

# BUILDINGTODAY

THE OFFICIAL MAGAZINE OF THE REGISTERED MASTER BUILDERS ASSOCIATION



VOLUME 30 NUMBER 1

FEBRUARY 2020

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2020 NZ WOOD-  
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**FROM THE EDITOR**

What a great start to the year for the industry! Before most of you have had a chance to get back on the tools properly comes the news of a \$12 billion Government infrastructure upgrade, and a million dollar boost to get school students into the trades.

Add to that the statistics that say that new home consent numbers are at a 45-year high, and you've got an industry that is looking very healthy indeed.

We've also got stories on New Zealand's largest-ever array of solar panels being installed at a massive distribution centre in Auckland. And the appointment of a CEO for the new NZ Institute of Skills and Technology, the body that is bringing together the existing 16 Institutes of Technology and Polytechnics, and superceding the country's Industry Training Organisations. Exciting times lie ahead!

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## Prospect, plan, implement

By RMBA president Darrell Trigg



RMBA president Darrell Trigg.

After reflecting on the past year and even the past decade as to the journey our business has taken, we have had a fantastic, albeit, seemingly short break.

Getting back into work can seem a bit tedious at the start, although many of us have plenty to do!

I took some time out in my first week to look ahead to the next two years and what we need to do to get the work, execute the work and, above all, have our business ready to manage it all.

### Prospect

One of the first things I did when back at work was to go through my prospecting list and send a "welcome to the new decade" email to all of those on the list.

I never ask when they are looking to build. Rather, I always maintain a "problem-solving" position by asking "if there is anything I can do to help, please don't hesitate to contact me at any stage".

My prospecting list consists of contacts that may be building at some stage, and I maintain contact with them about every 90 days.

This is about the right time to not be annoying, but to also demonstrate you are keen to be of assistance to them — it's all about building and maintaining relationships.

Prospecting is a disciplined process, and my aim is to add one new contact whom I haven't met per week.

This takes a concerted effort but ensures that the top of the prospecting funnel is wide, so that enough projects drop out the bottom to help us meet our goals as a business.

### Plan

I got a few hits from the prospecting email because some of those prospects were doing the same planning!

This made me then look at what our business needs to do to be ready for the next phase of work, including 2020 and 2021.

I have made a few notes on what we have to achieve to be ready for the upcoming workload, I have organised a meeting with a mentor of mine to discuss how to prepare, manage and execute the upcoming work, and I have discussed the upcoming workload with our team.

All of the above has allowed me to get a clear

set of actions to achieve, to allow us to manage the work we have for 2020, and to have our business systems and people ready for the increased workload we have for 2021.

### Implement

I am currently working on an implementation plan, notwithstanding the fact that I haven't yet completed the planning!

Basically, I understand what must be done, and am looking to finalise the scope of what we have to do within our business regarding systems by the end of February — and then the work begins.

Once I have the final detail and the scope sorted, I will be entering it into a Gantt chart programme which will have typical start and finish dates.

I also intend to allocate people resource to each task. This may not necessarily be our people, depending on what the outcomes are that we are aiming to achieve.

Seems like a lot to do, but when you break it down into separate tasks or "projects" and allocate the appropriate resource (not yourself) it is definitely achievable.

My intention is to ensure that each of the systems and processes we are aiming to enhance or introduce is part of a coordinated approach.

There are plenty of electronic solutions out there. Some of these will be in the mix — we just have to evaluate what will achieve the results we require to sustainably manage our business going forward.

In summary, prospecting is vital for the survival of any business, and must be done in a disciplined way. Planning for future growth or sustainable operations is equally important so you don't get caught lagging behind an increased workload.

Careful and managed implementation is just as important once you understand what needs to be done. This will require people and money to be complete, so planning is essential.

# AUCKLAND APPRENTICE SUCCEEDS UNDER COMPETITION PRESSURE



## JASON HELSBY

AUCKLAND REGIONAL WINNER AND  
2ND PLACE NATIONAL RUNNER UP  
REGISTERED MASTER BUILDERS  
CARTERS 2019 APPRENTICE OF THE YEAR

Jason is employed by Catalyst Construction Ltd, and was trained through the Building and Construction Industry Training Organisation (BCITO).

### SUCCESSES

Jason's highlight of the competition was meeting and competing against all the competitors, all of whom had shown strong skill in winning their own regional competitions.

"I appreciated the chance to meet so many likeminded individuals who are so passionate about the construction sector. They will no doubt be the future of the trade. I also enjoyed the chance to put my skills to the test against the best in the country."

### CHALLENGES

Jason said the toughest part of the competition was the practical element, that saw each apprentice build a pirate ship for early childhood education charity, BestStart.

"There was an immense time pressure as well as numerous 'fishhooks' the organisers put in to challenge us. This required me to meticulously read the plans and instructions while carefully managing my time."



### JUDGES' COMMENTS

"One of our youngest apprentices to compete in the competition this year. Jason was a strong allrounder across both the interview and practical. He was methodical and detailed, and remained focused on the task at hand throughout today's challenge."

### EMPLOYER COMMENTS

Karl Braithwaith, from Catalyst Construction, said Jason proactively decided to enter Apprentice of the Year himself. Karl made sure Jason had all the information and support he needed throughout the competition.

"Jason performed extremely well and the entire Catalyst Construction team is very proud of him. Jason sets a very high standards for himself as we expect at Catalyst, and this was clearly evident in the result. Jason is a humble, intelligent all-round good guy and he's an asset to our Company and to the Construction industry."

PRINCIPAL PARTNER



EVENT PARTNER



## Church restoration earns high praise

### Spice Build

National Winner

- Supreme Home of the Year Award
- Bunnings Renovation over \$1 million Award



### Successes

Spice Build Director, Matt Spicer, was thrilled to achieve the Supreme Renovation of the Year Award. He credits the win to the heritage aspect of the project, and his team's dedication to preserving the unique quality of the church.

"We had great collaboration with both the developer and architect, as we all shared a strong commitment to do a proper restoration of the church. This win helps to assert the quality work Spice Build is doing, and really cements ourselves in the Wellington market."

### Challenges

The team was challenged to create a modern aesthetic, while maintaining the original feel of the church. The building itself also offered unique problems to overcome.

"We had to grapple with the sheer size of the building, which was considerably bigger than your average residential home. The shape and style also had a number of complexities to deal with."

### Judges' comments

The judges were amazed by the vision of the build, which they described as nothing short of exceptional.

"The build process saw a fantastic collaboration between the owner and builder, with a result that can only be described as a masterpiece. It has perfectly retained the original character of the building, all while breathing new life into it with a stunning apartment conversion."

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## 'Hawk House' soars above competition

### Spearhead Developments

National Winner

- Supreme Home of the Year Award
- CARTERS New Home \$1 - \$1.5 million Award



### Successes

Named 'Rangi-Kahu', the Hawk House sits high in the hills between Cromwell and Wanaka. Spearhead Developments' builder Nick Mizzi was ecstatic to win the coveted Craftmanship Award and Supreme Award. He put his success down to the home's 'X-factor' unique design.

"I think our success came from the sheer complexity of the build. It couldn't have been achieved without the close collaboration between the owner, the architect and myself."

### Challenges

The build didn't come without challenges. The roof structure was incredibly complex, and the weather threw curve balls throughout the year. But the toughest was the news Nick learned partway through the build.

"We found out the client had been diagnosed with cancer. It meant there was an urgency to finish so he could have time to appreciate the finished home. Thankfully we managed to finish in time, and he was able to enjoy the home with his family in his final six months."

### Judges' comments

Competition judges described the Hawk House as an 'architectural masterpiece' that offers surprises at every turn.

"Despite what would have been constant challenges at every stage, the builder and his team of sub-trades have crafted an amazing building. Their attention to detail was to a level that is rarely seen.

"Overall, this is a result of the architect, owner and builder working tirelessly together to fulfil the owner's vision and dreams. Congratulations to the whole team for a very well-deserved win of this Supreme Award."

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# Builders put on great show with entertainment hub

## Hoyts entX

CATEGORY

Winner of Retail category

ENTRANT

Calder Stewart Construction Ltd

PROJECT PARTNERS

Calder Stewart Construction Ltd (Construction Company), Ignite Architects (Architect/Designer)

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### Successes

The Hoyts cinema complex in Christchurch is New Zealand's newest retail entertainment hub. Calder Stewart's Jeff Sutherland said it was great to be recognised at the Commercial Project Awards for an excellent build.

"Advertising for the hub went up early, so we had a short time frame to deliver what was a high level of services. Meeting this deadline, while delivering a key entertainment space to the Christchurch CBD, really helped us stand out from the competition. The level of finish was also to a very high standard."



### Challenges

The project faced several challenges, many of which came from the unique challenges of the site itself and building a cinema.

"A lot of things went into the building of the cinema. The most difficult was the constantly changing technology. The location of the hub itself was also particularly tricky, as we had 100% site coverage and no additional storage. We had to work with the council to ensure our deliveries could be made safely in a controlled manner."



### Judges' comments

Calder Stewart Ltd had the vision to create a building that made a distinct impact on the cityscape.

Judges were impressed by the design, workmanship and pre-planning of this large-scale project. The result is a great achievement and represents the team's total dedication to deliver a high-quality product, on time, and within the forecasted budget. This build has delivered a world-class entertainment and dining experience in central Christchurch.

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# Infrastructure upgrades get \$12 billion

Roads, rail, schools and hospitals will be built and upgraded across the country under the \$12 billion New Zealand Upgrade Programme announced recently, Prime Minister Jacinda Ardern says.

"This is a once in a lifetime opportunity to invest in New Zealand — modernising our infrastructure, preparing for climate change and helping grow the economy.

"It makes sense to do this now because we've managed the books wisely and have historically low interest rates, which makes our programme affordable," she says.

Deputy Prime Minister Winston Peters says the programme is the largest investment in infrastructure in decades.

"We have a vision for our country and we are investing in making that vision a reality," Peters says.

"The announcement of further funding for New Zealand's national rail system is yet one more step in restoring a reliable, resilient

freight and passenger network.

"The upgrade programme also includes a serious investment in the regions, which we will be announcing more detail about in the near future," he says.

Climate Change Minister James Shaw says in the wake of the Government's Zero Carbon Act passing unopposed last year, the clean energy announcements are an important step in getting the government's own house in order.

"Every community can be part of the solution to climate change and creating a better future for our kids and grandkids," Shaw says.

"Our plan to help important local places like hospitals, schools and other public organisations switch to clean, climate-friendly ways of keeping people warm and the lights on is a big part of that.

"Our Government is also improving our rail network so we can get more freight off the roads and give people better, cleaner ways of getting around.

"It is exciting too that for the first time we have a funded plan for people to be able to walk and cycle over the Auckland harbour bridge," he says.

"When it comes to making decisions about how we allocate public money, this is a government focused on what we can do to build a better, cleaner and healthier future for all New Zealanders."

## Where the new money is going:

- \$6.8 billion on new transport projects.
- \$400 million on one-off increases to schools' funding.
- \$300 million for regional investment opportunities.
- \$300 million for DHB asset renewal.
- \$200 million for public estate decarbonisation.

*Details on the more specific parts of the projects, such as where the money will be spent, will be unveiled in the coming months.*

# Million dollar Government boost to get school students into trades

A Government cash injection of more than \$1 million will go towards trades-based events at New Zealand schools.

More than 340 schools will receive \$3000 each to run the expo-style experiences this year, most in terms one and two.

It comes just days after the unveiling of the Government's \$12 billion infrastructure package, including big spending on roads and rail.

Education Minister Chris Hipkins says there has been "tremendous interest" from schools wanting to run the events.

"More than 85,000 students are expected to attend, with around 4000 employers joining them," he says.

"We're trying to get in early, and say look, there's a whole range of options out there."

The Government originally planned to fund 250 schools, but the Ministry of Education

received almost 100 extra eligible proposals.

The overwhelming interest means every school that asked for funding, got it.

"It's about building better local links between education and employment," Hipkins says.

The events will be designed for young people to explore industry-specific careers, and allow employers to showcase trades careers to students and their families.

Auckland's Massey High School is one of those to benefit from the cash boost. Principal Glen Denham says it is a great initiative.

"You can't tell me that there is one secondary school in this country that doesn't have at least a dozen kids that want to become a builder, an electrician or plumber.

"I don't think you'd find any school that says 'no, we don't want that \$3000, you can have it back'."

Denham hoped it would be a stepping stone to something more.

"I'm hoping that the feedback will be so great that other colleges say we need more money to do more of this."

Just over 6000 New Zealand students have used fees free for trades training since the Government's flagship policy started in 2018.

## Partnership plan — build big, lift productivity

Delivering the workforce and productivity gains required to build the houses, schools, roads, rail and hospitals New Zealand needs will become easier with the Construction Sector Transformation Plan launched last month, Minister for Building and Construction Jenny Salesa says.

The plan will see Government and industry:

- create a long-term workforce plan,
- strengthen industry's voice in training,
- drive cooperation through information sharing and education programmes,
- promote simpler, shorter contracts,
- develop a mental health strategy and expand

Mates in Construction to support better mental health in the trades, and

- run diversity campaigns to encourage women and young people into construction.

The Transformation Plan is a three-year plan delivering action and change across six major areas — leadership; business performance; people development; health, safety and well-being (including mental health); regulatory environment; and procurement and risk.

[constructionaccord.nz/transformation-plan](https://www.constructionaccord.nz/transformation-plan)

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# Largest-ever array of solar panels to be installed

**F**oodstuffs North Island (FSNI) will install the largest array of solar panels in New Zealand on the roof of its distribution centre currently under construction at the Landing Business Park near Auckland Airport.

A contract has been awarded to Reid Technology, a privately-owned New Zealand company, for the supply and installation of a 1.166MWp grid-connected solar panel system.

This incorporates 2915 solar panels covering a total area of about 6000 square metres, and will generate an amount of electricity equivalent to the power needs of 213 average New Zealand homes per year.

Technically known as a photovoltaic (PV) array, this renewable energy solution has been designed to make the office completely “zero carbon” for operational electrical consumption related to the office, something that will be confirmed during its first year of operation.

## Rare opportunity

Foodstuffs North Island general manager property Lindsay Rowles says this significant renewable energy installation reflects Foodstuffs’ commitment to carbon emissions reduction.

This facility, being the largest distribution centre in New Zealand, offered a rare opportunity to realise such significant carbon reductions.

The distribution centre footprint, at 74,886 square metres, would comfortably accommodate the playing areas of New Zealand’s four major rugby venues — Eden Park, Sky Stadium, Orangetheory Stadium and Forsyth Barr Stadium.

“This major solar panel installation and the creation of a 5 Greenstar New Zealand Green Building Council (NZGBC)-rated office complex is the first of its kind at this scale for New Zealand,” Rowles says.

“It is very much in line with our aspiration of working towards a more environmentally sustainable business.

“This entire project will see the establishment of an ambient distribution centre and the consolidation of the operations of three existing centres.

“This is an example of our commitment to working smarter and reducing our carbon footprint, while enabling the business to keep prices low and quality and service high.

“At Foodstuffs we are enormously conscious of our obligation to be a sustainable business and



*2915 solar panels covering a total area of about 6000 square metres — the largest array of solar panels in New Zealand — will be installed on the roof of Foodstuffs North Island’s distribution centre currently under construction at the Landing Business Park near Auckland Airport.*

a positive force for New Zealand.

“We recently joined the Climate Leaders Coalition to formally link our sustainability ambitions to the Coalition’s mission to work towards a low emissions future.

## Huge carbon reductions

“This array project is just another example of the constant evolution of our business. The new distribution centre and 5 Greenstar office complex, with such a powerful shift in electricity self-sufficiency, demonstrates our long-term commitment to operating in the most sustainable manner.”

The array generates enough electricity per year to drive 588 electric vehicles (EVs) a distance of 15,000km. Offsetting the electricity will result in savings of 194 tons of CO<sup>2</sup> per annum.

Any excess electricity will be sold back to the

grid, albeit the design minimises excess.

Simon Wilson of RDT Pacific, the director and sustainable development advisor for the project, says the economic viability of this system for Foodstuffs signals a turning point in the industry.

“As a major electricity consumer, Foodstuffs has obvious purchasing leverage and the solar option still stacks up. For this reason, this renewable energy solution should be attractive to many more businesses,” Wilson says.

Shay Brazier of Revolve Energy, the PV consultant for Foodstuffs, says innovation in PV technology has continued to drive down international prices, allowing PV to begin to compete with conventional energy generation sources in New Zealand.

“We applaud Foodstuffs for this strategic initiative — they are setting a benchmark for other New Zealand businesses.”

## Foodstuffs North Island's photovoltaic (PV) array at a glance:

- ***It will be the largest PV array in New Zealand.***
- ***It will be installed on the roof of the FSNI new distribution centre at the Landing Business Park.***
- ***The PV array consists of 2915 PV modules and covers a total area of 6000sq m.***
- ***It is estimated that the PV array will generate enough electricity to offset the electricity consumption of the office.***
- ***The electricity generated by the array in one year will be sufficient to power 213 average New Zealand homes, reduce the release of 194 tons of CO<sup>2</sup> into the atmosphere, and drive 8.8 million kilometres in an electric car — the equivalent of nearly 600 EVs driving 15,000km per year.***

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# Chief executive appointed to lead new NZIST

Stephen Town has been named as the inaugural chief executive of the New Zealand Institute of Skills and Technology (working name).

Currently in his final year leading the Auckland Council, Town will formally take up his new role on July 6, 2020.

IST Establishment Board chair Barry Jordan says the Board is delighted to have attracted a candidate of Town's high calibre after an extensive search for the right person to lead the creation of the new national Institute, which is due to come into effect on April 1, 2020.

"With more than 25 years as a chief executive, including a distinguished career in the local government sector, Stephen has a proven track record of bringing people together through periods of complex change," Jordan says.

"He has led initiatives to create jobs for long-term unemployed in South Auckland and



*Inaugural New Zealand Institute of Skills and Technology chief executive Stephen Town.*

built enduring relationships with iwi and hapu.

"We were looking for someone who is a strong relationship builder with deep strategic experience successfully leading large and complex organisations to achieve significant improvement.

Jordan says the panel was impressed with Town's composed and strategic focus, his

ability to form enduring and productive relationships with stakeholders, and his long-term connection to the tertiary sector where his leadership journey began.

A graduate of Whanganui Regional Community Polytechnic, Town has maintained a deep interest in vocational education.

He has two sons in the BCITO system who will both qualify as carpenters this year.

"I'm honoured to take up this role and excited at the challenges ahead. Change leadership is our greatest opportunity, and New Zealand's needs will require much greater agility from the vocational education and training sector in the next two decades," Town says.

"Before us is a once-in-a-lifetime opportunity to build a sustainable and world-class vocational education system that strengthens communities and, ultimately, New Zealand.

"I am looking forward to working collaboratively with everyone in the sector to effect meaningful and lasting change."

## On the hunt for NZ's toughest trade

Kennards Hire has put a call out to Kiwis to help hunt down the toughest of trades.

It has released a number of job ads, sharing with Kiwis what is needed to take on the position of New Zealand's toughest trade.

The job ads are part of the company's latest campaign, and shines a light on the tough conditions that tradesmen and women across New Zealand work in day-in, day-out.

Job ads call out requirements such as "enduring hot summer afternoons", "facing heavy scrutiny by clients and neighbours", and being "roped into doing cashies on Sundays for distant relatives".

Breaking down the mullet wearing, energy drink-consuming construction trade clichés, Kennards Hire wants tradies to know that they understand the often gruelling environment they have to put up with, and know how they can help make their job easier.

Head of marketing Laura Galvin says every day they hear from tradies about how tough a work site can be.

"The heat, the rain, the physicality of the job, the constant changes of client briefs — it's not easy."

Far from a standard 9 to 5 office job, tradies



have one of the most physically challenging gigs around — regardless of whether they are a skilled chippie, sparkie, landscaper or plumber.

And Kennards wants to know which of the trades thinks they should have the title of the toughest.

"It's pretty clear to us that if you were looking through the ads, you definitely wouldn't be applying for one of these jobs," Galvin says.

If you think your trade is New Zealand's toughest you can vote by completing the online poll with your name, email and your vote for the toughest trade.

To let tradies know they are appreciated for the hard work they do in the rain, sun and sh\*t, Kennards Hire is rewarding all tradies with 20% off selected products.

[toughesttradie.kennardshire.co.nz](http://toughesttradie.kennardshire.co.nz)

## 45-year high for home consents bodes well

The number of new homes consented reached 37,010 in the year ended November 2019, the highest in a year since the mid-1970s, Stats NZ reported.

There were 37,919 new homes consented in the year ended September 1974, while the overall record is still 40,025 in the February 1974 year.

The population of New Zealand in the mid-1970s was around 3 million, compared with about 4.9 million today.

By region, the numbers of new dwellings consented in the year ended November 2019 (compared with the November 2018 year) were:

- 14,866 in Auckland — up 16%;
- 4176 in Waikato — up 13%;
- 3036 in Wellington — up 11%;
- 5849 in rest of North Island — up 6.9%;
- 5310 in Canterbury — up 14%;
- 3772 in rest of South Island — up 10%.

[stats.govt.nz/information-releases](http://stats.govt.nz/information-releases)



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## Construction and demolition waste specification goes live

An ecolabel specification that will encourage companies to reduce the amount of construction and demolition (C&D) waste going to landfill has been launched in New Zealand.

Launched at the WasteMINZ conference last year, the new specification, EC-59 C&D Waste Services, has been developed by the New Zealand Ecolabelling Trust (NZET).

NZET general manager Francesca Lipscombe says the Trust believes the new specification could be a game-changer for waste management in the construction industry.

Research shows that by weight, the C&D industry is one of the largest waste producers in the country, and makes up around half of all waste going to landfill.

A feasibility study by the Trust also found that the most significant issue is the amount of material going straight into landfill when it could be reused.

Ms Lipscombe says the Trust hopes the specification will encourage more innovative waste management practices within the industry.

"As the official ecolabel for New Zealand, our goal has been to deliver a powerful ecolabel which incentivises good practices in C&D waste services," Ms Lipscombe says.

"The specification answers a real need in the market, and will drive positive change by differentiating service providers by their environmental impact. The Environmental Choice New Zealand (ECNZ) label will lend verified providers kudos with customers.

Those with the label will be recognised as top performers who reliably demonstrate best-practice around waste minimisation, from waste reduction through recovery, reuse and recycling."

Ms Lipscombe says the specification is a signal for consumers and organisations looking to support sustainable C&D waste services providers.

"There's been a clear shift in thinking, and more people and businesses are looking for services that have a positive impact on the environment and society.

"I believe the specification will drive real, positive change across the industry, and support better management of the projected increase in C&D waste in coming years."



ECNZ general manager Francesca Lipscombe (left) and Auckland Council programme director for waste solutions Parul Sood.

The specification has been carefully developed, and was made possible through a grant from Auckland Council's Waste Minimisation and Innovation Fund. The development process included consultation with industry players and experts.

"The council's grant has been crucial to the successful completion of the specification. We're also thankful to the New Zealand Green Building Council (NZGBC) and WasteMINZ for their ongoing support."

Ms Lipscombe says the C&D Waste Services label will also help verify waste-diversion credits in the NZGBC's Green Star rating tool — a tool that measures the sustainability credentials of buildings across nine categories.

The specification will be awarded on a project basis, and cover domestic and commercial construction and demolition waste.

It will include best-practice criteria for waste minimisation planning, waste management on site, transportation, sorting and processing, reuse, recycling and disposal.

Licensed organisations will be required to report on measures of success in diverting waste from landfill.

<https://bit.ly/2nWik2T>

## Toyota engineering future urban infrastructure

In an unexpected move for a leading automotive company, Toyota's big announcement of CES 2020 extends well beyond the realm of the car.

"We have decided to build a prototype town of the future," Toyota Motor Corporation president Akio Toyoda revealed.

The project propels Toyota's brand beyond the physical boundaries of the car, adapting to a world where automobiles are no longer the great human connector.

Envisioned as a "living laboratory", the Woven City is an urban living experiment that will "explore new forms of urbanity", explained Bjark Ingels, whose architecture

firm Bjark Ingels Group (BIG) has been commissioned to design the city.

The campus will serve as a home to residents and researchers alike, operating as a community and a testing ground for technologies such as robotics, AI and material sciences.

The design of the city will merge natural elements with tech-enhanced living, with the goal to serve as a catalyst for human connection.

The city will be fully sustainable, generate and use solar power, and feature native vegetation hydroponics.

[www.woven-city.global](http://www.woven-city.global)

## New housing approach required

"News that New Zealand is the second least affordable place to buy a house, after only Hong Kong, is sadly unsurprising, and signals that a new approach is needed to get more homes built and make housing affordable," Infrastructure New Zealand chief executive Paul Blair says.

Demographia released its most recent annual report into housing affordability in Australia, Canada, Hong Kong, Ireland, Singapore, New Zealand, the UK, and the US.

All eight New Zealand cities were assessed as severely unaffordable, as each had median house prices over five times their median income.

Affordability is assessed by a ratio of three or lower.

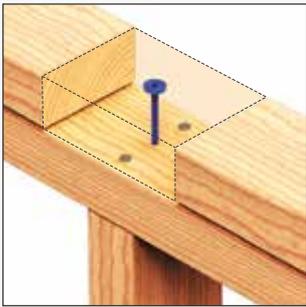
"Unfortunately this news is no surprise. It confirms that the problem is New Zealand-wide, and not limited to large or fast-growing cities like Auckland," Blair says.

[infrastructure.org.nz/reports](http://infrastructure.org.nz/reports)

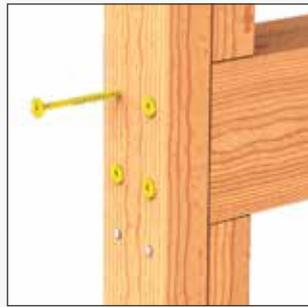
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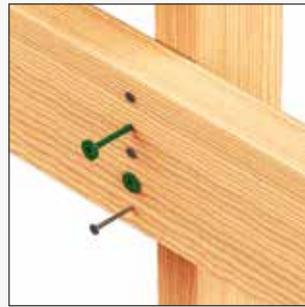
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COMING SOON

## Engineering a new type of wall — then we can all get some sleep!

Researchers at the University of Auckland have been awarded close to \$1 million to develop a new type of wall, to better shut out the unwanted sounds of the people next door.

This is timely in an age of increasingly powerful entertainment systems resulting in people being forced to listen to others' music and television, which can affect health and well-being.

This acoustic intrusion is more likely in medium-density housing, which is projected to constitute 30% of Auckland's housing by 2050.

The team of mechanical engineers at the Faculty of Engineering's Acoustic Research Centre, awarded \$991,000 from the Ministry of Business, Innovation and Employment (MBIE), is taking an innovative approach to noise insulation.

They aim to create a new kind of partition material in which they, with the use of specific materials, will reduce the capacity of a wall to vibrate in response to sound, thereby providing better sound insulation, but without taking up more floor space.

They are particularly focused on cutting out low frequency noise, which travels more easily through walls — bass beats, for instance, which can be intrusive and impossible to ignore.

"Sometimes it feels like Sting is playing his bass in your living room," according to Dr Andrew Hall, who is leading the research, adding that he likes Sting's bass playing — "just not at 2am".

A wall is vibrated much more easily at low frequencies, where wavelengths can be more than three metres, Dr Hall explains. "It's like a giant hand pushing on the wall."

### Acoustic metamaterials thwart soundwaves

Achieving effective noise insulation against low frequency sound is challenging and expensive, and usually involves increasing the density, mass or thickness of the partition material.

However he, co-researcher Dr George Dodd and their team have shown through previous research that they can use internal mechanisms, known as acoustic metamaterials, which can push back against that vibration, and disrupt the sound waves

travelling through the walls.

They are also investigating the use of Helmholtz resonators to improve the noise insulating properties of a wall.

"They respond much like when we blow over the top of a glass bottle, and so absorb and reflect sound," Dr Hall says.

Using 3D printing of soft and hard materials, the researchers will explore the many possibilities in the design of these Helmholtz resonators and acoustic metamaterials.

"Despite people decrying the poor quality of multi-family housing in lower socio-economic sectors, there's little evidence of research groups seeking solutions in the innovative way that we are proposing.

"Our system aims to raise New Zealand's sound insulation standards to meet the internationally-recognised minimum performance expressed in overseas building codes.

"More and more people are living in urban settings in close proximity to others, and tackling noise pollution will have enormous benefits for their health and well-being."

## Engineers Association gets rebrand

Just as people and companies evolve, so do brands — The Association of Consulting Engineers New Zealand (ACENZ) will become the Association of Consulting and Engineering.

It will also be known by the new acronym of ACE New Zealand.

The new strategy, approved by its board in 2019, called for a new brand and visual identity change that will take the organisation into the future.

The new name reflects that member firms aren't just about engineering — they are diverse and integrated professional service organisations.

The new name and strategy marks a new chapter in an ongoing mission to unleash the potential of the organisation.

"The strategy has been developed to ensure that we are a contemporary and relevant organisation that adds real value for Aotearoa," an association spokesperson says.

"We will continue to work diligently as a trusted advisor, providing business leadership in matters relating to the construction, engineering, and the professional services industry."

## Christchurch cafe wins ADNZ Resene award

A Christchurch coffee house has wowed the judges of the 2019 ADNZ Resene Architectural Design Awards.

Designed by Chris Wheeler of Hierarchy Architecture, Coffee Culture at The Crossing won the Resene Colour in Design Award, along with a regional Commercial Interior Architecture Design Award.



Judges said there were many reasons to love the project — the way the fit-out emulates the decorative circular facade that wraps the building, the organic joinery that efficiently works with the unique shape of the space, and the way the curved counter wraps the back wall, drawing you into the space.

They said the material selection creates cohesiveness and a balanced neutral palette using highly textural finishes and cleverly detailed elements to create a unique, inviting space.

Other pieces of magic include the highly textural mosaic tiles that have been paired with warm, solid timbers and brass detailing. The choice of lush velvet upholstery for the banquet seats which adds softness and comfort. An elegant brass clad wall that draws you in and channels you towards the counter.

Even the flooring is distinctive — a mix of engineered wood merged with a range of terrazzo tiles that works so well to emulate the flow through the space.

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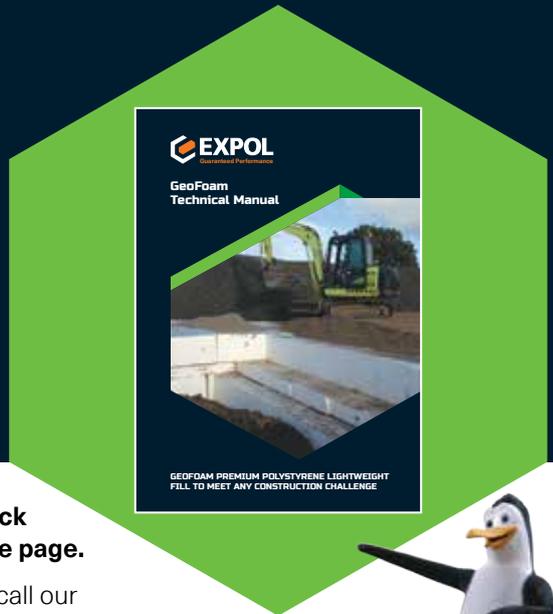
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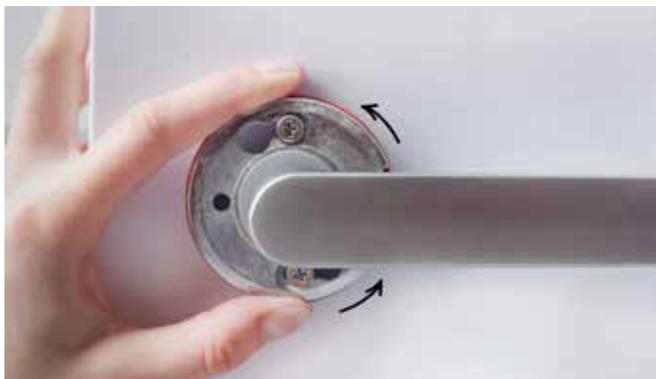


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## The authentic easy installation lever



The Lockwood Velocity Series door handles have come a long way since their launch in 2010.

At its core, the simple twist and tighten fixing method and lever set pre-assembly for super easy and super-fast installation has not changed.

But the options for lever styles and finishes has grown. In addition to the chrome finishes

there is now a matt black powder coated option.

Complementing the original 63mm offering is a 55mm small rose series for a sleek architectural look.

There is also an Urbo and Malta option to seamlessly match popular exterior joinery hardware finishes.

[assaabloy.co.nz](http://assaabloy.co.nz)

## Introducing the 'Big Boy' of Hammers

Estwing is a leading manufacturer of the world's most durable and comfortable striking tools.

The brand is synonymous with quality, durability and ergonomics, and its innovative designs continue to create the most revolutionary and long-lasting tools in the market.

Established in 1923, the Estwing family of products is the choice for professional tradesmen and do-it-yourself enthusiasts.

Continuing with the philosophy of offering the best, Estwing proudly introduces the "Big Boy" of hammers — the sledgehammer. By far the largest single selling hammer model, the sledgehammer is an essential tool for all major trades.

The Sledge Hammer Series includes four models with head weights ranging from 2.7kg to 5.5kg.



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

## MiTek PosiStrut provides the answer for Auckland's busiest hospital

The new Acute Mental Health Unit at Middlemore Hospital is a replacement for the existing Tiaho Mai building.

One of the key design drivers was the need to allow clear space within the ceiling areas for installation and maintenance of building services.

When Nicholas Wedde and the design team at Klein Architects looked for the best options to provide this, MiTek PosiStrut became the obvious choice.

Wedde explains that Mitek PosiStrut gives unequalled design freedom across a wide range of applications for floor and roof in domestic, industrial and commercial applications.

At Middlemore, providing easy access for the installation and maintenance of services in the floor zone is the clear advantage of the Posi-Joist system, and with the ever-increasing need for MVHR (Mechanical Ventilation and Heat Recovery) systems, PosiStrut provides a perfect and simple solution that isn't possible with alternative solid timber products.

PosiStruts enable long clear spans, reducing the need for intermediate supports, allowing unobstructed access and for future flexibility of areas of floor plate.

In addition, with the roof bracing plane at the underside of the



PosiStruts, design was possible at a high level and clear of the ceiling void.

The building at Middlemore was documented using nominal PosiStrut sizes and spacings, allowing a fully detailed design, including support details, to be carried out by MiTek as part of the review and approvals process.

On site, the speed and ease of installation of PosiStrut has been

another additional benefit to the project.

Hawkins project manager AJ Spicer says during the construction phase the benefits have been that they are comparatively lighter than alternative options, making them much easier to handle and install.

"The PosiStruts are manufactured to tight tolerances, making their installation straightforward due to their dimensional accuracy.

"Further to this, due to their timber top and bottom chord, it makes it fast for timber roof purlin installation above, fixing timber to timber."

The benefits of a package that includes design and fabrication of an easy-to-install, long spanning, light roof framing system such as MiTek PosiStrut have contributed to a successful project to date, with an anticipated completion in mid-2020.

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

# Summer a good time to install underfloor insulation for winter

Whilst winter seems a long way away it is only around the corner. So now is a good time to look at installing underfloor insulation.

It's a job you only want to do once, so you need a product that's easy-to-install and does a top job keeping homes warm and dry for life.

Expol offers two grades of easy-to-install underfloor insulation for timber floors — Expol R1.4 and Expol R1.8 — with both exceeding Residential Tenancies Act requirements.

Expol UnderFloor installation is simple to install. The R1.4 range comes in colour coded packs so you can easily identify the joist widths it fits between.

R1.4 is suitable for new and existing homes, and it's quick and easy to install. It fits snugly between timber floor joists, and stops drafts and damp from entering. It's also long-lasting, which means homes will be warm and dry for years to come. R1.4 also has a BRANZ-appraised 50-year limited product warranty.

R1.8 is the choice for houses in extreme conditions. It is 30% more efficient, and is ideal for cold or windy underfloor environments.

## Easy installation

Both have been designed for easy installation. Expol UnderFloor Insulation panels are concertina-cut on both sides to allow for a compression of up to 20mm, which makes the panels a tight fit.



To ensure the panels are absolutely secure, Expol L Brackets are available to use on existing floors, or Expol Joist Saddles on new floors.

Expol UnderFloor Insulation is ideal for retro-fitting under existing floors and for new floors. The R1.4 panels are made of rigid polystyrene, and the R1.8 panels are made from graphite infused polystyrene, 1200mm long and 60mm thick.

They're manufactured in four standard widths — 360mm, 410mm, 470mm and 560mm, so they fit between most standard joists.

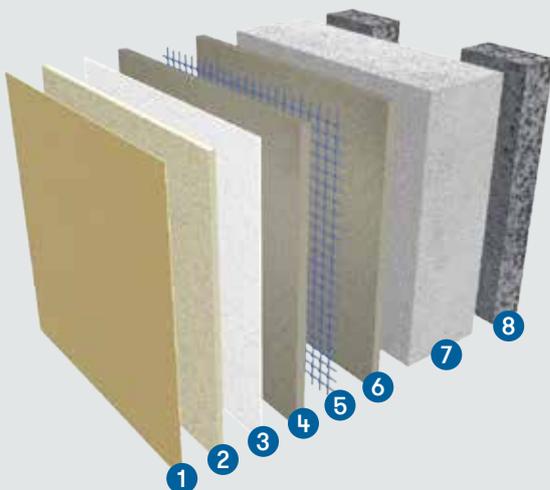
- Expol is 100% New Zealand owned and operated. The company has a Full Circle Recycling Philosophy, and operates seven manufacturing plants nationwide, all of which have recycling facilities.



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



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# Solar-powered surveillance cameras helping to keep construction sites secure



Sick of theft and vandalism on your building site? A great new option is now available with Spy Tower surveillance security cameras.

Spy Tower specialises in solar-powered construction site security cameras which are available for hire.

The units are able to increase the security on building sites by providing 24 hour camera surveillance that is self-monitoring via a 4G smartphone camera app.

Spy Tower security cameras can be placed anywhere on site and, because they are solar powered, do not require a power source. The user is able to view live site coverage and get

instant updates for everything from any suspicious activity to onsite deliveries.

Two types of mobile construction site cameras are available to suit all types of job sites. The camera towers can also be installed in rural locations, for events, or at any other public spaces that require extra security.

The SPY 90 camera tower features a 5 megapixel camera on a 3.6m high pole. It can be fixed into the ground and removed once construction is completed.

HD cameras provide images direct to smartphones for live viewing 24/7. Solar powered with a 90° vision, the unit also

features a bright floodlight activated by night sensors.

The towers are self-monitored with play back coverage, and email and push notifications.

The SPY 180 camera tower is a larger five metre-high camera tower which sits on a portable 850kg block that can only be moved by a forklift or hiab.

With 180° vision, this model can operate on 4G or Wifi networks, has a 30 metre infrared night vision feature, and three weeks' continuous recording storage.

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# Site theft — the traumatic effects of burglary on clients and builders

By Building Today writer Jo Bailey

In October last year, two weeks before I was due to move into my new home, I took a call from my builder I neither wanted, nor expected.

"I'm really sorry, but your house has been robbed."

My new kitchen appliances, still in their boxes, had been spirited away in the night, along with a heap of bathroom and electrical fittings.

Sure, builders' insurance covered the stolen items, but this doesn't make it a victimless crime. Far from it.

I was devastated to think people had invaded my home, and taken my hard-earned, and carefully-chosen possessions.

And instead of cruising towards completion after a smooth, enjoyable build, my builder was left to sort out the insurance claim and organise replacement of the stolen items, a time-consuming and not always simple process.

My experience is hardly a one-off, with theft from building sites a growing trend, and which has reached almost epidemic proportions in some regions.

A home or commercial building under construction can be an easy target for theft, particularly towards the end of the build when lots of valuable items arrive on site.

Detective Senior Sergeant Neville Jenkins, who heads the Christchurch Police Criminal Investigation Branch unit responsible for the investigation of burglaries, and who has been a victim of burglary himself, says the greatest inroads in reducing building site theft is through prevention.

"Builders need to be a lot more vigilant about security if they are to reduce the risk of being a target and protect their clients' home or building," Mr Jenkins says.

"If we were to drive around a new subdivision and look at the houses being built, a number would be insecure. I think builders are sometimes lax because they think insurance will cover anything that happens, but it's not until a burglary occurs on their site that they realise the true impact on a victim and themselves."

Builders' vehicles and tools are another constant target, given tools are so easy to fence, he says.

"We've had cases where builders have left unlocked \$40-50,000 vehicles full of tools in the driveway, or even out on the road.

"There are all sorts of ways builders can mark



tools now, such as chips and invisible engraving, which can help police identify the owner if we recover stolen items."

Canterbury Master Builders Association president Ivan Stanicich recently had first-hand experience of being burgled, after a house he was building for a family member was broken into. Among the stolen items were most of his tools.

"It was the first time this had happened to me in 20 years of business," Stanicich says.

"I don't usually leave my tools on site, so it was a hard lesson. I now have a better understanding of how a burglary makes people feel."

He has had many conversations with builders who have been "ripped off", and says while no one deserves it, some have been "bloody stupid" when it comes to site security.

"I think we definitely need to have more conversations about safety and security, and everybody needs to do a bit more to limit the excess money that is burned and wasted due to burglaries."

## Advice from NZ Police and Master Builders to protect your site, vehicles and tools:

- *Ensure your building site is secured with safety fencing and suitable locks.*
- *All visitors to site should follow WorkSafe procedures and sign in, whether through technology such as an iPad, scanning via an App, or manually writing in a sign-in book.*
- *Arrange for appliances to be delivered as close to move-in day as possible, and install them the day they arrive. If this is not possible, store them out of sight.*
- *Once the appliances are unpacked, don't throw the boxes and packaging onto the top of the skip.*
- *Record serial numbers of appliances, and write your company number on the back in invisible ink to identify them if they do get stolen.*
- *Provide contractors with contractors' keys to enter the house during construction and not owners' keys. The owners' keys will reset the lock after handover.*

*Store the keys in a lockbox, and only provide the code to trusted contractors. Regularly change the lockbox code, and never use the same code for different jobs.*

- *Use an on-site camera as a deterrent. There are reasonably priced cameras available now that send alerts and pictures to your cellphone if there is movement on site after hours.*
- *Don't park your vehicle on the road at night. If you can't park your vehicle in the garage, at least back it right up to the garage door so the canopy can't be opened. Alarm the canopy as a deterrent.*
- *Keep a register of your tools, and mark or engrave them. Spraying with orange dazzle isn't enough.*

## Finalists selected for 2020 NZ Wood-Resene Timber Design Awards

Judges have completed the task of selecting 48 finalists from the many entries received for the 2020 NZ Wood-Resene Timber Design Awards.

Following the finalists' more detailed submissions, the second round of judging took place on December 10, and winners will be announced at a gala function on March 26 at the Grand Millennium Hotel in Auckland.

The jury for this year's programme includes New Zealand Institute of Architects president Tim Melville, New Zealand Timber Design Society president David Carradine, sustainable architect at Scion Andrea Stocchero, and NZ Wood Design Guides manager Andy van Houtte.

This year's crop of entries has shown more prefabricated and panelised designs, both in mass timber and cassette form, as well as some post and beam formats with strong consideration of design for manufacture and assembly (DfMA) processes.

New wood products have been developed and commercialised, along with the uptake of environmentally-friendly, exterior-use products.

"The quality of entries is once again exceptional," judges said.

"More and more novel, innovative applications of timber are submitted every year. The quality, design, materials and build philosophies employed demonstrate the evolving and imaginative use of timber in New Zealand and, indeed, around the world," they said.

"These technologies are opening up new opportunities for designers," NZ Wood promotions manager Debbie Fergie says.

"More and more new and interesting applications of timber are being showcased, which shows that timber buildings are once again coming into their own.

"We look forward to even more architects and engineers confidently specifying timber for a wide range of applications within the built environment."

Finalists in the 2020 NZ Wood-Resene Timber Design Awards are:

### Residential Design Award

For the use of timber and wood-based products as a signature feature, resulting in excellent design of residential buildings, either stand-alone or multi-unit/ multi-storey. Sponsored by: Futurebuild Ltd.

- Arvida Living Well, Park Lane, Christchurch: Jasmax
- Blueskin Bay retreat, Dunedin: Mason & Wales Architects
- The Grounds, Auckland: Peddle Thorp
- Hidden Hills house, Wanaka: Warren & Mahoney
- Pauanui Beach home, Coromandel Peninsula: Peddle Thorp

- Tuarangi Rd 'Outaspace' Auckland: TOA Architects

### Commercial Design Award

For the use of timber and wood-based products as a signature feature, resulting in excellent design of commercial, industrial, hospitality, retail or office buildings. Sponsored by: TimberLab Solutions Ltd.

- Arrivals Complex, Plantation Island Resort, Fiji: Architects Pacific Ltd
- Auckland Zoo Administration Building: Ignite Architects
- Botany Toyota, Auckland: Woodhams Meikle Zhan Architects and Blueprint Consulting Engineers
- Haus Espresso, Christchurch: Dalman Architects
- Secret Spot, Rotorua: ABCD Architects
- Waterfront House, Wellington: Athfield Architects

### Public Design Award (new)

For the use of timber and wood-based products as a signature feature, resulting in excellent design of public buildings such as community, religious, education, healthcare and transport. Sponsored by: XLam NZ Ltd.

- Oxford Terrace Baptist Church, Christchurch: Andrew Barrie Lab, Holmes Consulting and Contract Construction
- St Patrick's Church, Lincoln (Canterbury): WSP Opus
- Star Mountain Plaza, Papua New Guinea: Kirk Roberts Consulting
- Te Ara a Tawhaki, Otaki: Tennent Brown Architects
- Waihinga Martinborough Community Centre, Wairarapa: Holmes Consulting

### Interior Design Award

For the use of timber and wood-based products as a signature feature, resulting in distinctive interior designs delivering ambiance, flair and practicality. Sponsored by: Woodspan Ltd.

- Harrison Grierson offices, Auckland: Warren & Mahoney
- Lara Lane, Kaiwaka, Rodney: Box Build Ltd
- National Library Auditorium, Wellington: Warren & Mahoney
- Oxford Terrace Baptist Church, Christchurch: Andrew Barrie Lab, Holmes Consulting and Contract Construction

### Exterior Structure Design Award (revised)

For the use of timber and wood-based products as a signature feature, resulting in designs of exterior structures and features such as bridges, pavilions, walkways, landscaping, exterior furniture and exterior art.

- Sponsored by: Forest Stewardship Council NZ (FSC).
- Chimpanzee habitat, Wellington Zoo: Isthmus Group
  - Farmers Corner Pavilion, Ashburton: PTL Consultants, Archetype, Quaid Construction, Techlam NZ
  - Saltwater Creek Cycleway Bridge, Nelson: Jerram Tocker Barron Architects
  - Secret Spot, Rotorua: ABCD Architects
  - Supernormal play structure, Christchurch: Andrew Barrie Lab, Heyman Lu and Matt Liggins Studio



Studio Pacific Architecture's He Tohu Document Centre entry was the Supreme Award winner in the 2018 NZ Wood-Resene Timber Design Awards.

- Te Ara a Tawhaki, Otaki: Tennent Brown Architects

### NZ Specialty Timber Award

For the use of NZ-grown alternative species (excludes Douglas Fir and Radiata Pine). Sponsored by: NZ Farm Forestry Association.

- Cloud of Witnesses, Christchurch: Andrew Barrie Lab
- Rimu floor, James Hay Theatre, Christchurch Town Hall: Timbers of New Zealand
- Ron Ball Studio, CSO Centre, Christchurch Town Hall: Warren & Mahoney

### Sustainable Development Award (new)

For the use of timber and wood-based products in projects that are achieving low environmental impact and enhancing New Zealand's unique society and environment. Sponsored by: Scion Research.

- Arvida Living Well, Park Lane, Christchurch: Jasmax
- Boatshed, Lyttelton: Christchurch City Council
- Hawea Flat Passiv Haus, Queenstown Lakes: Timberworks NZ
- Kowhai House, Dunedin: Rafe Maclean Architects
- Modhouse, Hastings: Modhouse

### Engineering Innovation Award

For timber engineering solutions, processes and integrated team collaborative approaches that deliver innovative buildings. Sponsored by: NZ Timber Design Society.

- All Souls Church & Hall, Christchurch: Holmes Consulting
- Lindis Lodge, Omarama, Otago: Architecture Workshop
- Waihinga Martinborough Community Centre, Wairarapa: Holmes Consulting

### Wood & Fibre Products & Technology Innovation Award (revised)

For the development of novel wood, wood fibre and derived products, or for novel technology and process development, or original application of existing technology and processes. Sponsored by: PEFC.

- Boatshed, Lyttelton: Christchurch City Council
- Optimised Engineered Lumber (OELTM), Auckland: Wood Engineering Technology
- Parallel Laminated Timber, New Plymouth: Woodspan Ltd

# New tool to decarbonise New Zealand's construction sector

An innovative new tool is showcasing the commercial and environmental sustainability of engineered timber in new construction.

Naylor Love, one of New Zealand's largest and oldest construction companies, has developed a new sustainable construction calculator that quantifies the carbon impact of building structures using different materials.

The calculator is based on a new report commissioned by Naylor Love, and authored by sustainability experts thinkstep-anz.

The research project modelled a typical six-storey commercial building constructed two ways — engineered timber versus conventional concrete and steel. The engineered timber model reduced carbon emissions by up to 90%.

Naylor Love has developed the research findings into a tool that calculates carbon footprint differences between the different materials, and can identify where there are benefits and opportunities of using engineered timber.

The tool will help clients visualise the potential carbon impacts of their material choices.

Naylor Love business development director Scott Watson says the demand for sustainable construction is strong and steadily increasing.

"There is immense pressure on companies to be more sustainable, and that means new



*Naylor Love has used engineered timber on major projects, including the Otago Polytechnic Student Village — one of the largest laminated wood buildings by volume in New Zealand.*

thinking leading to new practices, materials and innovative technology in construction," Watson says.

"Clients want to be more sustainable and they want our help to achieve that. They also need the facts and figures that provide the rationale for their decisions.

"Our sustainable construction tool was developed in response to that demand, to help people change the way their buildings are designed and built.

## **'Wood essential in a carbon-neutral economy'**

"The goal is to provide data that quickly demonstrates carbon benefits of engineered wood over alternative materials, alongside a cost-benefit analysis.

"Wood is essential in transitioning New Zealand to a carbon-neutral economy. It's sustainable, renewable and less energy-intensive to process compared to other construction materials.

"The net total cost difference for an engineered timber structure can be as low as a few percent of the total building cost. For this, you can achieve about a 90% reduction in carbon emissions.

"We are not anti-concrete or anti-steel — those materials will always have a place in construction. You wouldn't build a dam or motorway bridge out of timber, for example.

"But for some applications, the environmental benefits of wood can't be ignored."

Naylor Love's study has been reviewed and endorsed by Dr Andy Buchanan of PTL Structural Consultants, Emeritus Professor of Timber Design at the University of Canterbury. Dr Buchanan is one of the pioneers of modern timber construction.

New Zealand buildings generate around 20% of the country's carbon emissions, according to an earlier thinkstep-anz report, which found that the bulk of those emissions were from concrete and steel, accounting for more than half of the carbon footprint of residential and non-residential construction.

Watson says the construction industry is key to addressing carbon pollution, particularly as the Government is striving for net zero carbon emissions by 2050.

"Naylor Love is committed to helping clients decarbonise and consider more efficient products, like engineered timber. We hope our efforts will help lead New Zealand construction projects in a more sustainable direction."

Naylor Love has used engineered timber on major projects, including the Otago Polytechnic Student Village — one of the largest laminated wood buildings by volume in New Zealand.

The company is also one of 122 signatories to the Climate Leaders Coalition, and a member of the Sustainable Business Council.

*From page 26*

- Smith house roof, Queenstown: Potius Building Systems Ltd
- Ultra-strong, transparent flexible wood, Rotorua: Scion Research

## **Engineered Wood Products Innovation Award**

For pushing the future boundaries of EWP and showing innovation such as Design for Manufacture and Assembly (DfMA), technical performance, novel use, aesthetics etc.

Sponsored by: Nelson Pine Industries Ltd.

- Botany Toyota, Auckland: Woodhams Meikle Zhan Architects and Blueprint Consulting Engineers
- Concision house, Christchurch: Concision Panelised Technology
- Farmers Corner Pavilion, Ashburton: PTL Consultants, Architype, Quaid Construction, Techlam NZ
- Metal Jacket house, Tauranga: Jigsaw Architects Ltd
- Tuarangi Rd 'Outspace' Auckland: TOA Architects

# Extra length beams and posts a big point of difference

Stuart Dale, director of consultancy firm Architectural Promotions, spends a good deal of his working week talking with architects, engineers, designers and specifiers. Here he talks about one of his clients, Northpine, a timber manufacturer in Northland.

Delivering face-to-face presentations is part and parcel of Stuart Dale's role — communicating the products and services offered by his clients.

He gets to hear about the many issues facing the architectural sector as they all strive to deliver innovation and efficiencies for their clients.

It's not an easy game. Finding that point of difference, that key innovation, clever idea, efficient use of space or cost-effective material is often problematic.

One of his clients is a timber manufacturer in Waipu by the name of Northpine.

"They produce a range of high quality dressed and sawn timber beams, square posts and joists — from very strong Northland-grown pine — under the brand name Northbeam," he says.

"They can be used for many different purposes — sub-floor, lintels, joists, rafters and so on ... and for decks, exposed beams, walkways and pergolas. They are extremely strong and dense beams and posts capable of taking big loads."

Best of all, Stuart adds, Northpine's mill is set up to process beams and posts of SG8 and SG10 up to 7.2metres long. Most mills have a maximum length of 6m.

"The specifiers I visit in Auckland, Waikato and Bay of Plenty are sometimes reluctant to learn about a small timber mill up north, thinking it's too far away to be relevant to them. But when they realise the enormous advantages they can achieve with Northbeam, it's a light bulb moment."

"They get quite excited about the possibilities when they realise how they can specify Northbeam in the plan."

The advantages are numerous.

"Many specifiers these days don't even consider choosing SG10 because they've been told that it's simply not available. Not only is the Northbeam range procurable — at a price much more cost-effective than engineered wood products — but choosing the 7.2m length (SG8 or SG10) allows a specifier to get an additional 10% continuous span under the NZS:3604 standard.

"Architects just need to go to the span tables to figure out how and where it can work for their



Northbeam has been used for civil and commercial projects — from public walkways and wharves to farm gates and imposing entranceways. Above is the new wharf at Camp Bentzon on Kawau Island in the Hauraki Gulf.

from his local merchant he made the change and saved his client thousands of dollars."

Another case involved a major Auckland housing company that changed their mid-floor joists on an apartment project from relatively costly engineered joists to SG10.

"They will not need to pack under the engineered beams to make them the same size as standard SG8 joists on that level, and their builders will be delighted not to have different fixing requirements to deal with."

Available from all timber merchants, Northbeam structural products are independently verified by GradeRight to SG8 or SG10 standard, and are also BRANZ Appraised.

Northbeam has been used for civil and commercial projects — from public walkways and wharves to farm gates and imposing entranceways — as well as in residential housing as exposed beams and rafters or pergolas and decks.

Northbeam products are cut-to-length (up to 7.2m) and delivered swiftly and efficiently from Northpine's distribution yard in Silverdale, Auckland, and via merchants nationwide, to sites all over the country.

**For more information visit:**

[www.northpine.co.nz/northbeam](http://www.northpine.co.nz/northbeam)

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

clients using SG10 at 7.2m lengths."

As an example, Stuart cites a designer in Northland who had just finished specifying an engineered solution for all the rafters on one of his designs, because SG8 wasn't going to span far enough and he couldn't use a bigger timber size as the building was at maximum height.

"When I told him that he could now get SG10

## SPAN TABLE – SG8 / SG10

Floor joist size (mm x mm)	Maximum span* of joists at a maximum spacing (mm) of 610					
	400		450		500	
	(m)	(ft)	(m)	(ft)	(m)	(ft)
	1000	1010	1020	1030	1040	1050
<b>(a) 1.8 kPa floor load (dry in service)</b>						
100 x 40	4.20	4.30	4.40	4.50	4.60	4.70
110 x 40	5.10	5.20	5.30	5.40	5.50	5.60
120 x 40	5.70	5.80	5.90	6.00	6.10	6.20
130 x 40	6.20	6.30	6.40	6.50	6.60	6.70
140 x 40	6.60	6.70	6.80	6.90	7.00	7.10
150 x 40	6.90	7.00	7.10	7.20	7.30	7.40
<b>(b) 2.0 kPa floor load (wet in service)</b>						
100 x 40	4.00	4.10	4.20	4.30	4.40	4.50
110 x 40	4.80	4.90	5.00	5.10	5.20	5.30
120 x 40	5.30	5.40	5.50	5.60	5.70	5.80
130 x 40	5.70	5.80	5.90	6.00	6.10	6.20
140 x 40	6.00	6.10	6.20	6.30	6.40	6.50
150 x 40	6.30	6.40	6.50	6.60	6.70	6.80

Left: A sample Northbeam SG8/SG10 Span Table.

Download  
FREE Span Tables at  
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New wharf, Camp Bentzon, Kawau Island



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Tailor-made in lengths up to 7.2 metres, these strong SG8 and SG10 verified beams and square posts are naturally elegant, easy on the eye and very cost-effective.

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## NORTHBEAM

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# CLT manufacturer grows from strength to strength

The largest Cross Laminated Timber (CLT) manufacturer in the Southern Hemisphere, XLam's new \$30 million manufacturing facility in Wodonga, Victoria, Australia, is now well and truly up and running.

XLam was the first to start manufacturing the monolithic structural building material, CLT, in Australasia in 2011. Since then XLam has been a trailblazer for the use of mass timber and the uptake of build offsite thinking and technologies by the construction sector.

"While the year on year growth of XLam has been impressive from day one since commissioning the Wodonga facility in March 2018, demand for Australasian-made CLT has grown significantly," XLam head of marketing and business development John Eastwood says.

"The commissioning of the Wodonga facility is a game changer for the Australasian market that allows us to meet the growing demand for mass timber buildings in Australasian-made CLT, from Australasian plantation radiata pine forests," Eastwood says.

"The benefits for New Zealand mass timber buildings is also significant, with the plant able to supply greater volumes of treated CLT that complies with New Zealand Building Code requirements with more consistent lead times and, now, without the volatility of New Zealand log pricing, at a more consistent price point," he says.

The 12,000sq m facility has an annual manufacturing capacity of 50,000cu m of CLT, and plans to scale up that capacity have already been accelerated.

"The plant is already double shifted in most areas — we're just finalising the commissioning of another Hundegger PBA3 to create our second CNC line, and we're finalising investments in additional finishing and lifting equipment," Eastwood says.

Along with its manufacturing facility in Wodonga, XLam also has offices in Melbourne, Auckland and Nelson, and personnel based in Sydney, Brisbane, Maryborough, Christchurch and Queenstown providing specification advice, structural engineering services, contract management and construction services.

"While at our core we are a CLT manufacturer, we are also a design services provider and a construction services provider. Simply being a manufacturer of a product doesn't cut it in the construction sector anymore.

"Manufacturers of specifically-designed materials or systems must be a lot more



The largest Cross Laminated Timber (CLT) manufacturer in the Southern Hemisphere — XLam's new \$30 million manufacturing facility in Wodonga, Victoria, Australia.

integrated in the design and construction processes.

"While we're not the designer, manufacturer and installer on every project we're involved with, there is an imperative these wraparound services are available to our clients that they can pick and choose from, depending on what's best for the project."

It is widely understood the benefits of using mass timber structures in buildings and build offsite technologies is in safety, time and cost.

## Understanding the benefits

However, really understanding where these benefits manifest in a project and just how big they can be takes some time and different thinking by clients and project teams.

Simply comparing square metre rates doesn't reveal these underlying benefits. By way of example, the comparison of monolithic structural building materials such as CLT with Post Tension (PT) or Precast Concrete on a square metre rate basis will result in a like for like price point, or sometimes even a slightly high square metre rate for CLT.

The benefit isn't in the like for like exchange of concrete for mass timber though — it's in what the mass differential can do for the design and building of the structure.

With CLT being around 20% of the mass of concrete, the up to 30% material cost savings

and time cost savings is in foundation design and construction.

Simply put, the material cost saving of CLT is in the ground. What designers and constructors alike are rapidly recognising is switching from a concrete structure to a mass timber structure without taking up the indirect foundation material and time cost benefits doesn't benefit them or their clients.

To extend this example, the switching from a concrete structure to a mass timber structure can improve the onsite programme by up to 20%, given there is no curing time.

Again, what constructors are recognising is without the need for curing time and the inconvenience of the sea of temporary propping, they can push the 20% programme benefit even further by the resequencing and truncating of secondary subtrades schedules.

There is a range of build types where mass timber structures are being embraced by clients and project teams. An example is where a regular geometry structure is being used.

Architectural typologies such as student accommodation buildings, hotel buildings and age care facilities are prime examples, along with social housing builds such as three-storey walk-ups.

There is a significant increase in the use of mass timber in commercial office buildings using large scale Glue Laminated Timber (GLT) post and beam structures in conjunction with



Above: *The Merawarp Home in Victoria, Australia.*  
Below: *The Seed House in New South Wales, Australia.*



CLT floor plates and cores, along with a number of large retail and industrial buildings using very large floor plates, cores and stairs.

The use of mass timber in hybrid structures such as steel post and beam structures using CLT floor plates, cores and stairs is seeing previously unusable land — due to things like poor soil conditions — now being commercially viable to develop, along with vertical extensions to existing buildings with minimal strengthening requirements to the existing structure.

Naturally, the use of mass timber in high-end architectural dwellings continues to grow and push boundaries.

“The lightbulb moment for our clients and the project teams we’re involved with is the realisation that mass timber and build offsite technologies are freeing them from traditional construction sector thinking that has driven design, procurement and construction that hasn’t really evolved for over a century,” Eastwood says.

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# Sustainable timber offers character and integrity

In 2009 Interlink Ltd was established by Matthew Kennedy to supply recycled timber from sustainable sources to a customer base throughout New Zealand.

Since then awareness of the importance of reducing carbon emissions has grown, and individuals and businesses alike are consciously giving greater thought to the impact of their actions on the environment.

### Careful consideration

Careful consideration of the types of products chosen and how they are used can impact greatly on the total emissions of a project, and can help build a healthier, more sustainable environment for everyone.

Interlink prides itself in sourcing recycled timber products that offer character and integrity to all applications.

Whether it be hardwood timber, railway sleepers or wharf beams, the company can find a product to suit its clients' building requirements.



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# New look BT!

# Coming your way:

# March 2020

# BT's Back in Time

## 20 years ago — February 2000:

- New Registered Master Builders Federation chief executive Chris Preston said consolidation of the organisation's brand in the marketplace was his initial priority upon taking up the role.

"I have joined the organisation as a professional manager," Mr Preston said.

"I don't know much about the building industry, so there will be a learning curve. But the commercial reality is that the key aspects of management are common across all business organisations.

"It's all about maintaining market share, a high profile in the market and financial stability, and having a sharp focus in everything the organisation does," he said.

- The BCITO was about to launch qualifications within the following two months in two of the various trade areas outside of carpentry for which it administered training — cement and concrete, and proprietary plaster cladding systems.

BCITO development manager Pauline Edwards said the new qualifications in cement and concrete would provide a mechanism for recognising the skills and knowledge of those already working in the trade, as well as a path for new entrants.

## 15 years ago — February 2005:

- People using private building certifiers were warned to be aware that certifiers may not have adequate insurance cover against potential claims of negligence, particularly if the certifier did not continue in business, the Department of Building and Housing said.

The advice followed a comprehensive review, begun by the former Building Industry Authority, of the indemnity that insurance building certifiers were required to have.

Under the Building Act 1991, building certifiers had to carry insurance to cover their liabilities. For example, a building certifier may have been liable if it negligently certified a house that later needed repairs because it did not meet Building Code standards.

- Owners of the huge Sacramento housing complex in Botany Downs, Auckland — where many units were rotten and faced possible demolition — were claiming victory after the High Court upheld their right to sue the Government's former building agency.

An application by the former Building Industry Authority (BIA) to have all claims against it struck out in the country's biggest leaky-building case had not been successful.

The BIA was facing three claims of negligence by the Sacramento body corporate.

The three BIA applications to have the claims struck out were dismissed, but the court concluded that the aspect of claims against the BIA relating to its failure to amend the building code should be struck out.

## 10 years ago — February 2010:

- Qualified builders and tradespeople were to find it faster, easier and cheaper to get licensed, with most qualified applicants being able to save around half the current assessment fees.

The streamlined application process for qualified people was launched by Minister of Building and Construction Maurice Williamson in Auckland.

Applicants needed to provide evidence of qualifications, supply references

and proof of identity, and complete a short, easy form. And, because the process was simpler, the application could be fast-tracked.

- PlaceMakers chief executive John Beveridge presented a giant cheque for \$70,000 to the Prostate Cancer Foundation — the sum the company raised for the Blue September appeal — at PlaceMakers Mt Wellington in Auckland.

Mr Beveridge said the company was proud of all its staff. "We had 100% participation from every PlaceMakers store throughout New Zealand. It was an inspiring effort, and we hope to do even better next year."

## 5 years ago — February 2015:

- Overhauling the Resource Management Act (RMA) was critical to addressing housing supply and affordability, and maintaining the momentum of economic and job growth, as well as better managing New Zealand's environment.

Minister for Building and Housing Dr Nick Smith said the RMA had produced more than 80,000 pages of plans and rules across New Zealand's 78 councils.

"This 10-metre mountain of red tape is holding back the development of new houses and jobs, and it is not performing well enough in managing key resources like freshwater," Dr Smith said.

"The Government is planning the most significant overhaul of the Act since its inception 25 years ago. We want to modernise the purpose to make it more practical and relevant, standardise council plans and simplify the process for gaining consents."

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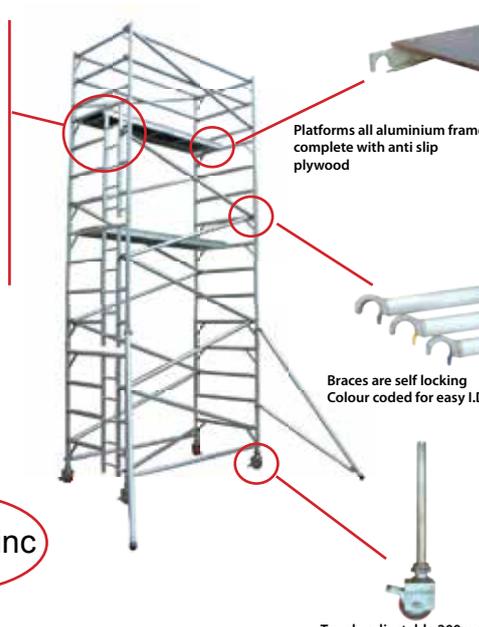
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## Dispute resolution — just how should disputes be resolved?

Timothy Bates and Sabina Boyd of Auckland law firm Legal Vision review a recent case where the dispute resolution mechanism was, well, disputed.

In the November 2019 High Court decision *Peryer Construction Wgtn Ltd v Cathie*, the court was asked to the application of a dispute resolution clause in the context of a protest to jurisdiction.

### Background

In October 2016, the parties entered into a contract whereby the plaintiff, Peryer Construction Wgtn Ltd (“Peryer”) would carry out work on the defendant’s (“Cathie”) home.

A dispute arose between the parties, so they referred it to expert determination, being the first stage of dispute resolution provided for pursuant to the contract.

There was considerable correspondence regarding the jurisdiction of the expert determinator, and it was decided that the expert would only determine a very narrow preliminary issue.

The nature of the dispute was broadly set out in a referral to the Arbitrators and Mediators Institute of New Zealand (AMINZ) (for an appointment of an expert) as:

- What works remain defective or uncompleted under the contract?
- Whether the contractor is in default under the contract?
- What monies, if any, are owed under the contract?

Subsequently however, Peryer commenced proceedings seeking to enable the expert to determine the balance of the dispute, and sought summary judgment on this application.

Nevertheless, summary judgment was deemed unsuccessful by the Associate Judge Osborne.

He concluded that while the contract clearly allowed Peryer to refer a dispute to an expert irrespective of whether Ms Cathie agreed to



that referral, it was not beyond argument that the parties had agreed to alter that arrangement in respect of the expert during the preliminary case management conference in November 2017. Summary judgment, therefore, failed.

Peryer thereafter made a claim in the High Court against Cathie for breach of contract, thus abandoning the attempt to resolve the dispute via an expert determinator.

Cathie protested the court’s jurisdiction in this case, and submitted that the parties’ contract contained a mandatory dispute resolution clause.

### Protest to jurisdiction — relevant principles

The court will stay a proceeding and refer the dispute back to the expert determinator if it finds that there is a valid dispute resolution clause within the contract, and there is no reason why it should not be dealt with via that method.

Alternatively, where a defendant takes an active step in the proceeding, they will be taken to have accepted the court’s jurisdiction, even where the court would have not otherwise have been prepared to hear and determine the proceeding.

### Application to set aside Ms Cathie’s protest to jurisdiction

The court was asked to consider the ambit of the dispute resolution clause. The relevant provisions were as follows:

“13.1.2 Every dispute or difference concerning the contract which is not precluded by the provisions of 12.4, 12.6 or 13.1 shall be dealt with under the following provisions of this Section.

For the purposes of Section 13, the words “dispute of difference” shall include every question which by these conditions is to be agreed between the Principal and the Contractor, and on which they have been unable to agree.”

13.2.1 Either party may, but with notice in writing, refer any dispute or difference to the expert.

The argument presented by Peryer was unusual in this way. It had previously argued that the dispute resolution clause did apply such that an expert should determine the dispute.

But on losing that argument on a summary judgment basis, it abandoned that claim and then sought to use the jurisdiction of the court only.

However, Associate Judge Johnston held that the dispute resolution mechanism was broad enough to govern the current dispute which arose directly from the contract.

The court also held that the dispute resolution mechanism was, in fact, mandatory.

The court held that, subject to the aforementioned difficulties, the court should not subvert the parties’ clear contractual commitments by assuming responsibility for the resolution of the current dispute.

The final point for the court to determine was whether Cathie had submitted to the jurisdiction of the court by filing a Notice of Opposition to the original summary judgment proceeding.

The court held that whilst it had jurisdiction by method of the original summary judgment application, still the parties had agreed to have the substantive dispute decided by the expert, and so Peryer’s substantive claim was stayed, pending an expert determining it.

### Result

The court set aside Cathie’s protest to jurisdiction; however, it stayed the plaintiff’s proceeding pending the parties’ effort to resolve the dispute via the dispute mechanism clause of the contract, giving the parties leave to come back to the court if necessary, for assistance with that dispute resolution method.

**Note:** This article is not intended to be legal advice (nor a substitute for legal advice). No responsibility or liability is accepted by Legal Vision or *Building Today* to anyone who relies on the information contained in this article.



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# Time to dissect! And analyse analyse analyse . . .

Terry Sage of Trades Coaching New Zealand says it's time to dissect what happened in your business last year. And to analyse over and over to find out how to improve on the good, the mediocre, and the bad bits.

Here we are again — the first mag of the new year. Or, the first one of the new decade if we want to be really dramatic about it.

And there are half a dozen ways I could start it off and sound very professional and almost business coachey-like!

You know, stuff like, "the new year is upon us, it is now time to open your mind and plan your future".

Or, "don't waste another day, it's your year to change" — all a bit hairy hippy and mind bending cult for me.

So let's get down to the nitty gritty shall we? Was last year a good one? Great, then do it all again.

Was last year a bad one? Great, then do something about it, right?

Was last year mediocre? Great, keep the good and change the bad.

And to think I get paid astronomical amounts of bucks to come up with wisdom like that.

Do you have any idea how long this stuff takes? Any at all? A few paragraphs and only one ad

break on the TV — cool eh?

My point is, don't over-think business. Don't over-think the good, the bad or the nearly.

The simpler you keep your business, your management, and even your life, the more time you will have in order to do it all better.

Now stop the bus, and get a wee reality check here — too simple and life sort of, stops. So keep it all in perspective here, okay?

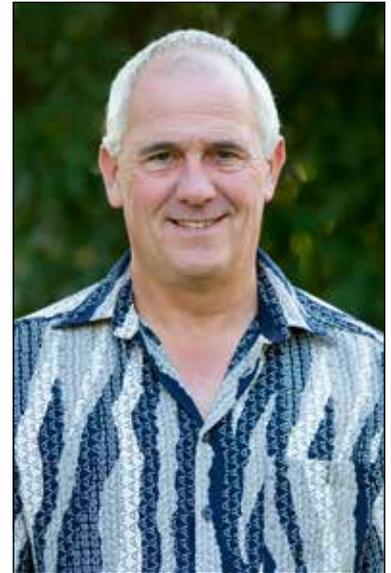
## Dissect it!

Let's take the scenario that last year was out of this world — first, congratulations. Step one is to understand what was so good and why.

Write it down and dissect it a bit. There will be bits that were outstanding, bits that were good and the odd bit that was okayish.

Turn the okay into good, the good into outstanding, and do the outstanding again.

Second scenario, the bad year — don't dwell on it, let it go. Understand what parts went wrong and write them down, because there will definitely be some good bits mixed in there.



Work on the goods bits to make them outstanding. The bad bits will more than likely have one or two reasons why they went wrong — and don't panic if that reason is you because you're easy to put right. I hope?

Third scenario, just mediocre. Guess what — write it down, and itemise the good, bad and the in the middle bits.

## Analyse analyse analyse

Figured out the pattern yet? Both parts? First, doesn't matter what type of year 2019 was, there is always room for change — from a little fine tuning to ditching completely whatever it is that's never going to work.

Second, analyse analyse analyse. It's the only way to recognise, understand, document and formulate changes.

I have said more than once — "write it down". I'm a list type of person so it works for me, but you would be better off using a method that works for you.

Just make sure you keep the analysis somewhere so you can refer back to it.

If there is a bottom line here, a reason for all the above or a moral to this story, it's simply that last year is history, the future is a mystery and today is reality.

So make the absolute most of it by having a plan based on known facts.

Here's a tip — don't be shy to ask for help because you're one and a half twelfths into the year already!

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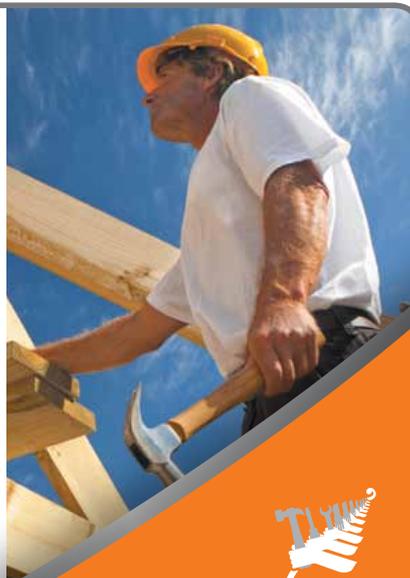
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THE BUSINESS SIDE OF CONSTRUCTION

# The Villa Savoye

The Villa Savoye near Paris was the culmination of the architect's implementation of the 'five points of New Architecture'. Architect Don Bunting explains.

The commune of Poissy, located 24 kilometres west of Paris, France, is known for hosting successively the Ford SAF, Simca, Chrysler and Talbot car factories.

It has a population of some 38,000, and now hosts one of France's largest Peugeot Citroen factories.

While car enthusiasts will make a bee-line for the impressive car museum, for architects the main attraction is located on the outskirts of the city centre — the Villa Savoye.

## The Villa Savoye

Historian Peter Blake described three leading architects as "The Master Builders" of the first half of the 20th Century because of their artistic approach to commissions, their masterly use of materials, and how strongly they influenced their contemporaries.

The three were American Frank Lloyd Wright, a master of timber and stone; German and adopted American citizen Mies van der Rohe, a master of steel and glass; and Swiss-Frenchman Le Corbusier (Charles Edouard Jeanneret), a master in the plastic design of concrete structures.

The Villa Savoye near Poissy is accepted as Le Corbusier's most recognisable and seminal work, although he was arguably better known as a town planner through his designs for the Unite de Habitation in Marseille, and the new capital of India's half of partitioned Punjab, Chandigarh.



The Villa Savoye shows how an architect can use a heavy material like concrete to appear as light as air. The three-level building floats in the landscape, lightly tethered to the ground by thin, round pilotis (columns).

## The client

Pierre Savoye made a substantial fortune offering insurance contracts to large industrial groups in the textile, mining and chemicals sector of northern France.

Resulting from his negative experiences in the First World War, he never owned property of any kind, convinced that a new, destructive war was inevitable.

Nevertheless, he finally gave in to wife Eugenie's wish for a weekend home on the outskirts of Paris.

In 1928 he retained fashionable architects Le Corbusier and his brother Pierre Jeanneret to design such a home on the seven hectares he purchased on the Chateau de Villiers in Poissy.

Except for financial matters, Pierre Savoye took little interest in the project, leaving all decisions to his wife.

Someone once said that everyone should have a building designed by Frank Lloyd Wright, but only once.

It's a truism that someone brave enough to take on a leading architect needs to have endless patience and an endless supply of funds. Both were needed.

## The brief

Eugenie's brief to her architects was quite specific — all modern conveniences including hot and cold water, electric light, power and central heating.

She wanted all main living areas — kitchen, dining, living — on the ground floor, plus a bedroom for their son and a guest room, two maids' rooms, accommodation for their concierge or gardener and a room for their chauffeur.

Also on the ground floor was to be a garage for three cars (her husband was always chauffeur driven), space for tools and trunks, and a wine cellar.

The first floor was to be reserved for a large bedroom, bathroom with toilet and a boudoir. The idea was that entertaining and guests should be confined to the ground floor, with the first floor reserved for their own private use.

Eugenie ended with a request for a descriptive, quantitative estimate and an agreement that all work more or less to be added or deducted from the fixed price.

Not surprisingly, the finished result was somewhat different. The architects' initial concept was to evoke the Athenian acropolis; as one does.

First estimates were twice the allocated budget, but five design approaches later the architects finally agreed with the client on a design and an acceptable budget.

The final layout was the complete reverse of the clients' wishes. The design was to be



A key feature of the design was the way the three levels — including the solarium at the very highest point — were linked by ramps.



*The Villa Savoye shows how an architect can use a heavy material like concrete to appear as light as air. The three-level building floats in the landscape, lightly tethered to the ground by thin, round pilotis (columns).*

characterised by automobiles gliding under thin pilotis to drop off guests at the entrance hall.

The garage would be integrated into the volume of the house, and all main living areas, including guest bedrooms, the main bedroom and boudoir, brought together upstairs.

The rectangular plan was set out on a 4.75 x 4.75 metre grid, with 440 square metres of habitable space and a total area of 875 square metres including the garage, roof garden, terrace and solarium.

On the ground floor were servants' quarters, entrance hall and the three-car garage. The concierge and gardener were in a separate house at the entrance to the property.

A key feature of the design was the way the three levels — including the solarium at the very highest point — were linked by ramps.

There was also a stunningly elegant spiral staircase for more direct access to the first floor living areas and access to the basement.

The design and construction process took its toll on the relationship between the architects and the Savoyes.

The villa ending up costing more than twice the agreed cost, and the economic crisis of 1929 weighed heavily on the business and prosperity of Pierre Savoye.

This, along with the architects operating at the limits of 1920s technology, is probably why the process was a rather painful experience for the couple.

### **The significance of the Villa Savoye**

The house suffered during the Second World War and, later, due to potential expansion plans by the adjoining automobile complex and plans for a school.

It took the intervention of Le Corbusier and local architectural groups, including renowned architectural historian Siegfried Giedeon, to save the building from demolition. Even then it took significant fund raising efforts to pay for repairs to the building's fabric.

Le Corbusier died in 1965 before repairs were completed. The villa was listed seven months later and finally opened to the public in 1987.

Architectural writer Dominique Amouroux described the villa as maintaining intact its power to delight and charm all those who visit, whatever their culture or country of origin.

"The box in the air" was the culmination of the architect's implementation



*There is a stunningly elegant spiral staircase for more direct access to the first floor living areas and access to the basement.*

of the "five points of New Architecture":

- Stilts to create the "box in the air" with a recessed base disappearing into the surrounding grass.
- Roof gardens and horizontal lines, making the building stand out against the sky.
- An open plan, freeing the interior of load-bearing walls and columns.
- A free-floating facade with the structure set in behind.
- Horizontal windows and openings creating light and airy interiors.

The Villa Savoye achieves these aims in spades.

# Temporary work visas — important changes for workers and employers

Guest columnist and Licensed Immigration Adviser Andrew Kerr, in association with Kevin Everett of Building Recruitment, examines recent changes impacting Kiwi employers and migrant workers in the construction industry.

## Accredited employer — new remuneration threshold:

As of October 7, 2019, accredited employers who wish to hire overseas applicants under the Talent (Accredited Employer) work visa must be willing to offer a remuneration package of at least \$38.25 per hour (\$79,560 per annum) for a 40-hour work week.

This figure is set to increase each year in line with the annual rise in median income.

These employees will be eligible to apply for residence under the Residence from Work category after two years of maintaining the conditions of the visa.

Anyone who does not earn the \$79,560 and is still hired by an accredited employer will need to apply for an Essential Skills work visa and apply for residence based on the Skilled Migrant Category (SMC).

## Residence v Permanent Residence:

After applying for the Expression of Interest (EOI) and submitting the ITA under the SMC (Invitation to apply) and the application being approved, you then receive residence in New Zealand.

To obtain Permanent Residence (PR) you need to prove that you have been a resident in New Zealand (resided in) and shown a commitment to New Zealand for more than six months in each of the two-year periods.

There is a travel condition on the residence visa which means you can travel in and out of New Zealand multiple times for up to two years, but then you need to be sure that you are in New Zealand at the two-year mark, and

have applied for and hold the correct visa for further travel beyond this date.

## New rules being implemented by 2021 — Accreditation/approved employer:

By 2021 there will be only one temporary work visa type. All other visa types such as talent visas will be removed.

There will also not be any ANZSCO codes which determine the skill level for a work visa.

The main determining factor for skill level and, consequently, visa length, will be the rate of pay.

- Below \$25.50 per hour — 1 year work visa
- Above \$25.50 per hour — 3 year work visa
- Above \$38.50 per hour — 5 year work visa

## Employer registration with Immigration NZ (INZ) by 2021 for companies hiring migrants:

From 2021, any employer who wishes to employ an immigrant will need to obtain “accreditation” or, simply stated, become an “approved employer” by INZ before hiring a migrant or renewing a current work visa.

Based on the information currently available, there will be three types of employer “accreditation/approval”, depending on how many migrants an employer wishes to employ in a 12-month period.

If you employ:

- between one and five migrants in 12 months — Standard Accreditation.
- more than five in 12 months — High-volume Accreditation.
- Labour hire employer accreditation is the third option.

There is a 3-stage approach to approval:

- 1** The employer check will likely include an assessment of the items currently taken into consideration for an accreditation application, i.e. employer finances, training of New Zealanders, recruitment practices, human resource policies.
- 2** The job check will include ensuring that the job is paid in line with the New Zealand market rate and, in some cases, will include a labour market test to ensure New Zealand workers are not available.
- 3** The worker check will ensure the applicant meets the standard character, identity and health requirements, as well as showing they have the skills and/or qualifications to perform the job that they have been offered, with a focus on remuneration in determining an occupational skill level rather than the traditional occupational classification, ensuring that migrant workers are only recruited for genuine labour shortages (ANZSCO).

It has been indicated that, over the next 18 or so months, INZ will be implementing these changes in a staged roll-out, facilitating much-needed change to address the needs of regional skills shortages, but also ensuring that New Zealanders are considered first and that migrant workers are protected.

## Appendix 7 — Certain Skill Level 4 positions have been converted to higher skill levels:

INZ has also compiled a list of lower-skilled occupations, now known as Appendix 7, which can now be classified as Skill Level 3 occupations.

These occupations may be deemed as skilled employment, and eligible for points under the Skilled Migrant Category provided the applicant earns at least the New Zealand median income of \$25 to \$50 or above per hour.

To find out more information regarding these INZ changes or for assistance with accreditation questions, email [andrew@networkmigration.com](mailto:andrew@networkmigration.com), or call Peter in the New Zealand office on 022 396 5700.

• Andrew Kerr is a Licenced Immigration Adviser — IAA Reg. No: 200903080

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# Building Consents Information

For All Authorisations, December 2019

Dwellings	\$1,153,553,000
Domestic Outbuildings	\$11,992,000
<b>Total Residential</b>	<b>\$1,165,545,000</b>
Non-residential	\$587,076,000
<b>Total All Buildings</b>	<b>\$1,752,621,000</b>
Non-building Construction	\$58,055,000
<b>Total Authorisations</b>	<b>\$1,810,676,000</b>

## Number of new dwellings consented

	Dec 2019	Nov 2019	Dec 2018		Dec 2019	Nov 2019	Dec 2018
Far North District	22	31	17	Horowhenua District	14	31	22
Whangarei District	25	49	44	Kapiti Coast District	17	15	17
Kaipara District	5	16	20	Porirua City	3	16	15
Rodney District	45	68	59	Upper Hutt City	19	25	21
North Shore/Albany Wards	223	151	179	Lower Hutt City	36	52	25
Waitakere Ward	155	157	55	Wellington City	199	196	47
Auckland Wards	428	245	390	Masterton District	14	14	11
Manukau/Howick Wards	209	265	114	Carterton District	5	8	7
Manurewa-Papakura Ward	104	176	83	South Wairarapa District	2	11	14
Franklin Ward	62	58	58	Tasman District	39	42	40
Thames-Coromandel District	19	29	15	Nelson City	17	9	5
Hauraki District	8	9	8	Marlborough District	32	32	18
Waikato District	77	80	52	Kaikoura District	3	5	5
Matamata-Piako District	34	28	11	Buller District	8	6	5
Hamilton City	123	149	101	Grey District	4	5	3
Waipa District	43	53	42	Westland District	1	4	4
Otorohanga District	0	2	3	Hurunui District	8	6	16
South Waikato District	3	0	3	Waimakariri District	41	52	55
Waitomo District	1	3	2	Christchurch City	214	294	212
Taupo District	21	37	18	Selwyn District	90	121	92
Western Bay of Plenty District	30	37	20	Ashburton District	6	17	5
Tauranga City	93	82	81	Timaru District	14	9	6
Rotorua District	9	15	21	Mackenzie District	16	17	7
Whakatane District	7	14	4	Waimate District	4	3	0
Kawerau District	0	0	1	Chatham Islands Territory	0	0	0
Opotiki District	4	0	3	Waitaki District	5	9	6
Gisborne District	10	3	6	Central Otago District	19	21	23
Wairoa District	1	1	0	Queenstown-Lakes District	119	94	73
Hastings District	33	24	19	Dunedin City	34	53	32
Napier City	15	60	5	Clutha District	2	1	5
Central Hawke's Bay District	3	6	3	Southland District	2	7	5
New Plymouth District	47	37	40	Gore District	2	2	4
Stratford District	5	3	2	Invercargill City	8	22	7
South Taranaki District	4	7	3	Area Outside TA	0	0	0
Ruapehu District	1	6	7				
Whanganui District	9	7	5	<b>Total</b>	<b>2910</b>	<b>3204</b>	<b>2382</b>
Rangitikei District	7	6	1				
Manawatu District	7	14	46				
Palmerston North City	16	71	32				
Taranaki District	5	6	2				

• 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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