantly reduces the number of chemicals present in the air during and after application.

Greenguard Gold is a third-party certification that tests for more than 10,000 chemicals and Volatile Organic Compounds (VOC) emissions, helping to reduce indoor air pollutions and the risk of chemical exposure.

It is also Environmental Choice-approved — New Zealand’s official environmental label — and Global GreenTag-certified.

Dulux UltraAir’s 10 litre pails are made from 50% post-consumer recycled plastic, and can be recycled again and again through the Dulux Paint Take-Back programme.

Dulux product manager Shirelle Schubert says the new range helps maintain a non-toxic indoor environment.

“It also has hardly any odour, so you can get back into the room a lot quicker, which is especially important with New Zealanders currently spending substantial amounts of time in their homes and needing to live and



work in their spaces as they renovate them,” Schubert says.

Research found indoor air quality can be two to five times worse than outdoor air quality, making it more important than ever to select products for the home that help maintain indoor air quality.

UltraAir is touch-dry after two hours, and users will have the convenience of using the room almost immediately upon applying the paint.

It might assist families who may be prone to sensitivities such as asthma or allergies,

and other respiratory or skin irritants.

Dulux UltraAir is available in colours tinted off a white base in a low sheen or matt finish, giving customers access to more than 500 colours from the Dulux Colours of New Zealand range.

Dulux UltraAir is available from Bunnings, Dulux Trade Centres and select PlaceMakers, ITM and Guthrie Bowron stores nationwide, and are available in 1L, 2L, 4L and 10L packages, depending on the product.

[www.dulux.co.nz/products/UltraAir](http://www.dulux.co.nz/products/UltraAir)

## Back strain a thing of the past

Max is aiming to cut down on back strain for workers tying rebar on concrete slabs with a new stand-up, battery-powered tying tool.

Features of the new Max RB401T-E Stand Up TwinTier Rebar Tier include:

- Reduced back strain: The RB401T-E is an ergonomic solution for backbreaking slab work.
- Adjustable handles: Users can adjust the handles to two positions for the most comfortable fit for their height.
- Trigger-less technology: An automatic contact mechanism allows the tool to instantly tie when pushed down over a rebar intersection.
- Shorter tie height: A wire bending mechanism produces a shorter tie height. Less concrete is needed to fully cover a wire tie.
- Tilt sensor: The tilt-sensor prevents the tool from tying when angled upward.
- Enclosed design: Allows greater protection against debris and moisture entering the tool.

All these features work together for a 55% reduction in the significant risk of developing back pain in the long term.

The RB401T-E can tie D10 x D10 up to D19 x D19 rebar combinations for a variety of applications, including, but not limited to, road and bridge decks, industrial foundations and commercial floors.

Like other tools in the TwinTier family, the RB401T-E’s special attributes include its faster tying speed, a reduction in wire consumption, and a short wire tie.

The RB401T-E also uses the same battery and TwinTier tie wire as the RB441T and RB611T hand-held TwinTiers.

[www.sifco.co.nz](http://www.sifco.co.nz)





## Panel drills double-ended for longer life

The Evacut HSS Double End Panel Drill has been developed to drill holes for rivets in flat and curved panels, and for use in sheet metal fabrication.

Features include:

- 135° self-centring point — minimises wandering when starting.
- Flute length designed for shallow hole drilling no deeper than 1.25mm x diameter.
- Double ended to increase the drill life, and ensures that the chuck jaws are fully tightened.
- Ground from solid.

[suttontools.co.nz/products/panel-drills-double-ended-silver](http://suttontools.co.nz/products/panel-drills-double-ended-silver)

# WIN!



We've got another great reader competition prize this month — an Evacut Drill Set from Sutton Tools worth

# \$155

Visit

[www.buildingtoday.co.nz](http://www.buildingtoday.co.nz), hit the Competitions link and correctly answer the Building Today Trivia Question to go into the draw to win this fantastic prize!

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**BUILDING TODAY**

Congratulations go to Kellyn Hodge of Cambridge, who won the Tajima prize pack from Acme Supplies, worth \$384.

# Quality never goes out of fashion

Although the building sector is busy managing the continued uncertainty created by Covid-19, Concrete NZ says building quality must never be compromised.

Concrete NZ's Precast Plant Certification Scheme provides purchasers and specifiers with peace-of-mind that their precast concrete products meet quality requirements.

Within a construction environment dominated by concerns around operating during the pandemic, there have been recent reports of building material supply issues and, in turn, potential quality concerns.

The media recently picked up on a recent industry survey which reported a number of concerns, including building consent delays, increased costs, customer complaints, and product substitutions due to a lack of building materials.

While the concrete industry is not immune to operating challenges such as a shortage of truck drivers, and is monitoring aggregate supply, there are no capacity issues that should force building contractors to replace the quality concrete products supplied by members of the Concrete NZ Precast Certification Scheme with inferior alternatives.

The Precast Plant Certification Scheme is gaining traction amongst Concrete NZ Precast members and their clients.



The manufacture of precast concrete products requires considerable experience and skill, as they often form a building's primary structural system.

Poor precast manufacturing practices have the potential to compromise a structure's durability and the life safety of its occupants.

In addition, safety considerations are paramount during the manufacturing, handling and installation of precast products, with any short cuts potentially resulting in unsafe outcomes with significant consequences.

The Precast Plant Certification Scheme provides specifiers, contractors and their clients with confidence that products purchased from a Precast Certified Plant are backed by an established operator with appropriate facilities, experienced staff and quality assurance programmes.

Regardless of the application of the precast product — architectural, structural,

cladding, civil or other — purchasing from a Concrete NZ Precast Certified Plant ensures the product has been manufactured at a facility with systems audited by an independent, third-party body.

Certified plants invest heavily in modern equipment, oversight procedures and staff training, with the intention of delivering "quality".

While cheaper alternatives may be available, cost must never be the only consideration.

Procurement decisions should always factor in quality as a prerequisite and, in terms of precast, the stamp to look for is the Concrete NZ "Precast Certified Plant" logo.

For more details on the Precast Certification Scheme and a link to the precast plants currently registered, visit the Concrete NZ web site at [www.concretenz.org.nz](http://www.concretenz.org.nz).



*The Precast Plant Certification Scheme is gaining traction amongst Concrete NZ Precast members and their clients.*

## NOT ALL PRECAST CONCRETE IS CREATED EQUAL INDUSTRY CERTIFICATION FOR YOUR PROTECTION

A Concrete NZ Precast Certified Plant ensures precast concrete has been manufactured by experienced personnel at an established plant with robust quality management systems.

Ensure your next project specifies a **Concrete NZ Precast Certified Plant**

[www.concretenz.org.nz](http://www.concretenz.org.nz)



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It delivers an uncompromised compressive strength of 200kPa @ 10% deformation and exceptional Insulation Values.

Specifically engineered for residential and commercial projects, its high performance gives engineers and specifiers peace of mind while increasing the thermal performance of a building.

SLABX200's durable nature means it will not degrade over time, keeping its integrity for the life of the structure.

**SLABX200 delivers the ultimate high performance:**

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- Exceptional Insulation Values
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**3.0  
R-VALUE  
@100mm**

**200kPa  
STRENGTH  
@ 10%  
DEFORMATION**

Sheet Sizes	Thickness (mm)	R-Value
EXPOL SLABX200 2400 x 1200	50mm	R 1.5
	75mm	R 2.2
	100mm	R 3.0
	150mm	R 4.5
	200mm	R 6.0
Other thickness available		

BTNOV21

# Pozzolans — the answer to concrete's carbon challenge

Kiwi company Neocrete's innovation is reducing carbon in concrete — including precast panels in Kainga Ora developments and the Auckland City Rail Link.

In November, world leaders met in Glasgow to discuss more ambitious goals to reduce greenhouse gas emissions. New Zealand pledged to half emissions by 2030.

One key part of this challenge is the manufacture of concrete, which accounts for 8% of man-made emissions.

Yet we are not about to stop using the most popular product on earth (after water). In fact, use of concrete will increase, according to the New Zealand Infrastructure Commission's new Physical Resources Study, as we build the infrastructure we need to transition to a low-carbon economy.

This means that concrete must evolve into a much more sustainable material. The key, the Infrastructure Commission says, could be the ancient material called pozzolans.

## Pozzolans: a forgotten treasure

A pozzolan is any silicate material that forms a cement when mixed with calcium-rich water.

"Before the invention of Portland cement, which contains both calcium and silica, pozzolan-based concrete dominated for two millennia," according to Jackson MacFarlane, who recently returned to New Zealand after finishing his PhD on pozzolans at Stanford University.

"Romans made concrete by mixing lime and volcanic ash to form a mortar. Water hydrates the lime and reacts with the pozzolans in the ash to cement everything together," MacFarlane says.

"The resulting material is strong and durable — as anyone who has visited Italy can tell you!"

While durable, the problem with pozzolans is they slow the setting time of concrete. This is why they have been largely replaced by the faster-setting Portland cement.

Today, the only pozzolans that are still used as partial cement substitutes are by-products of coal power plants and metal production — mostly fly ash and silica fume. Their supply is set to diminish as we move to greener technologies.

*Neocrete co-founder Zarina Bazoeva and Jackson MacFarlane undertake R&D testing at the Neocrete laboratory in Auckland.*



But as we search for a greener way to make concrete, pozzolans are making a comeback, this time with new technology to overcome old problems.

## Kiwi innovation solving a global challenge

It is this search which drew MacFarlane back to New Zealand to work with Kiwi company Neocrete, a global frontrunner in the race to make concrete sustainable.

"Neocrete's pozzolan-based concrete admixture, D5 Green, actually accelerates concrete setting, without losing the durability that pozzolanic concrete is known for," MacFarlane says.

"The great thing is that it does it with natural volcanic pozzolans, abundant here in New Zealand."

On any day during the latest lockdown, instead of being cooped up in a Stanford University office, you will find MacFarlane in gumboots, testing trial batches of concrete at Neocrete's lab in Auckland.

"We believe pozzolans are the answer to concrete's sustainability challenge," Neocrete co-founder Zarina Bazoeva says.

Bazoeva's family has been working with natural pozzolans for the past 30 years, adapting them to improve the strength, water-resistance, durability and setting time of concrete.

The strength that D5 Green adds to concrete allows a reduction in cement — and, thereby, carbon. This is what Neocrete research and development has focused on

since 2018, with help from Jackson and the concrete industry.

"Our latest trials demonstrate 25% cement reduction. With industrial pozzolans added, we reduce overall embodied carbon by 40%, with no loss in strength, including early strength," Bazoeva says.

Coming in dry powder form, D5 Green can be added at concrete or cement production stage, which means both cement and concrete manufacturers can benefit from it.

The product has BRANZ accreditation and a full range of trial data on its web site.

## Low-carbon Neocrete D5 Green — pouring in your neighbourhood

Neocrete's flagship product D5 Green is already being used around New Zealand.

Early adopters such as Concretec and Stevenson Concrete are using Neocrete D5 Green to reduce the embodied carbon and accelerate curing time in concrete panels for the Auckland City Rail Link and for Kainga Ora. LT McGuinness has used D5 Green in new buildings at Scots College, Wellington.

"We now have the ability to reduce carbon emissions from concrete. The challenge is the lack of incentives for industry to use it," Bazoeva says.

"The early adopters alone won't get us to 50% reduction in emissions by 2030. We need government to step up with better incentives for businesses to adopt green technology. We also need more agencies to take a leadership role, like Kainga Ora."

For MacFarlane, using the power of pozzolans is a no-brainer. "This is an opportunity for New Zealand to lead the world building a sustainable future — we just have to grab it."



*Passive House builder eHaus using Neocrete D5 Green to reduce carbon in a concrete slab in Nelson.*



## Reduce the carbon footprint of concrete with D5 Green

Made from natural minerals, D5 Green significantly increases the strength of concrete. This means cement content can be substantially reduced, lowering the carbon footprint of concrete by 16-33% without impairing its performance.

Increases concrete strength

Reduces cement content

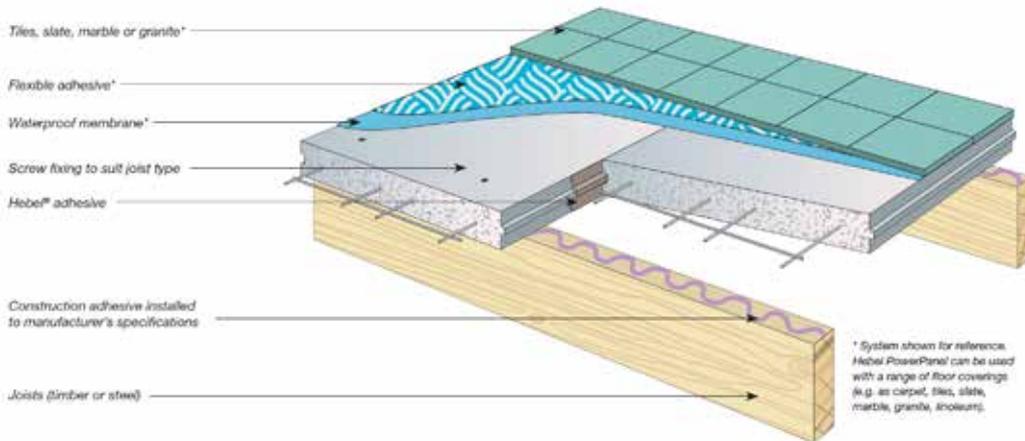
Reduces carbon footprint

Improves durability

Accelerates setting time

To learn how D5 Green can lower the carbon footprint of your next project, visit: [neocrete.co.nz](https://neocrete.co.nz)

# Build solid flooring — and reduce noise between floors



PowerFloor is a highly versatile solid platform flooring system that gives the feel of a concrete floor at a significantly lower cost.

Installed over conventional joists, the system of 75mm-thick tongue and groove PowerFloor panels fit snugly together to form a strong, smooth floor.

PowerFloor is simple and fast to install, with less mess than pouring concrete, and has a superior solid feel compared to particleboard and timber flooring.

It is easily installed by on-site tradies such as carpenters, so there are no delays to the building schedule.

The unique benefits of constructing floors with Hebel PowerFloor include:

- Solid masonry flooring system that is installed like conventional particleboard over conventional joists.
- Solid feel, eliminating the bounce and flex of timber sheet flooring.
- Superior thermal performance, particularly for suspended floors on sloping sites.
- Extremely strong, with each panel reinforced with corrosion-protected steel mesh.
- Not affected by weather during installation.
- It can be easily installed

by normal on-site tradesmen such as carpenters.

- Reduces foot-fall, airborne noise between floors, and eliminates squeaking associated with particle board floors.

### The ideal choice

The combination of solid strength, thermal performance and acoustic insulation properties make PowerFloor an ideal choice for first floor and suspended ground floors, as well as decks and balconies.

It is the creak-free solid alternative to particle board, reducing sound transmission

between floors, and eliminating the squeaking, bouncing and noise often associated with timber flooring substrates.

The thermal efficiency of PowerFloor helps reduce the reliance on heating and cooling appliances, so you will enjoy a comfortable home all year round with potentially lower energy costs.

PowerFloor provides an excellent solid base for ceramic tiles, carpet, floating floors or polished timber boards.

For more information visit [hebel.co.nz](http://hebel.co.nz).

## Conference 2021 postponed to February 2022

Concrete NZ's Conference 2021 has been postponed from its original dates in mid-October 2021, and will now take place at the Energy Events Centre in Rotorua on February 17-19, 2022.

Recent uncertainty around when all of New Zealand would return to Covid-19 Alert Level 1 prompted the decision to postpone.

The Concrete NZ Board and Conference organising committee felt that rescheduling to February 2022 offered greater assurance to all those wishing to attend and/or support the event that they would have the opportunity to do so.

Concrete NZ hopes that the postponement is not a significant inconvenience, and remains confident that the rescheduled event will be an excellent opportunity for professional networking, while remaining up to date with developments across concrete design, construction, materials and technology.

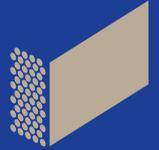
For more information, contact the conference secretary at [concrete@bluepacificevents.com](mailto:concrete@bluepacificevents.com), or phone 09 536 5410.



# Hebel PowerFloor

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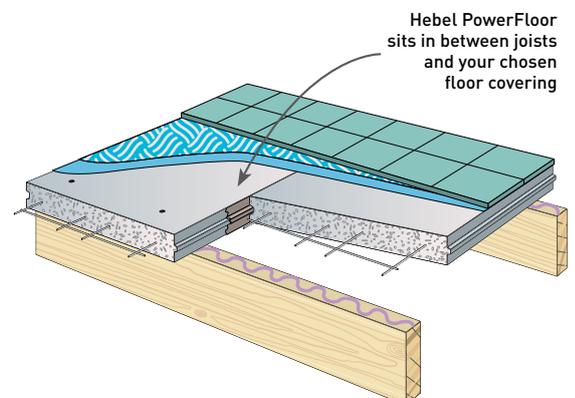


PowerFloor is a highly versatile solid platform flooring system that gives you the feel of a concrete floor at a significantly lower cost.

PowerFloor is an ideal choice for first floor and suspended ground floors as well as decks and balconies.

## The unique benefits of constructing your floor with Hebel PowerFloor

- CodeMark certified and easy to specify
- Solid masonry flooring system
- Easy to install
- Not affected by weather during installation
- Superior thermal performance
- Extremely strong
- Reduces sound transmission between floors



Download the new Hebel PowerFloor Design and Install Guide at [www.hebel.co.nz](http://www.hebel.co.nz) or call us on 0800 443 235 for more information.



# Market share increasing for synthetic

Lower Hutt manufacturer Stratmore Construction Solutions Ltd has been supplying products to the New Zealand building industry for more than 65 years. In addition to their own products, Stratmore is the sole distributor for some of the best products in their respective fields, including macro and micro synthetic fibres for reinforcing concrete.

Stratmore general manager Adrian Woodliffe explains more about these products, and their increasing use as the preferred option to wire mesh and rebar in construction – particularly so in these difficult times as the supply of wire mesh and rebar are impacted by global freight disruptions.

Stratmore has supplied fibre reinforcement systems to the New Zealand construction industry for more than 25 years, with hundreds of thousands of cubic metres of concrete reinforced with synthetic fibres.

These fibres are manufactured by Forta Corporation (Forta) from Pennsylvania, USA.

Forta has been in existence since 1978, and has supplied the international construction market with reinforcement fibre products that minimise cracking, improve material performance and add long-term durability in a wide variety of construction projects, including roads, bridges, buildings and infrastructure.

For a while Stratmore distributed only the macro synthetic fibre, Forta-Ferro. Of late, it has strengthened that offering by supplying other high-performing Forta fibres, including Mighty-Mono, Econo-Cast, and Super-Net.

Forta synthetic fibres are manufactured solely as concrete reinforcement fibres in a plant dedicated for this production.

They are manufactured from pure virgin polypropylene or polymer and are, therefore, 100% stable in the alkaline concrete environment.

Forta fibres are tested and certified for use in concrete, and the plant is independently audited.

The resultant fibres used in New Zealand will not adversely affect the status or quality of concrete supplied by a certified concrete plant.

Globally, the fibre market is worth around US\$3 billion, and the market is increasing by about 5% per annum. This growth is likely to accelerate with the current global shortages of mesh and rebar.

Modern synthetic fibres have been around for a while, and Stratmore has seen a reasonable uptake of the use of Forta fibres in New Zealand.

However, there can still be some resistance to using fibres, with traditionalists citing reasons why wire mesh and rebar are the preferred options for reinforcing concrete.

These objections and barriers to considering fibres are, for the most part, based on:

- a lack of knowledge and understanding, or
- a prior experience of poor fibre performance because of the use of cheap, inferior, non-certified fibres.

To help create a better market understanding and appreciation of fibre reinforced concrete and how it performs and provides longer lasting concrete slabs and precast (compared to wire mesh and steel fibre reinforcement), Stratmore established Fibre Reinforced Concrete Ltd (FRC Ltd), a division of Stratmore.

Its web site, [www.frc.co.nz](http://www.frc.co.nz), is dedicated to telling the story about the benefits of using fibres in New Zealand construction, including:

- superior strength and cost efficiency,
- shorter build times,
- controlled build environments,
- low labour costs,
- efficient construction off-site, and
- peace of mind in construction in seismic zones and in protecting infrastructure.



Mana Cruising Club,  
Wellington.



Moureeses Bay, north  
of Whangarei.

# fibres in concrete reinforcement



railway embankment, Utiku, Rangitikei

**FORTA**  
CONCRETE FIBER



Stratmore has been the NZ distributor of FORTA® synthetic fibres for over 15 years

[www.frc.co.nz](http://www.frc.co.nz) tells the story of Stratmore's relationship with FORTA Corporation (FORTA®) and their high performing synthetic reinforcing fibres for concrete:

**FORTA-FERRO®** is a heavy duty, blended fibre system consisting of a macro *and* a micro synthetic fibre in the same mixer-ready bag. It offers toughness, impact resistance, flexural and residual strength and may be used to replace steel reinforcing mesh for slab on grade applications, precast tanks and products

**FORTA MIGHTY MONO®** - for residential and architectural applications, this is a fine micro fibre that controls plastic shrinkage cracking and is virtually invisible in the finished concrete

**FORTA SUPER-NET®** - for more demanding residential and commercial applications, this micro fibre has 'SUPER-NETWORKING' power, long-term durability, and true secondary/temperature control and incorporates a fibrillated pattern into the concrete mix

**FORTA ECONO-CAST®** - for shotcrete, plaster and precast

Fibre Reinforced Concrete Ltd is a division of:  
Stratmore Construction Solutions Ltd | PO Box 35136 | Naenae Lower Hutt | 0800 835 699  
[www.stratmore.co.nz](http://www.stratmore.co.nz)



# Countering climate change with 'cool pavements'

Researchers affiliated with the MIT Concrete Sustainability Hub (MIT CSHub) in the US are finding that paving and roading material selection could mitigate extreme heat and greenhouse gas emissions.

Pavements are an abundant urban surface, covering around 40% of American cities. But in addition to carrying traffic, they can also emit heat.

Due to what's called the urban heat island effect, densely built, impermeable surfaces such as pavements can absorb solar radiation and warm up their surroundings by re-emitting that radiation as heat.

This phenomenon poses a serious threat to cities. It increases air temperatures by up to as much as 7° Fahrenheit and contributes to health and environmental risks — risks that climate change will magnify.

In response, researchers at the MIT CSHub are studying how a surface that ordinarily heightens urban heat islands can instead lessen their intensity.

Their research focuses on "cool pavements," which reflect more solar

radiation and emit less heat than conventional paving surfaces.

A recent study found that they could lower air temperatures in Boston and Phoenix by up to 1.7°C and 2.1°C respectively. They would also reduce greenhouse gas emissions, cutting total emissions by up to 3% in Boston and 6% in Phoenix.

However, achieving these savings requires that cool pavement strategies be selected according to the climate, traffic and building configurations of each neighbourhood.

Cities such as Los Angeles and Phoenix have already conducted sizeable experiments with cool pavements, but the technology is still not widely implemented.

The CSHub team hopes their research can guide future cool paving projects to help cities cope with a changing climate.

## Scratching the surface

It's well known that darker surfaces get hotter in sunlight than lighter ones. Climate scientists use a metric called "albedo" to help describe this phenomenon.

"Albedo is a measure of surface reflectivity," according to Hessam AzariJafari, the paper's lead author and a postdoc at the MIT CSHub.

"Surfaces with low albedo absorb more light and tend to be darker, while high-albedo surfaces are brighter and reflect more light."

Albedo is central to cool pavements. Typical paving surfaces such as conventional asphalt possess a low albedo, and absorb more radiation and emit more heat.

However, cool pavements have brighter materials that reflect more than three times as much radiation and, consequently, re-emit far less heat.

"We can build cool pavements in many different ways," says Randolph Kirchain, a researcher in the Materials Science Laboratory and co-director of the CSHub.

"Brighter materials such as concrete and lighter-coloured aggregates offer higher albedo, while existing asphalt pavements can be made 'cool' through reflective coatings."



CSHub researchers considered these several options in a study of Boston and Phoenix. Their analysis considered different outcomes when concrete, reflective asphalt, and reflective concrete replaced conventional asphalt pavements — which make up more than 95% of pavements worldwide.

## Situational awareness

For a comprehensive understanding of the environmental benefits of cool pavements in Boston and Phoenix, researchers had to look beyond just paving materials.

That's because, in addition to lowering air temperatures, cool pavements exert direct and indirect impacts on climate change.

"The one direct impact is radiative forcing," AzariJafari says. "By reflecting radiation back into the atmosphere, cool pavements exert a radiative forcing, meaning that they change the Earth's energy balance by sending more energy out of the atmosphere — similar to the polar ice caps."

Cool pavements also exert complex, indirect climate change impacts by altering energy use in adjacent buildings.

What's more, albedo effects are only a portion of the overall life cycle impacts of a cool pavement. In fact, impacts from construction and materials extraction (referred to together as embodied impacts) and the use of the pavement both dominate the life cycle.

The primary use phase impact of a pavement — apart from albedo effects — is excess fuel consumption. Pavements with smooth surfaces and stiff structures cause less excess fuel consumption in the vehicles that drive on them.

**NB:** In the US, pavement most often refers to a road or street, but it can also mean any paved surface, such as a sidewalk or paved area in a park.

## An intricate process

The MIT Concrete Sustainability Hub is a team of researchers from several departments across MIT working on concrete and infrastructure science, engineering and economics.

It is based in Massachusetts, US, and its research is supported by the Portland Cement Association and the Ready Mixed Concrete Research and Education Foundation.

Assessing the climate change impacts of cool pavements is an intricate process — one involving many trade-offs.

The analysis on this page is one of the most comprehensive studies of cool pavements to date — but there's more to investigate.

Just as with pavements, it's also possible to adjust building albedo, which may result in changes to building energy demand.

Intensive grid decarbonisation and the introduction of low-carbon concrete mixtures may also alter the emissions generated by cool pavements.

There's still lots of ground to cover for the CSHub team. But by studying cool pavements, they've elevated a brilliant climate change solution, and opened avenues for further research and future mitigation.

# Business 101: The team — your biggest asset or liability?

Terry Sage of Trades Coaching New Zealand continues his Business 101 series of articles with a look at how to ensure your team remains your biggest company asset.

Cast your mind back to when you first started in the construction industry. For most of us, we were the apprentice, or maybe a labourer. Whatever it was, we had a boss.

Was this person liked, hated or feared? Why do I ask?

Because for a lot of you, you are now that boss yourselves, or have dreams of becoming that boss. So ask yourself that question — are you liked, respected, hated or feared?

If you are the boss, then more than likely there are staff involved. Does it matter what they think of you? Absolutely, it does.

It can affect every aspect of your business. So let's take a look at the staff, the team, and the dream you had of employing people to do the work for you.

They have either become your biggest asset or your biggest liability. If it is the latter you are in trouble and the future is bleak. So what steps are needed to make sure they remain an asset?

When I started my first company at the very naive age of 20, my then boss, who was grumpy because I was leaving, called me in to the office and said "here, a word of advice boy — don't ever employ anybody, and if you have to, don't become their friend because they will walk all over you. But if you treat them like slaves there will be hate in the air and not much profit."

He paid me out and never said goodbye, but his words have come back to haunt me time and time again, with regard to my own companies and in many of my clients' companies.

There is no ideal model when it comes to staffing practices with a trade or construction-style company as there are many variables within companies.

However, the following five points are a good place to start.

**1** Make sure everybody within the company has an employment contract. Obvious? It should be as it has been law for many years. But I still come across many businesses that do not comply.

As part of the contract, include a full job description, responsibilities list, set of house rules, reporting structure and a signed list of company property they have been assigned.



**2** A defined hierarchy and reporting channel. If there are too many chiefs and not enough Indians, efficiencies go out the window and confusion reigns. Profits will slide.

**3** Regular staff meetings. These have to have structure and relevance. Meeting for the sake of meeting becomes worthless and resented. A good meeting should encourage team bonding — and get buy-in from all involved on all points.

**4** Establish a balanced work culture that has drawn boundary lines. What's work, what's play and how far is too far? The house rules in the contract should go a long way to setting

**5** these expectations. Going back to the advice for a 20-year-old, it is far easier for us to be a friendly boss with the team than not. It's more fun, and gives us somebody to socialise with as, in many cases, the people you employ were your mates before they worked for you.

But being one of the lads or lasses will cloud the points made in Point 4.

Most of us do not have it in us to be a homicidal dictator every day of the week (some days perhaps, but not every day). So where do we draw the line?

Have the distinction of them and us — no socialising apart from the organised work functions, for example, the company Christmas party.

Treat them with respect and you will get it back, and remember — all your staff will only ever be as good as you are.

What does this mean? If you smile they will. If you come to work depressed and grumpy so will they. If you are lazy, messy and sloppy so will they.

Lead from the top, and you will have a team that will be an asset, and one to be proud of.

If you need help with your team give Trades Coaching New Zealand a call on 021 280 8679 — especially if you don't have employment contracts in place.

Next month: Marketing tips.

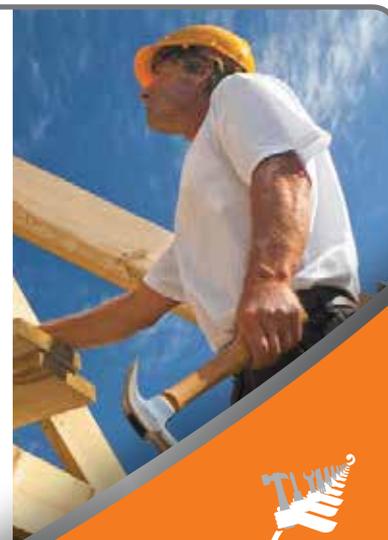
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Trades Coaching  
New Zealand

THE BUSINESS SIDE OF CONSTRUCTION

# OSM: Time to scale up to meet demand,

EasyBuild director Mike Fox says instead of importing fully-built homes, the Government has a once-in-a-lifetime opportunity to create a sustainable, Kiwi-based, off-site manufacturing (OSM) housing industry.

Many readers will have seen the recent positive news that Kainga Ora (formerly Housing Zealand) is poised to order thousands of prefabricated homes using OSM, as it is now commonly known.

Kainga Ora should be congratulated for showing great foresight, as the only way we are going to build the number of houses we need is by integrating OSM techniques alongside traditional building practices.

We could double the number of homes produced with the existing workforce if we use more OSM, along with recalibrating most Kiwis' penchant for wanting every building bespoke.

Kainga Ora intends to use a mix of New Zealand and overseas providers, where the latter will apparently supply fully-built homes delivered from far flung countries on container ships to New Zealand's shores.

I can see you all shaking your heads in disbelief. Why would we import homes from overseas when it would make more sense to upscale the New Zealand industry to meet our own needs?

If the Government allows Kainga Ora to source homes from offshore they will, in essence, export jobs and raw materials, and be sending the potential for the local market to build at scale offshore — not just for the foreseeable future but, quite possibly, the indefinite future too.

In their defence, Kainga Ora will have been under immense political pressure to do something quickly about the ballooning housing crisis.

Recent taxation and tenancy law changes have reduced the number of private rentals, pushed rental rates up and, now, tenants perceived as less than perfect have become pretty much solely the Government's problem to house.

Hence the massive increase in housing waiting lists for people wanting state houses.

Kainga Ora can safely say that few manufacturers in New Zealand are building at the scale needed, so they have to look offshore.

However, it's at least 50 years since demand for housing of this magnitude has been made available to the industry, so it's little wonder we are not building OSM homes at scale.

But that doesn't mean that with secure forward work, local factories can't scale up to meet demand.



It's a chicken and egg scenario where no one will invest extensively in technology and production without the security of multi-year contracts. It would be economically foolhardy to do so.

Hence, the OSM industry in New Zealand has been held back from reaching its potential and being the game changer it could be.

## Anti-competitive behaviour

There is a very valid argument that building, and especially building products, in New Zealand is becoming prohibitively expensive, and the latter are being artificially held up by anti-competitive behaviour and lack of competition.

In turn, this overpricing will make it difficult in the long run for New Zealand to have a competitive export market.

The Government could assist by concluding the long-awaited inquiry into building product pricing in New Zealand, and making it easier for internationally-proven mainstream products to enter the New Zealand market.

This would have a two-pronged effect. First, it would help fill the current product shortages and, second, it would supply some healthy competition within a supply market that has been unhealthily captured and controlled by too few players.

These players have the ability to hold the local market to ransom, expecting international rates in a local market that just can't afford to compete.

We are making peasants out of our own people while a few at the top prosper — and it is not an enduring model.

Places like Canada and the USA who also have large timber supplies decree that the local markets must be satisfied prior to exporting the surplus.

We naively work the other way around and sell everything we have to the highest international bidder, while the local market and consumer is left out in the unaffordable cold.

The foreign nations that profit from our naivety must be laughing at how incredibly short-sighted we are, always taking the short-term financial solution over sustainable, nation wealth-building solutions.

## How dumb are we?

Currently, there is an acute shortage of framing timber in New Zealand, and unprecedented mega-inflation on timber and other basic building products — and all the while our wharves are clogged with raw export timber. How dumb are we as a nation to allow this to happen?

I have checked out the technology and systems that competitors are using overseas, and there are providers here in New Zealand that are using similar systems and methods right now.

The only thing the local operators are missing is the invitation to scale up to meet the demand, thereby keeping jobs, building capability and money within New Zealand's shores.

It's a no brainer that with a work pipeline like this, New Zealand operators could relatively easily build capability within New Zealand, and have a viable industry at the end of the cycle that could then export houses.

Why on earth would we feather the beds of foreign nations who I suspect could even be getting export subsidies from their own government to keep prices down and maintain capability within their own country?

Kainga Ora's previous procurement model was to order small numbers of homes from lots of different suppliers at the cheapest possible price. The conditions of contract were punitive, and many contractors have failed trying to deliver. Their process makes newcomers very wary when there are easier clients to work for.

Unfortunately, the landscape is littered with builders and contractors that have not been able to meet the demands, and it's pretty telling that procurement on the cheapest and fastest platform, combined with punishing liquidated damages and massive bonds, is a formula that is not sustainable.

# retain jobs and build capability

Added to this, the Kainga Ora pipeline was never any further than 12 months out, and there was no guarantee of continuous work.

As a result, our builders have remained small and nimble as they endeavour to cope with fluctuating workloads and are unable to invest in technology or scale.

As the country's biggest housing client, and by their own actions alone, Kainga Ora has inadvertently curbed the ability of Kiwi firms to build modular homes at scale.

That is, of course, until now, with the change to multi-tier procurement — and they are to be applauded for this.

If I was Kainga Ora, faced with having to produce an ever-increasing number of dwellings, I would be nurturing the available contractors with fair contract conditions, sustainable pricing, realistic time frames, and multi-year contracts.

That way you are creating strong contractors with the capacity to deliver well out into the future. It's a win, win, win for the contractor, client and, most importantly, those currently experiencing housing instability or homelessness.

There are promising green shoots that this message is getting through as Kainga Ora grapples with how best to meet the growing demand.

## Once-in-a-generation opportunity

This once-in-a-generation opportunity for the New Zealand industry to scale up to provide social and affordable homes for deserving Kiwis may be lost if Kainga Ora proceeds with its plans to purchase fully-built homes from offshore.

It beggars belief that this opportunity, along with local sustainable jobs, could be lost offshore.

If the Government, with all its worthy rhetoric, allows this to happen they will have fallen at the first hurdle, with its admirable mantra "jobs for Kiwis first" becoming little more than lip service.

This is where the rubber meets the road, and the first cab

leaves with this opportunity to build New Zealand capability for modular construction.

Existing construction methods are already tapped out, so the extra houses aren't going to come through that portal.

It also beggars belief that the construction industry will passively watch an opportunity like this slip away. Can you imagine the uproar from the farming community if the Government decided it was going to import a massive order of dairy and beef products from offshore?

There would rightly be tractors on the steps of parliament, and every politician in the land would be told in no uncertain terms about this.

Builders are too polite and, for a hardy bunch, are disappointingly soft at pushing back at the raw deals successive administrations have dumped upon them.

This is a golden chance for the Government to partner with our

industry and walk the talk, get runs on the board and make a difference.

Let's hope they can deliver on the rhetoric, and see how important this is to New Zealand to have the ongoing ability to house itself and seize the opportunity.

“

It beggars belief that the construction industry will passively watch an opportunity like this slip away. Can you imagine the uproar from the farming community if the Government decided it was going to import a massive order of dairy and beef products from offshore?

”

• This article contains the author's opinion only, and is not necessarily the opinion of the Registered Master Builders Association, its chief executive or staff.

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# Keeping your good people

TradieHR director Leigh Olsen presents some top tips and steps employers can take to retain their valued staff.

I met with a client recently, and I could sense that something was on their mind. When I asked them, their reply was “the usual Leigh — I just can’t keep my good people. I’m over it!”

Sadly, this is not the first time I have heard this, as this issue has increased in the past few years thanks to a nationwide skills shortage and the impact of Covid-19 on our businesses.

Keeping good people is a reality for many business owners, and one that can be managed better with some advanced planning and key action steps taken on a regular basis.

## Start with the ‘Why’

Before we look at how you can keep your good people for longer, it is important to first understand why a person leaves a company. Start with yourself, and find the reasons why you have left jobs in the past.

## What are the common themes?

What you will discover are your key reasons for “why” you work — your motivation to stay in a job. When a good worker’s motivation dries up, good people don’t stick around to complain. Instead, they find other employers who will provide the “why” in their work.

For most of us, our themes for why we stay in a company are not based on money. In my experience, the most common theme for why a person left their job is because of their manager.

In fact, in some research reports I have read, this can be the main reason for up to 80% of people leaving their jobs! Other themes include boredom, not being included, or being treated differently.

More recently I’ve seen people leave their jobs as they feel that their values are out of alignment with the company’s. Or, in even more recent times, employees have left because of their workload.

Due to Covid-19, some employees have had a significant increase in their workload. At first, they have not minded this increase as they wanted to stay committed to their team. Yet, in time, the workload has not reduced, creating unrealistic and long-term demands.

## Top Tips

Based on these common themes, there are also some common actions you can take before and during an employee’s time with your company to keep them on board and part of your team.



If you are working remotely, add in a Zoom call. Go beyond just one celebration a year — the annual Christmas party — and diarise a gift box to go out in the middle of the year to keep up the connection and to also show your thanks.

One employee recently was buzzing for the whole day when his boss sent a simple gift box saying “you’re awesome”. It was a simple gesture to keep a valued employee on track and on board.

Staying connected and providing recognition shows your good people they are still top of mind and they are still valued.

• **Create opportunities for growth:** A big reason people join a company is because they see an opportunity to develop and grow — and not for the money.

Yet if these opportunities dry up, it’s a key factor why they will leave, and quickly. Take time in your business planning to identify possible projects for your people to grow and develop.

Think about the possibility also that a team member could be seconded to something else to develop a new skill set.

Finally, what can you do if your good employee says they are about to leave because of the money?

Take them for a coffee and ask them if it’s really about the money. Sometimes it could be the frustration of poor resources, such as a slow computer, or that their tools are too clunky.

These are easy fixes that, even if you cannot keep this good person, you can make changes for the future to keep the rest of the team happy in the workplace and wanting to stay.

To fine-tune your plans for retaining your people, please contact Tradie HR for more great ways to take the right plans and key actions.

**Note:** This article is not intended to be a replacement for legal advice.

• **Communicate, communicate, communicate:** Right from the first interview, keep communicating with your employee. Before they start, set out a clear direction with a solid job description.

Set them up to succeed in their first 90 days with someone to communicate and teach them what is expected in their job.

Keep up this communication with regular 1-2-1s, checking in with them to see how they are going, and opening up the conversation to share what their worries are.

During lockdown, one of my clients in their weekly team meetings would always finish the meeting by asking his managers, “what do you need from me? What resources do you need?”

His team loved this communication approach, and it helped to keep his hard-working managers going, during a really tough time.

This is a great skill to ask of your managers as, remember, a lot of good people leave because of their manager.

• **Stay connected:** Keep in touch with your people — always! It does not have to involve long lengthy conversations and, often, it can be just picking up the phone for a quick check-in.



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We look forward to talking with you.  
Call Leigh Olsen for a free consultation.

# Building Consents Information

For all authorisations, September 2021

Dwellings	\$1,936,541,000	Total All Buildings	\$2,566,680,000
Domestic Outbuildings	\$25,531,000	Non-building Construction	\$49,483,000
Total Residential	\$1,962,072,000		
Non-residential	\$604,608,000	<b>Total Authorisations</b>	<b>\$2,616,163,000</b>

## Number of new dwellings consented

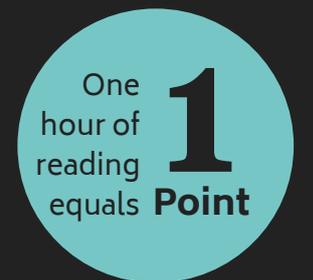
	Sep 2021	Aug 2021	Sep 2020		Sep 2021	Aug 2021	Sep 2020
Far North District	34	41	36	Palmerston North City	43	37	34
Whangarei District	52	45	42	Taranaki District	4	11	4
Kaipara District	26	22	17	Horowhenua District	31	37	13
Rodney District	150	162	126	Kapiti Coast District	43	23	21
North Shore/Albany Wards	319	380	423	Porirua City	33	14	9
Waitakere Ward	198	312	146	Upper Hutt City	22	24	29
Auckland Wards	544	521	464	Lower Hutt City	221	101	67
Manukau/Howick Wards	243	359	333	Wellington City	40	57	68
Manurewa-Papakura Ward	154	288	171	Masterton District	16	15	15
Franklin Ward	83	140	71	Carterton District	9	9	10
Thames-Coromandel District	34	27	19	South Wairarapa District	13	50	13
Hauraki District	26	23	9	Tasman District	45	40	81
Waikato District	112	112	93	Nelson City	7	10	21
Matamata-Piako District	30	37	11	Marlborough District	32	18	23
Hamilton City	135	160	135	Kaikoura District	1	5	2
Waipa District	94	40	62	Buller District	8	4	3
Otorohanga District	7	1	5	Grey District	8	4	5
South Waikato District	8	7	7	Westland District	9	2	2
Waitomo District	2	4	4	Hurunui District	13	18	5
Taupo District	29	20	34	Waimakariri District	74	64	53
Western Bay of Plenty District	42	44	49	Christchurch City	398	360	183
Tauranga City	106	121	98	Selwyn District	167	208	162
Rotorua District	30	39	19	Ashburton District	41	12	11
Whakatane District	14	11	9	Timaru District	28	23	12
Kawerau District	1	4	2	Mackenzie District	12	7	5
Opotiki District	6	3	3	Waimate District	1	1	2
Gisborne District	18	7	5	Chatham Islands Territory	1	0	0
Wairoa District	0	0	2	Waitaki District	20	14	8
Hastings District	111	47	53	Central Otago District	34	26	16
Napier City	59	36	70	Queenstown-Lakes District	158	93	61
Central Hawke's Bay District	9	10	6	Dunedin City	63	29	32
New Plymouth District	53	59	39	Clutha District	9	3	6
Stratford District	5	7	2	Southland District	21	15	13
South Taranaki District	6	7	8	Gore District	7	2	6
Ruapehu District	10	5	3	Invercargill City	46	25	11
Whanganui District	22	10	12	Area Outside TA	0	0	0
Rangitikei District	7	3	1				
Manawatu District	26	15	10				
				<b>Total</b>	<b>4483</b>	<b>4490</b>	<b>3605</b>

Based on 2006 census areas | Each dwelling unit in a housing project is counted separately | Figures in these tables may differ from published statistics | Source: Statistics New Zealand

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