straight up

THE MAGAZINE OF THE BUILDING OFFICIALS' INSTITUTE OF NEW ZEALAND

MARCH / APRIL 2014

"It's been more than a journey..... Phil Saunders"

THE CHANGE THE PARTY

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Building Officials Institute of NZ

BUILDING OFFICIALS INSTITUTE OF NZ

47THANNUAL CONFERENCE AND EXPO 2014

6 – 9 APRIL 2014 WELLINGTON TSB BANK ARENA



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straight up

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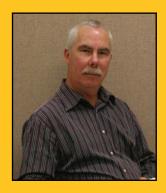






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From the President

It's been more than a journey.....!!!!

In preparing to write my last President's Desk article for Straight Up, I did a little reflecting on the two terms of office that I have been your President.

Firstly I need to say that I have been both lucky and fortunate in my role as President, lucky that, by and large the goals we set as a Board and organisation have come to fruition at a rate we could not of imagined four years ago. Fortunate in that the support of the members over this time has been unwaveringly positive. Fortunate that our vision has not only been shared by you but by many of our stakeholders and partners. Your respect and kind words for the Board and management over the years, is equally reciprocated.

There have been a number of milestones over my time on the Board and I thought you may find this reflection interesting

- The 2011 Conference presentations by the Minister of Building and Construction (Hon. Maurice Williamson) and the Chief Executive of the Department of Building and Housing (Katrina Bach) both acknowledged the importance of Building Control Officials in advancing New Zealand's building quality.
- Our collective work in supporting Operation Suburb proved to New Zealand and the world, the value Building Surveyors offer in times of crisis and disaster.
- The Canterbury Earthquake Royal Commission's acknowledgement that they were "impressed by the efforts that BOINZ is putting into the continuing professional development of building consent officers. We consider that they should continue to be supported by Local Government New Zealand and territorial authorities"

- The improving relationships and partnerships we have developed over this time. A reflection of the value we can offer as an organisation not only to our sector but to the public of New Zealand.
- The significant investment the Institute has made on behalf of its members in developing course material to underpin the skill and knowledge gaps our members need to achieve an appropriate qualification.
- The acceptance and nomination by MBIE of the list of appropriate qualifications to allow our members to work in at technical capacity with BCA's. Obviously the most important being the dedicated National Diploma's in Building Control Surveying.
- Our ability as an organisation to quickly overcome financial adversity, on the back of a vision that saw our members understanding the need for professionalism in their careers and work, but not the least the need for the Institute to be the backbone of the sector's professionalism.
- Our international relationships which were very important during some of the darker earlier times, and which have subsequently been reciprocated in terms of the sharing of our governance and business methodology.
- Our Branch network, which is now the strength of the Institute at a local level. Lead by capable passionate members, committed to delivering quality training and information locally.

 Our ability to add value to a better understanding of the Building Surveying and Building Control sectors. We are a credible voice and one that is increasingly listened to. We continue to add value and pragmatism to a wider sector that is still far from mature in terms of knowledge and quality.

These are some of the highlights, and there are many more. As I step aside to allow new ideas to take the organisation to another level, I do so knowing we are on the right track. As Building Surveyors and Building Officials we need to be vigilant in maintaining building quality – after all we are the professionals.

Phil Saunders President

Building Officials Institute Of New Zealand Branch Chairs And Secretaries For The 2014/2015 Term

Northland Branch (Meeting/AGM held Friday 21st February 2014)			
Chair	Stu Ferris	Re-elected	stuartf@wdc.govt.nz
Secretary Jane Stace Re-elected jstace@kaipara.govt.nz			

Auckland Branch (Meeting/AGM held Wednesday 19th February 2014)			
Chair	Quentin Dagger	Re-elected	Quentin.Dagger@aucklandcouncil.govt.nz
Secretary	Tineke de Villiers	Re-elected	Tineke.Devilliers@aucklandcouncil.govt.nz
Convenor of Venues	Grant Brown	Re-elected	grant@conqra.co.nz

Waikato/Bay of Plenty Branch (Meeting/AGM held Friday 28th February 2014)			
Chair	lan Mayes	Re-elected	ian.mayes@hcc.govt.nz
Secretary Alister Arcus Re-elected alister.arcus@hcc.govt.nz			

East Coast Branch (Meeting/AGM held Tuesday 18th February 2014)			
Chair	Michael Skelton	Newly Elected	michaels@hdc.govt.nz
Secretary Paul Simmonds Newly Elected pauls@hdc.govt.nz			

Central Branch (Meeting/AGM held Wednesday 5th February 2014)				
Chair Craig White Re-elected whitec@npdc.govt.nz				
Secretary Tracey Shaw Re-elected shawt@npdc.govt.nz				

Nelson/Marlborough Branch (Meeting/AGM held Monday 19th February 2014)			
Co-Chair Chris Wood Re-elected chris.wood@ncc.govt.nz			
Co-Chair	Winton Griggs	Re-elected	winton.griggs@ncc.govt.nz
Secretary	Paul Guile	Re-elected	paul.guile@marlborough.govt.nz

Canterbury/Westland Branch (Meeting/AGM held Tuesday 4th February 2014)			
Chair John Blanken Re-elected john@stonewood.co.nz			
Secretary Brenda McIndoe Re-elected brenda.mcindoe@wmk.govt.nz			

Southern Branch (Meeting/AGM held Friday 21st February 2014)			
Chair Barry Holsted Newly elected to Chair position barry.holsted@icc.govt.nz			
Secretary Christine Scannell Newly elected christine@mackenzie.govt.nz			

Wellington Branch			
Chair	Robert Tierney		rob.tierney@holmesfarsight.com
Secretary	Murray Usmar		murray.usmar@mbie.govt.nz

2014 ANNUAL GENERAL MEETING

2014 Annual General Meeting

The Institute's 2014 Annual General Meeting will be held at the TSB Bank Arena, 4 Queens Wharf, Wellington, in the Main Plenary on Monday 7th April 2014 commencing at 4.00pm.

To streamline the process of signing in at the 2014 AGM, please remember to bring your current Membership Card to prove your current membership status.

President's Report on the BOINZ visit to 2013 ICC Conference in Atlantic City USA

The BOINZ Board in terms of the strategic direction developed in 2011 had an objective to engage in reciprocal visits to international conferences on the basis of gaining knowledge, networking and positioning the Institute on the international stage. For some years our colleagues in Hong Kong, Australia and USA had made a number of visits to New Zealand but the Institute was not positioned to reciprocate because of financial restrictions. In 2012 the Institute budgeted for a USA visit and in 2013 the board approved a visit to the ICC conference in Atlantic City for the president and CEO.

Atlantic City lies on the eastern seaboard south of New York City in the state of New Jersey. Of interest for the Institute was the opportunity to learn from the Americans at close hand and particularly any information that we could bring back to improve our own situation for our members. New Jersey and New York had recently been devastated by Super Storm Sandy and in particular Atlantic City had experienced huge flooding and extensive damage to land and buildings. We were aware that the conference programme included a number of presentations, workshops and site visits on repairing damage to buildings and measures to avert further similar disasters so we were interested in how this would compare with our learning's from the Canterbury earthquakes.

The scale of things in America is certainly on the larger size and ICC conferences often have well over 2,000 delegates compare that with the 350 or thereabouts we get in New Zealand. The venue was massive with 3 auditoriums that could each seat up to 700 people. There were also 3 levels of breakout rooms with approximately a dozen rooms on each level that could seat over 100 people. These were used for specific training sessions. The Americans are extremely professional and do many things well. We were impressed at their marketing and communication skills and we certainly learnt a few things that we can apply to our events and marketing business. Also they are absolutely technical world leaders and embrace technology on a large scale.

The trade show associated with the conference was about 10 times the size

of anything we see in New Zealand with many companies specialising in software, tools and programmes that support the building surveying operations both in large cities and small rural towns. Of mention is the development of systems that interconnected with Council systems on a very broad scale. These systems in many cases allowed for a user under license to access many layers of council information related to buildings, land, services and records. The private IT companies in America are major players in enabling Councils to operate effectively through the use of smart technology. New Zealand quite frankly are well behind them and this is an area of expansion and learning with many opportunities available to BOINZ. A number of companies that our Chief Executive and I spoke to are very interested in the New Zealand market and expressed a want to attend one of our conferences.

Nick and I decided to separate and cover as many presentations as possible and I attended a number of presentations and a field trip. The field trip covered the coastal part of Atlantic City that had been heavily affected by Superstorm Sandy. Superstorm Sandy was a 1 in 100 year event that had never been recorded in the history surrounding the eastern seaboard of America. The storm instead of diverting into the Atlantic Ocean as so many other storms had done before was forced inland because of a strong anti-cyclone. The storm as a result of turning inland devastated large areas of the state of New Jersey including New York City. The cost of the damage exceeded \$60 Billion which is approximately 10 times the cost of damage that occurred in Canterbury. The field trip included site visits where local houses had suffered inundation from severe flooding. The southern section of Atlantic City is a long peninsular and has a harbour formed from a further spit of land. The peninsular has been built up over time affording some higher ground the further one ventures inland, however where much of the inundation occurred the peninsular is only a kilometer or so wide. Super storm Sandy created a "King Tide" where the increased water levels were unable to escape the harbour and combined with the power of the storm spread inland. In many cases, talking with locals they related instances where whole streets were underwater with 1m high waves occurring in between houses. Few

houses it seems were spared from flooding and damage was extensive. The saving grace according to experts was the fact that the houses broke up the waves meaning that in many cases damage was minimised to water damage from water flowing through the lower level of the house only with no major structural damage.

A local building official guided our field trip and explained that the Government Authorities after the storm had zoned the area according to the levels of inundation that had been measured or assumed during the event. This meant in many cases owners had their properties tagged as "subject to inundation" and were forced to either demolish and rebuild incorporating mitigation from flooding, carry out mitigation work such as lifting their building above the flood level or doing nothing and incurring a large insurance cost. The cost of higher insurance premiums in many instances was unaffordable and people were forced to carry out the mitigation by raising the living levels above the designated



flood height. The levels calculated by Government officials varied greatly with examples related where neighbours in the same street living side by side had been assessed with vastly different levels. In many cases houses were assessed more than 3 times with different levels advised on each occasion. Insurance payouts were a long time coming for many owners and were much less than the cost of repairs or mitigation. Also many did not have insurance. In many ways little different to the problems building owners in Canterbury faced.

A number of properties visited were in the process of raising their buildings where some other more valuable properties on the water's edge had been demolished and new houses were being constructed. The local building official related instances where people had struggled to claim insurance and in a number of cases some had successfully argued with Government Officials a lower level of inundation and therefore a lower risk profile with their building. This of course importantly resulted in cheaper insurance.

So let's consider some of the comparisons with the Canterbury experience:

- Cost of rebuilds, repairs and mitigation in many cases far exceeded the value of insurance payouts.
- The response to the disaster was disorganised with the different authorities including fire service and police not understanding who was in charge. The National Guard (American equivalent of the Territorial forces) once mobilised took control in many areas, but had no idea of what were essential services to support the community and in many cases building surveyors had their access restricted over critical building evaluation periods.
- Insurance payouts were slow with some people still waiting today.
- Values plummeted initially but in many cases are now higher than they were before the storm.
- Many people are still living in damaged houses.
- Some local authorities were proactive getting their communities back to operating levels. Others couldn't make sensible decisions and communities fell into disrepair.

We visited 2 sites under construction



where the houses were being lifted and a new ground floor level was being added. Of interest was the installation of 300mm to 350mm diameter piles to support the upper level and 150mm thick heavily reinforced concrete floors. The ground floor walls were generally masonry with hinged metal vents installed in the outer walls near floor level to allow the ingress and egress of water in the event of a flood. The Americans take the attitude that what had occurred will likely occur again and therefore build above the flood level and construct the lower floor so that any flood damage will be minimal.

On the networking front the Americans value the international relationships and had set up a number of workshops where various attendees could discuss and share experiences from their own countries. BOINZ have been invited to become a member of the equivalent of the international council and therefore represent the interests of the Institute on the international stage. This is a great opportunity to profit from an international relationship that benefits our Institute and members. I have recommended that we





take full advantage of the opportunity and budget for attendance at the ICC national conference on a two-yearly basis. To sum up, the ICC conference was a worthwhile visit for BOINZ and we have made a number of key contacts in America as a result. We have been invited to have a place on an international group that places the Institute in a position to learn and develop new ideas. Kiwis are very well respected by Americans and they are keen to learn from us. We need to take every opportunity to grow our influence through our international relationships and ensure we have a programme of ongoing networking. We invited a number of groups to New Zealand, and we already have experienced some interest in reciprocal educational and data gathering exercises around disaster learning.

Phil Saunders President



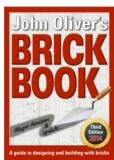


2014 Industry Events

Date	Conference	Location
19 March	ForestWood	Wellington
26 – 28 March	PrefabNZ Conference	Auckland
26 – 28 March	Master Plumbers, Gasfitters & Drainlayers Conference	Christchurch
3 – 5 April 2014	HVAC&R Industry Trade Exhibition & Conference	Auckland
6-9 April 2014	Building Officials Institute of New Zealand 47th Annual Conference and Expo	Wellington
21 April 2014	Passive House Tour and Conference	Germany
Autumn 2014	NZILA Conference	Gisborne
7 June	Property Council Awards night	
6 – 9 August 2014	NZ Contractors Federation and ACENZ joint Conference	Rotorua
21 – 22 August 2014	Building Officials Institute of New Zealand Senior Building Control Officers' Forum	Christchurch
3 – 5 September 2014	Beacon Pathway 'Building a Better New Zealand Conference'	Auckland
Early September 2014	Property Council Annual Conference	North Island
24 – 27 September 2014	ADNZ Annual Conference	Bay of Islands
11 – 14 October 2014	The Concrete Industry 50th Annual Conference	Wairakei

John Oliver's BRICK BOOK 3rd Edition 2014





BOINZ MEMBERS RECEIVE 10% DISCOUNT!

This iconic reference book, written for the building industry, is now in its 3rd edition superceding the 2nd edition which was printed in 2006. Over the past 8 years, as we all know, there have been considerable changes in our industry including the introduction of Licenced Building Practitioners, to reformatting brick veneer cladding as an 'Acceptable Solution' under E2 and removing it from NZS3604; and of course, the Christchurch earthquakes and the media's fixation on showing bricks failing everywhere! The reality is, modern brick veneers performed beyond all expectations, but sadly, the brick industry did little to defend and promote their excellent product.

The major update and revision of this 3rd edition book includes 9 new chapters that cover subjects such as:

- The Christchurch earthquakes and the performance of brick.
- Saving brick heritage buildings.
- Earthquake zones and brick tie requirements.

- The use of second-hand bricks, particularly relevant when considering Christchurch stock piles that are being shipped for use around the country.
- The recladding of leaky dwellings using brick veneer.
- The new two storey brick system I developed for the brick industry in 2010 that people are just unaware of; to my knowledge, never explained to the industry.
- The introduction of E2/AS1 Masonry and its implications.
- What does define the 'quality' of a brick?
- · How to build compliant veneers.

I have inspected many new brick veneers constructed since December 2011, and I believe it is not an exaggeration to say I am yet to inspect a completed veneer, that complies with E2/AS1 Masonry, yet these dwellings and veneers are being passed by inspectors and signed off on the Record of Works by an LBP as compliant with the solution, and Code Compliance Certificates issued. This book clearly explains everyone's responsibility, and what is required to achieve compliant veneers.

All details in this book have been reviewed and amended where required to bring them up to date with new requirements and products; a good example of that being the introduction of 3M All Weather Tapes for flashings; those who have used them, rave about their performance. There is now a library of 122 construction details in the book that go a long way to not only providing solutions but demonstrating principles that can be adopted to achieve good solutions.

When individuals look at brick veneer, it seems to me the focus has always been on the brick as opposed to the mortar. It is the mortar that not only glues the whole veneer together, but equally important, holds the brick ties securely, which are screwed to the timber frame. This book helps explain the important issues that surround mortar such as bond strength, compressive strength and comment regarding the testing of these, which I'm sure you will find enlightening. Over the years I have been to a number of jobs where the bricklaying has been excellent, only to discover the mortar had not been cured correctly, presenting a very dangerous situation, the only solution being to pull the veneer down and rebuild it.

Based on my experience, and in general, many bricklayers do not attend training courses, do not buy the brick book, do not keep up with new regulations and requirements, probably think E2/AS1 is a character in Star Wars and have all been laying bricks for 20 years and are therefore experts!

The industry as a whole is moving forward and John Oliver's BRICK BOOK is a valuable reference source that every inspector should have in his car and everyone processing plans for a brick veneer clad structure should have on their desk. The cost is \$49.95 incl. GST &PP, can be purchased on line, www. brickconsultant.co.nz give your BOINZ membership number and get 10% discount.

PrefabNZ Top Five

Pamela Bell, Daiman Otto and Matthew Hay arrived back safely from the recent Prefab Study Tour to Germany and Austria. They have a number of insights and learnings from the site tours, conference and industry engagements to share, and below is a taste of these findings from Daiman.

PrefabNZ Board Chair Daiman Otto reported that Germany's prefabrication sector was largely stimulated in the 1990's by an industry-led drive (via the Bundesverband Deutscher Fertigbau (BDF)) to differentiate from traditional masonry construction by adopting passivhaus standards and emphasizing quality and energy-saving as a key benefit to their customers. This was a very brave move, as it forced prefabricators to move away from what we are familiar with in terms of 90mm stud walls, to very thick, highly insulated wall frames. The BDF also operates its own quality system which is adopted by its members (25) and is annually reviewed.



Regnauer wall panel construction





Check out the Dune House with its innovative roof structure created from cross laminated timber structural panels, designed by Norwegian architects Jarmund Vigsnaes Arkitekter, in collaboration with Mole Architects.

http://www.trada.co.uk/news/view/BE2BC042-1B52-435E-9A2D-47C662EDC610/New_TRADA_Case_Study_Dune_House_Thorpeness?utm_source=newsletter&utm_medium=email&utm_campaign=dune_house?intDispatchID=6761743



Located just five minutes away from Princeton's University, this new modern home designed by Marina Rubina in collaboration with GMLM Design Giedre Miller has some "elite" features of its own. Surprisingly enough, The Quarry House was fabricated at a modular factory in less than a month and installed on site in one day. According to the architects, the sustainable prefab house utilizes the best practices, but pushes the design to the next level: "no need to standardize the design as long as standard fabrication methods are used"

http://freshome.com/2014/01/13/warmthelegance-displayed-sustainable-prefabhouse-princeton-video/



Pamela Bell (Chief Executive, PrefabNZ) in front of Hufhaus

The Island House by Dutch studio 2by4-architects was first completed in 2011, and now the architects have designed a prefabricated modular version of this stunning home. See more here. http://smallhousebliss.com/2014/01/10/island-house-by-2by4-architects-now-available-



ACRS - Eliminating Breaks in the 'Chain of Certification'

Quality construction projects require quality materials with demonstrated compliance. Selecting construction materials based on price alone can end up costing significantly more than using materials that are selected on the basis of quality and performance – particularly if it is determined that fault in law could be found.

Put simply, it doesn't matter how well you build if you have built in a high risk of structural failure through using unverified materials from an uncertified supplier.

ACRS certification from the mill to the end supplier gives you the simple tool to manage this risk - the supplier's ACRS certificates.

Steel reinforcement, prestressing steel and structural steel are integral parts of any building or structure. While to the casual observer, all steel may look to be created equal, in reality this is far from the case.

Whether as a result of inferior raw materials, contamination during manufacturing, incorrect or inappropriate manufacturing processes, or manufacturing to alternative Standards, there are steel reinforcing, prestressing and structural steel products which quite simply do not meet the requirements of the relevant Australian and New Zealand Standards.

Notwithstanding the potential safety issues that can result from using sub-standard construction materials, in these days of widespread litigation and strict 'chain of responsibility' legislation, the use of non-compliant steels can spell disaster for engineers, certifiers, specifiers, suppliers and builders in more ways than one.

ACRS - Expert Third Party Steel Assessment

With these issues and risks in mind, the Australasian Certification Authority for Reinforcing and Structural Steels (ACRS) provides fully independent, non-biased, expert third party assessment and verification of steel construction materials supplied to the construction industry, to ensure that they meet Australian and New Zealand Standards.

Quite simply, ACRS certification reduces

the risk of buying and using steel which does not meet minimum requirements, and enables feedback and corrective action in case problems arise.

Major construction clients, designers and contractors worldwide, recognise and even specify ACRS and its product certification scheme to confirm the technical competence of suppliers and gain assurance of consistent product quality.

ACRS is the expert, independent, thirdparty product certification scheme for construction steels supplied to AS/NZS Standards. ACRS was created in 2000 as a not-for-profit body to provide a cost effective, but credible means of verifying through direct, factory and in-market assessment, that the construction steels supplied to building sites consistently meet the requirements of engineers, specifiers, builders, building certifiers and customers.

Independent of any commercial interests, ACRS assessors, auditors and management are all experienced engineers, certifiers or metallurgists with extensive experience in steel manufacture, supply, design and construction.

ACRS provides a centralised, streamlined certification process for:

- · Reinforcing bar, wire and mesh
- Prestressing bar, wire and strand
- Cold-formed steel hollow sections
- Hot-rolled steel plates, bars and sections

ACRS currently certifies over 150 manufacturing locations, in 15 countries around the world, and has undertaken more than 700 technical conformity assessments to AS/NZS steel Standards. These include:

- AS/NZS 4671 Steel reinforcing materials (Manufacturing and processing of materials)
- AS/NZS 4672 Steel prestressing materials
- AS/NZS 1163 Cold formed steel hollow sections
- AS/NZS 1594 Hot-rolled steel flat products
- AS/NZS 3678 Hot-rolled plates, floorplates and slabs
- AS/NZS 3679.1 Hot-rolled bars & sections
- AS/NZS 3679.2 Welded I sections

WARNING

Just because the steel originally came from an ACRS certified mill, does not mean the end product is "ACRS Certified".

When it comes to ACRS certification, there are only ever two options, either:

- The Supplier IS ACRS Certified and all of its materials are declared, assessed and verified to AS/NZS Standards;
- OR
- The supplier IS NOT ACRS Certified (and therefore the onus is on the customer to verify the supplier's claims of conformity)

It is fraudulent for a supplier to claim that a product is "ACRS Certified" simply because the end product used materials from an ACRS certified mill.

The full 'chain' must be ACRS Certified. Failure to verify that the products are from an ACRS Certified supplier may result in you using non-compliant materials for which you may be held liable.

ACRS Certificates - Quick & Easy Web-Based Verification

ACRS also gives you real choice. ACRS certifies not just domestic suppliers, but also world-class overseas manufacturers, giving Australian and international customers the widest choice of products complying with Australian & New Zealand Standards.

With ACRS it's easy for your suppliers, easy for your customers and easy for you!

For further information about the validity of supplier certification for any materials being supplied into your project, visit the ACRS website www.steelcertification.com or contact ACRS phone: (02) 9965 7216 or email info@steelcertification.com

Be Safe – Be Sure - Only Use ACRS Certified Products



Independent Third Party
Australasian Standards
Certification & Verification of
Reinforcing, Prestressing &
Structural Steels

www.steelcertification.com



Using non-compliant steel can take on a new meaning if something goes wrong.

Failure.

(noun.) An act or instance of failing or proving unsuccessful; subnormal quality, non-performance of something required, or expected.

- If the integrity of a structure is compromised due to non-compliant steel the project could be a failure.
- Because of your choices or oversight you could be implicated resulting in heavy losses and damaged reputations.
- It's important to be confident that structures that are built comply with Australian/New Zealand Standards and the Building Codes.
- Understanding how you can protect yourself is critical. You have the power to refuse to use non-compliant steel.
- Just because it looks the same doesn't mean the steel you are using complies.
- Don't leave steel compliance to chance, demand the ACRS Certificate of Product Compliance.

Demand ACRS Certificates of Product Compliance. They won't fail you.



2014 Building Officials Institute of NZ

Excellence Awards

CALL FOR NOMINATIONS

STANDARDS NEW ZEALAND

CONTRIBUTION TO TECHNICAL AND LEGISLATIVE IMPROVEMENTS AWARD

This award is given to the individual who has excelled in contributing to advancing the technical and/or legislative understand of members.

RESENE CONSTRUCTION SYSTEMS

EMERGING LEADER AWARD

Each Branch is to nominate an individual who has shown exceptional leadership skills at a local and / or national level, whose actions have grown the value of BOINZ among members.

KOP-COAT NZ

CONTRIBUTION TO BOINZ AWARD

The individual or organisation who have made a significant impact to the advancement of BOINZ in the market place.

BRANZ* NEW AWARD

OUTSTANDING COMMITMENT TO INFORMATION, SKILLS DEVELOPMENT AND EDUCATION OF BUILDING OFFICIALS

The individual or organisation who demonstrated outstanding commitment to providing information, developing skills and advancing the education of Building Officials within the Industry.

PACIFIC STEEL GROUP* NEW AWARD

THE YOUNG* BUILDING CONTROL PROFESSIONAL OF THE YEAR AWARD

Young* defined as under the age of 35 as at 31st December 2013.

This Award goes to an individual that reflects strong professional growth and has dedicated their time to enhancing the Building Control profession.

CARTER HOLT HARVEY* NEW AWARD

INNOVATOR OF THE YEAR AWARD

This award recognises a building surveying professional, or a team engaged in building surveying activities, who has demonstrated commitment to innovation in building surveying.

MITEK NZ

TRAINING COMMITMENT AWARD

The individual or organisation that has committed to significantly improving the position of training in their field.

WINSTONE WALLBOARDS

BRANCH OF THE YEAR AWARD

The Branch award is considered by the BOINZ Board each year based on participation, innovation and member value at a local level.

CALL FOR NOMINATIONS closes 14 March 2014

Return attached Nomination form to office@boinz.org.nz

Be at the BOINZ 2014 Gala Dinner to support your nomination Tuesday 8th April 2014



For best practice, and to avoid time-consuming and costly call-backs,
Winstone Wallboards recommends
the following best practice guidelines
for quality ceiling installation. Framing
dimensions and structured performance
must comply with the requirements of
NZS 3604:2011.

For full information, please refer to the latest edition of the GIB® Site Guide. Alternatively, contact the GIB® Helpline on 0800 100 442 during business hours.

You can also refer to our bulletin "Ceiling Batten Centres for Gypsum Plasterboard". This document provides information on constructing a ceiling in accordance with agreed industry standards and achieving a high quality of finish that meets/exceeds customer expectation.

For free on-site training, book online at gib.co.nz/skills-maintenance-request-form/ or call the GIB® Helpline.



GIB® is a registered trademark.

7 THINGS TO CONSIDER WHEN INSTALLING A QUALITY CEILING.

These recommendations are not a substitute for the full information contained in relevant GIB® technical literature.

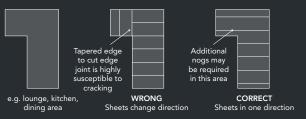
STEPS

1 Battens

The use of GIB® Rondo® metal ceiling battens is recommended to achieve a stable substrate.

2 Batten installation

It is important that all ceiling battens run the same way within a ceiling plane. Although this may require some additional nogging to be installed, it ensures that all sheets' edge joints will be running in the same direction.



3 Plasterboard

Thicker 13mm GIB® Standard plasterboard is more rigid and less prone to sagging than 10mm plasterboard in a ceiling application. It is recommended that 13mm GIB® Standard plasterboard is supported at no more than 600mm centres, resulting in less battens being used for the job and less fasteners, meaning you will achieve an overall smoother finish. When batten, labour and board costs are taken into account, this system is cost effective as well as being the least prone to finishing defects.

Note: 10mm plasterboard will sag significantly more than the equivalent 13mm plasterboard on the same batten spacing. Given the wet humid conditions prevalent across many parts of New Zealand ceiling sag can be amplified. To meet the high expectation of the New Zealand market, Winstone Wallboards ceiling recommendation is 10mm plasterboard at 450mm batten spacing and 13mm plasterboard at 600mm batten spacing.

4 Point loading

To limit sag in GIB® plasterboard ceilings, long term uniformly distributed loads (e.g. fixtures and fittings and/or overlaid insulation) should not exceed 3kg/m2 unless independently supported.

5 Back blocking

Back blocking strengthens and stabilises joints between GIB® plasterboard sheets. It is primarily used to reinforce the point where butt joints occur but is also recommended for sheet edge joints.

6 Fixing

All ceiling sheets must be fixed at right angles to the ceiling framing.

7 Control joints

Install control joints in large open ceiling planes exceeding 12m or points where cracking is often predictable, such as at changes in direction.





SPECIFY WITH CONFIDENCE

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IS ONLY THE START

- DELIVERING ON
THE PROMISE IS
WHAT REALLY COUNTS.

















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Plasterboard Bracing: Substitution of Brand and RBW

Elephant Plasterboard as a 100% New Zealand owned business that has been operating for the last twenty five years, supplying the Elephant brand of plasterboard to the New Zealand market. In that time we have seen many changes to building legislation. The advent of plasterboard being used for bracing, in accordance with the requirements of NZS3604, commenced in the early 1990's. To our knowledge, the use of plasterboard as an element to resist wind and seismic forces is very unique when compared with the traditional use of plasterboard internationally. Indeed New Zealanders have come to expect quite a lot from the internal linings of their homes; wet areas being another obvious example.

To provide background understanding, and context to this article it is important to know that operationally Elephant Plasterboard generally makes its sales at the coal face. Our customer service representatives spend a lot of time talking to builders and home owners about the merits of our products and systems. However plans are already drawn, specifications already written, and the BCA stamp has been applied to the consent documentation. Therefore the builder and/ or home owner is making a choice to change from the specified brand of plasterboard to Elephant Plasterboard. All relevant information is copied and sent to our head office where a conversion exercise is undertaken. Traditionally substituting one brand of plasterboard for another was a simple and straight forward exercise. The last five years have seen the substitution exercise becoming more complicated. The housing affordability and productivity options paper (released Nov. 2013) has quite a bit say about the commercial implications for the New Zealander consumer who is considering a brand substitution.

With the introduction of Building (Definition of Restricted Building Work) Order 2011, Order in Council, BCA's in general across our country have had yet more changes to legislation to become familiar with. In light of the natural disasters that struck the Canterbury region, the more recent seismic activity in Wellington, structural integrity is of foremost concern. The revised NZS3604:2011 (specifically section 5) also highlights this.

It is natural to interpret and apply the requirements of new, amended, or revised legislation in a conservative manner. With

structural integrity being a key element deemed restricted building work, and plasterboard being used for bracing purposes, there have arisen conflicting opinions in respect of the substitution of one brand of internal lining for another.

Some BCA's have taken the approach that a substitution of the originally specified brand of plasterboard to an alternative brand requires an amendment. This then requires an amended certificate of works to be provided by an LBP design. Other BCA's have taken the view that this is a minor variation, which is a change on site that incurs no cost to the builder / owner, supported with relevant documentation. The information provided consists of a remarked bracing plan, a bracing recalculation using the Elephant Quickbrace spreadsheet to show that the change to Elephant meets the bracing demands, along with a document which the owner or authorised agent signs confirming they have made the decision to change plasterboard brand.

What is also of real concern to Elephant Plasterboard is the number of bracing design errors that are slipping through. A substitution of one brand of plasterboard occurs after consent. We are therefore dealing with consented plans and bracing calculations. Our company performs hundreds of bracing recalculations each year, putting us in a unique position to see what errors commonly occur and are regularly repeated. It should be troubling to those involved with bracing plans and calculations that 63% of the plans and calculations received into our office contain some form of a mistake. These errors span the divide from trivial right through to serious design faults that impact upon the integrity of the proposed structure. The latter category would form 14% of the total. Had a substitution not occurred then these design errors would never have come to light.

With this in mind Elephant Plasterboard has developed a presentation called Bracing: Pitfalls and Lessons Learnt. It is our aim to provide a learning opportunity to assist BCA's at both processing, and during onsite inspections (e.g. Pre-line) to spot the common design errors to ensure that homes are built in accordance with requirements to withstand wind and seismic forces where plasterboard forms part of the bracing solution. Initial feedback has been very positive and we are keen to provide this presentation

in small group situations to ensure that all recipients have the opportunity to engage fully in discussion to maximise the educational value of the content provided.

Departmental managers for processing and onsite inspection teams are invited to contact our office to arrange a suitable date and time for the provision of this educational opportunity. Contact details as follows:

Email: info@elephantpb.co.nz Ph: 09-818-7706 Fax: 09-818-7702

On behalf of Elephant Plasterboard I would like to wish all BOINZ members the very best for the year ahead.

R. Manning, Elephant Plasterboard Limited.

MINISTRY OF BUSINESS, INNOVATION AND EMPLOYMENT ADVICE - MINOR VARIATIONS

The Building (Minor Variations)
Regulations 2009 allow for a minor modification, addition, or variation to a building consent that does not deviate significantly from the plans and specifications to which the building consent relates. The Regulations provides examples of what could be considered a minor variation including the example of substitution of one internal lining for a similar internal lining.

A minor variation proposal does not require a formal application in the way that a building consent amendment is applied for. In some circumstances this may be as simple as a conversation on site with the inspector (documented afterwards) or a covering letter or e-mail from the designer or builder accompanying revised plans or construction details covering the proposed change. The BCA should consider what evidence it requires from the applicants to show that the work will comply with the Building Code at the time of application.

There is no requirement for a Certificate of Design Work if the proposed minor variations include restricted building work. A Certificate of Design Work would only accompany a consent application or formal amendment to the consent.

The Importance of "Quality" in Training

Every manager likes to think he or she has a commitment to quality. The reality often is sadly disappointing. Few organisations avoid customer disappointment and complaints.

No matter what the intent, failure in products, process and service can generally be traced back to training – whether it be lack of or poor quality training.

Imagine if a business could accurately forecast service level and financial performance – the benefits would be huge. From my experiences many in local government and the built sector generally show a lack of understanding as to the long term value quality training delivers to an organisation's or business's performance outcomes.

Interestingly, when talking to those actually undertaking the work, there is a huge positivity and commitment for training and up-skilling. Unfortunately all too often managers and those who have the responsibility for training budgets fail to recognise the value of quality training – and ironically it is these people who mostly have the responsibility for organisational strategic and business direction.

In the case of local government, I would have thought an immediate commitment to Regulation 18 would have been a "no brainer". Instead we have had years of resistance at the expense of productivity and building quality. What surprises me more in 2014 is that while many councils are "getting on" with the up-skilling and training of their BCA staff, we still have pockets of resistance. The cost-benefit analysis surely stacks up – it's time to move on, train staff and deliver the quality and efficiencies needed in a modern service based customer focused economy.

It wouldn't be realistic if the wider LBP community wasn't included in quality training concerns. At a reasonably high powered meeting on training needs recently, a respected building and construction identity was a lone voice arguing against training in the construction sector. The basis for his defence was that by and large builders were well trained, they couldn't afford to take staff out of work to train and that training was too costly. Nowhere in his argument was there consideration for benefits to the business in terms of efficiency and quality output. This

negative sentiment in respect of training is unfortunately all too common within the LBP community, whether they be designers or involved in the building sector.

Our public has a very naive view of building quality in New Zealand, and to be fair the legacy of weathertightness, the demise of a robust apprenticeship system and building project management that focuses on cost rather than quality, have a lot to answer for.

It's now time for councils, and the business owners in the design and construction sectors to make a commitment to quality, and train their technical and operational staff appropriately. The mindset that training is not cost recoverable is archaic. Training is part of doing business. Customers want to deal with knowledgeable, skilled professionals, who "know their stuff" and can deliver effectively and efficiently. Today's customer wants a guaranteed quality outcome.

The achievement of this commitment to quality must come from the top and be regularly reinforced over and over again. Unless our councils and the design and construction sector organisations view quality as their single most non negotiable goal, we will continue to see the tradeoffs that cause major issues to the quality of our building stock.

Training is multi – dimensional, in that there are initiation programmes for new start ups, theoretical programmes to underpin knowledge and performance expectations as well as practical and experiential exposure. However to view training in these respective areas, the focus needs to be on quality courses and quality delivery, as well as ensuring that those undertaking the training understand the expectations of their attendance, particularly about improving quality.

The need to invest in quality training is now paramount if we are to deliver to the quality building expectation. However, too often training decisions are made solely around cost with little consideration to the outcome. This flawed approach adds no value to businesses' efficiency or value. There is also a whole raft of "trainers" seeking to fleece the council, design and construction sectors. On the other side of the coin there are those making training decisions who should not be involved in

the decision making of the business. There is a need to carefully select who makes the training decisions, and check the processes involved.

The Institute has invested significantly in lifting the skills and professionalism of building control officials and the building control sector. It has done this across a number of channels including information delivery, promotion, media, advocacy and of course our Training Academy courses whether they be to support the APL assessment programme or up skilling. Quality is what we stand for; national consistency is what we strive for. A well educated and qualified building surveying sector is just the start of the movement to lift building quality. As a member of the Institute you are investing in your career. Our promise to you is that we will deliver the best training available. Our request is that you invest in quality training and spend your money on training that will deliver quality results for all sectors of industry.

Phil Saunders President





BOINZ are proud to be resellers of NZ Standards



As a further membership benefit the Institute has negotiated with Standards New Zealand to become an official Reseller. What this means is that members now have access to a range of published standards and standards related products (Hand books, Codes of Practice etc).

Purchasing these vital products allows you to understand and comply with legislation more easily, and what's better is that they are available to you at a discounted rate off the RRP by purchasing through BOINZ.

It's easy —contact the National Office at office@boinz.org.nz attaching your order, along with your name, member number and postal address.

Take advantage of your Institute's ability to offer you discounted NZ Standards including:

- NZS 3604:2011
 Timber Framed Buildings
- NZS 4306:2005
 Residential property inspection

Update from Standards New Zealand Acting Chief Executive



Strengthening New Zealand's standards system - transition project As you may know, a policy review of New Zealand's standards and conformance infrastructure commenced in early 2012. The stated purpose of the review was 'to develop proposals for a viable and well-functioning standards system that meets the needs of business and regulators into the foreseeable future'. At a meeting on 14 October 2013, the New Zealand government agreed to recommendations that will see the Standards Council disestablished and a new standards body established within the government agency, the Ministry of Business, Innovation and Employment.

The new body will have an independent statutory board – established by legislation and not subject to the direction of ministers – and an independent statutory officer role. Standards will continue to be developed by technical expert committees according to a set of criteria specified in regulations.

Work is ongoing on the transition project. A Standards Bill is expected to be introduced to Parliament early this year which will make the necessary legislative changes.

There is more information on the Standards New Zealand website (link www.standards. co.nz/news/Policy+Review.htm)

In the meantime ...

Work continues as usual for us, with a busy work programme ahead. We are still developing and providing access to standards, making continuous improvements to our products and services, and signing up new development projects.

New standards for conditions of contract for building and civil engineering

NZS 3910, 3916, and 3917 are three tailored standards that ensure contracts for building and civil engineering are suited to New Zealand's industrial and legislative scenes.

A review took place in 2011 of key areas of NZS 3910:2003 Conditions of contract for building and civil engineering. It was the first revision in 10 years of the form of contract most commonly used for building and civil engineering construction contracts in New Zealand. During the review, a decision was made by the committee that it should be published as three tailored standards:

(a) NZS 3910 Conditions of contract for building and civil engineering construction (b) NZS 3916 Conditions of contract for building and civil engineering – Design and construct

(c) NZS 3917 Conditions of contract for building and civil engineering – Fixed term

Together these three standards, which are available from our web shop, supersede NZS 3910:2003. www.standards.co.nz

Maintaining a contemporary New Zealand Standards catalogue

It is important that the New Zealand standards catalogue remains relevant for its users. To that end, the Standards Council has decided that it is timely to review non-cited New Zealand standards, as these generally tend to be older than cited standards, which are over 16 years old. This amounts to 227 standards and we estimate this process will take approximately 3 months.

Australia/New Zealand standards are being considered under a separate review. We will post more information on our website.

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Kind regards Michelle Wessing

Getting what you pay for,

HERA Structural Systems General Manager Dr Stephen Hicks



Non-compliance is often identified when a failure occurs, or when inferior quality products are substituted and are delivered to site. In these cases, it can be a very costly exercise for everyone involved to undertake remedial measures, reject products when they are delivered or implement separate quality assurance measures.

As a consequence of this, it is in everyone's interest to get things right first time by ensuring that construction products comply with the standards specified by the designer through conformity assessment. The three possible levels of conformity assessment for a construction product are: By the manufacturer or supplier (first-party); By a user or purchaser (second-party); or By an independent body (third-party).

For any user or purchaser who has undertaken a conformity assessment of the different products that are used within a structure (second party), this can be a daunting prospect. Particularly when considering that, to enable a Producer Statement to be issued: The manufacturer's certificates will need to be reviewed (which could run into their hundreds on a large project); the performance characteristics on the certificates need to be compared with the product standards that they were manufactured to; and it needs to be verified that the laboratory that conducted the tests to establish the performance characteristics are accredited to undertake the tests according to the relevant test standards (for AS/NZS steel products, the laboratory has to be accredited by signatories to the International Laboratory Accreditation Corporation (ILAC) through their Mutual Recognition Agreement (MRA), in the field and class of testing).

Due to the time and skillset required to undertake these tasks, third-party conformity assessment of products is becoming the norm internationally. The benefits of third-party certification are as follows:

- The body independently and expertly assesses compliance and fitness for purpose of products to their relevant product Standards, irrespective of origin of the material.
- It removes the need for customers and certifiers to check every supplier test certificate
- Experience shows that independent certification neither affects the availability, nor the costs on the end product

In response to concerns that a number of non-conforming products are entering the country, under the Australasian Procurement and Construction Council (APCC), the Australian Technical Infrastructure Committee (ATIC) has been developing a Suite of Schemes to enable third-party product certification bodies to be able to consistently evaluate the performance of different construction products.

In response to the perennial question: who certifies the certifier (to prevent anyone from deciding to become a certification body), the appropriate qualification for a certification body to operate in this area is through being accredited by the Joint Accreditation System for Australia and New Zealand (JAS-ANZ) to the International Standard ISO/IEC 17065. Accreditation to this international standard independently benchmarks the governance, probity, general operation, independence and impartiality of the certification body to current international best practice.

For steel products, the conformity assessment is undertaken in two stages: the certification body checks to see if the manufacturer can consistently make a product according to the relevant product standard before it is placed on the market (known as Initial Type Testing, or ITT); and, after completion of the ITT, the certification body routinely audits the manufacturer's processes to ensure that the product is consistently achieving the performance requirements and that the appropriate quality systems are in place (known as

Factory Production Control, or FPC). The Australasian Certification Authority for Reinforcing and Structural Steels (ACRS) were formed by the industry in 2000 and offer a third-party product certification scheme. ACRS currently certifies 42 steel producers from 16 countries around the world, for over 100 production locations supplying materials to AS/NZS steel Standards. To ensure that New Zealand interests are represented, HERA and the Building Officials Institute of NZ (BOINZ) have made a commitment through Dr Stephen Hicks and Nicholas Hill, CEO of BOINZ, taking on the role of Directors on the ACRS Board.

Given that the majority of structural steel suppliers to the New Zealand market have been accredited by ACRS (for the current list certificate holders, as well as their production sites, see http://www.steelcertification.com/), it is therefore of great satisfaction to learn that ACRS achieved JAS-ANZ accreditation as a certification body to ISO/IEC 17065 in February this year.

Unlike Europe where CE Marking is mandatory for all construction products that are permanently incorporated into 'construction works', it is a pity that, through MBIE Standards and Conformance Review, there doesn't appear to be a similar level of regulation for the conformity assessment of construction products.

Given the potential influx of imported products in response to the Christchurch rebuild, it is felt that this is an opportune time for the government to take leadership in this area by making a regulatory move in a similar way as has been done to ensure that only complying food products enter our market.

Research Tackles Condensation

Dampness and moisture problems are well known features of many New Zealand houses. Whether renovating or building new, there are some key ways to knock moisture problems on the head – or stop them from arising.

Why care about moisture?

The biggest concern about moisture and damp in houses relate to their health effects: the growth of mould, spreading dust mites, making houses harder to keep warm and affecting asthma, bronchitis and other breathing disorders.

What to watch for when building new

Building design can make a big difference to whether houses will be damp. Houses which are well oriented towards the sun, with double glazing and thermally broken frames, high levels of insulation, extract ventilation in bathrooms, laundries and kitchen, and the means to easily ventilate the house passively, are much less likely to develop moisture and damp problems.

New houses usually have high internal moisture levels for up to two years after construction. Moisture comes from concrete and masonry, timber, plaster and paint, all of which take time to dry out.

There are a number of things a builder can do to reduce the amount of construction moisture, and therefore the drying time:

- Construction during summer (particularly those early critical stages before the house is enclosed) can make a huge difference – concrete slabs and timber that has been rained on take a lot longer to dry out, even once enclosed.
- Materials should be as dry as possible before enclosing the house – materials dry much faster in open air. Timber framing with the 20% moisture allowed by the Building Code will still contribute around 200 litres of water into the average house. The Building Code should be regarded as a minimum.
- There's a lot of water in a concrete slab – 1m2 of concrete has around 120 litres of water which needs to evaporate out even once it's been

cured. Wet concrete should have the minimum amount of water added to enable it to be workable – builders should check the slump of concrete which arrives for the slab pour and not accept concrete which is too wet.

 A ground moisture barrier is essential under both concrete slabs and suspended floors – about 45 litres of water per day comes out of the ground under a 93 m2 house and 90 litres per day under a 186m2 house.

Solving moisture problems in existing houses

Many existing homes have damp and moisture problems caused by a combination of factors such as rising damp, lack of ventilation, insufficient insulation and leaks. Renovation represents a real opportunity to solve these problems.

The following table outlines some common problems contributing to moisture and their solutions.

Potential solution	Problem helps with
Bathroom extract ventilation ducted to the outside (not the roof!). Locate the unit close to or above the shower/bath and make sure the fan size is big enough for the bathroom – 25 litres/second is usually sufficient but larger fans may be needed for big bathrooms.	 Mould in the house Condensation on windows (not just in the bathroom)
Kitchen range hood ducted to the outside – sized to cover the whole hob and close enough to the hob to be effective.	Damp in kitchenCooking smellsOils and dirt covering surfaces in the kitchen
Replace single glazed windows with double glazing. Specify thermally broken aluminium or timber frames.	Condensation on windowsHouse is hard to heatCold bedrooms
Make sure the house is well insulated – in the ceiling, walls and, if possible, under the floor. Aim to bring the whole house up to at least Code insulation levels – ideally better than Code	Mould or musty smells in living & bedroom areas
Retrofit a ground vapour barrier under suspended timber floors	 Rising damp – symptoms are often seen on ceilings, the upper part of walls and in the roof cavity General dampness in the house – ground moisture can contribute more than half the total moisture in a house
Externally vent clothes dryer	 Mould and musty smells in the house Difficulty in heating Dirt and lint in the laundry area
Install a well located washing line – under cover if possible	 Mould or musty smells in living and bedroom areas General dampness in the house
Fix leaks – roof, cladding, windows, doors and plumbing	General dampness in the house

BEACON PATHWAYS

Home Performance Advisor and Home Energy Awareness training

Sometimes it's hard to work out what the underlying cause of damp in a house. Two new training programmes are underway to develop the skills to identify causes of problems and steps to improving home performance and achieving a warm healthy home. These are ideal for anyone who advises clients on improving home performance, particularly if you have input during the design of renovations or new build. There's never a better time to get the basics right!

You can choose to upskill by taking the level 1 Certificate in Home Energy Awareness (next course 14 April 2014, Wellington) or choose to be certified as a Home Performance Advisor by taking the level 2 course (7-9 May 2014, Hamilton).

www.communityenergy.org.nz/training

About Beacon Pathway

Beacon Pathway is an Incorporated Society committed to transforming New Zealand's homes and neighbourhoods through research and demonstration projects that show how to make homes more resource efficient, healthier to live in, adaptable, resilient and affordable.



For further information about Beacon Pathway visit

www.beaconpathway.co.nz.



An Article by Charles Willmot, Manager Investigations and Discipline – IPENZ



Last year I wrote an article for Straight Up asking for your help as a Member of BOINZ to spill the beans on poorly performing engineers. Some of you have done so and can vouch for the robustness of the investigation that we undertake. Unfortunately it is not a speedy process as at every step we need to be mindful of the engineer's right to natural justice but once the process is completed the engineers concerned, if grounds for discipline are confirmed, can be removed from the register, suspended for a period of time, censured and/or fined.

If any of you are still permitting IPENZ Members that are not chartered professional engineers to certify work then you can also complain about them, but the matter will not be recorded on the register as it is for three years in the case of chartered professional engineers. We have no jurisdiction over engineers who are not members of IPENZ or CPEng. Neither can we investigate buildings, companies or contractual issues. Our jurisdiction is over the people involved in engineering activities; either the design or the peer review process.

Where the misconduct is sufficiently serious, the disciplinary tribunal may order that the matter be advertised in the national press or in the local media in order to provide some protection to the general public. It is also likely that the engineer will be ordered to make a contribution to the costs of the disciplinary process. These costs can be quite high, often far higher than the fine imposed, and consideration of the proportion of costs starts at 100% and may be reduced for those engineers who have mitigated the effects, cooperated with the investigation or alternatively already taken steps to reduce the impact of their misconduct.

The Registration Authority takes a poor view of any person who claims to be a chartered professional engineer but is found not to be. Sometimes this can be accidental where an engineer has chartered status in another jurisdiction but has not been assessed as currently competent to practice in New

Zealand. Whilst this can have very serious consequences, in general once the registrar has contacted the person and clarified the legislation they are usually more than happy to contact anybody that they may have misled and explain that their work should be reviewed by a chartered professional engineer. However, if the person is reluctant to do so, then the Registration Authority will take out a summary prosecution against the person involved.

Whether the alleged misconduct concerns incompetence, negligence or some transgression of the code of ethical conduct, we want to hear about it and will investigate. Where proven, we will discipline the person concerned. Nobody who has received an invoice for costs in a disciplinary case would consider they have been slapped with a wet bus ticket... it hurts. It can't be good for business either, but disciplinary orders are not there to be punitive. They are there to protect the public and make New Zealand a safer place to live.

On the whole engineers in New Zealand operate to a high standard and you can be sure that the Registration Authority jealously guards that position. For those of you who have been helping us to do so I thank you. For those of you who have not yet be prepared to do so I ask that you consider it your duty to bring dubious practice to our attention and let us do our job.

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Coming Soon To BOINZ Members – New Electronic Discount Card For Smartphones.

Get all the great benefits of our discount card right from your favourite device with our new electronic Discount Card for iPhone and Android being developed right now!

It's as Easy as 1, 2, 3...

1. Link Up

An individual website link is generated and sent to each of our members by text (each link will only work on the device it is first loaded to).

2. Install the Icon

The first time the link is accessed, it will automatically detect the type of phone and instruct the user how to easily install the Discount Card icon (which will be the BOINZ logo). Once installed, tapping the icon will give our members direct access to their electronic discount card.

Start Saving!

At point of purchase, members simply need to present the electronic Discount Card on their mobile device to access your BOINZ Membership Discounts.

Members will be notified as soon as possible once the new discount card for mobiles is ready. To make the process easier, we suggest you update your mobile numbers on the BOINZ website, to make sure we've got your correct phone number. You will be sent a text with the link once ready!

Crushed Glass Sand Makes an Eco-friendly Wastewater Treatment System Even Greener

The eco-friendly wastewater treatment system - Advanced Enviro-Septic® (AES) – just became even greener with the announcement that recycled glass crushed within specifications can be used as the 'system sand' surrounding the AES pipes.

"This is great news for the environmental impact of the AES system and also means drainlayers and installers have another option when looking for a suitable aggregate," says Dick Lamb of Environment Technology, the sole distributors of AES in New Zealand.

Advanced Enviro-Septic® (AES) is new to New Zealand and purifies wastewater using a natural bacterial process within specially designed, aerated pipes installed in a sand bed, treating effluent to advanced secondary quality before passively dispersing it into the soil.

The AES on-site treatment system has several environmental advantages. It produces very high quality effluent, 10 times better than that required by the NZ Standards. This minimises the risk of groundwater contamination. The treatment process requires NO external energy input, there are no complicated controllers, pumps, compressors to fail, no alarms going off and no regular servicing required. Advanced Enviro-Septic® System components are made with significant

quantities of recycled plastic. This gives it one of the lowest carbon footprints in the wastewater treatment industry. And for an environment with peace of mind no home owner interaction or intervention is required

Across the ditch the Australian distributors are jealous. "We would love to be able to use crushed glass if it was available as sand at around \$70 per cubic metre is prohibitively expensive due to the Environmental Protection Agency shutting down many sand pits," says Randall Crisp of Chankar Environmental, the AES distributors in Australia.

"The AES system is considerably more costeffective to purchase and maintain than
current conventional electro mechanical
systems," says Lamb. "Installations use a
majority of locally-sourced, low-embodied
energy materials with minimal transport
requirements, plus the lightweight
Advanced Enviro-Septic® components
are very easy to handle and transport. It
requires only a locally-sourced standard
septic tank and sand or recycled crushed
glass materials. The durable components
last indefinitely and come with a 20 year
guarantee against manufacturing defects."

AES system pipes are flexible to allow adaption to any site shape – straight or curved, and can incorporate multi-level

ECO FRIENDLY

configurations. The wastewater treatment system performs with high capacity in areas of limited space and facilitates quick start-up after periods of non-use. AES pipes provide a large surface area for aerobic bacterial activity within the pipes which allows for protection of the outer pipe layers and receiving surfaces so they remain permeable.

An average 3 bedroom household produces around 1000 litres of wastewater per day. AES systems are easily adapted to small or larger wastewater flows and have been used in designs from 400 litres per day and, to date, up to 198,000 litres per day in a municipal application in Blodgett Landing, Newbury, New Hampshire, US. The existing sand filtration beds were upgraded to AES beds in 2011. In August 2013 when the plant was required to renew its discharge consent license, the required testing interval was increased as the testing regime for the previous two years had produced consistent and high quality results.

There are in excess of 150,000 installations in the US State of New Hampshire, 95% of on-site treatment systems are Advanced Enviro-Septic® Systems and 25% of all houses in New Hampshire use Advanced Enviro-Septic®

The first Advanced Enviro-Septic® systems have been installed in the Tasman district and lots of interest has been received nationwide from councils and homeowners alike.

"In order to help new designers and installers familiarise themselves with the basic procedures, an AES certification course has been developed," says Lamb. "Drainlayers will need to complete this course if they wish to install Advanced Enviro-Septic® systems and Designers are encouraged to use the course to familiarise themselves with the relatively simple design parameters. Drainlayers and Plumbers earn Continuing Professional Development Points for their satisfactory completion. Anyone interested is welcome to view the training video and complete the questions. Further information is available at www.environmenttechnology. co.nz/aes-certification-process AES is adaptable to virtually any residential or commercial application and can be retro-fitted to existing septic tanks as an upgrade or if the existing disposal field has

For more information about Advanced Enviro-septic and Environment Technology please visit www.environmenttechnology. co.nz or email info@et.kiwi.nz

failed.

Northland Branch

On February 21st 2014, Northland Branch proudly presented Institute Member Jack Freeman with a certificate of Recognition of Outstanding Local Commitment and Long Service.

Jack enjoys getting away for weekends to the great outdoors with his caravan and enjoys all water sports and spends a lot of time enjoying the tranquillity found aboard his ocean kayak.

Jack is also the very proud grandfather to two granddaughters and closely observes their hockey prowess (New Zealand underage representatives and playing in the USA)

Most Friday's Jack can be found doing hospital visits supporting cancer patients and the like. He has had his own health issues cancer a few years ago (which are now sorted) and last September he experienced a stroke paralysing his right side. Doctors said he would not likely work again. However, Jack's determination to 'overcome' with the help doctors has seen him return to work continuing his property consultancy business along with all the other community support he provides.

Pictured below from left to right are Branch Secretary Jane Stace, Jack Freeman, Branch Chairperson Stu Ferris and BOINZ Chief Executive Nick Hill, who was there to present the award.



VALE

Trevor Bridges

Trevor was a former National President of the New Zealand Institute of Building Inspectors over the period 1975 – 1977. The NZIBI was a founding organisation of the Building Officials Institute of New Zealand.

Trevor was the Chief Building Inspector at the Paparua County Council up until he retired in 1988.

Brian Robertson

Brian worked for Queenstown Lakes District Council in its various names from being a borough to private ownership to being a CCO as Lakes Environmental and back to QLDC.

He worked for the council for just under 30 years and was a member of the Institute for approximately the same period. His work and contribution to the NZIBI was recognised by the presentation of a special shield in 1985 for the New Zealand Institute of Building Inspectors (inc).

Max Birtles

Max Birtles was a Building Officer with Central Otago District Council for approximately 19 years, and previously came from an engineering background having worked on the Clyde Dam.

He was approaching retirement age – but had several instances of cancer over recent years which involved a number of operations.

His funeral in Alexander was well attended by a number of BOINZ members including Stewart Geddes (Vice President) who worked with him for a number of years, and Murray who was also his manager at Central Otago District Council for a period.

Plumbers, Gasfitters and Drainlayers Board Ask for the card campaign

Council inspectors and the Plumbers, Gasfitters and Drainlayers Board of New Zealand are both working towards protecting public health and safety by ensuring that construction work is carried out competently by authorised tradespeople. The PGD Board does this by administering the registration and licensing systems of plumbers, gasfitters and drainlayers and in doing so, is responsible for setting the minimum standards for registration and ensuring those persons carrying out regulated work are skilled enough to do so. The Board receives complaints and, as a result may investigate and discipline registered persons (including provisional licence holders) or instigate a prosecution in the District Court against those working illegally in the industry, most commonly unregistered or unlicensed persons.

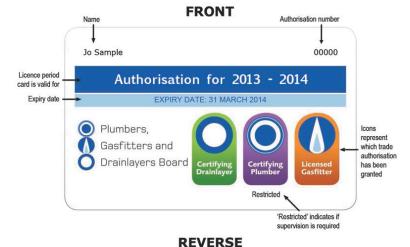
The PGD Board does not have ground staff checking whether tradespeople are authorised to carry out plumbing, gasfitting and drainlaying work so the help of inspectors with checking licences and authorisations has been invaluable for discouraging cowboys and for encouraging authorised tradespeople to hold current licences and authorisations. The Board would like to encourage all inspectors to check that any tradesperson carrying out plumbing, gasfitting or drainlaying work is authorised to do so. The Board requires that all authorised tradespeople carry an authorisation card with them to show to inspectors and consumers. The card proves that a tradesperson is authorised to carry out work and what kind of work they are authorised to do. It also details

if a tradesperson has any supervision

requirements on the reverse of the card. If a tradesperson is not carrying their card inspectors can check to see if a person is authorised by searching the Board's online public register at www.pgdb.co.nz or by calling 0800 743 262. How to check a tradesperson's authorisation card:

- Ask to see a tradespersons authorisation card and check the expiry date to see that it is current.
- 2. Check the icons on the front of the

- tradespersons authorisation card to ensure that the type of work to be carried out or the work that has been carried out is permitted by the licence or authorisation.
- 3. If the work is being undertaken by anyone other than a certifying tradesperson, check the back of the card for the name of the registered certifying tradesperson who is responsible for certifying/verifying that the work is compliant and safe to be used.







Order offlittle www.branz.co.nz of call 0800 80 80 85 (press z

Updated guidance for exempt building work



Ministry of Business, Innovation & Employment

Did you know some plumbing and drainlaying work must be carried out by an "authorised person", such as a registered certifying plumber or drainlayer, before it can be considered exempt building work? Or that if you are removing a building element such as a chimney, roof or cladding from a building 3 storeys or less, then there is a new exemption which may mean you do not require a building consent.

These changes, were made when Schedule 1 of the Building Act 2004 (the Act) was amended in November 2013.

The Ministry of Business, Innovation and Employment published new guidance in March this year, to help keep you up to date with the changes to Schedule 1.

The guidance concentrates on the 43 exemptions of Schedule 1. It is full of practical examples, with photos, providing information on each of the Schedule 1 exemptions. It clarifies the type of work that is exempt and who can carry out this work.

It's important builders are aware of building work that is exempt from a building consent. Your clients will often rely on you to advise them what types of work do not need a building consent. Carrying out building work, that is not exempt, without a building consent, is an offence and can incur a fine up to \$200,000 and a further fine of up to \$10,000 per day if work continues.

Councils continue to have discretionary powers to grant exemptions for any proposed building work under exemption 2. However, they must be satisfied that the completed work is likely to comply with the Building Code, or there is minimal risk of it endangering people or property. If you want any work to be considered under this exemption, it is important to start discussions early with the local council.

WHAT'S NEW?

A new section, relating to Schedule 1, has been added to the Act, while Schedule 1 itself has been amended to make the exemptions easier to use.

- Section 42A of the Act, is a new section which imposes some general conditions and limits on Schedule 1 exemptions and clarifies:
- what type of building work is exempt from requiring a building consent
- · who can carry it out, and
- what other conditions apply.

SCHEDULE 1

- The scope of building work covered by Schedule 1 does not vary much from the previous version, which was introduced in December 2010. However, it has a new numbering system and has been divided into three parts depending on who can carry out the work:
- Part 1 Exempted building work lists work that anyone can carry out. It includes exemption 2, formerly Schedule 1(k), which gives territorial and regional authorities the discretion to exempt any building work from requiring a building consent.
- Part 2: Sanitary plumbing and drainlaying carried out by person authorised under Plumbers, Gasfitters, and Drainlayers Act 2006.
- Part 3: Building work for which design is carried out or reviewed by a chartered professional engineer.

READ THE GUIDANCE

To find out more read the guidance Building work that does not require a building consent - Building Act 2004 at www.dbh.govt.nz/bc-no-consent

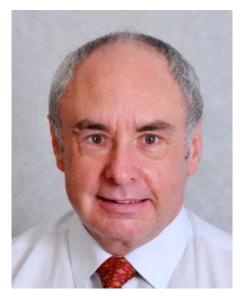
REMINDER - OTHER CHANGES TO THE ACT

Once the building regulations are amended, builders will need to provide clients with information about their credentials and enter into written contracts for work over a specified amount. These changes will make it easier for builders and homeowners to understand their rights and responsibilities. For a summary of the changes go to http://www.dbh.govt.nz/bcupdate-149

Remember all building work must comply with the Building Code regardless of whether it needs a building consent.

New Light Steel Framing Course for Building Officials

Carl Davies, General Manager
National Association of Steel Framed Housing Inc (NASH)



Light Steel Framing is growing in popularity internationally and here in New Zealand.

Market share domestically has risen dramatically over the last 5 years with specifiers and home building companies that have, up to now, used traditional materials, reviewing their value propositions and increasingly looking at Light Steel Framing as a viable alternative. For more of the advantages of using Light Steel Framing visit www.nashnz.org.nz. Anecdotal evidence suggests that more and more Builders are also transitioning to Light Steel Framing especially when they consider its inherent weight and time saving advantages compared with the more traditional timber construction for housing and medium rise construction. Most Light Steel Framing or Cold Rolled Steel as it is sometimes referred to used in NZ today is made by NZ Steel at their Glenbrook mill near Pukekohe in Auckland. This steel is backed by a 50 YEAR durability statement from the company and is distributed under the AXXIS Steel for Framing brand (www. axxis.co.nz). Care must be taken by the regulatory authority to ensure that any steel used in NZ, other than that produced by NZ Steel should be of equal specification.

Having taken note of this growing trend for Steel Framing in buildings

and to keep Building Officials well informed, BOINZ in close partnership with NASH have developed a new course on Light Steel Framing. It is being offered by BOINZ as part of the Diploma in Building Control Surveying and will be run 5 times this year in major centres around the country with the first one, next month, in Christchurch.

The one day course offers the delegate a thorough immersion and understanding of Light Steel Framing and will include manufacture, distribution, quality control, rollforming as well as specifying documents such as the NASH Standard, which was the first to be officially cited as a method of compliance in the Building Code . The course will also cover all the essential building elements and assist in developing the delegate's competency when considering compliance issues to be considered prior to the granting of a building consent and practical processes for on-site inspections. The course is a mix of presentations, group work, discussion and assignment. It will ensure that delegates that come from organisations with differing approaches to Light Steel Framing are comfortable with the topic and have a common approach to compliance in this emerging sector of our economy



NEW IN 2014

NZS 4229 CONCRETE & MASONRY BUILDINGS NOT REQUIRING SPECIFIC ENGINEERING DESIGN

The Institute is pleased to bring to our members and clients this new three day course.

This high quality Diploma recognised course was developed in partnership with CCANZ and will bring those with a desire and need for knowledge and exposure in this area up to speed rapidly in this crucial building and construction discipline.

The Institute's drive to bring innovation and consistency to the Training Academy range of programs is recognised by the very way in which they are using Ralf Kessel, Alistair Russell and David Barnard to facilitate this three day course. The huge wealth of knowledge these presenters bring as well as national and international experience to the training program will ensure your knowledge and skills grow exponentially.

This course will provide an understanding of the content of the NZS 4229:2013 and NZS 4210:2001 and the ability to apply this knowledge to ensure compliance of a completed concrete masonry construction.

The Next Course is April 28- 30, Wellington

We would like to make you a Special Offer for the first course in April Only

Member Rate \$975 25% off the Full Price Member Rate of \$1300 Plus GST

Non Member Rate

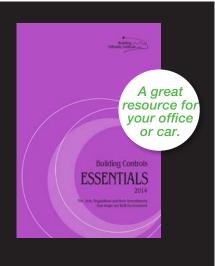
\$1267.50 25% off the Full Price Non Member Rate of \$1690 Plus GST

2014 Training Academy Public Schedule Calendar

	MARCH	
6	NZHHA Solid Fuel Semianr Training	Nelson
17	TA001 Communication/TA003 Ethics	Wellington
17-19	TA002 Building Controls	Christchurch
17-20	TA008 NZS 3604 Timber Framed Buildings	Wellington
20-21	TA013 E2 Weathertightness	Christchurch
24-26	TA020 Fire Documents	Wellington
24-20	APRIL	weilington
1	TA004 Accreditation	Wellington
2	TA010 Light Steel Framing	Christchurch
2,3	TA006 Site Inspection	Wellington
4	TA015 Clause D1 Access Routes/TA015 Clause F1 Safety of Users	Christchurch
	TA005 Plan Processing	Auckland
14,15	3	
28-30	TA009 NZS 4229 Concrete & Masonry Building	Wellington
MAY TA002 Duilding Controls		
5,6,7	TA002 Building Controls	Auckland
8,9	TA013 E2 Weathertightness	Auckland
19,20,21,22	TA008 NZS 3604 Timber Framed Buildings	Auckland
26,27	TA104 Complex Fire Design	Wellington
26-28	TA009 NZS 4229 Concrete & Masonry Building	Christchurch
1.6	JUNE	VA / III
16	TA010 Light Steel Framing	Wellington
	TA019 Plumbing Drainage & Compliance	Auckland
17	TA001 Communication/TA003 Ethics	Auckland
23,24,25	TA020 Fire Documents	Christchurch
	JULY	
21,22	TA013 E2 Weathertightness	Wellington
21,22,23	TA002 Building Controls	Wellington
23,24	TA005 Plan Processing	Christchurch
28,29,30,31	TA008 NZS 3604 Timber Framed Buildings	Christchurch
29,30	TA006 Site Inspection	Auckland
31	TA004 Accreditation	Auckland
28-30	TA009 NZS 4229 Concrete & Masonry Building	Auckland
F	AUGUST	Associate in al
5	TA010 Light Steel Framing	Auckland Auckland
7,8	TA104 Complex Fire Design TA020 Fire Documents	Auckland
11,12,13 28	TA015 Clause D1 Access Routes/TA015 Clause F1 Safety of Users	Wellington
20	SEPTEMBER	weilington
1	TA001 Communication/TA003 Ethics	Christchurch
2,3	TA013 E2 Weathertightness	Christchurch
8,9,10	TA002 Building Controls	Christchurch
	TA008 NZS 3604 Timber Framed Buildings	Wellington
8,9,10,11 15,16,17,18,19	TA019 Plumbing Drainage & Compliance	Wellington
15-17	TA009 NZS 4229 Concrete & Masonry Building	Wellington
15 17	OCTOBER	Weilington
13,14	TA005 Plan Processing	Wellington
15,16,17	TA020 Fire Documents	Wellington
15,10,17	TA004 Accreditation	Christchurch
16-17	TA006 Site Inspection	Christchurch
29	TA010 Light Steel Framing	Christchurch
	NOVEMBER	
3	TA001 Communication/TA003 Ethics	Wellington
3,4,5	TA009 NZS 4229 Concrete & Masonry Building	Christchurch
10,11,12	TA002 Building Controls	Auckland
10,11,12,13	TA008 NZS 3604 Timber Framed Buildings	Auckland
13	TA015 Clause D1 Access Routes/TA015 Clause F1 Safety of Users	Auckland
17,18	TA104 Complex Fire Design	Christchurch
DECEMBER		
1,2	TA013 E2 Weathertightness	Auckland
3,4	TA005 Plan Processing	Auckland
5	TA010 Light Steel Framing	Wellington
8,9,10	TA020 Fire Documents	Christchurch
The Training Academy also provides an Inhouse training option for many of our courses. This has been		

The Training Academy also provides an Inhouse training option for many of our courses. This has been utilised by individual councils and cluster groups of councils. Should you wish to customise a course please don't hesitate to discuss options to allow us to asist you meeting your objectives.

Please be aware that for various reasons we may have to change our dates so just keep checking the BOINZ website for the most up to date



Building Controls Essentials 2014

Available now

Book Contents:

- The Building Act 2004 and amendments (consolidated with history notes). As at 1 February
- Building Regulations 1992
- Building (Specified Systems, Change the Use, and Earthquakeprone Buildings) Regulations 2005
- Building (Accreditation of Building Consent Authorities) Regulations 2006

Book Size: A5 (approx.)
Pages: 480 (approx.)

Visit our Store at www.boinz.org.nz for more details

Visit our book store at www.boinz.org.nz



The New GIB® Fire Systems 2012 technical literature includes changes to the NZBC related to fire (which comes into effect from April 2013), new penetration and surface property details, plus new systems.

If you haven't already received a copy, you can order one for free:

- visit gib.co.nz/request-gib-fire-rated-systems/
- call **0800 100 442** or
- scan the **QR code**.













21 – 22 AUGUST 2014 CHRISTCHURCH COPTHORNE HOTEL COMMODRE