

# STRAIGHT UP

BUILDING OFFICIALS INSTITUTE OF NEW ZEALAND

## **Producer Statements**

The most common questions

## **Mental Health**

The role of leadership in the workplace

## **Sustainability**

Zero Carbon Steel Program





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# STRAIGHT UP

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# Unprecedented Challenges

Greetings and welcome to our Winter Edition of Straight Up. It was great to see the excellent voter turnout for our recent board elections, surpassing previous years by around 20%. The incoming Board includes two new faces, and we have our first female Vice President. Over the coming months we will be running social media introductions with each board member and of course those of you attending our combined SBCO Forum/Conference in August will have the opportunity to meet the Governance group first hand.

It will be no surprise to you that we all still face a challenging pathway ahead. Our environment both globally and nationally is changing at a rapid pace. Most of us would agree that as a country, New Zealand performs above its weight. We are a tenacious and resilient population that looks ahead with a good dose of positivity, and often, sees opportunity emanating from adversity.

Dealing with changes and challenges effectively requires a commensurate level of planning and capability. At the Board table, a significant amount of our time goes into assessing where we put our precious resources to benefit both our members and the community. Over the last few years or so, the debate has become more intense, wide ranging, looking at the immediate challenges and planning for the future.

New Zealand, like most countries, has undergone the pain of dealing with and adapting to the challenges

off the COVID pandemic. We are now experiencing increasing inflation, supply chain logistic issues never experienced in recent history and on top of that New Zealand is undertaking aspirational legislative reform on a scale not seen in decades. In terms of pressure on our personal and professional lives we are experiencing the perfect storm, and the signs of creaking decks are starting to show.

So, what does this mean for BOINZ and its members. Importantly, the Institute will be looking to support members' professional capability, ensuring there will be efficiency and effectiveness in the way we all work. We are continuing to develop and add value to your membership and always want to hear from you about initiatives you see value in. The Board has in place a 5-year strategic pathway based on the principles of professionalism, opportunity, and collaboration. We have been working with this strategic direction over the past year and as members you will have seen the obvious mode changes to our Training Academy material and delivery (online and in-person), and importantly information accessibility through BOINZTV. Both these initiatives are exhibiting significant member uptake and reflect the quality commitment BOINZ is renowned for. In the not so obviously visible areas such as advocacy we have strengthened our technical capability and are providing representatives and support to regulatory standing committees and work groups as well as delivering comprehensive

feedback on an increasing number of consultations, all of which can be found on our member website. We are experiencing a renewed engagement from central government agencies who are listening to our combined voices.



*We are a tenacious and resilient population that looks ahead with a good dose of positivity, and often, sees opportunity emanating from adversity.*

Looking ahead, the Board will be seeking to guide and support our National Office in operationally meeting the challenges of the next few years. Several reforms being undertaken by government are not just simple fixes, they are high risk and costly, and already we have

## OUR BOARD



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President



**Karel Boakes**  
Vice President



**Alana Reid**



**Cory Lang**



**Jeff Fahrensohn**



**Peter Sparrow**



**Nick Hill**  
Chief Executive

seen some well publicised failures. Our role as an independent voice in guiding change has been well respected over many years, as we see the issues daily. Now is the time for careful consideration as to how change should be managed. The careful understanding of capability and capacity should be central to decision making, to avoid unintended consequences.

Our sector is critical to the national economy, and it is frustrating that we have had a revolving door of nine Ministers since 2004. Our sector is complex, takes time to understand and we feel it hasn't received the long-term care and attention needed, whilst being subjected to knee-jerk reactions on occasions. Regulatory change and reform need both informed technical input and market input in advance of political and policy decisions. To make meaningful and effective change to our sector, the consumer outcome must be at the forefront of discussions as does a consistent and well-informed group of change agents at every level. BOINZ must be at every table as the reasoned independent voice of

compliance and quality building outcomes.

So, what does the future mean for our membership in this rapidly changing and complex environment. My view is simple, by being part of BOINZ and through your professionalism you have a fantastic opportunity to improve the performance and quality of build outcomes. Now more than ever participation is vitally relevant, whether it be approaching your employer for relevant training, attending branch meetings to grow your market and product knowledge, or using your learned and experiential skills to support the BOINZ voice for a better build and construction sector. Remember that your membership is personal to you as an individual, you may have your employer paying your subscription as part of your remuneration benefits, but the effort you put in and the value you gain through many avenues is your own.

I titled and started this piece with the heading Unprecedented Challenges, and while there is and should be warnings in



Peter Laurenson - BOINZ President

respect of what is occurring in our environment, I hope you see some opportunities and are prepared to share and participate with BOINZ at a time when your professionalism is truly needed.

*Peter Laurenson  
President*

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# Did You Know - We Can All Help BCAs with Building Consenting

It is widely known in the past decade Aotearoa – New Zealand has experienced tremendous growth leading to shortages with building supplies and qualified people in the construction sector, otherwise known as growing pangs throughout our industry. In the past 2-years some Councils have received unprecedented volumes of building consents impacting significantly to already strained processing systems.

Organizations throughout New Zealand, private & public, have been actively working to fill the demand for qualified people to process building consents with some districts developing new automated systems to accommodate increased consent applications.

Due to the number of applications being submitted around our country daily it has been demonstrated that providing a complete, accurate & compliant building consent application, can lead to greater positive outcomes to owners, designers, builders & BCAs.

Currently, it seems consent applicants have become accustomed to BCA's providing Requests For Information or RFI's almost relying on the consenting process as an administrative quality assurance step rather than an approval process. Over time, processors have unintentionally nurtured the RFI process which results in increased communications, time to process, ultimately placing increased stress to an already bursting system, also in some projects creating even higher processing fees.

The role of our industry partners is identified by our legislative authority who have provided guidance with the framework for construction within the New Zealand Building Act 2004. The Building Act identifies



expectations to owners, designers, builders up to BCAs to design & build safe, healthy buildings for people to occupy.

“Granting a building consent can only be accomplished when the person processing the consent is satisfied on reasonable grounds the provisions of the building code would be met if the building work were properly completed in accordance with the plans and specifications that accompanied the application.”

Often, items within RFI's are the result of more simple details, such as, unclear compliance paths, inconsistencies to supporting details, forms not complete or accurate to the proposed works. It is fair to say required information & forms do differ between districts, however, the trend to submit accurate & complete details continues to challenge BCAs alike.

By implementing a 'quality check' prior to submission of a building consent application, to verify forms are complete with accuracy,

consistency & completeness of content, including relevant supporting details otherwise accurate to:

- Building Codes
- Regulations
- Standards
- Territorial Authorities

These would greatly reduce processing times, increase processing efficiencies & increase the likelihood of a successful application - therefore resulting in happier building owners, designers, builders & BCA's.

Only in working together can we build a safe, sustainable Aotearoa for future generations.

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*By Jason Kent – Senior Building Surveyor*

# MBIE BSP Update

## The annual Building Code update consultation is open

Every year, the Ministry of Business, Innovation & Employment (MBIE) updates the Building Code to ensure it is keeping pace with new methods of construction, products and technologies.

The consultation provides an opportunity for the public and the building and construction sector to have their say on the proposed changes to selected Building Code acceptable solutions and verification methods.

The proposals in this year's consultation include:

- Changes to improve the safety and reliability of plumbing and drainage systems.
- Changes to the compliance pathway for the use of hollow-core floor systems in new buildings.
- Changes to improve the level of fire safety for our buildings.

To find out more about the proposed changes or to submit feedback visit:

[mbie.govt.nz/have-your-say/](https://mbie.govt.nz/have-your-say/)

Consultation on the proposed changes to the Building Code opened on 2 May 2022 and will run until 1 July 2022.

## CodeMark

MBIE is working through revision of the CodeMark scheme as part of the wider building system reforms. The aim of the changes is to improve confidence in the scheme and lift the quality of product certificates to support more efficient consenting, while giving MBIE greater oversight of the scheme. BCAs, industry and building owners will have greater

assurance that products certified under the CodeMark scheme can be used safely in building work and comply with the building code. MBIE is developing regulations, rules and guidance to support and implement the changes passed last year.

## Modular Component Manufacturing

MBIE is progressing with a new voluntary certification scheme for off-site modular component manufacturers in recognition that off-site manufacturing has the potential to lift productivity, reduce building costs and delays, and contribute to better environmental outcomes through a reduction in waste. The new scheme will provide manufacturers who meet certain requirements access to a streamlined consenting pathway, modular components produced by certified and registered manufacturers will be deemed to comply with the building code. MBIE is developing rules to provide detail about the roles and responsibilities, operating processes and evaluation criteria for manufacturers, certification bodies and the accreditation body under the new scheme.

## Dam Safety Regulations

New regulations focussing on dam safety (Building (Dam Safety) Regulations 2022) were announced by the Ministry of Business, Innovation and Employment (MBIE) on 13 May 2022.

The new regulations have been made by the Government to improve the safety and resilience of Aotearoa's dams, setting minimum requirements for dam safety and aligning with the rest of the

OECD. Dams that fall within the scope of the regulations, based on minimum size and storage volume thresholds, will be given a potential impact classification based on their potential to cause harm in the event of failure.

The regulations ensure that classifiable dams are well operated, maintained and regularly monitored. They also ensure that potential impacts of dam incidents and failures are reduced, protecting people, property, and the environment.

The new dam safety regulations require dam owners to review their dams against flood performance criteria every five years as part of a comprehensive safety review.

Most small farm dams and ponds and weirs will be excluded from the regulatory framework as they are unlikely to meet the minimum size or storage volume thresholds.

There is detailed information available on the MBIE website on which dams fall within the scope of the regulations, along with resources to help dam owners with their responsibilities.

There is a two-year lead in time before the Building (Dam Safety) Regulations 2022 commence on the 13th of May 2024, and once in force dam owners will have a further 1-2 years to undertake the necessary work to classify their dam and put in place a dam safety assurance programme.

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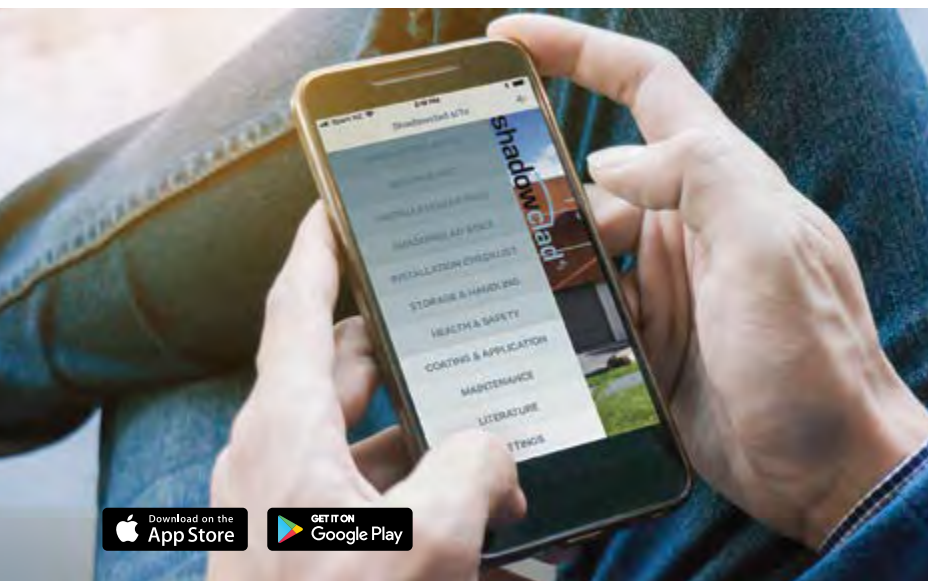
*For more information see the information and resources for dam owners on MBIE's webpages*  
**Information and resources for dam owners - MBIE Dam Safety Guidance**  
 [\(building.govt.nz\)](https://building.govt.nz)



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A DAY IN THE LIFE

# The Role of the Pre-Purchase Inspector and Expert Witness



*In recent years, the work of the pre-purchase Inspector has come under a significant level of scrutiny within New Zealand.*

**As a chartered building surveyor with nearly 40 years of experience in the construction industry, these two roles would appear to be somewhat uneasy bedfellows. On face value, one would appear to be all about hands-on inspection and report writing while the other is slightly more academic, perhaps forensic analysis role. In truth, both roles require similar skills.**

At the end of the day, most building surveyors are required to read, investigate, analyse, evaluate, and report. Interestingly, when we think about residential property, we tend to use the term “pre-purchase” whilst when considering commercial property most practitioners prefer to use the term “technical due diligence”. Although the latter would include a far greater level of scrutiny and would include such matters as example building services, fire, asbestos, seismic performance as well as the building envelope, they

do in essence necessitate the same level of rigour. Let’s look at the first of these roles.

In recent years, the work of the pre-purchase Inspector has come under a significant level of scrutiny within New Zealand. This has largely been because many such inspectors have found themselves at the pointed end of litigation when a homeowner discovers that their chosen inspector was perhaps not quite as diligent as they might have been. Much of this has eventuated because of what is essentially an unregulated market. Whilst most residential pre-purchase inspectors conduct themselves professionally, there is absolutely nothing preventing anyone who is so-minded from setting themselves up in business as a pre-purchase inspector. This has led to an unfortunately large number of perhaps well-intentioned inspectors finding themselves the unwanted target

of litigious homeowners. To put this into perspective, in the United Kingdom if you want to borrow money from a lending institution to purchase a residential property, the lender (my emphasis) will engage a chartered building surveyor from a preapproved list to undertake the inspection. If you're not a chartered surveyor, you will not be engaged. The reason behind this is that the lending institution knows that all chartered surveyors carry professional indemnity insurance and are degree qualified members of the Royal Institution of Chartered Surveyors. This sets the benchmark so that nobody gets any unpleasant surprises.

In New Zealand, no such requirements exist. Most lending institutions still lend money without making a pre-purchase inspection a condition of lending. If an inspection is required, then it is the buyer (my emphasis again) that engages the inspector and receives the report. The inspector does not need to be a member of any professional body, does not need to hold professional indemnity insurance, and does not need to undertake any specialised training or qualification. It is up to the person engaging the inspector to satisfy themselves that they have the necessary qualifications experience and insurance.

As a chartered building surveyor, I have undertaken many pre-purchase inspections during my career overseas however with full disclosure, the practice where I work does not. There is a simple reason for this and that is the uneasy balance between risk versus reward. In Auckland for example you can secure a residential pre-purchase inspection for anywhere between \$300-\$500. Based on the average hourly rate charged by most professionals, this equates to approximately 2 hours' work. I have been in this profession for many years and one thing I can tell you is that it is not possible to travel to site, diligently and carefully undertake the full evaluation of a standard residential building and write a detailed report in 2 hours. As a consequence, most of the pre-purchase reports that come my way are very thin on detail and formulaic based upon tablet software templates. Even those

that follow the template set out in New Zealand Standard 4306 (2005) Residential Property Inspection are frequently poorly completed.

In my view, to be a good pre-purchase surveyor, you need to consider spending between 3-4 hours on site. You need to assess every angle of the building from the highest point of the roof to the lowest point of the ground floor or basement. You need to access everywhere that you can easily and safely access so that when you leave that property at the end of the day, there is no part of that building that you have either not looked at, photographed, or at least considered how it is constructed. In an ideal world, you will have had prior access to the council property file and may have had the benefit of reviewing architectural drawings. These will help fill in the blanks if there are parts of the building that you cannot see. Make a sketch plan. Work out where all the doors and windows are. Make sure that you check that water comes into the property where it's meant to and goes out where it's meant to. Be methodical and go through the building in a systematic manner. When I am inspecting a building, whether it be a single story dwelling or a 15 story commercial building I always adopt the same methodology. I work from the outside in and from the top down. I always work in a clockwise motion be it around the building or the rooms within the building. There is a practical reason for this. When you are back at the office looking at 3000 photographs, it is easy to work out the order in which you took them and orientate yourself to the building. Make a checklist if it helps you organise your thoughts but make it logical.

One of the other important things to consider if this is a branch of the profession that you wish to enter is around your terms of engagement. Make sure that your client clearly understands what it is that you are going to do and more importantly what you're not going to do. This is a visual inspection, so you are not going to be cutting holes in walls and lifting up floors. Vendors take a dim view of professional vandalism! Therefore, you will have to make several assumptions about those things that you can



*In my view, to be a good pre-purchase surveyor, you need to consider spending between 3-4 hours on site.*

see based on the things that you cannot see. Your client is going to have to accept that there will be parts of the property that you simply cannot get access to so they will be heavily reliant upon your professional knowledge and understanding as to what risks may lie in those areas. Likewise, you will have to satisfy yourself that any opinion that you provide to your client can be supported by those things that you have seen on site or at the very least, a reasoned judgement on those things that you could not see. In any event, never provide an opinion on something that you do not know!

While practicing in France in the mid-2000s, I undertook a survey of a 19th-century stone property in a lovely village in the southwest of the country. My client (5 sisters) was buying the property and had all visited it separately and had fallen in love with it. When I arrived, the door was opened by a lovely old French gentleman who over the next 3-4 hours escorted me around the 4 storey house telling me all about its history and showing me all the work that he had done. When the tour was completed and I had looked at everything that I needed to, he went to show me to the front door. I turned and asked him to show me the cellar. He looked slightly awkward and said that there was no proper access to it. I knew that there was a cellar because I had noted a small door in the lower front wall of the house partially obscured by bushes when I had first arrived. Going outside, I found the old door and after wrestling with the rusty bolt, pushed my way through the undergrowth and into the cellar. What I found inside made the effort

worthwhile. The entire ground floor of the property was supported by Acrow props. The reason was that wood-boring insects (typically House-Longhorn in France) had all but consumed every piece of the supporting structure. The props were reasonably new, and I concluded that the charming old French owner was fully aware of them and had sought to conceal them. When I spoke to my clients, none of them were aware of a cellar had never been shown it!

### Expert Witness

The role of an expert witness is to assist the court/mediation/ adjudication process in understanding the matters before it. Contrary to popular opinion the role of an expert witness is not to assist their client. This is a common mistake that many who practice in this field make and as a consequence they end up being labelled an “advocate” by their peers. This is an unfortunate moniker and one that is hard to shift.

I have had the privilege of appearing as an expert witness on many construction litigation matters over the past 15 years. I say “privilege” because that is how I view it. If a lawyer or building owner or anyone else for that matter considers that I have the requisite knowledge and skill to understand a building and whatever defect it may be subject to then I feel particularly humble. Many of the

claims that I have worked on, ran into the tens of millions of dollars, some into the hundreds of millions. Therefore, there is much at stake for all sides, so it is critically important that this work is treated with the seriousness and rigour that requires.

Returning to our previous subject of the pre-purchase inspector, some years ago I was engaged as an expert witness by the owner of a large residential property in Auckland. They in turn were embroiled in a dispute with the vendor of the property whom they believed had concealed weather tightness defects with the property to achieve a sale. To make the matter more confusing, my client had also engaged a pre-purchase inspector to undertake a survey of the property prior to purchase. That survey report, whilst it had made comments about risks around the cladding in various locations, had failed to properly articulate to the buyer what the implications of those risks could be. As professionals, we understand what might go wrong when water gets into a building. We may also understand what it might cost to remediate such a building. The layperson by contrast has no such knowledge. Therefore, any report must be written in such a way that an unqualified person gets a clear and unambiguous understanding of what the risks might be and what the outcome of the proceeding might cost or at least the order of magnitude.

As part of my investigation of the property, I sought out evidence where it existed to determine whether the vendor of the property (who had lived in it for over 10 years) could have known that it was subject to weathertightness failure. In this instance, I was able to undertake localised and targeted destructive testing in certain high-risk locations and discovered that remedial work had been undertaken. Such remedial work would have required a building consent and no such consent had been obtained. Furthermore, the work incorporated materials that post-dated the construction of the property and included date stamps that fell within the ownership period of the vendor.

The matter proceeded to trial whereupon experts for the plaintiff and the defendant parties were required to give evidence. The matter did not conclude in court and to the best of my knowledge is still unresolved. Nonetheless, it was a very interesting case that required a great deal of careful analysis and evaluation. It was once again a timely reminder of the vulnerability of the pre-purchase inspector particularly when they may not have discharged their duty as well as they might.

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*Gérard Ball – Dip Bldg Cons, FRICS, FICWCI, LMBOINZ – May 2022*

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# Working Together for the Benefit of Us All

An article courtesy of the Master Brick and Blocklayers Association

Without doubt the consenting sector is facing one of its biggest challenges in our construction history. There has been a lot of recent comment around timeframes and timeliness of service provisions. But we need to acknowledge the incredibly challenging circumstances over the last couple of years, that more consents have been issued than at any time in our history. The role of building officials in delivering on quality consent needs greater acknowledgement, regardless of the stresses that are still in place.

There are many of us in the licensed field who have potential solutions that may expedite quality processing times and allow workflows to improve significantly. These can also assist in mitigating cost impacts of delays. With construction inflation currently running in the region of 18% to 20%, any tools allowing consenting



Tie spacing

authorities to proactively address the challenges delivering on quality processing should be looked at.

We are all aware that the perfect storm of increased build activity, the Covid 19 impact, supply chain shortages, skill capability limitations, combined with the inability of industry to boost their workforces from overseas, has placed immense pressure on all parts of the building system. Consequently, the Master Brick and Blocklayers has been investing in tools their members can use to assist Building Consent Authorities (BCAs) in significantly reducing review times to approve code-compliant work and keep a visual record of said work for future reference.

The advantages to all parties within the process are significant. Workflows improve for the building community, especially the smaller contractor who may not have enough of a pipeline to be economically comfortable with some of the delays that are now commonplace. Building clients are less likely to be impacted by inflationary delays, and builders and subcontractors cash flows are normalised, providing better protection for smaller businesses and ongoing sustainability.

Effectively, if we can assist in expediting the half high approval process it has a similar impact to removing the cork from a bottle, many other tasks flow from this point.

The evidential trail a modern app-based evidence system can provide, allows officials to have considerable comfort they can view the appropriate building code factors



Cavity

with confidence. The app-tools provide an ability to confirm the GPS location of the work and that an LBP is providing the evidence from their own device. Video or photographic confirmation of tasks can be appropriately included and completed, showing products used by brand and type.

The detail contained within the Master Brick and Blocklayers system collects and provides for a full record of works, that can be viewed or provided to builders, engineers, project managers, and consenting authorities instantly on request. The ability to improve workflows and be part of a solution that eases pressure on consenting officials has from day one been at the core of this system's development.

Within the app structure is capability for a full written and



Weephole

visual confirmation that the work being submitted is confirmed by the LBP and complies with the requirements of the appropriate NZ Standards, the Building Code, as well as Master Brick and Blocklayers Best Practice Guides for Brickwork. It achieves this through a comprehensive checklist completed by the LBP.

It also has the capability to add the SSSP and Record of Work for the project and can be directly uploaded and sent to the interested parties: e.g., Council, builders, engineers, and owners.

The list of inclusions covers site description, confirmation that appropriate consents have been sighted by the contractor,

identification of Restricted Building Work (RBW), product details, and site management and environmental controls.

This is followed by set out identifiers with specific pathways for Brick and Block work, that are confirmed by the LBP. These includes matching the consented plan, positioning of damp course, size of overhang, appropriate flashings, sealing of penetrations cavity size (which can be videoed along the expanse of the wall) or photographed as requested, covering of work and product as and where required, control joint methods with photographic support.

Tie and Lintel work is also recorded that they align with the consented plans. Weep Holes are appropriate and positioned, aligning with the standards, again with video or photo support being provided.

Once the contractor has completed this input, they move on to a completion checklist, which covers:

- Straightness and plumb within tolerances,
- Angle of sills,
- Cleanliness of finished work,
- End of work,
- Site management completed,
- For Brick whether it's a half filing or final filing.

Blockwork has its own specific workflow requirements, relating to the steelwork requirements of NZS 4210 and general site safety and best practice. Again, the stages can be recorded and sent directly to all parties in the process. This includes placement of horizontal steel, linking with vertical bars, clean outs, confirmation that the mortar is of the desired strength, pre-pour checks, confirmation that the correct block fill, as specified is used, dimensions, etc, all meet the specifications.

The checks within the app flows are very comprehensive. The app is designed to allow the consenting agent to respond to the sender, if clarification via photographic or video evidence is required, and to address any matter they may have questions about. Importantly saving time and travel for all parties involved.

Working together should primarily be about improving outcomes for consumers through collaborative partnerships to the benefit of all. If any consenting authority or group would like a demonstration of the full capability of the App, we are very willing to meet this request, either physically or through a Zoom/Teams type meeting. Master Brick and Blocklayers also have an introductory video outlining the processes and functionality. This can be made available to BOINZ members upon request.

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**About the writer:**

**Brian Miller is currently the Chair of Master Brick and Blocklayers and has spent most of his working life in the construction sector, from training as a Joinery Machinist, Window and Door Manufacture, and until recently as the CEO of Master Painters New Zealand.**

**The opinions expressed in this article are those of the Master Brick and Blocklayers Association.**



Cover up

# Spotlight on a Member: Daniel Harrison

Daniel Harrison was the recipient of the Emerging Leader Award at the BOINZ 2021 Conference in Wellington. With our annual conference coming up in August, we had a chat with Daniel to find out more about him, what he does and where he has been. Daniel is the Auckland Branch Secretary and currently works as a Team Leader in Project Assessments for Auckland Council.

Before his journey led him into this industry, Daniel started as an apprentice in painting and decorating for two years after leaving High School. During the global financial crisis of 2007/08 which affected the painting business, Daniel was let go, but an opportunity to study Theology arose, talk about a silver lining! Daniel packed up his bag and hit the road from Wellington to Auckland.

## Q. Tell us about your career pathway into the wider industry?

In 2009 I was successful enough to enter the cadetship programme collaboration between the Manukau City Council and the Ministry of Social Development. While the programme was only nine months long, I met some wonderful people who are still in Council today, and in Kotuku

House which is ironically where I have ended up! My duties included mostly front-of-house and customer services.

Part way through the programme I started working part-time in the call centre. I was back and forth between the teams, but it was a real eye-opener! There were some interesting calls and some customers. I didn't really know much about Council except for parking tickets and rates, but during the small stint on the job, I knew this was where I wanted to be.

As my time was coming to an end with my cadetship, my team leader in customer services put me in touch with another team leader based at the former Auckland City Council (ACC) for a similar role to what I was doing. This all happened two to three weeks out from wrapping up!

I then progressed to ACC into a team that dealt with more than just customer service. My first day was a baptism of fire, my former team leader and I still joke about that to this day. I do not recall taking a lunch break that day, but it was the best way I could have learned in how things worked in my new team. The team also produced LIM reports and property file products. I built my understanding of both building legislation and RMA during that time. I only lasted a year because ACC along with other



legacies were to merge to become Auckland Council in November 2010. My time there set me up for my first technical role as a Code Compliance Certificate (CCC) assessor. I give credit to Christine Watkinson, my team leader at the time who took the time to train me and teach me so much about building legislation.

A few years into the CCC Assessor role, I was fortunate to be given an opportunity to undertake the Diploma in Building Control Surveying to fulfil my reg 18 obligations. I enjoyed the processing segment which made me jump over from CCC to processing which I have been doing

to this day. In the past two years, I have been promoted to the Team Leader position in processing. Not bad for someone who never really finished school!

When I became a BOINZ member in 2012, I became more inquisitive and passionate about what we do as a regulatory service. Since then, I have been encouraged to take up office as a branch executive.

**Q. What are the major changes you have seen in the past 10 years in relation to BCOs and study?**

I think there is a bit more support for people like myself who want to enter the role of regulatory service. Back then it was more about who you knew. The training was not as serious as it is now, I think there is a real need for staff to train because there are so many legislation changes, and product systems being introduced into the market. We have no excuse for not preparing our staff with the same power and knowledge as you would with others on the list of five key responsibility holders. You have the owner, the builder, the designers and architects and product manufacturers. The BCA sits in there so we should have equal rights to knowledge in terms of the value we can input into our consenting and the build process.

**Q. What is your approach to facing industry challenges?**

Having those genuine conversations. Saying this is our part to play, take responsibility for that and ensure that we work together to find solutions to ensure the best outcome for the customer rather than pointing the finger at each other. We need to focus on building relationships more and expose the truth in all our doing. We need to ask ourselves does it have a benefit and does the cost outweigh the benefit? We need to know what the intent is behind it. What will it deliver and how will it be delivered? These are the conversations that never really come about as often as they should.

**Q. How do you deal with work challenges including working from home, so work doesn't encroach on family life?**

Good question! I make it a habit to turn off from work at a time in the day. Another habit is to take regular breaks during the day, get away from the desk, stretch the legs, get some fresh air, hang out some washing, or empty the dishwasher. Helps to keep you in check, as much as I love my job and want to do more, there is only so much time during one's day.

With my staff, I have calendar appointments booked to catch up with at least one person through a phone call or a message each week. This hasn't been as regular as usual, but I would like to think that

our approach to development is more inclusive than divided e.g., planners have their job but no consideration of impacts upon building officers etc.

I hope we can become smarter in the way we handle the consenting process with it being simplified and easier to understand, not just for us but for the customer too.

In terms of consenting, I would like to see a huge overhaul in the way we do things, case in point, RMA reform and the building act reform. For too long there have been two different legislations. One impacts another, but we cannot combine them together which confuses our customers.

With the number of houses, we are producing, we should have



my team knows that I have time for them. Whether they engage with me or not, the opportunity is there.

**Q. From your experience, where do you see our industry heading?**

Good question, I hope it heads in a good direction towards sustainability. Can we also make sustainable choices and houses that are not just warmer but smarter too?

In my lifetime I would like to think that legislation might become more compatible – RMA & BA rather RMA vs. BA – and that

considered the bigger picture. Let's get together and work through this whole consenting process and give them one or two consents out of the five they currently need.

**Q: What are you excited about in the future?**

The prospect that the next generation can make an impact on change if I continue to play my part. I'm excited to see where the direction of the regulatory service is heading and know that we're in good hands when BOINZ has some involvement.



*He aha te mea nui o te ao?*

*He tangata, he tangata, he tangata.*

**Q: What advice would you give someone looking to start their Building Control career?**

Firstly, I was taught as a young man to remain humble! Your humility can really shape your perspective on how you see people and their circumstances. There has got to be a time when you are wrong, and you must apologise for that. What is not okay is when you apologise for no reason, that's not humility. The humility I am talking about is when you can listen to someone's opinion and consider what they are saying instead of thinking "I know it all" that won't get you far in my opinion.

The second piece of advice is to stay teachable or adaptable. Change is inevitable, we are always going to encounter change whether we like it or not. We can either understand it, learn from it, or see how we can play a part in it, rather than do the opposite. Mindsets change, management change, what we can do is go with the change and own some of that.

**Q: What is your advice to someone who may want to be on the branch executive?**

You will never know the extent of your capabilities until you are thrown into the deep end. The branch executive role doesn't have a job description. People assume the role could be bigger than what it is.

You always have support from the team, plus, you have a National office I can't take all the credit. It is not scary at all. Like I said you won't know what you are truly made of until you pursue it. The branch chairs and secretaries are there to support you, and we are already supported by BOINZ. Chat to anyone at your branch and just

start the conversation. It is great being a part of it and seeing the members being really engaged. One of my favourite whakatauki (proverb) is:

*He aha te mea nui o te ao? he tangata, he tangata, he tangata*

*What is the most important thing in the world? It is the people, it is the people, it is the people.*

**Q: Do you have any final words?**

Shout out to the Auckland branch's past executives for what they have done and allow me to continue today. If it weren't for them, we would not have the strong membership we do. Branch meetings are like a tree of knowledge where we can pick its fruit.

---

*We would like to thank Daniel Harrison for being in the spotlight. Do you know a great candidate for Spotlight on a Member? Please email [marketing@boinz.org.nz](mailto:marketing@boinz.org.nz)*



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# Sourcing Sustainable Steel

## Do You Know Where It Has Come From?

**Sustainability in business is a focus across most industries and is certainly coming to steel. An astonishing 7% of global CO2 emissions are generated by the steel industry, but producers are working hard to shrink this number which should fall in coming years with the introduction of new materials, technologies, and processes.**

Sustainability ratings are already a major component of the attractiveness of construction projects, requiring sustainability certification alongside product certification. Designers, specifiers and steel procurers, construction firms, governments and the public all want to be certain that the steel in their homes, high rises, and infrastructure projects are high quality and sustainable.



### How can they ensure this?

There are various sustainability certification schemes available, but to choose you need to understand what these schemes are measuring. Sustainability currently has no specific parameters – most of these schemes are self-assessed or based on ISO 14001:2016 Environmental Management, which focuses on documented systems rather than assessing actual activity and product

output. Furthermore, they don't provide an adequate mechanism for product traceability to ensure what's been certified is what you get. Increasingly, such schemes are therefore not considered sufficient to verify sustainability claims. They disadvantage specifiers and consumers by certifying suppliers who may not be truly sustainable.

Sustainability must go beyond emissions as well. For a business to be sustainable, it must not be causing corrosive damage to any part of the supply chain. This includes human rights and labour conditions in sourcing and production, such as ethical business practices; modern slavery; fair supplier treatment; and the socioeconomic impacts of the steel value chain – in addition to the environmental impacts, including circular economy and climate change, pollution and depletion.

It is possible – and financially and ethically worthwhile – to ensure the steel you use is sustainable. Look for an independent, internationally recognised scheme that measures all sustainability criteria on an annual basis, and traceability. The scheme should align with the most universal definition of sustainability - the UN Sustainable Development Goals, 'The Global Goals'. Independence is crucial to guard against producer bias, misrepresentation or dilution of the expected certification process. Annual assessment is crucial to check standards are maintained, but also to help steel producers and processors monitor and improve their sustainability performance, enabling them to transition from current performance levels to aspirational 'sustainable' steel production of zero-emission steel production. A good scheme does more than pass or fail sustainability efforts, it recognises and incentivises levels of performance exceeding mandatory levels, further strengthening industry efforts to combat emissions.

Above all, a good scheme helps building designers, specifiers and customers make informed decisions

and confidently source steels produced under high standards of environmental, social and ethical management – combatting ESG confusion through the supply chain.

### About ACRS

Established in 2001 to provide New Zealand and Australia with independent, comprehensive, and credible certification of construction steel products, the Australasian Certification Authority for Reinforcing and Structural Steels (ACRS) is supported and endorsed by peak engineering and construction groups including BOINZ, HERA, Engineers Australia, Master Builders Association, SRIA, and the Housing Industry Association.

ACRS is internationally recognised as the leader in conformity assessment of construction steels to New Zealand and Australian Standards. ACRS owns and administers four consumer-oriented, independent, expert, not for-profit, third-party steel certification schemes:

- Product Conformity,
- Product Traceability,
- Sustainability Certification,
- Quality Systems.

ACRS has conducted audits and issued certificates to over 80 suppliers from more than 20 countries for construction materials supplied to AS, NZS, EN and BS Standards as well as a range of Government specifications, providing the New Zealand and Australian construction industries with the widest range of independently verified construction steels available today.

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**By Dr. Andrew Wheeler PhD., B.E., CPEng, FIEAust., Executive Director, Australasian Certification Authority for Reinforcing and Structural Steels Ltd**

# Zero Carbon Steel Program

The Zero Carbon Steel Program Promises To Advance Sustainability By Reducing Net Emissions In Steel Construction

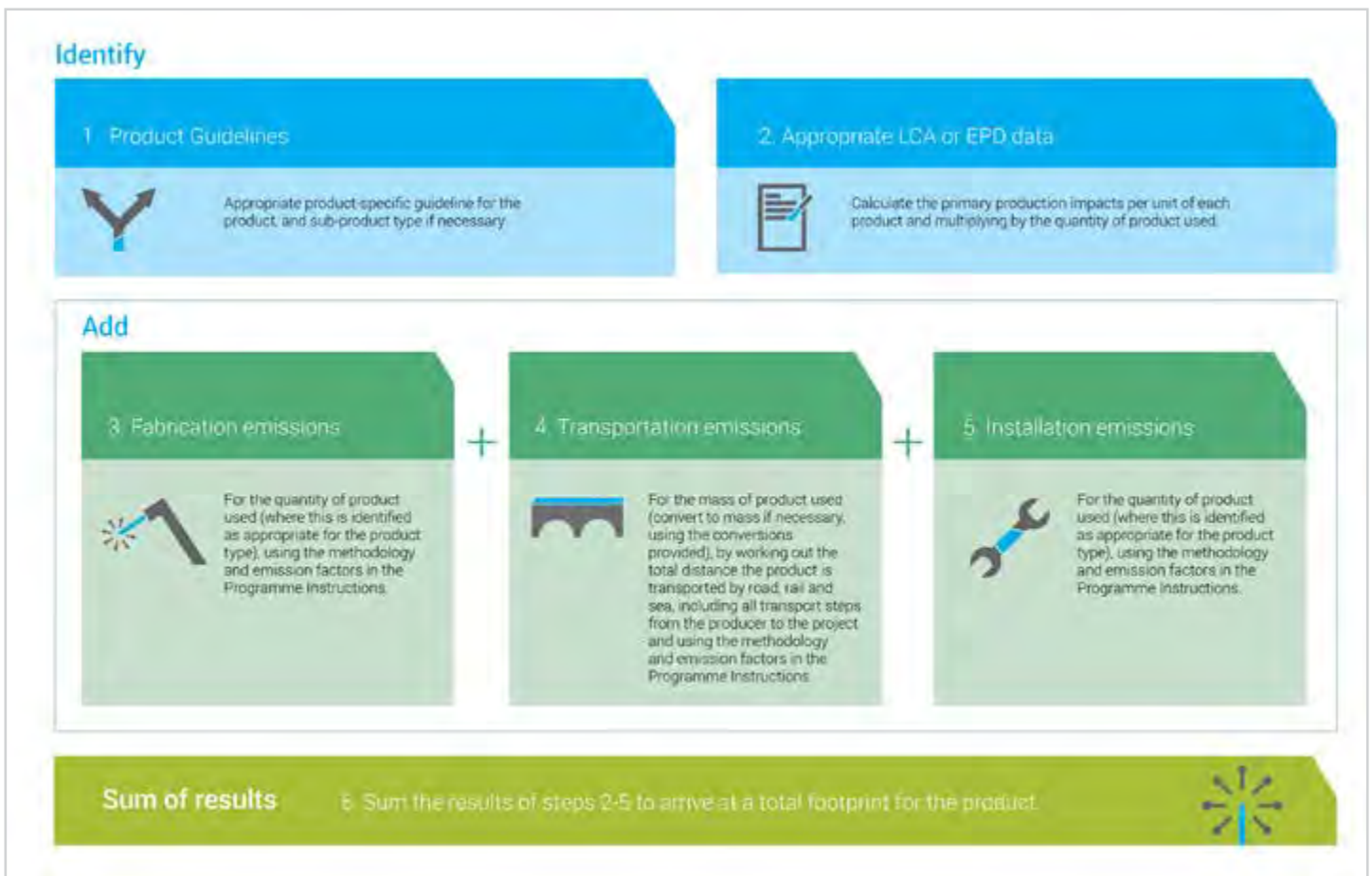


*New Zealand has committed to a net zero carbon target by 2050*

A new zero carbon steel program called Hōtaka Whakakore Puhanga Waro has launched marking a global first for the construction sector, who can now offer a zero carbon steel option for most steel products used in New Zealand. As part of the offsetting program, HERA commissioned thinkstep-anz to develop a robust set of program rules to determine the underlying requirements for calculating the emissions for offsetting to ensure integrity of the program.

HERA has partnered with Ekos, a leader in carbon management and environmental financing, to administer the offsetting process. Emissions are offset via Ekos through the calculator itself with the offsets being sourced from native forest projects in the Pacific Islands. These projects deliver multiple biological, ecological and social co-benefits beyond simply carbon sequestration.

New Zealand has committed to a net zero carbon target by 2050, meaning the reduction of the steel



<sup>1</sup> <https://www.wellingtonuniventures.nz/portfolio/green-steel/>

industry's emissions is important, but that this is only part of the challenge.

Steel and iron production is the single largest industrial source of CO2 emissions in New Zealand, representing 55% of industrial emissions and around 5% of total gross emissions. Carbon is primarily used in the steel-making process as a reductant, rather than an energy source. Although there is research into alternative reductants (e.g. hydrogen), currently no commercially viable alternative exists for coal.

There are many research projects looking at green steel options using alternative reductants, including work supported by New Zealand Steel, at Victoria University of Wellington, looking at hydrogen as an alternative reductant. While that technology is not yet available, it is important for the industry to utilise carbon offsetting as a mechanism to reduce net emissions.

The construction industry is having a lot of conversations around carbon in steel, with MBIE having developed two emissions mitigation frameworks under the Building for Climate Change Programme – the building and construction sector's contribution to New Zealand's goal of net zero carbon emissions by 2050. MBIE has proposed new reporting requirements and caps on emissions from building operations and on whole-of-life embodied carbon to drive emissions reductions. HERA expects the program to change the conversation around the carbon performance of steel, with the sector knowing that a reliable option for net zero carbon steel now exists.

The program includes coated roofing and cladding, rebar used in concrete, light-gauge steel framing, heavy structural steel and stainless steel, wherever reliable EPD or LCA data was available.

---

*For more information on Hōtaka Whakakore Puhanga Waro and to access the program, visit <https://www.hera.org.nz/carbon-offsetting-programme/>.*

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## INDUSTRY ADVICE

# Producer Statements

**Almost fifty percent of the questions I receive are about Producer Statements. This article addresses the most common questions and lets you know what we are doing, where possible, to address them permanently.**

## Can Non-CPEng Sign A Producer Statement?

BCAs rely on producer statements to confirm that someone with a recognised competence level has reviewed the calculations and drawings attached to them. Typically, CPEng status demonstrates that level of competence. While anyone can sign a producer statement, most BCAs will not accept it unless the author is CPEng.

The New Zealand Building Code supports this in section 1.0.3(e) “An engineer with relevant experience and skills in structural engineering shall be responsible for the interpretation of the requirements of the Standards cited when used for building structure design. A structural engineer who is chartered under the Chartered Professional Engineers of New Zealand Act 2002 would satisfy this requirement.”

People often ask about Chartered Member of Engineering New Zealand (CMEng) vs CPEng. Initially, Engineering New Zealand brought in CMEng because it was understood MBIE would recommend repealing the CPEng Act. CMEng is a mark of competence, and engineers who are

Chartered overseas can apply for it as mutual recognition of learning. BCAs should be aware that a CMEng is not always LBP, whereas a CPEng is.

In any event, Engineering New Zealand believes that it is good practice for the design of all complex works to be reviewed by a Chartered Professional Engineer.

## When Should A PS4 Be Issued?

An engineer should only issue a PS4 when their part of the project is complete. They should not be asked for a PS4 for each stage of the project, that is the role of construction monitoring reports. It is reasonable for a BCA to request a copy of the construction monitoring report before they approve the next stage. It is also reasonable for the BCA to ask for copies of the reports to be submitted with the PS4.

Engineering New Zealand has been working on providing good practice examples for BCAs and engineers. We're planning on having these live on the website in the next couple of months. Before then, go to the Engineering New Zealand website and search for documentation. The page contains some examples you can reference.

## Can An Overseas CPEng Sign Off Work In NZ And Vice Versa?

Not usually, CPEng (NZ) status shows that you have sufficient knowledge of the applicable New Zealand Standards, Codes and Acts

to undertake complex work. It also is a qualification that NZ BCAs and regulators can have confidence in. That is also the case if engineers wish to submit work overseas, they usually need to contact the equivalent of Engineering New Zealand in the country they are to work in and enquire about certification there.

## All or Part Only

Engineers rarely undertake the design of every part of a building relating to a particular clause of the Building Act. As a result, they typically tick 'Part only'. I recently wrote an article on this which you can see on our website: [engineeringnz.org/news-insights/producer-statements-all-or-part-only](http://engineeringnz.org/news-insights/producer-statements-all-or-part-only).

## Defining Bounds Of Competence

As a CPEng, only you can judge if undertaking work is within the bounds of your competence. If the engineer hasn't undertaken that type of work in a while, or there are unusual aspects to it, it is always a good idea to discuss the work with another engineer and ideally arrange for a peer review. Typically, however, an electrical engineer would not be competent to carry out structural work and vice versa.

If you are in doubt as to whether the engineer is competent to undertake the work, you can always request a peer review from an engineer you nominate. You can learn more about

engineers' bounds of competence by searching for the article on the Engineering New Zealand website.

### Digital Signatures

We suggest being very careful with digital signatures. While it may take a little more time to sign a producer statement manually, consider the ramifications if people use your signature without your permission. How could you prove you didn't sign it, thereby taking liability for the design?

### Engineers Signing Off Work On Their Own Property

An engineer signing for work on their own property is a conflict of interest. In the Code of Ethics, number five is Behave Appropriately; the section deals with conflicts of interest. If they are doing work on their own property, I recommend

having another engineer do a peer review (and PS2) of the design work and also carry out the inspections.

You can find the Ethical Conduct Practice Note here: [https://d2rjvl4n5h2b61.cloudfront.net/media/documents/Practice\\_Note\\_8\\_Being\\_Ethical.pdf](https://d2rjvl4n5h2b61.cloudfront.net/media/documents/Practice_Note_8_Being_Ethical.pdf) or search for the code of ethical conduct on the website.

### B2

There have been many issues regarding B2, and whether engineers should sign for it on a producer statement. The answer is typically no; when following New Zealand Standards, they provide a compliance pathway to B2. We have published the B2 Durability Guidance and distributed it to most Building Consenting Authorities (BCAs) throughout the country, and you can download it from the Engineering New Zealand

website: [www.engineeringnz.org/documents/891/B2\\_Practice\\_Advisory\\_Apr\\_2020.pdf](http://www.engineeringnz.org/documents/891/B2_Practice_Advisory_Apr_2020.pdf).

### Conclusion

This article has covered the most common questions asked in my time at Engineering New Zealand. We revised the producer statement series in November 2021 and encourage BCAs to check they are accepting the most up to date versions.

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*In the meantime, if you have questions or need access to the documents discussed here, please email [martin.pratchett@engineeringnz.org](mailto:martin.pratchett@engineeringnz.org) or call 027 603 3310.*

# TRUE OAK

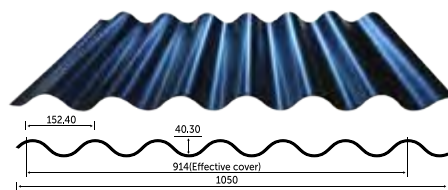
## DEEP

A return to the deeper corrugate



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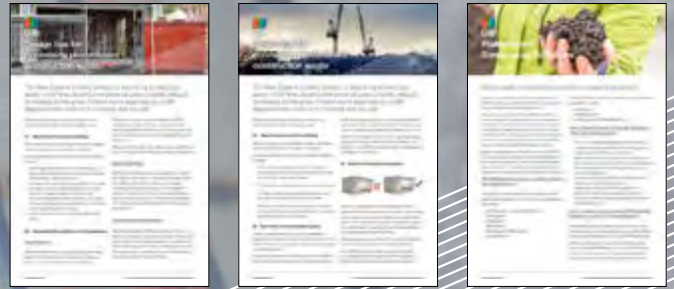
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# Sustainability updates



Environmental sustainability continues to be a high priority at Winstone Wallboards. Throughout 2021 we've been working to improve our sustainability position particularly around improving the availability of plasterboard offcut recycling options.

## GIB® Plasterboard Offcut Recycling

Working with a diverse range of waste collection businesses from around the country plasterboard offcut site collection services are currently available in Auckland, Nelson, Christchurch and Queenstown with further regional services on track to be introduced throughout 2022. There are also a growing number of regional council offcut collection points at landfill sites as well as a growing number of composting companies looking to accept plasterboard offcuts into their operations.

Why does this all matter? Because not only does it reduce the amount of waste going to landfill, but the gypsum that's extracted from the plasterboard offcuts is reused for compost and other agricultural products.

To learn more about recycling options for GIB® plasterboard including a list of current providers go to [gib.co.nz/sustainability/](http://gib.co.nz/sustainability/)

## Minimising Plasterboard Waste

Most of us know that plasterboard offcuts are among the largest contributors to site construction waste, and to effectively tackle the problem everybody has a part to play. Clear ownership and accountability for waste minimisation, both during design and construction, is essential, and reducing the amount of plasterboard waste created on site is a vital piece of the puzzle. That's why our team has developed a series of practical steps to help installers

with 'Onsite Tips' and designers with 'Design Tips' to support the building industry minimising construction waste especially as landfill disposal costs continue to increase year on year.

## Composting Guidelines

Why you should consider including Gypsum into composting products is outlined on our 'Plasterboard composting guidelines'. It covers best practice guidance through to the many benefits composting brings

## Environmental Certifications

Winstone Wallboards' holds a number of environmental certifications to help support your project including an Environmental Product Declaration (EPD) for GIB® plasterboard and other certifications such as Global GreenTag and Declare. In 2021, GIB Aqualine®, GIB Weatherline®, GIB Barrierline®, GIB Toughline® and GIB Toughline® Aqua became the GECA (Good Environmental Choice Australia) Ecolabel certification which is a recognised ecolabel on both sides of the Tasman.

Moving in to the New Year and reflecting on 2021, we take great pride in our achievements and new partnerships. But the journey is far from over, we look forward to having an even greater impact on all things green in 2022 and beyond.

# The Cardrona Cabin by Abodo

This cabin showcases New Zealand material, detail and craft in the alpine environment. Sited in the Cardrona Valley between Wanaka and Queenstown, the building demonstrates the Abodo range of thermally modified timber products in practice: cladding, structure, linings, flooring, fenestration, joinery, furnishing and fence posts showcase the products.

The gable form is derived from the Central Otago stone shed, though the traditional appearance has been abstracted. Elements that normally communicate building scale are absent, the form is presented as a monolith of rigorously set-out battened timber, floating on a recessed piled foundation. Slight variations in the batten spacings signify windows, a single street-side door is sheltered by a steel arch.

In contrast to the restrained exterior materiality, the interior structure and surfaces are a rich articulation of New Zealand carpentry codes and builders craft, using a wide array of Abodo timbers and finishes.

Extensive use of timber throughout - a few carefully crafted details include:

- Façade and Roof: Abodo Vulcan timber screening, finished in Sioo:x, a silicate-based wood finish designed to silver off.
- Entry Platform: Board formed concrete with “bush hammer” finish.
- Structure: Abodo Vulcan timber in exposed studs and rafters in raw finish combined with exposed steel portals.
- Interiors: Abodo Vulcan Panelling TG9 – raw finish.
- Flooring: Abodo Thermally Modified Silver Beech, finished in Whittle Evolution hard wax oil.
- Kitchen: Abodo Vulcan facings, with Abodo Thermally Modified Silver Beech bench top, finished in Rubio Monocoat Intense Black.



No longer can we use slow grown, imported timbers to build premium homes and structures. This building is a showcase of what can be achieved when we think differently - it is designed to inspire others.

Abodo timbers are sourced from rapidly renewable FSC® certified New Zealand plantations that help to mitigate climate change by absorbing vast amounts of carbon.

Using state-of-the-art thermal modification and grain orientation technology, we can craft beautiful timbers that stand the test of time, reducing the carbon footprint of buildings, without disadvantaging future generations.

## Reducing Carbon Footprint – A Case Study: Cardrona Cabin

Over 9 tonnes of carbon is stored in the Vulcan timber elements alone, dramatically offsetting the small amounts of concrete and structural steel used in the building.

- [Read more here](#)
- [Download Abodo's Environmental Product Declaration \(EPD\) here](#)

## Image galleries:

Please note, photography credits are required (as below):

- Chris Lea: see images
- Simon Devitt: see images
- Brad Willetts: see images

## Video links:

- [Trailer: see link](#)
- [Interview with architect, Assembly Architects: see link](#)

## Additional information:

- [Vulcan Screening](#)
- [Vulcan Panelling](#)
- [Sioo:x Natural Wood Coating](#)
- [Architect: Assembly Architects](#)
- [Builder: Dunlop Builders – Wanaka](#)
- [See full project](#)



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# J-FRAME

## EXPOSURE TO THE ELEMENTS

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Therefore J-Frame, laminated veneer lumber [LVL] “can be used in applications involving extreme long-term exposure to weather or wet and damp conditions. But we always recommend keeping it dry when possible.

Have confidence in the structural capacity of your framing, even after extended periods of weathering.

For more information go to [www.jnl.co.nz/product/framing-j-frame/](http://www.jnl.co.nz/product/framing-j-frame/) or scan the QR code:



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

# Promoting Career Pathways

For the past year BOINZ has been working closely with BCA managers in identifying opportunities and promoting pathways into the BCA environment. This piece of work began by understanding what a recruit may look like and what their existing development pathway would involve.

Councils advised us there are generally four different types of recruits:

1. New Cadets.
  - These go onto the Diploma of Building Surveying with some Councils offering cadetship programmes
2. Those that have a Regulation 18 qualification but no experience.
  - These go on to complete BOINZ competency-based courses

3. Those that have a Regulation 18 qualification and experience in another area such as Construction Management or Architectural Drafting.
  - These go on to complete BOINZ competency-based courses
4. Those with no Regulation 18 qualification but experience in another area such as a Certificate in Construction.
  - These go on to complete the Diploma of Building Surveying

The big challenge across all these new starts is upskilling them quickly and effectively in order for them to add value to the team as soon as practicable. This year BOINZ has piloted and launched the learning Development Pathway Entry to BCA – Part one and Entry to BCA - Part two.

These programmes are a collaboration with Councils to increase the competency of new starts effectively and efficiently. They will also be used to promote a clear development pathway for those looking to enter the industry. It is intended that these will also support new and existing cadetship programmes. What this looks like will be shaped by Council input.

*The first intake of the Entry to BCA-part two commences at the end of August. Get involved and contact [training@boinz.org.nz](mailto:training@boinz.org.nz) for more information.*

## Dates confirmation

### Entry to BCA - Part two

<b>Week 1</b> 22 - 26 August	2.5 days of training - Chris Woods <ul style="list-style-type: none"> <li>▶ Building Controls 2 days - 22 &amp; 23 August</li> <li>▶ Accreditation 0.5 days - 24 August (AM)</li> </ul> Practical application of technical learning: 2.5 days - 24, 25, 26 August
<b>Week 2</b> 29 Aug - 2 September	2.5 days of training - Chris Woods <ul style="list-style-type: none"> <li>▶ Processing 1.5 days - 29 &amp; 30 August</li> <li>▶ Inspection 1 day - 31 August</li> </ul> Practical application of technical learning: 1 & 2 September
<b>Week 3</b> 5 - 9 September	4 days of Training - Peter Downey <ul style="list-style-type: none"> <li>▶ Plumbing and Drainage - 5, 6, 7, 8 September</li> </ul>
<b>Week 4</b> 12 - 16 September	Practical application of technical learning Plumbing and Drainage
<b>Week 5</b> 19 - 23 September	Structure (NZS 3604 & Light Steel) 3 days of training - Chris Wood <ul style="list-style-type: none"> <li>▶ Structure - 19, 20, 21 September</li> </ul> Practical application of technical learning: 22 & 23 September
<b>Week 6</b> 26 - 30 September	2 days of training - Chris Wood <ul style="list-style-type: none"> <li>▶ D1 Access &amp; F1 Safety of Users: 1 day - 26 September</li> <li>▶ H1 Energy Efficiency: 1 day - 27 September</li> </ul> Practical application of technical learning: 28, 29, 30 September

<b>Week 7</b> 3 - 7 October	2 days of Training- Chris Randell <ul style="list-style-type: none"> <li>▶ B2 Durability - 3 &amp; 4 October</li> </ul> Practical application of technical learning: 5, 6, 7 October
<b>Week 8</b> 10 - 14 October	2 days of Training Chris Wood <ul style="list-style-type: none"> <li>▶ E2 Weathertightness - 10 &amp; 11 October</li> </ul> Practical application of technical learning: 12, 13, 14 October
<b>Week 9</b> 17 - 21 October	2 days of Training - Trent Fearnley <ul style="list-style-type: none"> <li>▶ Fire - 17 &amp; 18 October</li> </ul> Practical application of technical learning: 19,20,21 October
<b>Week 10</b> 25 - 28 October	2 days of Training Chris Wood - Note Labour day <ul style="list-style-type: none"> <li>▶ Services and Facilities - 26 &amp; 27 October</li> </ul> Practical application of technical learning: 26, 27, 28 October
<b>Week 11</b> 31 Oct - 4 November	Case study work - Chris Wood available for mentoring support
<b>Week 12</b> 7 - 11 November	Date TBC - Presentations of Case Studies and Graduation

# From Builder To BCO

**Attracting and retaining good people is difficult in any industry in recent times with Building Compliance being no exception. Councils are crying out for experienced people, but with applicants scarce, employing and training new recruits is an ongoing process! The question then is, how do we attract applicants with industry knowledge and experience to make it easier for them to make the move?**

BOINZ followed Matt Harrison on his journey from Builder to BCO to find out just what this process looks like from an applicant's perspective, where the roadblocks were and what or who assisted him along the way.

Matt Harrison is a Licenced Building Practitioner with a National Certificate in Carpentry from BCITO and over 20 years of hands-on building and project management experience. Earlier this year he contacted BOINZ to enquire about working opportunities that existed within this area and what training he could undertake that could help secure him a role as a Building Inspector within a Council.

"I felt it was time to get off the tools. I didn't really want to retrain and with my background in building with over 20 years of experience navigating the consenting process, working as an inspector was a natural

progression" says Matt. "I thought my background would give me an advantage but was surprised to find that without an existing Regulation 18 qualification, I may have to wait up to a year for an intake of Cadets at which time I would need to apply again".

As he was unable to complete the Diploma of Building Surveying until he secured a role in Council, he enrolled in the Diploma of Project Management through the Open Polytechnic. I was told I would have a better chance if I had or was working my way towards a Regulation 18 qualification which the diploma course did. At the same time, he contacted BOINZ and asked for advice on alternative training options that would show a BCA he was committed to professional development within the industry.

We invited Matt to join the BOINZ Entry to BCA – Part one pilot. Although this is designed for those with very little knowledge of the industry it provided him with further evidence of his commitment to upskilling and gave him further acknowledgment he was on the right path.

Matt explains: "I was open to trying anything that would progress me quickly and help open doors. Entry to BCA - Part one, gave me further exposure to those that were already in the industry and an

opportunity to provide feedback on a development programme. I was lucky enough to be able to complete it within a month, which meant I could reference it on future applications."

Matts says that while the Diploma in Project Management wasn't really what he wanted to do, it did help him land an inspector role with a Council, starting mid-June. "That and the BOINZ Entry to BCA course showed the Council that I was committed to getting into the industry. I am now able to swap from the Diploma of Project Management to the Diploma in Building Surveying and I am really looking forward to moving into an Inspector role."

We asked Matt what he felt the industry could do to attract more people, to which he responded: "My main challenge was identifying what would assist me in achieving a role as quickly as possible. Ideally, it would have been helpful if every Council promoted a consistent and clear pathway so those looking at coming in can measure what they have against what is needed. Being specific in job advertisements and showing people that this is an industry that supports and develops its people needs more effort. I'm confident this would contribute to making it easier and more attractive for prospective BCOs to make the move."



# Building Future Leaders



Dunedin cohort Year 1 students 2020. All went on to complete their diploma in 2021.

**Future Skills Academy lecturers Sam Hay and Carl Graham are thrilled to be delivering the first year of the two-year NZ Diploma in Building Surveying (Level 6).**

The industry-driven program will see them teaching the following six specialist subjects in 2022 to upskill students for Regulation 18 of Building (Accreditation of Building Consent Authorities) Regulations 2006:

- Regulatory Environment- History and the Legislative Framework,
- Building Consent Authority- Your competency and the Regulatory Framework,
- Building Construction Materials & Systems- Common principles of constructing buildings,
- Building Code & acceptable solutions (Small)- Analyse building consent applications for small buildings,
- Plan Processing (Small)- Process small building plans, specifications, and other documentation,
- Site Inspections (Small-Inspect and evaluate buildings and building work).

Future Skills Academy has gradually transitioned from delivering the diploma requirements with Otago

Polytechnic to our specialised team of lecturers offering the diploma today. Year One lecturers Carl Graham and Sam Hay are backed by Year Two lecturers Patrick Schofield, the Head of Department, and Year Two senior lecturer Peter Sparrow with his area of Building Regulatory Environment. Collectively the four have more than 145 years of collective experience in the building industry. They are driven to be the best they can be for their students to align with the values of Future Skills Academy. With this goal in mind, they have all embarked on a journey of academic improvement. They are enrolled in a Graduate Diploma in Tertiary Education (GDTE) through the Otago Polytechnic.

The experienced team values the disciplines of what a New Zealand Qualifications Authority-approved course requires. This includes the importance of:

- Effectively writing assessments that align with students' core Graduate Profiles,
- Understanding the concept of Pre-Moderation,
- Understanding the concept of post-Moderation,
- Understanding the concept of Peer Review,
- Aligning learning outcomes with Graduate Profiles,

*Both Sam and I feel privileged to be able to support the New Zealand built environment through creating strong skills and leadership qualities in our current and future students*

- Being able to understand the concept of Formative Activities versus Summative assessments,
- Mastering new Learning Management Systems platforms such as Moodle,
- Grasping the full suite of the Office 365 platforms and helping students to navigate their council systems with our structures to give learners the best possible experience.

With Patrick's guidance, the team has adopted the Alpha building consent processing system. The lecturers have set up Future Skills Academy as a teaching Building Consent Authority (BCA) to offer a BCA platform that teaches students how to process effectively and align the building codes to specific components in the build process.

"The educational concept is the constructive alignment that scaffolds a student into their personal career choice and relates to the daily functions of their job," Carl says. The return on this investment is already showing dividends judging by the quality of the assessments and a collective agreement that leads to graduates who are well prepared for their role.

"I am immensely proud of the past students who have been incredibly patient and kind as the whole of the Building Consent Authorities, along with us as a teaching institution, has traversed the frustration of Covid-19 on our communities," he says. "Well done to you as Building Consent Authority managers as well as former and current students."

Carl says he and Sam are excited to be supporting and guiding their current students- and future leaders- on the pathway towards earning the diploma. "We are proud to host 106 Year One students from a diverse range of councils across New Zealand. These employment students hail from Christchurch, Westport, Northland, Taupo, Hastings, Gore, Palmerston North, Wellington, Auckland, Tauranga, Whakatane, Horowhenua, and Hutt city."



The Hawke's Bay cohort doing the Site Inspections paper 1-5-6 in 2021.

Among these dedicated learners is a group of 27 students known as an in-class cohort. This class learns the programme after hours on Tuesday and Thursday evenings as well as Saturday mornings. These students do not work at a council but have a mentor relationship with a local BCA to support their authentic work experience logbook requirements.

"Both Sam and I feel privileged to be able to support the New Zealand built environment through creating strong skills and leadership qualities in our current and future students," Carl says. "I often think of the irony of our name Future Skills Academy New Zealand. We continue to develop a full range of women and

men alumni from diverse ethnic backgrounds who live and work around New Zealand for the future of our communities with our mission being, 'Your Future, Our Skills.' I then think of the introduction of the degree program coming soon for the Building Surveying stream and again am incredibly thankful that we are supporting a positive change that is generational for the BCA community."

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***Want to find out more? Get in touch with us today by emailing [info@futureskills.co.nz](mailto:info@futureskills.co.nz), visiting our website [www.futureskills.co.nz](http://www.futureskills.co.nz), or phoning 0800 888 001.***



Queenstown Cohort Year 1 students 2021



## WELLBEING

# Mental Health in Workplace

## What is the Role of Leadership?

**A mentally healthy culture in the workplace is akin to a strong foundation for a building: both are preventative measures which minimise the risk of future damage. Leadership – including those most senior as well as frontline managers and supervisors – play a crucial role in the ongoing shaping of these cultural foundations and can be a powerful influence on the mental wellbeing of their workers.**

At a bare minimum, these foundations need to be compliant with the relevant standards of quality under the letter of the law. In New Zealand, workplaces and their leaders are responsible under the Health and Safety at Work Act 2015 to ensure they are protecting the mental health of their workers

so far as reasonably practicable. In addition to this, leaders have an opportunity to look beyond the bare minimum to develop a culture that not just protects the wellbeing of workers – but helps them to thrive. By doing so, workplaces fulfil their legal and moral obligations towards their workers and can also see uplifts in staff engagement, productivity, quality of work, and reduced absenteeism levels.

So, how do leadership go about shaping these foundations? At its core, a mentally healthy culture is one where workers feel that leaders demonstrate a genuine concern for their wellbeing in both words and actions. This involves leadership openly outlining their commitments to workers, and



*At its core, a mentally healthy culture is one where workers feel that leaders demonstrate a genuine concern for their wellbeing in both words and actions.*

driving actions aimed at managing risks to and promoting their wellbeing. This requires leaders to have an understanding of mental health and wellbeing at work and the types of interventions that can make the biggest changes. The more senior the leader in the organisation, the bigger the influence they will be able to have in how the work is designed (e.g., the amount of work, where it is performed, and how), and the more they will be looked to by workers as role models of behavioural standards that become normalised and acceptable (e.g., whether it is safe to raise issues and that they will be heard by leaders without judgement).

Good practice also involves listening and engaging with workers. Leaders should have regular formal and informal mechanisms to engage with workers to understand the mental wellbeing impacts of their

work. These can be informal, in-passing conversations, through to dedicated consultation with people doing the work, or formal audits, reviews, surveys, and assessments. It's beneficial for leaders to have the skill to navigate these conversations and to respond appropriately to what gets raised by workers. Leaders are not expected to have a level of mental health knowledge to rival that of a therapist, but they do need to demonstrate a level of vulnerability to create the space to hear feedback that is confronting – particularly when it is about them. When that feedback is seen to be taken seriously and acted upon, this type of vulnerability will help to fortify the cultural foundations.

When leaders take responsibility for laying the foundations for mentally healthy cultures at work, there will be less Kiwi workers occupying “damage-prone buildings”. That will give everyone a greater chance to thrive at work and at home.

*Written by David Cullen - Senior Advisor, Mentally Healthy Work at WorkSafe New Zealand*

*David is a specialist in mentally healthy work at WorkSafe with 10 years of experience in risk management and human resources roles across a variety of industries. David has an academic background in management and psychology and is passionate about helping people and communities to live well and meaningful lives.*

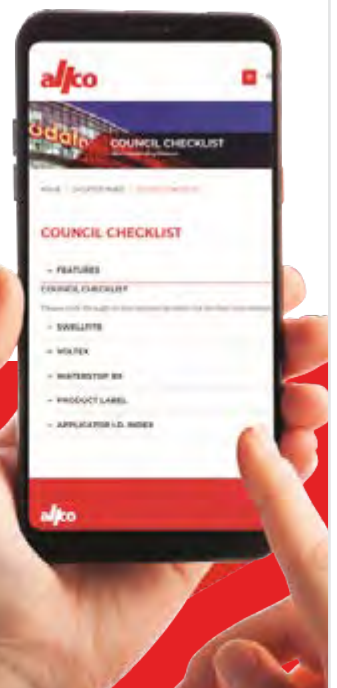
*For further information please contact Rachel Bowen, Engagement Lead (Construction), at WorkSafe New Zealand: [rachel.bowen@worksafe.govt.nz](mailto:rachel.bowen@worksafe.govt.nz).*



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## BELOW-GROUND WATERPROOFING

# Getting Your Tanking Waterproofing Right, The First Time

When designing below-ground waterproofing (also referred to as tanking), a crucial but often forgotten consideration is the water control system after construction is complete. Depending on where the water table is located, hydrostatic condition may be present, and the conditions/pressure needs to be detailed with great attention to prevent future water ingress.

### Designing, Planning And Selecting The Right Membrane Is Key.

It is important to consider if the walls are constructed of block, pre-cast panels, in-situ concrete or piles (secant or contiguous). Are any of the neighbouring walls in close proximity, e.g. 100mm? The best methodology and best-suited membrane can be decided by answering some of these questions.

The perimeter walls may differ in construction, with one close to the boundary of the neighbouring building, the next having good access and not totally below ground. These variations and transitions also require special attention when detailing to ensure compatibility of products. The answers to these questions may provoke additional ones.

Due to the many and varied complexities of design, it is extremely important to gain as much information prior to design completion. Combined meetings with architects, engineers, geo-technicians, contractors, and in the case of waterproofing; a good technical advisor, provides the knowledge to prevent excessive design alterations after construction has commenced and that's why Allco has a dedicated TA team (Technical Advisors) offering ongoing support throughout all the stages of the project.

### Water Control Systems

If good water control system in place (for example waterproofed retained walls applied with drainage sheet, backed with a good healthy depth of drainage material falling to drain coils at the base of the walls), in conjunction with sub-floor drains (where necessary) all feeding or pumped to stormwater, hydrostatic conditions should no longer be a problem once the construction is completed. One important aspect to mention in this water control design is where the drain coil is located. If the drain coil sits too close to the internal finished floor level (FFL), then in one-off rain events,

this location could experience temporary hydrostatic conditions prior to draining away, causing water ingress. Locating the coils well below these finished floor level will allow these vulnerable areas sufficient time for drainage to occur.

### Revisiting Design And Costing

Allco offers assistance with design, specification and compliance, reinforcing the important to revisit the design and costings of the project particularly around below-ground waterproofing, prior to build commencement.

From the initial build concept through to build commencement — including discussions with the client, architects, engineers and contractors — areas of the design sometimes are altered. Revisiting below-ground waterproofing at this stage can help ensure all parties are on the same page and avoid expensive and sometime hard to remedy mistakes.

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*For all advice and support contact Allco's technical team on (09) 448 1185 or email [tech@allco.co.nz](mailto:tech@allco.co.nz)*



# Auckland Woman Named Young Achiever of the Year at National Construction Industry Awards

D&H Steel Construction employee Kelly Jeffries was recently recognised as New Zealand's top young achiever in the structural steel industry, becoming the first woman to win the award. It's just one of many awards the West Auckland company won at the SCNZ Excellence in Steel Awards on Friday night.

Steel Construction New Zealand's (SCNZ's) Young Achiever of the Year award celebrates those whose skills, drive and willingness to learn has helped them to achieve outstanding outcomes. It recognises well-rounded people who demonstrate not only talent, but display traits important to the industry – commitment, innovation and agility.

Jeffries joined D&H Steel fresh out of school in 2011. Starting as a frontline administrator, she showed a high level of nous – it was clear that Jeffries was capable of much more.

"I like to keep busy so I started learning other people's roles," she says. "I began by teaching myself document control and progressed from there."

So, in just two years she was promoted and became the go-to person in the production office.

"I've always tried my best with everything I've done," she says. "I love a challenge and if I see a need, I try to fill it."

D&H Steel managing director Wayne Carson says that Jeffries is organised and applies her highly analytical mind to solving problems. "Kelly's attitude, commitment, and desire



to learn and develop has got her to where she is today."

It's up to Jeffries where she wants to take her career. "D&H will support me with my journey," she says. Her parents, too, have always backed her decisions, "even if they haven't agreed with them".

Frank Van Schaijik, chair of industry body SCNZ, says that people have come to realise that there are many successful careers in the trades, which can be attributed to New Zealand's strong construction sector, and increased demand for high levels of performance and delivery capability.

He says the award also reflects the industry's commitment to upskilling young members of the trade and investing in the future of the local structural steel industry, which is crucial given the impact of COVID on

New Zealand-grown capability.

"As a well-established industry we have a responsibility to ensure we pass on our skills and experience to the next generation of structural steel specialists to safeguard the future of the sector and support our economic recovery," says Van Schaijik.

The industry is excelling in its commitment to foster bright young talent.

"Of the total workforce employed by local structural steel contractors, 9.1 percent are in a training programme, and 69 percent of structural steel contractors employ an average of four apprentices," says Van Schaijik.

Jeffries says she's honoured to be recognised for what she's achieved and hopes that she can inspire other young women to consider a career in steel construction.

Working in a traditionally male-dominated industry has had its challenges. “So this is a huge confidence boost. Being acknowledged for trying reinforces that I’ve been doing the right thing,” she says. “Over time, I’ve proven myself. Now I’m included; I have a seat at the table.”

Jeffries says the industry is definitely changing and becoming more inclusive. “We now have women working as fabricators and welders in the workshop.”

Angela Adams is one of those women and was a finalist for the SCNZ Apprentice of the Year. Adams undertook her practical work experience at D&H Steel while completing her NZ Certificate in Mechanical Engineering at Unitec, and was subsequently offered an apprenticeship with the company. She has a passion for making things out of steel, works accurately and without supervision, and enjoys having a challenging role. What’s more, Adams isn’t fazed by working in a traditionally male environment.

Diversity and inclusion is part of a wider sustainability initiative that the company, and the wider structural steel industry, is pursuing. D&H Steel has been playing its part to futureproof the structural steel industry and build the diversity of its business.

“D&H Steel has long prided itself on its commitment to family, equal opportunity and diversity,” says Carson. “We have a strong track record of supporting young people from diverse backgrounds to grow, develop and achieve their goals through hard work and focus.”

It was a big night all round for D&H Steel, which successfully swept up multiple other awards, including the Chair’s Award for Wayne Carson’s outstanding contribution to the industry, the Under \$500k Award for the Waiouru Point Development and the Over \$3m Award for its work on Sylvia Park Galleria. The structural steel fabricator was also a finalist in the \$1.5m to \$3m category for Sudima Hotel.



### About SCNZ

Steel Construction New Zealand Inc. (SCNZ) aims to advance the interests of New Zealand’s diverse steel construction industry by promoting the benefits of steel solutions in building and infrastructure projects. Members include manufacturers of structural steel and steel products, distributors, fabricators, designers, detailers, galvanisers, and paint and building supply companies. SCNZ provides its members with technical advice on the latest in steel design trends and standards, networking opportunities, and a representative voice with key industry and government decision-makers.

**For more information please visit [www.scnz.org](http://www.scnz.org).**

### About D&H Steel Construction

D&H Steel is a leading structural steel contractor, based in Auckland. For 50 years it has led innovation in the steel industry, from being an early adopter of welded beams, on-the-ground erection techniques to, more recently, driving the fabrication quality management systems. It was the first company to receive AS/NZS 3834 accreditation and Steel Fabrication Certification (SFC). It has been behind many of the largest structural steel projects across Auckland, including Westfield Shopping Malls, Auckland Airport, Lion Brewery, the Deloitte Tower and the Viaduct Event Centre. Projects outside of Auckland include the Tauranga Cargo Sheds, University of Canterbury Regional Science and Innovation Centre, and the replacement Kopu River Bridge.

**For more information please visit [www.dhsteel.co.nz](http://www.dhsteel.co.nz).**

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