

Spring 2019

IN THIS ISSUE

SUCCESS AT SBCO

Highlights of the 2019 Senior Building Control
Officers' Forum in Wellington

Tiny Homes - building or vehicle?

Artisan - transforming residential inspections

9 ways to own your membership

Coastal Inundation

CAREER GROWTH. ONLINE.

www.boinz.org.nz



The new BOINZ Online Training Academy is now live and features brand new, accessible courses making your career development easy.

New for 2019:

Restricting Access to Residential Pools
Complying with the Building Code

Among the courses for development will be a refresher course series, along with CPD courses developed with our partnered organisations. Topical webinars and live Q&A sessions will also be available through our Online Training Academy

**For more info, visit our website www.boinz.org.nz
or email Jason at training@boinz.org.nz**



our contributors

Board

President:
Kerry Walsh

Vice President
Peter Laurenson

Board Members
Jayson Ellis
Cory Lang
Craig White

Administration:

Chief Executive
Nick Hill

Finance Manager
Deloitte Private

Marketing and Events Manager
Samantha Bryant

Education Advisor
Jason Goei

National Accreditation Division
Nicola Hakes

Membership Relations Coordinator
Henry Cassin

HR Division Manager
Michelle Te Ohaere

Advertising/Editorial Contractors

Advertising/Editorial
Please contact the Building Officials
Institute's National Office via
office@boinz.org.nz

Design & Print
no9.co.nz

ISSN 1175-9739 (print)
ISSN 2230-2654 (online)

Building Officials Institute of New Zealand

PO Box 11424
Manners Street, Wellington
Level 12, Grand Annexe
84 Boulcott St, Wellington
Phone (04) 473 6002
Fax (04) 473 6004
Email office@boinz.org.nz

Front Cover:

Hon. Jenny Salesa presenting at SBCO
2019, Shed 6, Wellington.
Photographer: Shane Boulton - SMB
Creative

IN THIS ISSUE

From the President	04
What's On at BOINZ	08
Own Your Membership	10
Spotlight on a Member - Phil Saunders	14
Update from Kainga Ora	17
Success at SBCO - Highlights of the 2019 Forum	22
Tiny Homes	25
BRANZ Artisan	28
Mitigating E3 Issues	31
C-Clause Updates	34
Coastal inundation - LGNZ Perspective	36
Construction Sector Accord	42
Straight Up Answers	44

Your Board:



Kerry Walsh
President



Peter Laurenson
Vice President



Jayson Ellis



Cory Lang



Craig White



Nick Hill
Chief executive



MESSAGE FROM BOINZ PRESIDENT

Customer Experience: The New Buzz-words in Building Control

Customer experience are the new buzz words being heard around building control and councils all over New Zealand and the western world.

Traditionally we have focused on compliance, liability, ensuring consents and code compliance certificates were issued correctly, meaning the customer experience suffered. We have played at the fringes of customer service but seriously, would that positively change perceptions of the value of what building officials do? Not likely. In my view, it's time for a change to a better "customer experience".

By way of an example, Kevin was 72 years of age when he retired. He was the sole building inspector at our small council during the first 10 years of his 30 years' service. Customers loved him and every aspect of his service, knowledge, experience and delivery. They wanted to talk to him; no one else. He was a customer focused professional

technically and in manner. Kevin was well trained, a BOINZ member for his entire 30 years of service and had passion for his profession and the industry. He once told me of a lady coming to the building counter with a magpie dive-bombing problem as she and her children walked down a footpath. Kevin said "I'll sort that out". He then visited the local police station advising he would be using his .22 on the lady's street to deal with the issue! To which the officer replied "I should come with you as it might not be the best look - a building inspector with a rifle walking down the street". After jumping into the officer's car the problem was soon dealt with, and the customer was super impressed with the council's service.

So, sans magpies, how do we offer the ultimate customer experience? Obviously by knowing our stuff: being technically competent, continually learning, drawing on experience, having professional connections, being confident with and knowing your

customers wants. A desire to be helpful is critical, as is compliance if the customer experience is to be appreciated.

You believe you offer great customer service, and hopefully you do. But is customer service just a part of the customer experience or is customer experience what happens when someone receives customer service? Are they the same thing? These terms “customer service” and “customer experience” are often confused and used interchangeably. They’re not the same, but are related. The difference is that while customer service is one piece of the puzzle — focused on human interaction and directly supporting customers. The customer experience is the sum of the entire customer journey with your business.

For a team to deliver the ultimate customer experience they need to be both highly technically skilled and experienced. They must also have the skills and desire to deliver services in a way that satisfies customers’ needs. The ultimate BCO has the whole package.

A solid building related background is a great foundation, but a qualification, in our case the Diploma in Building Surveying not only delivers core technical knowledge but delivers on service and customer expectations for the role.

I believe everyone, no matter what their background, would have learnt something about

how to better do our job by going through this diploma; I definitely did, and I now have two team members working towards their diploma. We employed them because they had the right people skills and some industry exposure. Both were confident they had what it takes to do the role but both have since come to me advising the learning now received has benefitted them greatly and I certainly see a massive improvement in their skills.

Once qualified with your diploma you need to keep your CPD up to date. You may be qualified and experienced, but you must maintain competence. The BOINZ Training Academy provides plenty of options.

The Training Academy is member owned and all profits are returned to members through further investment in training and other membership services. The more people using the training, the more that can be provided - and at better quality. The preparation and delivery of good quality training is significant and the Institutes goal is to break even or return a small profit enabling investment in new courses. A good example of this is the move into online web-based courses. In my view the attributes required for BOINZ Professional Membership are the same as those required to contribute to the ultimate customer experience.

Similarly if you introduce technology like GoGet, Simpli, Alpha 1, Artisan etc, you only

do this to improve systems and benefit customers. Councils introducing new technology should be wise in their choices and ask what the customer benefits would be from such a decision.

All team members need to focus on the customer experience; one bad customer experience delivery from anyone in your team member will tarnish the team, the council (business) and potentially every building official in NZ.

Most councils now carry out annual customer service surveys. Do you and your team know what your customers’ experience is actually like? Potentially you don’t. What do customers think about when booking in an inspection, how happy are they with an inspection, how was the experience of obtaining a building consent, and what worked (or didn’t) with the CCC process? Gaining this info requires constant checking and making improvements where necessary. You need to get this information.

So what are the main poor customer experiences that I hear nationwide?

- Timeframes
- RFI’s
- Communication.

If we all start by sorting these then I think we will hit the mark. Think outside the box - what can you do? What ideas will meet your customers’ needs - not just what everyone else is

doing - what will work for your customers?

To get you underway here are some starters:

- Ask your customers what isn't working for them
- Cut your wait times
- Delete your RFIs!

Pretty simple right? It should be pretty easy to survey your customers, but how do you cut your waiting times and eliminate RFIs?

Reducing wait times

Aim to get consents out faster, the faster the better, but still in a way that maintains compliance. Think about how long it takes to process a consent for a house from start to finish; probably 6 to 8 hours staff time including admin, BCO time etc. That tells me it is feasible for a customer to apply one day and get it the next. It's possible for a 24hr consent turnaround, you just need all your ducks lined up. Customers would love it. You don't increase your liability. Staff may have concerns but they should want to be part of a team that delivers a great customer experience?

If that's too much of a stretch, think about overall processing times rather than the 20 day statutory clock. We get our consents out in 20 working days or less but how long does the customer see; months or longer? What about getting our consents out the door including 'on hold time' in the 20 working days? A challenge I know, but if we achieved this our customers

would be happy as they expect "20 working days".

RFIs

Now that you are trained, experienced, know your customers and know your stuff, why can't you start helping people with their RFIs? We are the best people to help customers with answers to our RFIs so why not help them? We have been seeing and shaming designers for incomplete plans since 1992, but why do we get the bad press? I say let's take a stand to eliminate RFI letters.

Communication

Do you actually know who your customers are? Your top 10, 50 or 100 customers in each field? You should if you want to engage. Meet with your customers and communicate how they want to be communicated with.

In summary I would love to hear our customers describing the great experiences they have when connecting with Building Officials. A good customer experience plus technical compliance = quality results.

It's in our hands folks!

Our Premi



**PLATINUM
PARTNER**

ier Partners

MiTek®

CHH PLY



PACIFIC STEEL
CERTAIN STRENGTH



GOLD PARTNER

GOLD PARTNER

SILVER PARTNER

SILVER PARTNER

Resene
Construction Systems

pryda

BRONZE PARTNER

BRONZE PARTNER



WHAT'S ON @ BOINZ

Training Academy Calendar

November - December 2019

November

7 - 8 Nov	TA013 E2 Weathertightness	Christchurch
11 - 13 Nov	TA017 Services and Facilities	Wellington
18 Nov	ADV025 Earthquake Engineering	Queenstown
25 Nov- 6 Dec	TA019 Plumbing and Drainage Compliance	Dunedin
25 - 28 Nov	TA008 NZS 3604 Timber Framed Buildings	Auckland

December

6 Dec	NZHHA Solid Fuel Heating	Wellington
9 Dec	ADV020 Advanced Fire	Auckland
13 Dec	ADV005 Difficult to Consent	Christchurch

Online

Any time	ONL01 Restricting Access to Residential Pools	Online
Coming soon	ONL02 Complying with the Building Code	Online

New Con

This ex
signed
ing Co
those v
The co
pant's
Code, t
Buildin
cy of b
vide bu

For mo
son at



New Online Course Starting Soon

A new exclusively online course is designed as an introduction to the Building Code System, or as a refresher for those working in the Building Industry. The course will increase the participants' understanding of the Building Code and the ways to comply with the Building Code and increase the efficiency of the building consent process to produce buildings that are safe to use.

For more information, please email Ja-training@boinz.org.nz.

UPCOMING BRANCH MEETINGS

**Subject to change; Branch meeting notices will be sent out closer to the time of the event with further details*

Central

6th November incl AGM

Auckland

20th November incl AGM

Southern

22nd November incl AGM

East Coast

27th November incl AGM

Waikato/Bay of Plenty

29th November incl AGM

Nelson/Marlborough

3rd December incl AGM

Canterbury/Westland

3rd December

Wellington

4th December incl AGM

Northland

6th December incl AGM

Own Your Membership

9 ways to make the most of your BOINZ membership

1

Branch Networking and Training Events

Your local Branch Networking and Training Events are an excellent opportunity to meet with your peers and learn something new. Branch meetings are held regularly and give you an opportunity to listen to technical presentations from local businesses, associations and professionals in a face-to-face setting. You will also have the opportunity to travel

to site visits and see how businesses operate behind the scenes.

These are widely enjoyed meetings where longstanding and new members can put their heads together to discuss current events and common issues within the industry.

Keep an eye on your emails for the agenda and RSVP to your Branch Secretary.

Annual Conference and Senior Building Control Officers' Forum (SBCO)

Aside from the massive range of technical content covered by expert presenters, the Annual Conference and SBCO Forum both host exhibitions, networking sessions and dinner functions all focused around the built industry.

Meet with your peers in similar roles across New Zealand, discuss new products and technologies entering the market and experience presentations from some of the biggest industry names in New Zealand.

2

3

BOINZ BOOST App

On the back of your BOINZ membership card you will find a list of membership discounts to be used at various retailers. This is just the tip of the iceberg. Download the BOINZ app to your smartphone, register your membership and you'll have access to even more discounts

through the BOOST button. It also features access to Straight Up, our Monthly Updates, the BOINZ events calendar and more.

But why stop there? A newly rolled out feature for the BOINZ App has given members the chance to access BOINZ BOOST+.

BOOST+ is like a coupon book without the book. For \$49/yr you will gain access to over 450 more discounts and deals which are all geolocated to where you are right now. Any time you buy a coffee, building supplies or hire a car, you could be saving. Check out BOOST+ through the BOINZ app and sign up today.





Training Academy

The BOINZ Training Academy offers a wide range of technical courses. Recently they have also rolled out a brand-new Online Training Academy with exclusive online content that you can access from anywhere with a wifi connection.

The Training Academy offers large discounts for BOINZ members and has a wide variety of courses available through New Zealand. It's never too late to upskill, be sure to view the Training Academy on the BOINZ website for more.

4

5

Dedicated Membership Relations Coordinator

Sometimes it can be hard to get the attention you deserve. Sometimes you have a question or need help and you just can't get anyone to pick up the phone or reply to your email. With BOINZ you will never need worry about this.

As Membership Relations Coordinator, your problems are my problems, your wins are my wins and your phone calls will always be answered. My job is to be your go-to guy for anything BOINZ related, industry related or just for a fun chat. You can call me on 04 473 6002, email me at membership@boinz.org.nz or call me on my personal cell 027 917 9856. Please not after midnight, I need to sleep sometimes. I can't wait to hear from you.

BOINZ Website

The BOINZ Website holds a long list of exciting features. Have you ever wondered what roles are available in your area of expertise? Check out our Jobs Board.

Do you want daily industry new pieces and updates? Find our News section under "Resources" to keep yourself informed.

Missed a Branch meeting? Log into My BOINZ and have a read of the minutes. The list goes on. Once you become a BOINZ member, you will have all these features at your fingertips.

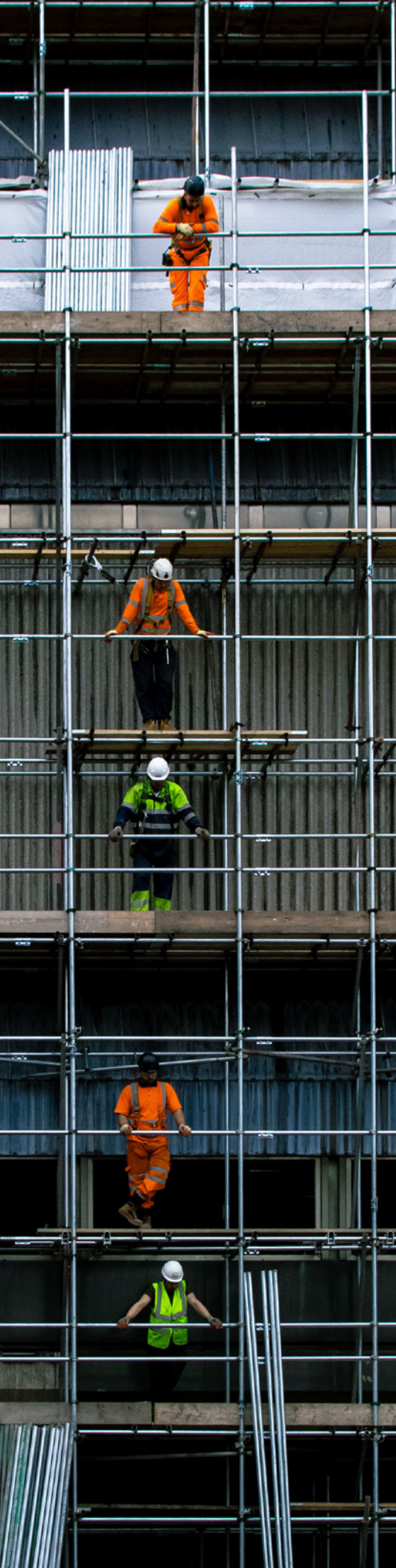
6

7

Member Publications

Each month you'll receive an email update of what's going on in each department at BOINZ. This includes upcoming branch meetings, training courses and any important industry changes you should be aware of. We'll also let you know the highlights from branch meetings from around the country and offer you chances to enter exclusive competitions to win some great prizes.

Straight Up is our quarterly magazine which is also emailed directly to members. It features technical articles written by industry experts, product developers and researchers. It's in-depth reading designed to keep your knowledge and skills relevant to the ever-changing industry.



Advocacy

The Institute spends hours investigating, consulting and understanding issues facing the industry. This knowledge and information is then put to use in supporting change where it is needed in the industry. BOINZ has been involved in monitoring the Vocational Educational Review, Building Legislative Reforms and providing industry opinions to the media.

Most recently, BOINZ made a submission for the Building Legislative Reform Programme. If you wish to read this submission, log into My BOINZ and navigate to the Submissions tab.

BOINZ have also been involved in:

Product assurance (Product Certification/Querying CodeMark), Occupational Regulation (LBP Category Tiers/ Site Inspection), Risk and Liability (Capping BCA Exposure/ Residential Guarantees and Insurance), Building Levy Use/ Expansion, Building Legislative Reforms, Construction Sector Accord, and various NZ Standards

8

9

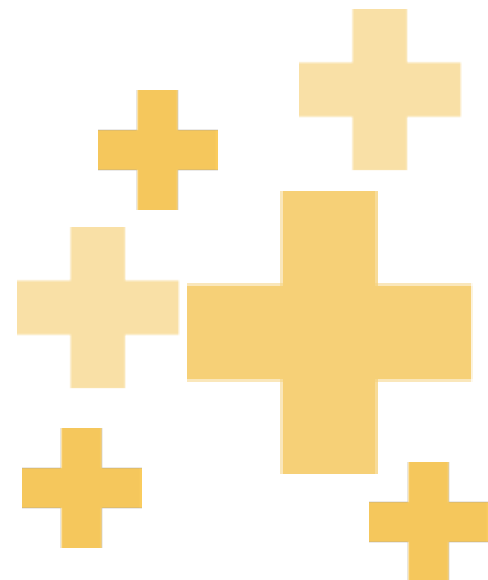
Professional Branding

As a BOINZ member, you are part of a professional organisation that validates your role in the industry and helps make sure you're viewed as a respected member of the built workforce.

It provides the ability to sharpen your professional skills by attending our formal Training Academy Courses, events, and to stay up to date with industry happenings. It's up to you to own this professionalism and continue to develop your brand and your career - we're here to help you achieve it!

Henry Cassin

Membership Relations Coordinator - BOINZ



THE BEST WAY TO **BOOST** YOUR BOINZ MEMBERSHIP



BOOST YOUR BOINZ MEMBERSHIP WITH BOOST AND BOOST+

Get more out of your membership with the new BOINZ mobile app.

Stay up to date with easy access to our newsletters, Straight up, Jobs Board and BOINZ events calendar and access your favourite member discounts through the BOOST button on the homepage. It's free as part of your BOINZ membership.

Unlock even more discounts with BOOST+

With the new BOOST+ optional add on, we'll put New Zealand's favourite products and services in your pocket and make you feel like a VIP every time you need a BOOST. Sign up to BOOST+ for just \$49 (*yearly subscription price) and you'll get access to over 450 extra discounts for dining, entertainment, travel, experiences and retail.

Just click the BOOST+ button on the app and sign up to access these extra discounts for a whole year.



DOWNLOAD THE NEW BOINZ MEMBER APP NOW





SPOTLIGHT ON A MEMBER

Phil Saunders

Manager Building Control - Otorohanga District Council

Phil Saunders has had a lifetime career in the Building and Construction industry, and still loves coming to work every single day. One might think that after 51 years he'd be ready to take a step back, but his drive and work ethic keeps him bouncing out of bed every morning ready to learn something new.

Speaking to Phil, you can hear the excitement and passion in his voice for the industry, so it's no wonder he's got some pearls of wisdom on how to make the most of such a diverse range of job roles he has held throughout his career.

Phil is currently the Building Control Manager at Otorohanga District Council, the latest challenge he has taken on after 41 years with Hamilton City Council.

41 years! Why the change now?

I loved working for Hamilton City Council and had several roles throughout my time there which kept things interesting. I had roles as a Building Inspector, Processing, Team Leader in both teams. I was the Clerk of Works for a while as well. More recently I was a Building Control

Manager for about 20 years and then the Principal Building Advisor. I always had something new and interesting to work with.

I'd heard about a situation at Otorohanga where a few people had left the council and it left a bit of a void. We all know there's a shortage of BCOs! I felt like I could help. I thought I could really make a difference. I also wondered what it would be like to work at a smaller organisation – I saw the opportunity for challenge in being more hands on. It's great because it puts me out of my comfort zone as there aren't any real "specialists" so you've got to get out there and learn for yourself.

So you love a challenge? What are the biggest challenges you've faced in your career?

Every day is a challenge! I love this industry because I love taxing my brain and facing difficult challenges. There's too many that I've seen in my time, but I like to take on problems that other people haven't been able to fix. I guess I like to fix things! Even in my spare time, I restore old furniture.

I love that each day brings different challenges, but how I see it is that I'm here to make other people successful.

Ultimately, we're in a customer service environment whether we like it or not and we're here to make sure our customers are successful. Our job is to make sure that buildings are safe, but to do that, we need to make sure the customer feels successful and that their experience with the building is successful.

How did you get into the industry?

My first job was as a building apprentice. I left school at 15 and picked up an apprenticeship.

I loved building. I worked for a few different builders and even had my own little business for a while. I joined Hamilton City Council at about 24 or 25. I had a young family so it was a good option so I could do the best I could for them, and I loved it!

What are the biggest changes you've seen in the industry throughout your career?

Probably the change from a prescriptive to a performance-based building code. The change brought a whole lot of good things with it, but also new challenges. Prescriptive can be quite narrow minded, like this is how you must build a building. Performance-based brings the challenges of bespoke plans that all have to meet the same

criteria.

What's your involvement with BOINZ and how has this impacted your career?

I actually joined in 1978. It was the Institute of Building Inspectors back then. I had a number of older colleagues who were members and they encouraged me to get involved. I saw a lot of value in being able to talk to people from around the region who experienced the same issues as we did, and learning from them different ways we could deal with them. I've also served 2 terms as President of BOINZ.

You get out what you put in. Organisations like BOINZ are so important in supporting BCOs. It should be compulsory to be a member! Being a member opens up so many opportunities through branch meetings and the suite of training offered. There are so many opportunities to learn new things, to network with experienced people from around the region and the country. You can discuss the issues you experience and get a new perspective. I'd highly recommend everyone get more involved with their branch and the executive committee to really understand the value that BOINZ can bring to your career.

What advice would you give to someone looking to get into a career in Building Control, or someone wanting to advance in their career?

It's a career where there is massive opportunity for learning. It's so diverse in the areas you can specialise, whether it's government or as a BCO. Political or working on site. The diversity means you can explore so many different roles within the one sector, or even one council!

Again, you get out what you put in. If you're keen to learn, the opportunities are out there.

KNOW SOMEONE WHO DESERVES THE SPOTLIGHT?

If you're interested in talking to us for future issues or you know of someone who is doing great work within the industry and deserves to have the spotlight on them, please email marketing@boinz.org.nz

“
You get out what you put in. There are so many opportunities to learn new things, to network with experienced people from around the region and around the country.
”





NEW OPTIONS ON THE BOINZ JOBS BOARD COMING SOON



JOB BOARD POST

30-day job advert posting, with your own business profile to upload and edit jobs easily and efficiently.

- Most viewed webpage on our website
- Only dedicates Building Surveying jobs board in the market

\$250 + gst

JOB POST SOCIAL+

Everything from "Job board post" **PLUS**

- Job shared on our Facebook and LinkedIn pages

Effective way to reach a broader audience

\$275 + gst

JOB POST MEMBER+

Everything from "Social+" **PLUS**

- Job shared to our Monthly Update distributed to our 1250+ members
- 300-word feature with links to your application page

\$325 + gst

MEMBER+ EXCLUSIVE

Everything from "Member+" **PLUS**

- "Stand Out" feature at the top of our jobs board Job posted at the top of our website's homepage.
- We will work with you to discuss your ideal candidates and directly contact anyone we know who fits the criteria

\$350 + gst

STANDARDS NZ SHORTS

Huge response to pre-funded building standards

Over 120 building standards used for Building Code compliance have been funded for free download thanks to a successful collaboration between Standards New Zealand and MBIE (Ministry of Business Innovation and Business).

Standards New Zealand has had a phenomenal response since the campaign was launched in mid-July, with more than 59,000 people accessing the pre-funded standards. This compares with 8,200 for the full 2018/19 year.

This initiative fits strongly with Standards New Zealand's strategy of working with regulators and industry to get more standards pre-funded, and enabling better access to standards that make a difference to the wellbeing of New Zealanders. It also makes New Zealand one of a few countries in the world that funds free access to building standards.

As a regulator of the building system, MBIE wants to reduce barriers that prevent people from 'doing the right thing' within the New Zealand building system. These building standards directly help demonstrate compliance with the New Zealand Building Code to ensure our buildings and homes are safe and well-constructed.

The pre-funded standards are now free to download from the Standards New Zealand website.



UPDATE FROM
KAINGA ORA

A more joined up approach to housing and urban development

An update from Kāinga Ora – Homes and Communities

Kāinga Ora – Homes and Communities is a new Crown agency established on 1 October 2019. It brings together the people, capabilities and resources of KiwiBuild, Housing New Zealand, and its development subsidiary HLC.

This new agency has been set up to support the Government's priorities for housing and urban development. It addresses the fact that critical roles and functions within these areas are currently split or duplicated across multiple agencies, resulting in limited co-ordination and fragmented decision-making.

A step-change is needed to address these challenges, rather than continuing business as usual. Establishing Kāinga Ora is the biggest institutional and legislative change to housing and urban development for a generation.

Kāinga Ora is charged with being a world-class public housing landlord and leading integrated urban development. It will also play an essential role in tackling the Government's priorities of ending homelessness and making homes in New Zealand more affordable.

An Urban Development Bill is expected to be introduced to Parliament in late 2019 and is likely to be passed by mid 2020. The new bill will provide Kāinga Ora with a tool-box of powers. This includes shortened planning and consenting processes, as

well as funding powers for infrastructure and other development activities. This will allow for a more streamlined approach, enabling complex projects to be undertaken with greater co-ordination, certainty and speed.

Partnerships across the public and private sectors will be critical in making this work. Kāinga Ora will partner with developers, councils, Māori, government agencies, and others to enable, facilitate and deliver urban development projects of all sizes.

Kāinga Ora will have a strong focus on long-term community engagement to deliver improved wellbeing outcomes and urban design. Development projects will provide people with good quality, public, affordable and market homes that connect to the jobs, transport networks, open spaces and facilities needed for communities to thrive.

Kāinga Ora is also well progressed in establishing its own national building consent authority. The standalone organisation within Kāinga Ora is targeting accreditation by the first half of 2020.

It will provide building compliance services exclusively to Kāinga Ora for specific types of state homes throughout the country. It will ensure these homes are of a high quality and meet or exceed New Zealand building standards in terms of design, materials, construction and connections to infrastructure.

More Than Just A Bent Bit Of Metal



Structural Connecting Systems and Solutions

Pryda the Industry Leader

Pioneers in the development of structural connectors and bracing products for over 50 years.

New Product Development

Products introduced by Pryda continue to significantly improve construction methods in New Zealand.

Product Quality & Compliance Standard

Pryda products are engineered, manufactured and tested to meet or exceed New Zealand building standards.

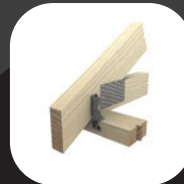
Engineering Support

Pryda have a team of engineers in house to provide assistance to builders, specifiers, building inspectors and architects.

Achieving a Common Goal

Pryda conducts training sessions with builders, designers, architects, engineers and BCAs with the aim of achieving Building Code Compliant Structures first time, every time.

Timber Connectors



Prefabricated Building Components



Pryda Build Design Software



Made in New Zealand

A wide range of Pryda's products are engineered and manufactured in New Zealand. The Pryda brand is widely known and respected among design and construction professionals who support local business.

Support: 0800 88 22 44
www.pryda.co.nz

BLOG

3 Insane Ways to Put Yourself Under More Pressure

You are already under pressure...

Deadlines...

Short of staff...

Dealing with things outside of your control...
and now you find yourself in the company of
another person only to find they constantly
use words that have a negative aspect
attached to them!

Sometimes you can't work out why someone would speak using language that has the potential to drag another person down and make them feel bad. You've got enough to contend with without listening to someone else's stuff!

And all too often when we're under pressure we speak to ourselves in our own head with little attention to the words used.

Remember, all words have power.

Depending on what power you give them or allow them to have will determine the strength and effect of those words.

One of my clients was unaware of how the language they were verbalising externally was giving rise to the negative self-talk they found themselves experiencing. Paying attention to your own spoken words can be difficult as you don't not generally notice what you're saying.

Here are examples of 3 insane things we might say that put us under more pressure:

1. I **should** spend more time with my team
2. I **ought** to send the report out straight after the on-site meeting
3. I **must** read and reply to all of my emails today

These words are called imperative words, for example, should, have to, need to, ought to, and must. I taught my client to start really listening to their own language for these imperative words and expressions, then just stop and ask themselves one or more of the following questions:

Who says?

What happens if I don't?

What happens when I say '**I choose to**' instead?

You'll notice how your feelings change as a result of talking to yourself differently. It takes time to change language patterns and just like most aspects of change you need to pay attention to it. This is another good place to start improving your self-talk.



Linda Wells

Author and Business Stress Specialist

About the author:

Linda Wells is a Business Stress Specialist and Men's Anxiety Expert who for the past ten years has inspired and educated men and women to reduce stress and significantly increase the enjoyment and success they get from their business and personal lives. She is the author of the book 'Transforming Your Stress Into Business Success' full of strategies, tips and techniques to reducing workplace stress.

www.transformingyourstressintobusinesssuccess.com

**MORE ARTICLES LIKE THIS WILL BE
FEATURED ON THE NEW BLOG SECTION
ON "MY BOINZ" COMING SOON**

Got something you want to share?

Send your blog articles or opinion pieces to
marketing@boinz.org.nz to be featured.

GIB® Fire Rated Systems Manual Available.



A comprehensive guide on how to achieve fire ratings for walls, floor/ceilings and structural steel fire protection.

NEW PRODUCT

- GIB Fire Soundseal®
- GIB® Grabber® Drill Point Fine Thread screw

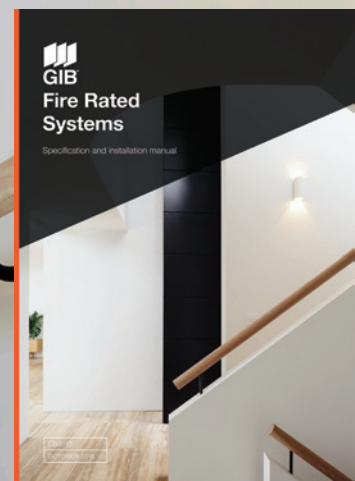
NEW SYSTEMS

- Smoke separation wall
- GBTL 30c
- GBUW 60 / GBUC 60 – Revised
- GBUW 180
- GBS 90b / GBS 60b
- GBS 120b
- GIB® Panel Shaft

OTHER ADDITIONS

- NLB steel stud centres and wall height guidance
- 'Top-down' fire exposure design guidance
- Metal components used within suspended ceiling grid systems
- Clarifications to junction details including deflection heads

For further information visit gib.co.nz or call the GIB® Helpline 0800 100 442.





LEFT: Fire test in progress. MIDDLE: Completed fire test with cladding still in place. RIGHT: Completed fire test with cladding removed and GIB Weatherline® visible.

GIB - CASE STUDY

GIB Weatherline® Fire Test

In proprietary tests undertaken by two reputable international cladding manufacturers and their respective New Zealand Distributors, GIB Weatherline® was included in combination with claddings to pass two separate NFPA285 full scale Façade fire tests.

MBIE have recently announced the “Building Performance Guide: Fire Performance of External Wall Cladding Systems” which summarises available pathways for NZ Building Code Clause C3 External spread of fire and includes a risk matrix for fire testing protocols.

In buildings deemed Low Risk applications, GIB Weatherline® Rigid Air Barrier Systems meet or exceed the requirements of NZBC Performance Clause C3.5.

For Medium Risk applications, to comply with MBIE Protocol P1, GIB Weatherline® has been tested in accordance with ISO 5660-1, meets the requirements of C/AS2 to C/AS7 paragraph 5.8 and can be used as a component in medium risk applications provided other cladding components also comply with MBIE Protocol P1 guidelines.

However, to meet High Risk Applications MBIE protocol P3, 13mm GIB Weatherline® Rigid Air

Barrier was tested on timber framing with internal insulation in two separate NFPA 285 full scale façade tests in combination with both Alucabond and Reynodual claddings systems.



ABOVE: Preparation for the fire test with GIB Weatherline® lining (left) and with cladding (right).



FOR FURTHER INFORMATION:

Call the GIB® Helpline 0800 100 442.



SUCCESS AT SBCO

“Getting it Right – Lead the way” was the underlying theme at the Institute’s events this year, and the Senior Building Control Officers’ (SBCO) Forum held true to this message.

Here's what you missed if you weren't at SBCO 2019:

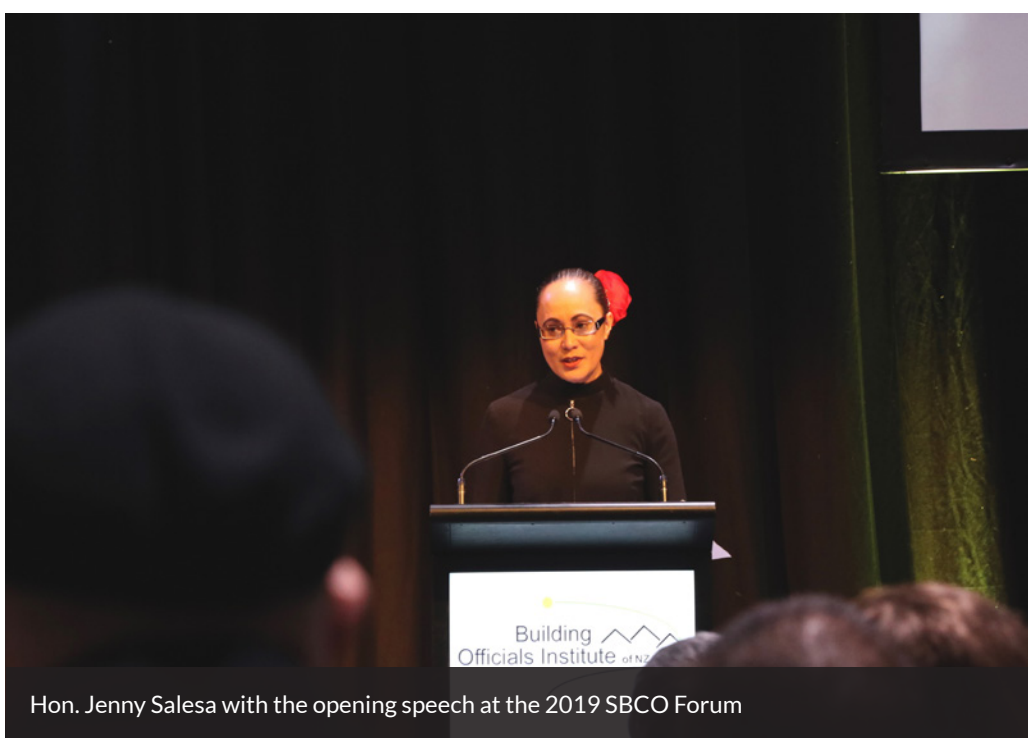
The two-day Forum hosted 160 senior delegates at Shed 6 in Wellington and covered an overview of new initiatives across legislative, environmental and technical topics.

We were very privileged to have the Minister of Building and Construction, Hon. Jenny Salesa, give the opening presentation and welcome delegates to Wellington. She touched on the introduction of the Building Sector Accord and the importance of government and industry working together. She then began to outline the process of implementing several phases of legislative change as a result of the legislative reform consultation. A project as big as this takes time to get right and the Institute’s Vice President, Peter Laurenson, showed his appreciation for the phased approach in his thanks to the Minister.

Mark Pattemore, Wellington City Council’s City Consenting and Compliance Manager, continued the morning presentations outlining some of the exciting work going on in Wellington City and the complexities of construction in a city at risk from seismic activity and coastal inundation.

Registered Master Builders Chief Executive, David Kelly, gave an explanation of the Construction Sector Accord and how championing a collaborative approach between government and the sector works to enhance industry leadership, collaboration and organisation. The hope is that it results in better business performance and improved culture and reputation across the industry.

LGNZ Principal Policy Advisor, Tom Simonson, then reported on the impact of coastal inundation



Hon. Jenny Salesa with the opening speech at the 2019 SBCO Forum

for BCA's and his hopes to start conversations at a national and local level. In a second presentation, Tom gave an LGNZ perspective on the recent Building Legislative Reform Package, which, for the most part shared similar views to those submitted by the Institute.

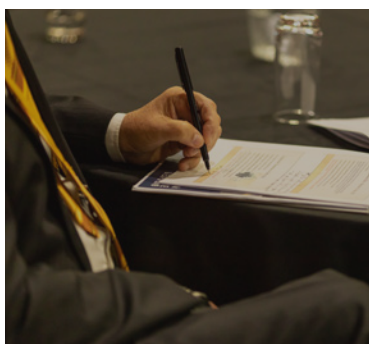
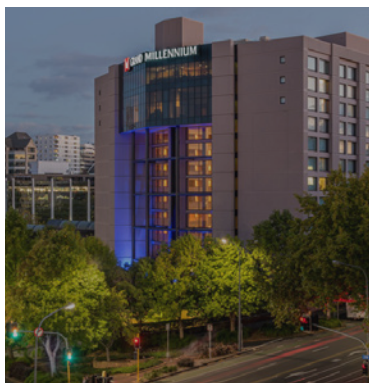
The last legislative focused presentation was given by Simon Thomas from MBIE who gave an update on the progress of the BCA accreditation project. This presentation sparked some debate and discussions from the audience and Simon highlighted that a lack of resource is an on-going concern for most BCAs, and that each local territory faces unique challenges.

Other topics featured at SBCO included the Building Safety Week initiative taking off in the US (Judy Zakreski, ICC), a new in-employment education programme enabling BCA staff to gain qualifications while they work (Sam Alavi, FutureSkills Academy), and the showcase of BRANZ's new mobile app and web solution, Artisan, which is transforming the residential building inspection process (Chelydra Percy, BRANZ CEO).

The afternoon featured presentations of a more technical nature, covering the mitigation of E3 issues when tiling (Brendon Manson, TANZ), dealing with dangerous affected and insanitary buildings (Kevin Duthie, South Waikato District Council) and the hot topic of tiny homes, which



Chelydra Percy (BRANZ CEO) showcasing the new Artisan mobile app and web solution for inspections



ANNUAL CONFERENCE & EXPO 2020

**CALL FOR PAPERS
NOW OPEN!**

**16 - 19 MAY 2020
GRAND MILLENNIUM AUCKLAND**

featured an interactive quiz putting delegates knowledge and interpretation of the Building Code to the test (Frana Divich and Kent Perry, Heaney & Partners).

Day 2 of the forum started strong with Helen Davidson from Engineering NZ explaining the work ENZ has done with Territorial Authorities to understand issues experienced in the engineering space and the use of this feedback to effect change in how engineers are regulated. Next up, Richard Merrifield (Building Practitioners Board) outlined their submission for the Building System Legislative Reform, focusing heavily on Occupational Regulation, and what this could mean for the future of LPBs. Then Patrick Dougherty (Housing New Zealand) took us through what HNZ is going through to set up their own BCA, taking pressure off local councils so they can focus on other residential and commercial builds.

With a huge amount of content to get through, the forum was split into breakout sessions where delegates were able to choose a range of presentation topics to attend. These sessions covered what it really means to be “satisfied on reasonable grounds”, changing trends in solid fuel installations, quality control of the building envelope, understanding solutions that directly comply with the performance criteria in the building code, customer facing technology (such as body cameras, drones and apps like Artisan), marquee construction best practice, residential pools legislation, roof drainage code of practice, C-clause updates and the Building Code Technical Risk Advisory Group (BTRAG). Feedback from delegates has been that these sessions were too hard to choose between!

The forum concluded with a panel discussion on Building Act compliance and enforcement, and a thought-provoking presentation on third party assessment and verification.

The Institute would like to extend a huge thank you to our Premier Partners (GIB, MiTek, Carter Holt Harvey Ecoply, Pacific Steel, BRANZ, Resene Construction Systems, and Pryda) SBCO event sponsors (Heaney & Partners, BRANZ, James Hardie and Resene Construction Systems) and our innovative exhibitors (Tracklok, GIB, James Hardie, Metalcraft Roofing, Simpson Strongtie, RoofLogic, Korok, Master Business Systems, FutureSkills Academy, Flashclad, Resene Construction Systems, and Objective) and of course our presenters and delegates for yet another successful event.

The BOINZ Annual Conference is up next on the 16-19th May 2020 and will be held at the Grand Millennium Auckland. Save the date, registrations will open soon!



ACCREDITED BUILDING SURVEYORS

2020 COURSES

26-28 March	Christchurch
22-24 May	Auckland
17-19 July	Wellington
18-20 Sept	Christchurch
13-15 Nov	Auckland

Email accreditation@boinz.org.nz
for info



TINY HOMES

Tiny Home? Or Not a Tiny Home?

Tiny homes seem to be everywhere at the moment. The tiny home movement has a strong following on social media.

They are promoted as an answer to housing affordability, the housing shortage and as a desirable alternative to the traditional house and mortgage. Conflicts between tiny home owners and local authorities have received heavy news coverage, they continue to cause headaches for council enforcement officers, and MBIE has been asked to determine whether a steady stream of tiny homes are vehicles or buildings.

The issues involved are not new or novel. In fact, the Court of Appeal articulated the test to be applied in a 2010 case called *Thames-Coromandel District Council v Te Puru Holiday Park Ltd* [2010] NZCA 633. That case concerned units described as “new generation caravans and mobile homes” and “trailerised recreational and accommodation units”. The owners of the units argued they were vehicles. The council said they were buildings. Simply articulated, the Court was asked to determine whether the units were vehicles or buildings.

Section 8 of the Building Act defines what a building is and section 9 defines what it is not. The Court did not find the interpretation exercise easy, but concluded that both those sections needed

to be looked at together. Where a specific thing is described and stated to be either included or not included in the definition, that is decisive. The specific obviates the need to consider the general definition. If the thing in question is not specifically dealt with, then you have to consider whether it comes within the general definition.

So in the case of a person arguing that something is a vehicle, the first thing that must be assessed is whether it is, in fact, a vehicle. If it is a vehicle then the next step is to assess whether the vehicle is immovable and occupied by people on a permanent or long term basis. If it is immovable and occupied on a permanent or long term basis, it is a building. If however it is found not to be a vehicle at all, then an assessment needs to be made on whether the thing comes within the general definition of building (which includes a movable structure).

One of the units the Court of Appeal was asked to consider had the following characteristics:

- a. It had no suspension.
- b. It had no brakes.
- c. The wheels on the unit were bolted to the hubs.
- d. Some of the tyres were not on the ground; the unit was sitting on concrete blocks and timber packers;
- e. It could not be towed without a special permit because of its width (3.64m).

- f. It could not have passed a warrant of fitness test.
- g. It was constructed of components commonly used on prefabricated buildings.
- h. It was plumbed.
- i. It was laid out like a small holiday house.
- j. It was occupied on a permanent basis.
- k. It was immovable for the time being and would take a lot of time to get it ready for towing.
- l. It did not have a tow bar.
- m. It did not have tail lights or registration plates.
- n. It had a ranchslider, going onto a wooden deck, with steps down to the ground.

Having considered the above, the Court found that the unit as presented was not a vehicle. It said *"The facts set out are not indicative of a vehicle, of something that moves. They are indicative of a small house, somewhere to live. We accept that the unit, if considerably modified, could have been turned into a caravan or trailer, but that is of minor relevance in determining its "as is" categorisation."*

Following the Court of Appeal's judgment there have been a number of determinations by MBIE and its predecessor on this very issue and apart from a couple of obvious mistakes, if a tiny home looks like a building, was designed to operate as a building i.e. "it is indicative of a small house, somewhere to live", then generally it has been found to be a building.

More recently, in determination 2018/031, MBIE has provided guidance on how to determine if a thing was a building or a boat. Again there is an interaction between sections 8 and 9 of the Building Act. The thing in question was on land and fitted the definition of "building" in section 8(1)(a)

in that it was a "temporary or permanent movable or immovable structure". However a boat "used in navigation" is expressly excluded from the definition of building by section 9(d). For MBIE the decision came down to whether the thing could be used in navigation. It was found that a number of features of the thing, including non nautical doors and windows in the hull and a greywater system discharging to the ground, were incompatible with a boat used in navigation. MBIE conceded that if modified the structure could be used in navigation – but if we take the Court of Appeal's reasoning, that is of minor relevance in determining its "as is" categorisation.

We have fielded a lot of questions about tiny homes. These have increased since our presentation at the SBCO Forum. BOINZ has kindly agreed to send our case note and the quiz questions (and answers) to the forum delegates so they can use them as training aids. We have also included MBIE's useful flow chart with this case note.

We ended our presentation in Wellington by saying these issues are not straightforward. Three very clever Court of Appeal judges found the interpretation exercise difficult. If you need help please do not hesitate to contact us at Heaney & Partners.

Fraňa Divich
Partner - Heaney & Partners



Is it a vehicle or a movable structure?

Things to consider:

- is it equipped with wheels, tracks or revolving runners on which it moves or is moved?
- is it used for transporting people or goods?
- is it drawn or propelled by mechanical power?
- what is the superstructure made up of?
- whether structures have been attached to it, such as decks, verandas, or additional rooms.

No, it is not a vehicle

A moveable structure falls under the general definition of a building under section 8(1)(a)

Yes, it is a vehicle

Does the structure meet the criteria in section 8(1)(b)(iii)?

Is it immovable? Consider:

- whether it is attached to the ground and how easily those attachments can be removed;
- it has been connected to services and how easily those can be removed;
- it has retained its wheels and the ability to be towed or to move itself;

No, it does not meet either criterion

It is **not** a building under section 8(b)(iii)

Is it occupied by people on a permanent or long-term basis? Consider:

- whether there is an intention of an indefinite period of occupancy;
- whether there is a definite or intended period of occupancy;
- whether occupation is intermittent, occasional, continuous or cyclical.

If it only meets one criteria

Yes, it is both immovable and occupied by people on a permanent or long term basis

It is a building under section 8(1)(b)(iii)



BRANZ Artisan

ARTISAN: Transforming the residential building inspection process

With around 43,300 new homes due to be built in New Zealand by 2023, building inspectors are going to be busier than ever.

As a result of continued growth in the construction industry, the sector is facing many challenges. The Government launched the Construction Sector Accord earlier this year which is a shared commitment between Government and industry to transform the building sector. The goals of the Accord are to increase productivity, raise capability, improve resilience, and restore confidence, pride and reputation.

BRANZ delivers transformative technology solution

One transformation initiative BRANZ has been working on is the development of Artisan – a digital solution which streamlines the residential building inspection process. The concept of Artisan came out of a strategic review BRANZ carried out a few years ago which focused on understanding build quality. The review identified opportunities for technology to improve the building inspection process, so BRANZ worked collaboratively with industry stakeholders to understand their needs and develop a digital solution – Artisan.

Artisan is a mobile phone app and web console technology which allows each residential build inspection step to be prescribed, seen, assessed, verified and recorded. It offers immediate and tangible ways to record the build process, but, importantly, Artisan is also a tool that delivers long term positive outcomes – like improved trust and collaboration.

Artisan aims to gradually transform the inspection process by helping to achieve productivity gains for everyone – inspectors, builders, architects and homeowners; while increasing build quality assurance and Building Code compliance.

How does Artisan work?

A consented project is set up by the Building Consent Authority (BCA) in Artisan with a "shot" list specific to each build stage check. Everyone involved in the build process – the builders, sub-contractors and clients – uses the smartphone app to view progress of the build against the checklist. Using the phone's photo function, builders and subbies complete the shot list and can record/see details of the build process in 'real time'.

The information captured creates an accurate record and evidence detailing how each new home is built. Each time new build quality evidence

is uploaded to the database, everyone from the client and design team through to product manufacturers and the BCA inspector can be alerted. The work undertaken at each critical step is visible for analysis and review. This allows inspectors to review, communicate with the build team, and sign off work virtually rather than having to visit sites for every inspection.

Artisan is easy to use, straightforward to implement, and can be used alongside the existing inspection process. There will still be inspections that need to be carried out on-site, but Artisan enables another way of working, and is particularly useful for office bound inspectors.

Artisan also includes a full training and resource portal, Knowhow Manager, which was developed in consultation with builders and councils, therefore the user experience is as seamless as possible.

Artisan is a great example of how well-designed tech can increase productivity

It drives productivity by:

- Reducing rework on site as it improves the build team's understanding of what inspectors are looking for.
- Reducing the wait time for inspections – because the inspector gets alerted when the builder submits the photos. They can inspect wherever they are, and in near real-time.
- Improves council productivity - inspectors can do two to three times the number of Artisan inspections as physical inspections.
- Reduces the amount of lost time for inspectors who no longer need to drive to site for every inspection.
- Enabling inspectors who aren't able to visit sites due to injury or other issues to continue to work, improving capacity within councils.

ecoply® BARRIER

WEATHERTIGHT RIGID AIR BARRIER

NOW WITH

180 DAY EXPOSURE

- ✓ Ecoply® Barrier can now be left exposed to the elements for up to 180 days before the cladding has to be installed.
- ✓ Achieve early close in and start on the inside sooner
- ✓ BRANZ appraised Structural Bracing and Weathertight Rigid Air Barrier.
- ✓ Engineered to allow the wall system to breathe and dry out.

www.ecoplybarrier.co.nz



Raising capability through collaboration, communication, and consistency

Another goal of the Accord is to raise capability within the construction industry. The feedback from Artisan users has already confirmed that the technology is doing just that. The builders have said they now have a better understanding about what council requires as they get to see exactly what the inspectors are looking for – this means they are seeking the knowledge and skills to deliver those requirements and can aim to get work right first time. They are communicating effectively through Artisan which is resulting in a lift in performance and consistency from both sides.

From a council's perspective, Artisan highlighted variability in the standard used to pass the inspection. Training and a set of example photos within Artisan have helped to improve consistency across both inspectors and councils.

Artisan is helping restore trust and confidence in the sector by creating an enduring record of build

quality for each project that uses it. This makes the quality of work transparent. It shows that builders are proud of their work and not afraid to be held to account for its quality – this is helping to restore confidence, pride and reputation.

Artisan is being carefully rolled out to BCAs and the industry has been buzzing with excitement about the transformational impact this technology can bring to the construction sector. BRANZ is looking to onboard more councils over the coming months, so if you would like to find out more about Artisan, visit www.branzartisan.nz, call 0800 80 80 50 or email artisan@branz.co.nz.



BRANZ

Artisan



Multi-role Robotic Platform. Ideal for sub-floor inspections, under-vehicle inspections, other health and safety situations.

- Fully designed and manufactured locally with quality components
- All software, electronics and manufacturing by Techmatics NZ
- High grade powder-coated metal body. Dust and splash proof.
- Supported by Callaghan Innovation (MBIE)
- 2 year warranty



- Protect health and safety of you and your staff. Avoid breathing fungus and dusts while inspecting sub-floor cavities or vehicle underside inspections
- Ideal solution for safely inspecting confined spaces
- 1080p HD camera system with built-in floodlights for high quality images
- Tough, rugged, reliable and maneuverable
- Compatible with iOS and Android devices
- Battery usually good for 1hr
- Smart battery charging with voltage display
- Save time on inspections
- Produce high quality reports
- Comes in a rugged case

TECHMATICS NZ

Phone: 0211062245
Email: info@techmatics.co.nz
Website: www.techmatics.co.nz





MITIGATING E3 ISSUES

E3: The Ancient Document from Last Century

The New Zealand Building Code is relied on to provide direction within the building industry. In the early 2000s it was confirmed that the building industry had problems with E2 External moisture with thousands of homes and apartment buildings sharing a common situation, and thus was born the realisation of the “leaky homes issue”.

From this the following sweeping changes to address the issue:

- An updated and expanded E2/AS1 was published with new cladding details and new flashing details
- a licensing program was set in place for licensed building practitioners
- an education system was developed so that this issue would not occur again.

It was seen by the building industry and associated parties that E2 was a “critical” part of the building code, as the destructive power of water can bring a building to ruin in a short amount of time and the financial cost is incredibly high.

So what about E3 Internal moisture? Is this also a critical part of the NZBC? Is there a need for

sweeping changes to be made to this document? Does Internal Moisture pose a problem in the building industry?

The simple answer is YES. E3/AS1, when looking at membrane and membrane application needs a complete update, and additional information so that it can be a directive document.

TANZ the Tile Association of New Zealand was formed to address the issues that relate to the tiling industry. It is very common for new homes to have tiled bathrooms with tiled showers. These showers work well, when done well, and they also work very poorly when done poorly. So how do you tell the difference? What are some key indicators as to whether a shower will leak or not, and how do you know if the membrane has been applied correctly or not?

This is why education is so important, as the difference between failure and success is understanding what one is looking at and what one is looking for. The education is about complete understanding, not just partial.

It is important that Architects understand the correct details and systems that are most suitable for the waterproofing and tiling for the plans that are drawn. This is then considered by the Councils, and information is conveyed to the Inspectors, which is another aspect which requires

education. Of course it is essential that the builder understands the importance of the substrate and preparation as well as the waterproofing applicator and tile installer.

Yes education is essential but it starts with the E3/AS1.

E3/AS1 has waterproofing and tile images from 1998, that's right from last century! To state that it needs an "update" is an understatement, as the membranes highlighted are a class1 membrane and the tiles shown are no longer made, making the details completely out of date

Today, the tiling industry is guided in New Zealand by Australian Standards AS3740-2004

for waterproofing and AS3958.1-2007 for tile installation.

So what do these standards say? And how does this apply to correct waterproofing and tile installation? The answer is found in education, this is where TANZ and BOINZ are working to provide the information to protect the New Zealand Building industry from a repeat of the "Leaky homes issue".

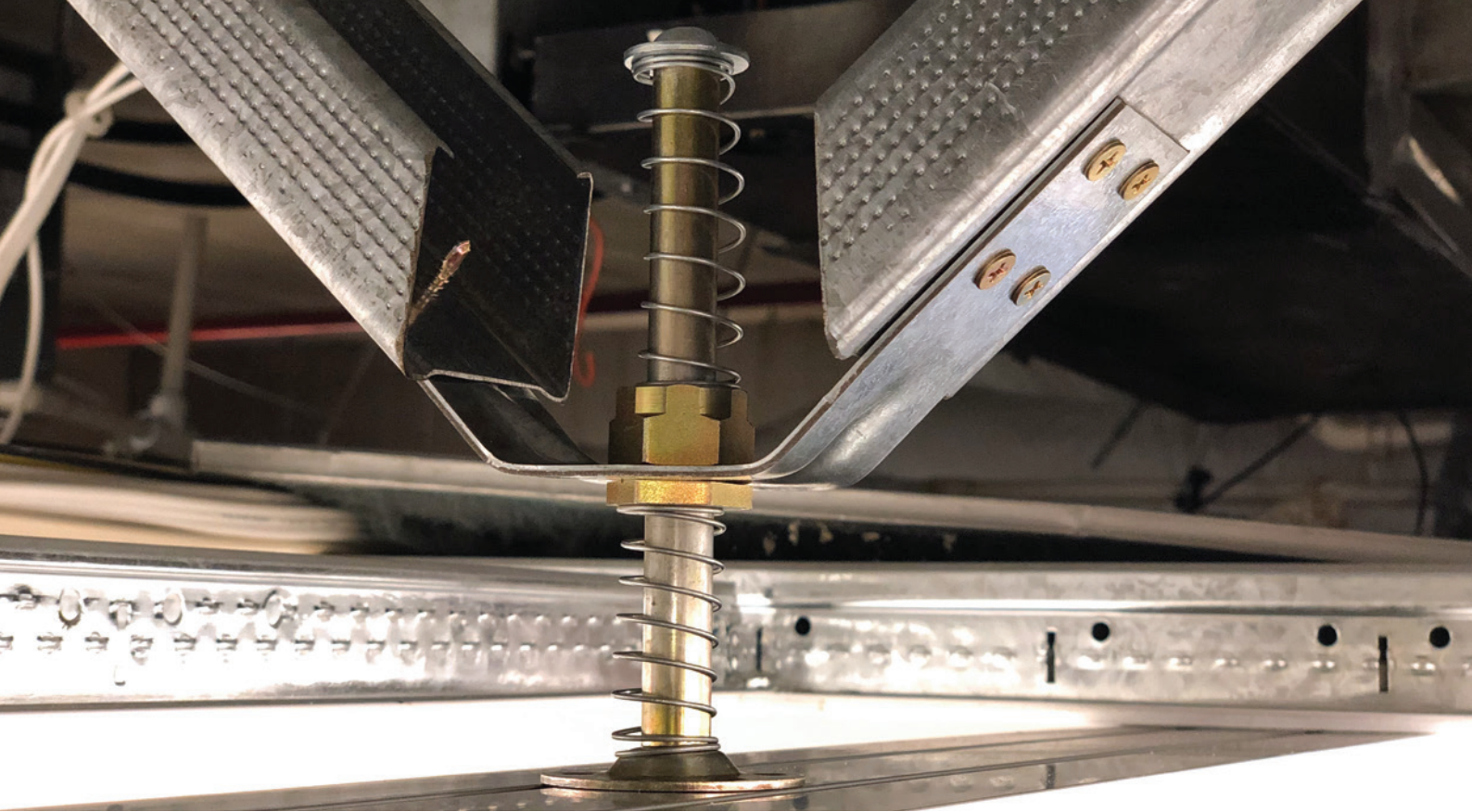
Brendon Manson
Director - TANZ

E3 TILING COURSE COMING SOON!

The BOINZ Training Academy has teamed up with the Tile Association of New Zealand (TANZ) to bring you a brand new course focused on better and more durable tiling installations to combat E3 issues in bathrooms, showers, roofs and floors.

- Compliance with the Building Code
- Compliance with the Building Code with a tiling focus
- Specialised tiling and design durable solutions and how to identify substandard installations

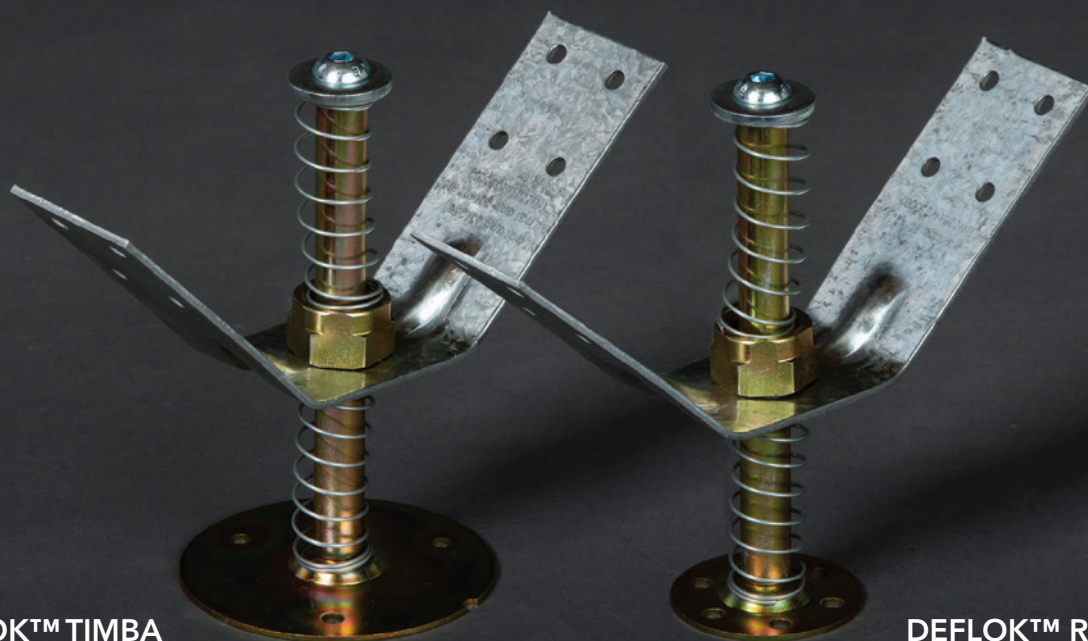
Contact Jason at training@boinz.org.nz for more info



DEFLOK™

**VERTICAL
DEFLECTION
BRACING**

www.tracklok.com



DEFLOK™ TIMBA

DEFLOK™ RETRO

DEFLOK™ is a revolutionary partition bracing system which allows vertical deflection whilst maintaining the lateral bracing attributes of the trusted TRACKLOK® range. DEFLOK™ provides a vertical movement allowance of + or - 35mm. While traditional steel or aluminium deflection tracks are a fantastic way to allow for up to + or - 20mm of vertical deflection, combine these with DEFLOK™ and you can achieve a huge + or - 55mm of total vertical deflection. DEFLOK™ does not require prior assembly, it's a sealed unit that will not fall apart, bind or protrude into the glazing pocket. Use DEFLOK™ where large vertical deflection allowances are required.

Visit our website for a list of reputable distributors.

www.tracklok.com



C-CLAUSE UPDATES

New Compliance Pathway Supports Consistent Approach to Protection from Fire

On 27 June 2019 the Ministry of Business, Innovation and Employment (MBIE) released an update to Acceptable Solution C/AS2 to provide an updated pathway for compliance with the Building Code provisions relating to protection from fire.

What's new with C/AS2?

The new edition of C/AS2 combines six previously separate Acceptable Solutions into a single guidance document. This means there is no longer a separate fire safety Acceptable Solution for each building risk group. C/AS2 now applies across all risk groups with the exception of small residential buildings and outbuildings, which are covered by C/AS1.

The consolidated C/AS2 makes it straightforward to design fire-safe and code-compliant buildings. Several technical changes have also been made to provide greater consistency, including the addition of a table to determine the required fire safety system(s) for a building that will be used for more than one kind of activity.

Consultation with the sector

The updated C/AS2 marks a return to a more streamlined approach to fire safety compliance last seen in 2012, when seven separate Acceptable Solutions were developed – one for each building activity risk group.

The intent of this change was to ensure that fire safety requirements for each risk group were well understood and consistently applied. However, as many buildings are used for a range of activities that can fall within different risk groups, designers still needed to refer to several Acceptable Solutions to ensure the full range of appropriate fire prevention solutions had been identified.

In 2014 MBIE commenced a review of the way it supports fire safety compliance, and consulted stakeholders across the building and construction sector to find out what could be improved. This included holding workshops, pilot testing, carrying out technical reviews, and a trial against “real” projects by Fire and Emergency New Zealand. It was clear from this consultation and review process that the use of multiple Acceptable Solutions across risk groups created unnecessary



complexity, and had led to some inconsistencies over time as each Acceptable Solution was updated separately. Returning to a single Acceptable Solution across multiple risk groups was the obvious solution, and was strongly supported by a clear majority of stakeholders. In releasing the new C/AS2, MBIE has adopted a number of technical changes where there was majority stakeholder support. One notable proposed change that was rejected, however, was a proposal to allow 'intended storage' to determine fire safety requirements for storage risk groups. The consensus stakeholder view was that this would be too difficult to police.

Future work

MBIE's current priority for bi-annual Building Code updates is to help increase the number of higher-density housing projects by normalising compliance pathways. We want to provide clarity and certainty about the Building Code's technical requirements for these projects, which will both support designers and promote consistency among building consent authorities.

In the November 2019 update, we anticipate issuing updated guidance in relation to Building Code clauses B1 (structure), G6 (sound), G7 (natural light) and H1 (energy efficiency). Any updates in relation to clause C (Fire), E2 (external moisture), E3 (internal moisture) or G4 (ventilation) will be issued in the June 2020 update.

C/AS2

Further to the technical changes within the latest version of C/AS2, during 2018 MBIE also

received a considerable amount of feedback on other potential improvements. We are currently analysing this feedback, and aim to incorporate a number of further changes into a June 2020 update to C/AS2. We are also keen to further improve the clarity and readability of the document in this update. We expect to issue a public consultation document in March to support this work.

C/VM2

MBIE is currently reviewing C/VM2 Verification Method: Framework for Fire Safety Design, which can be used to show compliance with the Protection from Fire clauses (C1-C6) of the Building Code. We expect to issue an amended document in 2022.

Keep up to date

MBIE issues regular building sector updates across a range of issues including building regulation. To ensure you are kept up to date with the latest developments, be sure to subscribe by visiting www.building.govt.nz/subscribe.

Saskia Holditch
Fire Engineer - MBIE



COASTAL INUNDATION

New Zealand's Vulnerable Buildings and Facilities

New Zealand has the 17th longest coastline in the world, and 65 per cent of us live within five kilometres of a beach. Consequently, sea level rise will affect most of us in our lifetime, and our resilience will depend on our ability to adapt. Our councils experience the impacts of climate change daily, which impact potential prosperity, vibrancy and long-term viability of our communities.

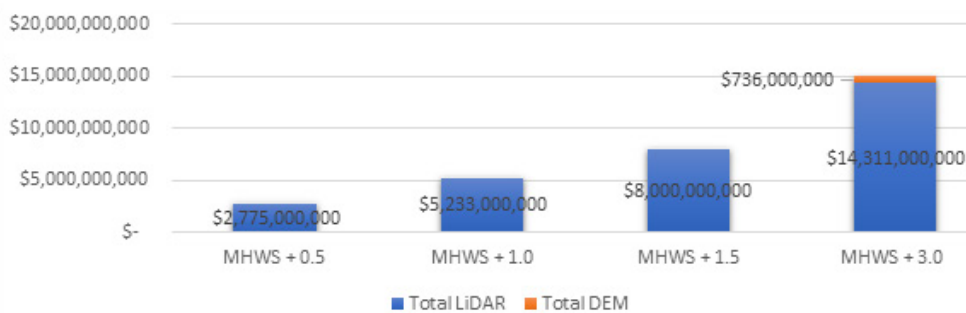
Consequently, Local Government New Zealand (LGNZ) released its landmark report, *Vulnerable: the quantum of local government owned infrastructure exposed to the effects of climate change*. It was the first time in New Zealand that national data was gathered on local government owned infrastructure exposed to the effects of climate change. Total costs were unsettling. Further, considering that central government, business and private owned assets were not included, the numbers were downright startling.

Research focused on supporting councils with their adaptation and mitigation responsibilities, and had two intended outputs. The first was research revealing the quantity and cost of infrastructure at four “mean high water springs” elevation increments: 0.5, 1.0, 1.5 and 3.0 metres. Collected data includes quantified replacement value of assets including roads, three waters and buildings/facilities.

The second - and more important - output was to directly address impacts resulting from rising seas. This output prompts questions, including how to improve procurement, fairly share management of risk, and communicate with stakeholders about priorities.

The data were collected through a survey with a 97 per cent response rate (59 of 61 councils). The results provided valuable insights in cost and quantity of exposed resources. For example, nationally at the 1.5m increment, more than 18,800 kilometres of water pipe, 5,100 kilometres of road and more than 2,000 buildings are exposed.

Total replacement value of exposed infrastructure at the 1.5m increment is approximately \$8 billion (excluding green space). Between the 1.5m and 3.0m elevation increment, the increase in council owned infrastructure exposed nearly doubles, creating a total estimated value greater than \$15 billion. These



Note: 1Data includes, Three Waters, Buildings/facilities, Transport, Landfills and Greenspaces.
2DEM data was only available at the MHWS + 3.0m elevation. It is important to note that while the DEM data is much coarser it only represents a small proportion of Councils and the related quantity / value of assets exposed. As such it is included within the overall data set within the MHWS + 3.0m category. There will also be small proportion of 'DEM' assets exposed at the lower elevation bands that are not included within the totals.

Figure 1 Grand total replacement value of exposed infrastructure

costs are unsettling, particularly as central government, business and private owned assets were not included. Even more unsettling is that the focus was limited to sea level rise. Other climate change related occurrences, such as drought, nor other ownership is considered.

National buildings/facilities data were collected relating to community facilities, council housing (flats and sites), council offices, and significant other buildings/facilities. Nationally, with a 0.5m sea level rise, approximately 780 council-owned buildings are exposed, with an estimated replacement value of around \$200 million.

At the 1.0m elevation, the number increases to approximately 1,400 with an estimated replacement value of more than \$7.1 billion. Further, at the 1.5 and 3.0m increments, approximately 2,110 and 3,970 buildings will be exposed with replacement values of roughly \$1.3 and \$2.2 billion respectively. Importantly, exposed building/facilities infrastructure is not equally distributed around the country. Generally, where the populations are larger, there will be greater exposure. In most locations, exposed

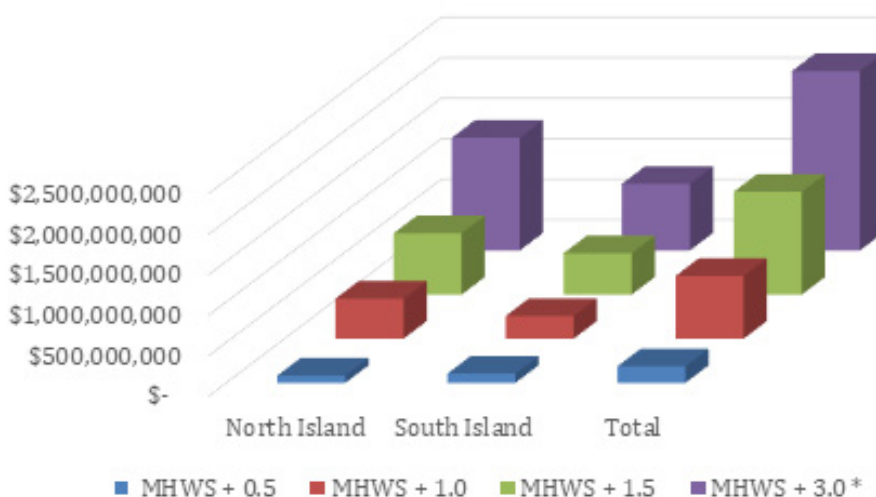


Figure 2 Total replacement value for buildings / facilities

*Note MHWS + 3.0m includes data from councils with both LiDAR and DEM contour information. For MHWS + 0.5, 1.0 and 1.5m only councils with LiDAR contour information are presented in the totals. DEM data was only available at the MHWS + 3.0m elevation. It is important to note that while the DEM data is much coarser it only represents a small proportion of Councils and the related quantity / value of assets exposed. As such, it is included within the overall data set within the MHWS + 3.0m category. There will also be small proportion of 'DEM' assets exposed at the lower elevation bands that are not included within the totals.

buildings represent only a small proportion of the total supply, but in some cases, the types of buildings vary considerably from community centres to council housing.

In the North Island, beginning at the 0.5m increment, \$90 million of infrastructure is exposed (210 buildings/facilities) rising to as high as \$1.4 billion at the 3.0m increment (nearly 2,230 buildings/facilities).

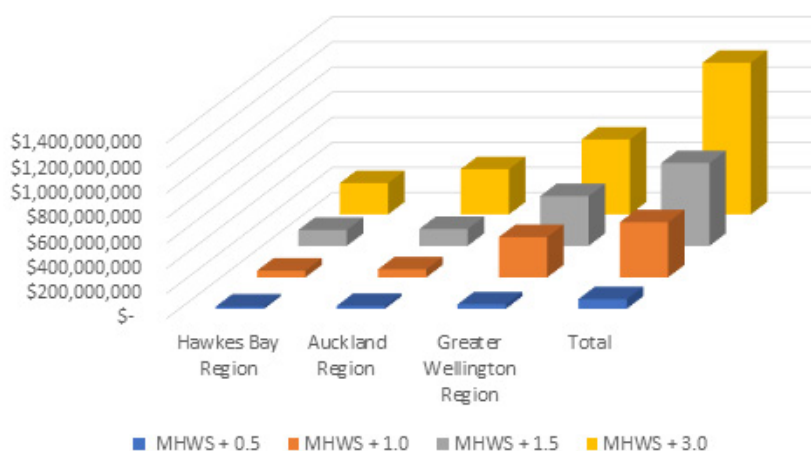


Figure 3 Total replacement value for buildings / facilities – North Island priority regions

All of the above regions had LiDAR contour information available.

In the South Island, at the 0.5m increment, \$114 million of infrastructure is exposed (570 council owned buildings/facilities), rising to \$820 million at the 3.0m increment (just over 1,700 buildings/facilities).

Impacts resulting from sea level rise will be far reaching. Central and local government, communities, iwi, and businesses must coordinate to adapt. Without continued research and dialogue to establish positions for directing local government resources, our communities will suffer from the inevitable impacts.

Public engagement should include a focus on managing expectations about the use of buildings and facilities, which could require transition to other uses. This may also include consideration toward many land uses as the impact of sea level rise impacts community activity and function.

In the future, greater detail in analysis and reporting will be needed by each council. Land use planning must ensure sea level rise is part of a matrix of evaluation to continued building/facility development and management. Where appropriate, planning should account for a limited building life.

Our future depends on good data informing community engagement. Good data will direct mitigation and adaptation measures to manage council investments. LGNZ identifies Government's National Climate Change Risk Assessment (NC-CRA) a good first step in balancing New Zealand's response to climate change. However, national guidance is still pending. As such, we trail other developed countries in measures for mitigation and adaptation.

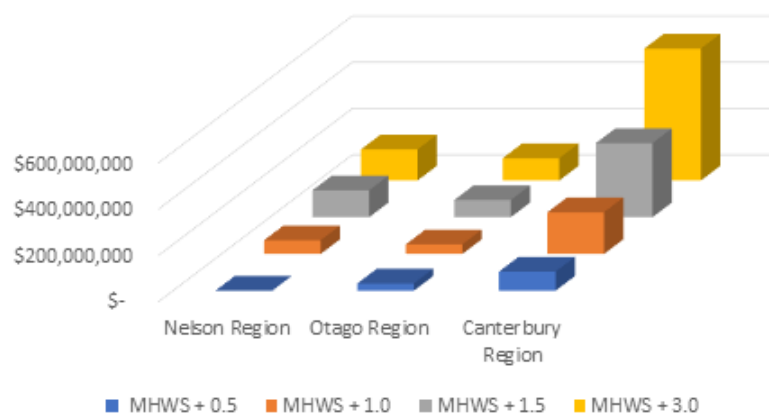


Figure 4 Total replacement value for buildings / facilities – South Island priority regions

All of the above regions had LiDAR contour information available.

Because there is a vacuum of in national policy, councils must plan to find their own incentives if they intend to thrive. This gap exists, in part, because problems are complex, and solutions will vary widely. Only councils have the detail and understanding to work closely with their communities. A failure to plan is a plan to fail. Waiting will not satisfy ratepayer appetite for answers to known problems; particularly as they have a growing understanding of the term "vulnerable".

Tom Simonson
Principal Regulatory Advisor - LGNZ



OPINION

No More Dwangs

Nogs (North Island slang) or Dwangs (South Island slang) are an interesting cultural relic.

Eliminated from the rest of the Western world long ago (50 years) when kiln dried timber became commonplace, New Zealand engineers still hung onto these non-structural elements because 'that is what is commonly done here'. These days their only function (dwangs - not engineers, but actually, maybe engineers too) is to draw more heat out of the building, cut down more crappy Radiata Pine trees (can we plant something else that doesn't rot if you sneeze on it, please?), and to maintain the 'she'll be right, we've always done it this way' nostalgia. Dwangs are costing us money, wasting our time and holding back for things that are actually useful.

Timber frame designers and engineers have long since lost the plot, ignoring study (BRANZ 1998), after study (Chapman 2011), after study (BRANZ 1991), after study (BRANZ 2011), (Collins 1974, sorry I couldn't find this online, if you have it please send to shawn@oculusltd.co.nz), naming the practice of nogging unnecessary. Even the very precious timber code referenced doesn't require dwangs (more on that below) - plain and simple here "dwangs and nogs are not required in timber walls that are lined on both sides."

For context, better windows cost a bit more, but if you spend a bit more money on quality windows, you might actually receive a building enclosure that meets the building code requirements (E3

and H1), and not to mention some value in return - warmer windows, less condensation, less heat loss, happier occupants, less mould, higher resale value - yay! Triple high fives all round! Value for money? You don't have to buy good windows (actually you might, and probably should), but you 100% don't have to use dwangs, and the latter should upset you more.

When you add dwangs into a wall, you create a thermal bridge that allows more heat to escape. There is no significant improvement to the structural performance, and the acoustics are worsened. The value of the home isn't increased. Even the finest realtor in Aotearoa couldn't spin that one - "this beauty has little bits of extra timber you can't see which makes the home a bit colder!" "Is it structurally better?" "Oh no, not at all."

So let's break this down. There is a 31% increase on timber cuts, 50% more nails and the benefit you get? A poor performing envelope and paying more for a worse product. Now that is the opposite of a good idea.

"But Shawn, it's just some bits of timber - how much could I really save?" One study found that on a timber frame house it could be as much as \$28/sqm floor! That might be high for an apartment and while I don't claim to know the dark art of quantity surveying - the cost of dwangs isn't zero. Quick maths - let's build an apartment building with thirty 65 sqm units and spend an extra \$28/sqm because 'ThAT's wHaT wE'Ve aLWayS dONe.' That is a \$54,600 spend on making your building worse.

The worst part of this is that nowhere does it say dwangs are mandatory, or that this is the way it is done here. So ask your engineer to point to the

part of the code where it says nogs are required, then slide her hand 35mm up the page where it says the exact opposite. All of this has been reiterated in the studies and bulletins above.

Here is the clause from NZS 3604 - 8.5.4 Lateral support of studs:

All studs shall be laterally supported by either:

- (a) Exterior wall claddings complying with E2/AS1 or interior linings complying with section 12. Such material shall be fixed to the studs by direct nailing of cladding or lining material, provided that building paper or similar material not exceeding 3 mm thick may separate the lining or cladding material from the stud; or*
- (b) Dwangs, walings, or metal angle walings in accordance with 8.8.*

Let's use option (a) because presumably your building has cladding (RAB counts by the way). My third grade teacher taught me the word "or" means to choose one, not both, so if option (a) is completed, option (b) is not required. Ipso facto translation: Bob's your uncle = no dwangs required. Case closed.

To remember:

- Nogs can be useful in small isolated locations such as backing for handrails, electrical, sheet edges, but they aren't required for structural support.
- This 'new way of doing things' is already permitted in NZS3604 and isn't that new.
- Adding nogs to a wall that is lined doesn't have any detrimental impacts other than reduced thermal performance and cost. However it will still generally comply with the building code.
- Many cladding and lining manufacturers include nogs and dwangs in their literature purely to match industry norms but will all permit use without nogs.
- Consider the use of nogs to be optional rather than mandatory.

This is just one example of a traditional Kiwi-way of building that provides no particular usefulness. The Acceptable Solutions and Verification Methods are filled with similar interesting ideas, things someone did once that kind of worked, and some outright stupid ideas. As an industry, we need to take a bit of a step back and think a bit smarter about how we can deliver projects more effectively for our country.

Shawn McIsaac
Senior Building Enclosure Engineer & Director - Oculus Architectural Engineering



STUDLOK™ by M

With the recent surge of various screws designs and applications appearing on building sites, understandably building inspectors find it very difficult to police the quality and performance of each brand of fastening. At MiTek® we provide a solution to assist both building inspectors and builders in the hope that this initiative is beneficial for the industry.

Paramount for us is that we manage as much of the process as practical to reduce building site errors. StudLok™ is specifically designed for structural timber frames that are produced in New Zealand and we test all MiTek® products against actual New Zealand construction methods. We question how overseas test reports benefits New Zealand builders. We have different timbers and different building codes so having something tested in America or Europe may not comply to New Zealand requirements. This is even more important when we are talking the Structural performance of timber frames. At MiTek® we align our StudLok™ screws to our Timber Structure Software and engineering as "the best people to determine the truss loading/ hold down requirement is the truss detailer using the software. It's a huge risk swapping out a proprietary screw in substitution for a critical fixing. Who really wants to take on that take on that liability?"

STUD-LOK FIXED ✓

PRODUCT KNOWLEDGE

Mitek®

MiTek has developed an alternative fixing for Lintels and Bottoms plates that are 100% compliant and also completely internal.

Using the Mitek 125 StudLok Screw (Yellow Head) our Mitek accredited fabricators will now be able to install fixing for lintels pre-fabrication, saving time on site.

As these fixings are completely internal they may be hidden from view during inspections. Mitek have therefore provided fabricators with a stamp identification as well as providing paperwork that will be signed off by our Accredited Fabricators that details the use of StudLok Screws for the structural frames.

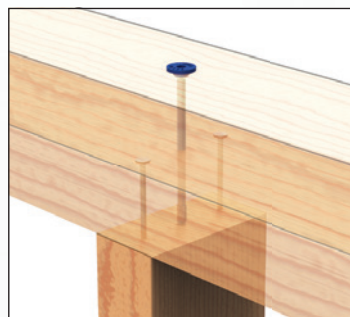
MiTek®

Leading building connections

Stud to top plate fixing made easy

Ask for STUD-LOK™ SL170

STUD-LOK™ SL170 has been specifically developed to provide an easy option, applied through the very top plate or capping plate, when fixing top plate to studs as per the requirements in Section 8 NZS 3604:2011 and forms an integral part of the MiTek® Truss and Frame design layout.





CONSTRUCTION SECTOR ACCORD

Transformation Plan to Drive the Right behaviours in the Sector

A high-performing construction sector is crucial to New Zealand's economy and ultimately to the well-being of all New Zealanders. That's why Government and construction leaders are working together to transform the sector through the Construction Sector Accord and a transformation plan.

The building and construction sector is New Zealand's fourth largest employer, accounting for nearly 10 per cent of New Zealand's workforce. It's our fifth largest industry by GDP contribution. These numbers are impressive in themselves, and even more so when the sector is growing - construction is one of eight industries forecast for higher than average annual growth to 2026. The 2019 National Construction Pipeline Report expects the value of construction activity to hit \$43.5 billion in 2021.

The key to the sustained growth of the sector is to make sure the building system is performing at its best.

The Construction Sector Accord

In April this year, government and industry leaders launched the Construction Sector Accord. The Accord is a commitment from government and industry to work together to transform the construction sector.

"The Accord signals a new way for government and industry to work together to meet some of the key challenges the sector is facing, such as skills and labour shortages, poor risk management, unclear regulations and pipeline of projects, a lack of coordinated leadership, and a culture of shifting risk," says Minister of Building and Construction Jenny Salesa.

The Accord outlines a set of strategic goals, outcomes and nine priority work areas for action. It calls for a change in culture and behaviour to enable the sector to thrive.

"The Accord is about everyone working together for the collective cause. The construction sector is an ecosystem that depends on the high performance of its many parts. It's important we get this right for all New Zealanders," says Minister Salesa.

Priority work areas

The Accord sets out nine priority work areas for transforming the construction sector, government and industry leaders will contribute to:

- Enhanced industry leadership
- Collaboration and partnership
- Better business performance
- Improved culture and leadership
- Better procurement and improved pipeline
- Improved building regulatory and consenting processes
- Grow workforce capacity
- Better risk management and risk allocation
- Improved health and safety
- More houses and infrastructure

The Government will lead on procurement practice, pipeline management, building regulatory system, consenting processes and industry have shared responsibility to grow workforce capacity, better risk management and risk allocation.

"The Government has a number of initiatives within these areas. These include the Skills Action Plan to build capacity, and the established New Zealand Infrastructure to better manage infrastructure development and project delivery," says Minister Salesa.



Transformation Plan

Since the launch of the Accord, the focus has been working to build engagement and support across the sector and create a detailed transformation plan by the end of the year.

“The Transformation Plan is coming together, with some bold ideas to make an impact for the sector generated from the Accord Steering Group, as well as feedback gathered from an Accord survey and public workshops held in Auckland, Wellington and Christchurch,” says Minister Salesa.

“The emerging plan incorporates several transformational opportunities in key areas for improvement including leadership, business performance, workforce capability, regulation and risk. The Plan will set out initiatives that will be implemented in the short, medium and longer term to drive the right behaviours among all players in the sector.

“Everyone needs to be a part of change. We have more than 400 people and businesses signed up to get involved with the Accord programme. Our Accord survey revealed a large majority (79 per cent) of people are motivated to be a change maker within their respective organisations, which is a positive sign as we all work to transform the sector.”

Construction Skills Action Plan

The Construction Skills Action Plan was launched last October and includes initiatives to improve procurement practices and attract more skilled construction workers.

“Our Skills Action Plan forms a key part of the Construction Sector Accord. We want to make sure that the industry has access to a steady stream of skilled employees to enable the sector to grow.

“Through Mana in Mahi, Skills for Industry partnerships and immigration settings, we’re well on our way to achieving the goal of an additional 4,000 people in the construction workforce.

“We want to work with industry to not only encourage more people into rewarding construction work, but support them to upskill throughout their careers, adapt to the changing nature of work and take up new opportunities.”

Procurement practice guided through information and rules

“One of the ways the Government is working to be a better partner in the sector is through procurement settings. The new Rules of Procurement came into effect on 1 October and will increase the size and skill level of the construction workforce.”

For contracts valued at over \$9 million, government agencies will be required to give the skills development and training commitments of suppliers a weighting in the tender process.

“I expect the changes to lift agencies’ procurement capabilities and make a tangible difference for construction businesses and the workforce.”

You can find details of the new construction procurement guidelines here: <https://www.procurement.govt.nz/procurement/specialised-procurement/construction-procurement/>.

Next steps

“We will be launching the Transformation Plan towards the end of the year. I encourage all those interested to engage with the plan and play your part in transforming the sector,” says Minister Salesa.

To stay up-to-date with the Accord and the Transformation Plan, visit the Accord website and sign up to the mailing list – www.constructionaccord.nz

and initiatives

ine priority work
g the sector that
stry will both

y leadership
organisation
performance
and reputation
nt practices and
management
y regulatory systems
ocesses.

apability and

ement and fairer

nd safety at work
better durability.

lead better
s and improved
; and improved
systems and
. Government
red leadership to
bility and capacity;
ent and fairer risk

s committed to 34
e priority work
he Construction
uild skills and
blishment of the
ucture Commission
astructure
curement,” says



LEGAL

RICE
SPEIR

Straight Up Answers

Rice Speir make the complex simple

Q

When is the right time to settle a dispute?

Every dispute has an optimum time for settlement. Genuine efforts to settle a dispute before or after the optimum time for settlement may prove less successful, or even unsuccessful. So when is the right time and how will I know? Every dispute ripens at a different time. It is when the parties are ready to “get it over the line”. It is a judgment call. If it is too early in the dispute then a party may not be prepared to make the concessions and compromises that are required to achieve a settlement, or there might not be enough information to allow parties to properly assess their risk and potential outcomes at trial. If it is too late in the dispute “the ship may have sailed”. Parties may be entrenched in their positions and unwilling to compromise. As time passes, the compromises and concessions required for a settlement will often be easier to make. It will be easier to assess your risk and you will gain a better understanding of the parties’ respective positions and their drivers (tangible and intangible). Do it once and do it properly. Too soon and a reasonable settlement won’t be achieved. Too late and the opportunity is missed. There are no hard and fast rules – you need to understand the dispute, understand what is agreed and what the differences are, understand the wants and needs of the parties. Lean into the dispute and ask the question: when is the optimum time for this dispute to settle? Is it now? If it isn’t, be patient and wait.

Helen Rice
Partner - Rice Speir

Helen Rice has more than 25 years’ experience working with clients to resolve their disputes. If you want to discuss how she can help you get resolution at a time that is likely to give you the best possible result, give her a call. Please send your questions to helen@ricespeir.co.nz.

HAVE A LEGAL QUESTION THAT NEEDS ANSWERING?

Rice Speir is here to help. For 25 years we have worked with councils to make the complex simple. We answer queries from our local authority clients from the far north to the deep south. Chances are we’ve dealt with your issue before. Please send your questions to helen@ricespeir.co.nz.



Your building could be put to the ultimate test.

So we do the same to our steel.

At Pacific Steel, we put all our products through a rigorous testing regime. Our dedicated laboratory has full IANZ certification and we're the only local manufacturer of reinforcing steel to have third party ACRS certification. So when we say our SEISMIC® reinforcing steel is tested to meet the AS/NZS 4671 standard, you can be sure it's been put to the ultimate test.

SEISMIC®
A PACIFIC STEEL PRODUCT



A steel bar about to be tested in one of five testing machines at our laboratory in Otahuhu.

BE THE EXPERT SHARE YOUR INSIGHT

STRAIGHT UP

THE MAGAZINE OF THE
BUILDING OFFICIALS INSTITUTE
OF NEW ZEALAND

Winter 2019



IN THIS ISSUE

SPOTLIGHT ON CONFERENCE

Highlights of the 2019 Annual Conference & Expo

New Online Training Academy

Medium Density Housing

EBANZ needs your help

Building Systems Legislative Reform

Contribute to Straight Up

Send your opinion piece, technical article or ideas for content
to marketing@boinz.org.nz