Guideline

August 2017

Welcome to this update on technical and informative advice for the building and construction industry on issues relating to building controls and good construction practices.

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Earthquake-prone buildings

New rules and terms

The system for identifying and managing earthquake-prone buildings changed on 1 July 2017. This is when the Building (Earthquake-prone Buildings) Amendment Act 2016 came into force to create Subpart 6A of Part 2 of the Building Act 2004.

The new system ensures the way our buildings are managed for future earthquakes is consistent across the country by creating a single national policy framework. Territorial authorities still hold the responsibility for administering the law in their area.

There is more information for people using buildings. For example, a publicly accessible and searchable register of earthquake-prone buildings is being developed.

The new system categorises New Zealand into three seismic risk areas – high, medium and low – and sets timeframes for each of these areas for identifying potentially earthquake-prone buildings and strengthening earthquake-prone buildings.

Also introduced is a new concept – priority buildings. This concept accelerates the timeframes for buildings that are considered to pose a higher risk to life safety or are critical to recovery in an emergency. The priority building provisions do not apply in low seismic risk areas. Full details are given in the MBIE priority buildings guidance document.

More information on overall earthquake-prone buildings requirements can be found here.

Solid fuel heaters

Safety is paramount

Building owners planning to install, replace or modify a solid fuel heater are required to obtain a building consent from their building consent authority under section 40 of the Building Act 2004.

There are a few exemptions to this. Schedule 1 of the Building Act permits building work that involves general repair, maintenance and replacement (if comparable materials are used) to be

carried out without a building consent. For example, this might include replacing the flue, firebricks, seals or glass.

Schedule 1 does not include moving the appliance or modifying the appliance to make it burn hotter or more efficiently. This includes installing a new part or device or altering the make-up of the appliance. This work will require a building consent.

Notable decisions against two LBPs
Rules can bite

The Building Practitioners Board has recently handed down two noteworthy sanctions against two separate LBPs and has chosen to name each LBP due to the seriousness of the matters.

Both LBPs were licensed in Carpentry and, due to the nature of the complaints, both were issued strong penalties. Poor on-site quality assurance and a lack of adherence to the consented plans led to disciplinary action. One was fined $5,000, and both had their licences cancelled.

Click here for more detail.

Level-entry drains
E2/AS1 isn't the only solution

The maximum length of a level-entry channel drain is 3.7 m when using E2/AS1 as a means of compliance. Channel drains could be longer than 3.7 m in total and comply with E2/AS1 where:

- the drain is segmented into sections no longer than 3.7 m
- each of the 3.7 m (or less) sections is individually drained to the stormwater system.

If the drain is not segmented or receives water from adjacent ground or downpipes, it would need to be assessed as an alternative method. The designer would need to provide supporting evidence that the channel and its drain(s) had sufficient capacity to deal with the design rainfall intensities.

Timber slat decks
It's all in the width

Where timber decks are constructed close to the ground, there are some simple good-practice rules that will help enhance the performance:

- Select narrow boards – they will be less likely to cup as a result of moisture evaporating from the ground.
- Select only straight-grained quarter-sawn (grain at right angles to the face of the board) timber.
- Leave the perimeter of the deck as open as possible to allow airflow.
- Consider placing polythene sheet over the ground and weighting it down to limit moisture and restrict weed growth. Slope the ground to drain water to the edge of the deck.

Minimum door head heights
How low can we go?

D1/AS1 does not specify a minimum head height for doors within a dwelling. However, Building Code clause C *Protection from fire* documents do specify a clear opening height of 1955 mm for doors on escape routes. We believe this should apply to most of the doors that allow escape from a space. D1/AS1 specifies a minimum 760 mm clear opening width is required for doors on an accessible route.

Industry news

The updater

Homestar v4 launched. Homestar, a tool for rating houses and apartments in energy efficiency and other areas, was developed with the industry to help improve the quality and health outcomes of housing.

MBIE is seeking feedback on a proposed Design Guide for Fire Safety: Residential Community Housing. The consultation runs from 17 July 2017 to 11 September 2017. Submissions may be:

- sent by email to firereview@mbie.govt.nz with 'Consultation on Residential Community Housing proposal' in the subject line
- posted to MBIE, PO Box 1473, Wellington 6140, Attention: Consultation on Residential Community Housing proposal.

On 26 July, the fourth National Construction Pipeline Report was released by Building and Construction Minister Dr Nick Smith along with a companion report, *Future demand for construction workers*. The National Construction Pipeline Report is an annual publication that forecasts the value of building and construction, by region and by type, for the next 6 years. It covers residential and non-residential projects planned by government, local government and the private sector.

Industry events

Association of Building Compliance events

The Association of Building Compliance (ABC) is the only IQP representative body in New Zealand. It was established to build competency, set a high standard and accountability in the provision of services for Building Warrant of Fitness (BWOF).

Fire Incidents Challenging our Building Standards Seminar (30 August 2017)

This seminar session aims to put participants in the jacket of the Fire Officer and attempt to deal with a range of emergencies in a variety of buildings. Find out more

Raising the Bar – ABC Conference and Exhibition (29–30 August 2017)

We all know the basics of what it is to be an IQP and provide building compliance services, but what can we do to improve ourselves or raise the bar? The spotlight is now upon us, and it is our duty to be the best we can possibly be for ourselves, clients, councils and the community. Download the brochure

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BRANZ seminars 2017

BRANZ to the Regions

BRANZ presented a ventilation (space and roof) and NZS 3604:2011 bracing seminar to a limited number of main centres early in 2017. Subsequently, there were a number of requests to bring the key components of each seminar to the regions. While this seminar abridges both those seminars, the key elements of content have been retained.

Ventilation component

Ventilation can be the difference between a building that is dry and healthy and one that is not. For what appears to be a seemingly simple process, there are a number of intricacies that lead to many buildings being constructed with inadequate ventilation.

This seminar will cover roof and living space ventilation based on BRANZ research. In each case, we'll talk about the possible moisture issues faced through inadequate ventilation and the solutions to address them.

The topics covered include:

- why ventilation is needed
- living space ventilation
    - clause G4 and ventilation options
    - drying out damp houses
    - effective duct and fan selection
- roof space ventilation
    - when roof space ventilation is required
    - simple roof space ventilation calculation
    - roof ventilation details.

Bracing component

Timber-framed buildings are required to be braced to resist horizontal loads from wind and earthquake. This seminar takes a back-to-basics approach to bracing, taking you through the steps that need to be addressed using examples to calculate the bracing required for framed walls.

We will start by looking in more detail at why we need bracing and what information is needed to begin the process of calculating wall bracing. Topics will include:

- why we need bracing
- making bracing easier
- the steps to work out bracing demand for wind and earthquake
- bracing capacity and how it is determined
- bracing lines and distribution of bracing.

These principles will then be applied to three simple design examples.

Presenters

Bracing: Roger Shelton – BRANZ Senior Structural Engineer and NZS 3604:2011 expert
Ventilation: Trevor Pringle – ANZIA – BRANZ Principal Writer

Dates and locations

Mon 18 Sep	Whangarei	Forum North
Tue 19 Sep	Kerikeri	Turner Centre
Wed 20 Sep	Palmerston North	Distinction Palmerston North
Wed 27 Sep	Blenheim	Marlborough Convention Centre
Thu 28 Sep	Nelson* (12.00–3.00pm)	Rutherford Hotel Nelson
Mon 2 Oct	Napier	Napier Conference Centre
Tue 3 Oct	Rotorua	Millennium Rotorua
Wed 4 Oct	New Plymouth	The Devon Hotel
Mon 9 Oct	Invercargill	Ascot Park Hotel
Tue 10 Oct	Queenstown (BRANZ Answers Bracing – no ventilation component))	Heritage Queenstown
Wed 11 Oct	Timaru	Landing Services Conference Centre

* All seminars run from 1.00–4.00pm except for Nelson. This seminar will run from 12.00–3.00pm, and a light lunch will be available from 11.30 am.

Registrations will open on the BRANZ website at the end of August.