Guideline

March 2016

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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Concrete piles and bearer fixing

Options for ordinary piles

While concrete piles are not commonly used, NZS 3604:2011 *Timber-framed buildings* permits them provided the height of the pile does not exceed 1.5 m. The question has arisen around the options for fixing of bearers to ordinary piles. Typically, the pile supports the bearer on its top edge. The bearer is wired to the pile with 4 mm galvanised wire passed through a hole in the pile and then stapled to the timber.

An alternative option would be to cast in a cranked M12 hot-dip galvanised bolt to the top of the pile. The bolt should be embedded at least 150 mm into the concrete. The bearer could be predrilled and slotted over the bolt and the nut and washer applied.

Concrete pile reinforcing

For piles over 750 mm

Concrete piles over 750 mm in height must be reinforced with a single D10 vertical rod located in the centre of the pile.

Commerce Commission investigating steel mesh

Non-compliance issue

The Commerce Commission is investigating concerns that some steel mesh products may not comply with AS/NZS 4671:2001 *Steel reinforcing materials*. It has advised that Brilliance Steel Ltd and Euro Corporation Ltd have agreed to stop selling some steel mesh products while this investigation is under way.

Bracing capacity limits

BUs for wall bracing elements

While high-performance wall bracing systems can be designed, the performance of such systems is limited by the material the hold-downs are fixed into. For timber-framed floors, NZS 3604:2011 limits the capacity of any wall bracing element to 120 BUs per metre. For concrete slabs on ground, the limit is 150 BUs per metre.

Residential construction handover

Know your responsibilities

At the completion of a residential construction project (that commenced after 1 January 2015), the owner must be supplied with:

- a document outlining the maintenance requirements for their house especially that maintenance required to maintain warranty validity
- copies of all applicable warranties and guarantees that apply to materials or services
- copies of any insurances that continue for the benefit of the owner.

For guarantees/warranties, information must cover:

- how to make a claim
- whether the guarantee/warranty is transferable or not
- whether it needs to be signed and returned to the issuer in order to be valid.

Also applicable is the defect repair period, which is in force for 12 months from the date residential building work is complete (all building work agreed between the client and the contractor is finished). This is:

- all the physical building work agreed in the written contract, or
- the completion of physical building work where there is no written contract.

Setting up an ALF 3.2 account

Step by step

The ALF 3.2 (Annual Loss Factor) tool is a free online aid to the thermal design of houses. It is presented in a step-by-step format providing a simple method of calculating the energy performance of conventional New Zealand houses.

ALF 3.2 is a verification method for determining the Building Performance Index (BPI), which can be used to show compliance with New Zealand Building Code clause H1 Energy efficiency.

To set up an ALF account, go to http://alf.branz.co.nz. Alternatively, you can access it through the Toolbox on the BRANZ website. When ALF 3.2 opens, go to the box on the right-hand side of the screen called 'Create an ALF account' and fill in the required fields with the email address you want to use and a password. This email address is where you will receive notifications of any projects you have been sent and any reset passwords. If your sign-up confirmation email lands in your junk email or quarantine, save it as a safe sender to avoid later problems.

To start a new project, view an existing project or one you've been sent, you must log in to your account. You can check you are logged in at the top right-hand side of the screen where it should say 'Hello' and your account name. When you are logged in, you can save and store all your ALF projects. If you start a new project while not logged in, it will not be saved.

You can use the same email address and password for your Lintels and Beams account and your ALF account. Just remember that they don't link information, so you can't move from one to the other without logging in separately.

Applying D1/AS1 *Access routes* to detached residential buildings

Know the specific requirements

The requirements of D1/AS1 that apply to a stand-alone domestic building relate to the main or primary entry of the building and to any stairs or ramps within that building.

The main or primary entry is typically the transit route from the street to the front door of the building and may include paths, ramps, steps, decks or patios.

Specific requirements that will need to be met are:
- slip resistance, particularly when wet
- slope for ramps
- maximum/minimum stair riser and tread dimensions
- provision of handrails.

BRANZ Managing Moisture seminar
Register now

Water. It is a vital component for life to exist on earth, but it causes all manner of headaches when it comes to constructing buildings that work. It can cause degradation of materials and loss of thermal performance and have an adverse effect on occupant health.

The aim of this seminar, delivered by experienced BRANZ researchers, is to provide the scientific low-down on a range of building moisture issues other than weathertightness. In each case, we'll talk about the science involved and provide the best guidance we have, based on what we know today.

- Water 101 – get up to speed with water and why it causes so many issues.
- Moisture movement – the big picture:
    - How does water vapour move around structures?
    - How much do we have to deal with?
    - Where does it come from?
- Vapour control in walls:
    - What the heck is a vapour retarder?
    - Do I need one?
- Roof space ventilation in schools and homes.
- Subfloor spaces.
- Good ventilation practice.

Venues and dates
The following are the dates for each location:

Location	Date	Venue
Dunedin	Mon 14 March	Forsyth Barr Stadium
Queenstown	Tue 15 March	Crowne Plaza Queenstown
Christchurch	Wed 16 March	Addington Events Centre
Auckland – North Shore	Thu 17 March	QBE Stadium
Hamilton	Mon 21 March	Claudelands Conference and Exhibition Centre
Tauranga	Tue 22 March	Trinity Wharf Tauranga
Auckland – Central	Wed 23 March	Crowne Plaza Auckland
Wellington	Thu 24 March	InterContinental Wellington

All seminars are from 1.00–4.00pm. Online registration is available now.

New – Good Practice Guide *Masonry Veneer* 2nd edition
Special offer

Grab 25% off the fully updated Good Practice Guide *Masonry Veneer* 2nd edition. It describes the installation of masonry veneer cladding using clay brick and concrete brick and block products.

Packed with numerous photos and figures, this guide provides good-practice solutions for masonry veneer design and construction along with wall ties, structural frame, foundations and cavity requirements.

This guide is an essential resource for any professional builder, architect or designer and is available in hardcopy or electronic format from the BRANZ website. Grab any of the other 10 titles available in the Good Practice Guide series.

Book $39 + $8 p&p (Save $13)
eBook $33.75 (Save $11.25)

Use promo code: GGPGMV (offer expires 31 May 2016)