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codewords

New licensing system for building sector

Building Issues Minister Clayton Cosgrove has announced a scheme to introduce the licensing of design and building practitioners. The announcement follows extensive consultation with the building sector and stakeholders.

'New Zealanders have a right to expect building work to be done properly the first time. This new licensing system will set benchmark national standards, which skilled building practitioners must meet to be able to undertake significant work,' said Mr Cosgrove.

'While most builders are reputable, there are some providing a poor service. This system will make it harder for these cowboys to operate, and will improve consumer confidence in the industry.

'Builders without a licence will still be able to undertake a wide range of construction work, but significant work will have to be supervised by a licence-holder,' said Mr Cosgrove.

Mr Cosgrove said the Government's commonsense approach protects the Kiwi DIY tradition.

'Unlicensed people will still be able to carry out most of the work they now do around their home. For example, a farmer will still be able to build a hayshed, or a homeowner build a deck, a garden shed or fit a new kitchen.'

Mr Cosgrove said currently anyone can put on a tool belt and call themselves a builder, whether they are competent at their trade or not, so change is needed.

'This is an exciting time for the building industry. The licensed building practitioners regime will set a benchmark for quality and improve consumer confidence in the sector as a whole,' said Mr Cosgrove.

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New licensing system for building sector *continued*

HOW IT WILL WORK

There will be 13 licence classes, which will be progressively introduced from November 2007 with full rollout of the scheme by 2011.

There will be three Design and three Site licences that correspond to three categories of building where:

- category 1 is for straightforward houses
- category 2 is for moderately complex commercial or residential buildings
- category 3 is for large or publicly important buildings.

On all projects requiring licensed building practitioners there must be a Design Lead with the appropriate Design licence who would take responsibility for the final design and certify that the design meets the Building Code.

On all projects requiring licensed building practitioners there must also be a Site Lead with the appropriate Site licence who would take responsibility for the final outcome of the construction work on the project and who would certify that the building work has been completed in accordance with the building consent.

There will be seven Specialist and Trade licences (for all building categories):

- Concrete Structure
- Steel Structure
- Building Services
- Carpentry
- External Plaster
- Roofing
- Brick and Blocklaying.

The Specialist and Trade licence-holders will certify that the building work on the structure and envelope has been completed in accordance with the building consent.

Licensing will only be mandatory for significant building projects, in other words:

- new buildings
- changing the use of a building
- extending or substantially altering an existing building

that are intended for human occupation as a residence or work-place or for public use.

People without a licence will still be able to work on projects coming under the licensing regime, as long as they are supervised by a licensed building practitioner.

TIMETABLE

It is estimated that a total of 28,000 people (about 19 percent of the current workforce) will need to be licensed to supervise or undertake the work on significant building projects. Therefore, it will be necessary to phase in the licence classes to enable the Department and the industry to balance the pressures of implementing the scheme while keeping the industry ticking.

From 1 November 2007, voluntary licensing for Design, Site and Carpentry licences will be available. These three are grouped together, as many people seeking a Site licence will also be seeking a Carpentry licence. There will be a package for people applying for more than one licence.

From 2008, voluntary licensing for the licence classes relating to structure and envelope, ie, the remaining Specialist and Trade licences, will be phased in progressively.

From 30 November 2009 the role of Design Lead and Site Lead becomes mandatory.

From 30 November 2011 all building projects requiring licensed building practitioners will require the appropriate Trade and Specialist licensed building practitioners. The Building Services licence remains voluntary.

WHAT WILL IT COST?

People seeking licences are likely to face an initial assessment cost of between $250 and $650, and the annual licence renewal will cost up to $200.

Ultimately, licensing will result in significant benefits and savings for consumers. Up-skilling the workforce means it will be better able to respond to future changes in materials and products, thereby reducing the risk of future costly building failures. In time, this should lead to reduced construction costs, and fewer delays and disputes.

LICENCE STANDARDS AND ASSESSMENT CRITERIA

The licence standards and assessment criteria will be established over the next year, and approved by the Building Practitioners Board.

People will not necessarily need to have a formal qualification when they first apply to become licensed. There are many highly skilled and competent practitioners in the workforce who do not have any formal qualifications. They will be able to become licensed if they can demonstrate they meet the standards through their skills and experience.

Applications will be assessed on whether they meet the licence standards. Some applicants may need an in-depth assessment, such as a face-to-face interview or a visit to previous projects. The assessments will be done by people with industry experience.

The licence standards for each licence class are under development with help from the industry. The details of the standards for each licence class will be available later in 2006 or early 2007.

TRAINING

It is anticipated that licensing will encourage an increase, over time, in the numbers of people in the building industry undertaking and completing formal education and training.

It is known that there has already been a substantial increase in participation in training for a number of key trades (eg, carpentry, roofing, external plastering). However, not all licence classes have recognised qualification pathways at present. Work is under way to enhance the training pathways for those wanting to qualify in the areas of work covered by the licence classes.

In the longer term, the aim is to have a relevant qualification linked to each licence class. This will encourage people joining the industry to undertake training that will not only increase their competence but also help their chances of becoming licensed.

FREQUENTLY ASKED QUESTIONS

Why is the Government introducing licensing?

The new licensing regime is designed to help ensure buildings are built properly first time by setting high-quality benchmark standards for the building industry. There are currently low levels of formal training in the building industry. One third of builders have a formal qualification and for many specialist trades the percentage is lower. At the same time there have been a lot of changes in the building industry, including:

- changing consumer preferences
- more complex residential buildings being built
- more activity by developers building to on-sell
- more fragmentation of building trades and use of semi-skilled labour
- rapid development of new technologies, materials and systems
- less coordination between design and construction.

These factors have contributed to significant building failures, notably leaky buildings. The licensing system aims to improve the quality of buildings and increase consumer protection by:

- setting national standards for people carrying out certain design and building work
- helping consumers identify licensed building practitioners
- ensuring design and building practitioners are accountable for their work.

What does the building industry think about licensing?

The industry has had a key role in developing the regime and is supportive of the approach being taken. Industry will continue to be involved as we work through the implementation process.

How does licensing help consumers?

Licensing sets benchmark standards. People who apply for a licence will have their name on a public register. Consumers will be able to check the register and use it to choose building and design practitioners who meet the national standards. Licensed building practitioners will be accountable for their work before the Building Practitioners Board.

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New licensing system for building sector *continued*

Will people still be able to undertake do-it-yourself work?

Yes. Most of the work DIYers do today they will still be able to do under the new regime. The only construction that will need to be supervised and certified by a licensed building practitioner will be for:

- new buildings intended for human residence, work or public use
- change of use of buildings (for example, converting an office into an apartment)
- extensions and major alterations to existing buildings intended to be used as residences, workplaces or for public use.

What is the Building Practitioners Board?

The Building Practitioners Board is made up of building industry specialists with expertise in design, construction, inspection services, the law, dispute resolution, education and training. It will approve the rules for standards and assessment processes, hear appeals against licensing decisions and hear complaints against, and discipline, licensed building practitioners. The Board is appointed by the Governor-General on the recommendation of the Minister for Building Issues.

Further information

Visit the Department of Building and Housing website: www.dbh.govt.nz

Queenstown builder Alister Saville (right) giving Building Issues Minister Clayton Cosgrove the benefit of his knowledge after the launch of the Licensing of Building Practitioners regime on April 23.

Building Issues Minister Clayton Cosgrove, Department of Building and Housing Chief Executive Katrina Bach and Occupational Licensing Manager Virginia Burton prepare to present the regime to registered master builders at their conference in Queenstown on April 23.

Release of the Building Consent Authority Development Guide

The Department of Building and Housing has recently released the *Building Consent Authority Development Guide*, a guidance document developed to help organisations prepare for accreditation as a building consent authority (BCA).

The Building Act 2004 requires territorial authorities (TAs), regional authorities (RAs) and private bodies to be registered as building consent authorities (BCAs) in order to undertake regulatory building control functions after 30 November 2007.

In order to be registered as BCAs, organisations will need to meet prescribed standards and criteria for BCA accreditation.

The Department produced the Guide in response to requests from the building control sector for guidance material on preparation for the accreditation scheme. It has been developed in collaboration with territorial authorities, industry and other stakeholders to ensure the Guide provides practical, easy-to-use, and comprehensive advice.

This Guide provides a possible model for documenting the statutory functions required of BCAs in their building consent and inspection operations. It should not be confused with the building consent authority accreditation standards and criteria discussion document about to be consulted on by the Department.

The application of an accreditation and registration regime to New Zealand's building control industry is new. It is intended to strengthen New Zealand's building control system and help to ensure buildings are well designed and constructed, safe, healthy, accessible and meet New Zealanders' expectations.

Accreditation of the building control sector aims to strengthen decision-making at the critical building consent and inspection stages of the building process. Successful implementation will bring about greater consistency in regulatory building control across New Zealand. It will help lead to performance improvements, raised standards in the sector, and more consumer confidence in the system.

The Guide sets out good practice in the delivery of the technical building control systems and processes for consenting and inspections. This information is provided in both narrative form and through process maps. Supplementary material is also provided to assist territorial authorities in identifying the links between territorial authority statutory functions and building consent authority functions.

The *Building Consent Authority Development Guide* is intended to be used as a tool with which BCAs may challenge their existing systems, policies and procedures. It will help BCAs make informed decisions as to how best to develop and implement systems, policies and procedures appropriate to their particular circumstances.

Organisations are not required to use the information in the Guide when preparing for accreditation or when developing documented BCA policies, systems and processes for building control functions: it is guidance material only and is but one possible option.

The Department considers that there is further guidance and assistance that could be added to the Guide in the future (depending on the final structure of the BCA accreditation scheme). We will update you on any upcoming work to develop future modules.

Please contact Andrew Minturn, Adviser, BCA Accreditation and Registration if you have any questions or issues that you would like to discuss further. You can also request additional copies of the guide from him. Andrew's contact details are:

@ andrew.minturn@dbh.govt.nz
(04) 470 1024
Fax: (04) 494 0290

The *Building Consent Authority Development Guide* is also available online at www.dbh.govt.nz/bc-guide/index.html

Solid fuel heaters

With the onset of winter it is likely that many building consent authorities (BCAs) will receive a number of building consent applications for the installation of solid fuel-burning appliances. When it comes to the granting of building consents for such appliances, which include woodburners, there appear to be two main areas of confusion.

The first area of confusion lies around the introduction of the National Environmental Standards for Air Quality, which introduced a new woodburner design standard.
The other issue is the durability (B2) requirements for solid fuel appliances and whether a building consent can be issued in accordance with the provisions of section 113 of the Building Act 2004.

Before approving building consents that involve the installation of domestic solid fuel appliances, BCAs will need to consider whether an appliance complies with the requirements of the Building Code and should also give close consideration to the requirements of the National Environmental Standards.

THE NATIONAL ENVIRONMENTAL STANDARDS FOR AIR QUALITY

Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 are mandatory technical environmental regulations. They have the force of regulation under the Resource Management Act 1991. In October 2004, 14 standards were introduced, including a new woodburner design standard.

The woodburner design standard specifies a maximum particle emission limit of 1.5 g/kg of wood burnt as measured in accordance with AS/NZS 4013: 1999.

The Standard further specifies a minimum thermal efficiency of 65 percent as measured in accordance with AS/NZS 4012: 1999.

The woodburner Standard applies to all new woodburners installed in urban areas in New Zealand after 1 September 2005. For the purpose of this Standard an urban area is defined as a property with a lot size of 2 ha or less (20,000 m^2).

There are currently 46 wood-burners on the market that meet the Standard. A list of certified woodburners is available on the Ministry for the Environment website at www.mfe.govt.nz/laws/standards/woodburners/authorised-woodburners.html

The Standard does not apply to existing woodburners (unless they are reinstalled into a property), open fires, multi-fuel burners, pellet fires, wood/coal stoves designed for the primary purpose of cooking, and coal burners. However, some regional plans may impose other requirements for the installation of all burners.

For further information regarding the National Environmental Standards for Air Quality please see the Ministry for the Environment website at www.mfe.govt.nz/laws/standards/air-quality-standards.html

DURABILITY VERSES SPECIFIED INTENDED LIFE

The relationship between the durability requirements of the Building Code and the 'buildings with specified intended lives' provision in the Building Act has been discussed for some time.

The durability of a building element must not be confused with the intended life of the building. A specified intended life (section 113 of the Building Act) applies to the **whole building, not parts of a building** and should not be applied to solid fuel-burning appliances.

Clause B2 of the Building Code requires a durability of 5 years for building elements for which access, replacement and detection of failure is easy. Building elements that are moderately difficult to access or replace, or where detection of failure would only occur during normal maintenance, must be durable for 15 years.

Most freestanding appliances must have a durability of 5 years, while most inbuilt appliances and flues should have a durability of 15 years.

Where it is proposed that a second-hand appliance be installed, durability requirements and the National Environmental Standards for Air Quality should be considered.

A second-hand appliance may appear to be in good condition. However, it would be difficult to be certain that the appliance will meet the durability requirement as it may already be several years old.

When approving building consents for second-hand appliances, some building consent authorities address the issue of durability by granting the consents subject to a waiver of Clause B2 of the Building Code.

If a waiver is granted, it should be shown on the building consent documentation, and notification of the waiver must be provided to the Department of Building and Housing as required by section 68 of the Building Act 2004.

Ongoing maintenance is the responsibility of the owner. The durability levels given in the Building Code are minimum levels and good maintenance is highly likely to give a longer life. After 5 years (or 15 years), the heater will have satisfied durability requirements, but this does not mean that its safe working life has expired. *BIA News* No. 92, June 1999 provides a full explanation of the durability issue regarding domestic solid fuel-burning appliances. A copy of this can be found at www.building.dbh.govt.nz/e/publish/news/news92/92fuel_burners.htm

INSTALLATION

The recognised Standard that determines specific installation requirements for an appliance is AS/NZS 2918 Domestic Solid Fuel Burning Appliances. The Standard outlines the means for determining the correct and safe installation of appliances and their associated floor protectors and flue systems, including minimum clearances from heat-sensitive materials. It also sets requirements where flues may discharge in relation to buildings.

Manufacturers develop installation instructions to ensure appliances achieve the requirements of the Standard. When approving building consent applications for the installation of appliances, building consent authorities must be certain that the proposed installation of an appliance complies with the manufacturer's installation instructions.

An applicant will need to provide a copy of the manufacturer's installation instructions, a site plan showing the location of the appliance, a room plan showing where the appliance is to be located, details of seismic restraint provisions and, if a wetback is to be fitted to the appliance, details of how the hot water will be kept at a safe temperature.

KEY POINTS

When approving building consents for solid fuel-burning appliances, building consent authorities should consider the requirements of the Building Code, AS/NZS 2918 Domestic Solid Fuel Burning Appliances, the manufacturer's installation instructions and the National Environmental Standards for Air Quality.

Timber and timber-based flooring in wet areas

INTRODUCTION

There has been some confusion about the requirements for timber-based flooring and floor structures under wet areas. Wet areas are spaces that contain sanitary fixtures or appliances, including laundries, bathrooms, kitchens and toilets. Designers and building consent authorities who use New Zealand Standard NZS 3602: Timber and Wood Based Products for Use in Building may be having difficulty interpreting the Standard regarding treatment of flooring in wet areas. This article gives guidance on that matter.

NZS 3602

NZS 3602 is cited in the Acceptable Solution for Clause B2 Durability of the Building Code (B2/AS1). While NZS 3602 is deemed to comply with the Building Code, it lists minimum levels of treatment. Owners are at liberty to choose levels of treatment that are in excess of these limits if they wish.

Particleboard is a popular choice for timber-based flooring in New Zealand. However, NZS 3602 identifies some wet area situations where treated timber is required and hence where it would be inappropriate to use particleboard.

Clause 110.3.1 of NZS 3602 states:

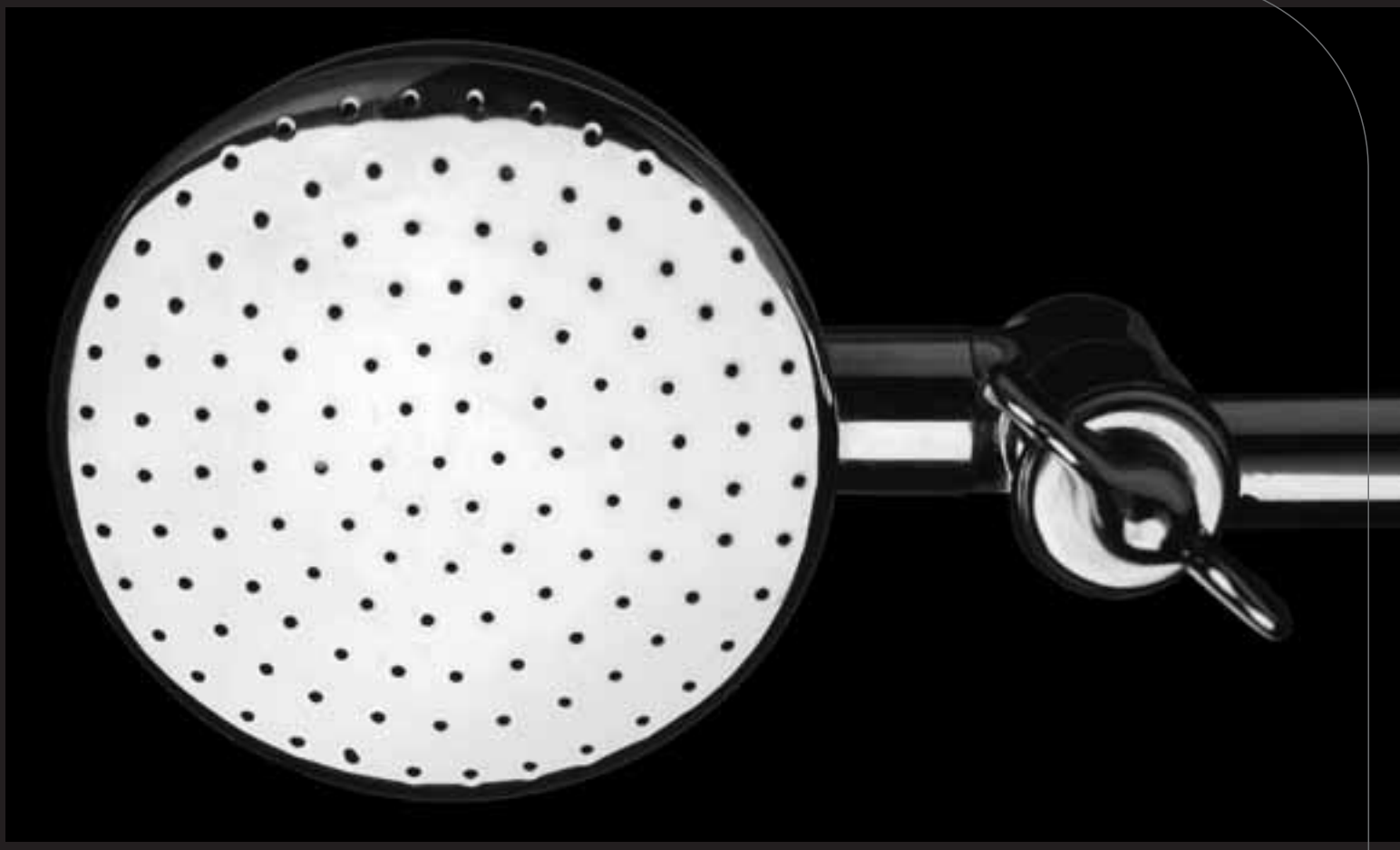
> Floor coverings in "wet areas" such as laundries, bathrooms, kitchens and toilets shall be as set out in E3/AS1. Where maintenance of an **impervious** coating cannot be **assured** in wet areas plywood or timber flooring that has been treated to a minimum of H3.1 shall be used.

WHY IS AN IMPERVIOUS SURFACE NEEDED?

Wet areas may be subject to splashed or leaked water. Therefore, floors in these areas are expected to be exposed to regular, low levels of wetting in localised spots.

Timber-based flooring is particularly susceptible to the effects of water and must be protected with an impervious surface. A floor surface that is impervious to water stops water penetrating or rotting the timber beneath.

E3/AS1 is the Acceptable Solution for Clause E3 Internal Moisture of the Building Code. It lists six examples of impervious floor surfaces, including vinyl covering with sealed joints, tiles with waterproof grout and particleboard sealed with water-proof coatings.



WHAT IS ASSURED MAINTENANCE?

The impervious surface must be maintained to ensure ongoing protection of the timber floor beneath. Maintenance may involve re-application of coatings or replacement of part or all of the system. Maintenance tasks are discussed in Paragraph 2.1 of B2/AS1, including re-coating protective finishes and replacing sealant in joints. It is important that building consent applicants nominate the required maintenance for the impervious surface that they are proposing to use.

'Assured' maintenance in the context of Clause 110.3.1 of NZS 3602 is taken to mean that it is reasonable to expect that maintenance of the impervious surface will be carried out. It is not possible to confirm whether an individual will undertake maintenance, but it is possible to ensure the maintenance requirement is practical. If the maintenance requirement is practical, it can be expected that an individual would maintain the impervious surface. If the maintenance requirement is not practical, it follows that the maintenance is unlikely to be carried out. Therefore, whether maintenance can be assured must relate to the practicality of carrying out the maintenance, not whether someone might have the inclination to do so.

Situations where the maintenance of the impervious surface cannot be assured include where the surface cannot be accessed to do the maintenance or where the maintenance requirement itself is unreasonable. Providing that it is accessible, most impervious floor surfaces in wet areas will have practical maintenance requirements. Accordingly, there should be no reason why a building consent authority cannot be 'assured' the maintenance will occur.

WET AREA FLOORING

If water penetrates the impervious surface, preservative treatment will delay the decay of the timber. This delay allows time for the cause of the leak to be noticed and remedied before permanent damage is done.

If there is doubt that the maintenance requirements of an impervious surface can be assured then the flooring beneath must be minimum H3.1 treated (such as H3 plywood) and not particleboard.

Note that this refers to 'flooring' only, and not to the underlying floor framing. However, if the wet area contains a shower fixture, special consideration, as discussed overleaf, should be given to the flooring plus the framing.

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Timber and timber-based flooring in wet areas *continued*

FLOORING AND FRAMING UNDER SHOWERS

Where frequent water splash is present from a shower, there is a high risk of water entry. Access for inspection behind showers is difficult and water leaks may remain undetected.

Clause B2 of the Building Code requires that building elements are durable depending on, among other things, ease of access and replacement. Flooring under a shower tray is moderately difficult to get to and replace and accordingly, Clause B2.3.1(b)(i) of the Building Code requires a minimum 15-year durability (note that this must be extended to a minimum 50-year durability where the flooring performs a structural function, such as where it is part of a structural diaphragm or where it is laid underneath the bottom plate).

In a comment on Clause 110.3.1, NZS 3602 recommends the following solution for flooring under showers:

> Considerable undetected water damage to particleboard and surrounding wall floor framing can occur under baths used as a shower and under certain types of shower trays. It is recommended that H3 treated plywood be used under such fittings where maintenance cannot be assured. Adjoining timber framing and timber supporting these fittings should be treated.

The level of treatment for the timber framing is not mentioned and needs to be determined on a case-by-case basis depending on the risk involved. The risk must be assessed in terms of the likelihood of water entering below or behind the shower and remaining there long enough to cause damage.

Where there is a risk of water damage, treatment of the surrounding and supporting framing to H3.1 is likely to satisfy this requirement, but lesser levels of treatment may be appropriate in some circumstances. If it can be demonstrated that there is no risk of water damage then neither the flooring nor the framing would need to be treated. Note that the timber may need to be treated for other reasons, such as insect attack or ground atmosphere – refer to NZS 3602 for more information.

Bend the bar

Bendometers are used to check the bends in steel bars against the relevant New Zealand Standard.

...but not the rules

With the issue of 5000 Department of Building and Housing bendometers across the industry, there is no excuse for incorrect bending of main reinforcing steel.

For some time, the Department has been reminding concrete construction personnel that incorrect bending of reinforcing steel can lead to poor performance of structures and even failure. The matter was highlighted when the new 500E reinforcing steel became available in New Zealand.
The issue is that reinforcing steel is sometimes being bent to tighter diameters than specified in the New Zealand Standards cited in the Department's B1 Compliance Document, and therefore does not comply with the Building Code.

Bends tighter than specified, especially in 500E steel, can lead to cracking of the main bars and therefore reduction in strength of the concrete member and non-compliance with the Building Code.

The Department devised and produced a 'bendometer' for checking whether the bend in a bar is in accordance with the relevant New Zealand Standard. The device incorporates four disks, each with a specific diameter, giving the minimum (inside) bend for that particular bar (10, 12, 16 and 20 mm, see photo). Each disk also has a cut-out to quickly check the diameter of the bar being inspected. The correct minimum bend diameter for each size of bar is the same as the corresponding disk diameter. Other useful information for the user (eg, markings) is given on the back of the disks.

While the disks were designed to be used with the main bars and not with stirrups or ties, they can be used with either grade 300 or 500 reinforcement.

The disks are attached to a split ring (supplied) for ease of use at the bending or construction site. A one-page instruction sheet is also included.

Some bending devices used by construction personnel bend bars to inside diameters much less than the minimum requirements. The bendometer provides site personnel and building officials with an easy way to check that the requirements have been met.

Feedback from the construction industry on the bendometers has so far been very good and there have been a number of letters of appreciation and requests for additional units. Attendees at the recent BOINZ conference received a sample and they proved popular. With the support of Cement and Concrete Association of New Zealand, the bendometer is being promoted to provide a practical measuring device and to raise awareness of the need to bend reinforcement correctly.

If you were not on our mailing list, or you or your colleagues would like to receive more bendometers, please let us know by calling 0800 242 243 or by emailing info@dbh.govt.nz

Consultation on proposed amendments to the Compliance Document for Clause B1 Structure

PROPOSED CITATION OF AS/NZS 1170 AND NZS 3101

The Department of Building and Housing will shortly be seeking feedback from interested parties on proposed changes to Verification Method B1/VM1 contained in the Compliance Document for Clause B1 Structure.

In particular, the Department is proposing to cite the Loading Standard AS/NZS 1170 and the recently published Concrete Structures Standard NZS 3101 as means of compliance with the Building Code.

The citation process is not automatic. The Building Act requires that the Department consult widely and prepare a cost-benefit analysis that assesses the impact of the new Standards on the building industry.

PROPOSED CITATION OF THE NEW LOADING STANDARD AS/NZS 1170

It is proposed that the new Loadings Standard AS/NZS1170, Structural Design Actions replace NZS 4203: 1992 General Structural Design and Design Loadings for Buildings in Verification Method B1/VM1. AS/NZS 1170 Structural Design Actions consists of the following parts.

- AS/NZS 1170.0: 2002 – General Principles
- AS/NZS 1170.1: 2002 – Permanent, imposed and other actions
- AS/NZS 1170.2: 2002 – Wind actions
- AS/NZS 1170.3: 2002 – Snow and ice actions
- NZS 1170.5: 2004 – Earthquake actions – New Zealand

The loadings standard is an important document as it specifies the general procedures and criteria for the structural design of buildings in limit state format. It covers design actions, combinations of actions, methods of analysis, robustness and confirmation of design.

There have been changes to earthquake, live, wind and snow actions from those currently given in NZS 4203. The Department has been working with consultants to identify and give the reasons for all the changes, and a cost-benefit analysis has been carried out to investigate the impact of these changes on the building industry. The cost-benefit analysis shows that overall there is little change with the increase in cost for buildings designed using AS/NZS 1170 being small. The study shows a significant net benefit when savings associated with such aspects as maintenance, damage, injuries and fatalities are accounted for.

A public consultation document, which will give background to and explain the changes and include the cost-benefit analysis, is being prepared and is expected to be available shortly.

PROPOSED CITATION OF THE NEW CONCRETE STRUCTURES STANDARD, NZS 3101: 2006

It is proposed that the Concrete Structures Standard NZS 3101: 2006, published in March 2006 by Standards New Zealand, replace the previous version, NZS 3101: 1995, currently cited in Verification Method B1/VM1. This Standard sets out the minimum material requirements for reinforced and pre-stressed concrete structures.

The Department is working with consultants to review the changes between these Standards and to prepare a cost-benefit analysis to assess the impact of the changes on the building industry.

A public consultation document, which will give background to and explain the changes and include the cost-benefit analysis, is planned for release in September 2006. The consultation period will run for 8 weeks.

PROPOSED CITATION

The Department will not make any decision about citing AS/NZS 1170 or NZS 3101 until such time as it has considered the comments received on both Standards. It is likely that any citation of the Standards in the Compliance Document will be subject to an introductory period to enable previously consented work to be completed and give designers time to become familiar with the Standards' provisions. These aspects will be discussed in detail in the respective public consultation documents.

AVAILABILITY OF PUBLIC CONSULTATION DOCUMENTS

Selected commentators will be sent the public consultation documents as soon as they are available. Details of public consultation will be posted on the Department's website www.dbh.govt.nz, in a future issue of *Codewords* and in the national newspapers.

Public consultation documents for both Standards will also be able to be downloaded, free of charge, from the Department's website or a hard copy will be able to be obtained by calling the Department on 0800 242 243.

A copy of the new Standards can be viewed at the Department's Wellington offices or at major public libraries.

Territorial authority BCA accreditation preparations

The deadline for organisations to be accredited as building consent authorities (BCAs) is drawing closer, and a number of territorial authorities are clustering together and sharing services as they prepare for the change.

From 30 November 2007, the Building Act 2004 requires organisations to be registered and accredited as building consent authorities (BCAs) before undertaking building consent and inspection functions.

The new BCA accreditation scheme aims to strengthen decision-making at the critical building consent and inspection stages of the building process. It is intended to bring about greater consistency in regulatory building control across New Zealand, as well as generally improve performance, raise standards and provide consumers with more confidence in the building control system.

The implementation of the new scheme is an important undertaking and is likely to bring about considerable change in the sector.

The concept of shared services is not a new one in the local government arena and there appears to be significant benefits involved in territorial authorities sharing services as they move towards accreditation.

The Department of Building and Housing wholeheartedly supports the shared service clustering concept and actively encourages other territorial authorities not already involved to consider it.

The Department recently surveyed seven territorial authority clusters on the benefits of a shared services arrangement. Our findings are briefly summarised below.

PROJECT MANAGEMENT

A number of clusters, such as the Waikato and South Island Central groups, have engaged a project manager to coordinate the accreditation preparation process and facilitate the flow of information between territorial authority management and building control staff.

STANDARDISING PROCESSES

Several territorial authorities in regional areas are synchronising building consent processes by standardising their building consent application forms, letters, inspection checklists, and consent processing and inspection systems and practices.

Achieving standardisation has involved a number of steps, including identifying what is currently in place across each territorial authority, analysing the similarities and identifying any inconsistencies and gaps, then consulting on and producing relevant materials.

MEMORANDA OF UNDERSTANDING (MOU) AND OPERATIONAL AGREEMENTS

Many of the groups surveyed are considering MoUs, operational or service level agreements, or agreements-in-principle to formalise shared service arrangements. For example, the five territorial authorities in the greater Wellington region and the 12 territorial authorities in the central South Island have recently signed an MoU to adopt a regional approach to developing and implementing common building control systems, processes and resources in preparation for accreditation.

COSTS

There are costs associated with forming cluster groups, mainly around developing new materials, staff acquisition and employment of external consultants where required.

These costs are negotiated on a case-by-case basis between the territorial authorities within the clusters, sometimes on a pro-rata basis. For example, the Wellington group has established a population-based formula for sharing the costs.

FURTHER INFORMATION ON ESTABLISHING SHARED SERVICE ARRANGEMENTS

Territorial authorities working together on BCA accreditation preparations can be a practical and cost-effective way to share experiences and best practice, and access resources and specialist technical expertise across a region or indeed the country. It can also help to strengthen organisational capacity and capability, improve compliance with legislation and standards, and achieve savings through economies of scale.

The Department is looking at developing guidance material to help organisations start or further progress work on establishing shared service arrangements for building consent authority functions. In the meantime, existing general guidelines on the development of shared service agreements between local authorities can be found on the Office of the Auditor-General's website: www.oag.govt.nz/2004/working-together/working-together.pdf Further sources of information may also include Local Government New Zealand and the Department of Internal Affairs.

The Department of Building and Housing has recently released the *Building Consent Authority Development Guide*. This resource is available as a tool for applicant BCAs to use when preparing for accreditation. A copy is available online at www.dbh.govt.nz/bc-guide/index.html

If you would like more information about the BCA accreditation scheme go to www.building.govt.nz or contact the Department on 0800 242 243.

The seven territorial authority groups surveyed and their members are as follows.

- **Far North Cluster:**
  Far North District Council
  Kaipara District Council
  Whangarei District Council
- **Waikato Cluster:**
  Hamilton City Council
  Matamata-Piako District Council
  Otorohanga District Council
  Waikato District Council
  Waipa District Council
- **Central North Island Cluster:**
  Kawerau District Council
  Opotiki District Council
  Rotorua District Council
  South Waikato District Council
  Taupo District Council
  Whakatane District Council
- **Lower North Island Cluster:**
  Palmerston North City Council
  Manawatu District Council
  Horowhenua District Council
  Tararua District Council
  Rangitikei District Council
  Wanganui District Council
  Ruapehu District Council
  Horizons Regional Council
- **Wellington Cluster:**
  Lower Hutt City Council
  Kapiti Coast District Council
  Porirua City Council
  Upper Hutt City Council
  Wellington City Council
- **South Island Central Cluster:**
  Ashburton District Council
  Buller District Council
  Christchurch City Council
  Grey District Council
  Hurunui District Council
  Kaikoura District Council
  Marlborough District Council
  Nelson City Council
  Selwyn District Council
  Tasman District Council,
  Waimaki District Council
  Westland District Council
- **Southern Region Cluster:**
  Central Otago District Council
  Civic Corp
  Clutha District Council
  Dunedin City Council
  Invercargill City Council
  Gore District Council
  Mackenzie District Council
  Timaru District Council
  Southland District Council
  Waitaki District Council
  Waimate District Council.

Operations Group work in progress

THE PUBLICATION PROCESS FOR:

BUILDING CODE CLAUSES

1. **Identify need for Clause change**
2. **Departmental analysis of options for change**
3. **Prepare proposal for public consultation**
4. **Public consultation**
5. **Consider comments received from consultation**
6. **Prepare Cabinet paper seeking approval of proposed change including consultation with other relevant government departments**
7. **Prepare drafting instructions for Parliamentary Counsel to draft regulations to make the change**
8. **Submit draft regulations to Cabinet for approval**
9. **Regulations made by Governor-General**

COMPLIANCE DOCUMENTS

1. **Identify need for change to Compliance Document**
2. **Appoint project manager and/ or establish working group**
3. **Prepare information for public consultation**
4. **Public consultation**
5. **Consider comments received from consultation**
6. **Prepare draft for Chief Executive's approval**
7. **Publication**

Clause B1, Structure, Concrete Standards
Stage: prepare information for public comment
Proposed citation of revised concrete Standard NZS 3101: 2006.

Stage: prepare for publication
Citation of Amendment 1 to NZS 3109.

Clause B1, Structure, Timber Standards
Stage: analyse public comment
Proposed citation of Amendment 2 to the timber framing Standard NZS 3604 and Amendment 4 to the timber structures Standard NZS 3603.

Clause B1, Structure, Loadings Standards
Stage: prepare information for public comment
Proposed citation of new loading Standards (AS/NZS 1170 Parts 0, 1, 2 and 3, and NZS 1170 Part 5).

Clause C, Fire Safety – single means of escape
Stage: prepare proposal
Concerning the design requirements for multi-storey buildings with single means of escape from fire.

Clause C, Fire Safety – Type 4 and 5 alarms
Stage: prepare proposal
Concerning the design requirements in relation to alarm systems for certain buildings.

Clause C, Fire Safety – Amendment to C/AS1
Stage: analyse public comment
Joint public consultation with Standards New Zealand to reference NZS 4541: 2006 Automatic Fire Sprinkler Systems.

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: prepare for public comment on implementation date
Amendments to Acceptable Solution F4/AS1 for publication concerning barrier heights.

Clause F6, Lighting for Emergency
Stage: Economic Development Committee paper prepared, Department's consultation about to be undertaken.
Amendments to the Code Clause and its Compliance Document.

Clause G6, Airborne and Impact Sound
Stage: analyse public comment in parallel with re-drafting the Code Clause and Compliance Documents to align with the Building Code Review project 8 tiered hierarchy format
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: analyse public comment
(awaiting Code review of main Clause G6, on hold until above is resolved)
Amendments to the Code Clause and its 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: prepare for consultation on revised Compliance Document
Amendments includes referencing AS/NZ 4859.1 for insulation materials.

Determinations issued

Determination 2005/156

Notice to fix re access and facilities for use by people with disabilities

The application arose from a territorial authority's issuing of a notice to fix requiring the upgrading of a building's access and facilities for use by people with disabilities.

The notice

A complex of five detached buildings, which between them contained 11 unit-titled apartments, had been formed by the subdivision of a larger motel complex, which had included a number of 'accessible' units that included features to permit use by people with disabilities. The apartment concerned was originally an accessible unit, but was subsequently altered, without a building consent, with the result that some of its facilities were no longer accessible. The unit title holders of many of the apartments, including the one concerned, made them available to the general public as holiday accommodation.

When the territorial authority became aware of the alteration, it issued a notice to fix requiring certain building work to be undertaken to make the apartment accessible.

The issues

The issues before the Chief Executive were as follows.

1. For the purposes of the determination, was the building concerned:
   (a) all of the units in the new complex, which consisted of '2 or more buildings . . . managed as 1 building with a common use and a common set of ownership arrangements' as provided by section 8(c)(ii) of the Building Act, or
   (b) only the particular unit concerned?
2. Did section 118 of the Building Act apply to the building concerned so that it was required to include access and facilities for people with disabilities?
3. Was the notice to fix properly issued?
4. Should the territorial authority's decision to issue the notice to fix be confirmed, modified or reversed?

The decision

The Chief Executive took the view that:

1. if section 118 applied so that the building concerned was required to comply with the provisions of the Building Code for access and facilities for use by people with disabilities, then it was more reasonable to apply those provisions to the complex as a whole, so that only a certain number of the apartments were required to be accessible, than solely to the unit concerned. Otherwise, whenever any of the buildings making up the complex was being altered that building would have to be upgraded.
2. the provisions for access and facilities for use by people with disabilities did apply because all, or most, of the apartments were used to 'provide accommodation for the public' and therefore came within clause (j) of Schedule 2 to the Building Act
3. for the purposes of the mandatory upgrading requirements of section 112, it had to be accepted that, at the time of subdivision, the new complex complied as nearly as is reasonably practicable with the provisions of the Building Code for access and facilities for use by people with disabilities
4. the notice to fix had required that the apartment concerned be brought to a greater degree of compliance than at the time of subdivision. The notice had also specified an unreasonably short timeframe for the completion of the work.

Accordingly, the Chief Executive determined that the notice to fix was to be modified to require the apartment concerned to be altered, within a specified timeframe, so as to achieve the same degree of accessibility as at the time of subdivision.

Continued on page 18

Determinations issued *continued*

Determination 2006/22

Requirement for fencing a swimming pool in a small back yard

The application for determination

The application arose from the refusal by a territorial authority to amend a building consent for a swimming pool so as to omit a safety barrier separating the pool from a small back yard.

There was a minimal area (the front yard) between the house and the street. Behind the house there was a back yard of approximately 125 m^2 which contained the 24 m^2 swimming pool.

The owners wished to omit a safety barrier along one side of the pool. The result would be that the remaining safety barriers would surround effectively all of the back yard.

The question for determination

The question for determination was whether virtually the entire back yard could properly be described as 'the immediate pool surround' for the purposes of clause F4.3.5(a) of the Building Code or as 'the immediate pool area' for the purposes of clause F4.3.4(f) of the Building Code.

The Chief Executive's approach to the questions

The Chief Executive took the term 'immediate pool surround' to mean an area around the pool into which it would be unsafe for young children to go unless someone able to protect them was also in the same area (see Determination 2003/6).

Applying that approach to this case, the Chief Executive considered that an adult in the back yard who was engaged in activities not related to the use of the pool might not necessarily be aware if a young child was in danger. Accordingly, the back yard could not be accepted as 'the immediate pool surround'.

Since Determination 2003/6 was issued, the term 'immediate pool area' in the Fencing of Swimming Pools Act had been considered by the High Court in *Waitakere City Council v Hickman*.[1] The Court held in effect that the immediate pool area was an area used for 'activities or purposes carried out in conjunction with the use of the pool'.

Activities that would not usually be carried out in conjunction with the use of the pool included the use of clothes lines, vegetable gardens, vehicle or pedestrian access ways, and planting for landscape purposes. On the other hand, activities that would ordinarily be carried out in conjunction with the use of the pool included the use of pool furniture, changing sheds, pumps or pool maintenance equipment, sunbathing areas, and diving boards or other pool equipment.

In considering what activities were likely to be carried out in the back yard, the Chief Executive noted that, on average, houses in New Zealand changed ownership with relatively low frequency, and took the view that both present and future owners of the house must be taken into account when considering what activities were likely to be undertaken in the back yard.

Taking that approach in the light of the High Court decision, the Chief Executive considered that future owners were likely to use the back yard as a children's play area and for other outdoor activities not necessarily associated with the use of the pool, simply because there was no other suitable outdoor area.

The decision

The Chief Executive therefore concluded that the entire back yard could not properly be described as 'the immediate pool surround' or 'the immediate pool area', and accordingly confirmed the territorial authority's decision not to amend the building consent.

To read all the Determinations in summary or in full, go to:
www.dbh.govt.nz/e/publish/determinations_issued.shtml

1 Waitakere City Council v Hickman 1/10/2004, Randerson J, HC Auckland CIV 2003-404-7266.

vicbooks

WHERE TO GET COMPLIANCE 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
sam.stanley@vicbooks.co.nz
Freephone 0800 370 370

Learning curve

Wellington Institute of Technology

Endorsed as the preferred provider of national qualifications for building officials by the Department of Building and Housing

Building Controls Legislation module now available

WelTec is now offering a short module titled 'Building Controls Legislation'. The module will be delivered in distance learning mode with a one-day seminar being run in eight regions around New Zealand.

Suited to existing and new building officials, the module will cover the principles and provisions of the Building Act 2004, the legal system as it pertains to local government, health and safety in the workplace, and the powers of a compliance officer. In particular you will learn how to:

- interpret the Building Act and Regulations and apply them to given projects
- understand the components of the building controls framework and their hierarchical position
- determine the criteria that will ensure construction methods comply with the intent of the Building Code
- identify the factors that influence the safety and health of building occupants
- outline the aims of the Resource Management Act in relation to building and land use.

Post-course assessments successfully completed will give credits towards the WelTec Diploma in Building Surveying (2005) and the new National Diploma in Building Controls in 2006.

Fee:
$731 GST inclusive
Discount may apply to cohort enrolments
For further information contact the tutor: Rose McLaughlan
info@nzbit.co.nz

BRANZ CONSTRUCTION INDUSTRY TRAINING ENTERPRISE (CITE)

Study Skills

This one-day course provides research, study and report-writing skills, learning and assessment techniques and an understanding of learning styles. It is suited to those who have not participated in formal learning since leaving school or tertiary study.

Date	Location
2 August	Hamilton
29 August	Dunedin

Cost $281.25 including GST

Learning curve *continued*

Building Controls

This 10-day course will provide knowledge and understanding of the building controls regime, legislative background, duties and responsibilities and knowledge of processes involved. Particularly relevant for building officials, those with limited experience, and those wanting to enter the building controls profession.

Date	Location
Week 1: 12-16 June	
Week 2: 17-21 July	Christchurch
Week 1: 2-6 October	
Week 2: 30 October – 3 November	Wellington

Costs $3,937.50 inc. GST

Plumbing Inspection

This 10-day course will extend plumbing inspection skills and provide the skills necessary to carry out plumbing design checks and on-site inspections for compliance with the Building Code. It also provides skills related to the use of Clauses G1, G2, G3, G10, G12 and G13 of the New Zealand Building Code. It will suit building officials, clerks of works, building information officers, plumbers, builders, or those with a construction background who are already in, or wanting to enter, the building controls industry and need plumbing inspection skills.

Date	Location
Week 1: 19-23 June	
Week 2: 17-21 July	Auckland
Week 1: 21-25 August	
Week 2: 18-22 September	Christchurch

Cost $2,812.50 inc. GST

Register for both the Building Controls and Plumbing Inspection courses for $5,625 inc. GST, and save $1,000.

Early-bird discounts are available on all courses. They may not be used in conjunction with other offers.

For more information about courses:

www.branz.co.nz (CITE Industry Training)
branzcite@branz.co.nz
Natasha Breen (CITE Administration Officer) **(04) 237 1170**
Marie Munro (CITE Manager Student Resources) **(04) 237 1170 ext 714**

BARRIER FREE NEW ZEALAND TRUST – 2006 TRAINING SEMINARS

Reasons to attend

These 2-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).

Duration	Location	Date 2006
2 days	Wanganui	19-20 June
2 days	Paihia/Kerikeri	31 July-1 August
1-day refresher course for accredited BFAs and participants of earlier seminars	Brentwood Hotel Wellington	18 August
2 days	Oamaru	7-8 September
2 days	Hastings/Gisborne	9-10 October
2 days	North Shore	9-10 November

Costs include copy of Barrier Free NZ Trust Resource Handbook for Barrier Free Environments

	Cost (excl) GST	Cost (incl) GST
2-day course	$300.00	$337.50
Specialist 1- or 2-day course	Rate negotiable with any interested organisation/ company	
1-day refresher course	$150.00	$168.75

Enquiries to:
Administrator – Barrier Free NZ Trust
PO Box 25064, Panama Street, Wellington
(04) 915 5848 or (04) 499 0725
Fax: (04) 915 5849
seminar@barrierfreenz.org.nz

Barrier Free NEW ZEALAND TRUST

Important changes to BIA website
The content previously available on the Building Industry Authority website (www.bia.govt.nz) is now located within the Department of Building and Housing website:
www.dbh.govt.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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