straight up

THE MAGAZINE OF THE BUILDING OFFICIALS INSTITUTE OF NEW ZEALAND

JUNE 2017

In this month's Bumper issue:

50th Annual Conference & Expo

Are Women the Answer to NZ's Building Problems?

Earthquake Focus

Consultation on Fire Safety Proposals

Building Officials Institute of NZ

Building Officials Institute of NZ

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From the CEO

Changing Times

We have just held a very successful 50th Anniversary Conference, an event that celebrated the Past, Present and the Future.

We were incredibly privileged to have with us a large number of our Past Presidents, an honour in terms of attendees very few similar organisations would likely be able to duplicate. We were further honoured by a large contingent from our sister organisation in Australia and importantly the Minister of Building and Construction, the Honourable Dr Nick Smith attending our Gala Awards Presentation evening.

For me personally the 50th Anniversary theming was extremely relevant, given that in each time frame, past, present and future, we could appreciate and be grateful for what we had, have, and possibly will have. Observing the memorabilia on display and picking up on the challenges and controversies over past decades proved to me that as a profession we are people who keep on trying and more often than not do improve building outcomes for the public we serve.

We learnt the building surveying profession has a history going back to Babylonian building regulations, and subsequently ancient Greece where building surveyors were known as "Wardens of the City" and during that time we also saw the first mention of "building control". Of course, most of us traditionally see building surveying rising from the embers of the Great Fire of London "where one or more discrete and intelligent person or person's knowledgeable in the art of buildings to see said rules well and truly observed". Over the centuries building surveying has had to deal with a myriad of challenges and disruptions, from natural disasters, poor legislation, lack of appropriate investment, non-performing product, narrow vision and unscrupulous behaviour. Interestingly these impact areas are still with us but our response and learning over the centuries means the public is in a far better space, a space we should all be proud of.

I know it's a bit of a cliché, but Confucius once said "Our greatest glory is not in never falling, but in rising every time we fall". I take from this that life is never static, times will always be changing and it is our role to master our future environment, a challenge that can only be achieved through continuous knowledge uptake.

At our 2017 AGM, I addressed members, advising we have recently experienced a period of solid growth organisationally and this had provided the Institute with a foundation it has not had previously. This occurred on the back of vision, hard work and member support. At the same time, I cautioned members that it pays to not allow hard won foundations to be a predictor of the future. Our reality is that we are living in rapidly changing and stressful times and your Institute has to always be planning and preparing its future pathway.

The need for relevance always underpins the reason for our existence. This 2017 year is not only a year of business as usual but importantly one of investment to build a new platform from which to grow and support our members as well as the stakeholder environment. At the end of this year our financial result will as planned differ from the last few years, based on the fact we are entering a new development cycle. We are building for growth and an ability to remain sustainable, much in the same way we did through 2011- 2012. Our pathway over this new phase may be exposed to limited resource capacity constraints given the tight market conditions however our journey has commenced and the fruits of our efforts will enhance member and stakeholder capability. You will receive more detail over the balance of the year through attendance at your Branch Networking and Training Events. We aim to be the leader in what we can and do deliver.

In closing I would like to leave you with this thought. The Institute works on your behalf but it also operates in a competitive market, a market whose interests aren't always aligned with your interests in mind. For the Institute to continue to reinvest in you, your profession and by default your employing organisation we need your continued support, so that we can provide support over the next 50 years.

I look forward to catching up with you all soon and wish you all the best as we move in to the 2nd half of 2017.

Nick Hill

Chief Executive

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Visit gib.co.nz to download the system manual and watch a short video. Or call the GIB® Helpline on 0800 100 442.

PrefabNZ Top 5

1. KAIKORA DISTRICT COUNCIL CLT BUILDING WITHSTANDS MAJOR EARTHQUAKE

After the 7.8-magnitude earthquake struck the South Island on 14 November 2016, a team of engineers including Gavin Robertson (Engineer), Andy Reid (Engineer) and Sam Leslie (XLam) visited the recently constructed Kaikora District Council (KDC) building to assess the impact of the Earthquake.

The KDC building is a 3-storey office comprising a Potius Floor and roof Structure, LVL beams and Columns and Cross Laminated Timber (CLT) walls. The building design included 15 CLT/LVL-composed rocking shear walls, each approximately 13m high and 3.4m wide, which are post-tensioned to the foundations. Each wall was constructed with continuous Macalloy Post Tensioning Bars running down the centre.

On inspection the mass timber KDC building lived up to its reputation of earthquake resilience and performed extremely well. There was very little sign of damage, other than slight cosmetic cracking to the pavement and some movement at the joints between elements, suggesting the building has the capacity to withstand an even larger event. The KDC building was used as a post disaster HQ.

Read the full case study at
www.prefabnz.com/news/KDCXLam

2. FIRST 8 HOMESTAR RATING FOR A CONTAINER HOME

PrefabNZ is proud of its Member IQ Container Homes for recently achieving an 8 Homestar rating for their container house in Auckland.

The tiny house was given the high rating by the NZ Green Building Council partly due to its offsite construction resulting in reduced waste and environmental impact. Its stylish, affordable, sustainable, efficient and totally livable. Congratulations Brenda Kelly! IQ Container Homes has been a Member of PrefabNZ since 2014.

For more information see:
www.iqcontainerhomes.co.nz
https://www.nzgbc.org.nz/

Picture: stuff.co.nz

3. CLUSTERS – COLLABORATIVE EVENTS FOR URBAN-ENVIRONMENT DEVOTEES

PrefabNZ is thrilled to welcome Members of BOINZ to attend the regional FREE Cluster events. These collaborative events bring together professionals from across the construction industry for thought-provoking quick-fire presentations. Sharing knowledge, ideas and innovation with those interested in green urban environment.

Why do people come to Clusters? "Networking, meeting new people, connections + industry presentations."
What do they love about Clusters? "Informal but informative events around the country, variety of topics, range of speakers + great site tours."
Join Members of:

- New Zealand Green Building Council
- New Zealand Institute of Architects
- The Designers Institute of New Zealand
- Architectural Designers New Zealand
- Institution of Professional Engineers NZ
- Building Officials Institute of New Zealand
- PrefabNZ
- and New Zealand Institute of Building

The next Cluster is on Wed 28 June in Auckland.
4.30 – 6.30pm
For more information and to register see:
http://www.prefabnz.com/Events/ClusterJun17

4. DETERMINATION FOR ALTERNATIVE SOLUTIONS

Designing from scratch, specific to a site and its orientation can be problematic within the Building Code. Alternatives are possible, PrefabNZ Members have many examples, here is one from Adam Taylor Architecture.
The infill coastal site had stringent planning rules around coverage and use which posed a challenge. After in depth research and applied knowledge of efficient use of space, an alternate design solution was presented for a 5 bedroom, multi living dwelling on a 127m^2 footprint. It incorporated a space saving samba stair and mezzanine. This stair design wasn't covered by the NZ Building Code, which meant the stair was one of a select few, located around the country.

The design solution was recognized by International Building Codes, but was limited to certain applications. ATA applied for a Determination, where they compared international building codes, against NZBC proving this stair was suitable for its application. The Ministry of Business Innovation and Employment (MBIE) granted the Determination and their (ATA's) clients have the an efficient, and one of a select few in New Zealand samba stair and mezzanine design.

The nature of innovative design means there are often hurdles, innovative design and construction practitioners embrace hurdles. It means they are on to something epic.

5. JOIN PREFABNZ TODAY

PrefabNZ members span the design and construction sector, from specifiers to engineers, builders, manufacturers and researchers. The organisation delivers strategy, policies and outputs on behalf of the innovative construction industry. Benefit that grow businesses from events, news, research and development initiatives and connections with potential collaborators. Make sure you're up-to-date with everything prefab – join PrefabNZ, visit www.prefabnz.com.

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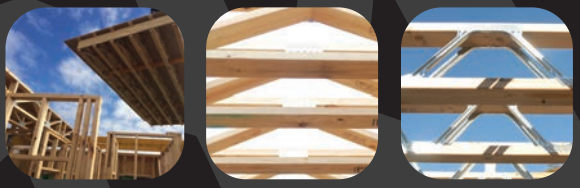

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Female Tradies the Answer to NZ Building Problems?

At this year's Annual Conference & Expo, Rice + Co Lawyers organized a panel of women to discuss Past, Present and Future Pathways of Female Building Control Officers. The panel was very well received and so in the same vein we are exploring the topic of women in the industry further in this quarter's Straight Up. ***This article is reprinted with permission from ITM. Building Business, April 2017***

Can you imagine your daughter, sister or niece working as a tradie? It's a tough business for hard men, not delicate flowers, right?

Think again. Disruption is affecting everything about the world right now, so it's no surprise that stereotypical roles we grew up with in the New Zealand building industry are changing as well.

Faced with a critical trade skills crisis, many building companies are re-looking at their hiring processes and seeing a huge untapped resource.

"The whole thing about the industry these days is that's it's not all about brute strength. Quite the opposite. It's about being smart and in that regard, women and men are equally capable," says Destination Trades CEO Christina Rogstad.

"Jobs that have become feminised typically have lower wages. Women who move into the construction trades make more money.

A promising future

"The pay is greater than working in a mall, but more to the point, the future is rosier. Construction activity in New Zealand is set to increase 10 percent every year to 2021 and there is a projected deficit of about 50,000 trades jobs coming up.

"With our rapidly changing world and technological advances, the career field that school-leavers will enter into will not be the same as it is currently. A whole list of jobs is redundant now – some don't exist any more, and some can be done by computers. However, trades are something that people are always going to need."

CAN A WOMAN SUCCESSFULLY WORK IN THE BUILDING INDUSTRY?

Holly is 23, nearly a year into her apprenticeship as a carpenter and reckons it's the best thing she has ever done.

Female tradies… who would have thought? Why would a young woman choose a career in a tough industry like building instead of a more traditional feminine role in hospitality, nursing, retail or such like?

"You get better money as a builder and you get to do a whole lot of different stuff. It's outdoors in the fresh air, and the prospects of running your own business are amazing."

Totally unexpected

"I wanted to be a vet. Then I grew up a bit and discovered I'm a bit squeamish, so I ruled that out. I was uncertain about what I wanted to do and tried a whole lot of things.

"I stayed with my brother in Australia and got a job as a receptionist. Boring. Came back, didn't have a job, mucked around and in my spare time, ended up sanding tables and making a dog kennel just to keep busy. I liked it and decided to make a career out of it.

"I never in a thousand years thought I'd be doing a building apprenticeship, but I did the course at polytech for level three carpentry and I really loved it.

"I went there thinking that I wanted to be a joiner, and then I decided I didn't want to work in a factory (boring, repetitive). I started working for Atrium Homes about a year ago."

It's the norm now

"My fellow workers and contractors all did a double take first up, but most of them have gotten used to me.

"But every time someone new comes along, they look at me, see what I'm doing, then they look back. I don't have any negative things come at me, it's just they're curious as to why.

"They did modify their behaviour to start with and they used to apologise for swearing when things went wrong, and I said don't worry about it. It's kind of common talk these days, they're just words. It doesn't worry me and now they just act normal."

Getting paid for my gym membership

"Do you need to be strong? Not really. I'm five foot eight and about 70 kilos. It's got to do with that mindset; it's a male dominated industry so you kind of need big muscles to do the job, but it's not the case.

"I joke with my partner, I'm getting paid for my gym membership, cos that's what it's like. You start off and you can't lift things so you work your way up to it.

"When I first started, I'd look at it and say oh my gosh, I can't even lift the end of that. It's like going to the gym; you get fit as you go.

"With OSH rules and stuff, there's a limit to what you're allowed to lift, and you've always got someone there if you need a hand. My foreman, he asks are you comfortable with lifting that?"

The Yuck Stuff

"I got some flooring glue in my hair once, it wasn't fun. Had to cut my hair out. I'm not a fan of digging holes, but I don't know who is. But it gets easier.

"I have long hair, but now I tie it up in a bun every single day; same with blokes, they tie up their hair

"Girls can be precious about their hair and make up and clothes. But it doesn't work in the trades. There's no point wearing make up because you'd sweat it off in an hour.

"In a funny way, that's liberating, you can be yourself. I don't have to put on a dress and have nice hair to be relevant."

Ambition

"My mum was really supportive. She said: what tools do you need? She wanted to buy me tools. They're all supportive. My sister tells everyone, hey my sister is an apprentice chippie. She makes me fix everything of hers around the place.

"My brother in Australia has plans for me to go over and build him a deck. I'm going to build my own house; my mum's already got the plans for her granny flat. My partner's a painter. I say, I'll build them and you can paint them."

What do you like?

"Being in construction is exciting and rewarding; you learn great skills to keep forever.

"I get to do a lot of the careful work; I think my boss sees in me that feminine side of things, obsession with detail I suppose. I get a lot of finishing work. Skirting, architraves, scotia. The exacting stuff.

"I like everything about this job. I just like making things. I like to see nothing go to something and say: I made that. You can't do that in a mall selling nail polish."

AN UNTAPPED WORKFORCE?

Allan Shaw of Atrium Homes took on Holly as an apprentice not just because she was near the top of the class in her carpentry course, but because he recognised the skillset that a female offers is precisely what the building industry needs.

"This male-dominated testosterone charged industry needs to change its culture to be more forward thinking. It needs a softer touch. Seriously, it does."

Attention to detail

"Traditionally, with many small businesses in the building industry, there are women behind the scenes helping to organise things and lending a hand in sorting out the accounts. Women I think are especially good at that, but they can also bring those skills onto the building site.

"That same kind of meticulous attention to detail is what we need on site. Women have different skills, different sensitivities. Holly is especially good at detail stuff and finishing work. She takes her time to get it right.

"She worked on an old 1935 mansion style house that we restored and refurbished last year, and as you can imagine, that's pretty finicky work. She's very good at that."

Top of the class

"The local polytech usually sends me their best apprentices, the ones that stand out in the groups. Last year, the person I deal with said, hey I've got two I would recommend, but one's a girl.

"I paused for a while. Then I said it makes no difference.

"I talked with Holly, talked to my wife. Others members of our crew spoke to their partners; you know this is new ground for all of us.

"What would happen if your daughter wanted to become a builder? Wouldn't it be good if there was someone out there who would be willing to take her on?

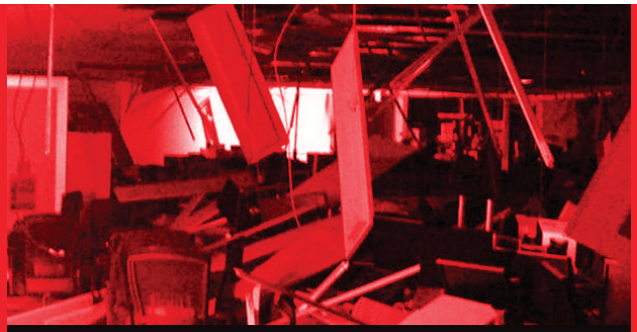
"We deal with a subcontractor who has a female painter, a roofer that has a female roofer, an electrician with a female electrician.

"It's refreshing to know that there are some of us out there that consider women are just as good as we are at doing this kind of work, and in some respects, they're better."

"I've said to Holly that if anyone decides to be smartass to you, then you tell me. It doesn't matter whether you're male or female, I won't stand for anyone doing that to anyone.

"Our ITM rep, he thinks it's fantastic, he said well done. It should be encouraged. The subbies are the same. They don't worry about it. It's great that those old fashioned attitudes are changing."

Are Your Staff & Customers Safe From Falling Objects During an Earthquake?



The BNZ Head Office in Wellington had enormous internal damage from falling objects in the 2013 earthquake, even though the building remained structurally sound.

During an earthquake, falling objects can be dangerous and damaging. The damage caused by falling objects can significantly increase the cost of earthquake repairs, lead to massive business interruption, and cause serious injuries or even death.

Make Your Building Safer by Securing Falling Objects Likely to Cause Harm

Obvious falling objects:

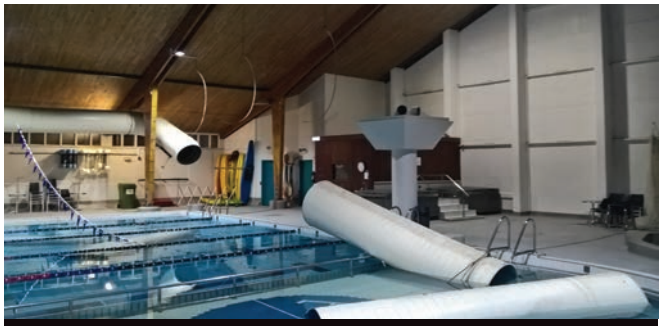
- TVs
- Wall units
- Hanging lights & signs
- Computer monitor

Less obvious falling objects:

- Ceiling tiles
- Floating ceiling framing
- Air conditioning grills
- Speaker systems & lights

Falling objects hidden in ceilings:

- Air conditioning units & ducting
- Sprinkler systems
- Waste pipes
- Cable trays



Huge air conditioning ducts fell into Keith Spry swimming pool in Johnsonville in the November 2016 earthquake.

Did you know around 70 - 80% of the total repair cost after an earthquake is usually due to the damage of internal and non-structural elements?

While the main focus of earthquake readiness is usually on the structural soundness of buildings, securing internal dangers is also very important.

Quake Protected Installs Restraints Designed to Secure Falling Objects

Using specially designed restraints, we make sure any potential hazards are secure. This greatly decreases damage and helps prevent injuries during an earthquake.

Quake Protected gives businesses and building owners:

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QUAKE PROTECTED

Earthquakes:

What are they, How we design for them and What happens to 'non-structural' items

D. Scheibmair – Technical and Education Manager, BOINZ

In this last part of the series of articles on earthquakes we will focus on 'non-structural' items and their impact on structures and occupants under earthquake induced load and movement.

The building code offers only limited indirect guidance on what is required for bracing best practice of non-structural components primarily in Clause B1 Structure, B2 Durability and F2 Hazardous Materials. Clause B1 for example establishes the need to safeguard people from injury, loss of amenity, and to protect other property from damage caused by structural behaviour or failure – clearly therefore implying a requirement to consider non-structural building components even though these may not be specifically spelt out.

In the world of non-structural elements there is a great tendency to think of partition walls and glazing lines as 'temporary', and often visual design elements and finishing touches such as screens and decorative suspended fit-out components are never given the consideration that arguably they should – under Clause B1 requirements as already noted for example. These building components are no less important in considering safeguarding of occupiers from injury and loss of amenity than the structure supporting them. This has been proven in a way in the non-structural damage sustained from earthquakes around the country over recent years that has rendered structurally sound buildings economic write-offs – commercial, industrial and residential buildings alike. Fortunate only, in that many failures of non-structural installations did not result in far greater numbers of injuries or even loss of life thanks to the timing of seismic events. So maybe it's time we started focusing a little more on non-structural elements and obligations set out in various Building Code Clauses.

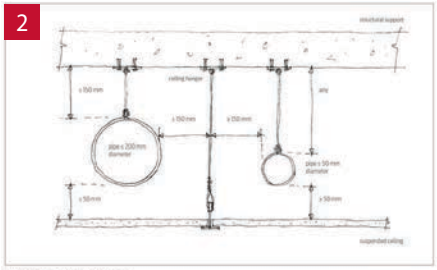
3

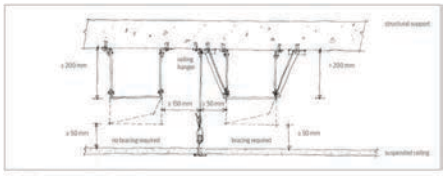
Those involved in the interior fit out industry know how difficult it has been to comply with building code requirements and ceiling manufacturers warranties. For decades, the manufacturers of two-way ceiling grids have stated that no materials should be connected to their product – for decades this requirement has been largely ignored. As Shaun from Tracklok says; 'Attaching the head of partition walls and glazing lines to the two-way grid with a series of 10-gauge tech screws defies logic and voids the ceiling manufacturer's warranty. This in turn prevents the issuance of producer statements and potentially voiding insurance claims when disaster strikes. Whereas allowing the separation of wall and ceiling provides the building owner with certainty, the building occupants with peace of mind and the insurance companies with a client that complies with the building code requirements.'

1

Services, often contained within suspended ceiling voids, must also be restrained by adequate fixing to the supporting building components or elements so that seismic forces are properly transferred to the structure. Where the movement of services can be catered for so as to not cause impact against other elements, restraint may not be required, however the supporting component must still be designed to carry any additional induced seismic load, and hence cannot be attached to other non-structural elements (for example suspended ceilings or partition walls). The issue of non-structural elements in earthquakes also extends into our residential housing stock, and given even less consideration here than in commercial and industrial construction. Damage is often less life threatening, however does have significant financial implications. Our internal wall linings, external cladding, external glazing, and interior and exterior doors, are all but a small number of examples of non-structural elements in residential structures that suffer serious damage and often require replacing even where the structure does not.

2

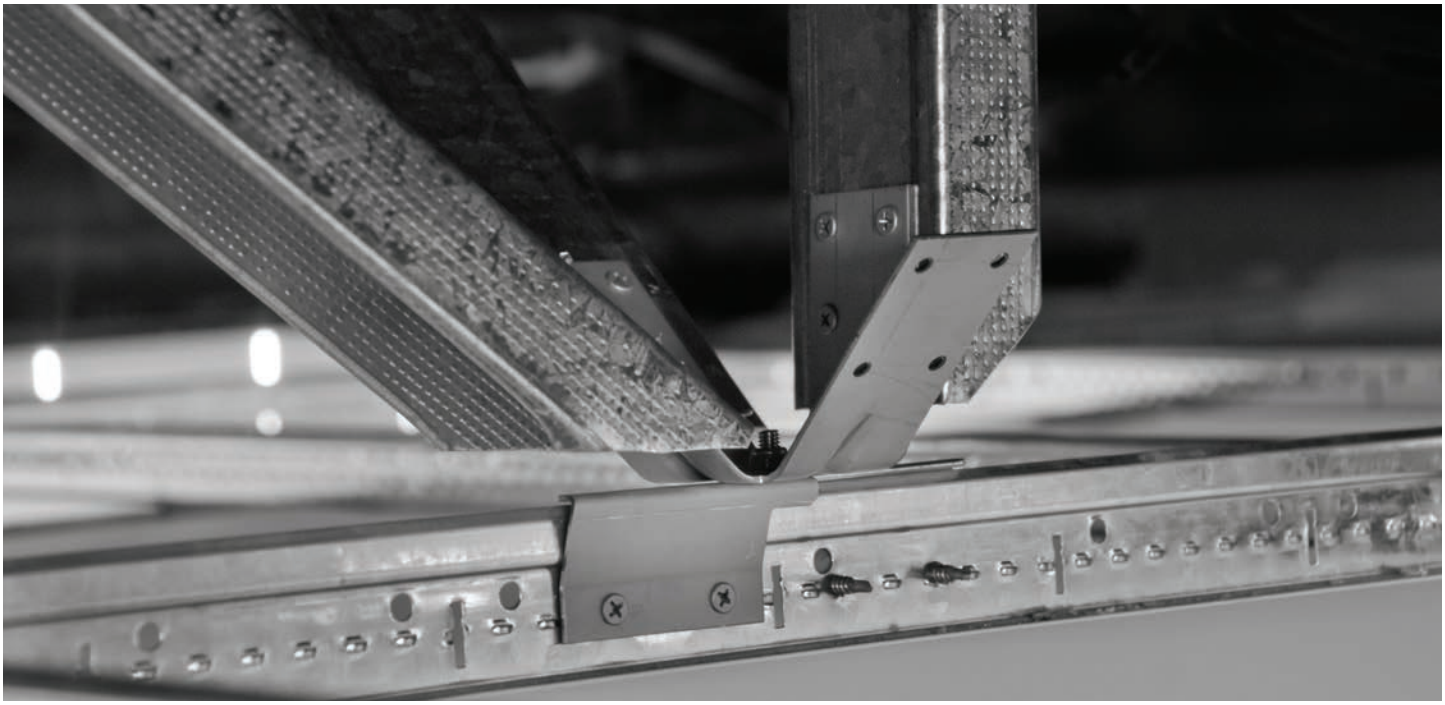




Products and systems have been, and continue to be, developed to satisfy the Building Code requirements. Not only are these systems being developed and promoted by product suppliers, but work has also been focused on appropriate installation of such systems[4]. From a Building Surveyor engaged in Building Control perspective therefore, ensuring the job is done correctly is the realm of intelligent design and accordingly installed innovative solutions that are tested and proven. Best practice is starting to no longer be an optional 'nice to have', nor just a requirement to better building; it is an obligation that must be carefully considered and acted upon to ensure Building Code (and Health and Safety) requirements are satisfied.

References and additional reading resources:

[1] www.tracklok.co.nz
[2] www.seismicreslience.org.nz
[© BRANZ]
[3] www.stuff.co.nz
www.quakecentre.co.nz
www.building.govt.nz
[4]www.quakeprotected.co.nz



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T&R Interior Systems	0800 666 556

www.tracklok.co.nz

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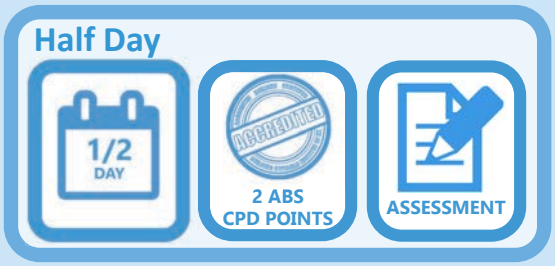
Building Officials Institute of New Zealand

Earthquake Engineering - '101' for Professional Building Surveyors

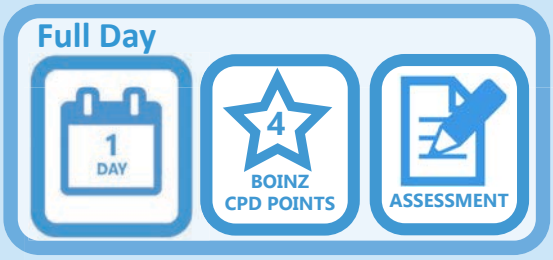
Following an increase in Seismic activity, the Building (Earthquake-prone Buildings) Amendment Act 2016, and the recent Hurunui/Kaikōura Earthquake's Recovery (Unreinforced Masonry Buildings) Order 2017, this course has been developed to establish core understanding of earthquake engineering that informs the design of structures, and to gain insight into building behaviour during, and visible effects post, seismic events.

Two distinctly unique CPD courses are offered:

- **The Half day course:** relevant to both Building Surveyors engaged in building control and Accredited Building Surveyors conducting Pre-Purchase Inspections, covers the fundamentals of earthquake engineering, how buildings react in an earthquake, what to expect on site, and tips to identify and distinguish Earthquake damage.



- **The Full day course:** includes the half day course and builds on it with earthquake engineering insight focused on BCA specific functions and compliance aspects of earthquake engineering.



Attendees will also gain familiarity with pertinent terminology to facilitate improved communication between building control officials or pre-purchase inspectors and consulting engineers, designers, construction supervisors, construction crews, and other clients.

Keep an eye out for more information coming soon!

Should you be interested in attending this course, please email training@boinz.org.nz

BOINZ TRAINING ACADEMY
04 473 6003
training@boinz.org.nz

Product Non-Conformance

About the middle of last year media reports and Auckland Council raised issues around non-conforming building products. The Minister of Building and Construction, Nick Smith, championed third party certification for critical building products.
The NZ Building Industry Federation (BIF), BOINZ, RMBA, CBANZ and the Registered Plumbers, Gasfitters and Drainlayers Board subsequently commissioned a senior industry executive, Paul Taylor, to examine the situation in Auckland.

As a result of this report the BIF canvassed supply chain members on their views of how a solution to the problem of non-conforming products might look. Members gave their views at a meeting attended by Minister Smith. The upshot of this activity was the following paper prepared by BIF and submitted to the Minister for his consideration. He referred it on to MBIE for its views.

Now MBIE proposes to review the country's product assurance system with an eye to clarifying the various means of complying with the Building Code and associated Standards and compliance documents, and also to examine the Building Code itself.
In view of this it may be useful to obtain a first-hand insight into supply chain thinking around this critical area of industry performance.

TOWARD STRENGTHENING THE PRODUCT ASSURANCE FRAMEWORK APRIL, 2017

The Australian Building Codes Board describes non-conforming products as: Products that purport to be something they are not and are marketed or supplied with the intent to deceive those who intend using them

The issue of Product Assurance has been to the fore in the New Zealand and Australian construction sectors for the past two years, catalysed by a surge of non-conforming imported building products. In recent months this attention has been particularly focused upon steel conformance with Standards and the NZ Building Code, however other product areas have also come into question, including electrical cabling, glass, claddings, plumbing materials (especially pipe), and roofing tiles. Auckland Council has voiced considerable concern around this issue, as confirmed in the Taylor Report (prepared for BOINZ and a number of industry organisations). The Council has also drawn attention to what it regards as an undue amount of product substitution on site without resort to regulatory consent and compliance processes. Such substitution can be difficult to identify unless product or material wrapping is present on site as an indicative guide of the items used.

This paper seeks to address the non-conformance issue by a strengthening of the product assurance framework through two areas. These are:

- Amending Section 14G of the Building Act to make absolutely clear a statement of compliance with NZ Building Code is mandatory for all products and/or systems brought to market;
- Recognising the internationally accepted three tiers of assurance with the additional possibility of making a minimum entry level for certain products and/or systems according to their considered importance to the integrity of a build.
- These actions we believe would remove the ability of a manufacturer or importer to claim in the event of non-conformance that no assertion of compliance with the NZ Building Code was claimed and therefore no offence was committed. However, a mandatory statement of compliance would, in the event of non-conformance, unequivocally bring the manufacturer/importer clearly within the scope of the Fair Trading Act, Sale of Goods Act, Consumer Guarantees Act and the Building Act.

The proposed assurance layers to be covered in regulation, perhaps legislation, are captured in the diagram below:

THREE TIER ASSURANCE SCHEME

SECTION 14G OF THE BUILDING ACT (NZBC COMPLIANCE STATEMENT REQUIREMENT)

FEATURE/ENTRY LEVEL	TIER	RISK
Simple compliance statement Base level entry Required by all products/systems as a minimum	**First Party certification** (Assurance provided by the producer or importer)	Low
Technical, opinion based Generally a snapshot in time with no regular ongoing testing For high importance, non-life safety critical, products or systems	**Second Party certification** (Assurance provided by an expert party eg. BRANZ, CPEng etc)	Medium
Audit based in conjunction with technical backup Regular ongoing testing incl random sample testing Independent body is also audited For critical products or systems that directly impact on Life Safety (Structure/Fire)	**Third Party certification** (Assurance provided by an independent third party body eg. ACRS; CodeMark certifiers etc, who are audited by a professional body such as JASANZ; IANZ; ISO	High

Issues to be defined going forward include identifying the ranges of products and systems that fit into each of these categories, where a minimum assurance level might apply, the wording for legislative change and associated regulation.
BIF sees the legislative and regulatory requirements of introducing such a scheme as minimal, in light of the benefits to be obtained by industry, consumers and regulators, and believe this can be implemented with little overall expense impact on the sector.Key to its success, however, will be the enhanced enforcement of the requirements.
It should be emphasised that this proposal is in no way intended to operate as a barrier to importation of products and materials. It is solely intended to lift across-the-board conformance with New Zealand Building Code and associated Standards and should apply to all building products and systems entering the market, whether locally produced or imported. The cost impact on products and systems available on the market should be minimal.

It is also our view that any forum or consultation in regard to this should also discuss the issue of "Product Substitution" which is considered by industry participants, including BRANZ, and Auckland Council, to be occurring at a rate detrimental to quality industry performance.

Article courtesy of Bruce Kohn, Chief Executive, Building Industry Federation.

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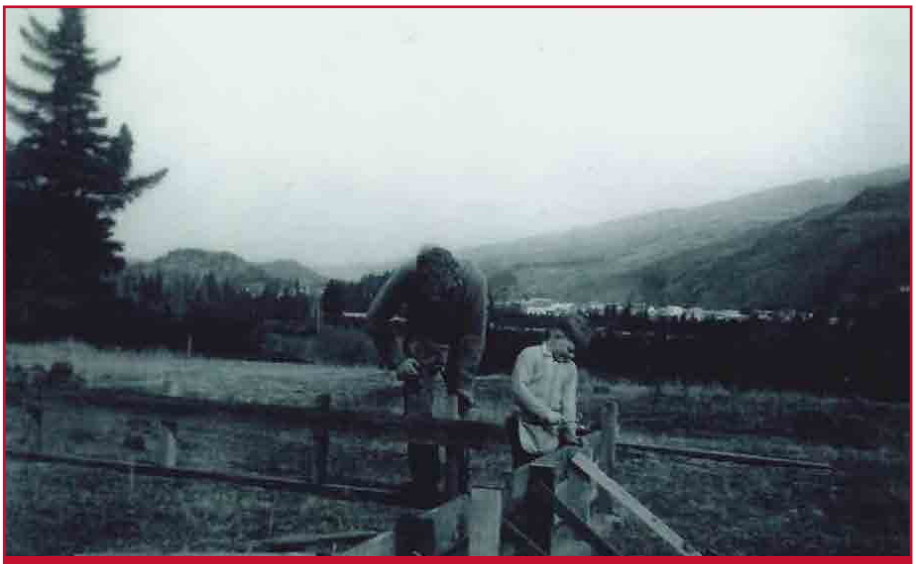
Spotlight on a Member

Name: Stu Geddes
Official Job Title: Director, Building Code Compliance
Region: Otago



Stu at a young age learning construction from his dad.

Stu Geddes has an interesting perspective to share with us – up until May of 2016, he had been BOINZ's National President for two years and so was able to talk to us about how he feels the built environment can be improved across New Zealand. We conducted the interview during BOINZ's 50th annual conference and Stu had just been awarded life membership for his services to the Institute during the 2017 Annual General Meeting. He was feeling proud, relaxed and contemplative as we discussed his beginnings into the industry and where he sees the sector heading moving forward.

What was your first full time job?

I was an apprentice plumber & drainlayer. I was originally signed up to be an apprentice builder – a mate was due to do the plumbing and drainlaying apprenticeship, but we decided to switch and he ended up doing the building apprenticeship and I did the plumbing and drainage one! It was 4 years to complete the apprenticeship, and once finished I carried on for a few more years with my employer before I started up my own business in Central Otago (Roxburgh) which I ran for about 6 years before embarking in a career in building inspecting.

How did you get into the industry?

I saw an advert in the Otago Daily Times for a Plumbing and Drainage Inspector in Dunedin. Back in those days there was a lot of respect for inspectors when they came on site so I thought it would be nice to one day have that job to become an inspector myself. So I applied and got it!
Thinking about it, I seemed destined to go into the industry. My father was a builder, and his father was too. He worked on building motels in Central Otago and I was always helping him – there's a photo of me with my dad with tools in my hand when I was only about 10 years old.

What do you think has changed about the industry since you first started working in it?

The quality of the build seems to have largely gone backwards. It seems to have been sacrificed to get the job done quicker. I think this is mainly because we've got a severe housing shortage. There doesn't seem to be as much communication between the construction workers these days, which I think is because of that need for speed. There was a really good interaction years ago with making sure that the plumber was on site getting pipes in before the linings go on the wall. Now it's every man for himself, and they just try and get it done when they can. I think it's unfortunate that this is now the way – get the job done, get the code of compliance, get paid and move onto the next one. It seems to be driven by the money factor and the housing shortage.

The electronic age seems to have had a positive change on the industry. Especially electronic processing of building consents, getting tablets out on the field seems to be making a big difference. I went to an international conference in California a few years ago and visited one of their councils – they were still using the big A1 plans rolled up and stacked on the tables. They were only just starting to move into electronic processing.

We've got a much better training structure than we used to have in terms of the courses that are available now. Getting the Building Surveying qualification up and running has been huge – this was the fourth attempt to get a qualification across the line and it is now great to see it set in stone. It provides the younger people leaving school with a career pathway into the industry. An industry that is vital for the economy. And the quality of our conferences is great – they really help to increase the professionalism within the industry and our members have taken that on board. You can see this new professionalism even in the way they dress and carry themselves. Delegates used to rock up in shorts or jeans and a pair of jandals. We're certainly on the right track as far as that goes.

What is the most interesting part of your job?

Every day is different – back when I was Building Services Manager in Queenstown you just never knew what was going to come across your desk. Having to deal with leaky buildings and accreditation gave a great variety. Every day was different. Now I'm director of my own company – Building Code Compliance Limited. I'm doing remote processing of building consents electronically and I'm also still doing some inspection work for Queenstown Lakes District Council.

What do you consider to be the biggest challenge in your role?

I think I'd have to say consistency. It's something I've grappled with for a long time. It's hard enough to get consistency with processing and inspections within an individual council where you may have ten inspectors within a team; all on the same wavelength and processing and inspecting with the same thought pattern. Once you've mastered that, you've then got to get consistency across 70 councils in New Zealand and ensuring they're all on the same wavelength. It's important that a customer gets the same response in Northland as they will in Central Otago. I spent a year in the private sector working for a construction company applying for all their building consents. An identical set of drawings for a rotary cow milking shed; for one council, it took seven days with no further information needed, for another council, it was four further information letters and three months to get through their system. It's a good example because it was simple construction. It made me realise the frustrations the private

sector has with councils, so when I returned to council I wanted to ensure that we would try to get better at trying to deliver consistency. I'm not sure how much ground we've made with that – some councils have different views which adds to the difficulty. With our building code not being prescriptive and black and white, it's open to interpretation and you may interpret it differently than how I do. That's a huge challenge to achieving consistency.

Another challenge that's right across New Zealand at the moment is the lack of building control staff. There's a significant concern that building control staff are being targeted by the private sector offering significant pay increases and additional incentives. This just makes it even harder in the public sector to have enough officers to do the job. And it increases the frustrations the private sector has with councils as there aren't enough experts and qualified staff to process the consents quickly enough! It's especially frustrating from a council perspective when you spend a few years training these building control officers up and then they leave. A lot of the motivation is money orientated, but it can be a risky move. There is lots of work during a boom but when that bubble bursts and the projects slow down or stop, they can be the first to go. So it's not necessarily the best move to make to go private. People often think they are going into an easier and less stressful job too, which doesn't always turn out to be the case.

Queenstown and Auckland also have the issue of their building control officers not being able to afford to live in the areas they are consenting because of the local government salaries. This makes it easier for the private sector to entice these people away from local government. The challenges aren't just the recruiting of the staff, but also the retaining of them. I believe a review of Building Control Officers' salaries matrix and giving them ongoing good quality professional training development would hugely assist with this issue.

What do you think is different about being in the built environment in Queenstown rather than other regions?

I think that the Southern Cluster group work very well together in a collaborative way to help each other out. If someone's not quite so busy, they will help out another council that's under the pump. Clutha have recently sent a couple of inspectors to Queenstown because they really need the help at the moment. It's like a family – the sharing of resources in processes and consents is mostly due to the building control managers all having a good relationship. At our cluster group meetings, we work out what our training requirements are. We can then tell BOINZ we've got fifteen people who need to go on the plumbing and drainage course, and get them to organise a trainer to come down to Queenstown. Having a collective training plan with other councils in the cluster really helps to get the courses down here.

Sharing the resources between councils also helps improve consistency from council to council. When someone visits a council, they will often remark when something is different from how they usually do things and can help more officers to understand a greater variety of work. A small and rural council that normally doesn't get very complex work, can head to another council to help out and as a bonus get some really interesting higher-level work experience at the same time.

What do you see as the future of the built environment?

A continuation of building a more professional perspective for the building control officers. Gone are the days where inspectors solely came from having been injured on site so they had to down tools. We just can't rely on that anymore. We need to start looking at building surveying as a career path, which should be looked at as highly skilled individuals working as professionals in a highly complex building environment. Now that we have the pathway set up with the qualifications and also a national cadetship we're on the road to achieving that. It's great we're seeing a lot of young people coming into the industry. I noticed the last five out of six new building control officers we've taken on in Queenstown recently are in their mid-twenties. They have a real thirst for knowledge and are so keen to learn which is really encouraging. Two of them have got building surveying degrees in the UK, so it's great that they want to come here and continue to learn and put their skills to good use. We seem to have more interest from overseas than we do from New Zealanders. I'm not sure why – but it might be worth looking at going into schools across New Zealand to try and encourage younger people into the industry to get it across to the younger generation about what we actually do. There's going to continue to be a shortage unless we are more proactive in this area.

Increased use of technology is definitely the future of the built environment. Technology and young people go hand in hand – so this will be a good way to get them on board. They are able to think outside the box and develop apps to make processing easier – it's a refreshing change. It's important that we all embrace this fresh thinking and use it to its full advantage as it helps to make building control officers' jobs more sustainable. It would also be great to use some of our older members as mentors for these younger people entering the industry as it's important that the knowledge of these wise and experienced building control officers is passed on to the next generation. Since I started in the 90's the job has become much more complex and challenging so it's important for new officers to get the support they need wherever possible. It didn't use to be this way as officers would have the time to train newcomers themselves, but since this is no longer an option we need to look to others who do have the knowledge and the time to impart their wisdom. This would be a fantastic example of the past, present and future working together to improve the quality of the built environment.

If you have a story to tell, or think you might know someone who does, please contact marketing@boinz.org.nz We'd love to hear from you!

Stu being awarded Life Membership at this year's conference.

Consultation on Fire Safety Proposals

Christine Duncan, Fire Engineer MBIE

The Ministry of Business, Innovation and Employment (MBIE) is responsible for the Protection from Fire clauses in the Building Code. Part of MBIE's responsibility is keeping the Building Code up to date, up to an international standard and flexible enough to allow industry to generate innovative solutions.

MBIE is consistently seeking improvements and best practice for New Zealand building professionals. Part of the ongoing work programme has been creating a discussion document based on feedback from stakeholders and international fire engineering experts. MBIE are currently seeking feedback on the discussion document which has four proposals to improve fire safety design for New Zealand buildings. The consultation began on 15 May 2017 and will run to 14 July 2017.

The four proposals are:

1. Increased flexibility in the use of internal surface finishes
2. Clarify Building Code requirements for structural performance in fire
3. Update the Verification Method C/VM2 and include more safeguards for tall buildings
4. Support Alternative Solutions for fire designs by issuing guidance.

The new proposals are aimed at making fire safety requirements easier to understand and apply, promoting innovation in fire safety engineering and design, and supporting collaboration between building professionals.

The proposals are mostly adjustments to simplify the fire design process and to support a shift towards better performance. The proposed changes to the fire safety requirements are relatively minimal for the majority of building professionals who will be using the requirements. There are some new requirements for specialised areas such as tall buildings, where MBIE considers it necessary to include more safeguards for building occupants and firefighters. The new requirements are heavily focussed on safety and will provide more clarity for professionals in this area.

MBIE has received input on these proposals from key stakeholders including the New Zealand Fire Service, the Society of Fire Protection Engineers, building control officials and architects. MBIE has also worked with international fire engineering experts to develop these proposals, keeping the New Zealand Building Code aligned with international best practice.
The consultation is now open for anyone wanting to view the proposals and submit their feedback to the fire team at MBIE.
View the proposals on the MBIE Corporate website . MBIE encourages dialogue amongst peers and therefore comments and feedback are best provided to technical@boinz.org.nz for inclusion in the submission BOINZ is preparing on behalf of its membership.

1.0 FIRE SAFETY CONSULTATION - WHAT IS HAPPENING?

The original fire programme was initiated in 2014 in direct response to stakeholder feedback from the 2012 changes to the Building Code Part C *Protection from Fire* and its associated compliance documents.
The two year fire programme was seen by MBIE as an opportunity to review the whole fire regulatory system to test and discuss the perceived issues. The fire programme has now concluded with MBIE receiving feedback on a range of topics through various working groups using expertise from key stakeholders. Stakeholder engagement was extensive and covered representation from across the industry, including BOINZ.
The outcome from the programme and working groups was a number of priority fire projects MBIE would focus its efforts on. The first phase of project initiatives have been consolidated into the discussion document "MBIE: Consultation on Fire Safety Proposals" which is currently open for consultation and available on the MBIE website. The initiatives, derived from the fire programme, range from suggested Building Code changes through to modifications of the Acceptable Solutions and Verification Method, plus publication of Section 175 Guidance to support the use of Alternative Solutions. The aim of these changes is to improve the effectiveness of the fire regulatory system for building professionals and reinforce safe practices for building occupants.

2.0 SNAPSHOT OF THE CONSULTATION THE PROPOSED CHANGES TO THE FIRE REGULATORY SYSTEM ARE:

- Remove the specifics of Material Group Numbers and Critical Heat Flux from NZBC C3.4
- Remove the term structural stability from NZBC C6
- Make amendments to Verification Method C/VM2, inclusive of specific criteria for tall buildings (>60m building height)
- Issue guidance under Section 175 of the Building Act to frame the methodology for undertaking Alternative Solutions for Fire Safety Design

2.1 MATERIAL GROUP NUMBERS

Currently the fire safety requirements for internal surface finishes including walls, ceilings and floors are fixed at Building Code level. The specifics within the performance clause remove the ability to undertake performance-based design. The fire programme review uncovered that this requirement was overly restrictive and does not allow for equivalent measures or specific uses, such as education buildings or Marae buildings. The proposal for consultation is to remove the prescriptive requirements from the Building Code level and retain the criteria within the Acceptable Solutions and Verification Method. This will result in changes to NZBC C3.4, Acceptable Solutions C/AS1-7 and Verification Method C/VM2.

2.2 STRUCTURAL STABILITY

The existing fire safety requirements call for structural stability to be maintained in fire. Through the fire regulatory framework review it was concluded that the stability of structure is the role of the structural engineer, therefore the fire engineer's role became undefined. The proposals in this consultation aim to help separate the roles and responsibilities of the structural and fire engineers to provide clarity. The proposals would modify the Building Code moving the requirement for structural stability from Clause C6: Protection from Fire to Clause B1: Structure. The aim of the proposal is to introduce a term structural performance to allow for innovations in structural fire protection that serve to protect the structure for the period of time needed to achieve the performance requirements. The proposed changes would include modifications to NZBC Clause C6 and resultant changes to definitions in Acceptable Solutions C/AS1-7 and Verification Method B1/VM1. Post fire stability requirements (B1/VM1) do not apply to B1/AS1 or C/AS1 domestic buildings.

2.3 VERIFICATION METHOD C/VM2

The Verification Method C/VM2 provides a framework for fire safety design in New Zealand. MBIE has drafted a proposal to update the Verification Method and include more safeguards for tall buildings. The proposal for consultation includes specific metrics for determining the range of additional considerations for tall buildings ranging from escape provisions to firefighting access and facilities, and appropriate fire resistance rating of structure. These updates to the Verification Method would ensure safety is paramount in tall buildings, but the regulations aren't overly restrictive for other buildings not in this category.

2.4 ALTERNATIVE SOLUTIONS

The performance-based building environment in New Zealand permits the method of Alternative Solutions to demonstrate compliance with the Building Code. Historically there has been a wide range of Alternative Solutions presented for fire safety with no defined guidelines to justify a departure from the compliance document route. Through the fire review programme, MBIE concluded that a guidance framework was required for designs that deviate from the compliance document route to assist designers and Building Consent Authorities. Alternative Solutions are a valid method of demonstrating compliance with the Building Code and play an essential role in performance-based fire safety design. The proposed guidance intended to be issued under Section 175 of the Building Act seeks to provide clarity on a pathway using this Alternative Solution method. The intended outcome of this consultation is to support a performance-based code for fire design and reinforce the Alternative Solution route to compliance.

THERE ARE TWO PARALLEL PROJECTS TO THE CONSULTATION PROCESS THAT ARE BEING SEPARATELY UNDERTAKEN:

1. Review of acceptable solutions

MBIE has drafted a proposal to merge Acceptable Solutions C/AS2-7 into a single document to be known as C/AS2. This idea received widespread support from stakeholders during a series of workshops in 2016. In order to ensure the approach of the amalgamated document works in practice, MBIE are conducting a pilot scheme which is due to conclude in June. Full public consultation on this proposal is anticipated for later this year.

2. Fire safety Design Guidance for supported housing

The Supported Housing project run by MBIE has been working closely with representatives from the supported housing sector, Ministry of Health, Building Consent Authorities and the New Zealand Fire Service to develop a Residential Community Housing Design Guide for fire safety, intended for housing funded by the Ministry of Health or with a recognised audit process. This is a guidance document will be issued under Section 175 advice and is expected to go out for industry consultation later this year.

HOW CAN I GET INVOLVED?

The discussion documents are available for download via MBIE Corporate website While individual submissions are welcome, dialogue amongst peers is encouraged and therefore comments and feedback is best submitted to technical@boinz.org.nz for inclusion in the BOINZ submission.

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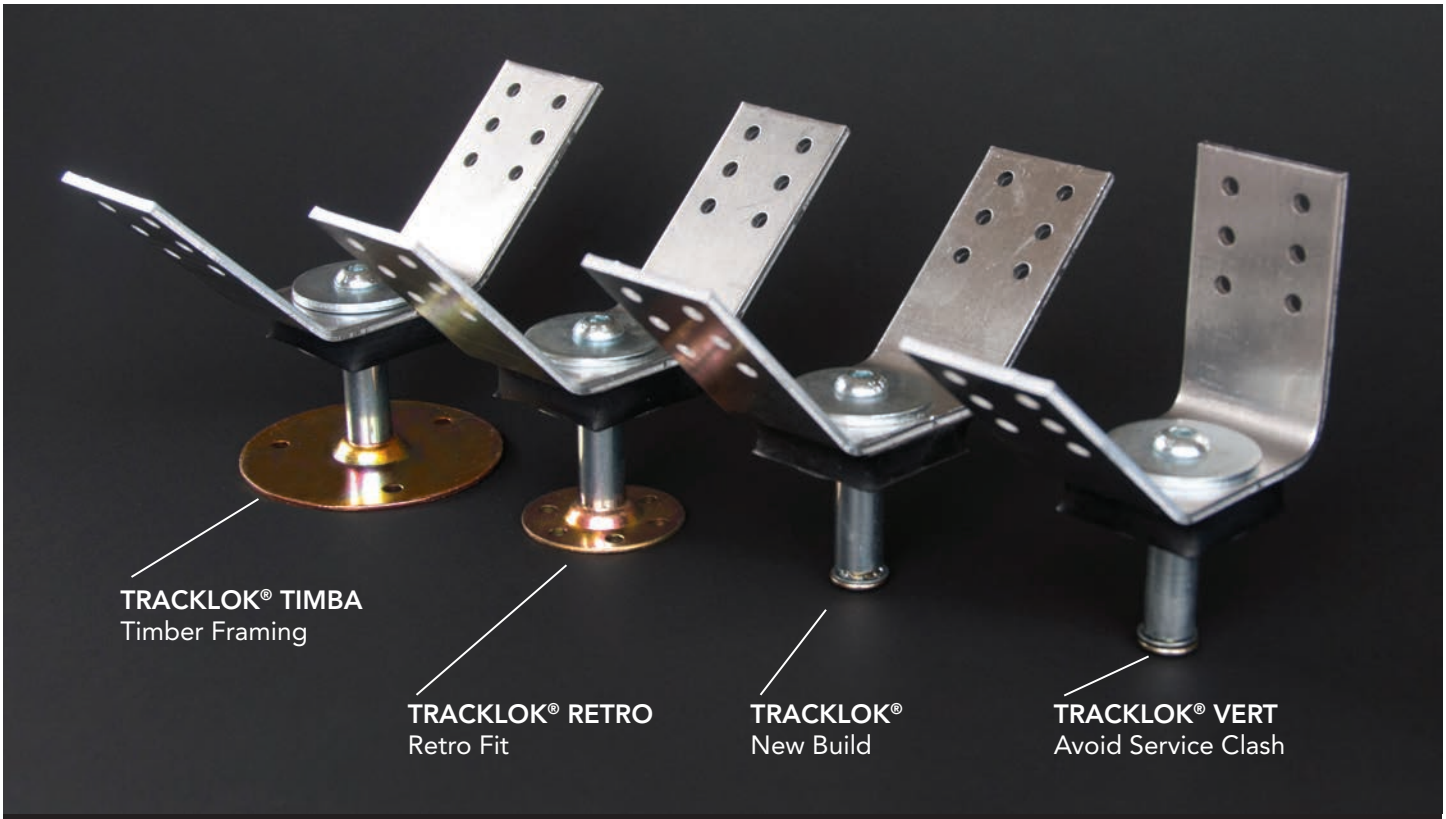

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D. Scheibmair – Technical and Education Manager, BOINZ

VANCOUVER CONFERENCE AND TIMBER MID-RISE BUILDINGS

Having held the role of President for the Timber Design Society (learn more at www.timberdesign.org) for 3 consecutive years, the responsibilities under the various positions held with previous employer, and the interest in timber design and innovation, I've been fortunate to have been able to gain great insights into, knowledge on, and create connections with individuals and organisations engaged in innovative applications of timber as a structural material. As a result I was recently asked to address the audience at a Timber Conference in Vancouver, British Columbia (BC), Canada, to share experiences, learnings and opportunities for structural timber applications in New Zealand. The event was well received by the approximately 900 individual attendees, and provided a unique opportunity to benchmark New Zealand's progress against BC and indeed to an extent globally. And while the event may have been timber focused it was most refreshing to see interest in collaborative efforts between the timber, concrete and steel 'industry sectors' in deriving at hybrid structures that ultimately provide the end user with the most cost effective solution. Similarly, the interest in and uptake of improved pre-fabrication as well as advances in design tools (Building Information Modelling – BIM) are assisting in working toward an improvement in construction accuracy and the resulting efficiency gains. Of particular interest to New Zealand might be the opportunities the expansion of the mid-rise construction market has created in Vancouver. These 6 storey mid-rise buildings are now emerging all over the greater Vancouver region (and other parts of Canada too). And while the structure primarily consists of light timber frame (LTF) utilising traditional sawn timber, concrete and steel are able to leverage benefits in foundations, individual specific structural components, as well as supporting infrastructure in the vicinity of these new multi-residential developments. Initial uptake of these timber structures was driven by WoodworksBC over many years of research and development, education and close engagement between different parties involved in the design and construction process, including BCAs and the Building Officials Association of BC (BOABC). A tipping point has now been reached where these structures are being employed due to their cost effectiveness. It's an area BOINZ is already exploring further as urban densification and population increases particularly in Auckland are already showing signs of similar changes establishing themselves in New Zealand – so rather than re-inventing the wheel entirely, a better approach might be to apply our No.8 mentality to improving on existing global advances instead.

BUILDING OFFICIALS ASSOCIATION OF BC (BOABC)

Following the conference in Vancouver, Derek Townsend (Executive Director BOABC) and Manjit Sohi (President BOABC) kindly took time out of their busy schedules to spend a morning discussing opportunities for alignment between BOINZ and BOABC, and creating connections that would benefit not only our organisations in improved resource efficiencies but also have a direct flow on effect to you, our membership. Among the items discussed were;

- Skilled staff shortages in both our geographic catchments, and facilitation of temporary and permanent staff relocation without 'poaching' and to maximise knowledge sharing as part of any exchange or relocation programme,
- Establishing qualifications to encourage interest in the Building Surveying profession beyond those traditionally in trades transitioning into the Building Control environment,
- Raising the professionalism of Building Surveying and recognition for our members' dedication to improving the quality and performance of our built environment,
- Utilisation of advances in online training facilitation to offer improved cost effectiveness and time sensitive course delivery.

It was reassuring to learn that the efforts and copious hours that BOINZ staff and our members have contributed to the Targeted Review of Qualifications (TRoQ) and the creation of the new NZ Certificate in Building Regulatory Environment and the NZ Diploma in Building Surveying, arguably with some detriment to the Training Academy, was received with great interest by BOABC. Indeed BOABC's view was that we are well ahead on creating a qualification and career pathway that no doubt will assist in easing the skilled staff shortage by accessing a pool of resource in school leavers and/or those looking to do full time study, in addition to the more traditional trades converting to building control.

BROCK COMMONS – TIMBER HYBRID HIGH RISE BUILDINGS

In addition to the mid-rise advances in Vancouver, BC, and indeed across other parts of Canada that have changed their code to enable timber buildings up to 6-8 storeys, Vancouver can also currently claim the honour of having the tallest timber building in the world. Though as people are quick to point out, the 18 storey Brock Commons building of course is not made entirely of wood. Having a concrete lift shaft, concrete topped CLT floors, light steel frame internal partition walls, and traditional façade

system it is in fact one of what I believe will become far more prevalent hybrid structures. These structures utilise different materials based on each one's strengths and advantages. The advantages of timber columns and CLT floor slabs in the Brock Commons project were uniquely identifiable as the building is a replica of a concrete one built on the same University Campus; speed of erection, reduced truck movements and less construction noise are only but some of the benefits. BOINZ is working with the NZ Timber Design Society to take the senior project manager from this project, Karla Fraser, around NZ on a roadshow in September, while she is in NZ to address the audience at a timber conference to be held in Rotorua 28th September. The project was Karla's first timber structure, and she is now a convert having seen the benefits first-hand, and indeed she's already got further projects lined up in downtown Vancouver that will showcase the benefits of lighter timber structures coupled with traditional concrete and steel in high seismic zones. Don't miss out on the chance to listen to Karla – and ask her questions! – so keep an eye out for further communication in the BOINZ monthly updates and our website in the coming months as plans for the main conference as well as the proposed roadshow firm up.

Tribute to Russell Lambert

Notes from his wife Cherry and his work comrades, Robbie Walker (ex-Palmerston North City Council), John Huntly (ex-Palmerston North City Council) and Graeme Duncan (ex-Manawatu District Council)

Russell was born 3rd July 1951 into an isolated farming community.
Boarding at secondary school lasted only one year as his father removed him to tend to younger family members and help on the farm. As his older siblings went on to achieve a good education, Russell's thirst to strive for education and do well was created.
In 1969 at 18 years old he left the farm and moved to Fielding where he worked as a hammerhand/building labourer. Later in 1975 he started an adult apprenticeship. He advanced to Leading Hand and then to Foreman for Palmerston North commercial builder Leader Construction. By 1980 with his apprenticeship and Advanced Trade Certificate completed, Russell advanced to Clerk of Works then progressing to achieve a New Zealand Certificate in Building.

Russell was employed by the Palmerston North City Council in 1985 within the Building Permit division. His early work was mainly the processing and inspection of new residential buildings and alterations. Early work on Commercial buildings brought a promotion to process and inspect commercial buildings. The opportunity to supervise and train new recruits was an integral part of the role, and anybody who was mentored by Russell was very fortunate. Promotion to a Senior Building Officer as Inspection Team Leader was the next advancement at the Council. Supervision to address any noncompliance and a more improved inspection system that formed part of the Building Act was another of Russell's roles. Customer satisfaction was where Russell was an outstanding officer. His liaison with all members of the trade and the handling of complaints and inquiries were actioned in rapid response. Russell was appointed the key account holder for Massey University. This work was an ongoing liaison with Massey representatives - architects, engineers, builders, trades people etc. Advancement within the computer and IT sector played a huge part in Russell being responsible for the implementation of tablets for his inspection team. He was always learning new innovation procedures for himself and his team where they should be following presentations regarding BRANZ, Trade Companies and new Timber Grading rules.

BOINZ membership was encouraged and supported by councils, where members of the team were able to attend presentations and take part in training.

Russell had a ready wit and it was not unknown for hand sketches of various people to be in circulation as circumstances arose. He enthusiastically participated in group social activities such as Relay for Life, river rafting, ten pin bowling, mini golf, building inspectors lunch and Christmas Social Club "dress up".
When visiting the formidable home Cherry and Russell built, one was always met with a warm welcome. Just a great atmosphere and then to view items of interest in their garden and grounds.
Russell had very diverse hobbies and pastimes such as art, photography, movies, music, live theatre, reading, guitar, ballroom and Latin American dancing, aerobics, cycling and kayaking, just to name most of them.
After his retirement, Russell looked forward to the weekly meeting with the "Lost Boys" (John, Robbie and Graeme) enjoying coffee, cakes and muffins.

Unfortunately, Russell passed away 25th December 2014 and was acknowledged with a plaque being placed within a Memorial Garden in the Victoria Esplanade, Palmerston North.

We miss him greatly.

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Some Thoughts of Performance Legislation

Dr Darryl O'Brien, Central Queensland University, Australia

INTRODUCTION

This article will provide some thoughts on the evolution of building codes and how this knowledge can influence our understanding of Performance Based Solutions (PBS).
To do this, we will:

- Describe the process of code development,
- Provide historic examples of code development,
- Consider how this knowledge may influence your view of PBS.

THE HISTORY OF PBL

Performance based legislation has a long conceptual history, indeed the first recorded performance based building code can be traced back to the code of Hammurabi, a Babylonian ruler from the period 1955 – 1913 B.C. (Gross, 1996). For example:

'The builder has built a house for a man and his work is not strong and if the house he has built falls in and kills the householder, that builder shall be slain', (Gross, 1996, p.2).

Whilst performance-based building codes are thought to represent a recent building control innovation, the first modern recommendation for performance-based building codes can be traced to a 1925 United States Bureau of Standards report (United States Bureau of Standards, 1925, as cited in Gross, 1996, p.3) 'Whenever possible, requirements should be stated in terms of performance, based upon test results for service conditions, rather than in dimensions, detailed methods, or specific materials. Otherwise new materials, or new assemblies of common materials, which would meet construction demands satisfactorily and economically, might be restricted from use, thus obstructing progress in the industry'.

THE USE OF PERFORMANCE SOLUTIONS

However, even with an understanding of the benefits of PBL, examination of the data suggests the use of performance solutions remains somewhat limited.
2004 Australian Productivity Commission Research Report Reform of Building regulation:

- 2-5% use performance solutions in residential construction,
- 70-80% use performance solutions in commercial construction
- Australian Building Codes Board 2012 stakeholder survey:
- 38.5% of respondents utilised an performance solution in less than 5% of projects,
- 56.3% rarely assessed (less than 5% of projects) performance solutions against BCA verification methods
- New Zealand 1997:
- 75% of all building applications used an exclusively prescriptive pathway,
- 15% adopted minor performance solutions,
- 8% adopted significant fire engineering based performance solutions (Buchanan, 1999)

In Australia, the comparatively slow uptake of performance solutions led to the 2014 ABCB 'Quantification of NCC Performance Requirements' initiative.
The goal of this initiative is to increase the perceived financial and innovation benefits available to the construction sector arising from the increased use of performance-based solutions (ABCB, 2014).
The acceptance and adoption of performance-based legislation reflects a view that traditional prescriptive controls are process rather than outcome based, a framework that potentially limits technical innovation, restricts trade and increases compliance costs. Alternatively, performance-based legislation is seen as being outcome focussed and permitting a range of compliance options that encourage innovation and reduce costs (Sexton & Barrett, 2005).
So, we can expect to see more performance solutions in the future – both for design and materials. This means that we need an understanding of the basis of performance based legislation, and to do this we need to understand how all laws and codes are developed.

CODE ORIGINS

Generally, the creation of technical codes involves two processes;

- Logical incrementalism
- Emergent strategy

Logical incrementalism is defined as a process of codification of existing practice and represents a pro-active, continuous (although gradual) change based on existing patterns and structures.

As applied to building codes, McDowell and Lemer (1991, p.1) describe this process as one where 'The influence of these criteria and practices on safety is presumed on the basis of past experience, scientific analysis, and reasoned discussion by those concerned with protecting the public-at-large and the interests of property owners'.

In relation to performance based codes, application of logical incrementalism can be clearly seen in the core acceptable solutions that represent the codification of existing practice that has been considered satisfactory over a historic timeframe. This status quo approach was summarised by Zimmerman and Martin (2001, p.172) as occurring where 'there is little incentive to do anything different than standard practice. What has been provided in the past is assumed to have worked and therefore be provided again.'

The use of the logical incrementalist approach has limitations when used in ad hoc way. Isolated amendments can potentially lead to excessively complex and restrictive codes as new requirements are incrementally added to existing requirements without consideration of the totality of the changes (Hadjisophocleous & Benichou, 1999).

However, as identified by Idenburg (1993) where the entirety and context of existing codes is identified by the code developer, logical incrementalism is seen to have strong goal and process orientation and provides a sound basis for code development.

LOGICAL INCREMENTALISM – FIRE SEPARATION

AD 560 the Justinian Code

We shall to some extent avoid words ordinarily used in governmental affairs and shall employ those which are more commonly known so that no one who comes in touch with this law will need an interpreter.

Projecting balconies must have a space of ten feet for free air between them. Where private buildings are built up against public granaries, an interval of fifteen feet shall be maintained free from obstruction from projecting balconies.

A man who builds must leave a space of twelve feet between his house and that of his neighbour and order that there shall be twelve feet of space left between the houses, from top to bottom.

An interval of ten feet shall be left between two sun-rooms opposite each other by the fact that sun-rooms are not too close to each other, danger from fire threatening the city and the owners of houses may be diminished and become scarcer and may be more easily warded off.

If a sunroom or stairway is constructed contrary to our law, it shall not only be torn down, the master-builder or contractor who constructed it shall pay another ten pounds of gold, and if the man who erected it cannot pay the fine on account of poverty, he shall be scourged by lashes and expelled from the city.

The London Rebuilding Act 1666

And in regard the building with Brick is not only

more comely and durable but also more safe against future perils of Fire. Be it further enacted by and with the Authorities aforesaid that all the outsides of all Buildings in and about the said City be henceforth made of Brick or Stone.

And also that the thickness of the Party walls between houses of this first and lesser sort of building be one Brick and an half as high as the said Garrets and that the thickness of the Party Wall in the Garrets be of the thickness of one Brick in length.

Sydney Building Act 1837

And be it enacted That every party-wall which shall after the said first day of January be built to any first-rate building or to any addition thereto or enlargement thereof shall be built and remain at the foundation thereof of the thickness of three bricks and a-half in length or two feet six inches and a-half at the least.

City of Brisbane Ordinances 1928

Thickness of Walls. - Where computations covering design of cross walls, fire walls, and internal bearing walls are not submitted, the following requirements shall be observed: every fire wall shall have a thickness of not less than 9 inches;

BCA 1990

Fire wall means a wall that divides a storey or building to resist the spread of fire and smoke and has the FRL required under Specification C1.1.

CODE ORIGINS

The key point to the historical logical incrementalism model is that satisfactory acceptable solutions are developed from trial and error. What works is retained, failures discarded. Importantly, it is the logical incrementalist model that formed the core of the acceptable solutions. But being astute building surveyors, you will have noticed that the logical incrementalist model fails to identify the mode that identifies design failures and causes a fundamental change to code content.
It is to this model that we now turn.

EMERGENT STRATEGY – CODE BY CATASTROPHE

Emergent strategy can be described as an intermittent process of reactive and discontinuous change based upon specific events.

As related to building codes McDowell and Lemer (1991, p.9) characterise this approach as occurring where 'From time the time, new hazards are identified and become the subject of debate, public policy and regulation.'
Following a substantive initial change that departs from the existing norm, the emergent strategy code reverts to periodic amendments based upon a logical incrementalist framework. In this way, over time the initial emergent strategy becomes the new 'normal' benchmark. Introducing emergent strategy regulations without consideration of the totality of the legislative environment may lead to sub-optimal outcomes. Idenburg (1993) described emergent strategy as having weak goal and process orientation, as the lessons learnt from previous code experience may not be applicable to the new codes.

EMERGENT STRATEGY – AN EXAMPLE

August 24 2001 a fire that started in a Slacks Creek (Qld) house killed 11 occupants. This fire was the single greatest loss of life in a domestic house in Australia.

The home had a smoke detector fitted, but due to faults this was turned off.
Coronial inquest recommended that smoke alarms be provided:

- In all stories containing bedrooms in every bedroom,
- In hall ways leading to bedrooms,
- Other stories not containing bedrooms,
- Be interconnected.

WHY DOES THIS MATTER?

As we have seen, the majority of codes are created using the process of logical incrementalism. This means the underlying basis for the code requirement may get lost, even from the experts.
'Background assumptions have a way of becoming taken for granted, or 'naturalized', and this disappearing even from experts' consciousness' (Jasanoff 1998, p.96)
This is compounded by a process known as 'sedimentisation'. This process occurs where existing knowledge and practice becomes normalised within the organisation. The risk is that we could be sedimentising poor practice and not know.

ASSESSING PERFORMANCE SOLUTIONS

Understanding the basis of the codes is important for performance solutions assessed using either first principle or benchmark approaches.

- First principle solutions are assessed against the performance requirements,
- Benchmarked solutions are assessed against the acceptable solutions.

The most effective performance codes are those where the performance requirements are expressed in quantitative (numerically compliance) terms (Kirchsteiger, 1999). Coglianese, Nash & Olmstead (2003) noted that the application of quantitative performance requirements would occur where predictive behaviours were observable, allowing for tightly specified and restrictive performance requirements – such as engineering solutions.

However, as observed by Bergeron, Bowen, Tubbs & Rackliffe (2001), the ability to express all performance criteria in quantifiable terms does not exist for all building requirements in the current generation of performance-based codes. This is particularly evident where no quantitative performance requirements are identified: rather the code relies on quantitative acceptable solutions to provide a performance solution benchmark.

This lack of clarity creates challenges for designers of performance solutions in situations where the acceptable solution contains a specific quantitative measurement, but lacks a clear description of the basis underpinning the measurement. This is a common occurrence with code requirements based upon logical incrementalism. Examples of such circumstances include ceiling heights, stair dimensions and minimum natural light requirements, where an understanding of the expert knowledge that informed the quantitative solution has disappeared from consciousness.

WHAT TO DO?

Effective building codes recognise that the more clearly a hazard can be identified, the more effective the code response.
Performance based solutions are no different – the more clearly the code requirement is known, the more effective the response.
How is this best achieved – in my view two pathways exist:

- Verification methods where deterministic and probabilistic calculation and testing can be applied,
- Post occupancy evaluations for all other cases.

CONCLUSION

Performance Based Legislation and performance solutions are set to be an increasing important aspect of the building surveying profession. To undertake this role, building surveyors need a better understanding of the process of code development and how this influences performance solutions – something I hope this article has provided.

References and selected bibliography

Ahrens, M. (2015). Home Structure Fires. National Fire Protection Association, Quincy, MA.
Australian Building Codes Board. (2015). Building Code of Australia, Volume 1 – 2015. Australian Building Codes Board, GPO Box 9839 CANBERRA ACT 2601.
Bergeron, D. (2003). Role of acceptable solutions in evaluating innovative designs. In Proceedings of the CIB-CTBUH International Conference on Tall Buildings (Vol. 8, p. 10).
Bergeron, D., Bowen, B., Tubbs, B., & Rackliffe, T. (2001). Acceptable Solutions, CIB World Building Congress, April 2001, Wellington New Zealand, Paper number: 257.
Coglianese, C., Nash, J., & Olmstead, T. (2003). Performance-based regulation: Prospects and limitations in health, safety, and environmental protection. Administrative Law Review, 705-729.
Gross, J. G. (1996). Developments in the Application of the Performance concept in building. In Proc. 3rd CIB-ASTM-ISO-RILEM International Symposium (Vol. 1). Retrieved from: http://fire.nist.gov/bfrlpubs/build96/PDF/b96145.pdf
Jasanoff, S. (1998). The political science of risk perception. Reliability Engineering & System Safety, 59(1), 91-99.
Kirchsteiger, C. (1999). On the use of probabilistic and deterministic methods in risk analysis. Journal of Loss Prevention in the Process Industries, 12(5), 399-419.
Sexton, M., & Barrett, P. (2005). Performance-based building and innovation: balancing client and industry needs. Building Research & Information, 33(2), 142-148.

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HRDIVISION

Dr Grant Lester: Managing Unreasonable Complainant Behaviour

The complaints of difficult people take up a disproportionate amount of time and resources for employers. They also impact emotionally on those trying to manage their complaints. For that reason Heaney & Partners brought Dr Grant Lester, Consultant Forensic Psychiatrist, over from Melbourne to present to the delegates at the 50th Celebratory BOINZ Conference in May.

Dr Lester has undertaken research on unusually persistent complainers and in 2004 his paper was published in the British Journal of Psychiatry. It came about because complaints organisations and the courts were plagued by a small group of unusually persistent people who consumed enormous amounts of resources. His research addressed the nature of this group of complainers and whether its members resembled those described in the old medical literature as querulous.

Complainants occupy a spectrum with only 5% being "abnormal". A normal complainant is aggrieved and seeking legitimate redress. At all terms they maintain proportionality and perspective and focus on the issue. They are able to negotiate and accept a reasonable settlement.

In contrast the persistent complainant uses the language of a victim with or without the loss of specificity i.e. they might pursue a complaint "for the public good". They have overly optimistic expectations of compensation or major changes to institutional structures. They are difficult to negotiate with because they reject all offers holding out for what they see as a just settlement. Though persistent, demanding and occasionally threatening they will ultimately settle but will continue to complain of injustice.

Within the 5% is a small group whose complaints arise from pre-existing schizophrenia. They are aggrieved by persecution and loss. Their complaints arise totally, or in part, from the delusions and hallucinations associated with their illness. Their claims are often bizarre and in flux. It is often impossible to define, let alone resolve the claim.

Finally there is the querulant or morbid complainant who develops over time and loses focus and proportionality. The peak age is between 40 and 60 years old and men outnumber women 4 to 1. Their communications are voluminous, over emphasised, pseudo legalistic, disjointed and often contain threats. They relentlessly pursue justice. If they are offered "total" reparation they will extend their complaint. They say they are seeking reparation and retribution but they actually seek vindication.

Studies of the development of the querulant indicate a personality mix of obsessional, narcissistic and paranoid. They are unable to accept mortality, loss of power and non accomplishment and may have experienced negative life events such as a marriage break up, career set backs or physical or psychological injury or illness.

The querulous pursue their claims for longer, supply more written material, telephone more often and for longer, intrude more frequently without an appointment and ultimately are still complaining when the case is closed or transferred. They differ from the normal complainer because they are motivated by desires for vindication and retribution, in the curious and dramatic forms in which they present their complaints; in how they behave while pursuing their claims – particularly with regard to threats - and how high a price they pay personally and socially for that pursuit.

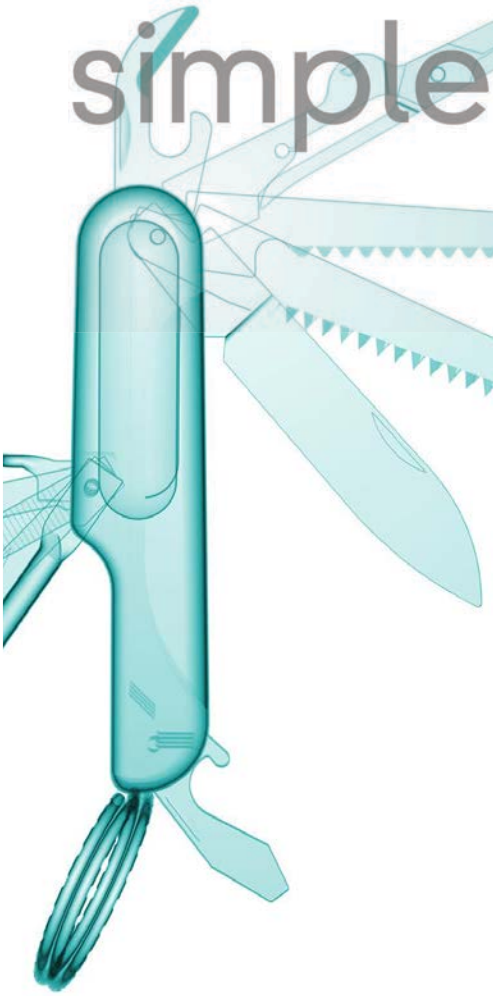
So how do you manage these difficult complainers? Dr Lester said there are twelve things for you to remember. They are:

1. You will struggle.
2. Recognise the 5 V's (victimised, voluminous and vague communications, variable demands, seeks vindication).
3. Maintain focus (for yourself and them).
4. Do not escalate.
5. Do not over service.
6. Contain i.e. record, discuss and respond.
7. Record fact, not opinion.
8. Maintain your safety and the safety of others.
9. Do not personalise the encounter.
10. Do not review (send the complaint higher up) just because they are unhappy.
11. Manage all threats and aggression; and
12. You will struggle. Do not be dismayed. It is not your fault.

By Frana Divich (summarising Dr Grant Lester's key note address at the 50th Celebratory BOINZ Conference)

STRAIGHT UP ANSWERS

we make the complex simple



Helen Rice | Partner

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Q: from Peter Bothwell Team Leader Building Inspections Nelson City Council / Te Kauniherao Whakatū.

If a former owner of a property carried out building work without a building consent before selling the property, should the council issue a notice to fix to the former owner or the new owner?

A: A notice to fix can only be issued to an owner in respect of a contravention or failure to comply with the Act or Regulations.

MBIE decided in Determination 2015/073 that if the person who contravened the Act is no longer the owner of the building, a notice to fix cannot be issued to that former owner because they are no longer the owner of the building. However, nor can a notice to fix be issued to the new owner because they have not contravened or failed to comply with the Act or Regulations.

So the answer to your question is (if you follow MBIE's direction at least) neither the former owner nor the new owner. This leaves councils in an impossible situation and we have approached MBIE about the need for this issue to be revisited.

Q: from Malcolm Smith Manager Building Consents Napier City Council / Te Kaunihera O Ahuriri

If an owner applies for a building consent but prior to the consent being issued the owner sells the property, should the council issue the building consent to the former owner (the applicant) or the new owner of the property?

A: Surprisingly, the Act does not answer your question and our research suggests that neither the Court nor MBIE has ever been asked to clarify the situation.

Our view is that the building consent should be issued to the former owner (i.e. the applicant).

In granting the building consent pursuant to section 49 of the Act, the council is confirming that it is satisfied that the provisions of the Building Code would be met if the building work was properly completed in accordance with the plans and specifications that accompanied the application. Those plans and specifications were provided by the applicant, not the new owner.

Furthermore, if the council had refused the application, it would have been required by section 50 of the Act to give written notice to the applicant. It wouldn't make sense for a successful application to be treated differently.

We have referred your question to MBIE and in the next edition of Straight Up Answers we will provide MBIE's assessment as well as what to do with a CCC in similar circumstances.

Please send your questions to helen@riceandco.nz.

Watch this space.

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Building Officials Institute of NZ

Stadium Southland
Court of Appeal decision dated 21 March 2017

INTRODUCTION

Invercargill City Council v Southland Indoor Leisure Centre Charitable Trust (Stadium Southland) is a fantastic win for councils across New Zealand.
The Court of Appeal found that the council did not cause the owners of Stadium Southland any loss in negligent misstatement. Arguably, the principles of the case are more applicable to commercial buildings where "commissioning owners" are commonly the plaintiffs.

THE FACTS

You may recall the facts of this case.
Between 1999 and 2000 Stadium Southland was built in Invercargill to provide indoor sporting and recreation facilities for the Southland community. It was built under a project agreement and lease between a charitable trust (the Trust) and Invercargill City Council. During construction, the long and shallow mono-pitch roof sagged. The Trust's engineer (Mr Major) erred when designing the steel trusses that supported the roof and, with his approval, lighter gauge steel was used.
The Trust arranged for remedial work to occur, which was competently designed by an independent engineer (Mr Harris). The council insisted that the Trust seek a building consent for the remedial work and it issued a building consent based on Mr Harris' design. The consent required the Trust to provide a producer statement from Mr Major to certify that the completed work complied with Mr Harris' design.
The steel fabricators did not complete the remedial work to Mr Harris' design. Mr Major did not detect the defects because he did not inspect the work. The council did not identify the defects either, because it relied on Mr Major. The council issued a code compliance certificate before it received Mr Major's producer statement.
On 18 September 2010 Invercargill experienced a heavy snow storm and, because the remedial work was defective, the roof collapsed under the weight of the snow. Fortunately, no-one was harmed.
The Trust sued the council in the High Court for negligence and negligent misstatement based on the code compliance certificate. The Trust won and was awarded $15 million, being the cost of rebuilding the original structure less $750,000 for betterment.
The council appealed and argued that it did not owe the Trust a duty of care in tort. It also asserted that the lease excluded liability, it denied causation and alleged contributory negligence by the Trust. The Trust cross-appealed, challenging the High Court's betterment deduction and treatment of GST.

KEY POINTS FROM THE CASE

At 76 pages long, this "negligent misstatement case" is jam-packed with interesting law. We have distilled the key points for you below.

DUTY OF CARE

Two of the three judges in the Court of Appeal (Harrison and Cooper JJ) concluded that no duty of care existed. They said that a duty of care will not protect a plaintiff who causes its own loss due to its contractors' negligence.
The third Judge (Miller J) accepted that the council did owe a duty of care to what he termed "commissioning owners", but relied on the very "unusual facts" of Stadium Southland to distinguish it from the rule in Spencer on Byron that a local authority owes a broad duty of care to a commercial building owner.
The "very unusual facts" the Court was alluding to include:

- Unlike Sunset Terraces or Spencer on Byron, the Trust in Stadium Southland was a "commissioning owner" (not a subsequent owner). It commissioned and was a party to the principal contracts with the architect, engineer and builder and used its position to assert control over the work.
- The Trust's case rested on the negligent issue of the code compliance certificate and not upon any earlier acts or omissions, such as inspections (which were time-barred) and so specific reliance by the Trust on the code compliance certificate had to be considered.
- Unlike subsequent owners, the Trust commissioned construction and so its "vulnerability" needed to be considered when deciding whether to impose a duty of care. The Trust had the opportunity when commissioning the construction to ensure that it protected itself against loss (which it did) so it was not vulnerable and did not need protection.
- In both Spencer on Byron and Sunset Terraces the council directly handled the consenting, inspection and certifying process. In contrast, Stadium Southland is about producer statements in a situation where the Trust's engineer was relied upon to supply the evidence needed to certify that the work was code-compliant.
- For "commissioning owners" Miller J limited the broad duty of care, expressed in Spencer on Byron, to a different and lesser duty - that of checking that an appropriately qualified person had supplied adequate evidence that the consent conditions had been met. The reason for this was that the council never assumed a duty to inspect the remedial works to ensure that they complied with the

Building Code. Instead, the council relied on the Trust's engineer, Mr Major, to certify compliance.

BREACH OF DUTY

The Court said very clearly that the council breached the limited duty of care that the council owed to the Trust and that it "negligently issued the code compliance certificate." This is because in the absence of the Trust's engineer's PS4 the council had no way of knowing that the work complied with the conditions of the building consent.

CAUSATION

The Trust's claim stumbled at this hurdle. The Court of Appeal decided that the Trust did not specifically rely on the code compliance certificate and as a result the case should have failed in the High Court. The Court said that primary blame for the collapse belonged to the Trust's engineer and his contractors. To blame the council, the Trust had to prove that it would have had the opportunity to identify and remediate the roof if the council was not negligent.

As the claim was in negligent misstatement, specific reliance had to be proved and it was not. Prior to 2006 the Court found that the Trust did not rely on the code compliance certificate, but instead relied on its own agents. After 2006 (a year after the code compliance certificate was issued) the Trust and the stadium's management became alarmed at the performance of the roof under wind load. They decided that investigation and remedial action were warranted despite code compliance and then failed to follow its own expert's recommendations for remedial action.

If the claim was in negligence, then the Trust would only have needed to prove general reliance and would not have needed to prove specific reliance on the code compliance certificate.

OTHER INTERESTING COMMENTS FROM THE COURT

Interestingly, the Court of Appeal concluded that a claim based on a code compliance certificate alone (that is, a claim not founded on any antecedent inspections) must lie in negligent misstatement and therefore specific reliance by the Trust must be shown.

PRODUCER STATEMENTS

The Court of Appeal said that if producer statements are to mean anything, the statutory provisions allowing a council to accept them must envisage that producer statements might give the reasonable grounds the council requires in order to be satisfied of compliance with the Building Code. In other words, producer statements are given the status of evidence that is used by the council when establishing compliance.

Unfortunately the Court did not say what a local authority should do before relying on a producer statement. Counsel for the Trust argued that the council should have prepared a code compliance checklist and a PS4 acceptance policy. The Court did not decide this issue due to the lack of evidence about the practice at the time for accepting producer statements.

The Court did helpfully comment on one issue regarding acceptance of producer statements. Miller J disagreed with the Trust that the council was negligent to accept a producer statement from Mr Major given his "proven unreliability". The Court said that Mr Major was a qualified engineer subject to the disciplinary control of IPENZ and the council had taken reasonable steps to remind him of his responsibilities and secured assurances that Mr Major would comply in the future.

The Court said that a producer statement supplied by the owner's suitably qualified agent "might nonetheless count against a duty [owed by the council] where, as in this case, it was made clear that the council would not inspect the work itself but would rely on the producer statement". Ultimately, however, the Court found a duty was owed (albeit it a limited one).

CONTRIBUTORY NEGLIGENCE/ BETTERMENT

The Court of Appeal went on to say that, if it was wrong and the council was liable in negligent misstatement, it would have fixed the Trust's contributory negligence at 50% because the Trust was aware of the issues in 2006 and took no action. This is a 100% increase from the High Court decision.

Harrison and Cooper JJ said that the finding of contributory negligence would have been higher had the council pleaded that the Trust contributed substantially to its own damage through its agent's damage. The Court said that the Trust's contention about the High Court's betterment deduction was without merit.

TAKE HOME POINTS

The Court of Appeal said this case was "conceptually unique" with "very unusual" facts. This means that although the case has great take home points, its applicability to your day-to-day work should be treated with caution.

Stadium Southland packs plenty into its 210 paragraphs, but we highlight the following points to help with your risk management:

- Stadium Southland is a fantastic result for councils, especially in respect of the relationship between specific reliance at law and the control of risk. It may be much harder now for a commissioning building owner to say that they specifically relied on the council when, in fact, they engaged their own professionals to control the risk.
- The case reinforces our long-standing message to you that issuing a building consent is the most important step for a council to get right. Having everything in order before the train leaves the station helps to ensure a smooth journey.
- Beware: don't undo your good work at the consenting stage by inspecting the very works that are subject to the producer statement. In Stadium Southland the Court was influenced by the fact that the council did not inspect the works and did not charge for inspections or issuing the code compliance certificate. This was consistent with the fact that the owner knew that the council was relying on the producer statement to show compliance with the Building Code.
- Think carefully about "reasonable grounds." What makes it reasonable to accept a producer statement as evidence of compliance? Who is it reasonable to accept producer statements from? In Stadium Southland the author of the producer statement had proven unreliable in the past, so the owners argued that his producer statement should not have been accepted by the council. The Court disagreed and said that the expert was a qualified engineer subject to the disciplinary control of IPENZ. The council had taken reasonable steps to remind him of his responsibilities and secured assurances he would comply in the future.
- Check, check, check: make sure before you issue the code compliance certificate that you have carefully checked the conditions of the building consent and whether they have been met. If your answer is yes, the council has reasonable grounds to issue the code compliance certificate.

Article contributed by Rice + Co Lawyers
Nikki Flexman/Nathan Speir

TA 013 E2 WEATHERTIGHTNESS

3 - 4 July 2017 in Hamilton

The NZ economy has just experienced one of the worst construction disasters in its history. This weathertightness disaster was caused by lack of understanding and lack of application of the clause E2 Weathertightness.

This course will provide an understanding of the mechanics of water and the application of these principles ensuring compliance with E2 to make buildings weathertight.

QUALIFICATION CROSS CREDIT

SUITABLE FOR ACCREDITED

PRE COURSE READING

8 BOINZ CPD POINTS

2 DAYS

ASSESSMENT

TA 015 CLAUSE D1 ACCESS ROUTES/ TA 016 CLAUSE F1 SAFTEY OF USERS

5 July 2017 in Hamilton

QUALIFICATION CROSS CREDIT

ASSESSMENT

4 BOINZ CPD POINTS

1 DAY

Clause D1 Access Routes applies to all buildings and ensures the safe evacuation in the event of an emergency.

History has demonstrated how the correct application of the knowedge contained in this course can reduce the incidence of death & injury.

Safety of Users is about ensuring occupant protection including both those involved in the construction industry and those using buildings.

This course ensures an awareness of potential hazards involved in the construction or demolition process, and existing and completed buildings.

TA 002 BUILDING CONTROLS

10 - 12 July 2017 in Hawkes Bay

Building Control knowledge and the application of that knowledge is critical to the effective decision making process in building surveying.

This course will give participants the ability to navigate the legislation applicable to building and construction requirements, including NZ Building Code, compliance documents, standards, technical literature, approvals, terminations and other documentation required to carry out the building control function.

Providing a valueable overview for those starting out in building surveying, while also serving as a valuable refresher tool to those already practising in building surveying.

QUALIFICATION CROSS CREDIT

PRE COURSE READING

12 BOINZ CPD POINTS

3 DAYS

ASSESSMENT

TA 022 BWoF & Specified Systems

Building Officials Institute of NZ

17 - 19 July 2017 in Wellington

QUALIFICATION CROSS CREDIT

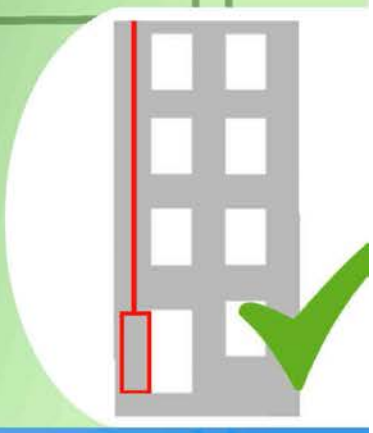
PRE COURSE READING

12 BOINZ CPD POINTS

3 DAYS

ASSESSMENT

This course provides an introduction to the compliance schedule regime, the preparation of compliance schedules and warrants of fitness, an explanation of each specified system, and the inspection and maintenance regimes which ensure the safe operation of these systems.



TA 008 NZS3604 TIMBER FRAMED BUILDINGS

Building Officials Institute of NZ

24 - 27 July 2017 in Wellington

QUALIFICATION CROSS CREDIT

SUITABLE FOR ACCREDITED

PRE COURSE READING

16 BOINZ CPD POINTS

ASSESSMENT

4 DAYS

The majority of building's built in NZ are low rise timber framed buildings, therefore making it essential for Building Surveyors, designers, builders and other involved in the built environment to have a thorough working knowledge of this document and its implications.

This course gives Building Surveyors an understanding of the Acceptable Solution for timber framed building to enable them to process building consent applications and carry out inspections.

TA 010 LIGHT STEEL FRAMING

Building Officials Institute of NZ

31 July 2017 in Wellington

QUALIFICATION CROSS CREDIT

SUITABLE FOR ACCREDITED

4 BOINZ CPD POINTS

ASSESSMENT

1 DAY

PRE COURSE READING

Light Steel Framing is achieving a growing market share within the built environment. It is essential Building Surveyors, Designers and Builders have a thorough working knowledge of the technology and construction requirements that pertain to steel framed buildings.

This course will provide an understanding of the content of the NASH (National Association of Steel Framed Housing) Standard - Residential and Low-rise Steel Framing Part 1: Design Criteria and the tools required to apply this knowledge to ensure compliance of a completed steel construction.

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