



# codewords

## Structural Engineering Practice Advisories published

**Building Controls has developed a series of Practice Advisories for all those in the building industry.**

Concerns have been raised, notably by John Scarry in his Open Letter to the Institution of Professional Engineers of New Zealand (IPENZ), around the need to improve certain areas of structural engineering practice.

Investigations by the Building Industry Authority (now Building Controls) and IPENZ confirmed that some aspects of the design and construction of structural elements may not always have been carried out to an acceptable standard.

To address these concerns a series of Practice Advisories has been developed aimed at maintaining and, where necessary, improving the quality and consistency of design, building consent review, construction and inspection.

The first six Advisories to be published cover:

- the bending of steel reinforcement
- structural concepts and load paths

- cold-worked wire mesh
- connection design and detailing
- precast hollow-core floor assemblies
- general design and construction practice.

These Advisories can be downloaded from the Building Controls section of the Department's website at [www.dbh.govt.nz](http://www.dbh.govt.nz).

Hard-copy versions will be printed in early 2005 and further advice will be provided on how these can be obtained.

The Department has worked closely with SESOC (the structural technical interest group of IPENZ) in the development of these Advisories. We encourage all those in the industry to do what they can to improve structural performance in their particular area. Structural engineers, building officials and those involved in the construction process should take special note of these Practice Advisories.

Dr Andrew Cleland, Chief Executive of IPENZ, said the Advisories would assist in minimising the number of mistakes and would contribute to the goal of getting building design right first time.

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# Structural Engineering Practice Advisories published *continued*

'Peer reviewed advice in a concise form will benefit structural engineers, but even the best advice cannot abrogate the responsibilities of the engineer to choose the most appropriate practice for a particular situation', he said.

Barry Davidson, President of SESOC,

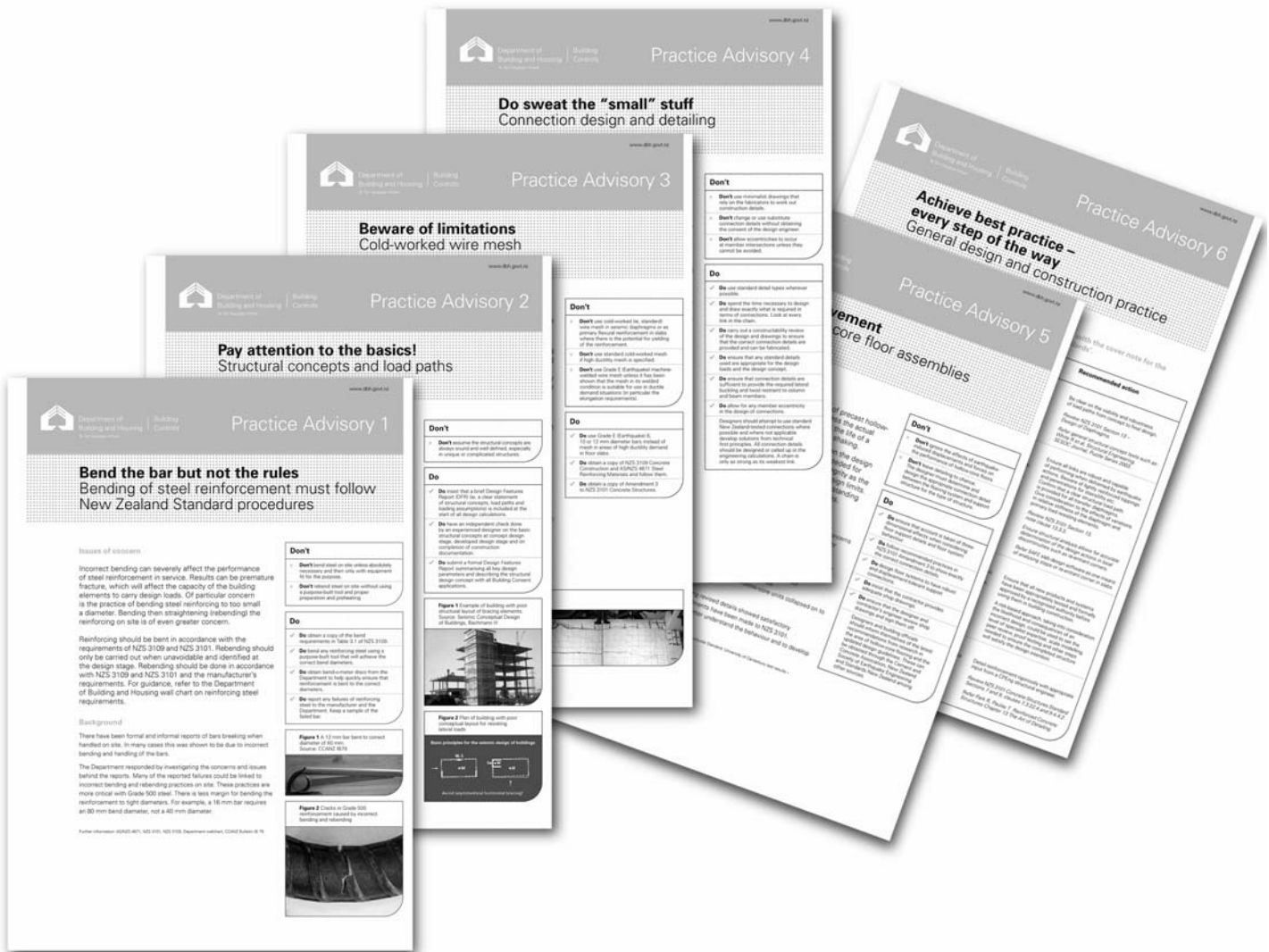
urges all SESOC members to support the content and spirit of the Advisories.

Dr David Hopkins, Senior Technical Adviser for the Department, said the Department is working actively to influence industry behaviour and practice.

'We are seeking to provide guidance

for the steps needed to create Code-compliant buildings,' he said.

The Department will issue further Practice Advisories from time to time in response to emerging concerns on any aspect affecting the compliance of buildings with the Building Code.



Download Advisories

[www.building.dbh.govt.nz/e/publish/publications.shtml](http://www.building.dbh.govt.nz/e/publish/publications.shtml)

# General Manager, Building Controls update

Welcome to the second issue of *Codewords*.

One of the key aims of the Building Act 2004 is to provide more guidance and information to both consumers and those in the building industry.

As part of this drive Building Controls has developed a series of Practice Advisories addressing concerns over the design and monitoring of structural elements. The first six Advisories were published in December 2004 and cover a range of areas from the bending of steel reinforcement to connection design and load paths. We call on structural engineers, building officials and the industry in general to stay alert to these issues and ensure good building site practice. You can read more about the Advisories on pages 1 and 2.

While providing guidance, the Department is also actively seeking advice through the establishment of four advisory panels covering fire, access for people with disabilities, structure and the building envelope. This is a significant step to ensure the department is informed about emerging issues and the needs of the sector. They are composed of leading professionals in each discipline and also include staff from territorial authorities and people familiar with consumer issues. All the panels have now met (see page 8), and we will have more details about their work in future editions of *Codewords*.

On the technical side, a reminder that the implementation date of the new Acceptable Solution for using treated timber in buildings has changed.

Previously a transition period of one year was in place for buildings with consents issued before 1 April 2004, to allow them to be finished under the old requirements. This transition period

no longer applies and compliance for treated timber will be assessed against the conditions in a project's building consent, rather than against the Building Code in place at the time of completion. You can read more about this decision on page 10.

A consultation document detailing proposed changes to the scheme of insurance following the Certifier's Insurance Review was released in January 2005. During late 2003 and early 2004, it emerged that building certifiers were experiencing difficulties fully complying with the Performance Specification. Concern about these difficulties led the BIA to initiate a review of the scheme of insurance, led by Don Hunn, with a view to considering what improvements could be made. After considering the options available, the Authority opted for a re-specification of the scheme of insurance to better meet the consumer protection standard. We expect the new Specification to be in effect by 31 March.

Building Controls is settling in well to our new structure and role. We are looking forward to continuing to work with local authorities and the building sector to implement the new regulatory framework over the coming year. As previously announced I will be moving on from my role at Building Controls at the end of February. It has been a privilege to be part of this sector over the last fifteen months.



A stylized, handwritten signature in blue ink, appearing to read 'J. Ryan'.

**John Ryan**  
General Manager  
Building Controls

# BRANZ Industry Research Needs Survey 2004

Each year the Building Research Association of New Zealand (BRANZ) surveys the industry to identify areas where new information is needed, and the topics that should be targeted. The survey was extended in coverage this year to seek ideas on Codes and Standards that respondents believed most needed review.

## METHODOLOGY

Survey forms were sent out in June 2004 to 558 industry participants, including designers, builders, subcontractors, manufacturers, building control officials and building owners. The questionnaire asked respondents to rank on a 1-7 scale (where 1 is extremely important and 7 is totally unimportant) the relative importance of a range of general topics.

It also asked for a simple 'tick the box' response on whether items on a list of 111 specific topics were important. Respondents were provided with spaces in which they could nominate the topics they saw as the most important for further research, for Codes and Standards review, and for seminars and publications.

## RESULTS

**Table 1** shows the overall ranking given to the general areas and the percentage of people who rated that area either 1 or 2, where 1 is extremely important.

**Table 2** lists the ten specific topics, from the list of 111, marked by 40 percent or more of respondents as important (the average percentage score of the 11 topics was 24 percent, down from 32 percent in 2003).

TABLE 1: RANKING OF IMPORTANCE OF GENERAL RESEARCH AREAS

General area	2004	2003
Building envelope	82%	85%
Materials performance	70%	76%
Energy	65%	61%
Sustainability and environmental issues	44%	44%
Fire safety science and engineering	43%	42%
Acoustics	40%	41%
On-site practice	39%	50%
Structural engineering	38%	32%
Internal environments	37%	33%
Advanced technologies	33%	48%
Earthquake engineering	33%	30%
Information management	31%	19%
Building services	29%	33%
Project management	28%	22%
Building user expectations	26%	38%
Re-use of existing buildings and structures	25%	26%
Economics/demographics	20%	27%
Building user behaviour	19%	33%
Geotechnical and hydraulic engineering	19%	15%

**TABLE 2: SPECIFIC TOPICS TICKED AS IMPORTANT BY 40 PERCENT OR MORE OF RESPONDENTS**

General area	Specific topic
Building envelope	Joint and junction detailing
Information management	Good Practice Database of design details
Building envelope	Rain penetration
Materials performance	Assessment of new materials entering market
Economics and demographics	Cost-benefits of alternative construction methods
Internal environments	Condensation and similar moisture problems
Acoustics	Acoustic separation
Energy	Passive heating/cooling
Energy	Cost-benefit of double/triple glazing
Building user behaviour	Effects of building user on energy efficient measures

The survey applies a very broad filter to industry opinion, but for the fourth year in a row the issues surrounding weathertightness dominated.

The need for better understanding about weathertightness issues also came through in the comments as the most important topics for research, seminars and printed material. Other Code Clauses seen to be in particular need of revision related to timber construction.

Materials performance has always been in the top two or three general areas and energy issues have also always been near the top of the list. The rise of environmental issues, to lie fourth in the list this year, is a continuation of a slow trend over the past few years.

The Department of Building and Housing is working with BRANZ and Standards New Zealand to ensure the programmes of the three organisations are well aligned. To assist this, the results database (with all names and identifiable characteristics removed) has been passed on to both organisations. As usual, too, a summary of the findings has been sent to the Foundation for Research Science and Technology (FRST) to assist them in their research investment processes.

**Note:** This article is excerpted from the December 2004/January 2005 issue of *BUILD*, published by BRANZ.

# Department to be represented at BOINZ annual conference

**The annual conference of the Building Officials' Institute of New Zealand (BOINZ) is to be held on 21-23 March 2005 in New Plymouth.**

This year's conference is entitled 'Mountains of Knowledge' and will take the shaping of the new Building Act 2004 as its key theme.

Subjects to be covered include accreditation of building consent authorities (BCAs), building product certification and licensing of practitioners. Staff from the Department of Building and Housing will be among the speakers, discussing the role of the Department, the intent of the regulations behind the Act, and the development of a formal education and training strategy.

The Department will also be running three workshops. These will cover the changes being introduced on 31 March 2005 to consents and inspection processes, and the third will consider BCA accreditation.

For more information on the conference, contact BOINZ on

- ☎ (04) 385 8884
- @ office@boinz.org.nz
- 🌐 www.boinz.org.nz

# Review of private building certifier insurance requirements completed

**People using private building certifiers should be aware that certifiers may not have adequate insurance cover against potential claims of negligence, particularly if the certifier does not continue in business.**

The advice follows a comprehensive review, begun by the former Building Industry Authority, of the indemnity insurance building certifiers are required to have. The review is now in its final stages.

Under the Building Act 1991 building certifiers must carry insurance to cover their liabilities. For example, a building certifier may be liable if it negligently certified a house that later needed repairs because it did not meet Building Code standards.

The type of insurance they must carry is set out in the 'Building Certifier Insurance Performance Specification' set by the Department.

In summary, the current specification requires two forms of insurance:

- A requirement for certifiers to hold insurance cover for claims of negligence extending 10 years from the completion of a job.
- A requirement to obtain run-off insurance if they go out of business – this would provide customers with up to 10 years of cover from the time the business closed.

John Ryan, General Manager Building Controls, said concerns around building certifier insurance emerged with the leaky building problem at the end of 2002.

The principal problem was that building certifiers couldn't get insurance to cover weathertightness for leaky building risks, Mr Ryan said.

As a result, the Building Industry Authority restricted the type of work certifiers could undertake to that for which they could get insurance cover. So, if cover could not be obtained for weathertightness activity, certifiers were unable to inspect and certify weathertightness related work.

The BIA then began a formal review of certifier insurance.

As a result a new specification is being proposed by the Department of Building and Housing and is being issued to private building certifiers and other interested parties for consultation.

A key change in the proposed specification is the requirement that run-off cover is purchased in advance.

If certifiers are unable to purchase run-off cover as proposed, or to meet other requirements of the new specification, then they will be unable to renew their approval to operate as a building certifier.<sup>1</sup>

The review found that the arrangements providing for the purchase of run-off cover have not proven effective in securing the level of cover intended by the current scheme.

This has been addressed by the proposed Performance Specification.

The Department expects a new specification to be in place in March 2005 after consideration of feedback on the proposals.

'The review has given us a much better understanding of the current nature of the insurance market and how that relates to problems like weathertightness and how that should be covered by insurance,' Mr Ryan said.

'This is in line with a range of other measures undertaken to improve the building regulatory framework.

'These include the introduction of a new Building Act with its requirements

for the accreditation of those undertaking certification work, and the licensing of building practitioners.'

The certifier industry is going through substantial change as a result of the Building Act 2004. As a result, building certifiers are currently assessing their business options and a number are in the process of forming arrangements to work with councils as sub-contractors.

'This means the expertise and capacity they provide will not be lost to the industry,' Mr Ryan said.

<sup>1</sup> Certifiers are required to have an Approval to Operate, which is issued by the Department. This is renewed regularly – usually annually.


# Building Controls – How to contact us


Building Controls, formerly the Building Industry Authority, is now part of the Department of Building and Housing. The Minister of Housing is Hon Steve Maharey, and the Minister of Building Issues with responsibility for the Department is Hon Chris Carter. The Chief Executive of the Department is Katrina Bach.

Building Controls still exists as a distinct group within this structure, with the powers of the BIA now delegated to the Acting General Manager of Building Controls Mike Stannard. Staff perform a range of advisory functions and are available for enquiries in their areas of expertise. Here are some key contacts within Building Controls and the Department:

## DEPARTMENT OF BUILDING AND HOUSING CORPORATE OFFICE

 [www.dbh.govt.nz](http://www.dbh.govt.nz)

 Level 6  
256 Lambton Quay  
PO Box 10 729  
Wellington

 (04) 494 0260


Tenancy advice and information

 0800 TENANCY (0800 83 62 62)


Bond enquiries

 0800 737 666

Licensing and Building Act queries

 0800 242 243

## BUILDING CONTROLS

Level 11  
Greenock House  
39 The Terrace  
PO Box 11 846  
Wellington  
 0800 242 243

### Media and Communications

Blair McLaren, Communications Adviser  
 (04) 470 1003


### Building Act 2004 Enquiries

Holly Young, Communications Adviser  
 (04) 470 1057


### Building Industry Performance Group


Malcolm MacMillan, Audit Manager  
 (04) 470 1042

### Determinations


Amanda Broomhall, Determinations Administrator  
 (04) 470 1050

### Certifications

Clare Coleman, Adviser, Building Certifiers  
 (04) 470 1044

Darien Mahony, Senior Adviser, Building Certifiers  
 (04) 470 1023

### Operations

Carolyn Pepper, Operations Group Administrator  
 (04) 470 1016

# Important changes to BIA website

The content previously available on the Building Industry Authority website ([www.bia.govt.nz](http://www.bia.govt.nz)) is now located within the Department of Building and Housing website:

 [www.dbh.govt.nz](http://www.dbh.govt.nz)

## HOW DO I FIND THE 'OLD BIA' INFORMATION?

Simply go to [www.dbh.govt.nz](http://www.dbh.govt.nz) and click on the link 'Building Controls' beneath the Department's logo. This will take you to the Building Controls section of the Department's website.

You will notice that the layout and structure of Building Controls information is very similar to the layout of the BIA website. The aim is to minimise disruption to users who were familiar with the BIA site.

Content has been updated to reflect the fact that the BIA has been dissolved, and its building control functions transferred to the Department of Building and Housing.

# New advisory panels meet

**Four new advisory panels have been set up by the Department of Building and Housing, with the aim of providing advice to the Department on current issues and trends in the building sector.**

Changes to the building regulator under the new Building Act include a greater consumer focus, and a requirement for the Department to seek input on emerging issues and the needs of the sector. As part of this change, Building Controls has established four advisory panels covering the following topics: fire, access for people with disabilities, structure and the building envelope.

The three key roles of the Advisory Panels are to provide:

- input into the Department's work programme, including identifying research that may be necessary in order for it to carry out its regulatory function
- appropriate advice to the Department on the issues and emerging trends within the building industry
- ad hoc advice to the Department and General Manager Building Controls.

The Fire Advisory Panel was the first to be established, in June 2004, with Tony Gibson as its chair. This has now been followed by the Access Advisory Panel (chaired by Alexia Pickering), Structural Advisory Panel (chaired by Andrew King), and Building Envelope Advisory Panel (chaired by John Hill).

More details about the work of the advisory panels will be covered in future editions of *Codewords*.



**The Access Advisory Panel meeting on 25 November** (left to right): Dr Jan Scown, Bill Wrightson (seated), Wyn Hoadley, Ron Pynenburg, Alexia Pickering (seated), Minnie Baragwanath, Mike Stannard, Simon Tonkin, Hamish Handley, Vivian Naylor (seated).



**The Structural Advisory Panel meeting on 15 December** (left to right): Graeme Lawrance, Mike Stannard, Peter Smith, Stuart George, Andrew King, Barry Davidson, Richard Built, John Buchan, David Hopkins, John Ryan, Grant Wilkinson. Absent: Richard Bialostocki.



**The Building Envelope Advisory Panel meeting on 16 December** (left to right): Kevin Golding, John Sutherland, Adrian Bennett (seated), Mike Stannard, Philip O'Sullivan, Bruce Connor, John Hill (seated), John Ryan, Bob de Leur, John Harper.

# Building Act latest inform

## CONSUMER LEAFLETS

The Department will be releasing a suite of leaflets outlining the Building Act 2004. Intended for consumers, building owners and builders, the leaflets will look at what the Building Act means for them and will be available from territorial authorities in March.

## BUILDING ACT GUIDANCE MATERIAL

Printed copies of the Building Official's Guide to the Building Act 2004 will be available in February. Intended as a day-to-day operational guide for building officials, the material focuses on:

- Project Information Memoranda
- building consents
- Code compliance certificates
- Compliance Schedules
- Building Warrants of Fitness
- Certificates of Acceptance
- Notices to Fix.

The material is also available for download from the Department's Building Act 2004 website

 [www.building.govt.nz](http://www.building.govt.nz)

# 2004: ation

## NEW INFORMATION ON CONSUMER MEASURES AND IMPLIED WARRANTIES

Important new information on consumer protection measures under the 2004 Act is also available on the website at [www.building.govt.nz/publish/363-364.php](http://www.building.govt.nz/publish/363-364.php) This covers public safety in buildings (section 363), sale by residential property developers (section 364) and implied warranties.

## BCA ACCREDITATION DISCUSSION DOCUMENT

*Proposed accreditation requirements for building consent authorities* has been released for public comment. The paper outlines training, timing and business process requirements for local authorities and other private organisations wanting to become building consent authorities. It is available at [www.building.govt.nz](http://www.building.govt.nz) and is open for submissions until 21 February 2005.

See *Newsline* for more information on all the above notices.

# ConsumerBuild proves popular

**The Department's ConsumerBuild website has proved extremely popular with Web users since its December launch.**

ConsumerBuild holds extensive information for people who are building, renovating or maintaining a home. It was developed in partnership by the Department of Building and Housing and Consumers' Institute.

During its first 11 days online, the site averaged 1900 visits per day. It has received mentions in a number of newspapers, and on other websites. The site has also been nominated 'Pick of the week' by Xtra in its weekly email to customers – citing it as 'Important and very useful'.

Feedback received through the site is a key indicator of its appeal. So far the comments have been positive and constructive, and we invite you to visit and offer suggestions on how the site can further be improved.

## TOPICS COVERED ON CONSUMERBUILD INCLUDE:

- The Building Act
- Buying a house
- Buying a section
- Managing the construction phase
- Dealing with tradespeople
- Finding and dealing with designers and architects
- DIY
- Leaky buildings
- Legal issues)
- Maintenance and repairs
- Materials and features
- Moving a house
- Project management
- Renovations and alterations

There is also news and updates on hot topics in the building industry, step-by-step guides to building and renovating, and plenty of other resources, tips and useful contacts.

Visit ConsumerBuild at:

 [www.consumerbuild.org.nz](http://www.consumerbuild.org.nz)

CONSUMERBUILD



# B2/AS1 Implementation date changes

## IMPLEMENTATION OF NEW TIMBER TREATMENT REQUIREMENTS

In December 2003 the Building Industry Authority (BIA) announced amendments to its Acceptable Solution, B2/AS1, dealing with the use of treated and untreated timber. The amendments require higher levels of timber treatment in parts of buildings more at risk of decay caused by leaking.

The new Acceptable Solution applies to any application for a building consent received on or after 1 April 2004.

When the amendment to B2/AS1 was announced, the BIA put in place a transition period of one year for those building to the old Acceptable Solution to gain a code compliance certificate (CCC). This transition period no longer applies.

Under the Building Act 2004, from 31 March 2005 CCCs will be assessed against the conditions in the original building consent, rather than against the Building Code in place at the time of the assessment.

The Authority has therefore decided that the policy intent of the new Act should apply for those who are already building under the old Acceptable Solution. Their buildings will therefore be assessed against the conditions of the original building consent and hence the old Acceptable Solution.

It must be remembered that the old Acceptable Solution only allows kiln-dried untreated timber framing if its in-service moisture content remains below 18 percent. Weathertightness failures have demonstrated that this condition

will not be achieved when there has been a lack of understanding of weather-tightness principles, poor detailing, no flashings, poor construction practice and no drainage plane.

In deciding whether a building is Code compliant, the Authority would expect an adequate inspection of the cladding and measurement of the moisture content of the framing in vulnerable locations. If untreated framing is being exposed during remedial work, the Authority recommends that territorial authorities (TAs) require surface treatment of the exposed framing to give additional protection against mould growth and decay. Additionally, it is recommended that owners are made aware of their obligations to maintain the cladding of their house.

TAs have no statutory responsibility for the ongoing maintenance of a building. However, the owner could discuss an appropriate maintenance programme with the TA, bearing in mind that any comments or advice provided by the TA should be accompanied by appropriate disclaimers.

## Publications update

### BUILDING ACT 2004 ON CD-ROM

Subscribers to the Compliance Document CD-ROM will soon be receiving an updated disk that contains the Building Act 2004.

The new Act runs alongside the 1991 Act until 31 March when the old Act is repealed. Consequently, both Acts are included in the new edition of the disk and are cross-referenced.

The CD-ROM also contains the New Zealand Building Code, all Compliance Documents and the Handbook. If you want to buy a copy, plus a year's subscription to updates, please see the advertisement for Vicbooks on page 12.

### E2/AS1 RISK MATRIX GUIDANCE DOCUMENT

Last year we ran a successful series of seminars on the risk matrix for assessing weathertightness of buildings in the new Acceptable Solution E2/AS1. As part of each seminar, attendees worked through practical examples of applying the risk matrix to house plans of varying complexity.

These worked examples are part of a guidance document which is now in production.

# Building Industry Performance **news**

## PROPOSED CHANGES TO THE B1 STRUCTURE APPROVED DOCUMENT

The Department of Building and Housing is now analysing feedback on proposed changes to its Compliance Document for Clause B1 Structure. The change relates to Standard NZS 3109: 1997 Concrete Construction.

This Standard is directly cited in B1/AS3 Small Chimneys. It is also referenced from NZS 3101: 1995 Concrete Structures which is cited in Verification Method B1/VM1 General. B1/VM1 provides approved means of checking that structures comply with the Building Code, largely by citing New Zealand Standards. B1/AS3 describes how to build Code-compliant small chimneys and concrete hearths for solid fuel burning domestic appliances.

The proposal is to amend the references page of the B1 Approved Document to include Amendment 1 to NZS 3109. Amendment 1 to the Standard was subject to the normal Standards New Zealand public comment process before being published in August 2003.

## PRODUCER STATEMENT GUIDANCE DOCUMENT

In late 2004, the Producer Statement work group developed a new Producer Statement guidance document. The work group was made up of representatives from the Building Officials' Institute of New Zealand (BOINZ), the Institution of Professional Engineers New Zealand (IPENZ), the Design Association New Zealand (DANZ) and the New Zealand Institute of Architects (NZIA).

## BACKGROUND

The Technical Reviews undertaken by Building Controls have highlighted that Producer Statements have not been managed well by the industry, and their value has been undermined.

## PURPOSE OF DOCUMENT

The aim of the document is to provide building consent authorities (BCAs) with guidelines to help them manage Producer Statements and includes information on:

- recommended qualifications/ experience of the author of a Producer Statement
- recommended processes a BCA should have in place for assessing a Producer Statement
- recommended auditing processes
- general use of Producer Statements.

The document will also benefit anyone who issues Producer Statements.

## CONSULTATION PROCESS

The document is due out for consultation some time in late March/early April, and will be published on the Department's website at [www.dbh.govt.nz](http://www.dbh.govt.nz). Interested parties will be able to make submissions at that time.

# Standards New Zealand work in progress

**STANDARDS NEW ZEALAND (SNZ), THE NATIONAL STANDARDS BODY, PROVIDES AN UPDATE ON THE PROGRESS OF RECENT BUILDING-RELATED STANDARDS.**

## Public comment

- A revision of a fire Standard, *Hand operated fire fighting equipment* (NZS 4503), was available for public comment until 2 February 2005. The revision is being made to take into account new information from many international sources including Australia. The current Standard is cited in the Fire Safety and Evacuation of Buildings Regulations 1982, and it is intended that this citation will continue.

## Under development


- A revision of the automatic fire sprinkler systems Standard (NZS 4541: 2003) has begun. The committee has met once, and agreed the way forward. A total of six working groups will be responsible for reviewing the content of the Standard in full. Amongst other things, the revision will incorporate relevant new research and technology as well as revised Acceptable Solutions and Building Code requirements. The Standard will apply to all automatic fire sprinkler systems installed in firecells or complete buildings or groups of buildings. The public comment period is expected to start in August 2005.
- The revised concrete structures Standard (NZS 3101) is currently under development and scheduled for publication in May 2005. The second part of this Standard contains information that aligns with the anticipated provisions of the earthquake loadings Standard (NZS 1170.5), which is soon to be finalised and published. It also updates the 1995 edition and includes re-arranging the content of the Standard on an elemental basis as well as revised provisions for Grade 500 steel, durability design for a range of cement types and additives, fibre reinforcement, effective section properties, thin panels, fire design and many other topics.
- New Zealand's first Standard for property inspections is scheduled for publication in February 2005. Entitled *Inspection of Buildings – Residential property* (NZS 4306), the Standard is intended to provide consistency in the way pre-sale/pre-purchase property inspections are carried out. The Standard will give guidance to property inspectors while providing homeowners, vendors, and financiers with assurance that the property's condition can be assessed fairly.

## Keeping up to date


- To ensure you receive all SNZ new product information, details on Standards that have been withdrawn, special offers and company news please subscribe at the 'Keep me up to date' section on the SNZ website ([www.standards.co.nz](http://www.standards.co.nz)).

## Purchasing details

If you would like to purchase any products from SNZ you can visit their online shop at [shop.standards.co.nz](http://shop.standards.co.nz) or contact SNZ sales on ph: 0800 735 656, fax: (04) 498 5994 or email

 [snz@standards.co.nz](mailto:snz@standards.co.nz)

You can also view and comment on the draft documents by following the link to the draft section on the SNZ website

 [www.standards.co.nz/drafts](http://www.standards.co.nz/drafts)





## WHERE TO GET COMPLIANCE DOCUMENTS (APPROVED DOCUMENTS)

Victoria University Bookcentre is pleased to be associated with the Department of Building and Housing. We supply the Department's Compliance Documents in hard copy, CD-ROM or PDF (internet) format, as well as the Building Act and Building Regulations which include the Building Code. We can also source technical and general books on your behalf.

**Victoria University Bookcentre, Gate 1, Student Union Building, 1 Kelburn Parade, PO Box 12337, Wellington.**

 [www.vicbooks.co.nz/dbh/](http://www.vicbooks.co.nz/dbh/)

 [sam.stanley@vicbooks.co.nz](mailto:sam.stanley@vicbooks.co.nz)

 Freephone 0800 370 370

# Operations group work in progress

## THE PUBLICATION PROCESS FOR:

### BUILDING CODE CLAUSES

1. Identify need for Clause change

2. Appoint project manager and/  
or establish working group

3. Prepare information for  
public comment

4. Public comment

5. Analyse public comment

6. New Clause drafted for  
Chief Executive's approval

7. Final draft goes through  
regulation approval process

8. Publication

### COMPLIANCE DOCUMENTS

1. Identify need for change to  
Compliance Document

2. Appoint project manager and/  
or establish working group

3. Prepare information for public  
comment

4. Public comment

5. Analyse public comment

6. New draft for Chief Executive's  
approval

7. Publication

#### Clause B1, Structure – Concrete Construction

Stage: Analyse Public Comment

Amendment to the references page to include Amendment 1 to Standard NZS 3109.

#### Clause C, Fire Safety – minimum fire ratings

Stage: analyse public comment

Amendment to the Acceptable Solution C/AS1 which proposes increases to the minimum fire ratings required.

#### Clause C, Fire Safety – safety in day-care centres where children sleep

Stage: analyse public comment

Amendment to Acceptable Solution C/AS1 regarding fire safety precautions and escape methods in buildings where young children may sleep.

#### Clause C, Fire Safety – single means of escape

Stage: assess need for change to C/AS1

Concerning the design requirements for multi-storey buildings with single means of escape from fire.

#### Clause E2, External Moisture

Stage: finalisation for implementation on 1 July 2005

Amendment to VM1/AS1 updating requirements for claddings regarding weathertightness.

#### Clause E3, Internal Moisture

Stage: publication/public comment

Publication of amendment to Code Clause with respect to domestic ventilation. Proposed amendments to Acceptable Solution E3/AS1 and E3/VM1.

#### Clause F3, Hazardous Substances and Processes

Stage: prepare information for public comment

Amendment to Compliance Document to comply with the new HSNO Act covering the storage of hazardous liquids and gases in buildings.

#### Clause F4, Safety from Falling

Stage: final draft going through the regulation approval process

Amendments to Clause and Acceptable Solution F4/AS1 concerning barriers not being used as seats and barrier heights.

#### Clause F6, Lighting for Emergency

Stage: analyse public comment

Amendments to the Code Clause and Approved Document.

#### Clause G6, Airborne and Impact Sound

Stage: analyse public comment

A complete review of the Code Clause and its Compliance Document. Proposals contain new methods for measuring sound and new criteria for protection from environmental sound.

#### Clause G6, Airborne and Impact Sound – classroom acoustics

Stage: prepare information for public comment

Amendments to the Code Clause and the Compliance Document.

#### Clause G14, Industrial Liquid Waste

Stage: final draft going through the regulation approval process

Amendments to Code Clause and Compliance Document: G14/AS1 and G14/VM1 altered, and a new Verification Method G14/VM2 for Foul Water: On-site disposal.

#### Clause H1, Energy Efficiency

Stage: analyse public comment

Proposal to cite revision of the Standard for house insulation referenced in Acceptable Solution H1/AS1.

# Determinations issued

**77 Determinations were issued last year, 60 of them on weathertightness matters. The following are summaries of two of the weathertightness Determinations issued in November.**

In both cases the owner disputed the territorial authority's (TA) decision not to issue a code compliance certificate (CCC) and applied for a Determination. Building Controls (the Building Industry Authority at the time) was asked to determine whether the monolithic cladding on each house complied with the external moisture requirements (E2) and durability requirements (B2) of the Building Code.

## **Determination 2004/70**

*House 54, issued 15 November 2004*

### **House design**

The house is built on two levels, in a high wind zone and is a moderately complex shape. It has two open tiled decks on the upper level, one of which is constructed over the kitchen, while the other is supported on an extended upper level joist and post system at its outer edges. The house has no eaves and the various gable ends are flush finished.

### **Submissions/reports**

The Authority received submissions from the TA and the owner, and it commissioned a cladding report from an independent expert. The expert took 29 moisture readings, 23 of which were above 18 percent, with some readings as high as 40 percent.

The most significant areas of moisture ingress were:

- the bottom plates, where moisture was entering through the base of the cladding, because of the lack of a capillary gap between the cladding and the concrete foundation

- the tops of the beams and columns supporting the deck over the kitchen, where moisture was entering because of inadequate sealing to the flat tops of the beams and columns
- the base of the columns on the deck, where moisture was entering through the inadequate seal between the tiled deck and the fibre-cement column
- boundary joists to the rear deck, where the moisture levels may be due to the penetration of the deck membrane by the fixings for the corner block support to the screen.

The expert also noted other deficiencies in the cladding.

- The waterproofing membrane under the tiles turned up under the fibre-cement walls had tile grout in the gap, so there was no capillary break between the back of the fibre-cement and the membrane along the walls and the columns.
- Penetrations were fixed directly into the cladding and not sealed effectively.
- A polystyrene fascia covering to a horizontal joint in the cladding was trapping water and preventing ongoing maintenance inspections to ensure the horizontal joint remained weathertight. Furthermore, the butt joint found behind the fascia is not a horizontal control joint and will not operate like one.
- Ground levels in some areas are too close to the bottom edge of the cladding.

## **Determination 2004/75**

*House 58, issued 29 November 2004*

### **House design**

The house is single-storey, in a low wind zone and the external walls have monolithic cladding. The house is of a fairly simple shape, but the roofs have several complex valley and wall/roof junctions. The flat roof eave projections are 300 mm wide. An attached 125 mm gutter gives further protection to all the eaves. The main roof verges have no projections.

### **Submissions/reports**

The Authority received submissions from the TA and the owner, and it commissioned a cladding report from an independent expert.

The expert took 23 moisture readings that were above 18 percent, with most readings in the high 20 percent range and some as high as 40 percent. These excessive moisture readings largely occurred under windows or at the bottom plates of the walls. The expert considered that it was possible that the ingress of moisture could have weakened the untreated timber behind the cladding. The expert also found that numerous cracks were evident in the cladding on all elevations of the building.

In addition, the expert also noted other deficiencies in the cladding.

- The exterior joinery units have standard aluminium head flashings, but the cladding finished hard against the flashing. There is no evidence of in-seal strips or sealant under the jamb flanges of these units.
- There are no flashings to the head and jambs of the garage door openings.
- No vertical control joints have been installed.

# Learning curve


- The cladding overlap at the foundation wall is insufficient at some locations.
- There is insufficient ground clearance to the cladding adjoining the garden areas, and the cladding is buried in the paving outside the front and garage doors.
- At four cladding/roof junctions the flashings are face mounted and driven rain can enter behind the cladding at these areas.
- The junctions between the vertical edge of the cladding and the butyl rubber flat roof membrane have the potential to permit moisture ingress.
- Some penetrations are not properly sealed.

## Decision

In both cases, the Authority found the cladding was not installed according to good trade practice or to the manufacturer's instructions. As a result, there were a number of defects which had caused penetration of moisture through the cladding. The Authority determined the cladding systems as installed did not comply with Clause E2.3.2 of the Building Code.

Because the faults identified were widespread and serious the Authority could not conclude that once the faults identified in the expert's report were fixed the claddings would be Code compliant. A final decision on the best remediation options can only be taken after more extensive investigation and careful design of the changes by an appropriate expert. In both cases, the Authority confirmed the TA's decision not to grant the CCCs.

To read all the Determinations in full, go to:

 [www.dbh.govt.nz/e/publish/determinations\\_issued.shtml](http://www.dbh.govt.nz/e/publish/determinations_issued.shtml)

## BUILDING ACT SEMINAR SERIES

The Department of Building and Housing will brief industry on the Building Act 2004 through a nationwide seminar series run in association with BRANZ Ltd. The seminars will take a 'what you need to know' approach to the Act and will offer a practical guide to the new legislation.


### Dates and venues

The seminar series runs from 28 February to 22 April 2005 in 32 centres nationwide. See *Newsline* for more information.

### Enquiries

To register your interest, contact Gail King, Seminar Coordinator, BRANZ Ltd, on

 [gailking@branz.co.nz](mailto:gailking@branz.co.nz)

 (04) 237 1170.

## BUILDING ACT WORKSHOPS FOR BUILDING OFFICIALS

The Department is also holding a separate series of workshops, designed specifically for building officials, on the day-to-day operational changes under the new Building Act.


### Dates and venues

These are detailed in *Newsline*, and take place from 14 February to 16 March at 22 centres around the country.

### Enquiries

Contact Rosemary Hazelwood, Building Networks

 [office@bldgnets.co.nz](mailto:office@bldgnets.co.nz)

 (04) 233 9588, Mobile: 027 223 5747

## BRANZ CONSTRUCTION INDUSTRY TRAINING ENTERPRISE (CITE)

### Certificate in Building Controls\*

#### Reasons to attend

This NZQA-approved course is aimed at providing those working in building controls with the knowledge and understanding of the building controls regime, legislative background, duties and responsibilities and the processes involved. The course also covers Producer Statements, Alternative Solutions and Acceptable Solutions.

This course has been revised and updated for 2005 to reflect the changes in building controls brought about by the passing of the Building Act 2004. It is for those working as a building official or private building certifier, and those planning a career in building controls.

#### Presenters

Rosemary Hazlewood, MA (Hons), Certs PR, IAT, Director of Building Networks, and Russell Cooney, BE (Hons), an engineer and registered building surveyor.

#### Dates and venue

Wellington:

Week 1: 7 to 11 February,

Week 2: 14 to 18 March 2005.

Cost per person is \$3,937.50 inc GST.

### Certificate in Fire Design

#### Reasons to attend

This eight-day course will provide students with the skills necessary to develop a fire design solution for any building that will comply with the Building Code Acceptable Solution C/AS1 for the C Fire Safety Clauses.

It will also enable the designer to seek advice from a fire engineer when an Alternative Solution might provide a more economic or practical solution.

Plus, it will equip building officials to assess designs that comply with the Acceptable Solution or recognise where they do not, and advise where to seek further assistance.

#### Presenter

Ed Soja, BRANZ Fire Engineer.

#### Dates and venues

Wellington:

Week 1: 22 to 25 February,

Week 2: 10 to 13 May 2005.

Cost per person is \$3,375.00 inc GST.

\*Book for the Building Controls and Plumbing Inspection courses at the same time and you will save \$1000.

# Learning curve continued

## Certificate in Plumbing Inspection\*

### Reasons to attend

This course will provide those already in, or wanting to enter, building controls and who have a construction background, to extend their inspections skills to the plumbing services.

### Presenter

Brent Mallinson, Plumbing Design and Consultancy Ltd

### Dates and venues

Rotorua:

Week 1: 28 February to 4 March,

Week 2: 4 to 8 April 2005.


Cost per person is \$2,812.50 inc GST.

## General enquiries

Early-bird discounts are available on all courses.

\*Book for the Building Controls and Plumbing Inspection courses at the same time and you will save \$1000.

For more information about courses:

 [www.branz.co.nz](http://www.branz.co.nz) (CITE Industry Training)

 [branzcite@branz.co.nz](mailto:branzcite@branz.co.nz)

 **Fiona McColl, CITE Education Officer,**  
ph: (04) 238 1291

## STANDARDS NEW ZEALAND

### Seminar series – Risk management

Standards New Zealand, the national Standards body, will be running a seminar series on their new *risk management* Standard (AS/NZS 4360:2004) in March 2005.

The seminars will cover all aspects of the Standard and discuss how it can be applied to all businesses, large or small. This includes a description of the key steps offered in the Standard which are:

- establishing the context
- identifying the risks
- analysing the risks
- evaluating the risks
- treating the risks
- monitoring and reviewing
- communicating and consulting.

These are all stages that any businessperson can relate to, whether their business is manufacturing, service or sales based.

### Seminar registration and information

For registration, dates, locations, prices and further information, call 0800 735 656 or email

 [seminar@standards.co.nz](mailto:seminar@standards.co.nz)

## BARRIER FREE NEW ZEALAND TRUST – TRAINING COURSES

### Reasons to attend

These two-day seminars are designed to raise people's awareness and understanding of the issues for people with disabilities. They provide up-to-date information about building legislation in New Zealand and the access requirements for people with disabilities.

The courses are aimed at building control officers, building certifiers, IQPs, Barrier Free Advisors, architects, designers, developers, building owners or property managers, and those seeking qualifications as a Barrier Free Advisor (BFA).

### Dates and venues

The next courses will be held on:

Date 2005	Locations
3-4 March	Wellington City Council 101 Wakefield Street Wellington
7-8 April	Ellerslie Novotel Hotel 72-112 Greenlane Road East Auckland
12-13 May	Christchurch
16-17 June	Whangarei
4-5 July	Hamilton
15-16 September	Westport
10-11 November	Auckland


### Cost


The two-day courses cost \$337.50 (inc GST).

This includes a copy of *Barrier Free NZ Trust Resource Handbook for Barrier Free Environments*.

### Enquiries

Enquiries can be made to Glenda Greenough, Administrator, Barrier Free NZ Trust.

 (04) 915 5848/(04) 499 0725

 [seminar@barrierfree.nz](mailto:seminar@barrierfree.nz)


## Legality of Department of Building and Housing interpretations


Only the courts can issue binding interpretations of the Building Act 1991 and Building Act 2004 and Regulations. Indications and guidelines issued by the Department of Building and Housing, either in *Codewords* or other communications, are provided with the intention of helping people to understand the legislation. They are, however, offered on a 'no-liability' basis and, in any particular case, those concerned should consult their own legal advisers.

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