GUIDELINE BRANZ
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Imported products

We have had some interesting feedback regarding the July *Guideline* article on plywood. BRANZ advises that, irrespective of product type, specifiers and users of a product must be satisfied of its provenance. There are many imported products available in New Zealand that meet all relevant standards for use here and have the evidence to support their use – plywoods among them. BRANZ was disappointed to receive feedback that the July *Guideline* plywood advice appears to have been used in an anti-competitive manner regarding plywood supply.

Contracts for building work

The amendment to the Building Act 2004 that will require a written contract for all building work over $20,000 is getting close to being passed by Parliament. The question that has arisen is: "Where can I get a contract that I can use?" Fortunately there are a number of contracts available:

Members of Master Builders and Certified Builders can use their organisation's contract.

The New Zealand Institute of Architects has a national building contract in their E-shop that can be purchased, as well as contracts for NZIA practices' use.

Standards New Zealand has a number of contracts available for purchase:

- NZS 3902:2004 *Housing, alterations and small buildings contract*
- NZS 3910:2003 *Conditions of contract for building and civil engineering construction*
- NZS 3915:2005 *Conditions of contract for building and civil engineering construction (where no person is appointed to act as engineer to the contract)*

Additional contract information is contained in *Build* 108 (Oct/Nov 2008, pages 25–26) Building contracts.

Rehydration of sodium bentonite

Recently there have been discussions in the marketplace with regard to sodium bentonite type below-grade waterproofing systems and their ability to rehydrate. Rehydration is a key performance requirement for sodium bentonite type systems.

BRANZ has criteria to confirm this key performance area and can state that all currently BRANZ Appraised sodium bentonite systems meet this performance requirement.

Mortar for masonry veneer

Mortar for brick veneer must achieve a 7-day masonry to mortar bond strength of 200 kPa when tested in accordance with AS 3700-2011 *Masonry structures* Appendix D. Compressive strength at 28 days when tested to NZS 4210:2001 *Masonry construction: Materials and workmanship* must be not less than 12.5 MPa.

Mortar is typically supplied as a dry premix of accurately measured sand, cement and additives to which the prescribed amount of water (as shown on the packaging) is added on site. The advantages of using the premixed material is accuracy and cleanliness of the dry constituents.

Mortar may also be mixed on site (in maximum batches of 0.3 m^3) in the following ratios (from Table 2.1 of NZS 4210):

- Exposure zones D and E in a ratio of 1:0–025:3 cement:hydrated lime:mortar sand.
- Exposure zones B and C in a ratio of 1:0.5:4.5 cement:hydrated lime:mortar sand.

The drawbacks of mixing mortar on site include keeping the sand clean plus ensuring consistency and accuracy of the mix proportions.

Section 3.15 of the BRANZ Good Practice Guide: *Masonry Veneer* covers the mixing requirements for mortar.

Changing passwords in ALF 3.2

If you have lost or forgotten your ALF 3.2 password, you can request a new one to be sent to you. Simply click on 'Forgot password' and enter your email address exactly as you first submitted it or updated it in your profile – remember, it is case sensitive. Remember to keep your email address in your profile up to date as replacement passwords are sent to the email address in your ALF profile.

Once requested, a new password consisting of a mix of characters will be sent to you. Enter this into the password box and sign in to your account. Once logged in, go to **Your profile**, then **Edit profile** to change the password to something you will remember under **Login details**. You can also update your email address in **Edit profile**.

NZS 3604 and deck bracing

Where a deck is attached to the adjacent building and is no more than 2 m wide, the foundations do not require any bracing. Where the deck is wider than 2 m, subfloor bracing (anchor, braced or cantilevered piles) will be required.

To work out the amount of bracing you need, refer to NZS 3604:2011 *Timber-framed buildings* Table 5.8 for single-storey buildings using a light subfloor cladding, light wall cladding and light roof options for a 0–25° pitch roof. Because the deck is not subject to the same windage as a full-height building, use half the demand (in bracing units per m^2) given in the table, then multiply that figure by the soil class for the appropriate earthquake zone. Bracing lines must be at 5 m maximum centres for subfloors.

Fixing requirements for dummy rafters under NZS 3604

The fixing requirements for dummy rafters are given in NZS 3604:

- Figure 10.19 – note that the skew nails shown in Figure 10.19 are a carry-over from the 1999 version of NZS 3604 and are no longer an option in Table 10.13.
- Figure 10.20 for cross-section details
- Table 10.13 for fixing requirements.

Showing compliance with H1

Located in the toolbox on the BRANZ website are several options for showing compliance with Building Code clause H1 *Energy efficiency*.

Referring to NZS 4218:2004:

- Schedule method checklist
- Calculation method formulas and worksheets

NZS 4218:2009:

- NZS 4218:2009 Calculation Method Tool
- NZS 4218:2009 Schedule Method Compliance Summary
- Standard Window R-value Calculation Procedure for NZS 4218:2009

Other information relevant to H1 compliance is contained in:

- Building Code compliance documents H1/AS1 and H1/VM1
- ALF (BPI)
- BRANZ *H1 Energy Efficiency* webstream seminar
- BRANZ *House Insulation Guide* Fourth Edition

Solid fuel burners with enclosed flues

When designing and constructing an enclosure to a solid fuel burner flue, the required clearances and ventilation openings are given in *Build* 129 (April/May 2012, pages 20–22) Flue installations in enclosures. These are based on the requirements in AS/NZS 2918:2001 *Domestic solid fuel burning appliances – Installation*. NZS 2918 also gives ridge clearances and the requirements for flue height. (NZS 5261:2003 *Gas installation* gives the requirements for gas fire or heater flues.)

Photovoltaic (PV) calculation tool

New to the BRANZ Toolbox is a PV calculator that can be used by designers to determine the average yearly electricity generation capability (i.e. energy yield) of a selected PV system.

Replacing broken glass in residential buildings

In general, when replacing broken glass in a domestic building, what is put back in can be the same as the glass that was broken or cracked – single glazing does not have to be replaced with double glazing.

However, where safety glass would be required if this was new construction, the existing glass should be replaced with grade A safety glass – laminated or toughened. Examples of where this may occur are glazed doors and sidelights and large areas of glass, particularly when floor to ceiling.

Guidance on the requirements for grade A safety glazing are given in NZS 4223.3:1999 *Glazing in buildings – Part 3: Human impact safety requirements*.

Change of use of a space and glazing requirements

Where a residential building is being altered, this may trigger a requirement to upgrade the glazing from ordinary glass to grade A safety glass. An example is where a room becomes a bathroom as part of the alteration – in this case, the glazing will need to be upgraded to safety glass.

Upcoming BRANZ seminars

Building Seismic Resilience

The Canterbury earthquakes highlighted the importance of achieving seismically resilient building construction and have brought about a paradigm shift in building design philosophy. This is driving the development and uptake of new low-damage seismically resisting technologies that can withstand major earthquakes and require little or no post-earthquake structural repair. This seminar will introduce options to improve the seismic resilience of buildings.

Location	Date	Time
Tauranga	26 August 2013	1–4pm
Hamilton	27 August 2013	1–4pm
Auckland – North Shore	28 August 2013	1–4pm
Auckland – Epsom	29 August 2013	1–4pm
Dunedin	2 September 2013	1–4pm
Christchurch	3 September 2013	1–4pm
Wellington	4 September 2013	1–4pm
Napier	5 September 2013	1–4pm

Online registration is available now.

***Fire Zone Modelling* (BRANZ-SFPE seminar)**

This half-day seminar will cover the use of fire zone models for fire safety design with emphasis on using the B-RISK computer model to meet the requirements of Building Code compliance document C/VM2. The seminar is intended for fire safety engineers with some previous zone modelling experience and has been organised in conjunction with the New Zealand Chapter of the Society of Fire Protection Engineers (SFPE). Content will include updated guidance on assessing suitable compartment size and shape for zone models, shafts and long corridors, appropriate use of vertical and horizontal flow vents, predicting smoke detector response, using spill plumes and modelling fully developed fires in accordance with C/VM2. Online registration will open on 2 September.

Location	Date	Time
Auckland – North Shore	23 September 2013	1–5pm
Auckland – Central	24 September 2013	1–5pm
Rotorua	25 September 2013	1–5pm
Wellington	26 September 2013	1–5pm
Christchurch	27 September 2013	1–5pm