

Editorial

This building industry always seems to be in a state of dynamic flux.

It is forever changing and evolving and currently we are going through another round of improvements to what we do.

The recent introduction of the improvements to insulation has caused some confusion in the industry to those people who have not kept up to date with the recent new requirements.

The Government has also increased the range of building work that is exempt from obtaining a building consent. This has a further spin-off for us, as it cuts down the miscellaneous very minor works that we have often been required to inspect.

The arrival of the Licensed Building Practitioner (LBP) is here, with one local builder already using his proudly achieved qualification in his advertising. There are other local people also licensed in town, so look out for the term LBP to be more prevalent within the industry.

Those in the building trade, including designers, will need to attend our upcoming trade evening to keep abreast of the vast range of changes that have already happened and are due to happen later this year.

Exempt building work list extended



The Government, via the Department of Building & Housing Ltd (DBH), has extended the list of building work that is able to be exempted from obtaining a building consent.

The Building Act applies to all building work. Building work is defined under section 7 of the Act, and the Act generally requires a building owner to obtain a building consent from a building consent authority (Council) before undertaking building work. All building work (regardless of the need for a building consent) must comply with the Building Code.

Schedule 1 of the Building Act 2004 sets out the circumstances where building work is exempt from needing a building consent. Its intent is to apply for an appropriate balance between minimising compliance costs (by exempting low risk and minor building work from consent process) and requiring some consistent regulatory oversight of building work that risks health and safety.

In addition to the exemptions already in place, the following work will be added to the list on 16 October 2008. Please note that this list is strictly of a general nature.

- Removal/alteration of a wall that is non load-bearing and not a bracing element.
- Awnings, pergolas or a verandah over a deck (sizes apply).
- Installation or replacement of windows, or exterior doors or roof windows, provided structural elements are not modified.
- Alterations of dwellings for access purposes, including doorway modifications and access ramps, but excluding wet area accessible shower.
- Internal shop or office fit out where the work does not modify, or require modifications to, any specified system or means of escape from fire.
- Alterations to existing plumbing in bathrooms, kitchens, laundries, toilets, including minor drainage alterations (e.g. shifting a gulley trap), but excluding new connections to services where: - work is carried out by a registered plumber in accordance with the Plumbers, Gasfitters and Drainlayers Acts 1976 and 2006.
- Erecting tents and marquees of up to 100m² where they are for private use and up to 50m² when they are intended for public assembly.

This article is intended as a general guide to Schedule 1 of the Building Act and should be read in association with the Act. While the Department of Building and Housing (the department) has taken every care in preparing this information, it should not be relied upon in establishing whether building work requires a building consent or the exemptions under Schedule 1 apply. Readers should always refer to the source documents, including the New Zealand Building Code, and be aware that in specific situations it may be necessary to seek independent technical and/or legal advice, or discuss your particular issue with the expert team at the Council.

Further information can also be obtained on www.dbh.govt.nz.

BUILDERS TRADE EVENING



9 October 2008

4.30pm

@ the Wanganui Room, Racecourse

BE SURE NOT TO MISS OUT

RSVP: Peter Tantrum

5pm – 3 October

Ph 349 0001 extn 8047

The trade evening, specifically for builders and designers, is a must attend to keep up to date with the current and future issues in the building industry.

Choosing efficient water heating is now even easier

Government Spokesperson on Energy Efficiency, Jeanette Fitzsimons, announced in September that heat pump water heaters will soon be included in the Solar Grants Scheme, giving consumers more efficient hot water choices.

Ms Fitzsimons says a performance standard for heat pump water heaters has been developed, so quality can be measured. A pilot scheme will start next year. EECA (Energy Efficiency and Conservation Authority) will consult with the heat pump water industry on the detail of the scheme. The level of the grant will relate to energy savings over the expected life of the heat pump water heaters.

“After three years working on improving quality standards and installer training for solar water heating we are now able to remove the requirement that suppliers be accredited by the Solar Industries Association.

“Installers will still be required to have undertaken an approved solar water installation course.

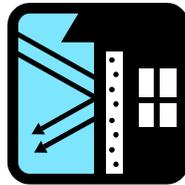
“As it is not possible to use the same cost effectiveness measures for heat pump water heaters as for solar hot water, the threshold for financial assistance currently used for the solar water programme will be removed.”

New insulation requirements

Home insulation (H1) and the new requirements that came in effect on 30 June 2008

We are continually being asked by builders about the 'new' requirements for insulation for housing. We have repeated the information again for those that missed it, or now find it relevant to know.

By now all of us in the building industry should be aware home insulation values for compliance have stepped up somewhat since 30 June 2008 in zone 2 (our region).



The document that controls this requirement is Code Clause H1 Energy Efficiency, which covers not only home insulation but all forms of energy efficiency in both residential and commercial buildings.

In this brief article I really only want to touch on home insulation and hopefully summarise the issues the builder or home owner would not necessarily be aware of.

Most of us might think of insulation as "Batts" in the walls and ceiling and maybe something under the floor, when in fact H1 has always considered floors, walls, roof and glazing.

There are three methods that can be used as a means of compliance: the scheduled method which selects a set of minimum requirements for floors, walls, roof and glazing; the calculation method if you fall outside the requirements of the scheduled method i.e. very large window areas, wanting to use single glazing etc; and the modelling method which is a computer modelling technique that basically does that calculation method for you.

This article is aimed at covering the first and most common, the scheduled method.

This method may be used when the combined areas of glazing on east, south and west walls is 30% or less of the combined total area of these walls, and the building total area of glazing is 30% or less of the total wall area.

In the past when this criteria was met, your likely insulation specification would have looked something like this:

Roof insulation R 2.2 (Batts or similar)
Wall insulation R1.8 (Batts or similar)
Floor insulation R1.3 (draped foil, polystyrene, concrete floor)
Glazing insulation R0.15 (by default single glazing)

Now, with the new requirements under the same method, it will look something like this:

Roof insulation R3.2 (Batts or similar) **Upgraded**
Wall insulation R2.2 (Batts or similar) **Upgraded**
Floor insulation R1.3 (draped foil, polystyrene, concrete floor) Unchanged
Glazing insulation R0.26 (double glazing) **Upgraded**



As you can see, the big changes are thicker insulation to walls and roof, floor remains the same, but windows are double glazed.

Just a note for those of you who have already looked in H1 table 1 and have seen the minimum R values for roof and walls slightly lower than the example above - please keep in mind they are structural R values total; the extra R value for the “Batts” takes into effect the conductivity of wall frames, stud centres etc.

The misconception is we “must have double glazing”. The answer is yes, if you want to achieve compliance under the scheduled method. If, for example, you are doing an addition and wish to reuse some existing windows (single glazing) you would then have to use the calculation method to show compliance and calculate a way of making up the shortfall in the glazing elsewhere.

For this, NZS4218 demonstrates a fairly simple formula for compliance – your designer would complete this as part of your building consent application.

Obviously for new housing and when new joinery is being ordered for alterations, the double glazing method would be the preferred option because of the heating and sound proofing benefits.



The Department of Building & Housing (DBH) and the Barrier Free NZ Trust have recently published a guidance booklet called *Accessible car parking spaces*. It is about providing car parking spaces that are suitable for use by people with disabilities, especially wheelchair users and people with mobility aids.

The document is aimed at off-street car parking, where the parking is associated with a particular building.

However, the principles apply to all off-street car parking.

There must be a safe route from the parking space to the associated building that a wheelchair user can negotiate without assistance (an 'accessible route'). The accessible car park makes an important contribution to ensuring people with disabilities are able to take part in normal everyday activities.

Other aspects covered in the guide are parking buildings, motel parking and Mobility Parking Permits.

You can find the booklet on the Department's website www.dbh.govt.nz or you can order hard copies from them by calling 0800 242 243 or call in and pick up a copy from Council.

Reducing false fire evacuations



The Department of Building & Housing (DBH) has made changes to the Compliance Documents for Building Code Clauses C (fire) and F7 (Warning Systems) which come into effect on 1 November 2008.

Type 5 fire alarms (instead of type 4) will now be required in certain new buildings with sleeping accommodation, such as residential apartments and hotels.

Type 5 fire alarms sound in a single area first, without triggering an immediate evacuation of the entire building. This will help make false evacuations less common by allowing residents of individual units to deal with the cause of the alarm (for example, from burnt toast). If the system is still detecting smoke after a certain period, the alarm will sound through out the building.

Further details can be found on the DBH website.

Water conservation



One of the purposes of the Building Act 2004 is to promote sustainable development. This includes the efficient use of water in buildings. The Building Code already allows for the use of non potable water in certain circumstances.

This becomes increasingly important for us in Wanganui as the summer season approaches and the potential for water restrictions requires consideration.

Non potable water, including collected rainwater, may be used for laundry, bathing and toilet flushing. Potable water, usually sourced from the reticulated supply, must be used for drinking, teeth cleaning, cooking and utensil washing, and must be supplied to the kitchen and the bathroom vanity. Pipes and outlets supplying non-potable water, such as bath, shower, toilet or laundry tub, must be clearly identified.

Rainwater may be made potable by treatment. This could include filters and/or sterilisers (for example, UV or ozone). Only potable water should be consumed because of the dangers of biological or chemical contamination.

Other ways to save water in the home include reduced flush toilets, water efficient showerheads and aerator taps for kitchen and bathroom sinks.

NZBC Clause F6, Visibility in Escape Routes



The Department of Building and Housing (DBH) has been asked to clarify the linkage between NZBC Clause F6, Visibility in Escape Routes and the Fire Safety Acceptable Solution C/AS1. The soon to be implemented amendments to C/AS1 will come into effect on 1 November 2008.

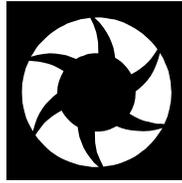
Clause F6, effective from 18 October 2007 last year, was drafted and renamed from 'Lighting for Emergency' to 'Visibility in Escape Routes' to acknowledge that emergency situations in *buildings* may have a number of causes and 'visibility in escape routes' may be provided by systems other than illuminance (lighting), such as wayfinding systems.

Clause F6 requires that the *specified features* in the *escape routes* of all *buildings*, except those listed in the Limits on Application (i.e. detached dwellings, *household units* within multi-unit dwellings, *outbuildings* or ancillary *buildings*), be made *reasonably visible* when the main lighting fails. Visibility systems do not have to be provided in the first 20 metres of an *escape route* in situations where the risk of impediment to movement due to the *specified features* not being visible is low. Examples include where people are familiar with the *escape route*, the *escape route* is level and people do not require assistance to *escape*.

While there has been a change in Clause F6's title, systems installed to satisfy the requirements of the clause remain *specified systems* under the Building (Specified Systems, Change of Use and Earthquake-prone Buildings) Regulations 2005. These systems require compliance schedules (SS 4).

Where a *building* is altered and the alteration involves changes to the means of escape then, under sections 112 and 115 of the Building Act, the requirements of Clause F6 must be considered along with other relevant Code clauses.

Household ventilation systems



We are often asked:

Do the many household ventilation systems regularly advertised on television, under a variety of trade names, meet the Building Code?

Household ventilation systems are mechanical ventilation systems with a fan that moves air around a house, flat or apartment. Typically, they draw air from the warmer roof space and force it into the living space below. Delivery of air into the living space creates a slight positive pressure and the air escapes from the building through the openings in or around windows and floors.

Claimed effects of these systems include healthier homes because of reduced internal moisture and less mould, fungi and dust mites.

Building Code Compliance

The Building Code (Clause G4) requires ventilation with outdoor air to maintain air purity. Compliance Documents contain several solutions for achieving this. The main solutions are natural ventilation comprising 5 percent of the floor area in opening devices or mechanical ventilation to achieve an air change in the occupied spaces (such as living areas) every three hours.

Because household ventilation systems draw air from the roof space, they are not directly drawing air from outside. Hence, they cannot be used to comply with the Building Code ventilation provisions. However, Building Code compliance is not generally an issue because household ventilation systems are installed in addition to opening windows.

Considerations

Installing household ventilation systems needs special care. The roof space must be clean and dry, as any animal waste, pathogens, allergens, mould and fungi in the roof space may be ventilated into the living space of the house. It is important to check for leaks in the roof space, as these may contribute to fungal and bacterial growth.