# straight up

THE MAGAZINE OF THE BUILDING OFFICIALS' INSTITUTE OF NEW ZEALAND

**JUNE 2006** 



BOINZ

Building Officials Institute of New Zealand INC

#### Your connection to the Future





#### WAVIN AS

- · Alternative to cast iron and lagged PVC
- · Easy to install
- · Complete low noise soil and waste system
- · Corrosion resistant
- · Smooth bore, free of incrustations
- · Optimal for hot & greasy wastewater
- · High chemical resistance
- · Light weight
- · Lower installation costs
- · 56 200mm pipe and fittings range



#### **FUTURE K2 - PEX**

- · Strong and resiliant
- · Economical and eco friendly
- · Non-corrosive materials
- · Double seal jointing (crimp and o-ring)
- · Stainless sleeve crimp system 16, 20, and 25mm
- · Quick, easy and safe assembly
- · Reduced noise and heat loss
- Choice of engineered plastic PPSU or dezincafication resistant brass fittings
- · Manual or battery crimp tools available

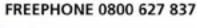


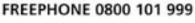
#### **TIGRIS GREEN - PPR**

- Fully welded homogenous pipe and fittings system
- Produced from food safe polypropylene random material
- · Lightweight, easy to handle
- Low noise emissions
- · High chemical resistance
- Low heat loss
- · Large product range
- · Complimentary brass fittings range
- 16 110mm pipe and fittings range

Supported by Iplex Pipelines NZ Ltd. Distributed by Mastertrade & Mico Plumbing Supplies

For information and supply contact your Mastertrade or Mico Plumbing & Pipelines store







#### **BOARD**

President Tim Weight

Vice-President & Auckland

Ewan Higham

Central

Jeff Jamieson

**East Coast** 

Rod Jarvis

Nelson/Marlborough Keith Langham

**Waikato/Bay of Plenty** Graeme Hogg

Wellington

Rosemary Hazlewood

Dick Marryatt

Canterbury/Westland

Tracy Quinton-Boundy

#### **ADMINISTRATION**

**Chief Executive** 

Lennard Clapham

Office Manager/PA

Fiona Morgan

**Project Assistant** 

Craig Charles

#### **CONTRACTORS**

#### Advertising

Noeline Strange

Phone: (09) 528 8009 or 027 207 6511

Email: n.strange@xtra.co.nz

#### **Design & Print**

Inkspot Print Steve Swift

Phone: 0800 821 871

Email: inkspot.print@xtra.co.nz

Elizabeth Stone

Phone: 027 278 7330 Email: scottstone@xtra.co.nz

**Events Division Ltd** 

Liz Alexander / Ainsley Button

Phone: (04) 473 6210

Email: liz@eventsdivision.co.nz

#### Training Academy

Enquiries to Len Clapham or Craig Charles BOINZ office

#### **Building Officials Institute**

PO Box 11-424, Manners Street, Wellington Level 11, Grand Arcade, 16 Willis St, Wellington Phone (04) 473 6002, Fax (04) 473 6004 Email: office@boinz.org.nz

# straight up

#### IN THIS ISSUE

Introducing Our New PresidentTim Weight	2
Board Member Profile - Rosemary Hazlewood	3
Building Act changes leads to a new way of working for some BOINZ members	4
Branch News - Paul Vernon, Secretary, Auckland Branch, BOINZ	6
Course notes from a plumbing and drainage perspective	7
Frontline Training	8
Profile of BOINZ member Des Barnes	9
The Standards numbering system— what does it mean?	10
Specifications & Standards	12
Out And About	14
Letter to the Editor	15
Events Calendar	16







The information contained within this publication is of a general nature only. BOINZ 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.



#### INTRODUCING OUR NEW PRESIDENT...TIM WEIGHT

I have been married to Elizabeth for 34 years and have three sons. I attended Ellerslie Primary, Cornwall Park Primary, Remuera Intermediate and Auckland Grammar School.

I left school and started as a dairy farming cadet with Auckland Federated Farmers working in Rama Rama for 2 years and Whangarei for 1 year. I spent 2 years in Australia in a variety of roles finishing up with 15 months on a dairy farm on the Gold

On returning to New Zealand I worked at farming again with 2 years as a farm worker then 11 years self-employed as a 50/50 share milking contractor.

I sold the herd and took the opportunity to work for a building company in Drury. The work undertaken by the company ranged from garages and kitset homes to extensive residential construction and commercial work. I decided to study towards a

qualification and went to Manukau Polytech completing a Trade Certificate and Advanced Trade Certificate in Carpentry.

With this qualification and 9 years building experience I was able to obtain a role with Franklin District Council as a Building Official. The work at Franklin covered Inspections, PIM site visits, Warrant of Fitness audit inspections, Consent processing and counter/phone duties. I joined BOINZ in 1995 to improve my knowledge as a Building Official and take the opportunity to network with more experienced colleagues in the Auckland Branch.

While working for Franklin DC I was approached by a housing company to fill a role with them as Contracts Manager. This lasted 9 months until work slowed and I was made redundant. I then worked for Auckland Registered Master Builders Association as a field officer responsible for all of

the Auckland province, until the role was changed and I decided not to re-sign a contract with them.

A visit to the South Island for my nephews' wedding precipitated a move to Akaroa after the sale of our property in Pukekohe. After 6 months in Akaroa I was employed by Christchurch City Council in the role of Team Leader Building Inspections where I manage a team of 18 inspectors and 4 administrators.

I became branch chairman after moving to Christchurch and I have been Canterbury/ Westland branch delegate on the National Executive for 4 years with the last three of those as Vice President.

#### **Tim Weight**

NATIONAL PRESIDENT **BUILDING OFFICIALS INSTITUTE OF NZ** 



Criticism of nationwide differences in building consent fees for installing solar energy saving heating devices were reported in the Waikato Times, 16 January 2006. The rationale given in the report for the fee rate was that it is up to individual homeowners to choose how they heat their homes and that the fees need to cover council expenses. The Solar Industries Association's response focused on its capability to provide recommendations on different solar water heating systems that could cut processing time for BCAs and save costs.

The cost of installing the systems is high \$2,500 to \$6,500 (and is comparable with overseas costs but in the UK, for example, these are subsidised by government) and consent fees are payable of up to \$500 on

**OVERWORKED OFFICIALS** 

top of that. It seems there is no likelihood that there will be any relief from subsidies to cover costs here. According to the Waikato Times and Government energy efficiency spokesperson, Jeanette Fitzsimons, the Government is expecting increased power prices to offset the installation costs and encourage uptake of more solar energy units. A recent front page report in

1 February 2006 reported huge profits from power prices yet annual sales of solar water systems have increased from only 850 in 2001 to only 3200 in 2005, well behind the Association's previous target of 10 000 units a year.

The Dominion Post,

Will know that under the Building Act assessing buildings is likely 2004 TAs are required to have a policy on to be a very specialised task earthquake prone buildings in their area. The which could require training new law has some commenting that having and the use of very expensive equipment which building consent authorities would need to have

access to.

#### **STOP PRESS**

What is green building? The NZ Green Building Council is progressing aims for sustainability in new and existing buildings. For more information contact www. nzgbc.org.nz. The next issue of Straight Up will include a report from the Council and information about green building characteristics.



a deemed at risk classification will lower the value of buildings. Other possible stumbling blocks? A number of buildings might not easily classify into the grading system and

#### **ROSEMARY HAZLEWOOD**

MA, Cert AT, Cert PR, HMBOINZ

www.bnets.co.nz

Many of you know Rosemary from her previous involvement with BOINZ, the former BIA, or the many roadshows or training events she has run over the years. Rosemary has been actively involved in training since 1992. She is the Director of Building Networks NZ Ltd, a training consultancy specialising in working with subject matter experts to create memorable learning experiences.

Since 1991 Rosemary has worked in a variety of roles in the building and health sectors where she designed public relations and training activities around legal compliance matters. She has also worked alongside professional associations to help them achieve their goals.

Rosemary tries to practice what she preaches with her own continuous professional development. She belongs to the Women into Self Employment (WISE) Network, the Porirua Business Development Association, the National Association of Women in Construction, and the NZ Association of Training and Development.

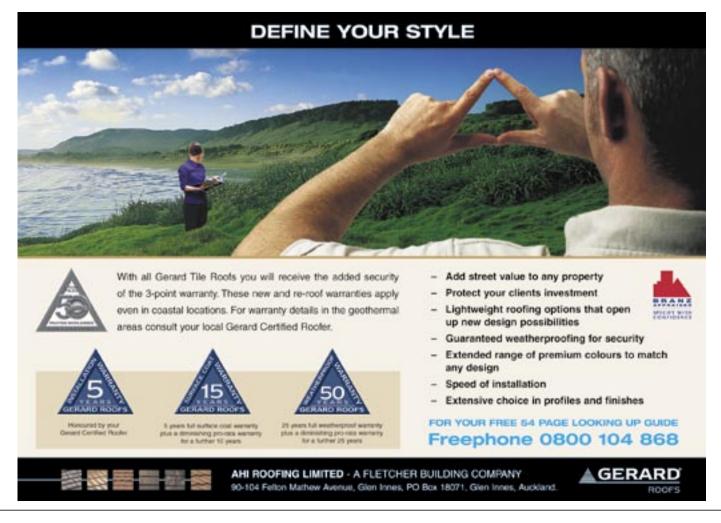
What you may not know about Rosemary is that she lives just North of Wellington with her husband Damien and her blended family of two girls aged 9 and wee Jordan (future building control officer!!). With two older boys also making up part of the whanau it's not quite the

Brady Bunch - but close to it. Much of her spare time (when she is not working) is taken up with family events.

With the departure of Ken Smith as Wellington delegate Rosemary was asked to step into his very big shoes and become the delegate for Wellington branch.



Rosemary Hazlewood



# Building Act changes leads to a new way of working for some BOINZ members

The result is a win

win for all parties.

Maurice Hinton, former BOINZ president and director of Compass Building Consultants, explains how one door closes and another door opens following the 2004 Building Act reforms.



**Maurice Hinton** 

One of the major casualties of the reforms to the Building Act in 2004 was private building certifiers. Legislated out of business by the Government, many certifiers walked away from the building industry for a variety of reasons I won't go into, while others took up positions with the new, rapidly expanding Department of Building and Housing or with Territorial Authorities.

Others, thanks to innovative TAs like Manukau City Council were able to set up as Building Consultants with contractual and partnership arrangements with TAs to continue to provide Building Consent processing and Compliance inspection services

much to the delight of their loyal customers. In addition, we also provide other services to TAs relating to Certificates of Acceptance and Certificates of Public Use.

The then Director of Environmental Management, now Chief Executive of Manukau City Council, Leigh Auton, realised that Manukau, one of New Zealand's fastest growing cities, which has over the last few years experienced huge growth in its building sector, could ill afford to loose the skills and experience provided by private sector building

certifiers. He also saw an opportunity for the City to position itself with a business model that would be robust and competitive as they moved towards becoming a Building Consent Authority.

Two former building certifying companies, Compass and Professional were part of a council-

led team that worked through the issues which resulted in a robust contract that addressed all the concerns of risk management, quality control and consumer protection being implemented.

The result is a win win for all parties. Consumers had a choice of service providers; either in-house or contractors, or in some cases a mix, and a degree of competitive pricing and customer focused service.

The big plus for TAs like Manukau is that they have access to a larger pool of skilled building officials at a time when the city is facing massive growth and pressure in its building sector, a means of performance measurement and benchmarking of service delivery options, while still controlling quality via strict audit and review processes.

For private sector companies like ours this has allowed us to remain in business and continue to employ our 16 staff. Having developed a well trained, well respected, close knit team it would have been a loss to the industry as well as myself and fellow directors to see it disbanded.

I won't deny that like all arranged "marriages" there have been some challenges we have had to grapple with, but regular partnering meetings facilitated by Manukau's Building Authority have helped all parties to provide an improved level of service to the consumer. These meetings have also been a great way to share information and work together as we move towards final implementation of BCA Accreditation, Product Certification and Builder Registration.



Other Council's in the Auckland Region have taken Manukau's lead and we now have similar contracts and partnerships with Auckland City Council, North Shore City and others.

Should you require further information on this successful model feel free to contact me, maurice@bldgcert.co.nz

ightharpoons

Z

20

# Protecto Wrap

Serious Waterproofing Solutions

Zero waste as tape can be

overlapped

Protecto Sill System

15 year warranty

the window and door flashing system that gives you peace of mind

- A tough, self-adhering air/moisture barrier.
- Waterproof both jambs and sill area.
- Guaranteed on all building wraps.
- 15 year warranty.
- Call us for a free step by step installation guide.
- Easy as . . . prime, peel, stick!



Assessed for use with building paper and BRANZ appraised building wraps - Appraisal No. 444 (2005)







Distributors: Marshall Waterproofing NZ/AUS LTD,

CALL 0800 776 9727 www.protectowrap.co.nz

ASK about
Protecto Wrap's
other professional
waterproofing
solutions

#### Paul Vernon, Secretary, Auckland Branch, BOINZ

In Auckland City, the largest city in New Zealand, there are a lot of major developments taking place, such as a Housing New Zealand project, where eco-friendly homes are being built for low income families. A Fletcher Housing subsidiary company is developing approximately 3000 dwellings in what was known as Winstone's quarry. There is a major shopping complex being developed by Multiplex at Mt Wellington and the 12 000 seat arena nearing completion, within 2 kilometres of the main street of Auckland.

The "City of Sails" and home to the Auckland Blues and the Warriors, is within 30 minutes of beaches, fishing spots, sports grounds, entertainment venues and many other endless activities, cultural or non-cultural. Yes, action is being taken to improve Auckland's roading system, with the development of a new motorway from east to west.

I am an import to Auckland, but my heart is for the mighty Waikato where I served my apprenticeship with Hawkins Construction Ltd. (Go the Chiefs and The Mooloos).

I come from a farming background and, after serving my building apprenticeship, did the big OE before moving to Auckland in 1982; addicted to the fast pace and the bright lights! I worked on commercial construction sites and know what it means to have the bad back syndrome – those who attended the recent BOINZ conference will appreciate that. I have, for the past 20 years, been with Auckland City Council, and like all good employees I have climbed through the ranks.

Auckland Branch has its monthly meetings mostly visiting manufacturing

companies throughout the Auckland Region, organised by our convenor of venues, Mr Grant Brown of Conqra. At these meetings, the host will present to members a detailed account on what and how they produce their products, which our members find very enjoyable and certainly educational. It also helps develop a valuable network for all concerned. We also have guest speakers on other topics of interest such as legislative requirements, engineering requirements both fire and structural and many more.



**Paul Vernon** 

In the 3 year period I have been secretary of the Auckland Branch, the attendance at meetings has increased by 10-15%, which is pleasing. However, there is still room for improvement considering there are nearly 200 members within the Auckland Branch. I am sure all branch secretaries agree with me one cannot be secretary forever. There is a life after being a secretary, and I urge all members around New Zealand to give it a go. We keep being reminded, "This is your Institute and you as members have to make it work". Help is always at hand, be it within your own office, branch or from Wellington. The support is there, all you have to do is participate!

After attending the recent Building Officials Institute Conference in Christchurch, I personally believe the Institute is in good stead. I am confident, that with Len Clapham our Chief Executive kicking the Parliamentarian butt, in less than 5 years the Institute will be acknowledged as a model to copy for similar institutes around the world.



NASH 3405 Steel Framed Buildings

**Design & Construction Guide (Non specific)** 



Order a free copy today from

National Association of Steel-Framed Housing 17 Gladding Place, PO Box 76 134, Manukau City Phone (09) 262 1625, Fax (09) 262 2856 Toll free 0800 333 225, Email gm@nashnz.org.nz

## WHICH SIDE OF THE FENCE DOES YOUR OPINION SIT?

The following is an extract from an article "Never the Twain" by Douglas Lloyd Jenkins, published in the New Zealand Listener on 23 July 2005, pp. 58-59 and printed with permission here in response to criticism in some quarters about foreign investment in property and proposed and existing land use developments in this country.

As New Zealanders it seems we are increasingly buying into a myth that we live surrounded by natural landscapes.

It seems that you can build what you want in urban areas (where there is no real aesthetic control) but in the countryside any building or structure at all is increasingly seen as an unacceptable intrusion into the "natural landscape".

But natural landscapes seems to be a very flexible term – and increasingly includes farmland – the idea that productive rural land is somehow pristine and best seen without built structures at all is a delusion of a most local sort.

The plan to place high voltage pylons across the North Island or to erect wind turbines at Makara on the Wellington coast, are to differing degrees being opposed on the grounds that man made is ugly and nature unassailably beautiful. Yet there are persuasive arguments that the Desert Road is much enhanced by the magnificent pylons that march along it.

Douglas Lloyd Jenkins is Associate Professor of Design in the School of Design, UNITEC, Auckland and is an architecture and design commentator.

#### Course notes from a plumbing and drainage perspective

My first training course was a BRANZ water supply one-day course presented by Brent Mallinson. The course was in-depth with several modules and was an eye opener on various interpretations of legislation issues and acceptable/alternatives solutions.

The changes to the Building Act and the leaky building syndrome resulted in an avalanche of seminars and day courses by various agencies and training organisations as the bone was pointed at various trades designers, architects, and of course Councils, for the onsite problems. The weathertightness seminars I have attended have been excellent and highlighted issues of fault at every level.

Domestic sprinkler design and installation was a credible course with a simplistic view to an otherwise complicated subject with excellent material and positive back up provided by Ed Sonja and BRANZ.

I recently attended a Plumbing Inspection 10-day course split over several weeks with multiple modules covering a variety of topics, also fronted by Brent Mallinson. The course was attended by a variety of people from the private and Council sectors. It was informative with a mountain of information to assist in the inspection environment. The discussions were lively and showed the difference in experience that some inspectors take to the field. The keeness and hunger for more information was very apparent and the course was a very enjoyable experience.

My most recent insight to what is available and what the future direction for training will bring was the recent BOINZ Conference in Christchurch. The need for training and the levels required were indicated at this event. The networking with other participants and the bonds attained through meetings and discussion will hopefully keep the objectives at hand. We require skilled and experienced professionals to get over our most recent humps. While the internet has made encyclopaedic knowledge available it is the older person



#### **Bruce Greentree**

within your organisation who has the most valuable tool available and that is "experience". My advice is to use it before you lose it.

#### **Bruce Greentree**

Approvals Officer-Plumbing & Drainage Hutt City Council bruce.greentree@huttcity.govt.nz http://www.huttcity.govt.nz



straight up June 2006 7

# BOINZ Training Academy launch presents frontline building control training for administrative and technical support staff

#### By Rose McLaughlan

Administrative and technical support staff are the first point of call for the general public enquiring about building legislation and they fulfil an important role. Yet, until recently, they have received little if any training, mainly because any training that is available is generally aimed at Building Officials

The Frontline Building Control course is one of several courses I have written and developed. I recognised that there was a desperate need for training in this area, to cater for the very people who are often overlooked.

Initially the course was designed for staff at Auckland City Environments, but other Territorial Authority's in the Auckland area heard about it and it was further developed to meet individual organisations needs. Favourable comments about the course reached BOINZ who approached me June 2005 with the idea of running the course around the country starting in January 2006, which coincided with the launch of the BOINZ Training Academy.

Although the course was designed for administration staff it has been equally beneficial to others in the industry. Planners, Team Leaders and Building Officials have also attended the course and found it to be informative. The new Building Act saw the introduction of significant changes all targeted around consumer protection; we look at each section of the Act and discuss why these changes were introduced.

The objective of the course is to provide an overview of the New Zealand Building Act, Building Regulations and Building Code and demonstrate how they all fit together. We also look at the purposes and principles of the

Act and discuss how the various clauses of the Building Code meet these objectives.

Support staff frequently hear the terminology that we use but don't actually understand what it is referring to or become confused, which is understandable. Words like the Approved Documents, Acceptable Solutions, Alternative Solutions, B1, B2, etc are explained in an easy to understand manner with examples and background information provided to support the course notes.

The course has been very well received and has certainly identified the need for further training with favourable comments from course attendees.

#### What attendees have said...

Very good examples used for all topics of discussion. Pointing out certain points of the Act that can prove problematic and giving an opinion about it.

Have found this course to be a great help and have learnt heaps, hopefully more courses to follow. Thank you.

I thought the course was very simple to understand. Lots of everyday examples which made the information easy to retain.

Excellent one day presentation, content and presentation great. Would recommend to a wide range of people. Cheers.

I enjoyed my day a lot and got heaps out of it. Thank you for a very informative workshop.

#### **SPECIFIERS | TERRITORIAL AUTHORITIES**



Dynex Extrusions Ltd, manufacturers and marketers of Palliside Weatherboards, are now Silver Strategic Partners with BOINZ.

Palliside Weatherboards incorporate all the stylish good looks of traditional weatherboards with modern, low maintenance materials. Designed, tested and manufactured in New Zealand specifically for the rigours of New Zealand's environment, Palliside comes with a 25-year guarantee and has been BRANZ Appraised.

The Palliside weatherboards system has been successfully tested to the latest E2/AS1 standards and has passed the Verification Method Testing (VM1).

In keeping with the changes introduced to the Building Code under E2/AS1, Palliside remains an Alternative Solution and is able to be installed Direct Fix from 0-12 points or 0-20 points over a Drained Ventilated Cavity applying the Building Envelope Risk Matrix.

BRANZ Appraisal Certificates covering Palliside Direct Fix (490) and Drained Cavity (491) installations are now available on request.

A Palliside Installation Guide, one for Direct Fix and one for Drained Cavity, are now available with a supporting Technical Guide.

Over forty details for Palliside Installation are available from the Palliside Website www.palliside.co.nz under Design Details.





contact. Dynex Extrusions Ltd

FREEPHONE. 0800 4DYNEX **[0800 439 639]** www.palliside.co.nz

#### Profile of BOINZ member... Des Barnes

This year it is 47 years since I started my working life as an apprentice carpenter and joiner in Penrose with DB Waite Ltd and 31 years since I joined BOINZ.

During my first 16 years while on the "tools" I worked on all types of construction from hydro works with site batched concrete with 150 mm aggregate, to repairs on a vehicle damaged dwelling (a bit simpler than the decaying ones we now see), joinery, and shop fitting.

In 1975 I decided to come in out of the mud and was offered a position as assistant Building Inspector at Mt Eden Borough Council.

In those days Building Inspector training was a correspondence course, then the NZCB which was extended out after a tremendous amount of input by members throughout the country. Both building industry courses failed through lack of applicants and the lack of encouragement from employers.

It is pleasing to see the importance that is now being placed on obtaining additional qualifications and continuing education. To ensure that this is successful there must be support by Building Officials enrolments on the programme and from TAs providing incentive for Building Officials continued support.

In 1978 at Mt Wellington Borough I held positions of Senior Building Inspector, Town Planning Officer, Chief Inspector, and Senior Building Control Officer through two amalgamations (Otahuhu/Mt Wellington and Auckland City) until 1994 when we moved to a new lifestyle at Ramarama and my next job, at Franklin District Council doing plan processing; a new learning experience under a new regime with the Building Act 1992 and Approved Documents and Alternative Solutions. Happily gone were the 10 000 m2 plus boundary to boundary cool stores, industrial units, shops, floor and occupancy load restrictions, with fire and town planning issues, the battles with designers to effect change and achieve compliance. All this was replaced with housing, cowsheds, barns, stables, septic tanks and irrigation fields where a boundary 500 m away is not an issue and adjoining owners are rarely upset.

After a 4 year enjoyable period of broadening knowledge and experience I departed from Franklin District Council to establish a building consultancy that, over the past 7 years has been hard work, long hours, but for all that a fulfilling and rewarding experience.

I still assist FDC as a permanent 2 day a week Building Control Officer. I have found this an ideal way of keeping abreast with the implementation of the 2004 Act, Approved Document and standards amendments, introduction of new building products and installation procedures.

**Des Barnes** 

I have always supported BOINZ and believe that it is on the right track for the future. The appointment of a Chief Executive was a timely and correct decision by the institute, necessary to provide positive direction and recognition of the importance of our role within the building industry.

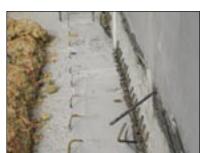
#### Des N. Barnes

Principal, Building Appraisals Ltd NZCB, RMBOINZ, WOBO

### Incorrect rebending of starter bars can cause massive failures!



It is common practice for starter bars in precast elements to be bent out of the way for transportation and erection. The department of Building and Housing has identified that this is often done incorrectly and in a manner that reduces the strength of the structural connection and commonly results in the bars breaking off on site.



It is a requirement that bars should only be bent to a controlled radius of 5 times the bar diameter. However in practice this is not being adhered to and protruding starter bars are being bent flat against the panel face to allow transportation.



The DBH also confirms Pacific Steel's warning that 500E starter bars should only be rebent after being reheated to 'cherry red' on site. Because this is impractical the rebent starter bars are losing ductility when rebent and are commonly breaking off during the rebending process.



www.reids.co.nz

**Solutions in Concrete Construction** 





 $\mathsf{Reidbar}^{\scriptscriptstyle\mathsf{TM}}$  Threaded Inserts are cast-in components that sit flush with the panel face meaning the panels can be easily transported to the site. Once there the Reidbar™ Starter Bars can be threaded into the inserts creating a stronger, more reliable connection that completely eliminates the need for any bending or rebending.

### ROCKCOTE systems

# habitat protection

Rockcote plaster cladding systems combine Licensed Plasterer product application, and the latest plastering technology to protect your habitat from New Zealand's extreme climate.

# Always Start with a Better Finish

0800 50 70 40

www.rockcote.co.nz

A Resene Group Company

# The Standards numbering system—what does it mean?

The numbering of New Zealand Standards is based on the original numbering system, which was created in 1937 when the first New Zealand Standard was published. The system was adopted from similar systems used by international Standards bodies.

The system has evolved with technology, the expansion of Standards into new sectors, and the increased development of Standards

The numbering of Standards began with a subject list that comprises eight categories, with a number of subcategories. The eight categories are: Electrical Installations; Building and Construction; Mechanical and Industrial; Electrical, Illumination and Physical Measurement; Chemical-Based Group; Consumer, Agriculture and General; Local Government; and Special Subjects.

The Building and Construction category has 15 subcategories numbered from 31 to 39 and then 41 to 47. When a new project begins, the Project Manager allocates a number that becomes the number of the Standard.

The first step is to classify the project as one of the eight categories, e.g., Building and Construction. The second step is to classify the project according to a subcategory such as Concrete, Iron and Steel, or Building Services. If the project is most accurately defined in the Concrete subcategory, then the first two digits of the Standards would be 31, e.g., NZS 3101 PARTS 1 AND 2:1995 - Concrete structures standard - The design of concrete structures. If the project is related to Timber then the first two digits of the Standard would be 36, e.g., NZS 3604:1999 - Timber Framed Buildings. To determine the last two digits of the Standard the Project Manager takes the next available sequential number.

Technological developments have enabled the paper-based system to evolve to become an electronic system.

The eight main categories have remained the same over the years but new subcategories are created with expansion of Standards into new sectors, e.g., Health, which has become a subcategory of Consumer, Agriculture and General.

When a project begins, and the content is closely related to an existing Standard then the numbering becomes point one (.1) or point two (.2) of the original Standard number.

Fundamentally, the numbering of Standards New Zealand Standards has not changed in 69 years and will remain this way for years to come.







New Inlet Control Valves for hot & cold water installations. This new seven-in-one valve comprises of; 15mm and 20mm sizes.

- The 15mm model, CV50, is well suited to under-sink hot & cold water cylinder installations.
- The 20mm model, CV75, can be used for domestic and apartment installations and is available in both hot (80c) and cold versions with provision for an equal pressure take off. Also utilizes meter type couplings, for ease of installation and maintenance in a variety of applications.
- Complies to G12 and AS 1357; Part 1 & 2.

Ask your merchants for prices and availability NOW!

## Standards New Zealand (SNZ), the National Standards body, has provided an update on the progress of recent building-related Standards.

#### **NOW AVAILABLE**

#### Concrete structures Standard (NZS 3101:2006)

A major revision of the Standard for concrete design has been available since March 2006. It will result in safer and improved design quality of structures using concrete.

Jointly funded by Standards New Zealand, the Cement and Concrete Association, the Department of Building and Housing, and the Earthquake Commission, *NZS 3101:2006 Concrete structures* will be used by engineers and territorial authorities.

Engineering design knowledge is constantly evolving as a result of New Zealand and international research, experience gained from evaluating the damage caused by major earthquakes around the world, and the introduction of new materials such as steel fibre reinforcing. New Zealand is recognised internationally as a leader in safer earthquake design. Therefore, periodically updating the concrete design Standard ensures that our world class knowledge is available to engineers to apply in designing our buildings.

Key updates to the Standard include:

- The Standard includes new information on Grade 500 reinforcing steel
- Design section now component based as opposed to force based
- Seismic design section now compatible with the recently released loading Standard NZS 1170.5:2004 structural design actions - earthquake actions
- Wall section reflects the latest developments in ACI318 and testing conducted in New Zealand, including new formulas to address the potential issue of buckling of thin panel walls
- Fire section The fire amendments to AS3600:2001 concrete structures have been included
- Durability section Now includes:
  - New information for structures with a specified life-span of 100 years
- Revised provisions for Zone C marine exposure classifications
- Guidance on chemical exposure, aggressive soils, abrasion resistance and fastening protection
- The appendices have been revised and include:
  - Design information on strut and tie models (based on ACI318)
  - Provisions for the seismic design of ductile jointed precast concrete structural systems

A series of seminars will be held to assist users of the Standard to understand how it has changed. For information about the seminars, please email **seminars@standards.co.nz.** Copies of the Standard are available for purchase on-line: **www.standards.co.nz** or call: 0800 782 632.

#### Timber Framed Buildings Amendment 2 (NZS 3604:1999)

New Zealand's main Standard for the design and construction of Timber framed buildings, NZS 3604:1999, is being amended.

The Standard provides practical guidance to designers and builders and the broader building industry to meet the requirements of the Building Code. The amendment will result in better quality houses and increased consumer confidence in timber houses. It will also ensure the Standard is consistent with the new timber properties and grades introduced in 2005 by Amendment 4 to the Timber Structures Standard, NZS 3603.

"Amendment 2 to NZS 3604 updates the Standard with the new verified grades and engineering properties defined in Amendment 4 to NZS 3603," says lan Garrett from Spencer Holmes Ltd, a member of the Institution of Professional Engineers NZ. "The Timber Structures Standard (NZS 3603 Amendments 1 and 2) is cited in the Department of Building and Housing Compliance Document, which is used by engineers to design timber structures, and which forms the basis for the design solutions given in NZS 3604," says lan, who is also a user of the Standard.

Amendment 2 to NZS 3604 incorporates the new verified timber grades and amended engineering properties into the design tables by providing new tables for those grades likely to be most commonly used. The amendment also revises the existing tables for No.1 framing to be consistent with the new values given for visually graded unverified timber.

Amendment 4 to NZS 3603 introduced new grades of timber. An associated verification Standard (NZS 3622), provides sawmills with a means of verifying the actual properties of the timber. The new properties given for unverified timber reflect a change in the profile of timber properties of current timber production.

These changes were required as research showed that some of the timber being milled today is not as strong and stiff as that of past decades. Factors such as forests being grown on fertile exfarm sites and forests being milled at a younger age are thought to be the main reasons for this change. The changes will place timber in the same position as other construction materials, such as steel and concrete, where engineering properties are more consistently verified. This should provide more certainty about the engineering properties of timber and contribute to improving the image of New Zealand timber in export markets.

"The new provisions relating to the verification of timber in NZS 3603 will provide certainty to users of the Standard that key design properties are being achieved and that the resulting buildings comply with the Building Code," says Dennis Monastra, Senior Technical Adviser Regulatory at the Department of Building and Housing and a member of the committee reviewing NZS 3604.

Subject to analysis of public comment and a suitable introductory period, both Amendment 2 to NZS 3604 and Amendment 4 to NZS 3603 are intended to be cited by the Department of Building and Housing in the Compliance Document B1 Structure to the New Zealand Building Code.

#### **UNDER DEVELOPMENT**

Current projects underway in the building sector include:

#### Timber Framed Buildings Revision (NZS 3604:1999)

Scoping work has commenced on a full revision to this widely-used Standard, which gives practical guidance to effectively help the Building Code to function. The key purpose of the revision is to achieve safer, healthier, more weather-proof and durable houses as a result of the updated Standard. It is also timely that the Standard is updated to reflect current and future industry needs. The revision is intended to take into account advances in materials, construction techniques and other recently revised Standards and acceptable solutions to the New Zealand Building Code. Industry feedback to guide the revision process has been collected via both telephone and online surveys.

#### Pliable, permeable Building Underlays (NZS 2295)

A revision and reinstatement of NZS 2295 is underway and will create a New Zealand specific Standard for building underlays. The new Standard will supersede, in part, AS/NZS 4200 which is cited in E2/AS1 of the New Zealand Building Code. This revision recognises recent technological advances in materials and reviews test methods for wall and roof applications. A draft document will be available from early May 2006 on the Standards New Zealand website seeking public comment until 30 June 2006. Publication of this Standard is expected in February 2007.

#### Safety of Swimming Pools (NZS 8500)

A committee of experts in the pool safety and manufacturing industry have begun developing a Standard to prevent young children from drowning in residential swimming pools, spas and hot tubs.

New Zealand has the highest rate of youth drowning among OECD countries and drownings among 1 to 4 year olds are most prevalent in home swimming pools, a major report found last year.

Pool owners, tenants, parents, architects, designers, pool and spa manufacturers and local authorities will be among the groups interested in the Standard, which will limit unsupervised access to residential swimming pools, spas and hot tubs by establishing layers of protection for young children against the potential for drowning and near drowning.

The Standard is sponsored by the Department of Building and Housing and Water Safety New Zealand. The committee developing the Standard comprises a cross-section of sector representatives, including: water safety organisations, child safety representatives, Plunket, pool and spa manufacturers, councils, architects, and designers, BRANZ Limited and the Department of Building and Housing.

The public comment period is expected to commence now in late June 2006, and the final Standard is expected to be published by first quarter 2007.

#### Automatic fire sprinkler systems (NZS 4541)

The Automatic Fire Sprinkler Systems Standard, which covers the design, installation and maintenance of fire-control sprinkler systems, has undergone a substantial review.

The Sprinkler Committee Working Groups have met over recent months and carried out an initial review of the public comments received and submitted their recommendations to the full Sprinkler Committee who recently met on 20-21 March. With the widespread publicity generated by both the FPA and Standards New Zealand it was not surprising that some 1000 were received of which some 400 comments were reviewed and agreed during the meeting in March. A subsequent meeting is now scheduled for 3-4 May to review the remaining comments.

It is expected that the full revision Standard will now be published in the first quarter of 2007. Readers are reminded that significant changes are likely between the draft and the published documents and until the document is published the draft should be not used as a design basis for the design and installation of sprinkler systems.

#### Steel Structures Amendment 2 (NZS 3404:1997)

This Standard sets out minimum requirements for the design, fabrication, erection and modification of steelwork in structures in accordance with the limit state design method or in accordance with the alternative design method.

NZS3404 requires amending in light of the changed loadings values given by the recently published AS/NZS 1170 series and NZS1170.5.

#### Solid Plastering Part 1 Cement Plasters for Walls, Ceilings and soffits (NZS 4251.1)

Water ingress leading to the wetting and subsequent rotting of timber was one of the key findings from the Hunn Report that contributed to the systematic failure of part of the housing stock to offer weathertightness protection.

The revised Standard will seek to address the introduction of a required cavity behind the plaster. Used in a majority of circumstances, the inclusion of a cavity wall will help mitigate the risk of water ingress in solid plaster houses.

This revision will also bring the contents up to date and reflect current industry best practice so that it can be used in conjunction with the recently revised Approved Document for E2 External Moisture, which cites NZS 4251.1.

#### Concrete masonry buildings not requiring specific engineering design (NZS 4229)

NZS 4229 is a key structural design Standard and is cited under clauses B1/AS1/AS3, E1/AS1, and G13/AS2 of the Building Code.

An amendment of NZS 4229 is required to bring the requirements and tables in line with the new loadings values given by the recently published AS/NZS and NZS 1170 loadings Standards and with the structure and requirements of NZS 4230.

#### Design of reinforced concrete masonry (NZS 4230)

NZS 4230 is a key structural design standard and is cited under clause B1/VM1 of the Building Code. An amendment of NZS 4230 is required to align the requirements and tables of this Standard with the loadings values in the recently published AS/NZS and NZS 1170 Loadings standards.

#### Plumbing and Drainage Set (AS/NZS 3500:2003)

 $\label{lem:controller} Australia\ holds\ the\ secretariat\ for\ this\ set, which\ is\ currently\ being\ amended.$ 

#### **PURCHASING DETAILS**

If you would like to purchase any products from SNZ you can visit the web shop at www.standards.co.nz or contact SNZ sales on ph: 0800 735 656, fax: (04) 498 5994 or e-mail snz@standards.co.nz. You can also view and comment on the draft documents by clicking on the Drafts for Comment tab on the SNZ website (www.standards.co.nz).

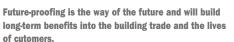
# BUILDING A BETTER FUTURE FOR THE BUILDING TRADE



Future-proofing. You've heard the term but what is it really about and how can it benefit both the building trade and the end-customer?

Future-proofing is about building properties that will meet today's requirements, and the changing lifestyles of tomorrow. By taking the time to understand future-proofing now, the trade can easily on-sell the benefits of a future-proofed home to customers. Yes, it will cost them a little more to build, but the long-term benefits of a future-proofed home should more than outweigh the initial cost. Today's and tomorrow's customers will be demanding future-proofed homes, and will expect the trade to know about building designs and product specifications that will meet and keep pace with lifestyle changes and trends.







#### **Sound Control**

Never cut corners on sound control. Customers will pay for laminated or double-glazed windows, and sound insulation products to make their homes more comfortable.



#### **Energy Efficiency**

Up-selling homeowners to more cost effective and energy efficient heating options means the trade profits in the short-term and customers benefit in the long-term.



#### **Health and Safety**

By building homes with health and safety in mind, the new homeowner gets peace of mind – something they can't put too high a price on.



There are 8 principles of future-proofing. For more information call 0508 FUTURE or visit www.fpb.co.nz





# Need E2/E3 Waterproofing?

Use the Wet-seal Branz Appraised Systems

# We get your waterproofing right first time, every time!

- ✓ Installed by National Network of Franchisees
- ✓ Every job is fully guaranteed
- ✓ No shape or size restrictions flexibility

For more information on how we can help you, phone

0800 436 000



"Your Waterproofing Professionals"



Email: straightup@wet-seal.ws Visit: www.wet-seal.co.nz



# Incy wincy spider... what would you think of this?

Darrell Spout, SU Plumbing

It's functional...a new water purifying system perhaps?



But is it an acceptable or alternative solution?



The finished product, a copper downpipe with a PVC sleeve on a new building, circa 2006.

#### Our friends, the Territorial Authorities...an independent voice speaks up

Not all who use and appreciate BOINZ, and the chatterbox, are TAs or council employees.

As a product supplier to the New Zealand and Australian building industry, Equus deals with TAs throughout New Zealand on a daily basis.

A couple of months ago I had a conversation with a property developer who was adamant that the TAs were the sole point of responsibility for all the "leaking homes in New Zealand", and all the delays to consents. He believed this was deliberate to slow the building industry down. It took a while, but I changed his mind on all counts, he now understands why his consents take longer than others do. I bet his next consent flies through the consent process. It will be complete and readable.

Please remember this, the TAs did not write the new building code, however, they are expected to interpret the code, enforce the code and then, they must deal with the public perception that it's all the TAs fault. Perhaps a bit of well directed advertising by the Department of Building and Housing would go a long way to re-educating the general public and the building related people who don't get the opportunity or time to attend seminars etc.

TAs are just as frustrated with the whole thing as we are, that's the architects, specifiers, product suppliers, applicator and the builders (big and small). TAs are concerned with the whole consenting and compliant product situation in New Zealand.

That's why some TAs are joining forces; working cooperatively with each other at a level that would not have happened 10 years ago.

For example, a dozen or so South Island TAs have been working closely with two of the major city councils in the North Island to produce "standard documentation and processes" for building activities. These will be used by the TAs to gain accreditation under the new Building Act and a proposed initial application was due to be made to the Department of Building and Housing this June. That is great news.

So, if you are someone who needs to be involved with the consent process, no matter how small the input might be, get it right the first time. Make sure you have all the documents required by LAW, not just by the TAs, and I'm sure the process will become a formality. And, I suggest you find, what the industry is calling the "hardest TA" to get a consent through and make them your minimum standard of documentation required, NOT your maximum standard. Be thankful these so called "hard TAs" are hard, it's to your advantage in the future. Do your paper work/documentation correctly, the TAs can do theirs, and consents will be issued promptly.

All TAs are busy. They are busy trying to help keep the building industry ticking over in a compliant manner. We thank them for the work they do and the changes they are trying to make to help all of us involved in the betterment of the building industry. Let's keep building a better New Zealand

#### **Gary Still**

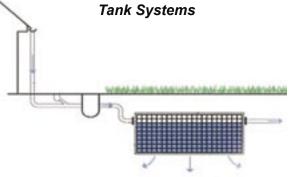
National Compliance Manager **Equus Industries Ltd** PPCS Assessor, MBOINZ

### **MACCAFERRI NZ Ltd**

**Engineered Drainage Solutions** 

## **VersiTank**®

Stormwater Retention / Percolation Tank Systems



Frees up precious ground space and adds a valuable resource. Reduces flood risk / replenishes surrounding water table



Engineered Environmental Solutions

Phone: 0800 60-60-20

sales@maccaferri.co.nz www.maccaferri.co.nz



The MBS GoGet for Building Inspections system reduces the paper trail and utilizes the latest mobile technologies to document the inspection process from start to finish. MBS GoGet can assist you to meet the requirements of the new BCA accreditation standards.

#### **System Features**

- Supports desktop PC's, Pocket PC's. laptops & tablet PC's
- **Customisable inspection checklists**
- **Daily inspection team scheduler**
- **Integrates with Council building** control systems
- Remote retrieve & update of inspection data via the GoGet Web Service
- Designed for the non-IT user
- No ongoing cost to BCA with new

user pays pricing structure!!





Call today for details and pricing Master Business Systems Ltd Contact: Laurence Bevan Email: laurence@master.co.nz

027-22-88-331

www.master.co.nz



#### **EVENT CALENDAR**

#### **JUNE 2006**

Structural Skeleton of Timber Buildings 06	Christchurch, 7 – 8 June 2006
BOINZ Plumbing and Drainage SIG Forum	Auckland, 12 June 2006
Barrier Free NZ Trust Seminar	Wanganui, 19 – 20 June 2006
Structual Skeleton of Timber Buildings 06	Wellington, 21- 22 June 2006
Reading and Interpreting Consent Documents Workshop Series 2006	Wellington, 27th June 2006
Reading and Interpreting Consent Documents Workshop Series 2006	Palmerston North, 28th June 2006
Reading and Interpreting Consent Documents Workshop Series 2006	Masterton, 29th June 2006

#### **JULY 2006**

Reading and Interpreting Consent Documents Workshop Series 2006	Dunedin, 4th July 2006
Reading and Interpreting Consent Documents Workshop Series 2006	Christchurch, 5th July 2006
Reading and Interpreting Consent Documents Workshop Series 2006	Invercargill, 6th July 2006
Reading and Interpreting Consent Documents Workshop Series 2006	New Plymouth, 25th July 2006
Reading and Interpreting Consent Documents Workshop Series 2006	Auckland, 26th July 2006
Reading and Interpreting Consent Documents Workshop Series 2006	Whangarei, 27th July 2006
Barrier Free NZ Trust Training Seminar	Paihia/Kerikeri July 31st – Aug 1st

#### **AUGUST 2006**

On-site Wastewater Management Training Course	Hamilton, August 1st and 2nd
Reading and Interpreting Consent Documents Workshop Series 2006	Blenheim, 8th August 2006

# TRU-CORE

#### Meets NZS3640:2003 Standard for H1.2

The TRU-CORE Programme is specifically designed for timber framing using both Radiata pine and Douglas fir. The advantages of this highly innovative Programme are:

- √ Timber Preservation Council "WOODmark®" approved
- In no need to re-treat notches, cuts and holes
- coloured pink so easy to recognise
- √ odourless
- √ good health and worker safety profile
- √ no flammability risk

Contact: Kop-Coat New Zealand Limited

Kop-Coat House No 2, Te Papa Tipu Innovation Park, Sala Street, PO Box 6065, Whakarewarewa, Rotorua

Phone: 07 343 6304 A/Hours: 021 708 336 E-Mail: kop-coat-rot@xtra.co.nz Website: www.kop-coat.co.nz

KOP-COAT innovation 2 value



# 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.

Independently verified. New Zealand Building Code compliant. That's a safe bet.

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





#### GOOD LOOKING, LONG LASTING PERFORMERS!

TelstraClear Pacific Events Centre Manukau City

> ColorCote  $ZRX^{\mathsf{TM}}$ Off White Styleline™

Profile manufactured by Dimond and installed by Clarke Roofing





We've always maintained that longevity is not just about performance - it's about out-performance.

A mindset that has been integrated into our range of ColorCote® pre-painted metal roofing and cladding systems.

Within the range you'll find a system -ZR8™.ZRX™.AR8™ or ARX™that withstands the environmental challenges you demand of it, including severe marine, geothermal and industrial conditions anywhere in New Zealand.

ColorCote® is available in an extensive range of colours to match your architectural or design taste.  $\mathsf{ColorCote}^{\ensuremath{\mathbb{R}}}$  coating systems are designed to provide advanced corrosion resistance and hold their original colour too.

Every part of a ColorCote® roof is made to last... made to last longer ...made for New Zealand.



PRE-PAINTED METAL PRODUCTS

0800 279 979

www.colorcote.co.nz



For further information on ColorCote® pre-painted metal products call 0800 279 979 now, or write to: Freepost ColorCote® Pacific Coilcoaters. PO Box 12 046, Penrose, Auckland.