



codewords

Swimming pool fencing laws being reviewed

The Department is reviewing the law requiring swimming pools, including spa pools, to be fenced to protect young children from drowning.

It is the first evaluation of the Fencing of Swimming Pools Act 1987 and is to assess whether the Act can be made more effective.

A discussion document was published and sent to stakeholder groups on 31 March, with submissions closing on 30 June 2008.

The evaluation will not question the existence of the Act, because statistics clearly show that while the number of swimming pools has increased, drownings have continued to fall.

The average number of children under six who drown in swimming pools each year has reduced by nearly two thirds since the Act took effect.

Water Safety New Zealand figures show that since 1980 a total of 193 children have drowned in swimming pools; 162, or 84 percent of them, in private pools. In the seven years before the Act was introduced, the annual average was 11.5. In the past seven years it has been four.

While the number of drownings has decreased, the number of private swimming pools has increased by 30 percent – from an estimated 57,600 in 1996 when the first estimate was taken to an estimated 73,700 in 2006.

House design has also changed a lot in the past two decades, with a greater focus on indoor/outdoor flow, which has implications for pool fencing.

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Releasing the consultation paper, the Minister for Building and Construction Hon. Shane Jones said it would appear that some of the deaths still occurring could be prevented by proper fencing. Hence the need to look at whether changes to the Act would improve compliance and enforcement.

The submissions and further research will enable the Department to develop proposals for changes to the Act and issue a second consultation paper to test the workability of the proposals.

'This consultation paper is basically a fact-finding, information-gathering exercise to help work out what people think about the Act, how it might be improved etc,' Mr Jones said.

'We want to see what has been learned since the Act was introduced, in order to ensure that it operates as effectively as possible, and that it allows flexibility to reflect modern house design, which often incorporates easy indoor/outdoor flow.'



The evaluation will also seek to:

- assess the current risks posed to young children under the existing provisions of the Act
- improve uniformity in territorial authorities' interpretation and application of the Act
- provide more certainty to pool owners and territorial authorities about their responsibilities and obligations under the Act
- increase public awareness of pool owners' responsibilities under the Act.

Copies of the consultation paper are available by phoning 0800 242 243 or at www.dbh.govt.nz under the heading 'Consulting on'.

More councils building conse

A further five territorial authorities have been accredited and registered as building consent authorities (BCAs) in recent weeks, taking the number now registered to 21.

Many of those accredited have been publicising their achievement to local news media, with comments about the benefits to them and to their communities of the BCA scheme.

Clutha District Council District Inspector Ray Applegarth said the Council now had a more productive, efficient building control unit. Staff were more confident in their decision-making as they had clear, consistent guidelines to follow.

'Accreditation has been a positive and necessary initiative to ensure we provide a quality service to our ratepayers and the industry,' he said.

Taupo District Council Manager of Building and Regulatory Services Jamie Dale said the Council now had formal recognition of the expertise of its building control team.

'The consensus among staff is that we produce a much better product consistently. We have a much more professional approach, which is proving popular with designers and builders, who are providing positive feedback,' he said.

registered as nt authorities

North Shore City Council General Manager Environmental Services Alison Geddes said the audit by International Accreditation New Zealand (IANZ) had given the Council, councillors and customers confidence that its building control services were of a high standard – ‘we now have independently proven and appropriate competency systems’.

All 85 territorial and regional authorities are required to be accredited and registered as BCAs by 30 June 2008, or to have made alternative arrangements for undertaking statutory building control functions.

The latest to be accredited are Carterton, Rotorua and Manawatu District Councils, and Waitakere and Hamilton City Councils.

Matamata-Piako and Waimakariri District Councils were accredited earlier in the year.

The fact that 14 of the 21 registered are rural or provincial councils has illustrated that accreditation is achievable, irrespective of the size of territorial authorities.

Two private organisations contracting to territorial authorities have also been accredited.

As at mid-March, 33 territorial authorities had completed their full on-site assessment by IANZ and were going through the final accreditation processes.

The Department continues to provide case advisor assistance to territorial and regional authorities to support their preparation for accreditation.

New Acceptable Solution for earth buildings

The Department has published a new Acceptable Solution (E2/AS2) for the weathertightness of earth buildings. It is available for free download from the Department’s website, www.dbh.govt.nz, and hard copies may be purchased by calling the Victoria University Bookcentre on 0800 370 370.

E2/AS2 cites New Zealand Standard NZS 4299: 1998 Earth Buildings Not Requiring Specific Design, subject to the following modifications.

- Revised window and door joinery details
- Revised foundation and soffit details
- New information for wall penetrations

E2/AS2 will make the compliance process simpler and reduce compliance costs for earth buildings. It will also benefit designers, builders and building officials.

Acceptable Solution E2/AS2 becomes effective on 1 May 2008.

Building Amendment Act 2008

The Building Amendment Act 2008 came into force on 15 March 2008. For more information, see our website:

[www.dbh.govt.nz/
building-amendment-act](http://www.dbh.govt.nz/building-amendment-act)

Infringement system for Building Act offences

The Department is developing guidance material for building officials on the implementation of an infringement system being introduced this year to encourage compliance with building control laws and to provide local authorities with a faster and cheaper alternative to court prosecutions.

The infringement or instant fine system will be similar to infringement notices that local authorities can already issue for parking, dog control, litter and Resource Management Act offences.

Regulations for the system, which is provided for in the Building Act 2004, take effect on 1 July 2008. As with other infringement systems, individual councils will decide if and when to implement it.

The regulations are available at <http://www.dbh.govt.nz/officials-bca>

The guidance material will help building officials and their managers to implement the building infringement system. Specific areas that will be covered include an explanation of the infringement system and its objectives, details of the offences and fees, procedures for issuing infringement notices, and options for increasing compliance with the infringement system (for instance, issuing a second notice).

The Department is aiming to have it available in May.

The infringement system targets 22 potentially dangerous offences for which there is not a need to prove intent. Infringement fees range from \$250 to \$2,000, depending on the seriousness of the offence, particularly in terms of health and safety risk. Offences include:

- building, altering, demolishing or removing a building without a consent
- failing to obtain a compliance schedule for a building for which a compliance schedule is required
- not displaying, or displaying a false or misleading building warrant of fitness for fire sprinkler systems, fire alarms, lifts, cable cars etc
- using or permitting use of a building that is unsafe or insanitary or lacks fire escapes
- not complying with any notice to fix, including a notice to fix a dangerous, earthquake-prone or insanitary building.

The Building Act provides for maximum court fines, and daily fines for certain offences, far higher than those planned for the infringement system. In some cases fines can be up to \$200,000.

If a council felt an offence warranted a bigger fine than was available under the infringement scheme, it could take a court prosecution.

The infringement system was developed by the Department in association with stakeholder groups such as the Building Officials Institute of New Zealand, Local Government New Zealand, the Society of Local Government Managers, the Registered Master Builders Federation, the Ministry of Justice and individual territorial authorities.

Infringement notices will usually not be a surprise to the recipient, given that most breaches of the Building Act are addressed first through a 'notice to fix'. Depending on their size, councils issue between 10 and 300 of these each year.

Compliance with notices to fix ranges between 20 and 50 percent; however, only 1–7 percent of cases of non-compliance are prosecuted, due to the time and cost associated with court action.

Councils that decide not to implement the infringement system will still be able to continue to take court-based prosecutions.

Anyone issued an infringement notice will be able to challenge the infringement notice in the same way that people can argue any type of instant fine. The infringement notice will set out their rights.

Building control accreditation schemes overseas

The Department of Building and Housing has been following developments in overseas accreditation schemes that have been designed and applied to local building control authorities (such as councils).

New Zealand's Building Consent Authority Accreditation and Registration Scheme (BCA scheme) was designed after consulting with the local sector to develop standards that are right for this country and recognise the challenges currently facing the sector. The BCA scheme sets standards that are realistic, have appropriate transition and staged lead-in times, and are also consistent with the developments in countries we often use as comparison such as Australia, the United States and Canada. In recent years, all of these countries have made changes to how they regulate building work and improve their performance.

UNITED STATES

In the USA, the International Accreditation Service Inc (IAS) offers an independent and voluntary building department accreditation scheme. IAS assesses the operational systems and processes, qualifications, experience and competence of building control departments in city and county councils throughout the country. The IAS and the organisations it accredits are broadly comparable to New Zealand's accreditation body (IANZ) and council building consent authorities respectively.

The IAS scheme provides national recognition that council building departments are professionally qualified and competent. Accreditation is promoted as extremely important because building control departments are responsible for public safety, health and welfare, and may be sued if they don't perform as required.

Applicant organisations must meet 74 criteria based on standards set by the International Organization for Standardization (ISO) (in this case, ISO/IEC 17020: 1998 General Requirement for the Operation of Various Types of Bodies Performing Inspection).

Examples of accredited city councils include Plano (Texas), Las Vegas City and Henderson City (Nevada). Over 20 council building control departments are also currently being assessed.

NEW SOUTH WALES

In Australia, a new NSW state government organisation, the Building Professionals Board, replaced a number of the former accreditation bodies on 1 March 2007.

The Board was originally set up under the Building Professionals Act 2005 and one of its key roles is to accredit local government and private certifiers in NSW to issue construction, occupation, subdivision, strata, compliance and complying development certificates. These are similar to New Zealand's building consents, certificates for public use and code compliance certificates. The Board also investigates complaints against accredited building certifiers and audits certifiers and councils.

The accreditation scheme establishes the core skills, knowledge, qualifications and experience requirements for any person seeking to be accredited. The Building Professionals Regulations 2007 define the 21 categories of accreditation that can be approved by the Board, including building surveying, fire safety, engineering and stormwater compliance.

More information about New Zealand's building control accreditation scheme can be found on the Department's website <http://www.dbh.govt.nz/bofficials-bca>

New Acceptable Solution for solar w

A new Acceptable Solution for solar water heaters came into effect in December 2007.

The new Acceptable Solution (G12/AS2) is part of the Clause G12 'Water Supplies' Compliance Document and can be used to get a building consent more easily. The Acceptable Solution clarifies the Building Code requirements for solar water heaters by specifying one way to achieve compliance with all relevant Building Code clauses in a single document.

The new document will simplify consent processes and allow them to be processed more quickly. It also sets out what a solar water heater installer has to do to comply with the Building Code.

As well as the benefits to homeowners, the new Acceptable Solution will provide certainty to the building, plumbing and solar water heating industries.

Does the new Acceptable Solution mean that the Building Code requirements for solar water heaters have changed?

No. There is no change to the Building Code for solar water heaters or for installing them. The Acceptable Solution simply describes how to specify and install solar water heaters to meet the requirements of the Building Code.

Does this mean all solar water heater installations now need a building consent?

Installing solar water heaters has always required a building consent because it is building work (as defined in the Building Act).

Does the Acceptable Solution cover all solar water heater installations?

No. The Acceptable Solution covers the most common installation of solar water heaters, where the requirements can be easily specified for generic applications. For example, it does not cover solar water heater installations where the water tank is installed on the roof. To develop an Acceptable Solution for tank-on-roof systems would require over-design in many situations to ensure the Building Code structural requirements were met in every possible situation.

What if a particular solar water heater is not covered by the Acceptable Solution?

Only solar water heaters tested and installed to relevant New Zealand and Australian Standards are included in the Acceptable Solution. Solar water heaters tested to other Standards may or may not meet Building Code requirements. For systems not tested to the Standards included in the Acceptable Solution, the supplier and/or installer is responsible for satisfying the building consent authority that the system meets Building Code requirements. This can be done by showing that the Standard used results in equivalent performance to the Standard in the Acceptable Solution.

What if a particular mounting arrangement is different from that described in the Acceptable Solution, but appears to meet the requirements of the Building Code?

A mounting arrangement different from that described in the Acceptable Solution could still comply with the requirements of the Building Code. The Acceptable Solution includes generic mounting arrangements which meet Building Code requirements. Other mounting requirements may or may not meet Building Code requirements. It is up to the supplier and/or installer to satisfy the building consent authority that specific mounting requirements are adequate for a specific installation.

Why does the Acceptable Solution include a load density limit and a size limit?

The load density limit (22 kgs/m²) and the size limit (4 m²) is in place because roofs are designed to carry minimal additional load. Therefore these limits restrict the additional load of the solar collector panel to 88 kgs and ensure that this load is spread over 4 m² of roof, ie distributed over the roof structure.

What should I do if the solar water heater I want to install is heavier than the load limits described in the Acceptable Solution?

A heavier solar collector panel may meet the Building Code requirements for some roofs. If the system is heavier or larger than the limits described in the Acceptable Solution, a structural assessment will be required to determine how much additional load the roof structure can support in each specific case.

Water heating

A copy of the original drawings of the house specifying the structural design standard used in the roof design will assist in this process. An engineer will need to determine the additional weight that the roof can support.

Why are the structural requirements more onerous for elevated panels?

Solar collector panels which are elevated at a different pitch to the pitch of the roof will be subjected to additional wind loads that need to be taken into account. This is why the structural and fixing requirements are slightly more onerous for elevated panels.

Why is there an option to elevate solar collector panels above the roof cladding?

Some roof cladding materials include a condition on the warranty that areas of the cladding that are not naturally washed by rain should be regularly cleaned. This elevated option allows for the roof cladding under the solar collector to be cleaned. Refer to your roof cladding manufacturer for specific advice.

Are there ways other than using the Acceptable Solution to show compliance with the Building Code?

Yes, other ways can be used to show compliance with the requirements of the Building Code. It is up to the supplier and/or installer to show compliance with the Building Code. Following the Acceptable Solution is only one way to achieve this.

First LBP licensing ID cards distributed

One of the first builders to successfully register as a licensed building practitioner has been presented with his own 'licence to build' by Building and Construction Minister Shane Jones.

Mr Jones awarded Craig Shorrocks with a Site 2 ID card when he visited him at a home he is repairing in Remuera, Auckland.

Nearly 9,000 application packs have been distributed since the scheme was officially launched on 1 November last year.

The first practitioners are now being licensed when they have successfully completed an application in their chosen licensing class.

All licensed building practitioners are also listed on a register to allow consumers to identify them. The register can be seen on the Department's website.



The Minister for Building and Construction, Shane Jones presents Craig Shorrocks with his Site 2 licence pack.

New H1 requirements for houses – Q&A

In October 2007, Clause H1 of the New Zealand Building Code was changed to require improved thermal performance in all new houses in the South Island and the North Island Central Plateau. These tougher requirements will be phased in throughout the rest of New Zealand, and will be effective for the whole country on 30 September 2008.

Late last year, the Department of Building and Housing and BRANZ ran a seminar series to discuss the changes with designers and building officials. These seminars prompted many questions about H1. Some of the questions were about the recent changes, while others highlighted the need for better understanding of the Building Code requirements for energy efficiency generally. This article is intended to answer some of the most common questions.

How do I prove compliance with the new H1 rules?

The thermal performance measure in Building Code Clause H1 (Energy Efficiency) is the building performance index (BPI). The BPI is calculated using the computer programme ALF3 (Annual Loss Factor method). If the ALF3 calculation for your house is less than the limits given in the Code, then you will have demonstrated compliance.

A simpler way to demonstrate compliance is by using the Acceptable Solution H1/AS1.

This entails using the insulation values for walls, ceilings and floors prescribed in NZS 4218 (the 'schedule method' or the 'calculation method'), as modified by the Acceptable Solution.

Another way to demonstrate compliance is to use the 'modelling method' prescribed in NZS 4218, which is cited as the Verification Method H1/VM1.

Should you wish to put forward an alternative solution proposal, you will need to satisfy the building consent authority that your design will meet the Building Code performance requirements.

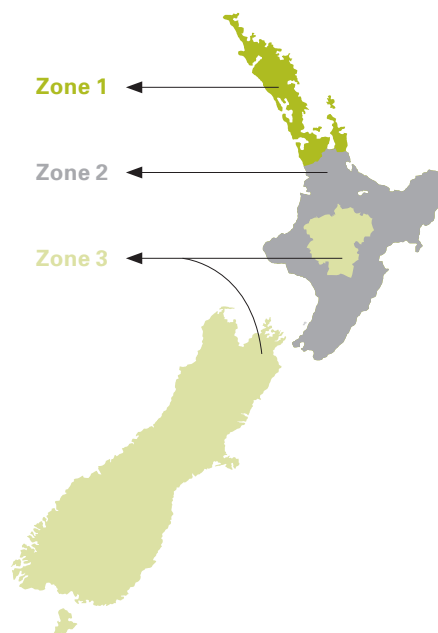
What are the changes to the Building Code?

The Building Code Clauses A2 and H1 3.2 have been changed to refine the definition of the building performance index (BPI), and to improve the thermal performance of houses. This effectively requires houses to use about 30% less heating energy than before and, in practice, means that most new houses will need better insulation.

The changes come into effect in stages as follows.

- 31 October 2007 – Zone 3: South Island and North Island Central Plateau
- 30 June 2008 – Zone 2: North Island districts south of Franklin and Thames-Coromandel Districts (excluding Central Plateau)
- 30 September 2008 – Zone 1: Districts north of Franklin and Thames-Coromandel Districts inclusive

Below: map of climate zones



What are the main changes to the Acceptable Solution H1/AS1?

Because of the recent changes to Building Code Clause H1, the Department has also changed Acceptable Solution H1/AS1. The changes to H1/AS1 include referencing the 2004 version of NZS 4218 (previously the 1996 version was referenced). The insulation R-values in the Standard have also been increased. In H1/AS1, the higher R-values come into effect in a staged way throughout New Zealand. However, the new Standard (NZS 4218: 2004) became effective for the whole country on 31 October 2007.

30% glazing limit

Another key change designers need to be aware of with the new 2004 Standard is that the schedule method can only be used when the glazing ratio is no greater than 30%, and the glazing ratio of the east, south and west faces is no greater than 30%.

The 2004 Standard now requires the use of the calculation or modelling method for glazing ratios over 30% (this was only recommended in the 1996 version).

Skylights

Another significant change in H1/AS1 is that the schedule method can only be used if the total area of skylights is less than 1.2 m². If the area is larger than this, the calculation or modelling methods must be used.

Is double-glazing mandatory?

Double-glazing is not mandatory.

While double-glazing is not specifically mentioned in either the Building Code or the Acceptable Solution, we expect that it will be used extensively to meet the new H1 requirements. For some designs in some locations, the building performance index will not exceed 1.55 for a house with single glazing, making double glazing an optional choice for the owner.

How do the new H1 rules apply to garages and conservatories?

The requirements of H1 only apply to conditioned spaces.

New attached garages or conservatories that sit within the building thermal envelope, and so are part of the conditioned space, must comply with the new H1 rules. For example, this includes conservatories that are openly connected to the interior of the house and are actively heated or cooled.

Attached garages or conservatories that are unconditioned and are outside the building thermal envelope do not need to comply with H1.

In these circumstances, any walls, windows or doors that sit between the garage or conservatory and the interior of the house will need to be appropriately insulated, as these will form part of the building thermal envelope.

See Part 2.3 of the NZS 4218: 2004 for more information.

Why are the solid construction R-values different in the Acceptable Solution H1/AS1?

For houses that use solid construction, it is important to realise that the lower wall R-values for solid wall construction account for:

- the performance benefits of thermal mass; however, thermal mass must be used in conjunction with good passive solar design to increase comfort and to reduce energy use (refer to the notes in the tables for solid construction in the Compliance Document)
- higher roof R-values; this is a trade-off to reduce the wall insulation by increasing the roof insulation
- higher floor R-values for some options; this is a trade-off to reduce the wall insulation by increasing the floor insulation.

How do I analyse a mixture of solid and non-solid construction for H1?

The most robust way to analyse a combination of different construction types in the same building is to use the computer programme ALF3 to calculate the building performance index (BPI), and to ensure that it does not exceed the limit in Clause H1.

However, most people would argue the best, and certainly the easiest, way to analyse mixed construction is to use the calculation method in the Acceptable Solution (refer NZS 4218: 2004, Part 3.2). The Acceptable Solution for H1 has three different R-value tables that correspond to three distinct types of external wall construction: non-solid (typically timber-framed), solid timber and other solid wall construction (typically masonry and rammed earth).

In the Acceptable Solution, it is acceptable to combine the different construction types using the Calculation Method provided you follow these rules.

- Do not mix and match the R-values (ie, for walls, roofs, floors, windows and skylights) from the different tables. For example, the non-solid construction roof R-value must not be used in the place of the solid construction roof R-value.

Continued on page 10

- The R-values for each component (ie, wall, roof, floor, window and skylight) should be used in the same proportions and should correspond to the different construction types used in the design. For example, if the design has half timber-framed walls and half masonry walls, then the R-values for Table 1 can be used for half the area and the R-values from Table 2(a) can be used for the other half of the area.
- Alternatively, the highest R-value can be selected from the different construction types and used for each component (ie, the highest wall R-value, the highest roof R-value, etc). This approach is inherently conservative and will result in better thermal performance than the Building Code requires.

Are there any insulation requirements for doors in the Acceptable Solution H1/AS1?

There are no insulation requirements for the opaque parts of a door or door set if the schedule method contained in the Acceptable Solution H1/AS1 is used (refer to NZS 4218: 2004). If the calculation method is used, the total area of doors that exceed 3 m² must be treated as a wall.

Glazing in doors is part of the total area of glazing. Hence, glazing in doors must be considered when calculating the glazing ratio.

The exemption of opaque doors from insulation requirements in the schedule method has been included to ensure that the schedule method is easy to apply and not too restrictive.

However, the door exemption is not intended to allow large areas of a house to be un-insulated; nor does it indicate that doors are typically well insulated.

What are the insulation requirements for opaque joinery, such as wooden or aluminium louvres?

If the Acceptable Solution is used to show compliance with Clause H1, then opaque joinery, other than doors, should be treated as either a window or a wall.

The reason for this is that all parts of the house's thermal envelope must limit heat loss consistently with the criteria specified in the Building Code or in the Acceptable Solution (see the R-value tables in H1/AS1 and NZS 4218: 2004). Any reduction in the R-values specified for the walls, floors, roofs and windows will result in additional heat loss, and the house will not comply with the Acceptable Solution.

Note that insulation (ie, R-values) can be traded off between different parts of the building using the calculation method, the modelling method or the BPI (building performance index). These methods allow louvres to be used in houses when a louvre does not meet the R-values specified for walls or windows in the schedule method.

Where can I get more information on the new H1 rules?

These changes have been publicised through media releases and the Department's BC Update 69, which is available from the Department's website, www.dbh.govt.nz

More information can be found in:

- *Your Guide to Smarter Insulation* – a booklet available on our website
- H1 Compliance Document – www.dbh.govt.nz/compliance-docs-get-copies
- free information from the Department – ph 0800 242 243.



DISCLAIMER

This article is not a substitute for legal advice. This article is published as general guidance only. If you have questions regarding application of the law to a particular set of circumstances, the Department recommends that you seek independent legal advice.

New rules for cable cars

From 31 March, a requirement in the Building Act 2004 relating to cable cars takes effect.

It means that any building with a cable car attached or servicing it must have a compliance schedule.

A cable car is defined in the Act as:

A vehicle that carries people or goods on or along an inclined plane or a suspended cable; and that operates wholly or partly outside a building; and the traction for which is supplied by a cable or any other means. It does not include a lift that carries people or goods between the floors of a building.

Buildings used wholly as a single household unit (a house) need the compliance schedule only for the cable car, but not for any other specified system in the building.

Buildings that are not used wholly as single household units and that contain specified systems (such as fire alarms, lifts and sprinklers) have been subject to the compliance schedule regime since the introduction of the Building Act 1991. These buildings are required to have a compliance schedule, which has procedures for regular inspection and maintenance of their specified systems throughout the year.

On the anniversary of the issue of the compliance schedule, a building warrant of fitness must be supplied to the council, certifying that all the procedures in the compliance schedule have been carried out. Sections 108 to 111 of the Building Act describe the building warrant of fitness requirements.

The owners of buildings with cable cars must contact their council to obtain a new compliance schedule or, if a compliance schedule already exists, an amendment to the compliance schedule. The council can charge a fee for issuing this.

There are several reasons why owners of cable cars should obtain a compliance schedule. Owners who do not obtain a compliance schedule may find themselves breaching warranty requirements under sale and purchase agreements when selling their properties. Councils should consider placing documents on Land Information Memoranda indicating whether compliance schedule and building warrant of fitness requirements have been complied with where properties are serviced by cable cars. There may also be problems for owners if a cable car failure leads to an insurance claim and there is not an up-to-date compliance schedule in place. It is also an offence under the Building Act 2004 not to obtain a compliance schedule where one is required. From July 2008, a council will be able to issue fines for certain breaches of the Act, such as not obtaining a compliance schedule.

The council will need some information from a qualified person in order to issue the compliance schedule. This will include, for example, how often the cable car needs an inspection, including safety checks, and what maintenance is needed in order to keep the cable car operating safely. Specific areas of concern would be the presence and operation of any device that prevents the cable car from an uncontrolled descent, and ensuring there are clearances and other measures to ensure that users are not in danger of being crushed between moving and non-moving parts of the cable car.

The New Zealand Standard NZS 5270, Cable Cars for Private Residences, includes information on the inspection and maintenance of cable cars for houses, including an example of a maintenance checklist and items to be included on a compliance schedule.

In order to compile this technical information required by councils, cable car owners should engage the services of an independent qualified person (IQP) to inspect their cable car. The IQP will identify the features of their cable car and will compile the necessary inspection and maintenance information required by the council. Most councils will maintain a list of IQPs operating in their local area who specialise in cable car certification and will be able to help owners to identify a suitable person to engage.

Each council should also be able to provide IQPs and owners with the necessarily compliance schedule application forms (or compliance schedule amendment forms) with instructions and guidance on how to complete and submit these documents. Once the council has received the necessary information, it will issue the compliance schedule.

The Department of Building and Housing will also shortly provide detailed technical guidance for building officials and IQPs by amending the Compliance Schedule Handbook to include cable cars in the Content Guide. This will include information and guidance on the content to be included in a compliance schedule about inspections and maintenance of the cable car.

A copy of the amended Compliance Schedule Handbook will be available on our website at: <http://www.dbh.govt.nz/UserFiles/File/Publications/Building/Building-Act/compliance-schedule-handbook.pdf>

Determinations issued

DETERMINATION 2007/141

Requirement for a fire protection barrier to a cool-store

The matter for determination

The application arose from the territorial authority's refusal to grant a waiver of the Building Code. The effect of the waiver was to remove the requirement for a firewall to be built that would protect a neighbour's property from the spread of fire from a cool-store. The owner of the cool-store applied for the determination.

The firewall

The cool-store is 59 x 25 metres in plan and located 7.8 metres from the neighbour's boundary at the closest point. The approved building consent documents showed a free-standing firewall located 800 mm from the cool-store positioned between the cool-store and the boundary at its closest point. The ground rises up at an angle of about 30° to the neighbour's boundary to the south east. There are no buildings in the radiation zone on the neighbour's land.

The firewall is a purpose-made structure measuring 21 metres long and 4.8 metres high and is designed to protect the neighbour's property from heat radiation resulting from a fire in the cool-store. Except for the construction of the firewall, the cool-store was substantially complete.

The submissions

A report provided by the owner's civil engineers analysed the subsoil conditions of the ground in the area of the boundary that would be affected by the fire radiation zone in the event of a fire in the cool-store. The report indicated the ground had unconsolidated fill material and could not safely support any imposed load from a building.

The owner submitted that because of the soil conditions, the neighbour was unable to build on his land immediately next to the cool-store, and therefore, with no buildings to protect, there was no need for a firewall.

The territorial authority confirmed that it declined to amend the consent because it was possible that a future neighbour might wish to develop the property.

The determination

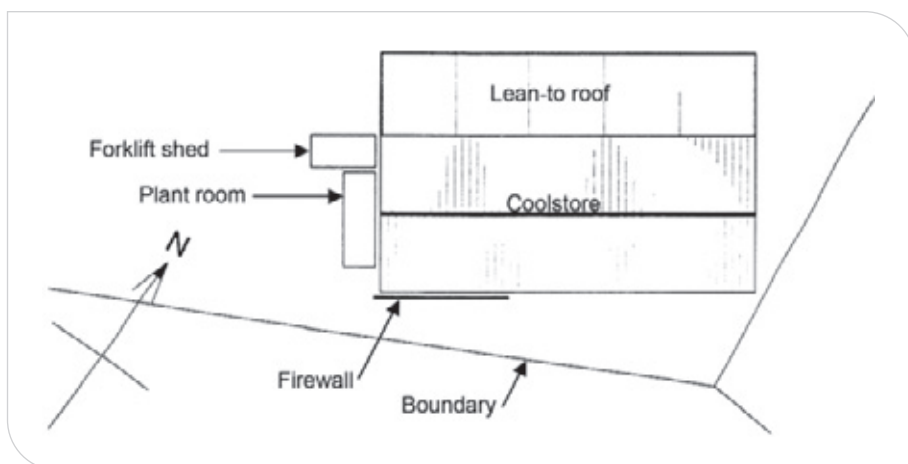
Building Code Clause C3 Spread of fire requires that other property be protected. 'Other property' is defined in terms of legal boundaries, not in terms of buildings, and this includes all or any assets on the property. In particular, 'other property' is not limited to the protection of buildings as submitted by the owner. Omitting the firewall would mean that the neighbouring property would not be protected against a fire in the cool-store to the extent required by the Building Code.

The cool-store is located in a rural area where there is a mix of industrial and rural land use. In this situation, there is a potential mix of an industrial fire, with a substantial fire radiation zone, with typical rural activities.

It was for the neighbour to consider whether to accept a level of protection to his property less than that required by the Building Code. The owner was not entitled to make that decision based on an opinion that it would be expensive for the neighbour to erect any buildings on his property, or for any other reason. Accordingly, lacking any agreement from the neighbour, it was not considered reasonable for the territorial authority to effectively deprive the neighbour's property of the protection required by the Building Code.

The decision

The territorial authority's decision to decline to waive the requirement of the Building Code to provide protection to other property was confirmed, as was the territorial authority's decision to decline to amend the building consent.



DETERMINATION 2008/5

Issuing notices to fix for recent alterations to an existing carport/deck

The matter for determination

The matters to be determined were the territorial authority's decision to issue two notices to fix in respect of unconsented alterations to a house and a carport, as well as to refuse to issue a certificate of acceptance for the completed work. The owner applied for the determination. In order to determine the matter, we needed to consider:

- how the legislation applied to the building work and the procedures that follow on from this
- whether the building work was Code compliant to the extent required by the Building Act 2004.

Background

The house was built in the 1930s, and some time following this, a carport was built next to the house. The carport was altered in the late 1960s to create a deck on the roof of the carport and a ranch slider installed in the house to open onto the deck.

During 2007, the following alterations were made to the carport, deck and house.

- Timber windows to the garage were replaced with aluminium windows.
- Wall framing and weatherboards to the carport were replaced and repaired.
- The deck structure was replaced and a new membrane roof installed.



- Metal uprights for a new balustrade to the deck were installed (the glass balustrade itself was not installed).
- The original aluminium ranch slider was replaced with a new ranchslider.

The territorial authority issued a first notice to fix requiring the owner to apply for a certificate of acceptance for the completed work, or alternatively, to seek a building consent to remove the unauthorised work and to reinstate it.

The owner applied for a certificate of acceptance for the completed work and later applied for a building consent for the glass balustrade. The territorial authority declined to issue the certificate of acceptance and issued a second notice to fix requiring the owner to fix specific defects in the 2007 alterations and the original carport.

The territorial authority issued a report, which concluded that the original carport was built without approval, and that the 2007 alterations were not exempt from the need for a building consent under Schedule 1 of the Building Act 2004.

The submissions

The owner submitted information to verify when the carport and deck were built and when the original ranch slider was installed. The owner considered that the work carried out during 2007 was maintenance and was therefore exempt from the need for a building consent. The determination considered the following matters.

1 Was any of the building work completed before the Building Acts of 1991 or 2004 came into effect?

The original carport and deck and ranch slider were completed well before either the Building Act 1991 or 2004 came into effect.

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In respect of this work, the view was taken that the territorial authority had no power to issue a notice to fix under section 164, unless the owner was contravening or failing to comply with the Act or the regulations made under it. In this case, there may well have been a contravention of the local building bylaws in force in 1987, but there did not appear to have been any contravention of, or failure to comply with, the Building Act.

2 Were the 2007 alterations exempt from the need for a building consent under Schedule 1?

Schedule 1 of the Building Act says a building consent is not required for 'repair and maintenance using comparable materials, or replacement with a comparable component or assembly in the same position, of any component or assembly incorporated or associated with a building'.

The determination therefore needed to consider whether the 2007 alterations fell into this category. Account was also taken of previous determinations which concluded that 'comparable' meant the use of 'similar materials and similar configuration' to the original building work, and whether their performance in terms of the Building Code was 'equivalent to or as good as that of the original'.

3 What elements of the 2007 alterations were considered exempt under Schedule 1?

The replacement framing and weatherboards to the carport, and the replacement ranch slider demonstrated the use of 'similar materials and similar configuration' and was considered 'comparable' with the original building elements. Therefore a building consent was not required for replacing these elements.

4 What elements of the 2007 alterations were not considered exempt under Schedule 1?

The new glass balustrade, the replacement aluminium windows to the carport, and the new deck structure including the membrane were not considered 'comparable' with the existing building elements. Therefore, these elements did not fall within paragraph (a) of Schedule 1, and a building consent was required for these elements.

5 Elements in the 2007 alterations to be included in the certificate of acceptance

A certificate of acceptance should only be issued for the completed elements for which a building consent should have been sought, being in this case, the replacement aluminium windows to the carport, and the new deck structure and membrane.

6 The extent to which the building work is required to comply with the Act

The territorial authority had inspected the building work and stated that it did not comply with the Building Code. However, section 112(1)(b) says that alterations to existing buildings, with two exceptions that do not apply in this instance, must 'continue to comply with the other provisions of the Building Code to at least the same extent as before the alteration'. The determination therefore considered whether the 2007 alterations, with the exception of the glass balustrade, were Code compliant to the extent required by Section 112(1)(b) of the Building Act.

7 The Code compliance of the building work

After examining the building work it was concluded that the only non-compliant items were under-sized deck joists and the durability of the original carport posts. However, in this particular case the view was taken that certain features of the building compensated for the area of non-compliance and helped the building elements comply with the structural and durability provisions of the Building Code.

Learning curve

It was accepted that the 2007 alterations had significantly improved the Code compliance of the building, when compared with the original, and it was concluded that the building work would continue to comply with the provisions of the Building Code to at least the same extent as before the alteration.


It was noted that the owner had applied for a building consent for the proposed glass balustrade. It was suggested that the territorial authority and the owner resolve any outstanding compliance matters as part of the building consent process and not via a notice to fix.

The decision

It was determined that:

- (a) the decision to issue the first notice to fix was modified to remove the alternative requirement for the owner to apply for a building consent in respect of the unauthorised work
- (b) the decision to issue the second notice to fix detailing the defects in the unauthorised work was reversed
- (c) the decision to decline to issue the certificate of acceptance in respect of the replacement aluminium windows to the carport, and the new deck structure and membrane was reversed.

To read all the determinations in summary or in full, go to:

 www.dbh.govt.nz/determinations

BUILDING OFFICIALS INSTITUTE OF NEW ZEALAND CONFERENCE

The Building Officials Institute of New Zealand expo and conference is a key annual event where building professionals can develop a better understanding of their responsibilities and duties under the law. It is also a chance for BOINZ members to meet and share knowledge and ideas about the science of building. Delegates will include building control professionals, surveyors, architects, builders, developers and others interested in this industry.

The conference is on 20–23 April 2008 at the Aotea Centre in Auckland. More information at:

<http://boinz.org.nz/conference08.htm>



REGISTERED MASTER BUILDERS CONFERENCE 2008

This year's conference, themed Keeping it Real, happens in Wellington from 24–27 April. Key industry leaders and decision makers will join members to discuss trends, strategies, policy and options that face the industry. The conference is an opportunity to meet and network with influential figures in the construction arena, including suppliers, customers, service providers, educational bodies and government regulators.

More information at:

<http://www.masterbuilder.org.nz/conference/conference1.htm>



CONFERENCE ON EFFECTIVE POST-DISASTER RECONSTRUCTION

If New Zealand is struck by a major disaster, there will be a need to rapidly rebuild and repair critical infrastructure, housing and commercial premises.

i-Rec is the International Group for Research and Information on Post-Disaster Reconstruction. The 4th International i-Rec Conference 2008 is on in Christchurch from 30 April to 2 May.

This conference will bring together leading international experts in post-disaster reconstruction and is a valuable opportunity for those in the construction industry, NGOs, emergency managers, insurers and planners to come together to learn, debate and work together to develop solutions.

The conference will focus on several key areas:

- Project management and stakeholder participation in reconstruction
- Legal and policy frameworks for reconstruction
- Finance and resources for reconstruction
- Urban planning and design for post-disaster reconstruction
- Education and training for reconstruction.

More information at:

<http://www.resorgs.org.nz/irec2008/>



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Learning curve *continued*

MORE BOINZ EVENTS

BOINZ encourages its members to develop a better understanding of the responsibilities and duties imposed by Acts and regulations. It has a calendar of events on its website here: <http://www.boinz.org.nz/calendar.htm>

Date	Event	Area
31 March–2 April	Building Controls – Getting Started in Building Controls Understand the 'big picture' in the building environment, local government and private sector.	Hamilton
3–4 April	Plan Processing – Getting Started in Building Controls For new building control officials (less than one year's experience)	Hamilton
8 April	E2 Weathertightness This course adopts a focus on excellence in processing and inspecting building work in relation to Clause E2 (External Moisture)	Christchurch
8–9 April	Barrier Free Seminar Two-day Seminar – Modules 1–4 Book direct with Barrier Free New Zealand Trust www.barrierfreenz.org.nz	Napier
5–7 May	Building Controls – Getting Started in Building Controls Understand the 'big picture' in the building environment, local government and private sector.	Wellington
13 May	Building Consent Vetting Identify that the right information has been submitted using Form 2 Building Consent Applications	New Plymouth
19–23 May	Water Supply and Sanitary Plumbing – Getting Started in Plumbing Inspection Understanding and knowledge of water supply and sanitary plumbing up to Category 3	Christchurch

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 advisors.

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Codewords March 2008 Issue 026

Published by the Department of Building and Housing
Print run: 9500