

# STRAIGHT UP

BUILDING OFFICIALS INSTITUTE OF NEW ZEALAND

## **NZ Steel**

New Zealand Steel partners with Government in \$300M co-investment to shrink carbon footprint of Glenbrook steel mill

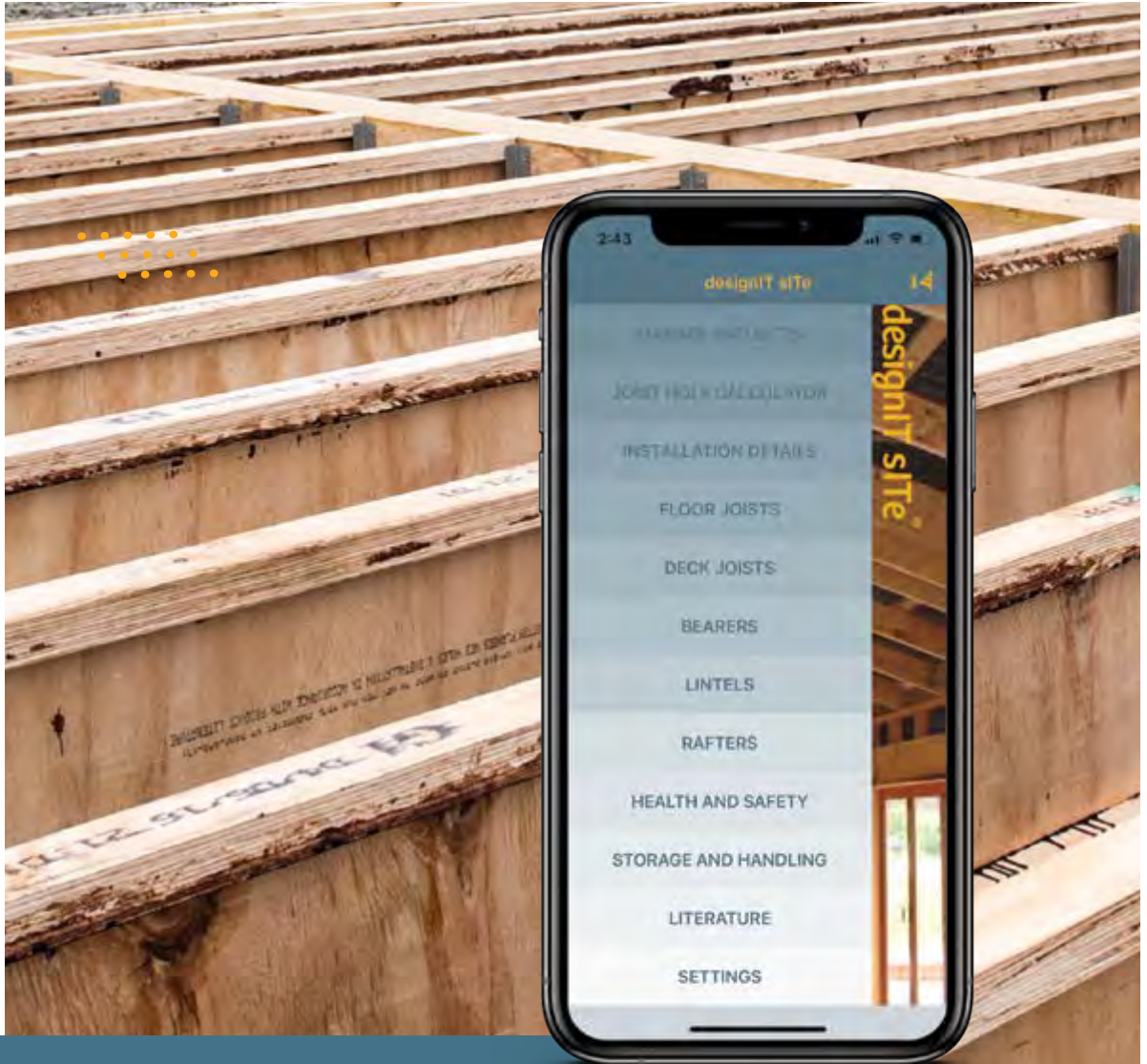
## **QOROX**

First fully 3D printed home completed in Paremoremo

## **Tauranga City Council**

Pioneering Sustainability in the Future Headquarters of Tauranga City Council





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## Design & Print

[no9.co.nz](http://no9.co.nz)

ISSN 1175-9739 (print)

ISSN 2230-2654 (online)



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# How Well Do Councils Handle Recessionary Conditions?

I regularly praise the resilience of both BOINZ and its members. And it is fitting the theme for our Conference 2024 in Wellington is “Building Resilience”. We have fought hard to achieve professional competency through our qualifications and ongoing professional development. Member and non-member skills and knowledge have been lifted, and Councils through their BCO and BCA’s relationships with BOINZ have benefited from our advocacy.

It was BOINZ who raised the initiative with the Minister to reduce the burden of annual BCO competency assessments, and we successfully got it moved out to 2-years to 2-year requirements. This was a significant financial benefit to BCAs in competency assessment direct costs and staff times to be assessed. The amount saved per individual technical staff member would have paid for approximately 4-6 times the annual BOINZ membership fee.

It is BOINZ who provides substantial direct feedback to central government in consultations and submissions for the benefit of our members and to protect the quality outputs for the built environment. We also provide valuable input to the Standards development process.

It is BOINZ who has led and supported the development of both iterations of the Building Surveying qualifications. It was BOINZ who invested in the development of course materials to ensure councils could get their

staff through the APL process for Regulation 18 requirements.

It was BOINZ who opened discussions with our international colleagues to pathway Building Surveyors from other countries to NZ to offset capacity shortages. It was BOINZ who developed promotional material to entice people to become Building Surveyors.

It was BOINZ who has supported many councils in disaster relief coordination such as Operation Suburb into the building evaluation after the Canterbury earthquake and again provided support following the Kaikoura earthquakes. And the list goes on and will continue.

So, I must ask myself why, in this period of financial austerity, have many Councils made the sharp choice to withdraw their support from the organisation that has supported them over many years. This can only serve to undermine our organisation’s ability to continue to deliver them and our members the best level of support and risk avoidance.

We are of course, as always, asking ourselves what more should we be doing. However, I do believe that we as an organisation are being challenged beyond what is due. Yes, there are some externalities that need to be taken into account. Elected officials have not performed well across local government for quite some time, and failings over time have come home to roost, the casualties being core

activities, not the least BCA’s who have regularly been targeted as a cash cow to cross subsidise other operations.

Additionally, efforts to curb inflationary pressures have challenged the New Zealand economy over the last 18 months. The last 12 months have seen the economy cool at a fierce rate, with clear evidence in the drop of residential dwelling consents.

The new national coalition government has introduced a clear response in its effort to address the country’s economic state. For those in business, I imagine many welcome the major changes and raft of initiatives in the government’s 100-day plan which underscores the need and importance of this country’s ability to adapt and remove what this government identifies as unwarranted excesses.

One of the casualties in the Construction sector was the Construction Sector Accord, a joint government/industry initiative to address long standing issues holding the sector back. BOINZ supported this initiative, but over time, I became disenchanted with the lack of focus on real issues, vital to the sector - those big-ticket items that drive sustained productivity and employment retention rather than driving the boom/bust cycle.

BOINZ has led by example in the quest for a long-term vision putting in place qualifications for building surveying, the accreditation of prepurchase property inspection and in more

## OUR BOARD



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recent times, the support of a degree in Building Surveying and Control. We read the 'tea leaves' over a decade ago and our members and employers are reaping the benefits of a more robust and highly skilled building surveying sector. The benefits flow through in reduced risks, better build outcomes and confidence in the consent and inspection progress generally.

However, getting building surveying to this stage of professionalism, meant we had to overcome detractors, particularly in local government, many of whom didn't see value in supporting the education of their building control staff. Now, five to ten years on, very few of us would argue against the investment.

It appears though that a significant number of elected local government officials or senior council management would ignore these benefits of long-term investment in education and are pulling back their support of BCA staff professional development and membership of BOINZ.

Throughout my time at BOINZ, I have been baffled by this cycle of BCA cost cutting in an area of significant council risk – staff knowledge and skills. I know it also frustrates our members. We hugely appreciate the strong and continuing support of those of

you working hard to find funding to support staff through BOINZ. But, do planners, engineers, and architects within a BCA have to battle so hard to maintain and grow in their profession? I don't believe they do.

In an environment where councils have a virtual monopoly, surely there is a responsibility to deliver on capacity and capability within BCAs. The council system needs better stewardship of its BCA resource, or it will slowly flounder and be a source of increasing risk.

The recent review of the Building Consent System covered many areas, but totally overlooked the risks involved with unfettered interference in the BCA system by council administration. Funding shouldn't be a problem. Most councils operate a user pays consent environment, but year on year, funds generated by BCAs are diverted. In turn, the ability to adequately resource one of the most critical groups in New Zealand's workforce is compromised, and along with it our built environment.

So, if I was to give councils a report card on how well they support their BCAs and BCA staff, especially in this tougher financial environment, I would have to say they would generally get a 5 out of 10. There are of course



**Nick Hill** - Chief Executive

those above the line and those below – but the awareness of the role, the unique or monopolistic environment, and responsibility to the public and ratepayer deserves better. So do their staff. Not a pretty picture – but it needs articulating for the sake of a solid discussion and better outcome.

**Nick Hill**  
Chief Executive

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QOROX

# First Fully 3D Printed Home Completed in Paremoremo

**QOROX's 3D printed concrete technology has achieved yet another first for New Zealand – the completion of the first fully 3D-printed residential home in the Auckland suburb of Paremoremo.**

This also becomes the largest fully 3D printed building in the Southern Hemisphere another groundbreaking achievement for Waikato-based QOROX.

The 252m<sup>2</sup> family home was designed for a family of four to complement the site's natural contours and peaceful setting, and features 3D-printed concrete wall panels which provide the perfect backdrop for modern living.

The mastermind behind the home's unique design features was multi-award-winning architectural firm, Dorrington Atcheson Architects,

who said the use of 3D printed technology provided more flexibility than traditional concrete builds.

"It's pretty cost effective, and you can get the geometric proportions and shapes that you would have to spend a lot of money to get if you did it in traditional concrete construction," said Tim, director of DAA.





Qorox managing director Wafaey Swelim, said the design provided by DAA allowed them to fully utilise the design capabilities of their 3D printer.

“DAA provided an amazing design which enabled us to fully utilise the design capabilities of our 3D concrete printer and produce a strong, secure and warm home for the owners to enjoy for many generations to come. People who visit the home are so impressed by its calmness and warmth.”

To create the ‘printing ink’ for the home, QOROX utilises its own mortar recipe that is 80% locally sourced. The final product was rendered internally and externally, using full Resene Construction Systems hand applied ROCKCOTE exterior and interior plaster and finishing coats, providing a ‘natural look’ to the wall panels and providing the clients with their desired finish.

Swelim said the flexibility of 3D printed concrete allowed homeowners to add their own personal flair to their homes, without an additional price-tag.

Paremoremo house’s 63 panels, with a total area of 360m<sup>2</sup>, were prefabricated in Hamilton and transported to site for installation by Qorox’s experienced team, with Senior Construction undertaking the rest of the build.



With 30% less emissions than traditional concrete builds, Swelim said achieving the fully 3D-printed home was another tick in the box for the next evolution in building.

“3D printed concrete is the next evolution in building, and it’s happening right now, right here in New Zealand.

“There are so many advantages to 3D printed technology. Our system allows the formation of wall cavities for insulation, plumbing and electrical wiring, and apply patterns and design elements directly, without the need for additional work.”

The QOROX 3D printed wall solution provides excellent thermal mass qualities helping to create more

climate resilient homes that are warmer during the winter months, delivering more comfortable living environments.

“The best part is all of these elements this can be completed without compromising the R-Value (thermal rating) or the overall strength of the build.”

Swelim encouraged architects and homeowners interested in 3D printed concrete to head to [www.qorox.co.nz](http://www.qorox.co.nz) to learn more.

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**By QOROX**



## TAURANGA CITY COUNCIL

# Pioneering Sustainability in the Future Headquarters of Tauranga City Council

The upcoming leased headquarters for Tauranga City Council's administrative staff, located at 90 Devonport Road, is being constructed through a collaboration between property development and investment company Willis Bond, construction partner LT McGuinness, architects Warren and Mahoney, the Council, and mana whenua.

Boasting a size of over 10,000 square metres, it will stand as the largest modern mass timber office building ever erected in New Zealand, setting a pioneering standard for environmentally sustainable projects on such a scale.

This building is at the forefront of environmentally sustainable design. In addition to utilising mass timber, it will incorporate features such as rainwater harvesting, electric vehicle charging stations, and amenities promoting active transport options. By opting for engineered timber over conventional concrete and steel elements, the project aims to minimise embodied carbon - the carbon emitted during the manufacturing, transportation,

and installation of building materials and components - to its lowest achievable level.

The light carbon footprint target provides a commitment to achieving an all-of-life carbon reduction of greater than 60%, as well as aiming for high environmental performance ratings such as a 6 Green Star and 5 Star NABERS. The overall goal is to demonstrate world leadership in sustainability, with a focus on minimising environmental impact and promoting eco-friendly practices.

The sustainable building is set to become the new home for all council administration staff, bringing everyone together under one roof for closer collaboration in a future-focused workplace.

City Development and Partnerships General Manager Gareth Wallis credits the collective efforts of everyone involved in reaching this exciting milestone.

"We've teamed up with some of the best in the business to lead the way in the sustainable and innovative

design of this building and are enjoying watching it coming to fruition so smoothly."

"This development involves a phased consenting process, which is usual for a building of this size and scale," Wallis said.

"Staging consents allow work on-site to begin on the initial stages, while further design and consenting is being completed in later stages."

The total value of the building consents issued to date for the building is about \$45.5m.

Creating a welcoming and people-friendly atmosphere, collaboration with mana whenua was undertaken to integrate principles of mātauranga Māori (Māori knowledge systems). This not only contributes to the building's Tauranga Moana origins but also enhances its overall aesthetic and ambiance.

*By Tauranga City Council*





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# The Importance of Digital Traceability in Assuring Compliant Steel

**The assurance of steel quality in New Zealand, building projects is not just a matter of regulatory compliance but a cornerstone of construction safety and sustainability.**

Building officials play a pivotal role in this context, with the responsibility of verifying that all steel materials used meet the stringent standards required by the industry. This verification process is essential in preventing the use of substandard or fraudulent steel, which can have dire consequences for the structural integrity of buildings and, ultimately, public safety.

The advent of digital traceability represents a significant advancement in the battle against the use of uncertified, unspecified or even fraudulent steel in the construction industry. Digital systems, such as the one developed by ACRS - the ACRS Cloud - offers a robust solution to ensure the integrity of steel throughout the supply chain. ACRS Cloud is designed to track the journey of steel products from the manufacturer to the construction site, providing a transparent and verifiable record of their compliance with the required standards.

This digital traceability is crucial for several reasons. First, it allows building officials to easily verify the quality and origin of steel products, ensuring they meet New Zealand's rigorous standards. By accessing digital records, officials can quickly identify the manufacturer, the batch, and the specific tests each product has undergone, significantly reducing the risk of substandard materials being used in construction projects.

Second, the system acts as a deterrent against the introduction of fraudulent steel into the supply chain. Knowing that every piece of steel can be traced back to its source puts pressure on suppliers and manufacturers to maintain high standards of quality and compliance. It also makes it more difficult for unscrupulous actors to introduce

counterfeit materials into the market, as each product's history is recorded and can be audited at any point.

Finally, digital traceability enhances the efficiency of the building certification process. Building officials can access real-time data on steel products, streamlining the approval process and ensuring that construction projects can proceed without unnecessary delays due to compliance concerns.



The role of building officials in verifying the quality of steel used in New Zealand's construction projects is of paramount importance. The introduction of digital traceability systems like the ACRS Cloud represents a significant step forward in ensuring the integrity of steel in the construction industry. By leveraging these technologies, New Zealand can continue to uphold the highest standards of safety and quality in its built environment, protecting its infrastructure and its users.

Find out more about ACRS Schemes at [steelcertification.com](http://steelcertification.com).

*By Dr. Andrew Wheeler, Executive Director, ACRS*

# Coalition's Plan to Cut Building Costs

**Building and Construction Minister Chris Penk is promising to cut building costs as the latest figures show the cost of building a house has increased 41% since 2019.**

Minister Penk said further analysis showed building costs here were consistently higher than in other countries. It was about 50% more expensive to build a stand-alone house in New Zealand than it was in Australia, with the Ministry of Business, Innovation and Employment calculating the per square metre cost of a home at \$2,591 in New Zealand compared with \$1,742 across the Tasman.

"Tackling out-of-control construction prices is one of the keys to reducing the cost of living and providing Kiwis with the high-quality, affordable housing they deserve," he said.

Penk said people paid too much for building materials and the Government

would ensure more high-quality building products were approved to increase competition, lower costs and support the country's resilience in the face of supply chain disruptions.

"This Government will reform the building consent system by streamlining the consent process, making product substitutions easier, and clarifying roles and responsibilities within the system. Removing unnecessary barriers and giving greater certainty to businesses means better productivity and less delays when building a home."

Penk told *NBR* all those changes could help bring costs down.

He said when it came to getting cheaper building products into the country it was often too difficult because there were 67 local authorities with 67 different interpretations of the standard.



Building and Construction Minister Chris Penk

To read the rest of the article please click here.

<https://www.nbr.co.nz/politics/coalitions-plan-to-cut-building-costs/>

By Brent Edwards, *NBR*



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## NEW ZEALAND STEEL

# New Zealand Steel Partners with Government in \$300M Co-investment to Shrink Carbon Footprint of Glenbrook Steel Mill

**New Zealand Steel has been busy over the last 12 months, helping to secure a more sustainable future of steel making in New Zealand with an Electric Arc Furnace through a co-funded deal with the NZ Government.**

New Zealand Steel will build a new \$300M Electric Arc Furnace at its steelworks at Glenbrook within the next three years as part of the move to lower carbon production.

Chief Executive Robin Davies says the significant investment will reduce Glenbrook's carbon footprint by 800,000 tonnes from day one – the same as taking approximately 300,000 cars off the road permanently.

"That's a reduction of over 45% in New Zealand Steel's emissions – or a total of 1% of New Zealand's total annual emissions. It also sets the platform for further carbon reductions and is a significant step towards our goal of net zero by 2050.

"These reductions will come from replacing Glenbrook's existing oxygen steelmaking furnace and two of the four coal fuelled kilns.

"An electric arc furnace makes sense when there's enough affordable renewable energy and scrap steel available, a way to get that scrap steel to site, and the right policy settings. We'll firm up the details of the different aspects of the project over the coming months but crucially, New Zealand has all these essential enablers in place.

"A reliable supply of firmed renewable energy is critical to this initiative and we're delighted by the pioneering and creative partnership with Contact Energy to provide a competitive and innovative supply agreement. The electric arc furnace provides New Zealand Steel with significantly more production flexibility which means we can scale down production at times of peak demand or supply shortages.

Mr Davies says New Zealand Steel and the Government will jointly invest total capital and transition costs of around \$300M in this landmark partnership to shrink Glenbrook's carbon footprint.

"The Government will contribute up to \$140M through the Government Investment in Decarbonising Industry, or GIDI fund, administered by EECA, as a co-investment. This project would not happen otherwise. This is a bold breakthrough initiative by the Government – but it's the right one, especially when you see the carbon reduction dividend that helps the country meet its global decarbonisation targets under the Paris Agreement.

New Zealand Steel will commit the additional \$160M, which includes the planned investment at Glenbrook to underpin the future of steelmaking in New Zealand. The immediate focus is to move at pace over coming months to confirm the remaining



critical aspects of the new operation, including the relevant regulatory approvals.

"From our perspective, this is a necessary step to secure steelmaking in New Zealand for many years to come. I'm delighted to say this is a great example of business and Government working together to meet the country's goal of net-zero emissions by 2050.

The Managing Director and CEO of New Zealand Steel's parent company, BlueScope, Mr Mark Vassella attended the announcement with the Prime Minister and says the co-investment is a landmark deal that showed the power of well-constructed public/private partnerships or investments.

"New Zealand Steel and the Government should be very proud of their initiative and the hard work that has led to today's announcement," Mr Vassella says.

Mr Davies says: "Steel is infinitely recyclable and this model will make New Zealand as close to self-sufficient as possible using renewable energy to recycle domestic scrap steel, rather than shipping it offshore.

"This project is a partnership that would never have happened without the support of the Government and the other key contributor Contact Energy who recognised the potential and had the commitment to help make it happen.

"This is a pragmatic response that not only sustains our critical domestic steel supply, but also provides a collaborative approach with government and industry to be world leaders in lower emissions steel."

New Zealand Steel, our country's sole producer of flat rolled steel products, manufactures and markets a range of products for the roofing sector. Their COLORSTEEL® brand is one many of you will be familiar with, along with ZINCALUME®. Their steel is also used across the country for steel framing (AXXIS®), structural beams, custom welded beams & columns at Steltech and reinforcing steel & wire at Pacific Steel.

Specifically, for our industry, the importance of a domestic supply is vital. This investment is key to ensuring key products continue to be produced locally, and the EAF will mean that the steel itself will out



perform the world average in terms of embodied carbon, enabling New Zealand Steel to produce raw steel with an average embodied carbon per tonne of 1.6 tonnes CO2/tonne steel (the world average is 1.9 tonnes CO2/tonne steel). The New Zealand Steel published Environmental Product Declarations (EPDs) for steel products will be updated in the future to reflect this dramatic shift in production method.

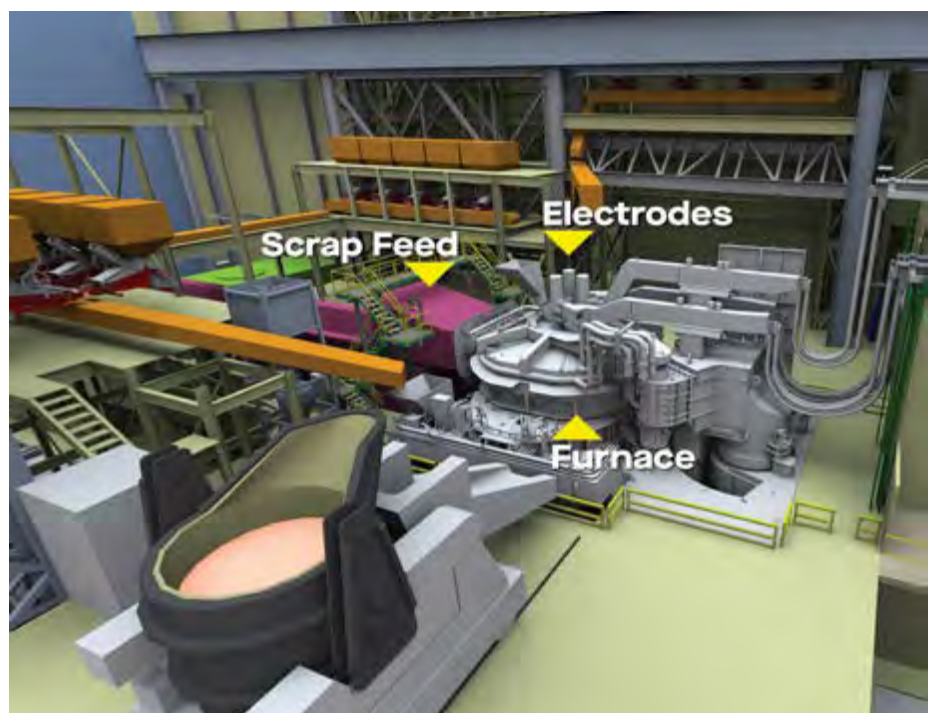
Another benefit of the EAF, is the establishment of a significant

domestic scrap steel recycling loop, avoiding the cost and carbon miles of exporting about half of NZ's scrap steel – about 300,000 tonnes a year.

It's great to know that in the future, the steel you recycle on site, will then make it back to the mill and see life again as a brand-new steel product somewhere else across the country.

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*By New Zealand Steel*



# Honouring BOINZ Members with 20 Years of Tenure

In 2023, Carter Holt Harvey, our esteemed Gold Premier Partner, embraced the Institute's vision to honour members with a substantial tenure at BOINZ, specifically those with 20 years of continuous membership or more.

The initiative aims to not only make members aware that their loyalty is recognised by the Institute but also to provide them with a token of appreciation that they can proudly showcase within their professional circles. As a membership organisation, it reflects positively on the Institute when we commemorate such significant milestones, especially when our partners recognise the value in acknowledging these distinctions.

During the financial year 2023, we celebrated 64 members who marked 20 or more years of unwavering membership with BOINZ. At the Conference in Auckland, we were honoured to have ten members in attendance, and an additional

three joined us at the SBCO Forum in Blenheim. We eagerly anticipate reconnecting with the remaining members at the upcoming branch meetings. You can see the distinguished Gold Honors list below.

You might find the names of these individuals familiar, having crossed paths with them, collaborated on projects, shared moments at Branch meetings, or engaged in conversations during conferences. When you next have the opportunity, take a moment to explore why the Institute has chosen to acknowledge and celebrate these distinguished Champions of BOINZ.

BOINZ and its sponsor Carter Holt Harvey who partner with the Institute in its Gold loyalty programme, wish to congratulate all members of BOINZ, especially those on the Gold Honours list, for the work they have undertaken and contributed to Improving the Quality and Performance of the Built Environment.



BOINZ Vice President Karel Boakes presented Gold awards to Bryan Jacobsen (left) and Graham Wait (right), both of whom have been members of BOINZ for 27 years. The awards were presented at the Central Branch meeting in Palmerston North in March.

By BOINZ

NAME	YEARS	NAME	YEARS	NAME	YEARS	NAME	YEARS
Ray Smith	57	Rose McLaughlan	35	Kelvin Goode	24	William Tyrie	21
Stephen Harding	54	Taylor Wong	35	Paul Vernon	23	Roy A Faris	21
Singh Kamboj	53	John Hodgson	34	Bill Ellis	23	Bevan A Hussey	21
Ewan Higham	52	Graeme Duncan	33	Bob De Leur	23	Bob Magnusson	21
John Apeldoorn	51	Steve Higgins	32	Colin Clench	23	Lindsay R Smith	21
Maurice Hinton	49	Ian Godfrey	31	Richard Knudsen	23	Jack Lyons	21
Phil Saunders	46	Bevan Smith	31	Ted Jones	22	Alan Richardson	21
Brian Bayne	44	Ray McGregor	30	Stephen Alexander	22	John Salenius	21
Morrie Blumenthal	43	Kerry Walsh	30	Jason Wang	22	Jeffrey Farrell	21
Richard Toner	42	Chris Henry	29	Gary Higham	22	William Leslie	21
Leo O'Loughlin	40	Brent Goldschmidt	28	Paul Barnett	21	Karl Steer	21
Geoff Plimmer	38	Grant Brown	27	Christopher Scott	21	Lee Bithray	21
Craig Ralston	38	Graham Wait	27	Ali Dahroug	21	Jeffrey Fahrensohn	21
Allen Vickress	38	Bryan Jacobsen	27	Wayne Roden	21	Christopher Randell	21
Scott MacBeth	37	Neil McLeod	27	John Barclay	21	Robert Tierney	21
Mark Fursdon	36	Paul Jones	24	B.W Mould	21	Stephen Walders	21

# Collaboration and Clarity with NZS 3910 Underpinning Construction Contracts

Our building, construction, engineering and infrastructure industries rely on NZS 3910 Conditions of contract for building and civil engineering construction to ensure that contracts are suited to New Zealand's industrial and legislative scene. A 2023 revision brings good practice up to date.

The building and construction industry is worth \$18 billion to New Zealand's economy, equating to a third of New Zealand's workforce and constituting 12% of all businesses. So, contracts that underpin this massive volume of work, and set clear understanding for deliverables and responsibilities, need to be comprehensive but at the same time easy to understand.

With origins stretching back nearly 60 years, the 2023 revision of NZS 3910 is the first substantial revision in a decade, jointly commissioned by the Construction Sector Accord (through Ministry of Business, Innovation and Employment Hīkina Whakatutuki) and the New Zealand Infrastructure Commission, Te Waihanga. David Wilkie was Chair of the development committee and brings substantial experience as a Director of TSA Management. Having worked on major New Zealand construction projects over 3 decades, including SkyCity New Zealand International Convention Centre (NZICC), the Auckland Metropolitan Rail Network improvements, the Auckland City Hospital, and Auckland War Memorial Museum, he understands the complexities of construction contracts. David talks us through what people can expect in this revision.

'NZS 3910 is very well used and accounts for nearly 80% of construction contracts written in New Zealand. It's designed to be suitable for "most contracts, most of the time". While it's generally well understood by the sector, over



the last ten years the contracting environment has changed. This has led to a large number of special conditions being introduced, which often has resulted in an imbalance in risk allocation. Industry representatives told us that there were so many amendments and variations that a wholesale review and update was warranted.

'The committee were given good direction over what the industry was concerned about and have addressed those and more! There are 23 people on the committee, ranging from contractors to designers, principals, private and central and local government professionals. Our approach reflected the diversity of our skills and experience.

'The outcome also integrates feedback from the 2,274 public consultation comments. Many comments were several hundred words in length, and we identified a series of common threads. This was

a massive task for the committee and highlights the level of interest in this standard.'

## What's new in this revision?

'People will be keen to know what's new, and be asking "how will this help me?" Firstly, the new standard remains familiar in content and structure. Of note is the:

- introduction of an order of precedence in the Contract Agreement;
- introduction of a Target Cost Contract Price, and provisions for the Contract Price to have various components including Lump Sum, Cost Reimbursable, Measure and Value, and Target Price.
- inclusion of a new clause dedicated to the Protection of the Environment.
- addition of clear contract administration processes



throughout, including new content on reviewing instructions and decisions.

- elimination of the Engineer to the Contract and its dual role, replacing it with two distinct new roles. This significant change ensures clarity on the purpose of each role, emphasising when specific activities demand fairness and impartiality.
- transition to fault-based indemnity and the introduction of a Limitation on Liability.
- introduction of the Final Account and Interim Final Account processes.
- inclusion of important prompts to clearly identify Contractor's Design Obligations.

'The industry wanted more collaboration, and we've woven

principles and requirements throughout the document. While we could not cater for every request, NZS 3910 is fair.'

### Built on collaboration

'The committee have given their time and experience generously (largely pro-bono) and the new standard is an exemplar of industry collaboration. Differences of opinion were sensitively and sensibly discussed, and the committee's flexible approach resulted in no stalemates and unanimous endorsement. It has truly been a team effort, and I want to thank the committee and public for contributing their knowledge and expertise so generously.

'NZS 3910:2023 gives a clearer overview of key clauses, retains valuable examples and flow charts, and eliminates any confusing or

redundant content. The language is straightforward, consistent, and gender neutral, and legislative references remain timeless.

'I'm proud of the work done we have done and feel we've landed on a very good standard that reflects modern industry practice and provides clear risk allocation.

'No matter the size of your construction project, I strongly encourage you to immediately adopt and use the industry-agreed best practice contract NZS 3910:2023.'

NZS 3910 Conditions of contract for building and civil engineering construction is available via [standards.govt.nz/shop/nzs-39102023](https://standards.govt.nz/shop/nzs-39102023)

*By Nick Cottrell/Standards New Zealand*

**DIGITAL TRACEABILITY**  
*putting assurance of steel compliance in your hands*

# Stay steel safe with ACRS CLOUD APP

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**INSTANT VERIFICATION**  
*of conformance to AS/NZ standards*

- ✓ product validity & provenance
- ✓ bar & tag markings
- ✓ supports sustainable steel use



## THE BUILDING AGENCY

# Owens Corning Asphalt Shingles

Owens Corning Asphalt Shingles have been imported and installed on roofs across New Zealand since 1994. At the time Asphalt Shingles were seen as a premium roofing material and used almost exclusively on high-value home. Now they are used across the housing sectors in a much wider style of housing.

Owens Corning Asphalt Roofing Shingles are glass-fibre reinforced surfaced with a ceramic coated mineral chip to provide protection from UV rays.

Owens Corning Shingles previously had a CodeMark under the CertiMark organisation. We have been working with Bureau Veritas to issue a new CodeMark. This has now been completed with the new CodeMark going live on the MBIE website on the 22nd of December.

**The following Components of the Owens Corning System were considered in achieving the CodeMark:**

- Oakridge Pro 30
- Oakridge Pro 30 Super
- Duration Premium
- Titanium UDL30
- Rhinorooft UD20
- Sureguard peel and stick
- Thermakraft 213

When considering the use of Owens Corning the CodeMark its important to consider (from the CodeMark):

1. Scope - Owens Corning Asphalt Roofing Shingles are certified for use for buildings: a. within the scope of Acceptable Solution E2/AS1 Paragraph 1.1, with regard to floor plan area and building height;

b. constructed with timber roof framing and plywood/sarking complying with the NZBC, c. where the roof pitch is 9.5° or greater up to 60° and d. located in NZS 3604:2011 Wind Zones up to and including Very High, (or Extra High for Duration Premium shingles).

2. Owens Corning Asphalt Roofing Shingles shall be: a. installed in accordance with the OWENS CORNING Laminate Shingles Installation Manual Oakridge Pro 30, Oakridge Pro 30 Super & Duration Premium [v3], November 2021, b. installed by a Licensed Building Practitioner who is also trained and approved by the certificate holder.

Asphalt shingles in the USA adhere to strict standards, utilizing premium coated granules and a proper asphalt blend on Owens Corning's fiberglass core. Some materials from other

regions may not meet these standards, emphasizing the importance of quality beyond surface appearance.

Our Shingle packaging is well labelled, and pallets are identified with the CodeMark Label.

Let our technical and specification team assist you with compliance if needed. Furthermore;

- **Stocked in New Zealand** in both our standard and high wind ranges. Other products and colours available on indent.
- Our **Duration** range features **SureNail Technology** and high definition colours for that extra durability in high wind locations and appearance.

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*By The Building Agency*





## SPOTLIGHT ON A MEMBER

# Spotlight on a Member - Rose McLaughan

I started with Manukau City Council in 1987 as a cadet and joined BOINZ as a Student Member in 1988. During this period, I studied NZ Certificate of Building at Unitec which I completed part time over 4 years. Back then the southern motorway did not go through to West Auckland, so I had quite the journey from Papakura exiting at Khyber Pass and making my way over to Mt Albert.

When I first started my career, we had the building permit system, then in 1993 the BAI991 came into force, which was a steep learning curve made very difficult by the fact that nothing was available online back then. Throughout my time with Council, I processed and inspected, my favourite part of the job being inspections.

In 1996, I left Council and unsure of what I wanted to do, applied to become a Building Certifier. I was interviewed in Wellington and to my delight was approved which thinking back was a tremendous achievement. I was the first female certifier, and my number was 007, another bonus! I received so much publicity in part because the BIA didn't think they would ever have a female, and this gave my business a tremendous boost. My business boomed and I employed 13 people; it bombed six years later due to the leaky building crisis and insurer's exiting the market.

From there I went on to consult for

the BIA, then DBH and finally MBIE. I undertook a range of work including writing guidance on producer statements, lead technical writer for the BCA quality manual that DBH developed when accreditation was introduced, technical audits of TAs, undertaking Determinations (expert reports) and helping write the regulations for accreditation. It was an interesting time, with so much to learn and so much to do.

Throughout this time, I also worked with multiple TAs helping them to write policies and procedures and developed the competency assessment framework which was used to form the basis of the system we have now.

In 2010, I was approached by Bob de Luer of Auckland Council who asked me to help them develop a QA system following the merge of the 7 Auckland TAs into the supercity. I ended up staying there for several years and left in 2017 before returning to consulting again.

In 2018, I was engaged to act as the expert for Tauranga in the Bella Vista case which involved giving evidence at trial. Since then, I have given evidence in other court cases where I work as an expert for Councils. I also work for several BCAs around the country providing technical expertise and have for many years worked as a technical expert for IANZ.



Rose McLaughan (right)

### 1. What led you to pursue a career in building control, and how has your role evolved over the years?

I was a solo mum and bought my first home which I painted and decorated. This led to me doing work for other people and I thought this could be a good career as it gave me some flexibility. During this time, I completed a Diploma in Interior Design by correspondence but couldn't draw, so went off to Unitec to do a course. It was then that I realised that this was not what I wanted to do, I did enjoy working on building sites, but decorating was hard work, and I was



knackered and dirty when I finished work each day, I figured there had to be a better way to make a crust. It was then that I saw an advert in the paper for a cadet building inspector. Funnily enough they were advertising for a young man 17-20 years of age, and I did not meet either criterion! I applied, and the City Inspector at Manukau (Dave Hull) took a chance and offered me a job. I was the only female in a team of 53 building inspectors! As my employment was on the cusp of equal employment opportunities, I was given so much support and the chance to work on other projects that provided me with skills that I could use later in my career.

## **2. What stands out as the most significant achievement or moment in your career thus far?**

There are several things really. Becoming a Building Certifier was one.

Working on the development of the 6-week training school and grad programme for Auckland Council delivering consistent training for Auckland BCO's. Finally, and probably the most special of them all was the recognition of prior leaning training programme I put in place for Auckland Council to support the BOINZ initiated and lead industry diplomas. What makes this so special is that many of my colleagues had a long career in building either on the tools or in regulatory control. Most had trade qualifications but never thought in their wildest dreams they would have a Diploma. To contribute to a programme that saw my colleagues achieve a Diploma and witness the pride they had in attending the graduation ceremony at the end of the journey is probably one of the most humbling experiences in my career. I recall one colleague (aged 67) who was stood up in front of his church congregation and congratulated by his minister. He was held up as an example of the importance of education regardless of one's age. I am proud of what I have achieved. Friends tell me I was a trail blazer and pathed the way for more women and diversity in our industry.

## **3. Can you share an example of a recent change or update in building codes that has had a significant impact on your work?**

I sometimes wonder what the logic was behind having to waterproof

floors in front of a kitchen island. Is this really an issue? I would have preferred to see a floor waste gully in every bathroom in a dwelling because let's face it, that's where it's going to flood if anywhere. I also think the changes to smoke alarms in dwellings are good but believe smoke alarms should also be required in the ceiling / roof space. A fire starting in a roof space will evolve quite quickly and you won't even know about it until it's too late.

Recent changes to the acceptable solutions (as opposed to the building code itself) seem to be of little consequence and limited affect. I support making changes where those changes improve the safety or wellbeing of building users.

We have seen a flurry of changes to the acceptable solutions recently. Are these made for the right reasons or simply to satisfy a lobby group or to align with other countries and justified by statistics with no meaningful content? Is it simply to show that something is being done? We need our regulator to tackle the bigger issues such as performance of designers and engineers and the associations that support those "professionals".

## **4. Are there any emerging trends or technologies in construction and building safety that you find particularly interesting or challenging?**

I might be cynical, but I think some of the stuff relating to safety is over the top. It seems to me if you have a high-viz vest and hundreds of orange cones then you become 6 foot tall and bullet proof. There is no common sense anymore.

Emerging trends around carbon reduction and the like could add considerable cost to the building process at a time when the government is saying they want to reduce costs.

I am also mindful of the government wanting to reduce the role of Councils in the consenting process, reduce restrictions and ease up on product substitution. Have we forgotten about the \$40-odd billion-dollar leaky building crisis?

## **5. What advice do you have for individuals aspiring to a career in building control or those looking to advance within the field?**

Take every opportunity that is offered to you and participate in working groups and special interest projects, you develop lifelong friendships and networks that you never know might help you one day. Don't accept everything you are told, do your own research, and be informed. Read everything – just because you have an expert opinion, it doesn't mean that it's right. When undertaking inspections record conversations and instructions, take lots of photos, and write good notes about what you have seen / not seen. If you don't know, ask. Read Determinations they are a great tool and full of learnings.

## **6. What are some of the most common challenges or issues you encounter in the field of building control today?**

For me it is the sheer volume of documentation being submitted for consent. Over the period of my career, it has gone from one extreme to the other. We used to get a site plan, floor plan, elevations and cross-section, and a truss plan (which we checked I might add, there were no producer statements or designs back then)! Plus, the obligatory specifications and wall bracing calculations. Now there are hundreds of pages of specifications and documents many of which have no bearing on the consent. Designers are lazy and submit entire technical manuals rather than just the information that is needed. This frustrates consenting efficiencies, often adding unnecessary costs. I sometimes look at the RFIs that are being raised and wonder what value they have.

Do we really need a BRANZ Appraisal to be on file for pink batts and the like? Do we really need to ask about lighting in a residential house?

## **7. How do you like to spend your leisure time?**

We have recently finished building so getting ready to do some landscaping and then hopefully we can relax and enjoy it. We have 10 acres and I quite like mowing the lawns on a nice summer's day (on the ride on mower of course) and spending time with family especially my grandkids.

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*By BOINZ*

# TRIBOARD

## BRACING PANEL VALUES // Framing as per NZS 3604

**Triboard stands out as a premium wood solution with proven wall bracing values.**

Triboard is composed of engineered strands orientated in such a way as to maximise strength and durability with an additional MDF fibre surface giving a smooth paint ready finish.

Certified uniform strength throughout its core gives Triboard Panels excellent wall bracing capabilities.

Triboard bracing information has been developed from tests carried out in the Timber Laboratory of SCION.  
For Triboard bracing details go to [www.jnl.co.nz/product/triboard/](http://www.jnl.co.nz/product/triboard/) **Brochures and Specs** or scan the QR code.







# Intense Rain Events, Project Design and Post Construction Water Control

In light of the recent surge in intense rain events, which were once considered rare but are now becoming more frequent, it has become imperative to address the design considerations for below-ground structures and the need for improved water control measures in non-hydrostatic conditions, emphasizing the importance of a proactive approach to mitigate potential damage. By adopting a forward-thinking mindset and implementing robust backfill systems, we can prevent the compromising of tanking systems and ensure effective water management.

## Understanding Backfilling Methods

In the context of water control, it is essential to recognize the two distinct methods of backfilling for hydrostatic and non-hydrostatic conditions. While the installation methodology of Allco's Volclay Tanking System remains the same, the choice of backfilling method can vary based on project requirements. Implementing the appropriate method will ensure optimal water pressure management.

## Non-Hydrostatic conditions

In scenarios where the tanking system is designed for non-hydrostatic conditions, a drain coil is typically placed at the base of the retaining wall. Coupled with suitable drainage materials as backfill, this design effectively directs water away from the retaining wall and towards the stormwater drains, preventing water build up and subsequent water damage.

## Hydrostatic conditions

When the project has no water control post-construction, the surrounding area becomes hydrostatic, exerting greater pressure on the tanked retaining walls. In such cases, backfill design requires increased confinement pressure. For instance, the Volclay Tanking System recommends the use of gap 40 (or 60) with fines compacted every 300 to 400 mm, much like the design utilized for under slab or under roading or around lift pits.

## Embracing a Forward-Thinking Approach

Prioritising water control measures in post-construction projects is crucial. Non-hydrostatic sites are particularly vulnerable as they have not been designed to cope with extreme conditions. Adopting larger drain coils or multiple drain coils and placing them further below the inside finished floor level, along with increased backfill volume, can effectively address

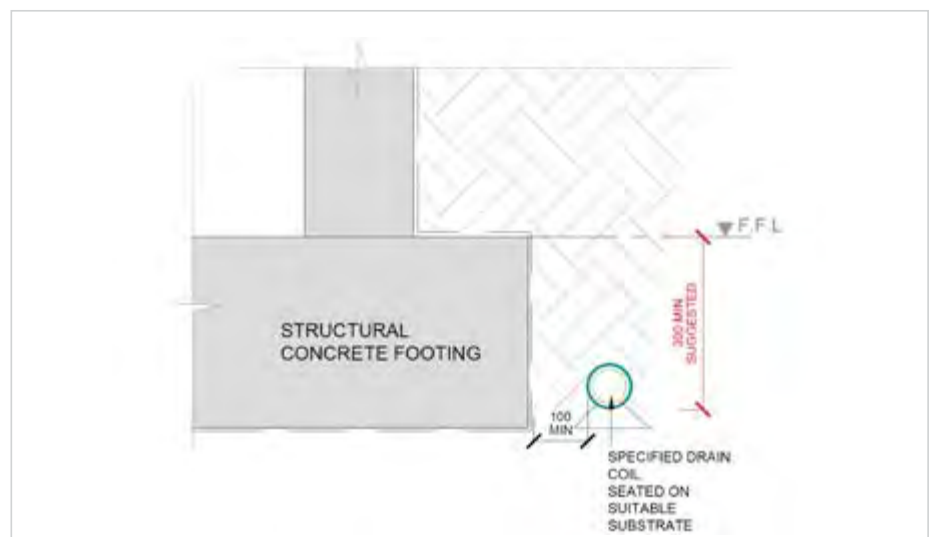
challenges caused by temporary hydrostatic conditions. Implementing a drain redesign and more robust backfill system, would allow more time for water to escape to the stormwater drains, before building a temporary hydrostatic condition, compromising the tanking system. Shifting our approach and proactively incorporating water control measures rather than rectifying issues after the fact.

## Regular Maintenance of Drains and Cesspits

It is also essential to emphasise the importance of regular inspection and maintenance of both residential and commercial drains and cesspits to ensure unobstructed water flow to the stormwater system. Periodic checks will help minimize the risk of water build up and related complications.

---

*By Adrian Crow, Allco Waterproofing Senior Technical Advisor*





# MiTek®

## Posi-Strut™

**You can't afford to ignore the benefits of Posi-Strut System.**  
Longer spans, easy routing of services and utilities, no drilling or  
battening out - saves time and money.



[MITEKNZ.CO.NZ](http://MITEKNZ.CO.NZ)



# Residential Concrete Slabs: Comfort, Style and Strength

Defined as any concrete slab poured over soil, concrete slab-on-grade (or slab-on-ground) floors have become the default option for new residential properties.

This uptake is based on benefits that include thermal mass, low carbon credentials, fire resistance, sound control, durability, value for money, and a range of attractive finishes.

## Thermal Comfort and Reduced Energy Use

As part of passive solar design, an exposed, well-insulated concrete floor can absorb, store and radiate the sun's heat, off-setting temperature peaks and troughs, to create a moderate living environment and help to reduce or even eradicate the need for energy-intensive space heating or cooling.

## Low Carbon

Committed to achieving net-zero carbon emissions by 2050, the concrete industry has identified a series of decarbonisation strategies that have already seen low carbon ready mixed concrete products appear in the market for use in residential slabs.



## Fire Resistance

An exposed concrete floor is non-flammable, non-combustible, and robust in fire. A concrete floor does not emit hazardous smoke, gas or toxic fumes during a fire event, and can more readily be repaired post fire, minimising inconvenience and cost.

## Sound Control

The robustness of a concrete floor renders footfall almost silent when wearing soft shoes, socks, or going barefoot. Unlike alternative lightweight flooring materials, concrete does not crack or creak with internal temperature swing or age.

## Durability

Virtually impervious to household wear and tear, concrete floors do not stain or rot after becoming wet, or scuff upon typical impact. Requiring only minimal surface preparation a resilient concrete floor will retain its level qualities indefinitely.

## Health

As a component within passive solar design, concrete floors help lessen temperature troughs, reducing

the potential for mould and dust mites, and in turn creating a healthy environment, particularly for those with a respiratory or asthmatic condition.

## Aesthetics

A polished concrete floor is beautiful, and is only one of a huge number of surface finishes. Using dyes, stains, stamps, stencils, polishing, grinding and decorative aggregates you are only limited by your imagination when it comes to concrete finishes.

## Value for Money

Subject to the complexities of installation and surface finish, the price of a concrete floor is comparable to alternatives, while from a whole-of-life cost perspective the savings associated with energy efficiency and health benefits make it hard to overlook.

The range of features offered by slab-on-grade concrete floors will see it remain the preferred ground floor option for homes.

Put simply, concrete floors provide peace of mind, under foot.

*By Concrete NZ*



## WINSTONE WALLBOARDS

# Winstone Wallboards New Tauranga Manufacturing and Distribution Facility Now Operational

**After years of anticipation and planning, Winstone Wallboards cutting-edge Tauranga facility is now operational, making it one of Australasia's largest plasterboard manufacturing and distribution centres.**

Tauranga manufactured GIB® plasterboard is now being despatched into the North Island and Freight into Store distribution has now fully transitioned to Tauranga and we have 100 staff working on site.

Let us take a closer look at some of the exciting features of our new state-of-the-art facility.

### **Bigger capacity for a brighter future**

The Tauranga plant is not just an upgrade; it is a huge leap forward for Winstone Wallboards, with production capacity now having the ability to increase by up to 50% compared to the Auckland manufacturing site.

What truly sets the plant apart is the forward-thinking design, which ensures Winstone Wallboards can also expand and support New Zealand manufacture well into the future too.

### **A hub of innovation**

With greater capacity comes the freedom to innovate. Our existing production lines in Auckland have been running at peak capacity which leaves little room for product development.

Our Tauranga facility unlocks the potential for the introduction of new product trials as well as enhancements to our existing range.

### **Gypsum revolutionised**

The core material of our plasterboard products, gypsum and how it is transported and used in production has also changed. Previously, gypsum travelled from Australia to Ports of Auckland, involving multiple handling

steps, such as stockpiling and loading into trucks.

In Tauranga, efficiency and sustainability take centre stage. Gypsum is offloaded straight from vessels at the Port of Tauranga into large hoppers to load trucks, reducing dust emissions. The trucks then drop their loads into in-ground hoppers and a conveyor system into the gypsum storage shed, eliminating the need for excavators to stockpile.

### **A sustainable tomorrow**

The Tauranga plant is not just about increasing capacity, it is also designed with sustainability at its heart. With a goal to reduce carbon emissions by ten per cent our new facility aligns with Fletcher Building's broader aim of a 30% reduction by 2030.

Recycling capabilities for water and waste are integrated, and there is a focus on energy efficiency with features like LED lighting and heat recovery systems.



The Tauranga facility also has a waste recycling facility that allows recycled gypsum to be included in GIB® plasterboard, setting the stage for our manufacture to transition from a linear economy model to a more circular one.

### Cutting-edge technology and safety

The Tauranga plant uses state-of-the-art, high-speed manufacturing technology and automation that can adapt to varying market demands swiftly. Automated processes reduce manual handling, enhancing health and safety. The layout and vehicle movement within the plant have also been optimised for efficiency.

### Fascinating facts

The Tauranga facility's main building area is equivalent to approximately eight full rugby fields, that is more



than two and a half times larger than the Felix Street site in Auckland.

The Tauranga business estate where the new plant is located, will also eventually host up to 100 businesses

making it one of Australasia's largest industrial parks.

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*By Winstone Wallboards*

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## OPINION PIECE

# Does the Construction Industry Require a Product Stewardship Scheme?

**In a past life I was actively involved in aspects of motor vehicle product stewardship, notably responsible tyre recycling. Some 20 years on, I am impressed to see the launch of Tyrewise, a product stewardship scheme for 'End of Life Tyres' (ELTs), which is scheduled for launch 1 March 2024.**

When one looks at the volumes of tyres that reach the end of their life in New Zealand each year, 6.5 million, it begs the question – why has such a scheme taken so long to develop? The answer is complex and too long for this article but suffice to say, vehicle and tyre supply chain is complex and designing a fair system was always going to be a tough ask.

When one looks at Construction Waste, statistics indicate that 50% plus of all New Zealand's landfill content is from the construction sector. In an environment of

unbridled construction cost increases, and a need for better environment management, construction waste must be a target for product stewardship.

If the motor industry, which is significantly more mature than the construction sector, takes some 20 years to implement a system of tyre stewardship, logic dictates design and construction must make this outcome its top priority. It also goes without saying, the project needs to be a government/business joint venture, and one with regulatory outcomes, such that all in the construction chain have a commitment, so that consumers and the environment ultimately benefit.

Managing down construction waste will take decades, but can be accelerated if the system is transparent, targets construction cost savings, and ensures build contracts

have waste targets. Procurement practice and on-site behaviours will also need to be part of the solution.

The Construction Sector Accord had, as one of its priorities, Environment and Climate Action and within this priority there were a number of initiatives targeting reduced waste and embodied and operational carbon. With the recent cabinet decision to close the Construction Sector Accord's Transformation Plan 2022-2025, I would hope the new government will continue a focus on waste reduction. My vision is for a simple process as opposed to complex, outcome driven and sooner rather than later. Tyrewise could be a good template.

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*By Nicholas (Nick) W Hill  
Chief Executive*

# Training Matters

## Investing in continuous improvement of ourselves and our organisations

**Training really does matter - we all know that. We know it is a critical step in continuously improving ourselves, as individuals, in our work of today and for our future work and experience of life. We need to stay current on the regulatory requirements we are responsible for applying. And we certainly know that those do not stand still.**

We know too that training contributes to our organisation's capability and capacity to deliver on its responsibilities. Running a capable staff and ensuring training of those staff is critical to maintaining a BCA's accreditation. Organisations with a learning culture are better equipped for the challenges of now and the future.

At BOINZ this year we've been running a Train the Trainer programme to support our own individual and organisational development and look to improve our practice. And some notes from the course about what makes a great trainer could apply equally to what makes a great worker (or organisation) in many disciplines, including building controls:

- ... instils confidence through competence and character (ref. Stephen Covey)
- Has a deep curiosity about learning
- Has a growth mindset.

Training is an investment – an investment in building competency and expanding capacity. In *The Value of Training*, IBM noted from its 2013 IBM Smarter Workforce Survey that “84% of employees in Best Performing Organisations are receiving the training they need compared with 16% in the worst performing companies.”

But training as an investment is always competing with other investments. And while we know training matters to our individual and organisation's performance, we

do need to justify and account for our investment choices, including when you book BOINZ training.

### Why invest in BOINZ training?

**1.** BOINZ training represents an investment in your core business – for BCAs and Accredited Organisations, building controls and understanding and application of the responsibilities and duties imposed by the Building Act 2004 and the Building Code, and other relevant legislation, is a regulatory responsibility. A BOINZ course on B2 Durability has been developed by experienced and skilled professionals with expertise in that B2 as it relates to building controls. The same with delivery. When your staff ask questions in the course, our trainer has the relevant background to answer as fits a building controls context. Our trainers are from the regulatory environment and have dealt with many of the complex problems you encounter.

**2.** BOINZ training supports your accreditation requirements, outlined in Regulation 11, relating to trained and capable staff. Our learning pathway and consistent nationwide training is designed to build or keep up your staff members' competency levels across Building Code clauses and key Building Act requirements. Our CPD system is designed to recognise and record their learning and as such support your documentation for IANZ. Similarly, BOINZ's Accreditation training is designed to ensure your work as a BOINZ Accredited Building Surveyor in Pre-Purchase Inspection (PPI) provides exemplary customer service, valued information and minimises liability.

**3.** BOINZ training is underpinned itself by a continuous improvement approach that draws upon:

- a.** Strong technical and industry input and advice from our Technical Advisory Group of current Building Managers and

PPI Accredited Experts

**b.** Professional development support for our great team of trainers – such as this year's Train the Trainer programme

**c.** Regular feedback, formal and informal, from course participants, and BCOs and their managers generally.


**4.** BOINZ itself works to raise the status and advance the interests of the profession of building surveyors – that's you and your colleagues in building controls and PPI. BOINZ training is centred on this largely altruistic rather than purely commercial purpose and as a not-for-profit reinvests any training profits in the development of its training. Your course fees are needed to cover the range of costs we incur to ensure we can deliver nationwide training across the wide range of building controls topics and the different modes you require – online facilitated, online self-paced, face to face facilitated, hybrid facilitated. All these costs have increased. The remainder of your fee is then reinvested in course development and updating. This new development work is ongoing as the recent MBIE changes to Fire and Plumbing and Drainage remind us. So, every dollar invested in BOINZ training, is invested on by us in building the regulatory knowledge and understanding of building surveying professionals. BOINZ always gives back.

The list doesn't stop there, but these are some of the compelling reasons why, when you consider training and your important investments in it, the BOINZ Training Academy should be your first choice. Or at least pick up the phone and give us a call!

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**By BOINZ**





# Posi-STRUTS: Design-Make-Build Advantage

In our industry, certain building solutions emerge as category leaders. Take, for instance, the MiTek Posi-Strut Floor System, a prime example of MiTek's Design-Make-Build methodology driving efficiency in off-site construction. It's challenging to find a better floor system. Posi-Strut Floor Systems deliver significant value to your project, catering to the needs of architects, builders, engineers, and regulatory officials.

## Design-Make-Build

→ Tailored engineered floor systems that blend timber's versatility with steel's strength.

→ Designed by experienced professionals using MiTek Software, a leading timber design software implementing the latest industry standards.

→ Incorporates timber connector plates and building products compliant with MBIE – BPIR and other Code Mark products. Complete with PS1 signed by qualified industry engineers.

## Design-Make-Build

→ Manufactured in controlled environments at reputable truss and frame manufacturing facilities, Posi-Strut ensures quality acoustic and dynamic performance.

→ It offers clear spans of up to 8m using 70mm, 90mm, or 140mm wide timber, with customised support end details to conceal steel beams or internal bearers.

→ This system provides top chord support without the need for joist hangers and allows balloon framing for three-story walk-up projects.

→ Delivered to the site in easy-to-assemble stacks or as floor cassettes, it leverages cost benefits from off-site construction. Additionally, it is the only system offering rafters for curved roof construction.

## Design-Make-Build

→ Open web configuration:

◦ Facilitates easy access to plumbing, electrical, and HVAC, eliminating the cost of cutting access holes.

◦ Enables clear visual building inspection, ensuring correct installation of components such as Posi Trusses, joist hangers, and plumbing fixtures.

→ Wide chord surface allows quick and stable installation without temporary bracing.

→ Provides a stable and rigid work platform immediately for upper-level works.

→ Ideal for sloping sites, saving costs on cut & fill or retaining structures.

The MiTek Posi-Strut Floor System is suitable for residential, commercial, and light industrial projects. Stable, easy to install, and custom-designed to meet project requirements, this system offers significant value and cost benefits, surpassing other options in saved man-hours on-site.

# Evaluation Service Reports Provide Confidence

We know that building products need to demonstrate they meet the requirements of the New Zealand Building Code (the Code). To be reassured in this exercise, practitioners looking to verify the evidence of suitability provided should be looking for products that have been subject to testing, inspection and certification (TIC), backed by accreditation for the bodies involved in these processes.

Standards against which products can be tested, and which should be written in accordance with ISO/IEC 17007, are an important part of the infrastructure, but do not always provide the full picture of determining where a building product can be used, what part of any requirements it is attested to perform to and any limitations that might apply to its use. These features are examined through independent certification, and should be performed by an accredited conformity assessment body.

As a principle it should stand that where no standard exists, which is typically the case for new and innovative products, more rigorous forms of evidence should be sought to provide confidence that a product's claims against the Code are conforming, as they are essentially a product 'Alternative Solution.'

An Evaluation Service Report (ESR) issued by ICC Evaluation Service (ICC-ES), represents one such form of evidence.

An ESR is a comprehensive attestation that provides information about what Code requirements or acceptance criteria (AC) have been used to evaluate a product. ACs are a form of technical specification developed by ICC-ES and used as the basis for evaluation of innovative products not specifically referenced in the Code and where no established standard exists. They are the most widely accepted and trusted building

product attestations reports by building officials in the US and are now being promoted for use in New Zealand and Australia.

ESRs, which are a normative document, are divided into eleven major elements, including the report holder, evaluation subject, evaluation scope, properties evaluated, product description and uses, how the product should be installed to meet the requirements, conditions of use and how to identify the product.



*As a principle it should stand that where no standard exists, which is typically the case for new and innovative products, more rigorous forms of evidence should be sought*

An example of an ESR issued to demonstrate compliance with the Code is report number ENZ-2023, for Halfen HZA Anchor Channels and HZS Channel Bolts, manufactured by Leviat GmbH. This ESR includes for example, reference to AC232 for Anchor Channels in Concrete Elements

By ICC

**Show proof of  
compliance to  
the NZBC  
with an  
Evaluation  
Service  
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# WELLINGTON 24

BOINZ Annual Conference & Expo

## PARTNER & EXHIBITOR PROSPECTUS

### Building Resilience



20-22 May 2024  
TSB Arena, Wellington

Our Annual Conference is the hub where Building Control thrives, and where industry leaders help shape the future of our sector.

Our conference promises unparalleled opportunities, and a unique networking experience you won't find elsewhere.

### Resilience in Partnership: Sponsorship that Resonates

The theme for Wellington 24 is Building Resilience, but it will encompass much more.

Over the course of the 3-day event, we will delve into key areas aligned with our theme: People Resilience, Resilience of the Building Consent System, Educational Resilience, Resilience of Competency, and Financial Resilience.

### Lets Talk Numbers

**300+**  
Attendees

**40+**  
Attending  
Companies

**35**  
speakers

*Wellington 24 is an event you won't want to miss! Contact us today if you would like a Partner & Exhibit Prospectus.*

*Email: [marketing@boinz.org.nz](mailto:marketing@boinz.org.nz)*