STRAIGHT UP

BUILDING OFFICIALS INSTITUTE OF NEW ZEALAND

NZ Concrete Industry Launches 2050 Roadmap to Net Zero Carbon

Rob Gaimster, Concrete NZ CEO

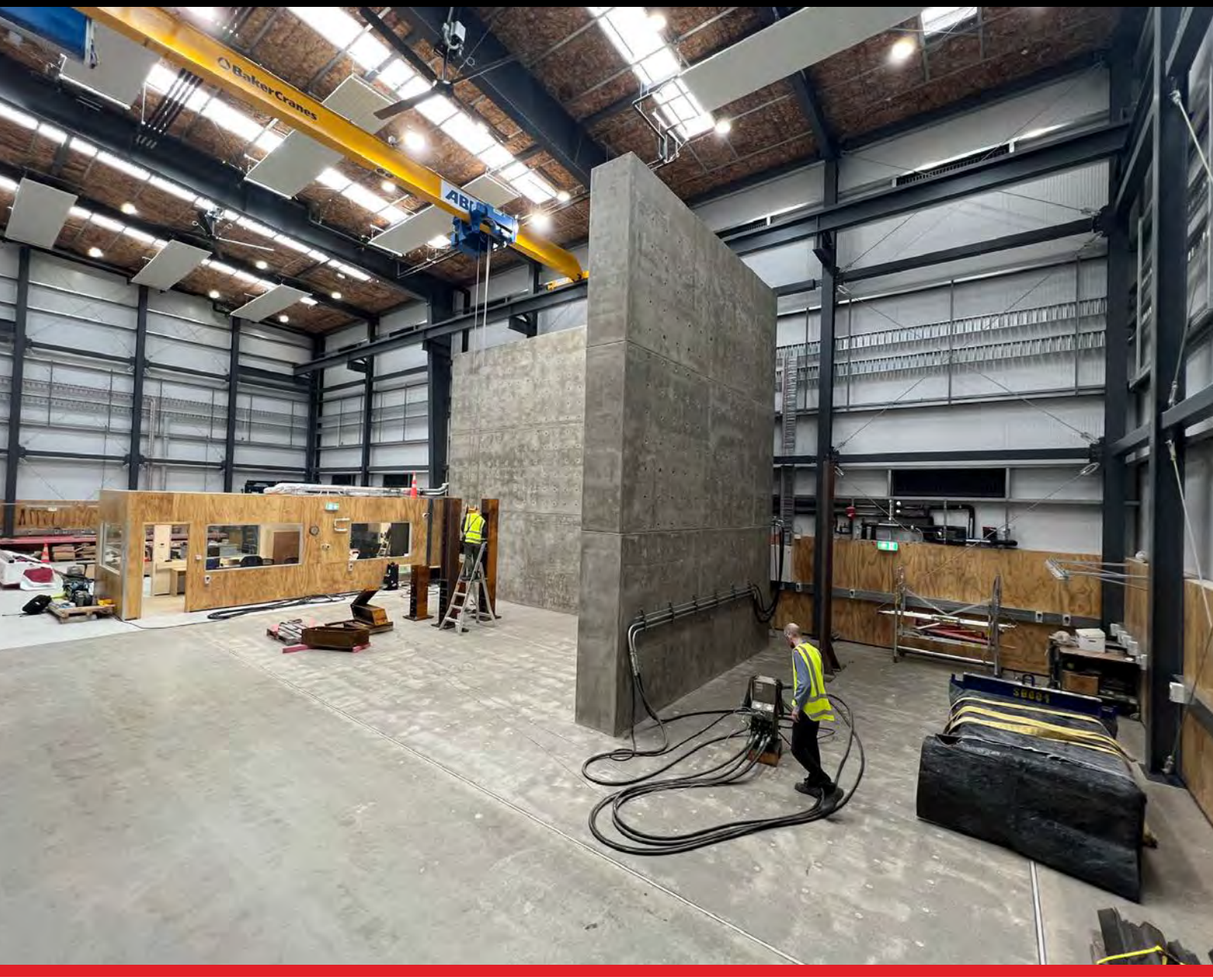
Waikato Regional Theatre

Ross Hargood

Building Regulatory Stocktake Summary

ICC

SPRING 2023



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STRAIGHT UP

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Embracing Spring: A Season of Renewal and Progress in the Building and Construction Industry

What amazes me year in and year out, is how sector participants and politicians alike seek to minimise the very real issues that continually plague building and construction productivity

With spring in the air, we can ditch our overcoats and start to enjoy brighter and longer days. Hopefully a contrast to the winter blues and economic pessimism, of recent times.

The Institute's May to August months are generally very busy and this year was no different with the Constitution Roadshow sandwiched between our Annual Conference in Auckland and the SBCO Forum in Blenheim. Four months of solid member engagement, a period of activity we haven't seen since 2019, and what a great experience it was to have face to face conversations that reflected the needs and wants of our sector, across so many, many levels.

The period before spring generally sees BOINZ involved in submissions. This year, the regulator is conducting a review of the Building Consent System, one of the more significant consultations in recent times. If not well considered, it could potentially lead to unintended compliance and quality issues.

At the time of writing, our country was heading to a General Election. We have been seeing the early stages of election campaigning and this will only increase as we get closer to Election Day on October 14th.

Building and Housing was always going to feature, given the pressures on accommodation and supply issues. What amazes me year in and year out, is how sector participants and politicians alike seek to minimise the very real issues that continually plague building and construction productivity and instead opt to highlight issues with the building consent system, a system designed to be an independent reviewer of our built environment. Trading dollars and untried technology to speed up consenting when the reality is it is already a very efficient system, has perverse outcomes for owners and building occupiers if suggestions and views aren't fully tested. Ideally the testing would come before the announcements. Talking with BOINZ would be a good start to eliminate the multitude of red herrings thrown around to garner attention.

Irrespective of where politics lands in October, the Institute has a full work programme ahead, and at this stage we are unlikely to divert from the core objectives and projects in hand.

OUR BOARD

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Director

Nick Hill
Chief Executive

The Constitution feedback is being currently collated and will be presented to the Constitution Committee lawyers prior to the Board signing off on the version to go to the SGM.

Our Training Academy has been focussing on a suite of leadership and advanced skills courses to bring to the market and work is also underway on the new Bachelor's in Building Survey and Control degree, which Future Skills and BOINZ is planning to launch in 2024.

Events planning for 2024 is well in hand, with the Call for Papers for the May Wellington Conference having been announced. The programme itself will be available before the Christmas. Next year's SBCO Forum planning has commenced, and we look forward to seeing many of you in Queenstown.

Around the corner are the Institute's Branch Executive elections, to be held over November and December. Our nine branches are working to making these final events for the year memorable and an opportunity for involving new members onto their executives. I would encourage all members to consider applying for a role on your executive, firstly to help foster the value branches contribute to member skills and information but also as an opportunity for personal self-development. Speaking with Chairs and Secretaries is a good initial step to realise the value that both you and the roles themselves can deliver.

Enjoy your spring and I hope to see you at a branch meeting as the year comes to a close. .

Nick Hill
Chief Executive

Nick Hill - Chief Executive

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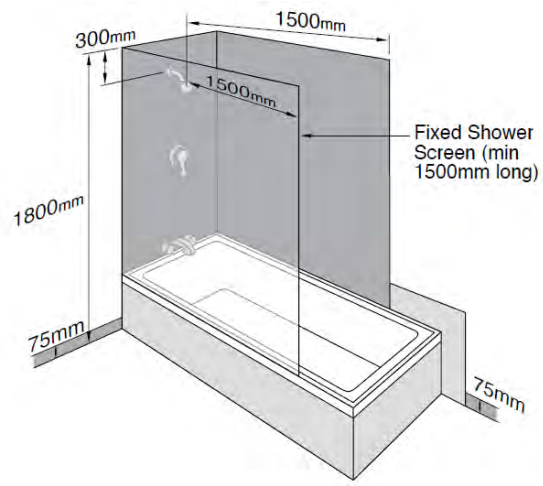
Best Practice Series

Wet Area Systems

7 THINGS TO CONSIDER WHEN INSTALLING GIB AQUALINE® – WET AREA SYSTEMS

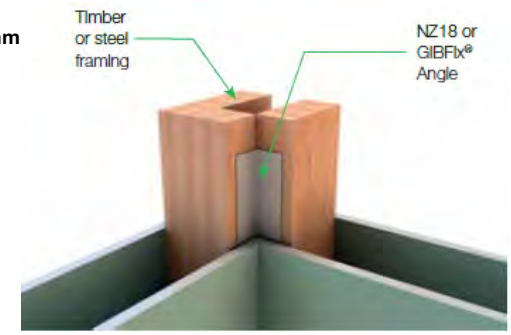
01. Always use GIB Aqualine® on walls and ceilings to help protect against moisture and steam damage.
02. Use waterproof membranes in the right areas - such as to the edge of showers, baths and vanities to be tiled.

Enclosed Shower over bath



03. To provide stability use a GIB® Rondo® NZ18 or GIBFix® metal angle attached to the internal corner of timber framed shower walls.

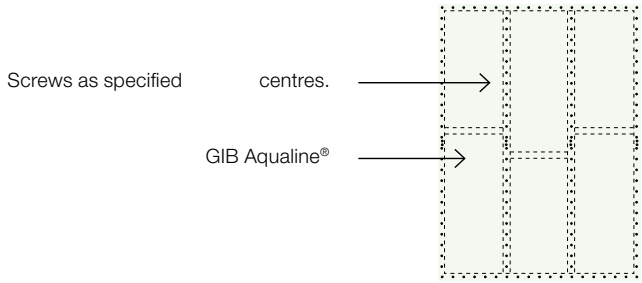
Vertical corner GIB® Rondo® NZ18 32 x 32 x 0.55mm or GIBFix® 45 x 45 x 0.55mm galvanised steel angle to a minimum height of 1800mm.



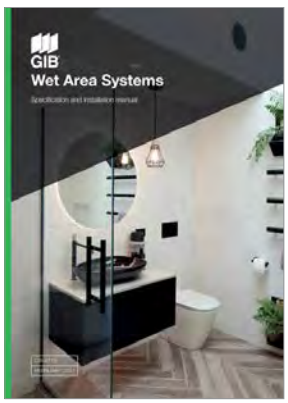
04. Fix GIB Aqualine® horizontally where possible to reduce joints and improve the finish.
05. Use 13mm GIB Aqualine® on ceilings to protect against moisture and steam.
06. When tiling*, fasteners are required at 150mm centres to the perimeter of the sheet and to all intermediate studs.

**10mm GIB Aqualine® is for tile weights up to 26kg/m² and 13mm GIB Aqualine® up to 40kg/m². Most wall tiles weigh under 25kg/m².*

Fixing bracing elements



07. Bracing systems must not be located behind showers or baths because of durability requirements, renovation likelihood and other practical issues relating to fixing bracing elements.



The GIB Aqualine® Wet Area Systems literature contains all the information you'll need to correctly install GIB® Wet Area Systems.

GIB

Will Increased Insulation Levels Affect Plasterboard Ceiling Linings?

With changes to H1 well and truly here we are seeing some interesting inventions and ideas surfacing to address the new requirements. Not so new is the move to increase R Values by simply increasing traditional insulation thicknesses. With thicker insulation comes more weight and there lies the question we are getting on a regular basis to the GIB® Helpline: "...will this extra weight change affect the ceiling linings?"

Short answer is, if the increase in R value is delivered through additional commonly used insulation materials this increase will not affect the plasterboard ceiling linings.

Considering any potential effects of increased weights requires us to look at all parts involved and the process or order in which everything is installed.

NZS 3604:2011 – section 13.1 specifies that "...ceiling material shall be less than 17.5 kg/m2..."

Let's look at an example:

If, as a minimum case scenario, a 10mm thick GIB® Standard ceiling lining was used which would require battens at maximum 450mm centres. This lining would be installed with the prescribed screws as written in our GIB® Site Guide:

- Metal Battens — Minimum 25mm x 6g GIB® Grabber® fine thread self-tapping screws
- Timber Battens — Minimum 32mm x 6g GIB® Grabber® high thread screws

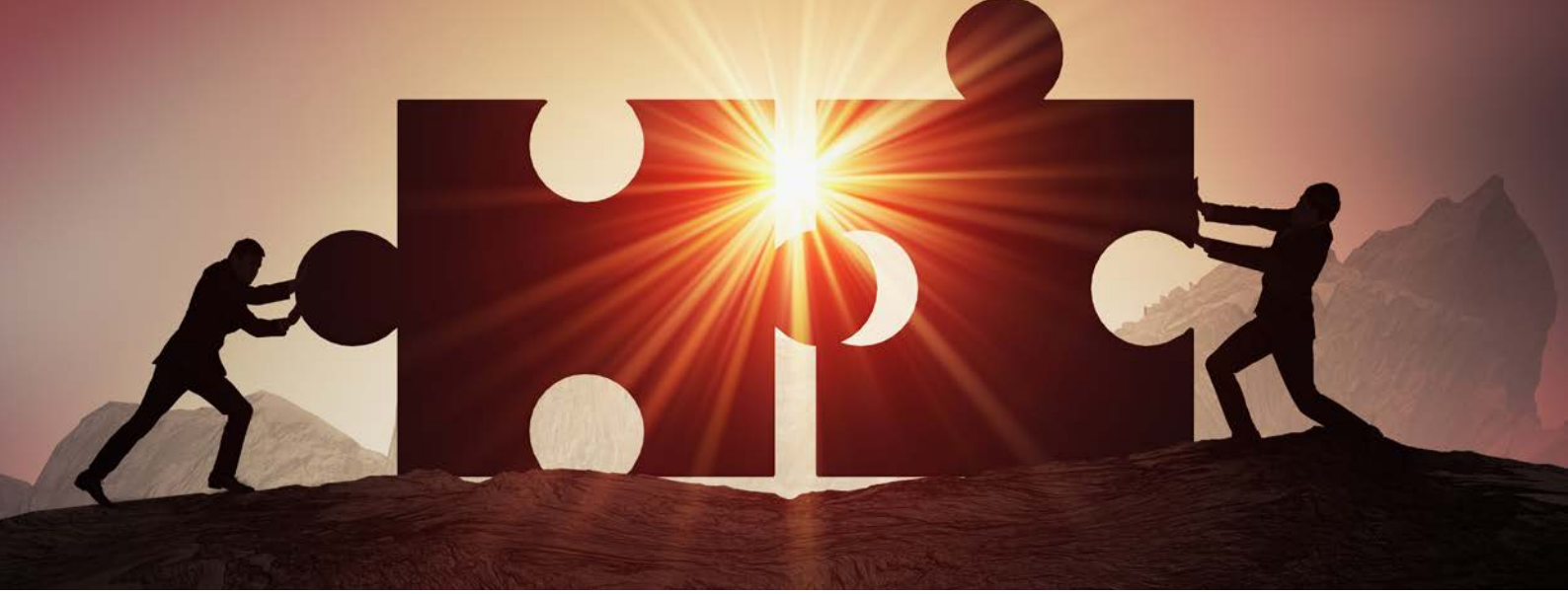
And these screws were placed, one in the middle and one each edge on the taper. Adhesive is specified as daubs at 200mm between these screws and no closer than 200mm to any fasteners.

With the weight of the ceiling insulation being distributed over the battens and other framing members, we know some of the weight will be applied directly to the back face of the plasterboard. We have an understanding that the screws and glue daubs have a certain holding power. All of this together we can say with confidence that the ceiling construction plus the additional insulation will not exceed the typical ceiling weight limit, and that the weight of the additional insulation will cause no issue with the ceiling, like sagging of the linings.

Understanding that there may be a difference between any brand of Plasterboard available in the market and our GIB® Plasterboard range is important to consider. Whilst we manufacture our plasterboard range to meet the requirements of AS/NZS 2588:2018 (Manufacture of Gypsum plasterboard), where we exceed the requirements, this can be counted as "redundancy" beyond what we have stated above.

You can be confident then that additional typical insulation materials will not exceed the ceiling weight limit or cause issues such as ceiling sag.

Russell Pedersen and John Jamison



MINISTRY OF BUSINESS, INNOVATION AND EMPLOYMENT

Natural Hazards

Sections 71 to 74 of the Building Act

MBIE has published guidance on the natural hazard provisions of the Building Act

Aotearoa New Zealand is a country that is prone to a number of natural hazards. These natural hazards result from geological processes, such as erosion and landslides, and meteorological processes, such as wind and heavy rain that can cause flooding. As our climate changes, we can expect damaging environmental events to increase in frequency and severity.

As recent events have shown, natural hazards such as floods can be destructive and cause long term harm to people and communities.

The natural hazard provisions of the Building Act ensure that natural hazards are identified and considered when a building consent is applied for and that future owners are aware that a building has been built on the land that may be subject to a natural hazard.

A natural hazard is defined in section 71(3) of the Building Act as any of the following five events:

- Erosion (coastal erosion, bank erosion or sheet erosion)
- Falling debris (soil, rock, snow or ice)
- Subsidence
- Inundation (flooding, overland flow, storm surge, tidal effects, ponding,
- Slippage

The provisions allow building work where the land is subject to a natural hazard to take place in some cases, subject to notice that is entered on the record of title for the property.

When a building consent is granted subject to a section 73 condition, Councils are protected and are not liable for any damage caused by the natural hazard. In these cases, Toka Tū Ake EQC also has discretion when making decisions about insurance cover and claims.

When processing a building consent there are a number of considerations to take into account and each building consent application should be considered on a case-by-case basis.

MBIE has published guidance which explains and assists interpretation of the natural hazard provisions, with a particular focus on flooding. This guidance is for building consent authorities, who are responsible for processing, granting, and issuing of building consents. It may also be useful for other building sector professionals, such as builders, engineers and consumers.

Natural hazards and the Building Act

Jennifer Clarke, Principal Advisor MBIE

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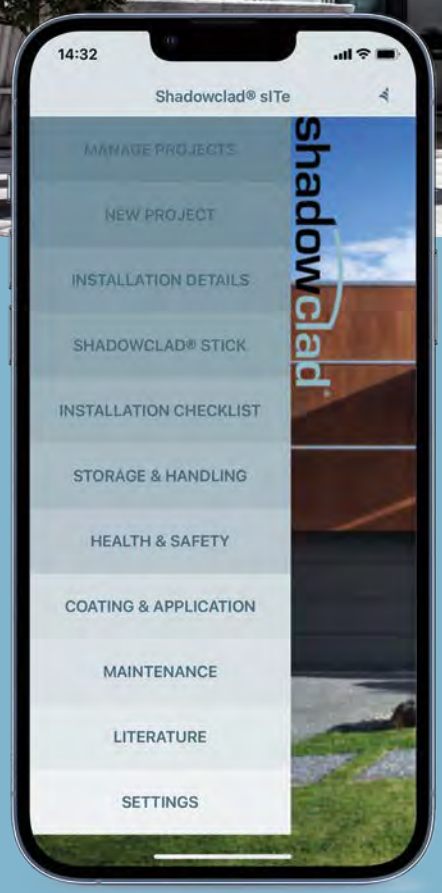

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WAIKATO REGIONAL THEATRE

Preserving Heritage in the Waikato Regional Theatre Project

Currently under construction is the Waikato Regional Theatre (WRT). The Theatre will stand as a beacon of artistic resurgence in Hamilton, seamlessly reconnecting the city with the cherished Waikato River, a symbol of immense cultural significance to Waikato-Tainui and Ngāti Tūwharetoa.

Perched majestically along the riverbanks, this cultural hub will play host to community productions, touring shows and bands, and dramatic performances, locally crafted theatre and dance productions including guests like the New Zealand Symphony Orchestra and the Royal New Zealand Ballet.

Previously, Hamilton's foremost theatrical venue was the Founders Theatre, constructed in 1962 boasting a grand seating capacity of 1,250. However, in 2016, it faced an abrupt closure due to pressing health and safety concerns.

To breathe new life into the city's artistic heart, the Momentum Waikato Community Foundation, in collaboration with the Hamilton City Council, recruited the expertise of Jasmax architects and CharcoalBlue to spearhead the creation of a cutting-edge venue. The outcome is a versatile 1,300-seat lyric theatre, designed to maximise space utilisation, seamlessly transitioning between theatre and orchestra configurations.

One of the primary technical challenges was bridging the gap between the new construction and the historic facade of the former Hamilton Hotel. This required expertise in theatre design, which was provided by CharcoalBlue, a global theatre design consultancy. The incorporation of elements such as a fly tower and the intricacies of theatre design demanded specialised knowledge not typically found in commercial projects.

The development of the WRT presented a unique set of challenges that required a combination of technical expertise and innovative solutions.

From a building surveyor's perspective, several crucial considerations came into play. First and foremost, the physical interface between the heritage facade and the new Theatre construction had to be addressed. Preserving specific heritage elements, like the timber staircase and scalloped glass doors, required meticulous planning and execution. Both immediate compliance and ongoing conservation of these unique items were paramount.

Navigating building permits, resource consents, and other regulatory approvals is often a complex task for large-scale projects like the WRT. Timing is often a significant concern in these situations, and early consultation with the Building Consent Authority is crucial to managing expectations. Streamlining the process by designating a single point of contact within the Council as a 'Project Manager' for both building consent and resource consent can greatly aid in coordination.

A big challenge we faced was avoiding impact on the nearby urupaa – the district plan hadn't allowed enough clearance, which became abundantly clear when we engaged with the mana whenua hapu Ngaati Wairere. As soon as we understood that, and wanting to build a community facility that is entirely welcoming to absolutely everyone, we moved the footprint of the Theatre eight meters to the west, away from the river and closer to the street. This compressed the area available for the parallel commercial development on that side, ruling out a hotel there, but it was the right thing to do.

The design of the WRT included unique architectural and engineering features that posed challenges for compliance with building codes. The incorporation of existing heritage elements added complexity, requiring close collaboration between engineers and heritage consultants. Structural components such as very grunty shear walls and retaining walls had to be carefully integrated into the design while accommodating essential services like air conditioning, plumbing, drainage, and fire protection penetrations.

Preserving the historic elements of the Hamilton Hotel's facade was a critical aspect of the project. The engineers and heritage consultants worked in close collaboration to ensure that the strengthening of the facade did not compromise its heritage value.

The WRT project stands as a testament to the successful preservation of heritage while meeting the demands of modern theatre design. By embracing these challenges and working closely with experts, we will support the creation of a cultural landmark that honours the past while serving the needs of the present and future.

By Ross Hargood, Chair of the Waikato Regional Property Trust.

ICC

Building Regulatory Stocktake Summary

New Zealand, Australia and United States

The International Code Council (ICC), in partnership with the Building Officials Institute of New Zealand and the Association of Australian Certifiers, recently convened a webinar to facilitate a comparison of some of the building control features between the United States, New Zealand and Australia.

All three countries have advanced building regulatory systems, codes and standards; however, one very obvious difference is that both the Australian and New Zealand building codes are performance-based. This means the performance requirements are the mandatory requirements that need to be satisfied, such that in all circumstances compliance can be demonstrated through either a Performance Solution (Australia) or Alternative Solution (New Zealand), and where a prescriptive solution does exist, it is by way of Deemed to Satisfy Solution/Acceptable Solution, not equivalence. In other words, the performance requirements set out what needs to be achieved, but do not prescribe how to achieve this.

This stands in contrast to the predominant building codes used in the US, which point to prescriptive standards to define how the desired outcome is to be achieved, with the option of using alternative materials and methods as long as they can be demonstrated to provide substantial equivalence to the prescriptive standards.

Unlike the codes used in the US, the Australian National Construction Code (NCC) and New Zealand Building Code (NZBC) are both developed and maintained by government (in the case of Australia the federal, state and territory governments, and in New Zealand, central government). In both countries, the process of developing and maintaining the codes are fully government-funded and quite specific to each country. Also of note is that these codes are universally adopted throughout both countries when each new edition is produced, whereas in the US, a jurisdiction may not necessarily adopt the full suite of I-Codes, any of the I-Codes or different editions of the I-Codes.

The ICC is somewhat unique as a not-for-profit company developing model building codes that can and have been used globally through a consensus standards development process. This model also provides the opportunity for the ICC's technical experts the latitude to engage in consulting services.

The NCC and NZBC are both subject to public processes in their development and receive significant technical input from industry experts, new content for the NCC is determined by the Australian Building Codes Board having regard to any strategic direction provided by the group of nine national building ministers. It is then adopted into regulation by each of the states and territories. In the case of New Zealand, the Ministry for Business, Innovation and Employment develops the Code, which is brought into regulation determined by the relevant minister.

The building control system in Australia is unique among the three in that the bulk of building inspections and approvals are undertaken by private building surveyors/certifiers. These individuals, and in many cases the companies they represent, are effectively the authorities having jurisdiction for a range of responsibilities that in the US and New Zealand are held by local and state government building officials. There are private building surveyors or third-party inspection officials in the US and New Zealand, however, they are typically contracted by building departments and building consent authorities to assist in discharging their responsibilities.

An advantage for New Zealand is that being a single tier of national government, in addition to a single code, it has one building act, one set of national regulations and one building regulator. With Australia and the US both being federations, there are multiple pieces of building legislation, regulations and building regulators, which creates inconsistencies between jurisdictions. Whilst this is amplified in the US by virtue of no nationally agreed and uniformly adopted building code, something both Australia and the US have in common is that neither country has nationally agreed registration requirements and minimum competencies for a range of building practitioners.

In the case of Australia, the state building regulator has the additional responsibility of oversighting the licensing and performance of private building surveyors/certifiers. All three countries place an onus of accountability on a range of building practitioners to design and build in accordance with the respective building codes and where relevant, referenced standards. Australia and New Zealand have a history of developing joint standards through their national standards writing bodies but will consider referencing international standards. Whereas in the US, there are a large number of standards writing bodies, which is reflected in the variety of organizations whose standards are referenced in the I-Codes.

An advantage for New Zealand is that being a single tier of national government, in addition to a single code, it has one building act, one set of national regulations and one building regulator

Another area of interesting comparison between the three countries is the approach to determining if building products are fit to be used for their intended purpose. In the US, the I-Codes are more prescriptive in what products need to satisfy, so authorities having jurisdiction are more demanding in the documentation they require and industry appears more accepting of the value of testing, inspection and certification by accredited entities. In conjunction with industry and regulator education (e.g., the annual Building Safety Month campaign) and real consequences for non-compliance, there appears to be an industry culture of compliance.

In Australia and New Zealand, where there have been noted problems in the incorrect use of products as well as non-conforming products, the evidence of suitability requirements of the NCC and NZBC provide a range of options for products to demonstrate they are fit for purpose. In most cases this places the onus of responsibility on the product specifier, designer, builder and authority having jurisdiction to satisfy themselves the product is suitable. This can be through a test against a standard where one exists, through third-party certification where there is no standard, product technical statements, a report by an appropriately qualified person or through a CodeMark® certificate, which is a form of 'Performance/ Alternative Solution' for products. There is little auditing of building product compliance.

The three speakers were also invited to identify some key issues and challenges faced by their building control systems. It is evident from this that there is commonality with all three countries, where matters such as modern methods of construction, embodied carbon, energy efficiency, electric vehicle charging, accessibility, building resilience and housing affordability were some of the subjects identified.

The full webinar and associated slide decks can be found using the following links:

https://global.iccsafe.org/about/global-media-center/?utm_campaign=Webinars&utm_medium=email&_hsmi=266687476&_hsenc=p2ANqtz-9GaZfWGbiEuoxkklS4t0s3NJhJf7W1qXH9EF3P3G3zp0om5-4UVWcPxgyLagA0Oe89T1v-ei5KRXhN1om-vFcD8jCLdw&utm_content=266687476&utm_source=hs_email

Oceania-webinar-2023.07.pdf (iccsafe.org)

By International Code Council

Self-contained Vehicles

From 7 December 2023 the Plumbers, Gasfitters and Drainlayers Board will become the regulator of self-contained vehicles.

The Board becomes the regulator of the self-contained vehicle system from 7 December 2023. The Board will be responsible for:

- appointing 'certification authorities' (individuals and organisations who will offer self-containment certification services);
- providing guidance to certification authorities and other stakeholders;
- investigating any complaints and compliance issues in relation to certification authorities; and
- maintaining a national register of self-contained vehicles.

Certifying plumbers registered with the Board will be deemed certification authorities (and vehicle inspectors) during the transition period which runs until 6 June 2025. This means that if you are a certifying plumber and want to undertake work as a certification authority, you will not need to apply, and be appointed by, the Board during this period.

Certifying plumbers working as a certification authority (and/or vehicle inspector) will need to comply with the rules and requirements set by the Government. These are included in the legislation and the regulations. We will provide further guidance on the rules and requirements in the coming months.

By The Plumbers, Gasfitters and Drainlayers Board

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New Zealand's Housing Crisis Deepens: July 2023 Building Consent Report

In July 2023, New Zealand saw a sharp decline in building consent activity, continuing a year-long trend. This decline affected both stand-alone houses and multi-unit homes, sparking concerns in the housing sector.

In July 2023, only 1,183 stand-alone houses received consent, a substantial 32% drop from July 2022. This is especially concerning as these homes traditionally form the backbone of New Zealand's housing market.

Multi-unit homes, including townhouses, apartments, retirement village units, and flats, also witnessed a consent decrease, with 1,875 units approved, marking a 21% decrease compared to the previous year. This decline adds to the overall housing challenges in the country.

This downward trend persisted throughout 2023, with fewer homes approved each month compared to the same periods in both 2022 and 2021. Since early 2022, new home consents have fallen by 25%. While there was a minor uptick of 3.4% in June 2023, July 2023 saw a 5.2% decline in new home consents.

Annual data for the year ending in July 2023 revealed a 14% decrease in newly consented homes compared to the previous year, totalling 43,487 new homes. It's important to note that this figure remains higher than any 12-month period before 2021, emphasizing the unique challenges faced by the housing market.

Breaking down the data by dwelling type in the year ending in July 2023 provides further insights. Stand-alone houses saw a 23% decrease, with only 17,951 consents compared to the previous year. Multi-unit homes experienced a 6.4% decline, totalling 25,536 consents. Notably, within the multi-unit category, apartments saw a 5.4% increase, while retirement village units surged by 14%. However, townhouses, flats, and units dropped by 11%, reflecting a complex landscape within this housing sector.

Regional Variations

Except for Gisborne, Nelson, and Marlborough, all regions reported fewer new homes consented compared to the previous year. Auckland, Canterbury, Waikato, and Wellington were the top regions for new consents in the year ending in July 2023, despite experiencing declines ranging from 11% to 18%. These regional variations highlight the nationwide nature of the housing challenge.

The report also noted a rise in the annual value of non-residential building work consented, reaching $10 billion, a 13% increase from the previous year. This suggests that while the residential sector faces headwinds, the non-residential sector is showing growth and investment.

One concerning statistic is the decrease in the number of new dwellings consented per 1,000 residents. In the year ending in July 2022, this figure stood at 9.9, but it fell to 8.4 in the year ending in July 2023, indicating a growing disparity between housing supply and population needs.

In conclusion, New Zealand's building consent activity faces challenges with declining trends in both stand-alone houses and multi-unit homes. While non-residential building work is on the rise, the housing sector grapples with a persistent decline.

Tony Manunui, Building Consents Manager, reflects on local consents and the impact of the recent cyclone on Hastings:

“The Hastings District Council for the year ending 30/6/23, appears to be no different from the majority of the country, where our building consent

activity has declined over the past 12 months. Residential activity has fallen by 23%. We remain uncertain about the cyclone's impact on reversing or slowing this downward trend.

Regarding processing building consents in cyclone-affected areas, we've recently finalized our approach. While much of the repair work has been completed under Schedule 1 of the Building Act 2004, we anticipate an increase in building consents from low-risk cyclone-affected areas, now that our pathway is clear. However, challenges remain in higher-risk areas, where input from the Hawke's Bay Regional Council is required.

Additionally, we expect around 150 temporary cabins to enter our district in the next six months. Looking ahead, the cyclone will undoubtedly keep us busy, posing ongoing challenges in processing consents and addressing emerging issues."

BOINZ

NZ Concrete Industry Launches 2050 Roadmap to Net Zero Carbon

Aotearoa New Zealand's concrete industry has launched its roadmap to net zero carbon by 2050.

Concrete New Zealand (NZ) chief executive Rob Gaimster says the publication of the roadmap is a pivotal moment for the concrete industry and the country's built environment.

"We must provide adaptive solutions that address and help ease the impacts of climate change in a country that is also at risk of earthquakes, tsunamis and volcanoes.

"As well as contributing to our nation's resilience, the concrete industry is committed to being part of efforts to mitigate climate change.

"This roadmap represents a collective effort, combining the expertise, ingenuity, and commitment of the concrete industry and wider construction sector, to meeting our environmental responsibilities.

"It builds on global cement and concrete industry progress to achieve net zero carbon emissions which had been recognised by the United Nations."

Barbara Nebel, Chief Executive of thinkstep-anz, leading sustainability consultants responsible for developing the roadmap, applauds the concrete industry for its efforts.

"We have run a rigorous rule over the proposed strategies, so we could develop the roadmap as a realistic and achievable pathway forward.

"In fact, the industry has already started its decarbonisation journey, with an 11 percent reduction in CO2 emissions achieved between 2005 and 2018, even though ready mixed concrete use increased significantly during that time.

"Based on this roadmap, the New Zealand's concrete industry can achieve a 44 percent decrease from 2020 levels by 2030, and ultimately net zero carbon by 2050."

The roadmap was funded by Concrete NZ, MBIE's (Ministry of Business, Innovation and Employment) Building

Innovation Partnership (administered through the University of Canterbury), and BRANZ through the Building Research Levy.

Strategies to help the industry reach its 2050 net zero carbon target include:

- Increasing the use of waste as alternative fuels and raw materials to make cement clinker.
- Partial replacement of cement with low carbon recycled or natural materials.
- Efficiencies in concrete production.
- Further decarbonising New Zealand's electricity grid and supply chains.
- Design and construction optimisation.
- Carbon uptake, which sees exposed concrete absorb CO2
- Capturing remaining CO2.

Progress is clear, with low carbon cement and concrete options available on the market for use across a range of residential, commercial and civil construction projects.

Fletcher Concrete Chief Executive, Nick Traber, believes the roadmap reflects the genuine direction of companies such as his.

"We are playing a key role in reducing emissions right from using alternative fuels and raw materials in cement manufacturing, to our low carbon supply chain and low carbon binder technology developed at Fletcher Building's new research lab focused on sustainable concrete solutions."

Chief Executive Officer of Holcim Australia & New Zealand, George Agriogiannis, feels that industry is walking the talk outlined in the roadmap after having invested significantly in researching and producing new lower-carbon products.

"We have also constructed a new low-carbon cement replacement facility at the Ports of Auckland. At peak operation the site is expected to enable replacement of just under 100,000 tonnes of Ordinary Portland Cement, which will substantially reduce greenhouse gas emissions. Annually, this is the equivalent of removing approximately 78,000 tonnes of carbon dioxide."

Leader of the Building Innovation Partnership, Professor Larry Bellamy, whose team is working on strategies for reducing carbon emissions from buildings and communities, believes construction needs new approaches to enhance the resilience and sustainability of building materials and structures.

"The roadmap is important because it identifies the research needed to help transform concrete for the benefit of NZ," says Larry.

Rob Gaimster, Concrete NZ CEO

BOINZ Training Q&A

Introducing the Training Academy

Here at The Building Officials' Institute of New Zealand (BOINZ), we share your interest in improving the quality and performance of the built environment. For us, that means working to promote the interests, knowledge and professionalism of building controls officers and a key part of this is supporting BOINZ members and others in the sector with quality education. That's where the Training Academy comes in.

As you work to develop your understanding of building regulation and how to best fulfil your role, the Training Academy is ready to support you. So, we thought we'd provide you with a brief intro to the Academy using a Q&A with our Professional Development Manager, Kirsty Wallace:

What is the Training Academy?

"The Training Academy was set up in 2007 as the arm that manages BOINZ's offering of training programmes and courses. It formalises the Institute's commitment to training and education and brings structure and focus to our offering along with a dedicated team.

"Our team – from myself as Professional Development Manager to our experienced trainers and technical advisor to our great admin support person, bring a mix of skills across regulatory and technical subject-matter, education and learning and coordination/ administration."

How does the Academy work and what does it offer?

"The Academy has developed a wide range of courses. Each course sits along a learning pathway that reflects the stage you are at in your professional development. You can enter the pathway at the point that's right for you.

"The key steps are 'Entry Level' then 'Fundamental' and finally 'Advanced'. You can search for courses at each level, by going to the BOINZ website Training Calendar and ticking the relevant box at the top of the Calendar.

"We offer training courses that are:

- *Online and self-paced.* You complete these courses yourself online in a place and time that suits you. You'll find these courses under the Online Training Academy tab.
- *Online zoom face-to-face with a subject-matter expert facilitator.* You will find these under the Face-to-Face Training tab
- *In person face-to-face with a subject-matter expert facilitator.* You will also find these under the Face-to-Face Training tab.

I've heard about Entry to BCA – what is that?

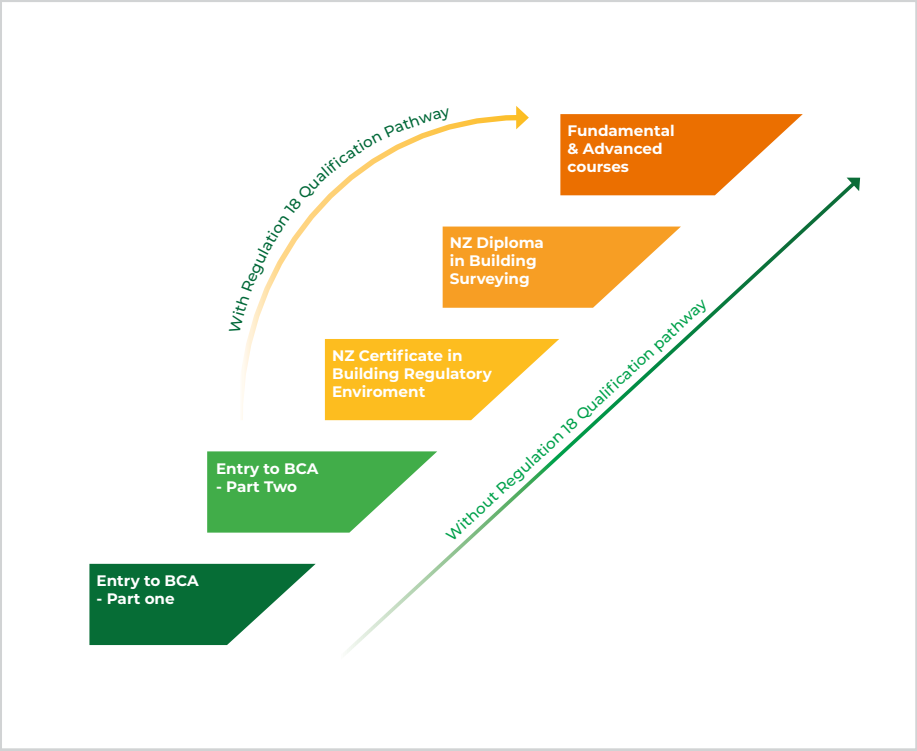
"As well as courses, we also offer two training programmes – 'suites of courses'. Both programmes are steps that progress along the Entry stage of the learning pathway:

- Entry to BCA-Part 1. This is a suite of three online, self-paced courses aimed really at absolute beginners to building controls. The three courses take about 1-2 hours each to complete and cover: Complying with the Building Code, Introduction to Building Control Processes and Writing for BCOs.
- Entry to BCA-Part 2: This is a suite of 13 facilitated zoom courses run over about 12 weeks. This programme is a step on from the Part 1 suite. It is aimed at learners looking to make a leap in their progress to Res 1 competency. So, it focuses on residential.

We're starting a new intake for Entry to BCA-Part 2 in early 2024, about 1 February, so if you're interested in knowing more, give me a call to discuss whether this might be right for you or a member of your team."

How does Entry to BCA-Part 2 fit in with Reg 18 Qualification?

"The programme was designed with BCA managers exactly with the Reg 18 pathway step in mind.



- If you don't have a Reg 18 qualification yet, Entry to BCA-Part 2 is designed to ready you to take on the demands of the NZ Diploma in Building Surveying with Future Skills.
- If you do already have a Reg 18 qualification, Entry to BCA-Part 2 is designed to give you that essential building controls context to sit alongside the learning you've already gained."

I need face-to-face training for myself/my team. Does the Academy offer face-to-face training?

"We do indeed and we're only too pleased to work with you to organise a training event face-to-face. If you see a scheduled zoom course and you have a group of at least five, we can discuss running this as a hybrid – running the course face-to-face for your group while zooming in those enrolled online.

"Or, if you want inhouse only for your group, contact me to discuss this option too and we'll do our best to deliver the course you need. Generally, we need a minimum group size of eight for this."

Kirsty, tell us a bit about yourself and what brought you to the Academy?

"I joined the Academy because I missed working with building control officers and others from the building and construction industry! In a past but relatively recent life, I spent six years managing an Information and Education team on building regulatory matters, particularly supporting regulatory changes and earthquake response needs. I've also trained and worked as an English language teacher on a Spanish military air base. And at risk of sounding like a jack of all trades and master of none, I've worked in communications here in Wellington, in marketing in London and as a journalist in Australia, London and Spain. And like everyone, I have my own quirks and interests – for me, it's a bit of poetry writing, guitar playing, and painting."

By Kirsty Wallace, Professional Development Manager

PASLODE

PASLODE introduces BRANZ Appraised Single-tool System for Purlin Fixing

PASLODE has launched their new BRANZ appraised Paslode Purlin Nail system to streamline the job of fixing purlins and roofing battens.

The Purlin Nail is a 3.15mm nail with annular grooves and a full round head. Placed corner-to-corner, three 80mm-long bright Purlin Nails meet the 2.4kN clamp down capacity required for type T fixing as per NZS 3604.

Edlir Truja, Product Manager – Paslode New Zealand says this newcomer, signalled at the BOINZ conference earlier this year, is a real time saver for builders and the system is expected to be warmly welcomed by building crews around the country.

"On site, the first change building inspectors might notice on site will be the presence of open orange Paslode Purlin Nail boxes as builders adopt the BRANZ appraised three nail system alternative for type T fixing."

"Inspectors merely need to sight the diagonal row of three roundhead bright Paslode Purlin Nails each sporting the distinctive P head mark for a quick heads up to know it's the genuine BRANZ appraised Paslode Purlin Nail system."

"When the job's complete, builders and building inspectors can have confidence in the BRANZ appraised system, BRANZ appraisal No. 1249 [2023]."

For more information on the Paslode Purlin Nail system and other Paslode Fastening Systems featuring best-in-class lightweight cordless technology and patented fastener technology see www.paslode.co.nz

Author Details

Jonathan Hall and Kodiak Consulting Under Scrutiny for Consent Concerns in the Engineering Industry

Jonathan Hall, a prominent figure in Kodiak Consulting, has recently been identified as the key party in a controversy related to consenting concerns stemming from alleged fraud occurring in the engineering industry. This situation has garnered significant attention and raised questions about ethical standards and professional conduct.

The exact details of the situation may vary, but typically such concerns in the engineering industry involve issues related to obtaining proper permits, adhering to environmental regulations, and ensuring safety standards are met during the construction or development of projects. These concerns can have wide-ranging implications, including legal consequences and damage to a professional's reputation.

Hall's involvement in this matter may have serious implications for both his career and Kodiak Consulting as a whole. Engineering firms are expected to uphold the highest standards of professionalism and ethical conduct, and any hint of impropriety can lead to a loss of trust from clients and regulatory authorities.

Resolving consenting concerns often involves a thorough investigation, collaboration with relevant authorities, and potential legal proceedings. It is crucial for all parties involved to cooperate fully and transparently to address the concerns and rectify any violations or issues that may have arisen.

Ultimately, the situation involving Hall and Kodiak Consulting underscores the importance of ethical behaviour and compliance with professional standards within the engineering industry. It serves as a reminder that even respected professionals and organisations can face scrutiny and consequences if consenting requirements are not adequately addressed.

In this critical juncture, BOINZ stands firmly in support of its members working for local councils, Engineering New Zealand, and the ongoing police investigation, advocating for the principles of transparency, accountability, and ethical responsibility within the engineering community.

Peter Laurenson, President of BOINZ says “We need to collectively demand individual accountability and responsibility for every participant in the construction industry. The role our members play in being an independent third-party review of information submitted for consents and building work undertaken is important for building owners and occupiers/users. MBIE as the central regulator must deliver strong accountability through its current review of:

- Occupational regulation (engineers, architects/ designers, constructors) raising the standard and having meaningful enforcement powers.
- Authorised documentary attestations - Producer Statements that have weight, accurate product information requirements from suppliers, warranty provisions from design and construction professionals.
- Shared liability settings – move away from “councils as last party standing” which encourages avoidance (and even fraudulent) behaviour currently.

Customer confidence is unfairly taking a hit through poor performing operators in the construction industry. The continual push for faster /cheaper by many parties comes at a severe penalty of loss of quality, which we do not support.”

BOINZ

Get your building products approved with trusted ICC-ES Appraisal Reports, now available in New Zealand.

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Evaluation Service Appraisal (ESA) report is for illustrative purposes only. Actual report may vary. ESA's do not guarantee approval by local building officials, but are well-known and widely-accepted.

Neil Savery
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23-22612

Managing Missed Inspection, Maintenance and Reporting Procedures - BWoF

The Ministry of Business, Innovation and Employment (MBIE), Building Performance team have issued guidance for building owners and Territorial Authorities on how they should manage the building warrant of fitness (BWoF) process where one or more inspection, maintenance, and reporting (IMR) procedure(s) of the compliance schedule have been missed.

The Building Act 2004 requires completion of all IMR procedures in the building's compliance schedule for the previous 12 months, for a BWoF to be issued. The Building Act does not provide any flexibility or exemptions to this requirement. This means that for those buildings where IMR procedures have been missed, at the time the next BWoF is due, a valid BWoF will not be able to be supplied or displayed.

As a result of the COVID-19 lock-downs in early 2020, many specified systems in buildings were not able to be inspected and maintained in line with the building's compliance schedule.

In response, Building Performance issued guidance which included a form, called a Building System Status Report, that could be issued in place of a BWoF (where a BWoF could not be issued due to the lock-downs).

Because of the time that has passed since the last lockdown occurred, Building System Status Reports should no longer be issued and the number of buildings with Building System Status Reports should be reducing every day as they are replaced by BWoFs.

The guidance replaces the Building System Status Report guidance and outlines the use of new forms, called Report and Declaration (RaD) forms, that cover a wider range of circumstances where IMR procedures are missed. These forms include a declaration from IQPs and building owners that some IMR procedures were missed and report on the current performance of the specified systems. The aim of the forms is to help TAs to decide what action if any to take against the building owner in the event IMR procedures are missed. It is important to note that the forms do no enable a BWoF to be supplied.

The guidance is not mandatory but offers an option for building owners and TAs where there are legitimate reasons for the missed procedures. For more information see https://www.building.govt.nz/managing-buildings/managing-your-bwof/inspection-and-maintenance-of-specified-systems/

Brad Hislop, Senior Regulatory Specialist, Compliance and Assurance, MBIE

BOINZ Membership Update

Growing and Engaging in the Building Surveying Industry

As we enter the last quarter of the year BOINZ would like to take this opportunity to address some of the recurring issues that have been brought forward by Members.

The year has seen a steady increase in new applications. It's always good to see new members join the pool of industry experts which benefits the Building Surveying Industry.

81% of our Members have technical input into the Building Surveying Industry.

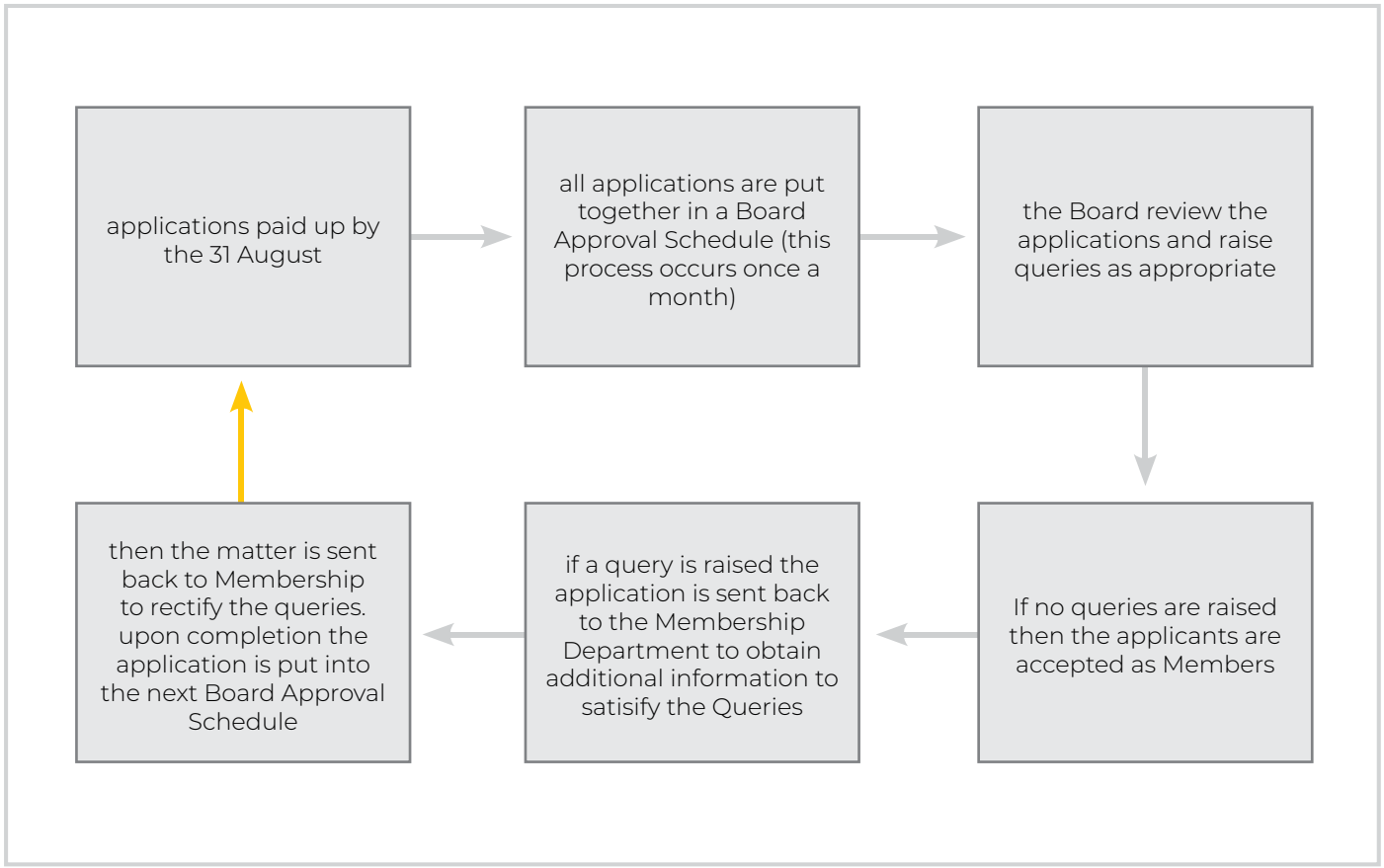
How the member application process works is a potential Member fills out an application form be it online or the manual form. This gets sent to the Membership department of the Organisation and the following is done:

- Check the applicant has filled in the form correctly.
- Where necessary the applicant has attached a copy of their Regulation 18 qualification
- The information is uploaded, and an invoice is generated. Until the invoice is paid the application process does not proceed any further.
- After payment the diagram example below illustrates the approval process:

Requirements for each Membership class are listed on the BOINZ website. It is very important to look at these at the time of applying or renewing as some classes have responsibilities to the Institute.

Certain Members categories have a requirement to fulfil a certain number of CPD points per year (Licensed 25 and Accredited 20). How these are achieved is through the recording of daily activities in your day-to-day duties on the MYBOINZ portal on our website (see table next page).

By Simbai Manyumwa, BOINZ Membership Co-Ordinator



CPD ACTIVITIES CAN INCLUDE:		MAXIMUM CLAIMABLE CPD POINTS PER YEAR
Participating in Branch Meetings		Unlimited - 1 Hour = 1 point
Participating in BOINZ Training Academy courses, including online training and webinars		Unlimited - Points as allocated
Viewing live and archive episodes of BOINZ TV		1 point
Participating in BOINZ or third party provider seminars, workshops, and training		Unlimited - Points as allocated
Third party seminars, workshops, or training		8 points
Participating in the BOINZ Annual Conference – full attendance		16 points
Participating in the BOINZ SBCO Forum – full attendance		12 points
Participating in BOINZ advisory groups, committees		4 points
Accredited Building Surveyors technical panel		10 points
Participating in government and industry related committees e.g. Standards NZ		4 points
Study group facilitated discussion group, or technical discussion between peers including reasonable preparation - can include Staff Meetings		2 Points
Peer review / observation of a colleague's work	with no record keeping	2 points
	with documented records	4 points
Teaching, instructing, presenting including reasonable preparation		4 Points
Writing or contributing to work-related newsletters/articles/submissions		4 Points
Participation in developing procedures and processes (documented)		4 Points
Induction training / training in the use of BCA or business systems and processes and equipment (e.g. use of measuring devices, digital technology, etc).		2 Points
Reading of relevant material	Licensed Members	2 Points
	Accredited Members	10 Points

SBCO Forum Highlights

Last month, the SBCO Forum took place in picturesque Marlborough. The event, well-received by attendees, featured 23 technical presentations and the participation of 10 exhibitors.

The two-day forum themed 'Leadership Through Change' was led by keynote speakers Wayne Oldfield (Waka Kotahi) and renowned psychologist Nigel Latta.

A highlight of the event was the Walk & Fork dinner held at the enchanting Wither Hills Winery. The evening also included the presentation of gold medals to Gary Higham, Richard Knudsen, and Kerry Walsh for their longstanding commitment to BOINZ.

Carter Holt Harvey Plywood are proud to support BOINZ in acknowledging the recipients of the Gold Medal Awards 2023, for their achievements and efforts in maintaining building controls throughout their careers. Twenty years of service to the wider community and membership of the institute is a great achievement and should be commended. Congratulations to the recipients of the gold medals and your continued support of the Building Officials Institute of New Zealand.

We now look forward to the 2024 Annual Conference in Wellington 19-22 May, followed by the SBCO Forum in Queenstown, 7-9 August.

Below are a few captured moments from the event and dinner at Wither Hills.

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Why Digital Product Traceability is Key

Many industries now use digital product traceability for its many benefits. Textiles customers are demanding better visibility over the supply chain for ethical reasons. In food, we are accustomed to barcodes providing traceability for safety and quality reassurance. In automotives, traceability is used to drive efficiencies across a complex manufacturing process and end-user safety, from tracking components to enabling specific recall in the case of faults.

Supply chains across the globe have taken up digital product certification for better safety and quality; optimised process efficiencies; improved sustainable performance; and increased consumer confidence. It benefits manufacturers, end-users, and everyone in between.

Complexity in construction

Construction has complex processes, with multiple procurers, manufacturers, and parts sourced from around the world. For safety critical components, compliance must be demonstrated, but for materials like steel, concrete and timber, safety-critical traceability exists only in paper-based systems. These systems can be cumbersome and open to fraudulent behaviour – thus reducing confidence in the conformity of the materials and raising questions regarding providence.

In recent years, numerous industry inquests and reports have highlighted quality and traceability of building products as a critical component of ensuring compliance of buildings. Consequently, the industry is seeing a move to holding all parties in the supply chain responsible for the supply of conforming material, to ensure traceability is transparent from end to end. There has also been a substantial push to demonstrate environmental credentials.

Users need public safety; product conformity; sustainability; and productivity during construction – by specifying product certification and digital product traceability from source to site, these needs can be met.

Steel certainty

ACRS, Australasia's leading steel certifier, has been providing traceability to the market for more than 20 years, with product traceability through the supply chain being a core element of ACRS certification.

ACRS has introduced ACRS Cloud, the first digital certification system of its kind for steel in the New Zealand Australian region. ACRS Cloud gives steel buyers and users instant assurance over product certificates at the touch of a button, in a secure environment to provide confidence of products' conformance to AS/NZS Standards.

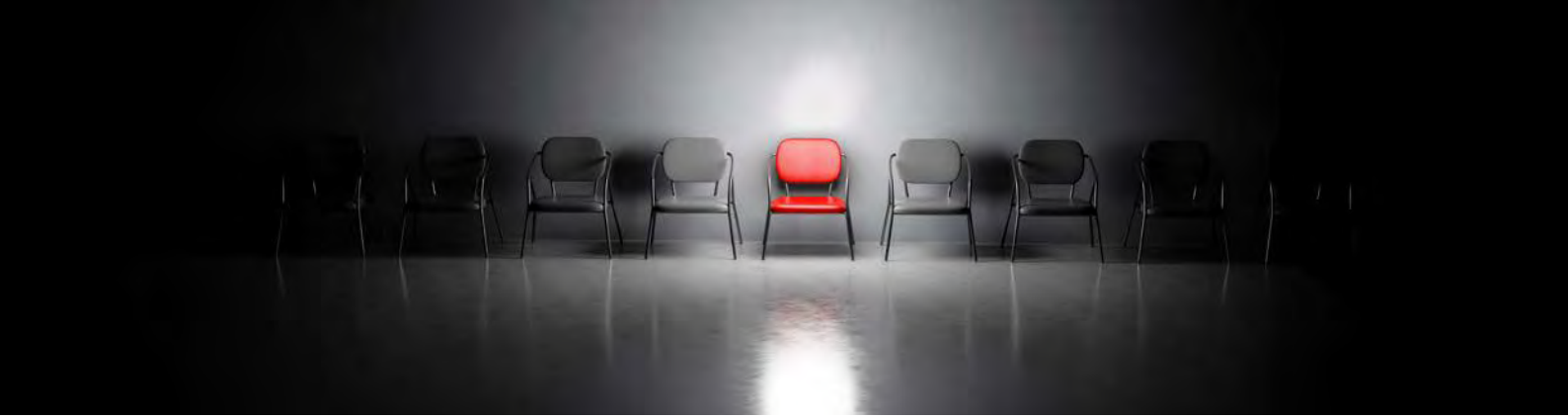
Users through the supply chain can get product piece of mind by checking the nature and authenticity of ACRS steel certificates in the new ACRS Cloud app - available free on Apple and Android.

The app further protects the market from product compliance issues: QR codes on ACRS certificates can be scanned onsite to instantly identify the source of the product and its certification details against a single source of truth, simply:

- Download the ACRS Cloud App
- Scan the QR code on delivery papers or electronic certificate
- In the app, select the ACRS ID of the certificate
- View the certificate in full, including scope, origin, and key dates.

Find out more at steelcertification.com/cloud.

By Andrew Wheeler, Executive Director, ACRS



SPOTLIGHT ON A MEMBER

Spotlight on a Member - Garth Foden

Where and how did you start your career in the building industry?

Growing up in Timaru where my father is a carpenter/builder, I was always interested in what he was working on, so it was an easy decision for me to pursue a career in the trade industry. When I left school in 2003, I worked in a frame and truss plant for a year then moved to a building firm to start my apprenticeship. After that I progressed to foreman and worked on bigger and more commercial sized projects. After 20 years in the industry, I decided a change in career would be the next step.

Why did you move into building controls?

In the last sort of five years, I was starting to look for higher learning and, starting in 2022, I enrolled into Future Skills Level 6 Diploma in Building Surveying in my own time and after a year of that I got a job at Timaru District Council as a BCO.

Where do you currently work and what is your role/what do you do?

I am currently employed at Timaru District Council as a Building Controls Officer.

What inspires you to get out of bed for work in the morning?

While I was a builder, I enjoyed training new apprentices and passing on my knowledge of the trade which kind of inspired me to take on a new challenge.

Why did you decide to tackle the Entry to BCA-Part Two programme?

After learning the ropes in the office for a couple of months, my manager Jayson Ellis advised me and two other new BCO's, there is a BOINZ course developed for new BCO's that you will benefit from, and it helped a great deal in understanding what I do as a BCO.

Now you've graduated, what do you see you have gained from the programme? / How are you using it on the job?

This course helped me with understanding how the industry works and after graduating I successfully completed an inhouse competency assessment, which I have now achieved competency to process and grant consent applications at Res 1 level.

What worked well for you with the programme? Any highlight or particular challenge?

I liked the workbooks that were made available for each module, and I still use them for a quick reference today and the test at the end of each module was challenging and easy to navigate.

Any advice for someone considering the programme for 2024?

My advice is, if you can, I recommend you do this course as a newbie. It

filled in a great deal of knowledge I was lacking or didn't understand and now I can say I have the confidence and ability to make decisions and complete consent applications without the need for any supervision.

As a newer member of BOINZ, what benefits of membership do you value most?

I especially like the support that they provide and all the new courses they have to offer and attend in the future.

What comes next for you? Any new goals/challenges – at work and/or in life?

Soon I will be starting to focus more on performing site inspections and to gain competency in this area which I believe will make me a better all round BCO, assisting in keeping the industry moving forward.

Kirsty Wallace, BOINZ Professional Development Manager

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