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THE MAGAZINE OF THE BUILDING OFFICIALS' INSTITUTE OF NEW ZEALAND

SEPTEMBER 2007

Building Officials Institute of NZ

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Building Officials Institute of NZ

Introducing Derek Staines

Derek Staines

I started my Plumbing, Drainlaying and Gasfitting apprenticeship in the New Zealand Army too many years ago to rememb I spent the first 3 years of my career at the Regular Force Cadet School in Waiouru, graduated in the Corps of the Royal New Zealand Engineers and was transferred to Linton Military Camp. As I climbed onto the main trunk line express train when it stopped in Waiouru at half past dark I vowed to myself that I would never return – oh how I was wrong.

One of the major projects that the engineers were involved with was the construction and extension of an all-weather road from Waiouru, east through the Home Valley towards the Kaimanawa ranges. The road then turned north and followed the ranges until it reached the northern edge of the Army training area where it then turned west and joined onto the Paradise Valley road, which is the highest point of the Desert Road. The road is named the Argo Road.

As the road progressed we laid culverts of various size and complexity and so added the skill of "Culvertoligist" to our trade. Ten day stints under canvas in the backblocks of Waiouru were character building but the novelty soon wore off. Drainlaying in army terms is the digging of long slit trenches, some you stood in while training to be a soldier with a rifle in your hand, and others you dropped a pipe into and then in both cases you filled them back in!

I next found myself transferred back to Waiouru as the Plumbing Instructor at the Cadet school – how my words were coming back to haunt me!

Postings to Linton, Dunedin, Burnham and back to Waiouru (Again!) in various roles as the military equivalent of a Clerk of Works allowed me to gain a great deal of cross skills. In Waiouru, construction of the Warrant Officers and Sergeants mess was nearing completion and work had begun on the Officers mess. A lot of lessons learned from one job were able to be transferred to the other.

Another Army job was a civil aid project in Fiji. A dam was constructed in a valley and then a pipeline of approx. 1 km was run through the terrain down to a village to improve their water supply. Travelling in a helicopter laying across lengths of pipe which were sticking out both sides of the chopper was interesting.

The refurbishment of the NZ Embassy in Moscow brought many challenges with the temperature down to -45oC on New Year's Day which the locals said was the coldest since 1945 when the Germans were attacking Moscow. The city was heated by 7 steam generating plants but 5 were broken or out of commission so we got warm water instead of steam. I had to drain the heating system daily, rerun pipe work and then fill the system back up and then try to heat the building again.

Leaving the Army into "Civvy" street I joined Hutt (Lower Hutt) City Council as Plumbing and Drainage Manager at a time when with the advent of the Building Code the clause about plumbing and drainage having to be inspected by Licensed Plumbers and Drainlayers was removed from the Plumbers, Drainlayers and Gasfitters Act. This was the start of cross skilling inspectors.

Several job shifts followed, notably working for a large fire protection company with Nick McKinstry developing the IQP side of the business on Means of Escape, Signs and the other Building Warrant of Fitness requirements for the fire company's clients.

Then at The Open Polytechnic of New Zealand as the Course Manager for Plumbing, Gasfitting and Drainlaying my job involved keeping up with changes in Standards, legislation, writing course material and assisting students and employers. I can attest that many of the mothers of trainees showed a keen interest in their sons' trade knowledge and could ably discuss hot water systems and other related topics. It is a pity some of them were not in apprenticeships as it may have helped to reduce the shortages being currently experienced!

As Plumbing Manager at BRANZ I was involved with rewriting the BRANZ Plumbing and Drainage Guide and while there I classed myself as a "legalised vandal" as with any materials testing clients pay you money to burn, bend or break their product to ensure it complies with the relevant Standards.

Now with Wellington City Council as a Building Officer I love the daily cut and thrust discussing relevant issues with a whole spectrum of people ranging from members of the public through to architects and engineers. For a number of years I have been involved with Standards New Zealand and I am serving on a number of Joint Standards Committees covering both New Zealand and Australian plumbing and drainage codes. So, I ask all members, if you have a question or a suggestion drop me a line or give me a call, every comment helps.

The current process for accreditation of the Council as a BCA, coupled with new licensing arrangements, is both interesting and frustrating with a few "minties" moments along the way. We need not loose sight of the fact that all our customers are interested in, is that their consent is processed on time and does not cost the earth.

The five Territorial Authorities in the Wellington region have formed a partnership and are formulating the documentation to satisfy the requirements of the DBH and IANZ, who are carrying out the audits for accreditation. This process hopefully should eventually trickle down to grass roots level and help reduce the general comment being received by building officials on site that "Wellington are the only ones asking for this!!"

Development in Wellington is continuingwith apartment blocks increasing around the city. The latest development called Watermark has sold a 746m2 apartment for around $11 million (THINK, 1 July 2007, www.thebuildingintelligencegroup.co.nz). The waterfront is being redeveloped with a "green" office block for a power company nearing completion, and two other buildings with a mix of office spaces, shops and apartments under development. A new indoor stadium has been approved for construction which will be sited at Kilbirnie Park near the airport.

The Wellington Branch continues to try to grow the attendance of the members at meetings with site visits to buildings and industries of note and interest being organised. Given the size of the region it is difficult for some members to attend, and coupled with the workloads of some authorities and the lack of staff, attendance at some meetings is disappointing.

I was a member of the Plumbing and Drainage Inspectors Institute and upon amalgamation joined BOINZ. I have served on the Branch Committee for a number of years and held a numbers of positions. I was surprised and humbled to be nominated and awarded the appointment of BOINZ Ambassador for which I thank the Institute. I have been elected by the Wellington Branch to the BOINZ Board and I aim to further the objectives of the Institute.

Aims and dreams?

To try and assist in the production of practical guidance documentation for the use of all Building Officials – recognise that we are all different but we need to not differ in our answers and interpretations.

To try and eliminate non-essential paperwork. Short clear instructions and where necessary diagrams that are easy to follow.

Forward the aims of the Institute.

Cheers, Derek Staines, aka Pinky The Plumber

Colin Clench

My first experience in the building profession was helping out during school holidays, cleaning up building sites and loading materials on to sites, digging foundations, sweeping the floor, learning to make frames up, cut braces in and nailing up dwangs and dog leg braces.

Being born into a family involved in the construction industry and introduced to the building profession at an early age it is no wonder it became a life-long passion for me.

Through my apprenticeship and early years with the family firm, I learned a varied array of building construction methods, giving me a good grounding in design and build, alterations, additions, renovations, light commercial and heavy commercial including joinery, plumbing and painting.

Overseas, I learned the skills of brick and blocklaying, which led to being involved in high rise developments. Back from the OE and keen to prove myself, I took up project management, becoming more involved with architects, councils and clients, honing my customer service skills, and setting up my own business.

With exposure to the building consent process and a passion to make sure that construction projects complied with council requirements, my interest grew in how building consents were processed.

After a stint at the Victoria University School of Architecture in the area of project management, I took up the challenge to become involved in the building consents process, at Hutt City Council starting as an approvals officer in 2001, and with the help and support through training opportunities provided by Hutt City Council, including an opportunity to study fire design back at Victoria University, became Team Leader Building Consents. More recently, as part of the BCA accreditation process, I was seconded for 8 months as Special Projects and Quality Control Manager. I must say Hutt City Council is a great place to live, work and play.

Hutt City Council's early involvement with the ISO 9001 process, which documents work instructions and forms that we use as part of our day to day process, makes it an easy process for learning the new skills of a processing officer. Because of my involvement in the ISO process, it has been advantageous for the BCA accreditation, having many requirements already in place.

It has also been a privilege to work with a knowledgeable group of people from other councils in the Wellington region, being part of one of the first cluster groups using Hutt City Council's knowledge of the ISO 9001 process, as a guide to making up a regional agreed process and procedure, for the processing and inspection of building consents. This has helped in cross pollinating our processes and procedures as a group, assuring home owners a more consistent approach for processing building consents across our region.

I am also involved with the Senior Building Officials Group for the Wellington region, which has been in place for a number of years now. This is an excellent group of people representing councils from all over our region, made up of senior staff from the consents and inspections areas, with an open invitation for anyone who wants to contribute positively to making the building consent process easier. The group meets bi-monthly to discuss topical issues, such as weathertightness and sustainability that affect us all on day to day issues, with input from BRANZ, DBH, New Zealand Standards, Risk Pool, New Zealand Fire Service, BOINZ and IQPs.

I am looking forward to what the future may bring to this industry as a whole. I think BOINZ is having a positive contribution for the betterment of our profession. We, as members, are lucky to have such a fantastic team who are leading the way to our future. I have always found it an exciting industry to be involved with, and being associated with such a great bunch of people, there is never a dull moment.

Happy Consenting! Colin

Colin Clench

Building Products & Systems:
Confirming Compliance With The New Zealand Building Code

INTRODUCTION

The objective of this project is to gain consensus for a workable strategy from the building and construction sector towards the implementation of a structured process the sector can use to support decision-making around building product/systems compliance in relation to a building consent's compliance with the New Zealand Building Code (the Code).

This project aligns with the Government's objectives under the Quality Regulation Review being led by the Minister of Commerce. As a part of that review the Sector identified a need for greater consistency in decision making under the Building Act, the development of best practice processes and the sharing of that best practice.

Following consultation and discussion within the building sector, the proposed outcome is that key parties will sign a memorandum confirming their organisation's support for the further development and implementation of a national process.

KEY PRINCIPLES:

BCAs:

- A simple, robust and effective way of being satisfied a proposed product or system meets the building code's requirements.

Manufacturers, importers, installers and designers:

- A clear understanding of the information required in order for BCA to approve the use of a product or system as part of a building consent.
- That product approval processes should be open and transparent.
- That costs associated with product approval processes should be kept at minimum levels consistent with a robust system applied nation-wide and that, first and foremost, has a public good objective.
- Consistency in the way products/systems are assessed for compliance with the Code, in order for the product/system to be accepted as part of a building consent application.
- Flexibility in the way products can confirm compliance in order not to stifle innovation.

The Department of Building and Housing:

- Supports collaborative initiatives from within the sector to complement the product certification scheme being developed under the Building Act 2004 and to build sector capability that will contribute to the people of New Zealand having access to quality homes and buildings that meet their needs, reflect our environment and contribute a sustainable New Zealand.

Proposed Actions:

On agreement from the sector, the following steps or tasks are proposed to be undertaken in a collaborative way:

1. Develop a "Plain English" guide for consent applicants, and the building and construction sector, that will outline the purpose for and process for a BCA to determine if it is satisfied a proposed product/system will meet the requirements of the Code.
2. Develop a guide for BCA's that will outline a standard process for determining how they are satisfied a product or system will meet the Code's requirements. (Generic Product Assessment)
3. Acknowledgement by the building and construction sector that, unless a product or system can be demonstrated by the applicant to meet the Building Code's requirements (when applicable), it will not be considered for a building consent.
4. Given the large number of building products available, there will need to be consensus on a list of key building product types and systems that will require specific confirmation of compliance by the applicant, in order for a BCA to consider and accept their use as part of a building consent. This could include the external building envelope, and internal membranes to wet areas. Manufacturers, suppliers and designers are responsible for confirming that a proposed product or building system is "fit to be accepted" as meeting the requirements of the Building Code.
5. As manufacturers and suppliers cannot guarantee the installation or application of their products and systems in all circumstances there should be development of a suitable QA process to ensure that systems have been installed correctly. This QA process will also include acknowledgement by the industry that only "approved applicators" of key building components are allowed to carry out installation or application work that requires a building consent. Building and construction sector agreement on the role and responsibilities of "approved applicators" in ensuring approved products will meet the Code's requirements. This will include the need for ongoing training and development in order for them to remain classified as approved applicators.
6. Create and maintain a national library/data base for products and systems that have been accepted by BCA's as meeting the requirements of the Code.
7. Development of a building and construction sector supported strategy for raising the public's awareness about the importance of maintaining their properties. This will include an outline of how this maintenance allows a building to continue to meet the requirements of the Building Code.
8. Development of a template or standard for a schedule of maintenance that can be attached to a building on completion of building work. It is suggested it is limited to key elements of the building envelope. It will include data on the products used, finished colour, maintenance requirements, name of manufacturer and installer.

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9. Development of a guidance document for applicants on the assessment of products for building consents where the products have been assessed against international standards not currently referenced within the Department of Building and Housing's "guidance documents."
10. Establishment of a panel to assess the competency of persons who wish to be classified as an expert within a chosen field in order for the expert to provide an independent technical assessment of a product or building system. It will be accepted an expert in one field will not necessarily equate to an equivalent expertise in another branch of the same field.
11. As part of an improved QA process, Codes of Practice and Guidance are developed and implemented for the use and installation of key building systems. An example of a key building system may be liquid membrane systems (interior and exterior).

It is understood that some of the above measures will take time to develop and implement. It is also acknowledged there may be additional costs associated with the above recommendations.

It is also noted that some of the above points are already being developed and implemented by various organisations. Therefore a stock taking exercise could be the first step in order to ensure the industry is taking a collaborative approach to the development of the overall process.

Following confirmation of principles and actions, the following steps are required in order to progress this matter:

- Project management timeline including key milestones for sign-off
- Evaluation of the best agency to undertake some of the points (role)
- Preparation of a business case that includes cost-benefit analysis
- Establishment of a consultation process and marketing plan
- Funding
- Arrangements for governance

Key stakeholders:

Building Officials Institute of NZ

Local Government New Zealand

Registered Master Builders Federation

Building Industry Federation

Construction Industry Council

Certified Builders of New Zealand

Department of Building and Housing

This document is open for consultation. All submissions can be made to Building Officials Institute of NZ (accepting submissions on behalf of the key stakeholders).

Submissions close on 17th August 2007 but late submissions from those receiving the September issue of Straight Up will be considered.

Further information can be obtained from: **www.boinz.org.nz or www.bifnz.org.nz**

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Report on the review/development process

The review of the National Diploma in Compliance and Regulatory Control with strands in Building Inspection, and Plumbing and Drainlaying Inspection, and an optional strand in Specialist Inspection [Ref: 0421], registered in March 2003, was initiated in August 2006.

A Sector Steering Committee was established comprising representatives from the Building Officials Institute of New Zealand (BOINZ), the Department of Building and Housing (DBH), the Society of Local Government Managers (SoLGM) and Local Government New Zealand (LGNZ). The Department of Building and Housing was the funding body, the Building Officials Institute of New Zealand was the lead organisation and also provided administrative and logistical support to Williams Unlimited Ltd, the company contracted to facilitate the review and development process.

The Sector Steering Committee commissioned a high level scoping project to establish whether or not the existing qualification was not fit for purpose and if not to propose a new qualification/s structure. The project began with a review of international benchmarks and discussions with sector stakeholders. The outcomes of this phase were presented to a Sector Working Group which met on the 13th December 2006 with the following individuals present: Maurice Hinton, Compass Building Consultants Auckland; Phil Saunders, Hamilton City Council; Richard Toner, Wellington City Council; Bob De Leur, Auckland City Council; Robert Wright, Timaru District Council; Andrew Minturn, Department of Building and Housing; Beryl Oldham, North Shore City Council; John Buchan, Christchurch City Council; Jeff Farrell, Whakatane District Council; and Rosemary Hazelwood, Building Networks Wellington.

The Sector Working Group proposed a two level national diploma format to replace the National Diploma in Compliance and Regulatory Control with strands in Building Inspection, and Plumbing and Drainlaying Inspection, and an optional strand in Specialist Inspection [Ref: 0421]. The structure followed the small, medium and large building definitions used in the Architectural Technology, Quantity Surveying and Construction Management qualifications which share common areas of knowledge.

The sector was then consulted regarding the Sector Working Group proposal. Two major communication components were used:

1. An initial emailed notification advising the existence and purpose of the request to participate in consultation followed up by a second reminder/request for feedback at the end of the consultation period. The emails were supported by the development and hosting of information on the BOINZ website http://www.boinz.org.nz/qualification-consultation.htm
2. The presentation and dissemination of information at the BOINZ conference.

There was strong interest in the web based information with 1220 hits on the BOINZ website and 94 copies of the feedback documents downloaded. The BOINZ conference with 350 delegates and over 480 registrants presented an ideal opportunity for a face-to-face presentation and direct feedback. In total 150 copies of the feedback forms were distributed at the event.

A Sector Expert Panel was convened and met in Wellington on the 26th and 27th April 2007 to review industry feedback on the draft competency matrix and review/develop the detailed administrative competencies (Communication Skills and Quality Management) required for the Small Buildings Qualification. This was followed by a workshop on legislation and building science on the 10th and 11th May 2007 with a final workshop focusing on site inspection and plan approval processes held on the 17th and 18th May 2007.

Emailed notification of the draft package resulting from the Sector Expert Panels work was supported by detailed information, documentation, questions and answers hosted on the BOINZ web site (1915 hits during the consultation phase) and presented to the sector at seven regional workshops. In total 263 people representing 54 organisations attended the seven workshops resulting in over 30 responses being received in hard copy or via the web site. The vast majority of responses were in favour of the package as presented. Following the consultation phase the package was endorsed by the Sector Expert Panel by email between the 12th and 25th July and the Sector Steering Group on the 25th July 2007. The endorsed package has been delivered to the LGITO for submission to NZQA.

Funding is being sought to commission the 'medium and large' building qualification package and its component unit standards. The gap resulting from the lack of 'medium and large' building coverage remains a significant issue with Building Control Surveyors being required to hold an approved qualification or comparable international alternative by 2013.

MILESTONE 3 – SECTOR CONSULTATION – PROJECT REPORT
DEVELOPMENT OF NATIONAL QUALIFICATIONS FOR BUILDING OFFICIALS
DATE: THURSDAY 11TH JULY 2007

Milestone 3 Sector Consultation activity:

This report covers the sector consultation on draft unit standards, assessment documents and qualification.

There have been two major components of the second consultation round:

1. The development and hosting of information on the BOINZ website supported by emailed notification and publications advising the existence, purpose and request to participate in consultation.
2. The presentation and dissemination of information at seven regional workshops.

Web Consultation

http://www.boinz.org.nz/qualification-consultation.htm

As at the 6th July 2007 there have been 1915 hits on the main consultation page, 122 on the structure page and 107 on the scenarios page.

15 electronic responses were received via the web feedback page.

Regional Meetings

Seven workshops were arranged to present the sector with the final recommendations of qualification title, structure, requirements and supporting assessment scenarios. In total 263 people representing 54 organisations (including 36 Territorial Authorities) attended the workshops at the following locations Auckland (125), Matamata (24), Napier (22), Wanganui (17), Wellington (19), Christchurch (40) and Dunedin (16).

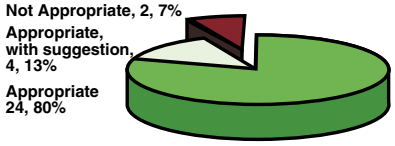
The main themes came out of the meeting were: How are existing skills and knowledge going to be recognised within the implementation system; How much will it cost; and When will the small and medium/large qualifications be available.

19 written responses were received following the regional meetings.

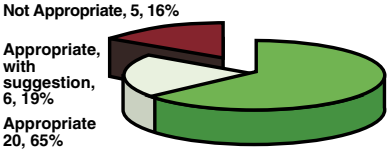
Milestone 3 Sector Consultation Feedback summary:

Please note the percentages used in the graphs below relate to the number of responses made to that question. The actual number of respondents for each question is displayed in brackets following the heading.

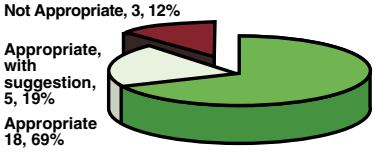
Title (30)
93 % Overall Approval



Content & Requirements (31)
84 % Overall Approval



Assessment Scenarios (26)
88 % Overall Approval



Two narrative responses and 32 questionnaires covering 22 organisations have been received. The recommended title, structure, requirements and supporting documents have generally been well received and there has been widespread approval of the documents as presented. There is a strong interest in how the qualifications will be assessed, especially how existing skills and knowledge will be recognised.

The recommended title attracted little comment at the workshops and has been well received.

Further analysis of the reasons why five individuals did not consider the qualification structure and requirements appropriate revealed the following themes: plumbing inspectors needing to multi skill to obtain the qualification; misunderstanding of how content affects delivery/assessment; the need or appropriateness of the dual design/compliance pathways.

The comments made by those who considered the scenarios inappropriate would suggest clarification and/or additional information in the final presentation of the documents would address the concerns/suggestions made.

Recommendation

Subject to confirmation of 'expert industry panel' endorsement, the steering committee endorse the submission of the new and reviewed unit standards and qualification documents to NZQA for registration via the Local Government ITO.

Issue

The lack of unit standards and qualifications for Medium/Large buildings was raised as an issue at all meetings. The gap in Medium/Large building qualification coverage was identified as a significant risk to implementation as many of those attending the workshops were employed in this segment of the industry.

Palmerston North's accreditation - a milestone in Building Act reforms

The accreditation in July of Palmerston North City Council as a building consent authority – the first council to be accredited – was a milestone in the implementation of the building consent authority scheme, with Building and Construction Minister Hon Clayton Cosgrove taking the opportunity to celebrate the occasion with the council.

Another milestone in the Building Act 2004 reforms will occur next month (October), when the licensed building practitioners scheme begins. Applications will open for the Design, Site and Carpentry licence classes and licences, with assessments – and issuing of licences – starting on 1 November 2007.

Applauding Palmerston North City Council's achievement, Mr Cosgrove said it "shows you have the systems, processes and procedures in place to play your part in ensuring building are built right first time".

Getting it right first time is at the heart of the Building Act reforms and councils are the consumer's last line of defence for ensuring that homes and other buildings are built right.

Palmerston North City Council led the way in the quest for accreditation – it was the first to apply and, with only seven, relatively minor corrective actions to be addressed, the first to succeed. Its next, and final step, is to be registered. Regulations covering the standards and criteria for registration are being developed but registration will, once councils are accredited, be virtually a rubber-stamp process.

FIRST ACCREDITATION: Building and Construction Minister Hon Clayton Cosgrove presents Palmerston North City Council Development Services Manager Shayne Harris with the council's certificate of accreditation as a building consent authority. Looking on are Deputy Mayor John Hornblow and IANZ Chairman Robin Pratt.

Some councils, however, are finding it challenging to meet accreditation requirements. Seventy had applied by the end of July, with IANZ at full flight in the different stages of assessing them for accreditation. Three private organisations contracted to councils had also applied for accreditation.

In recent months the Department of Building and Housing has been focusing on councils that have been finding the going tough, with both senior management and case advisors working with them on a one-to-one basis to find out where they need help and how best it might be provided. This reflects the Department's commitment to the successful implementation of a scheme that is pivotal to the overall success of the Building Act reforms, given the key role councils play in the building process.

The Building Code review – recommendations on which are due to be made to the Government in November 2007 – and the licensed building practitioners scheme are among the other major reforms.

The Department has undertaken an extensive programme of briefings around the country explaining licensing to builders and designers, with an estimated 10,000 industry professionals attending. More briefings are being scheduled.

The next step is the publication and widespread distribution of a booklet explaining application procedures and the requirements for each of the licence classes. The booklet will include a post-paid card for requesting application packs, which will be available from 1 October.

Trained assessors with industry experience will begin processing applications on 1 November. In most cases, licences will be granted on the basis of evidence of experience and the advice of referees, though more scrutiny will be required for the Design licences. Mandatory aspects of licensing are intended to come into effect in late 2010.

Further information on Building reforms is available on the Department's website www.dbh.govt.nz

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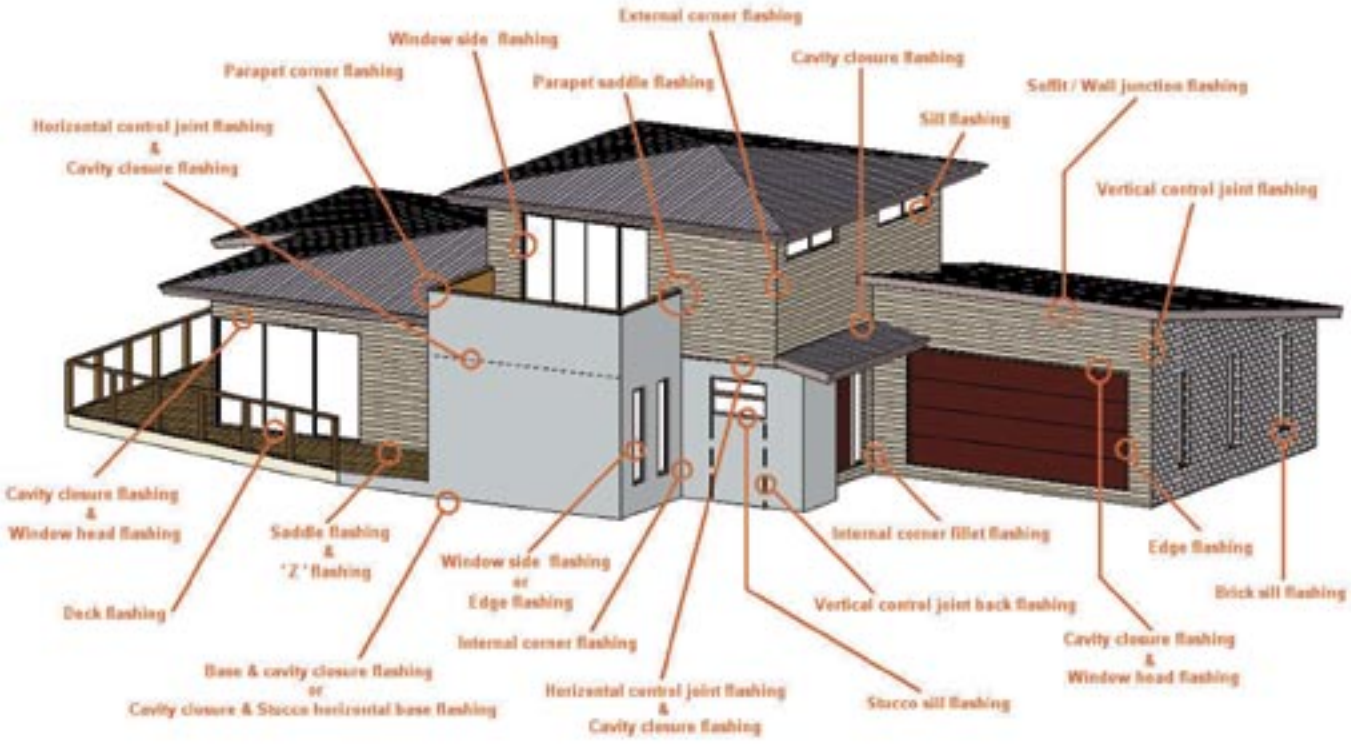

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Developing competency matrices at North Shore City Council

By Beryl Oldham, People Capability Manager

North Shore City Council has been developing a number of competency matrices for different professions across Council. The matrices are based on levels of competence as demonstrated in the application of skills and knowledge. There is no set number of levels at the outset – these become apparent during analysis.

The matrices are developmental as each level identifies, in behavioural terms, the requirements for progression to the next level – they target training and development requirements and identify competency requirements in a transparent manner. The idea is to identify the different requirements at different levels of competency. For example, what performance standards would you expect to see from someone new to the role and/or organisation? What do competent and expert performance look like, and are there different levels in between?

Matrices include both "hard" technical/professional competencies and "soft" generic interpersonal and self-leadership competencies – both are considered important for overall performance. They are designed with the view that all competencies and competency behaviours need to be demonstrated at each level before staff can progress to the next level. A checklist is then created for each level (or column) in the matrix for use in self and external assessments, as well as for peer review. Each level builds on the previous level; for example, to be operating at Level 3 one must also be able to demonstrate the competency behaviours required at the previous two levels. The following table is an excerpt from a building consents processing matrix and provides an example of what a matrix looks like:

	Level 1	Level 2	Level 3	Level 4	Level 5
Technical Skills	Under supervision, processes plans in accordance with the Building Code for:	Without supervision, processes plans in accordance with the Building Code for:	Effectively trains and coaches others in Category 1 buildings specifications	Effectively trains and coaches others in Category 1 and 2 buildings specifications	Demonstrates the ability to analyse and assess information, plans and highly complex designs in accordance with building code guidelines
	Ancillary buildings associated with residential properties E.g., pergolas, gazebos, garden sheds, pool changing rooms, etc (B1-2, C1, C4, D1, E1-3, F2, F4, G1, G4-6, G1, G9)	All category 1 buildings. (B1-2, C1, C4, D1, E1-3, F2, F4, F5, F7, G1 -6, G9-13, H1)	Without supervision, processes plans in accordance with the Building Code for: All category 1 and 2 buildings (B1-2, C1, C4, D1, E1-3, F2, F4, F5, F7, G1 -6, G9-13, H1)	Identifies and/or investigates problems / potential problems discovered in all building categories	Without supervision, checks buildings for compliance with the building consent documents and the Building Code for: Buildings (All) Alternate solutions (All)

SITESAFE
- DISC TO INKSPOT??

For building officers, a five level matrix is being used. Five levels were identified as necessary to reflect the different competency requirements based on three building categories overlaid with the requirements of different levels to reflect "competent under supervision", "competent without supervision", and "competent to train". Different versions of the matrices have been developed for Building Consents and Inspections Officers, and Plumbing & Drainage specialists. Building officers are starting their self-assessments now and the matrices should prove valuable tools in assessing the competency of staff for building accreditation, career development, and training and development purposes.

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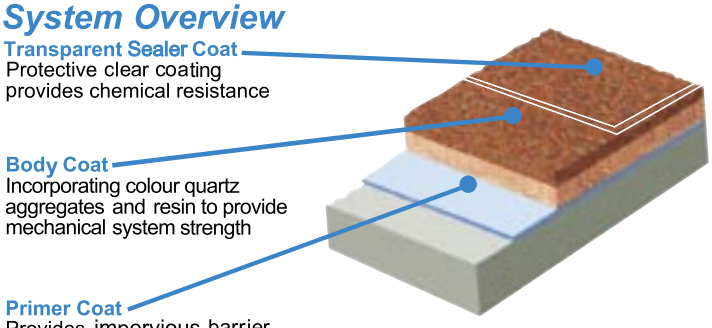

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An end to the "House of Horrors"

New initiative to boost confidence of home buyers and sellers

The new owner of this property had a pre purchase check undertaken by a so- called "expert" but, not long after purchasing the property, started noticing the tell tale signs that something was wrong - the damp and musty odours. Further investigation of the "expert" who undertook the pre purchase check revealed that he didn't even use a moisture meter.

The ongoing saga for this homeowner is the case will end up in court causing them enormous grief and the outlay of huge expense to rectify the problem. And the reality is, if the report they commissioned had been comprehensive, they would never have purchased the property.

To provide an answer to this type of challenge, the Building Officials Institute of New Zealand and a special interest group consisting of inspection and surveying industry professionals have launched an initiative designed to protect home buyers and sellers through a programme of accrediting building surveyors.

Building Officials Institute of NZ
ACCREDITED BUILDING SURVEYORS

Accredited surveyors will need to comply with the New Zealand Property Inspection standards and stringent application accreditation criteria that include a code of ethics, while the minimum level of qualification for them to be considered for accreditation will be NZ Trade Certificate or National Certificate in Carpentry.

While there has been a lot of discussion on this topic, the Institute and the industry special interest group have been working solidly for several months to create a robust process and infrastructure to support the new accreditation programme". The programme will undertake assessment, training and development for the profession including auditing.

The accreditation process will be a structured method for evaluating the competency of building surveyors to undertake pre-purchase and pre-sale surveys, safe and sanitary reports, investigation inspections, quality assurance inspections, council building record inspections, maintenance inspections, and sampling of lead and asbestos.

The programme will also benefit the individual who is accredited by this scheme as accreditation is the commencement point of a Quality Assurance programme. This establishes and demonstrates that the accredited individual has the knowledge, ethics and experience to set them apart within the Building Surveyor sector. They will carry an accreditation card to demonstrate their commitment to the highest standard of work ethic and a dedication to professional improvement that will ultimately lift the profile and image of building surveyors in New Zealand.

The accreditation process will be managed by the Building Surveyors Accreditation Division (also referred to as the National Accreditation Division) of the Building Officials Institute of New Zealand and is formal industry recognition of the professional ability, education and standard of competence required to undertake building survey inspections. To become accredited, the individual will have undergone a stringent assessment procedure as set out in the programme.

For the purposes of clarification on who is eligible for this programme, a Building Surveyor is someone who carries out:

- Pre purchase inspections
- Safe and sanitary reports / Unauthorised works reports
- Problem solving and advice
- Investigation inspections
- Quality assurance Inspections
- Council building record inspections
- Maintenance inspections
- Asbestos sampling
- Lead sampling

In time the accreditation programme will weed out individuals and companies within the industry who do not meet the required level of competency.

Lumley General Insurance (N.Z.) Limited has lent support to the initiative by providing comprehensive insurance cover to accredited professionals. Support has also been signaled by the finance sector.

Similar levels of accreditation and certification have been undertaken successfully in other countries including Great Britain and the USA.

This is an exciting initiative for improvement in the industry. The group is to be congratulated on their positive moves to achieve a higher standard of professionalism and service which will result in another measure of protection for the consumer.

The accreditation process is being piloted in Auckland, Hamilton, Wellington and Nelson. Applications must be received on the approved forms available from the National Accreditation Division, Building Officials Institute of New Zealand. These will also be available on-line by the end of July 2007 from the Institute's website - www.boinz.org.nz/surveyors.

The Institute is advocating that, in the future, every house sold in New Zealand should be required to have a home information pack that contains:

- Pre-sale survey to New Zealand property inspection standards;
- Terms of sale;
- Evidence of title;
- Standard searches;
- Planning consents and building control certificates;
- Land Information Memorandum (LIM);
- Warranties and guarantee and (in future) an Energy Efficiency Assessment.

This type of requirement should be the minimum information available to someone who is purchasing a property.

All enquiries concerning Accredited Building Surveyors and Institute activities should be directed to
The Building Officials Institute of New Zealand,
PO Box 11 424, Manners Street, Wellington
Phone 04 473 6002

Len Clapham, chief executive
Phone 04 473 6006

Full details of the application process are available on the Building Officials Institute's website – **www.boinz.org.nz**

Raising our profile and changing our infrastructure

How New Zealand has changed since the dollar was floated and released from the shackles of "being weighted against a basket of other currencies" 20 years ago. Today, a highly valued dollar and high interest rates are attracting overseas investment and this is making headline news.

The Reserve Bank has intervened on several occasions citing property speculation as a cause and has hiked up interest rates (thus attracting overseas investors cashing in on the high interest rates) and even bought the currency to offset market speculation but with little effect. The Reserve Bank may be in denial but the fact is high prices for exports of milk or "white gold" (as reported on Radio NZ National in July) are contributing to raising New Zealand's profile overseas and keeping the value of the dollar high – a windfall to us as the USA moves away from this market into using land to manufacture biofuels. Such has been the interest and level of comment on the dollar and interest rates that one online Yahoo readers' poll asked "Do you want the dollar to drop?" (29 July). It's just not that simple. Overseas travellers might say no but exporters might say yes. The dollar did drop slightly today in response to a fall in the New York stock exchange due to a home mortgage borrowing crisis in the USA and because of the "curry trade" where investors borrow money at cheap rates in Japan and reinvest it at higher rates elsewhere, such as New Zealand at present (Radio NZ Checkpoint, 27 July).

One wonders why it has taken so long for the dollar to do what was feared and legislated against so long ago. In July *The Dominion Post* headline "NZ dollar one of the highest valued currencies in the world" might also have said the same about our interest rates. In those days our exporters didn't need to worry about the value of the dollar going too high and reducing their margins as they were protected to some degree by subsidies. Import controls kept the price of goods high and out of reach for many. These controls were also removed (around the same time as the currency was floated) and as the dollar gained in value products could be imported more cheaply. This month the highest value of the dollar ever recorded coincided with the Government's annual Budget which encouraged us to save (join KiwiSaver) at what may arguably be the best time to buy goods! Can importers afford to borrow money to buy products at the current high rates of interest? Their borrowing adds to the high cost of our internal debt – the difference between what we earn and owe.

So what does all this mean for the construction industry? It will be interesting to see if the high interest rates increase the cost per metre in construction. *The Dominion Post* (30 July) reported that submissions to a parliamentary enquiry into monetary policy and the finance and expenditure committee are urging the Government to have another look at laws constraining the supply of land for houses. Lack of appropriated zoned land and tight Resource Management restrictions are cited for hindering the availability of land for residential buildings. The Institute of Chartered Accountants has called for a review of these constraints and has questioned whether Building Act changes are pushing up house prices. ASB attributes this to increases in compliance costs of building houses and says restrictions on urban sprawl in areas experiencing population growth would serve only to drive urban land prices higher.

Construction has been booming nationwide for the past decade and with our higher profile, the need for a workforce skilled in new technology, and population trends, it is likely that more people will settle here, and that demand for construction and employment in the industry will continue to rise placing more demands on building controls staff. Recruitment and retention to cope with demands in this area is already a major issue, so much so that building controls has been included on the Immediate Skills Shortages List by the Department of Labour. We feature information provided by the Department about this in their article below.

As for the dollar, like the construction industry I'm picking that it will remain strong reflecting the fact that New Zealand has grown out of the doldrums (even though we didn't bring home the Auld Mug – this time!).

AP Roover
SU Inspection

Coping with demand: building controls staffing shortages - getting staff where and when they are needed

By Lesley Haines, Group Manager Policy, Department of Labour

WHAT IS A SKILL SHORTAGE?

A skill shortage exists when a lack of skilled labour is constraining the expansion of an organisation or business at the going market wage. A skill shortage is a mismatch between the supply of people with particular skills and the demand for people with those skills. "Skill shortages" is a catch-all term used to describe a range of situations in which an employer finds it difficult to find an appropriately skilled person.

HOW DOES THE DEPARTMENT OF LABOUR MONITOR SKILL SHORTAGES?

The Department of Labour regularly monitors skill shortages through the Job Vacancy Monitoring Programme. This programme was introduced as one of the initiatives under the Government's 2002 Skills Action Plan. To identify which occupations are currently in shortage, the Department of Labour conducts the annual Survey of Employers who have Recently Advertised (SERA).

The scope of SERA 2006 was expanded from that of previous surveys to enable information to be collected on skill and labour shortages across all major occupational groups. Previously, information was collected only for professionals, technicians and associate professionals, and trades workers. In assessing skill shortages, the Department of Labour uses a mix of indicators that both directly and indirectly measure shortages, as well as measure the supply and demand forces that contribute to shortage. All these measures contribute to an understanding of skill shortages in particular occupations.

HOW ARE THE DEPARTMENT'S SKILL SHORTAGE LISTS DEVELOPED?

The Department maintains occupational skill shortages lists which it reviews and updates twice a year. During this review submissions are sought from industry groups who are experiencing skill shortages. They are asked to outline the nature and extent of the shortage.

The industry must also provide a range of evidence to prove that they have experienced difficulty recruiting New Zealand staff. It must be demonstrated that difficulties in finding suitable workers are not a result of recruitment or retention issues. The review therefore incorporates consideration of the need to protect employment opportunities for New Zealanders. They must also:

- Estimate the number of apprentices and trainees expected to join the industry
- Forecast the growth of the industry
- Prove that initiatives to recruit New Zealand staff have been put in place by industry and employers
- Outline the qualifications and skills needed for the occupation
- Provide any other information that may influence the shortage in the future.

The Department of Labour also uses its own data from the SERA and from research into regional labour market monitoring reports. The numbers of temporary and residence permits issued from individual occupations are also considered.

WHO IS CONSULTED?

To verify this information, the Department of Labour consults with both industry and employer groups and other government agencies. These agencies include the Tertiary Education Commission and the Ministry of Social Development.

Some or all of the following organisations are generally consulted on changes to the occupational skill shortages list:

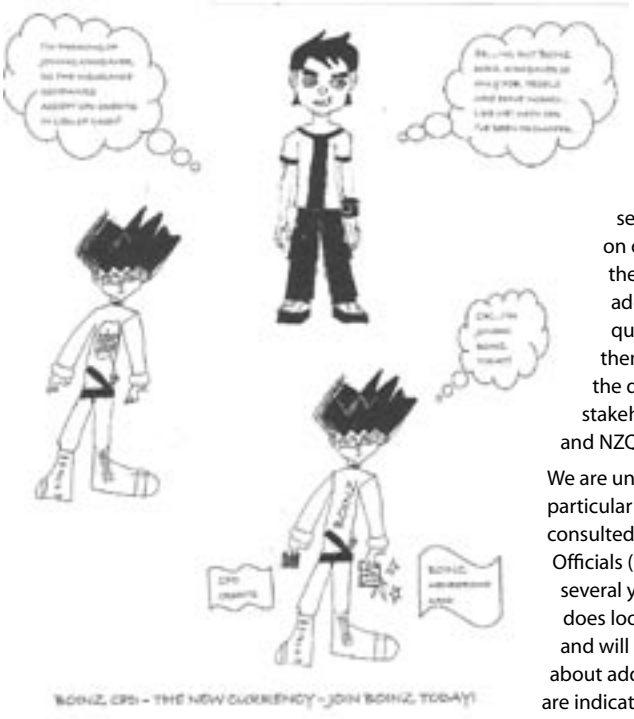
- Industry Training Organisations
- Industry bodies or associations
- Industry Training Federation
- Employers
- Employment agencies
- Government agencies
  - Ministry of Agriculture and Forestry
  - Ministry of Social Development (Work and Income, e.g., Work Brokers Survey)
  - Tertiary Education Commission
  - District Health Boards
  - New Zealand Trade and Enterprise
- New Zealand Rural GP Network
- Northern Rural General practice consortium
- Council of Trade Unions

WHAT ARE THE OCCUPATIONAL SKILLS SHORTAGES LISTS?

The lists provide migrants with the chance to see where opportunities for work lie in New Zealand.

The Immediate Skills Shortage List (ISSL) is based on regional, usually shorter term occupation shortages and is designed to facilitate the entry of temporary migrant workers. This list has been designed to ensure that migrants granted work permits are best able to contribute to the labour demands of the country.

Labour market tested work permits are one of a number of changes in recent years to assist New Zealand employers to fill skill shortages. The Immediate Skill Shortages List (ISSL),



administered nationally but applied on a regional basis, facilitates the recruitment of skilled staff to occupations with skill shortages by removing the need for a labour market test.

A local labour market check is the process used to ensure that there are no appropriately skilled New Zealand citizens or permanent residents available for the job.

The Long Term Skill Shortage List (LTSSL) includes recognised occupations in which skill shortages are sustained and ongoing. An applicant who has a job offer for an occupation listed on the LTSSL can be issued a work permit for up to 30 months. After 2 years, the applicant is able to apply for residence if they have employment in an occupation on the LTSSL with a salary of at least $45,000, and meet all other residence requirements. The LTSSL is also used to award bonus points under the Skilled Migrant Category.

Employers are able to make submissions to the Department to add occupations to skill shortage lists which are used to streamline immigration procedures. The Department of Labour consults with stakeholders twice a year around the composition of these lists.

Note: the ISSL and LTSSL are not extensive lists of skill shortages, but rather identified skill shortages areas/occupations that are considered appropriate for facilitating migration.

WHAT TYPE OF BUILDING OCCUPATIONS ARE ON THE OCCUPATIONAL SKILLS SHORTAGES LIST?

The lists are on the Department of Labour's Immigration website http://www.immigration.govt.nz/migrant/stream/work/skilledmigrant/caniapply/requirements/

Building Control Officials (Inspectors) are on the Immediate Skills Shortages List. Qualifications required are a National Certificate of Diploma in Building, Architecture, Carpentry or construction management and 2 year's relevant experience. The list notes shortages in Auckland and the Upper North Island, Waikato and Bay of Plenty, and the Central North Island.

The level of qualifications required for migrants in any particular occupation will be set when the occupation is first put on one of the skill shortages list. Often the submission to have the occupation added to the lists includes a suggested qualification. The Department then establishes the suitability of the qualification in consultation with stakeholders (including employers, ITOs and NZQA).

We are unable to give specific details of the particular organisations the Department consulted with when adding Building Control Officials (Inspectors) to the list, as it was several years ago. However, the Department does look at the data it collects on shortages and will proactively consult with stakeholders about adding occupations to the lists if there are indications that a skill shortage exists.

HOW DOES THE SKILLED MIGRANT CATEGORY WORK?

The Skilled Migrant Category is the most direct path to residence in New Zealand. It is designed to make sure that those migrating to New Zealand have the skills that the country needs in a time of low unemployment and skill shortages.

This category works on a points system. Points are earned on the basis of qualifications, work experience and job or job offer in New Zealand. Bonus points can be earned if expertise is in an industry which has been identified as having a skills shortage or growth potential. In addition, applicants need to have a good standard of English language and be under the age of 55 years.

WHAT WORK EXPERIENCE OR QUALIFICATION IS RECOGNISED IN THE SKILLED MIGRANT CATEGORY?

Under the SMC, work experience must have been gained in a comparable labour market to NZ. This helps to ensure that people are able to transfer their skills to the NZ labour market, settle well and contribute.

However, if a person has an offer of, or actual skilled employment, they will have all their work experience recognised, even if it was in a non-comparable country, on the basis that a NZ employer has already recognised their skills.

There is also a list of recognised qualifications in the operational manual by country/institution that have already been assessed as holding a particular level on the NZQA Register of Quality Assured Qualifications and will qualify for SMC points. (http://glossary.immigration.govt.nz/Listofrecognisedqualifications.htm)

If a qualification is not on this list, it means that the person has to get an assessment of their qualification done by NZQA to determine what level it is comparable to before it can be assessed for points.

NUMBERS OF BUILDING OFFICIALS ACCEPTED TO WORK TEMPORARILY OR PERMANENTLY IN NEW ZEALAND

Numbers accepted as skilled migrants from 1 July 2006 to 30 June 2007.

Nationality	Building Control/ Consents Officer	Quantity Surveyor	Safety Inspector	**Grand Total**
Great Britain	7	17	4	**28**
South Africa		3		**3**
India		5		**5**
Philippines		3		**3**
Fiji		2		**2**
Malaysia		2		**2**
China		1	1	**2**
Ireland		2		**2**
Romania			1	**1**
Grand Total	**7**	**35**	**6**	**48**

Numbers approved for work permits from 1 July 2006 to 6 July 2007.

Nationality	Building Control/ Consents Officer	Quantity Surveyor	Safety Inspector	**Grand Total**
Great Britain		22	7	**29**
Malaysia		8		**8**
United States of America		3	5	**8**
South Africa	3		4	**7**
Fiji		4	2	**6**
Ireland		5		**5**
India		2	2	**4**
Philippines		3	1	**4**
China			3	**3**
Brazil			2	**2**
Norway			2	**2**
Canada			1	**1**
Singapore			1	**1**
Turkey			1	**1**
Uzbekistan		1		**1**
Grand Total	**3**	**48**	**31**	**82**

For more information contact Alison Welch, Senior Communications Advisor, Department of Labour, on 04 915 4458 or 027 499 9323.

Building consents for solar water heating

Building consents for solar water heating will continue to grow as ongoing initiatives to promote the Government's solar water heating programme gather momentum.

The Energy Efficiency and Conversation Authority (EECA) wants to get solar water heating systems into more homes around New Zealand. Solar water heating can help many households lower their power bills while also reducing the impact on the environment.

For building consent officers this means that compliance for solar water heating systems needs to be well-spelled out so that they can proceed to building consent with minimum hold-ups. "EECA isworking with all parties to drive consents through, so consumers don't experience unnecessary delays", says Marie Brown.

"If councils haven't been given information for assessing an application installation of a solar water heating system, then it's frustrating for them, because they need to make further enquiries in order to progress their work. This can cause unnecessary hold-ups that ultimately have an impact on everyone," says Marie.

CURRENT COMPLIANCE

In May, EECA and the Solar Industries Association (SIA) approved AS/NZS 2712, a compliance method for the design and construction of solar and heat pump water heaters.

The SIA accreditation of this compliance method underpins the EECA run solar water heating programme and councils may find it useful to use these methods when considering consent applications for solar water heating.

UPCOMING CHANGES TO COMPLIANCE

Further work is being undertaken in the area of compliance. The Department of Building and Housing published a draft consultation paper of the Acceptable Solution G12/AS2 in December 2006. As a result of submissions and subsequent further research, a revised draft for further comment went out in July. A final version is planned to be published in August, to be effective from November 2007.

In addition to the above, guidelines are being prepared that will support the Acceptable Solution G12/AS2 and provide more detailed information on solar water heating installation best practice. These two documents will provide more information for building inspectors to assess applications.

EECA and the DBH will be running a series of meetings through August to October to present this information to councils.

For more information about the building consent process for solar water heating including the AS/NZS 2712 compliance method go to www.solarsmarter.org.nz/building-industry/regulations, call Marie Brown on (04) 470 2248 or email marie.brown@eeca.govt.nz

EECA
Energy Efficiency and Conservation Authority
Te Tari Tiaki Pūngao

Product trends from the market:
Consumers prefer quality and green product

By Bruce Kohn, Chief Executive, Building Industry Federation

Extra attention to energy efficiency and conservation requirements, as well as acute awareness of the need to ensure homes are weatherproof, is showing out in consumer purchases of building materials.

This is evident from discussion with building industry material suppliers as winter storms kick in around the country.

Supplier executives say it is apparent that the energy efficiency and conservation message and the need for high quality products in vital weather-vulnerable areas of housing are high on consumer buying lists.

Strong demand is apparent for treated timber products, flashings for windows and cavity battens to ensure adequate moisture control below windows. Stainless steel fasteners are also much more popular than in previous years.

A notable trend, according to merchants, is increased demand for aqualine water resistant gib board for use in kitchens and laundries, as well as its traditional applications in bathrooms. Linea weatherboards are also attracting higher consumer interest as part of a building "fashion" trend and perceptions of product durability.

Consumer consciousness of issues that may be posed by the presence of formaldehyde is also apparent, they say, in frequent preferences being shown for low formaldehyde MDF.

Within the energy efficiency and conservation product envelope, demand is said to be increasing for insulation with higher "R" values than required under the Building Code. Executives see this as evidence that customers have taken on board the role that insulation can play in increasing household energy efficiency, damping down greenhouse gas emissions and improving the thermal performance of their house in summer and winter.

Identification of these trends comes against a background of intense competition within the building materials supply sector as Kiwis demonstrate their liking for individualising their own homes.

This is a factor showing out in examinations of the high cost of house purchasing in New Zealand. Builders say that a significant influence on costs of home construction is the preference that many New Zealanders show for having their new house built to their own individual taste.

It is generally believed that there are some 500,000 different building products in the New Zealand market place with the country's borders open to the best the world can offer. Notable in recent years has been a steady rise in supplies of building products from Asia.

This is lending a degree of urgency to a co-operative effort by industry, Local Government New Zealand and the Building Officials Institute of New Zealand to encourage the establishment of a product listing scheme that will enable both building officials and consumers to readily access lists of products that have met specific performance criteria. It will make product selection and approvals in the consent process much easier.

That the need for sustainability in building materials has been taken on board is evident in a desire among architects and designers to readily access information that will quickly allow them to identify products that meet good environmental standards.

The mark of "Environmental Choice" promoted by an agency established with support by the Ministry for the Environment is a well accepted signpost to environmentally acceptable product. Materials suppliers who wish to qualify their products for this accreditation are required to have their products undergo rigorous testing that takes into account the amount of energy used in manufacture, recycling issues and the product's impact on the environment. Among products that carry the "Environmental Choice" logo are a paint and a popular type of thermal insulation.

It is probable that architects, designers, builders and consumers will soon be able to make a product selection from among a website listing products rated as environmentally acceptable, including those who have qualified for "Environmental Choice" accreditation.

A considerable amount of effort is going into the development by government ministries, departments and agencies of specific ratings for both energy efficient and water efficient appliances. Star ratings exist for energy appliances such as refrigerators and heaters while similar ratings are being assembled for water-using products such as dishwashers, clothes washers, showers and toilets. The product water rating scheme is projected for introduction in July next year.

Also on the horizon for introduction is a home energy efficiency rating scheme that is currently under trial in Christchurch and which, if successful, may become compulsory around the country by the end of this decade. The various product listing schemes will give consumers a useful guide to assessment of those products which can give them the best performance for the dollar they spend.

Current buying trends reinforce the view that materials suppliers face increasingly discerning buyers who place a premium on quality and environmental performance.

Home fire sprinkler systems – what do I need to know?

WHAT'S IN A NAME?

Although some people call these domestic sprinklers, the New Zealand Fire Service promotes these as "home fire sprinklers".
This is a clearer reflection of the title of NZS4517:2002 (Fire Sprinkler Systems for Houses) which is intended to govern their design, installation and maintenance requirements and helps clarify that these are only proposed to be for (single dwelling) houses.

WHAT ARE THESE SYSTEMS?

A home fire sprinkler system is a series of water pipes with attached sprinkler heads that are designed to help control and suppress an outbreak of fire in the home. It does this by automatically releasing a water spray to cover the contents of the room, when the heat from the fire has become sufficient to activate the nearest sprinkler head/s. Each sprinkler head can project the water spray to cover an area up to 6 m by 6 m, so usually a single sprinkler head per room, often centrally located in the ceiling plane is all that is required. Sprinkler heads can be thought of as just simple, single operation (heat sensitive) "taps," which only open, allowing the water to spray out, when their thermal element is activated. Because their water flow requirements (if operated) are significant, the plumbing pipe needs to be of a larger diameter (often 25 mm or even 32 mm) and is recommended to be looped to minimise friction losses and deadends. If building a new house this technology is most economically and efficiently applied if combined with the other (potable cold water supply) plumbing. Thus, in practice a (hydraulically designed plumbing) "loop" of pipe is installed around the house. This then supplies all the (potable cold water) amenity, life safety and fire protection (via the sprinkler heads) requirements for the occupants.

Although this sounds just like "normal plumbing" work and in practice it is, there is a need for the installer to understand a residential sprinkler head is cutting edge technology, so care needs to be exercised to get it right. Sprinkler heads are really just carefully located "automatically operable, heat sensitive taps" attached to the domestic plumbing.
As the heads have no moving parts, once installed and providing water supply to the house remains uninterrupted, the home fire sprinkler system can be expected to provide maintenance free fire protection for the lifetime of the house. If combined as part of the domestic plumbing, a home fire sprinkler system can maximise the use of reticulated water in the home, providing, not just amenity, but life safety and protection from fire outbreak. If installed correctly the system becomes a truly set and forget safety feature to protect against fire outbreak in the home. If desired it is also possible that these systems can be designed and installed to be completely independent of the domestic plumbing.

WHY ARE THESE SYSTEMS BEING RECOMMENDED BY THE NEW ZEALAND FIRE SERVICE?

Over 95% of fire deaths and injury in New Zealand occur in the home setting. This is regrettably a common statistic in most developed countries. Fires in the home occur mainly due to cooking, heating, candles, etc. Although these are often avoidable fires, once started they can develop within several minutes to become ranging infernos due to the types of readily available synthetic based combustibles present, trapping any (sleeping) occupants inside. Although smoke alarms can provide early warning of a fire outbreak, to give more time to allow the occupants to escape, they do nothing to slow its development and growing risk to those still inside. Home fire sprinklers are designed to operate automatically upon a fire, while it is still relatively small, suppressing its growth and mitigating the risk, not just saving lives, but helping protect what you value.

WHAT DO YOU AS A BUILDING OFFICIAL NEED TO KNOW ABOUT THEM?

These systems are intended to be designed, installed and maintained to NZS4517:2002 Fire Sprinkler Systems for Houses. It is important that you are familiar with this Standard. BRANZ has published a design guide called Sprinklers for Houses (2002), which describes what a home sprinkler system is and how they should work. As these systems are voluntary and most often just a part of the domestic plumbing in the house, they only require the same review and inspection as given to any other domestic (potable cold water supply) plumbing, which is, mainly, to ensure that they comply with G12 of the Building Code.
This can be achieved by the use of a backflow prevention valve or ensuring that the piping is regularly flushed by combining it with at least one of the domestic utilities, (excusing the pun, but often the toilet cistern). Due diligence as a Building Inspector would involve making an evaluation of the designers hydraulic calculations, piping layout and minimum piping sizes because these systems need to have specified pressure and location requirements to function properly to aid in life safety and protection. However, as these are voluntary systems and technically performance testing is not required (they exceed the performance requirements of the Building Code) it is strongly recommended that the Building Inspector insist upon, as a minimum, a signed Producers Statement from the installer clearly stating the commissioning details and final flow test results.

WHO CAN DESIGN THESE SYSTEMS?

At present there is no restriction, so anyone could design a system. There are however quite a number of students (ranging from plumbers to building and plumbing inspectors) who have passed a "home sprinkler" design course offered by BRANZ, UNITEC or Hydraulic Services Ltd. Although the industry recognises these course providers and the quality of their courses, no NZQA unit standard qualification at present exists.

The New Zealand Fire Service website http://homesprinklers.fire.org.nz/ lists the currently active home sprinkler designers that have passed one of these courses.

Providing the sprinkler heads are located and installed as specified and an acceptable flow test is achieved from the most hydraulically demanding part of the system they should work as intended.
The acid test for these systems is their proper commissioning.

WHO CAN INSTALL THESE SYSTEMS?

For independent home fire sprinkler systems anyone can install the piping and sprinkler heads, but must engage a registered plumber to install the backflow prevention valve and street connection. For combined domestic plumbing-home fire sprinkler systems the pipework can only be installed by a registered plumber as this forms part of the "sanitary plumbing" and is governed by the Plumbers,

*This article will be continued in the December 07 Issue of **Straight Up***

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80-year celebration for Winstone Wallboards

This year Winstone Wallboards is celebrating its 80th anniversary since first manufacturing GIB plasterboard in New Zealand.

The modest hand-operated factory which first opened in Auckland pioneered high-quality local production to replace imported plasterboard from North America. Since then, the company has achieved market leadership in many areas.

Working closely with New Zealand universities, major industrial research and development centers, and partners locally and abroad, Winstone Wallboards has developed many specialised products and complete systems specifically for New Zealand conditions. The technology is complemented by an extensive range of services to the building industry including next-day delivery promise, comprehensive technical literature, field sales support, expert technical advice and training.

In 1997 Winstone Wallboards extended education to homeowners by providing information to help them through the building process and get the home they really want. The award winning GIB Living Solutions® programme continues to offer a comprehensive resource kit on building a new home or renovating.

More recently the company has moved to endorse the principles of sustainability. Winstone Wallboards has met the challenge of Life Cycle Assessment (LCA) and is pioneering the successful establishment of recycling GIB plasterboard waste to compost. The company is also a partner in ventures to bring modern sustainable construction into the main stream of commercial and domestic building markets, through

Hand-production of "Gibraltar Board" in 1927.

support of the Beacon project and the New Zealand Green Building Council. A recent addition to its strengths is the achievement of Environmental Choice accreditation.

Today the company has automated factories in Auckland and Christchurch and distribution centres in Auckland, Wellington and Christchurch. It is also involved in the booming Asian markets through its Cemac operation in Hong Kong.

Winstone Wallboards continues to see its focus as developing and supplying products, systems and services which are dependable and easily used to create better interiors, to the benefit of all New Zealanders now and in the future.

For more information on Winstone Wallboards range of products, services and information visit www.gib.co.nz

OUT AND ABOUT

This is a new installation of an infinity system where the gasfitter used 2 blue taps.

The tap on the right is for gas and should be yellow, not blue. Another gasfitter called to the site on a separate job found a leak from the gas connection and replaced the tap - and all at the owners' expense because the original gasfitter was out of the country and the fault had to be corrected straight away.

Gus Main
SU Plumbing and Gasfitting

Smarter Homes - a new government-sponsored website

www.smarterhomes.org.nz was launched on 21 June. This website provides independent information about how to design, build and renovate homes that are warmer, drier, healthier, more comfortable, more affordable and kinder to the environment.

It includes a Homesmarts tool that enables users to customise their searches and information needs according to budget priorities, current renovation or building projects, and major problems they want to solve in their homes. The tool also offers an opportunity to prioritise these issues and problems by running a simple home health-check.

WHAT THE EXPERTS TELL US - HOW TO MAKE A SMART HOME C. 2007?

- design – passive design, ventilation, glazing, insulation
- energy efficiency – lighting, appliances, heating, cooling, micro-scale generation
- water efficiency – reducing water pressure, collecting rain water, re-using grey water, managing storm water
- siting and landscaping – site and neighbourhood selection, climate, landforms and waterways, hazards, planting
- materials – exteriors, painting and decorating, interior walls, floors and ceilings, furniture and textiles, decking and outdoor furniture
- construction – timber, concrete, straw bale, earth, insulated concrete, steel, roof and cladding, site practice.

WHY SMARTER HOMES?

Residential buildings use 13% of New Zealand's energy and close to 30% of the nation's electricity. They also consume a large proportion of other resources and are a major contributor to greenhouse gas emissions.

The most recent IPCC (Intergovernmental Panel on Climate Change) report considered the building sector as the most feasible source of significant reductions of greenhouse gases. As such they are a core part of the solution to containing demand and reducing its effects. The need to deliver solutions to the majority of New Zealand homes led to the development of the new website which provides information about renovating and building smarter, more energy efficient homes with technology that is available now.

WHAT'S IN IT FOR BUILDING OFFICIALS?

The website has been designed with consumers in mind. It is developed in a simple language that non-technical people can understand. At the same time, the correctness of facts was assured by strong involvement of the industry in the content development process. It has been developed in a way that can be used as a tool for industry experts to explain difficult decisions to clients. It's services can also be used for reference purposes or by way of fact sheets to facilitate communication between professionals and customers.

Sustainable Building New Zealand Conference, November 2007

The 'Sustainable Building 07' conference will be held in Auckland from 14-16 November 2007. The conference provides those with an interest in sustainable building in New Zealand, the opportunity to hear presentations from local and overseas experts and debate sustainability issues of importance for New Zealand and the world as a whole.

The conference will be of value to:

- Building owners, specifiers and managers
- Designers and engineers
- Developers and builders
- Suppliers of products and services
- Central and local government policy makers and planners
- Researchers and academics

The conference is scheduled to run over 3 days (Wednesday to Friday). The first 2 days will feature invited plenary and keynote speakers and parallel streams of presentations of peer reviewed papers and will be held at the Hyatt Hotel in Auckland.

The preliminary programme contains the following session themes:

- The case for sustainable building
- How policy can influence sustainable building
- Sustainable neighbourhoods and developments - case studies
- Sustainable commercial buildings - case studies
- Sustainable residential buildings - case studies
- Life cycle analysis
- Sustainability assessment tools
- Sustainable design - information and tools
- Resource efficiency
- Materials and products for sustainable building
- Dealing with existing buildings

EVENT CALENDAR - 2007

SEPTEMBER 2007

Monday 10th - Friday 14th	Building Controls Training, Wellington
Monday 17th	Conflict and Aggression, Christchurch
Tuesday 18th	Powers of the Building Inspector, Christchurch
Wednesday 19th	Photographing the Inspection, Christchurch
Thursday 20th	Structural Skeleton, Palmerston North Conflict and Aggression, Dunedin
Friday 21st	Negotiation Skills, Dunedin
Tuesday 25th	Negotiation Skills, Queenstown
Wednesday 26th	Negotiation Skills, Christchurch

OCTOBER 2007

Thursday 4th	Structural Skeleton, Nelson/Blenheim
Monday 8th - Friday 12th	Building Controls Training, Auckland
Monday 15th - Wednesday 17th	Investigations 3 day course, Christchurch
Thursday 18th	Notices and Forms, Christchurch
Friday 19th	Effective Notetaking, Christchurch
Thursday 25th	Structural Skeleton, Wellington
Monday 29th - Friday 2nd	Building Controls Training, Wellington

NOVEMBER 2007

Monday 5th - Friday 9th	Building Controls Training, Auckland
Monday 5th	Wall Wrap Seminar, Christchurch
Tuesday 6th	Wall Wrap Seminar, Timaru
Wednesday 7th	Wall Wrap Seminar, Dunedin
Thursday 8th	Wall Wrap Seminar, Invercargill
Friday 9th	Wall Wrap Seminar, Queenstown
Monday 12th	Negotiation Skills, Auckland
Tuesday 13th - Thursday 15th	Investigations 3 day course, Auckland
Friday 16th	Photographing the Inspection, Auckland
Tuesday 20th	Wall Wrap Seminar, Greymouth
Wednesday 21st	Wall Wrap Seminar, Nelson
Thursday 22nd	Structural Skeleton, Auckland Wall Wrap Seminar, Blenheim
Monday 26th	Effective Notetaking, Wellington
Tuesday 27th	Negotiation Skills, Wellington
Wednesday 28th	Conflict and Aggression, Hamilton
Thursday 29th	Negotiation Skills, Hamilton
Friday 30th	Conducting the Inspection, Wellington

For programme flyers and further information please contact the Institute's office on 04 473 6002 or visit the website - www.boinz.org.nz

Leave nothing to chance

There's no substitute for peace of mind. Which is why you might be surprised to know that only Winstone Wallboards Ltd have plasterboard products and systems that are BRANZ Appraised.

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Got a question? Never hesitate to ask. Call 0800 100 442

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Standard Plasterboard	1200mm	Tapered one side	10mm
Standard Plasterboard	1350mm	Tapered one side	10mm
Firestop Plasterboard	1200mm	Tapered both sides	10, 13, 16mm
Noisestop Plasterboard	1200mm	Tapered both sides	10, 13mm
Aquastop Plasterboard	1200mm	Tapered both sides	10, 13mm
Braceboard	1200mm	Tapered both sides	10mm
High Impact Board	1200mm	Tapered both sides	13mm

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