straight up





BOARD

President

Stewart Geddes

Vice President

Ian McCormick

Board members

Kerry Walsh

Norm Barton Peter Laurenson

Phil Roberts

ADMINISTRATION

Chief Executive

Nick Hill

Finance Manager

Tracey Farrelly

Training Manager

Victoria Purdie

EA to CE and Membership Relations

Manager

Louise Townsend

Marketing and Events Manager

Callista Knock

Technical Manager

Tony Conder

Membership Relations Co-ordinator

Walter Hi

ADVERTISING / EDITORIAL

CONTRACTORS

Advertising /Editorial

Please contact the Institutes office for advertising, rate card, and editorial enquiries please contact the Building Officials Institute's National Office on office@boinz.

org.nz

Design & Print Pushprint.co.nz

Steve Swift

Ph: 09 294 6764 Email: steve@pushprint.co.nz

ISSN 1175-9739 (Print)

ISSN 2230-2654 (Online)

Building Officials Institute of New Zealand

P O Box 11-424,

Manners Street, Wellington Level 12, Grand Annexe,

84 Boulcott St, Wellington

Phone (04) 473 6002,

Fax (04) 473 6004

E-mail: office@boinz.org.nz

straight up

IN THIS ISSUE

Beacon Pathway

From The CE	2
NZFS	4
Nelson Pine	7
SmartFit	9
Excellence Awards 2015	10
Prefab Top 5.	14
Metrapanel	16
Hiandri	19
Training Academy	20
Heaney & Partners	22







23



The information contained within this publication is of a general nature only. Building Officials Institute of New Zealand does not accept any responsibility or liability for any direct, indirect, incidental, consequential, special, exemplary or punitive damage, or for any loss of profit, income or any intangible losses, or any claims, costs, expenses, or damage, whether in contract, tort (including negligence), equity or otherwise arising directly or indirectly from, or connected with, your use of this publication or your reliance on information contained in this publication. The Building Officials Institute of NZ reserves the right to reject or accept any article or advertisement submitted for publication.





From the Chief Executive

Time to support the good builders, and come down hard on the shoddy ones. Pity the poor, new building owner. We are in that cycle again where the unscrupulous take advantage of innocent, well-meaning citizens, who invest in good faith in "Bob the Builder" and his merry gang of unqualified and untrained subcontracting "Charlie's."

The stories of poor building quality coming out of Auckland and Christchurch abound. Why is it so easy to bag the council's inspection regime, when the real problem is the unscrupulous, untrained builder and his "mate's?" These guys' phoenix building council's as if it is their privilege to remain in business and rip hard working people off.

Successive government working groups around building productivity and capability have identified significant workforce issues about every other area as a problem for the built environment. Yet the shoddy builder is allowed to continue. The sad outcome is that the good builders (and

there are lots of them), are stigmatised by these bad eggs.

It's time to stop this cycle and protect those who train, work ethically, and do a fantastic job to deliver quality to the building owner. It's time to name and shame the dodgy, shoddy operators who rip the consumer off; those who not only drive the initial build, but cause significant, costly repercussions downstream in the remedial work as the building ages.

So how do we do this? Firstly, we have got to stop listening to builders who say they know what they are doing: they don't. Qualified builders generally do, but untrained and unskilled builders are a blight on our economy. We need to educate the public to only employ fully trained and qualified builders.

Secondly, we need to demand that each building site is controlled by qualified and appropriately experienced site supervisors. We have to stop the cycle in the residential space of developers and builders not employing qualified supervisors and foremen. Too many sites have significant levels of unskilled labour, and partially trained tradesmen with no supervision... but the owner /customer thinks they are getting qualified tradespeople.

Thirdly, a move to a mandatory CPD programme for all building and design trades is a must. In particular, they need to know the building code, and its options and limitations.

We all need to stop the builders saying "it's

too expensive to train." In reality, it's too expensive to not train. The waste involved on a building site in terms of labour and materials is excessive in New Zealand. Designers also need to accept they need to train also. The cost of not presenting appropriately completed design applications for consents is a significant one for the owner.

Let's also not forget to educate the consumer on the type of qualified designer and builder they should be looking to employ. Any investor should know what they are paying for. Surely a qualified site supervisor for a residential property is a guarantee. The consumer has a right to be in the driving seat- not the shoddy builder.

The bottom line is accountability for the roles and responsibilities one undertakes in the building sector. The time for short cuts is over, and the introduction of significant penalties needs to commence.

In metropolitan areas, it is too easy to hide from one's pre-meditated compliance avoidance or mistakes. Harsher penalties are needed by the Licenced Practitioners Board, and a card system that shows the LBP'S qualification is needed. Then owners will be in a position to choose at face value, a qualified individual that can undertake the quality work they expect and deserve.

Finally, the building supervisor on the site should be nominated on the consent application, thereby subsequently being held responsible for supervising and managing subcontractors, and quality control.

IT'S HUMAN NATURE TO CONTINUALLY SEEK BETTER AND MORE EFFICIENT WAYS OF DOING THINGS...

Discover another way to build at frametek.co.nz











HOMEOVERSITE

HOW WELL DO YOU UNDERSTAND YOUR PROPERTY?

Trying to match a paint colour in your living room? Having difficulty locating the contact details of that 'really good' plumber you used last year? Wish you'd received more information and history about your property from the previous owner? We do.

That's why we've built HomeOversite® – a FREE online tool built for New Zealand homeowners to keep track of anything to do with their home.

Think of it as a digital property wallet, a place to store anything related to your house – from photos, plans and compliance documentation, to insurance and warranty information. There's an easy set and forget maintenance schedule, and reminders are sent when any maintenance or insurances are due, or when any warranties are about to expire. When a property goes to market, the property's file can be easily transferred to the new owner passing on that invaluable property history that often gets lost from owner to owner.

Recent changes to the Building Act also require that more information (such as maintenance and warranties) be handed over by the builder to the homeowner at the end of a project. HomeOversite allows for all of this information to be conveniently stored in a single place for ease of reference. Soon we'll also be launching buildinsite.co.nz to enable builders to meet these new compliance requirements online.

HomeOversite is all about giving homeowners the independence to control what they do with their home, in a manner that does not take up valuable storage space with screeds of paperwork. We've built it for New Zealand homeowners because we believe that there must be a better way for them to manage and have a greater insight of their hard-earned investments.

You can now tell your clients there's an easier way. To find out more, please visit <u>homeoversite.co.nz</u>



Incomplete Fire Separations

BACKGROUND

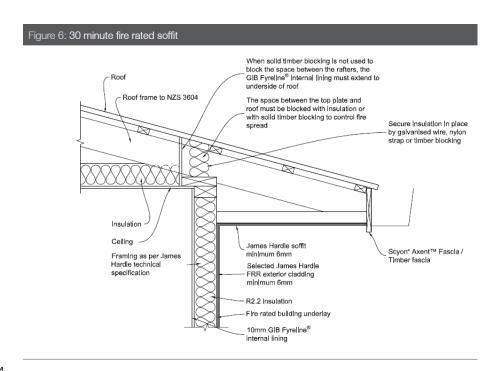
Security alarm monitoring companies frequently offer fire alarm monitoring as an extra service to their clients. These fire alarm systems can be rudimentary, consisting of non-addressable smoke or heat detectors, often on a single loop.

Such systems, even if non-compliant with the relevant fire alarm standards, can provide significant benefit outside occupied hours. However, fires at several buildings that use this form of monitoring have led to significant delays in calling the fire service. Due to the rapid growth of fires once they become established early intervention and suppression is critical to avoid large losses and fire damage.

Warehouse fire 03/02/2014

INCIDENT DETAILS

The following outlines a few fires in 2014 and 2015 where there were protracted delays in notifying the fire service. This list is not exhaustive.



Incident Details	Alarm and Notification Sequence	Outcome
12/01/2014		
Fire started on the outside of a school toilet block, spreading to an adjacent classroom block. The monitoring company notified the key holder who elected to attend first before calling the fire service.	Monitoring Company Notification - 05.45 hrs 111 Call (passer-by) - 05.51 hrs Delay -6 minutes	Total loss of toilet block, significant damage to a three classroom block.
03/02/2014		
Fire in a warehouse. All four detection zones activated in sequence. The monitoring company informed the key holder, who called the fire service passing on second-hand information, excluding multiple activations.	Monitoring Company Notification - 22.40 hrs 111 Call (key holder) - 22.46 hrs Delay - 6 min	Total building loss.
05/03/2015		
A small fire broke out in a warehouse. The monitoring company received notification of smoke detection and PIR activation. They informed the key holder who requested a security guard respond.	Monitoring Company Notification - 04.12 hrs 111 Call (security guard) - 04.35 hrs Delay - 23 min	Limited fire damage in the area of origin. Extensive smoke damage to all areas of the building and stock in the warehouse.
27/04/2015		
Fire in a school classroom block. Monitoring company dispatched a security guard who arrived on scene after the fire service arrived.	Monitoring Company Notification - 01.14 hrs 111 Call (passer-by) - 01.18 hrs Delay - 4 min	Extensive damage to a classroom.

FURTHER INFORMATION

The incidents listed above indicate that the potential benefits of monitored fire alarm systems can be undermined if the information is not used to notify the fire service in a timely manner. For two of these incidents, the fire service was notified by members of the public, nullifying the possible benefits of early detection of a developing fire by the fire alarm system.

In the other two examples, investigation by the key holders eventually resulted in a fire service callout, albeit delayed. Critical information available to the monitoring centre was not passed on, which affected the initial fire service response and the delay enabled the fire to cause extensive damage.

School Fire 24/01/2014

In an effort to avoid false alarms, building owners sometimes elect to have their premises inspected prior to calling the fire service. Rudimentary fire detection systems can also make it difficult to identify remotely whether one or several devices have activated.

Typical PIR device However, there are a few indications that can be used to help alarm monitoring companies and building owners make informed decisions remotely.

For more advanced systems (addressable or including several detection zones), multiple activations tend to indicate a real fire rather than a false alarm. This is particularly true if the activations are sequential, progressing through the building.

Some security devices, such as Passive Infrared Sensors (PIR) can also react to fires. Therefore, the activation of smoke detection and security sensors in short succession may indicate a developing fire. This information should be passed to the fire service.

LESSONS LEARNED/RECOMMENDATIONS

The lessons learned are applicable to building owners, security alarm providers and monitoring companies;

- Building owners should consider the intended objective in installing a monitored fire alarm system and discuss with their alarm provider an appropriate fire service notification process to minimize delays and protect their buildings.
- Fire detection systems provided as an "add-on" to security systems should, where possible, be designed to allow the fire alarm panel to identify individual detectors. This informs the monitoring company of multiple detector activations suggesting a growing fire.
- Alarm monitoring company staff should be trained and empowered to make critical decisions based on the information available, including directly notifying the fire service if there is strong evidence to suggest a fire is developing.
- All available information should be passed on to the fire service to ensure the most appropriate response.
- Where property or business protection is critical, a detection and alarm system designed to NZS 4512 and directly connected to the fire service may be a more appropriate solution.









straight up June 2015 5

MINIMISING FASTENERS POPPING

'Popping' describes the protrusion of fastener heads through the finished surface of plasterboard. Popping may not become visible for some considerable period after completion. They may be just sitting there hidden under the paint until something like a door is slammed or the house moves slightly.

Winstone Wallboards has prepared best practice guidelines to help minimise the most common occurrences of popping, including:



- Understanding the process of timber shrinkage; with an illustration showing the effect of fasteners popping when timber dries.
- The importance of allowing adequate drying time and some key considerations for installation during the winter months.
- Correct fasteners, straight framing and correct installation.
- Tips on repairing popping and a recommendation for the best time to conduct repairs.

The GIB® Technical Helpline is available weekdays on 0800 100 442 for further information.

The GIB® Site Guide and relevant technical systems literature includes best practice installation guidelines to help you install plasterboard systems correctly, first time.





Laminated Veneer Lumber (LVL) complying with the New Zealand Building Code as an Acceptable Solution or Verification method

Laminated Veneer Lumber framing has been making significant inroads as a 90x45 general framing product into a market previously dominated by sawn timber. The key benefits of LVL over sawn timber are consistency, straightness, long lengths and its strength properties. It is important that the standards path with which LVL complies with the New Zealand Building Code (NZBC) is clearly understood by designers and building inspectors. This paper does not cover Alternative Solutions.

New Zealand Building Code (NZBC) Clause B1 STRUCTURE

Currently LVL is manufactured to proprietary grades and no standard grades are defined in NZS3603. This means each individual manufacturer can produce and market its own individual grades as per AS/NZS4357 Structural Laminated Veneer Lumber.

There are three routes for LVL to meet the requirements of the NZBC clause B1 Structure, via Acceptable Solution B1/AS1 (as permitted by NZS3604 clause 2.3.9):

- 1. LVL is produced in accordance with AS/NZS4357 and machine stress graded in accordance with NZS3622 Verification of Timber Properties to determine its MSG rating and maybe used as a direct substitute for SG6, SG8 or SG10 provided that:
 - a. The members are of the same finished size as the member to be substituted.
 - b. The strength and stiffness properties have been verified and marked in accordance with NZS3622.
 - c. The strength and stiffness properties are no less than the grade to be substituted.
- 2. LVL is produced in accordance with AS/NZS4357 and has its grade verified as per AS/NZS4063 Characterization of Structural Timber to determine its LVL characteristic properties and maybe used as a direct substitute for SG6, SG8 or SG10 provided that:
 - a. The members are of the same finished size as the member to be substituted.
 - b. The strength and stiffness properties are no less than the grade to be substituted.
 - c. In this case the LVL characteristic properties have been verified by AS/NZS4063 which is referenced by AS/NZS4357.
- 3. Specific design of LVL framing members using proprietary software and/or charts provided:
 - a. The framing member is within the scope of NZS3604.
 - b. The load bearing reaction of the framing member shall not exceed 16kN in a downwards direction or 16kN in an upwards direction.
 - c. The selection charts or software used for the selection of the engineered wood product have as a minimum been engineered in accordance with B1/VM1 (NZS3603)

There is one route for LVL to meet the requirements of the NZBC clause B1 Structure Verification Method B1/VM1:

1. For specific design in accordance with NZS3603.

New Zealand Building Code (NZBC) Clause B2 DURABILITY (this section has been adapted from the EWPAA LVL Treatment Position statement September 2014)

The acceptable solution B2/AS1 is the overarching regulatory document with the following standards being the Acceptable solution:

- 1. NZS3602 Part 1 modified by 3.2.2 including Table 1A of B2/AS1.
- 2. NZS3640 as modified by paragraph 3.2.3 of B2/AS1

H1.2 treatment for LVL is specified in NZS3640, however for other treatments of LVL NZS3640 refers to AS/NZS1604.4 through clause 1.1.2 (amendment 5). As/NZS 1604.4 Clause 1.9 outlines the specifics for use of AS/NZS1604.4 in New Zealand with NZS3640.

LVL is commonly available in New Zealand as:

- Untreated
- H1.2 glueline treated with a surface spray to NZS3640 (amendment 8 B2/AS1)
- H1.2 pressure treated using Boron to NZS3640 and AS/NZS1604.4
- H3.1 pressure treated using LOPS solvent borne preservatives to AS/NZS11604.4

Thus in Table 1 of NZS3602 as modified by Table 1A of B2/AS1

Category C members protected from the weather but exposed to ground atmosphere				
1C.1 Subfloor framing	LVL requires no treatment if 18% or lower in service moisture content			
1C.3 Suspended ground floors	LVL requires no treatment if 18% or lower in service moisture content			
Category D Protected from weather with the risk of moisture penetration (as modified by B2/AS1)				
1D.2 Flat roof framing	Treat LVL to minimum H1.2 as for Radiata Pine			
1D.3 Skillion roof framing	Treat LVL to minimum H1.2 as for Radiata Pine			
1D.5 Frames in enclosed decks	Treat LVL to minimum H1.2 as for Radiata Pine			
1D.7 Higher risk framing in enclosed decks	Treat LVL to minimum H3.2 as for Radiata Pine			
1D.8 Members supporting enclosed decks	Treat LVL to minimum H1.2 as for Radiata Pine			
1D.11 Framing supporting masonry hardware	Treat LVL to minimum H3.1 as for Radiata Pine			
1D.13 Framing for E2/AS1 compliant claddings	Treat LVL to minimum H1.2 as for Radiata Pine			
1D.14 Other exterior wall framing	Treat LVL to minimum H1.2 as for Radiata Pine			
Category E Not exposed to weather and kept dry				
1E.1 Roof members (excluding skillion roof)	LVL requires no treatment			
1E.2 Mid-Floor framing (excluding boundary joists)	LVL requires no treatment			
1E.3 Unlined buildings	LVL requires no treatment			
1E.4 Framing in single storey masonry veneer	LVL requires no treatment			
buildings (per cl. 110.2(b))				
1D.5 Internal walls (not supporting balconies)	LVL requires no treatment			
The legal requirement is the performance level in clause B2.3.1 and B2.3.2 in the Building Code. This can be achieved				

The Verification Method in B2/VM1 maybe used to satisfy that the durability of a building element complies with the NZBC B2.3.1 and B2.3.2 by proof of performance and shall take into account the expected in-service exposure conditions by one or more of the following conditions:

1. In-service history **2.** Laboratory testing **3.** Comparable performance of similar building elements. Typically this would be performed in New Zealand in organisations such as SCION and BRANZ (BRANZ Appraisals)

through adherence to B2/AS1 as a minimum, or through alternative higher levels of treatment.

Courtesy of Andy Van Houtte, Nelson Pine Ltd







Azotek H1.2 – Innovative treatment process

Azotek was approved in the NZ Building code in early 2014, it is now a vital treatment option for NZ Laminated Veneer Lumber manufacturers such as Nelson Pine Industries.

The Azotek treatment provides a uniform and consistent treatment right throughout a piece of LVL regardless of its dimensions, this is commonly referred to as "full penetration", something that is difficult to achieve using traditional pressure treatment methods. Rather than the use of solvents and or pressure treatment plants to push the solution into the wood fibre, a liquid solution "Azotek" is simply added to the glue during the LVL manufacture. The heat and pressure created during the pressing process allows the chemistry to move into the veneer and fix to the wood fibre. This treatment process saves time as the LVL

panel is treated as it exits the press. The alternative options, LOSP or waterborne Boron, both require further handling and treating which then in turn may require the final LVL product to be dried or solvents to be flashed off.

Azotek currently has New Zealand and Australian standards approval for H1.2 treatment, however, H1.2 does not apply in Australia. Zelam have been collecting data from their field trials for over 7 years and are working towards an approval for the use of Azotek to achieve further durability of engineered wood to higher hazard classes. In time this could provide a wide variety of situations and uses for LVL products in both New Zealand and Australian building projects.

Azotek is made up of three well known actives also registered for use in crop

protection. Two of which are fungicides, cyproconazole and triadimefon along with an insecticide, bifenthrin. These actives have a benign toxicological and environmental profile in the context of wood treatment. Since they do not provide protection against soil microorganisms, any buried LVL sawdust and wood waste will biodegrade over time.

Azotek has been developed for the treatment of LVL and Plywood meeting H1.2 and H2 requirements under NZS3640:2003 (amendment 5), AS/ NZS1604.3:2012 & AS/NZS1604.4:2012. Zelam would like to recognise SCION for their trial work and data assessments that were used in the approval process of Azotek.

Courtesy of Scott Connor, Nelson Pine Ltd

SmartFit: An alternative solution to E2/AS1

Window Installation Evolution

E2 AS1 window installation method evolved out of the WANZ WIS (Window Association of New Zealand window installation system).

Window frame shapes and the way they were installed into buildings had been stable for some time. The method was typically window frames with attached timber reveals and outer lapping facings, pushed in from outside and nailed into position through the reveals. With improvements needed in the way claddings connected to windows and how the weathertight building envelope managed water, the window industry was proactive in designing and testing a new window installation weatherisation system.

WANZ WIS borrowed ideas internationally but the final solution was unique to New Zealand because of the way we build our homes

At the time of the leaky building saga there was no opportunity to change the window frame shapes or change the wall construction and cladding types. WANZ WIS was effectively the immediate solution which successfully joined the windows to the cladding, providing a degree of protection to the wall framing should the installation fail.

WANZ WIS was an alternative solution. It incorporated some things that E2 AS1 omitted, that were impractical or was not clear about.

Several E2 VM1 tests were done to prove the system and compliance with E2 and it gained good traction as an improved method of window installation. The subsequent revisions to E2 AS1 began to incorporate more detail and became largely the same as WANZ WIS.

E2 AS1 has been successful at providing good back up if the installation should fail but the complexity and layers of materials has proven confusing and we see many installations – even 12 years on - where the intent of the system has not been achieved, either through lack of understanding or through poor quality materials and workmanship. The E2 AS1 method allows the weathering area to extend all the way back over the framing to the wall board line, where the air seal is located. Consequently this area needs protecting with layers of materials. A well achieved E2 AS1 window installation

is a safe bet but a poorly achieved installation carries risk.

Fletcher Window and Door Systems developed Smartfit® as a robust and sophisticated solution to this complexity and risk.

If the danger elements and complexity are removed from the equation then risk is reduced. The Smartfit® window system moves the window outwards to reside over the cladding and cavity space. By repositioning the window, there is the ability to exclude the building framing area from the weathering area of the window installation. Once this area is excluded, it no longer needs the layers of complexity to protect it.

Traditional windows are supplied as basic units with bundles of support bars, cavity closers and head flashings, rolls of sill tape and PEF rod, bags of end dams and packers and tubes of expanding foam. With this method we are effectively asking the builder to take this window kitset and make them weathertight on site. Smartfit® removes all of this site work and brings those tasks back into a certified and audited controlled manufacturing environment, where quality can be assured and is not affected by varying skill levels, incompatible materials and inclement site conditions.

Smartfit® not only achieves a better long term weathertightness result but also contributes to improved productivity.

As building professionals, it is our collective responsibility to build houses better and more efficiently but without reducing quality levels. In some cases Smartfit® windows can be installed 8 or 9 times faster than the conventional method and enables material savings by not requiring most of what is used now.

The Smartfit® project was awarded substantial funding through Callaghan innovation.

The Smartfit® window system is backed by a BRANZ appraisal and Codemark certification.

www.smartfitwindows.co.nz

Courtesy of Ronnie Pocock, Fletcher Aluminium Windows & Doors









Building Officials Institute of New Zealand's

2015 Excellence Awards Winners

STANDARDS NEW ZEALAND

Contribution to Technical & Legislative Improvements Award

Award Presenter: Fay Sowerby, from Standards New Zealand

Winner: Michael Hartstonge, Invercargill City Council (Accepted by John Hunter) Michael Hartstonge spent his original years trained as a plumber, gasfitter and drain layer, being qualified in all three trades. He has spent the last 15 years with Invercargill City Council, moving from various positions and is currently working as Team Leader – Building Regulation

Services. Michael was contracted on behalf of the Plumbers, Gasfitters and Drain layers Board and the Plumbing, Gas fitting, Drain laying and Roofing ITO to be a technical writer for the new textbooks developed for apprentices hoping to work in this specialised area. He is also currently working with the chairman of the Southern BOINZ Branch to develop training notes for use by BOINZ members in response to common problems they see on site or when processing the plumbing and drainage aspects of building consent.



Faye Sowerby, Standards New Zealand

RESENE CONSTRUCTION SYSTEMS

Emerging Leader Award

Award Presenter: Mike Olds, Resene Construction Systems

Winner: Craig White New Plymouth District Council

Craig often takes on additional tasks, including roles in quality assurance (involving internal auditing, system and policy development), Health and Safety (including the development of significant policy improvements) and has also successfully completed the National

Diploma in Building Control Surveying. He is in his third term as a BOINZ Branch Chair, having been an asset to the branch during their tenure in this position. Craig runs branch meetings with confidence and encourages controlled discussion at meetings ensuring the content is relevant and informative.

Due to his drive, energy and attention to detail, along with the ability to clearly communicate, Craig is a natural leader, always willing to share his knowledge with the team, builders and apprentice's onsite.



Craig White & Mike Olds

KOPCOAT NEW ZEALAND

Contribution to BOINZ Award

Award Presenter: Cameron Scott, Kop Coat New Zealand

Winner: Bruce Symon, Realsure Ltd
Bruce started off his career in the
engineering field, and then moved to the
NZ Police Force, where he was awarded
the NZ Police Long Service Medal and
Good Conduct Medal on leaving the
police force. Upon leaving the force, he
decided to build and run his own very
successful business.

In conjunction with his partner, Sarah Symon, they entered the murky world of property inspections and set out to build a business that excelled in process excellence, strong building technical knowledge and skills and at the forefront of the IT and instrument use and understanding.

Over the ensuring years Bruce, along with a number of others, worked tirelessly to support BOINZ's Accredited Building Surveyor programme. Over recent times, he has provided our technical Manager, Tony Conder with significant resource to develop this. But it doesn't stop there –Bruce is also in the middle of completing his national diploma in Building Surveying.



Bruce Symon & Cameron Scott

BRANZ

Outstanding Commitment to Information, Skills Development, and Education of Building Officials Award

Award Presenter: Chelydra Percy, CE of BRANZ

Winner: Phil Saunders, Hamilton City Council

Phil Saunders has for years been a vocal advocate for the professionalising of

the Building Surveying sector and has not been shy in leading by example. Phil is such a staunch supporter of the requirement for qualifications, he has been a key player in the stakeholder groups tasked with creating the qualifications for Building Surveyors as they currently stand and how they will look in the future. Phil has an extensive list of achievements, including Diplomas in Building Surveying.



Phil Saunders & Chelydra Percy

PACIFIC STEEL

The Young* Building Control Professional of the Year Award

Award Presenter: Stan Clark, Pacific Steel

Winner: Duncan Francis, Auckland Council

Duncan Francis started his working life in building control approximately 10 years ago in Auckland Council's Environments section. This individual was employed in the Code Compliance administration team in an administrative role, but it quickly became obvious that he was very bright and had far more potential than the position he was employed for.

After 18 months, Duncan was given the opportunity to develop these skills further in the more technical aspects of code compliance certificate assessment. Duncan has become an expert time, working closely with project and construction managers on large projects, providing the information they needed to facilitate the quick turnaround of the code compliance certificate. Many of these project managers see Duncan as an integral part of their final inspection, bringing a project together at the end, and relying on him to pick up what they have missed.



Duncan Francis & Stan Clark

MITEK NEW ZEALAND

Training Commitment Award

Award Presenter: Graham Hunt, Mitek NZ

Winner: Auckland Council (Accepted By lan McCormick & Rose McLaughlan)

This Award goes to Auckland Council, who has shown an unwavering support for the development and training at all levels, including IT, Soft Skills and Technical Development for their Building Controls staff to be able to do their job to the best of their ability. Auckland Council

is dedicated to achieving the highest results and standards for their BCO's. They have been working incredibly hard on a number of fronts. Auckland Council have made an incredible commitment to ensuring their current Building Control Officer have the technical knowledge and experiences to progress through their qualifications with a multi-pronged approach including a strong in-house, ITO support from the Skill's Organisation and a strong suite of training course from BOINZ.



Rose McLaughlan & Ian McCormick, Auckland Council & Graham Hunt

CARTER HOLT HARVEY

Building Control Innovator of the Year Award

Award Presenter: Jim Malone, Carter Holt Harvey

Winner: Marlborough District Council (Accepted by Paul Guile)

This year's award winner goes to a team who has been considered at the fore front of the local government field in the way it is using technology to benefit the region. Marlborough District Council made the long term decision to digitise all property files, setting them up to create efficiencies

that include the saving of time and money for both council and customers.

The mobile building inspection solution took the 2014 ALGIM Web and Digital Project of the Year Award. The solution utilises a shared services platform used by several other New Zealand councils, and allows building inspectors to complete digital building consent inspections. The use of this technology saves time, is easy to use, and automates the process of updating council systems with inspection information, providing a major improvement in efficiency.



Paul Guile & Jim Malone

HILTI

Organisational Commitment to Customer Service & Excellence

Award Presenter: Jake Symes, Hilti

Winner: Hamilton City Council (Accepted by Phil Roberts & Phil Saunders)

Taking an innovative approach, Hamilton City Council developed a trial partnership programme with a view to rewarding local industry practitioners who historically had demonstrated their performance exceeded that of their peers.

Their partnership programme allowed for a membership "building block" approach (Bronze through to Platinum) which altered the levels of approval for any applicant depending on their ability. At each level all parties being the customer /building and the council needed to play their part at the highest level to ensure the very tight consenting /inspection timeframes are achieved.



Jake Symes, Hamilton City Council

WINSTONE WALLBOARDS

Branch of the Year Award

Award Presenter: Dayle Merson, Winstone Wallboards

Winner: East Coast Branch (Accepted by Michael Skelton & Paul Simmonds)

The East Coast Branch's regular contact with their many stakeholders strengthens their relationships with industry in their region, a role proudly established by their predecessors and continued today. This networking provides solid meeting offerings for members. They spice things up through a combination of insightful and relevant presentations, site visits and make full use of stakeholder, industry and regulatory input.

This branch is also one of many where distance presents no barriers. Members drive hundreds of kilometres to attend their meetings - and then they go back again (much the wiser for the information and experience).



Dayle Merson, East Coast Branch

ANNUAL CONF & EXPO 2015



PrefabNZ Top 5

CLICKRAFT COMES TO EASTBOURNE

According to architect and urbanist Chris Moller 'it is time to drag architecture kicking and screaming into being a super inexpensive enabling tool.'

The CLICK-RAFT is an inexpensive fabrication architecture – inspired by Thoreau's hut at Walden Pond, the Citroen TPV, and Lego©. Click-Leaf architecture is a playful open system which utilizes the qualities of CNC cut plywood in click-leaf's and click-beam's to form a lattice of structure/networks assembled from standard panels which can be quickly 'clicked' together to form floor, wall, and roof click-rafts in different configurations.

Chris and a team of helpers recently constructed this 10m2 studio in Eastbourne just in time to enjoy the Easter break! See the full construction here. Visit the ClickRaft at the upcoming BuildNZ and DesignEx in Auckland in June





IN-DEPTH STUDY SAYS PREFABS TIME HAS COME

Pure Advantage, a group of prominent New Zealand business leaders, recently held a green think-tank on sustainable ways to reverse the housing crisis and identified prefabrication as a way to not only reduce overall building costs, but save time and minimise waste. Find out more here.

FLAT-PACK SHELTER HOUSE ERECTED IN TWO HOURS

Following the devastating earthquakes in Nepal, UK company Extremis
Technology are working with a charity to provide HUSH2 shelters for some of the thousands of displaced families. The emergency shelters can be erected in two hours without the need for special tools, and can also be transformed into a hurricane shelter in less than seven minutes. Read more here.



CLT HOUSE WINS AWARD

New Zealand's only full cross laminated timber (CLT) house received more acclaim at the recent Canterbury Architecture Awards, with Makers of Architecture winning the small project category. The impressive 65 square metre Warrander Studio has been digitally designed and fabricated using BIM (Building Information Modelling) and CNC (Computer Numerical Control) technologies. Constructed in three days, the CLT structure was then clad with a new plywood based cassette system developed by Makers of Architecture. The accuracies of this system enable precise building costing/pricing (due to BIM data outputs), while minimising material waste through digital optimisation. See more here.



COLAB 2015 - COLLABORATION IN ACTION

The CoLab in April was a whirlwind of group oath-taking, honouring of PrefabNZ's first Life Member (Gary Caulfield), crashing tangram games, world café table-talking, site visit touring and a lively 3D printing panel discussion over dinner. With an impressive line-up of international guest speakers and local experts providing the opportunity to postulate over provocations such as 'scale is not our enemy'.

PrefabNZ also launched two new reports - the Levers for Prefab was prepared for MBIE with assistance from Registered Master Builders Association, BRANZ and MBIE. It 'cuts to the chase' and looks at what is holding us back from improving construction productivity.

The PrefabNZ 5 Year Impact Report, looks at the achievements of PrefabNZ since its inception in 2010, and offers some predictions about future uptake of prefabrication technology in New Zealand over the next 10 years. Both reports can be downloaded from the PrefabNZ website here.





Waterproofing Membrane Association Incorporated Code Of Practice: Waterstops

The detail below has been lifted from the recently published Internal Wet area Membrane (IWAM) Code of Practice from the Waterproofing Membrane Association Incorporated (WMAI).

The document is a must have for all building officials as it covers aspects of internal waterproofing from membrane selection to design and installation method. The IWAM code of practice is available as a downloadable copy or as a hard copy from the WMAI website www.membrane.org.nz just visit the site and head to the publications page to purchase your copy.

Author: Kevin Turley

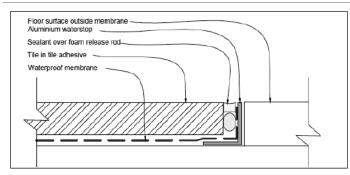
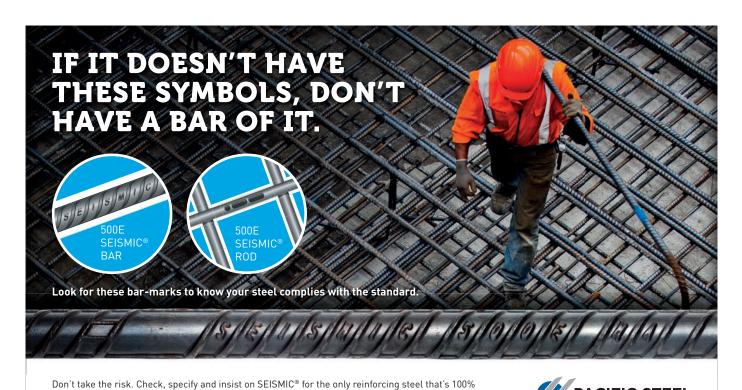


Figure 10: Waterstop at termination of membrane

It is recommended that the membrane covers the whole of the floor area and terminate at change of flooring material, generally at doorways. However, in some open plan situations, particularly when tiling is carried through, the termination point can be pre-determined and used as the set-out with the waterstop located at a grout line. Where possible a floor drain should be installed, and the floor should fall from the waterstop toward the drain.



All earthquake-grade 500E reinforcing by Pacific Steel carries the written SEISMIC® brand or our unique 'dot dash dash' symbol, so you can be sure your reinforcing meets the strictest local standards.

locally manufactured and tested to ensure it complies with the standard.

Phone 0800 PAC STEEL | www.pacificsteel.co.nz





Metrapanel The best point of difference is a proven history

Metrapanel modular panel housing system is celebrating 25 years in business. It's a milestone in itself but it is the future that the company is most focused on, especially opportunities in the North Island market.

Metrapanel is a New Zealand family owned business originally established in 1994 by Les Wykes. It was owned by Fletcher Building Limited before being bought by Les' daughter Melissa and her husband Andrew who are today the principal drivers of the business, maintaining a strong focus on business growth and development. In 2014 the company celebrated surpassing Fletchers' best unit production with a record amount of sales.

The concept of Metrapanel is brilliantly simple, solid walls, floors and ceiling panels pre-cut to simplify and speed up construction. The system is suited to a range of construction including multi storey apartment blocks, retirement units, residential homes and also due to the new falling from heights legislation, a safe compliant ceiling solution. The key benefits of the product are strength, durability and rapid installation, and all Metrapanel products are fully BRANZ appraised. Buildings built 25 years ago, such as the Netherland Retirement Village in Hamilton, are still in good condition with the owners enjoying low maintenance costs.

SOLID BACKING FOR FUTURE GROWTH

Metrapanel builds an average of 350 homes and buildings each year and growing. The success has hinged on the company's core family values and solid relationship's they have formed over time

Laminex New Zealand and Metrapanel are strategic partners with a strong 25-year history. Utilizing a large format Superfine® particleboard panel manufactured at the Laminex NZ plant in Taupo, Metrapanel and Laminex NZ have worked closely to engineer products specifically for Metrapanel System requirements.

"With the combined expertise of Laminex NZ manufacturing, and the Metrapanel passion and vision for building construction, this provides New Zealand with an innovative panel construction system perfect for modular homes". Richard Pollington, General Manager, Laminex New Zealand

FAMILY VALUES REASSURE THE MARKET

Metrapanel considers that the success and longevity of the company has been achieved by being hands on in the bus and surrounding themselves with a good trustworthy team. It is family values that they believe will be one of the most important factors to take the business into the future to meet market demand. Family businesses are able to offer speed to market, they think about making a change in the morning and put it into action in the afternoon. They also have a high level of trust amongst their team working closely together with the aim to grow the business to its full potential. Twenty-five years means that Metrapanel has a proven product in the New Zealand market. Production is increasing as a result to keep up with customer demand. Metrapanel are excited about the future of prefabrication and the advantages it offers developers, builders and most importantly home owners.

SAFETY IS KEY IN OUR WORLD, HENCE THE RISE IN DEMAND FOR CEILING SYSTEM

Metrapanel supplies its products nationwide to 35 trained installers. In 2013 Metrapanel established an onsite Health and Safety training programme for Certified Installers to use when installing Metrapanel. The initiative secured Metrapanel a spot in the 2014 New Zealand Workplace Health and Safety Awards. With 520 attendees, Metrapanel was selected as a finalist for category 6 - best health and safety initiative by a small business. Since the tightening of restrictions around working at heights Metrapanel has seen its METRAceilings system surge in popularity. The panels are delivered by long-reach hiab truck and placed into position. Because the panels are 7.35m by 2.45m this results in a solid ceiling, which acts as a safe platform for builders to walk on to tie down trusses, eliminating the need for bean bags and netting currently being used by some builders, to prevent falls through ceilings during construction. Metrapanel has seen a huge increase in sales in the past two years and are predicting further significant increases this year.

Other key benefits of the product include quicker installation – in most cases the product is a 30-50% faster to build with than traditional methods. Bracing can be removed quickly to allow for ease of access throughout the building. METRAceiling also covers the frames allowing for quicker drying times. The product results in less joins and no twisting or warping giving straight, true lines easily achieving a superior level four finish. The product is fully BRANZ appraised and when constructed by a Licensed Metrapanel Installer METRAceiling will meet the provisions of the New Zealand Building Code.

Although METRAceiling is not a new product what is new is Metrapanel's decision to supply the product as a stand-alone system rather than just as



part of its entire building system which includes walls, extrusions and floors.

Metrapanel has also teamed up with Innovative Ceiling Systems (ICS) who are the company's main installer of METRAceiling. The partnership should see the product further infiltrate the market. For the past two years ICS has been a finalist for the Unitec Institute of Technology Safety Innovation Award at the Site Safe Construction Health and Safety Awards also completing a case study with the Department of Labour with a positive response.



An opportunity to step ahead of the game

Located in the Waikato in Huntly, around 70% of Metrapanel's product is currently heading to the South Island, in particular Christchurch. But with the shortage of houses in Auckland, huge growth opportunities have been identified which has meant that Metrapanel is looking to align themselves with experienced, forward-thinking reputable companies and individuals. Urgently seeking Approved Developers, Licensed Installers and Certified Builders in the Auckland region. Currently working with Panelwood Homes and Legacy Properties, the enquiry level from the Auckland area requires at least two more Installers.

30-50% faster construction = twice as many houses built within the same timeframe = twice as much revenue

The demand for Metrapanel is growing across New Zealand at an unexpected rate. How can you get involved? Whether you are a developer, existing building company, or sub-contractor, we have an option for you to come on board.

Visit our 'Come on Board' section on the Metrapanel website to find out more.

www.metrapanel.co.nz

Youtube: Metrapanel System Limited











2015 Special General Meeting

The Building Officials Institute of New Zealand is calling a Special General Meeting

Thursday 20th August 2015 commencing at 1:00pm

at

Novotel Tanui, Hamilton (Union Room, ground floor).

The Notice of Motion will be sent to members in July 2015.

(Please note that the Special General Meeting is at the conclusion of the first day of the Institute's SBCO Forum.)

Access to the 2015 SGM will be done by identification via your current Membership Card, proving your current membership status.



New system helps builder's pass pre-line moisture test

John Oliver Marketing Manager

Building inspectors take no joy in failing a moisture test of the bottom plate on a job. It causes inspectors to get off-side with builders; - it creates tension and can put a building schedule into disarray. It's a negative experience for all involved. The consequences of failing the pre-line, because of wet bottom plates, can be major, and costly. Luckily, there is a new simple innovative system that virtually solves this problem – and it is being embraced by the building industry, HIANDRI bottom plate packers.

Most builders try to reduce the water held in by the plates by sweeping, which also provide a safer working platform, however this consumes hours of time over the contract, a costly exercise with limited results.

Winter is here and most building sites throughout New Zealand are already being subjected to wet, cold weather and an end result is inevitably saturated timber framing prior to the roof going on. This of course is not the end of the problem. We know from experience that once bottom plates become saturated, even with the roof on, it takes literally weeks before they achieve compliance with E2/AS1, maximum 20% moisture content.

These Hiandri patented bottom plate packers are a great example of the kiwi initiative, and lateral thinking. A 'Codemarked' system, it lifts all the frames 12 mm above the floor, both concrete and timber, and is generally fitted by the pre-cutter. This simple economic concept keeps the timber out of water, preventing moisture uptake and allows it to both drain and dry effectively in a natural manner.

The bottom plate packer is a system that truly 'Raises the building industry to a new level' and goes a long way to solving lots of problems. It has been well received by the construction industry and virtually all major housing companies are already committed to using this system. All builders need to do is ask their pre-cutter to install them on their frames. Our website, www.hiandri.com, contains the 'Installation Manual' together with lots of other information. If you have a technical enquiry not mentioned on the site please contact Alan Dick, Technical Manager on 0274 42538

*Please note that this is a product technology update from the inventor of the system and that the Institute takes no responsibility for the accuracy of the claims made in this article.



July-Sep 2015 Training Schedule

	JULY				
1	MiTEK Timber Truss & Wall Framing	Palmerston North			
2	MiTEK Timber Truss & Wall Framing	Napier			
9 & 17	TA013 E2 Weathertightness	Tauranga			
20-21	TA006 Site Inspection	Auckland			
20-22	TA020 Fire Documents	Auckland			
22-23	TA013 E2 Weathertightness	Wellington			
23	MITEK Timber Truss & Wall Framing	Christchurch			
27	TA001 Communication/TA003 Ethics	Auckland			
28	TA004 Accreditation	Auckland			
29-31	TA002 Building Controls	Auckland			
30-31	TA012 H1 Energy Efficiency (NEW COURSE) CONFIRMED	Dunedin			
	AUGUST				
3-4	TA005 Plan Processing	Christchurch			
4	NZHHA Solid Fuel	Christchurch			
5-6	TA007 Simple House (NEW COURSE)	Christchurch			
6	TA003 Ethics CONFIRMED (2 sessions, 9-12.30pm, 1.30pm – 5pm)	Selwyn			
10	Timber Uses in New Zealand Construction & Associated Products & Processes Seminar	Palmerston North			
10-11	TA014 B2 Durability (NEW COURSE)	Auckland			
10	TA015 Clause D1 Access Routes/ TA015 Clause F1 Safety of Users	Wellington			
11	Timber Uses in New Zealand Construction & Associated Products & Processes Seminar	Napier			
11	TA010 Light Steel Framing	Christchurch			
12	Timber Uses in New Zealand Construction & Associated Products & Processes Seminar	Hamilton			
13	Timber Uses in New Zealand Construction & Associated Products & Processes Seminar	New Plymouth			
	JULY				
1-2	TA009 NZS 4229 Concrete & Masonry Building	Wellington			
3-4	TA013 E2 Weathertightness	Christchurch			
7-9	TA002 Building Controls	Wellington			
7-10	TA008 NZS 3604 Timber Framed Buildings	Christchurch			
14-16	TA020 Fire Documents	Wellington			
21-22	TA012 H1 Energy Efficiency (NEW COURSE)	Auckland			

The Training Academy also provides an In-house training option for our courses, which has been utilised by individual councils and cluster groups.

Please be aware that for various reasons we may have to change our dates, so check the BOINZ website for the most up to date information.

For more information, course details and to register please visit our website **www.boinz.org.nz** or contact the Training Academy via **training@boinz.org.nz**



Welcome to BRANZ Find

Enter Search



BRANZ search and locate tool

The BRANZFind digital helpline is a useful, comprehensive directory of New Zealand building and construction industry information.

BRANZFind provides free online access to building information and the documents commonly requested from the BRANZ 0800 advisory service.

Use it to search and find links to resources including study reports, online tools, guidelines, Codes of Practice, technical guidance, the Building Code, standards and legislation.

www.branzfind.nz or call 0800 80 80 85

Developer's Defence Dashed

The Court of Appeal decision of Wellington City Council v Dallas [2015] NZCA 126 found the director of a development company liable for representing to the council that defects in the construction of a property had been addressed.

The council had settled the claim against it with the owners of the property. The council claimed against Dallas for a contribution to the settlement it had reached with the owners. The claim against Dallas, the director of a development company Kingdom Residential, proceeded to a hearing in the high court.

The claim against the council and Dallas arose out of the following circumstances. Prior to the council issuing the code compliance certificate for the property, the council had identified aspects of construction which were non-compliant. The council required that these items be attended to by the then owner. Kingdom Residential and Dallas became involved in organising the remedial work for some of the items identified by the council. Work was done and Dallas wrote a letter to the council which, among other things, stated that the roof apron flashings had been attended to and that kickouts had been installed. The kickouts were not installed. Of themselves, the lack of kickouts to the apron flashings necessitated that the property be fully reclad.

The council took into account the statements in Dallas' letter as well as the council's own inspections when concluding that the building complied with the building code. The council issued a code compliance certificate. The property was then purchased by the owners. They discovered that the building was a leaky building and brought a claim against the council. One of the defects concerned the lack of kickouts to the apron flashings. The claim against Dallas was for breach of the Fair Trading Act. The council claimed that Dallas' statements in the letter about the kickouts was misleading and deceptive. In the first instance, the high court found

Dallas not liable. The council appealed

the decision to the court of appeal.

The council succeeded against Dallas in the court of appeal. There were two interesting aspects to the appeal.

Firstly, Dallas argued that because the council had inspected the property after receiving his letter advising that the kickouts to the apron flashings had been addressed, that his letter had no causative effect.

The court rejected that argument. It held that it was reasonable for the council to rely upon Dallas' representations about the kickout flashings and as a result he had contributed to the loss and damage claimed. The court found this irrespective of the fact that the council had itself inspected the property after receiving Dallas' letter.

Secondly, Dallas argued that if the lack of kickouts had caused loss, that Dallas' liability should be limited given there were other defects at the property causing weathertightness issues for which Dallas had no liability.

In respect of this issue, the court was satisfied that Dallas' liability for the losses claimed should be apportioned equally at 50% with the council. That was because the kickouts of themselves had caused the need for a full reclad. Further, it had not been proved in the evidence in the high court hearing that there were other defects that were established as having caused loss and damage for which the council was liable and for which Dallas was not liable. Dallas has sought leave to appeal to the supreme court which is yet to be determined. If leave is not granted, the court of appeal decision will stand for the proposition that it is reasonable in particular circumstances for councils to rely upon information provided to them by those involved in the construction of buildings.

Courtesy of Heaney & Partners

New Zealand Registered Architects Board: Competence Concern Advisory

A notice is being sent to the managers of consenting authorities etc. to advise of a NZRAB procedure that you may want to use where you have a concern about the overall competence of an architect.

This is different from laying a complaint.

The NZRAB is currently giving more profile to a procedure called a one-off, out-of-sequence competence review.

The NZRAB is required to review the competence and therefore the registration of all architects every five years. In addition, under law the NZRAB can require an individual architect to undertake a one-off competence review at any time, should the Board become aware of circumstances that require that action. The consequence of an unsuccessful competence review is the loss of the architect's registration.

The NZRAB website now explains to the public, and entities including consenting authorities, how they can raise with the NZRAB any concerns they may have about an architect's competence. If a competence concern is raised in this way, it is assessed and then, if warranted, it may trigger a one-off out-of-sequence competence review.

The link is https://www.nzrab.nz/c/Competence-Concern.

Whether or not an expression of a competence concern results in a one-off out-of-sequence competence review, the architect in question will be advised and will see the correspondence.

If you want more information about how and when to invoke this procedure, please contact the NZRAB:

New Zealand Registered Architects Board 04 471 1336 info@nzrab.org.nz https://www.nzrab.nz/c/ Competence-Concern

Addressing housing affordability through new housing options

By Nick Collins

New Zealand is not the only country to struggle with housing affordability. A 2014 report by the McKinsey Global Institute claims that affordable housing is a global challenge – 60 million households across the US, European Union, Japan and Australia are financially stretched by housing costs.

On the up side, the report says "Affordable housing is an overlooked opportunity for developers, investors, and financial institutions." It identifies four strategies to reduce the costs of delivering affordable housing:

- 1. Unlock land at the right location
- 2. Reduce construction costs through value engineering and industrial approaches
- 3. Increase operations and maintenance efficiency
- 4. Reduce financing costs for buyers and developers.

NEW ZEALAND'S PROGRESS

Looking at these four strategies, how does New Zealand's progress rate?

Unlocking land: The Government's Housing Accord and Special Housing Areas are a step in the right direction and there are some good examples such as the Waimahia Inlet development in Auckland which offers 3 bedroom homes from \$450k on a shared equity model on old Justice Department land. But questions remain. Is the land in the right location (close to amenities, transport hubs, jobs)? Will some SHA's deliver any housing at all or are they merely serving to drive up the value of the land?

Reducing construction costs: There is little progress on developing simple repeatable structures or economies through fabrication off-site.

Operational / maintenance efficiency:

Sadly, despite mounting evidence for savings from operational efficiency, there is little uptake of sustainability features in any homes, let alone in new affordable homes. The focus is largely on first cost rather than investments in saving significantly over the life of the building. Reducing financing costs: Financing costs continue to escalate as development timelines extend further.

WE NEED TO THINK OUTSIDE THE BOX

It's clear from reading the McKinsey report that standard approaches to affordable housing will yield only standard—and inadequate—results. It's time for New Zealand to do things differently, and there are some good examples around the world of where to start.

I saw some of these in North America in 2013 on a study tour of Victoria BC, Portland and Seattle. These cities face similar challenges to New Zealand (Auckland and Christchurch in particular) but have developed some interesting solutions to delivering affordable housing.

UNLOCKING LAND AT RIGHT LOCATION

One noticeable difference in approach was that affordability was not just measured in terms of cost and access to housing, but included cost of transport too. There is significant research demonstrating the economic and social costs to families who have long work-tohome commuting distances. This - and a commitment to affordable housing - has contributed to these cities unlocking the potential of brownfields sites. In Portland, Grays Landing was a former sawmill and barge building site, redeveloped into 600 units of affordable housing. The City of Portland is committed to affordable housing, requiring that 30% of each new development has to be affordable. The site sits right on city streetcar routes - residents can have annual streetcar passes, and the complex provides a break room for streetcar drivers. In Seattle, an abandoned school and historic building, Youngstown, is now an

All three cities recognise the lure of living in traditional neighbourhoods and have found ways to invisibly increase the density of existing neighbourhoods. Victoria has used the seismic retrofit of heritage buildings to deliver 631 additional residential apartments; for example, the New England Hotel redevelopment added 22 apartments on three upper floors and added a fifth floor, invisible from the street.

'alternative' school, and cultural arts centre

with living accommodation and work

spaces for artists.

Other mechanisms encourage density within existing suburbs through laneway houses (Vancouver, Victoria, Portland) and secondary suites (Victoria, Portland) which increase density invisibly with little change to the built footprint.

INCREASING OPERATIONAL AND MAINTENANCE EFFICIENCY

It's noticeable in these cities that quality is not compromised in delivering

affordable housing. Developments are often mixed ownership and rental, and there is little distinction between the quality of affordable rental housing and condominiums (owner occupied). Sustainable features are built in to be environmentally healthy and energy-efficient

Grays Landing's affordable housing was all built to LEED Platinum standard with solar thermal providing 60% of hot water. Ease of maintenance was a feature with durable finishes, stainless steel flashings, and brick panels over cavity construction. A green roof provides stormwater run-off control. The complex is expected to remain affordable for at least 60 years. High Point in Seattle is a master planned, mixed ownership/rental development with a total of 1600 units. Site development includes natural swales draining stormwater, and all units (affordable or not) focus on reducing costs to heat and cool, overall lower energy use, reduced water use, longer lifecycles, and low maintenance costs. Community buildings are built LEED gold standard with geothermal heating and solar PV.

REDUCING FINANCING COSTS FOR BUYERS AND DEVELOPERS

These three cities have multiple funding mechanisms for affordable housing, including public-private partnerships, tax incentives and equity schemes.

The City of Portland provided the land for Gray's Landing for \$5m. In addition, the property tax increment means valuations are frozen for 20 years, so, while real values rise, the savings become available for reinvestment in the development. For Gray's Landing, the improvement value of the glass tower blocks made a major contribution to the affordable housing (half the costs).

High Point received \$38 million of Federal funding along with Federal subsidies for rental tenants. By mixing half market sites and half affordable rental, the sites sold off to builders helped to fund the affordable rentals.

Hiawatha Lofts (Seattle) is a series of affordable units for artists on the basis that "artists bring vitality to the neighbourhood." Units are available for 40%, 50%, and 60% median income. Units are paid for with 5% - 10% private foundation money, 5% - 10% Council grants, and the rest via a small mortgage paid off by the artists as rents.

2015 McGredy Winder SOLGM Local Government Excellence Awards

The 2015 McGredy Winder SOLGM Local Government Excellence Awards® celebrate the very best in professional excellence in local government management and were open to Local Authorities and Council Controlled Organisations in New Zealand.

The 2015 Supreme Award sponsored by McGredy Winder & Co was presented to Project Helix from Selwyn District Council. Project Helix led to development of an end to end, cloud based building consenting system in partnership with the private sector.

The judges said "This tool was developed at a time of unprecedented demand and has transformed the way building consenting can be delivered. Project Helix has already demonstrated that it is applicable to the sector as a whole. The approach taken here should also serve as an example to central government regarding the sector's capacity to develop and implement solutions to a national level issue."

THE 2015 CATEGORY WINNERS WERE:

Building Organisational Capability

Auckland Council on behalf of the NEMS Steering Group - National Environmental Monitoring Standards

Joined Up Local Government

Environment Canterbury on behalf of the Combined Health and Environmental Risks Programme Control Group -

Canterbury's Waste and Environmental Management Team

Council-Community Relations

Gisborne District Council - Gigatown

Transforming Service Delivery

Selwyn District Council - Project Helix

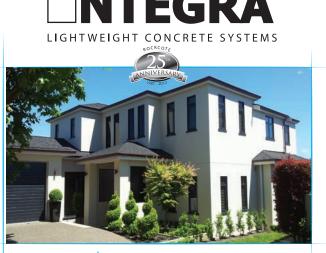
Transforming Service Delivery - Highly Commended Award

Kaipara District Council for their entry Retaining BCA Accreditation.

Brookfields Lawyers Environmental Leadership and Sustainability

Waikato Regional Council - The Tui Mine Remediation

Courtesy of New Zealand Society of Government Managers



Resene ______Construction Systems

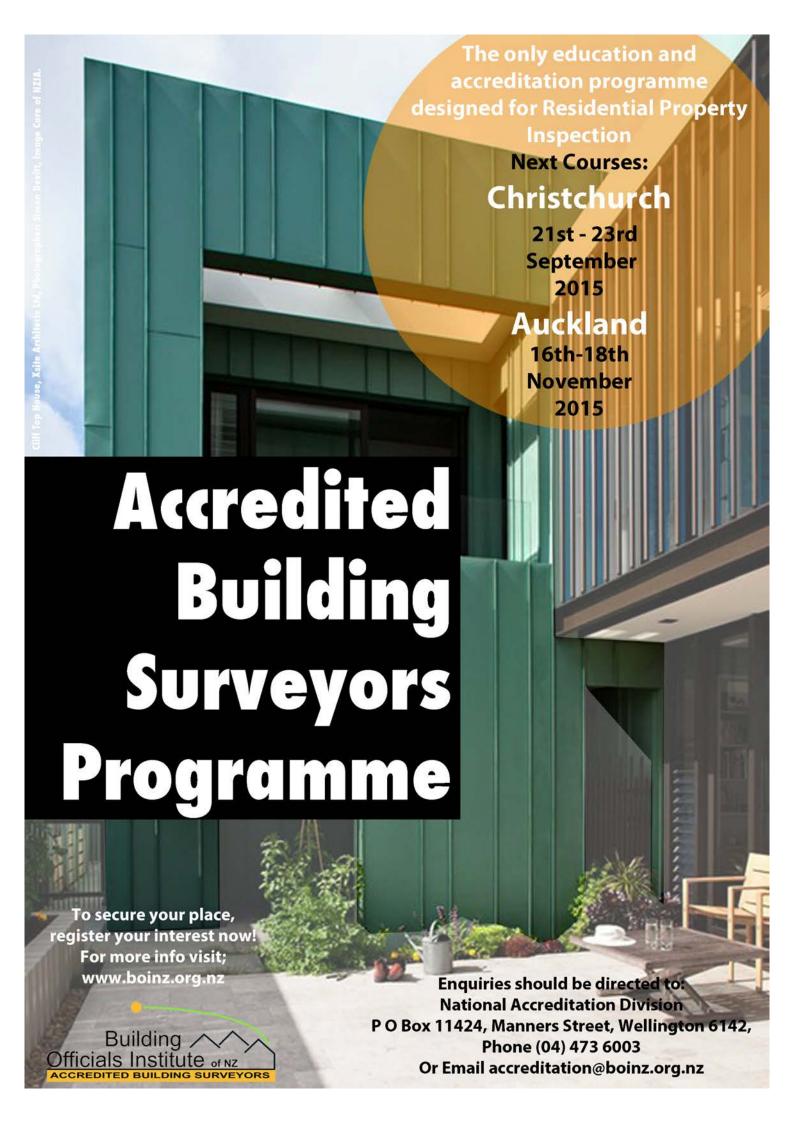
www.reseneconstruction.co.nz 0800 50 70 40

ROC(COTE | PSI

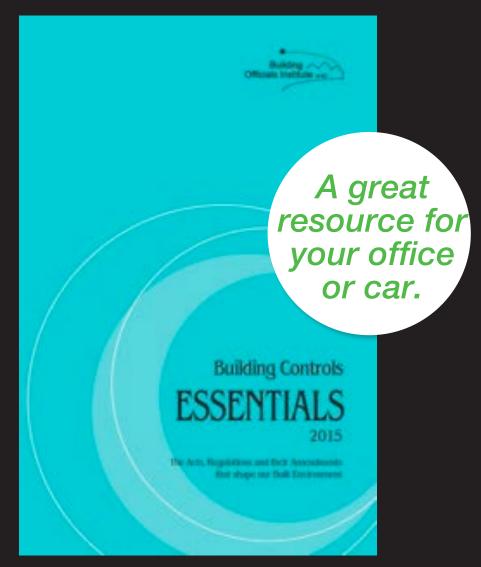
Premium Façade Systems

Resene Construction Systems have been providing advanced construction systems using Rockcote and now Plaster Systems specifically designed for the New Zealand environment for over 25 years. Our Façade Systems are some of the most efficient and complete barrier facades available, which combine our patented flashing suite, and drained cavity technology providing confidence to you and your next project.

Our Façade Systems have passed stringent BRANZ weathertight testing and can only be installed by Registered LBP professionals.



Building Controls Essentials 2015



Book Contents:

- Preface
- Building Act 2004
- Building Regulations 1992
- Building (Specified Systems, Change the Use, and Earthquake-prone Buildings)
 Regulations 2005
- Building (Accreditation of Building Consent Authorities) Regulations 2006
- Building (Residential Consumer Rights and Remedies) Regulations 2014
- Building (Earthquake-prone Buildings) Amendment Bill 2013
- Subject Index

Book Size: A5 (approx.)
Pages: 508 (approx.)

Price:

Member price \$48.30 (including GST)+ Postage Non member \$55.20 (including GST)+ Postage

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