# GUIDELINE

Free monthly update on building issues prepared by BRANZ Ltd and funded by the Building Research Levy



# **NOVEMBER 2007**

## H1 INSULATION CHANGES

The changes to Building Code Clause H1 Energy Efficiency are not simple. We strongly recommend that you attend the BRANZ seminar on the changes so that you know the reasons behind the changes and the specific detail of the changes. Seminar dates and locations are given below

While the introduction of the requirements is still to come for climate zones 1 and 2, designers may chose to advise owners to adopt the new requirements now. Getting owners to sign-off in situations where they have chosen not to adopt new or higher standards is a recommended form of protection. We believe this approach should also be adopted by designers when specifying insulation levels for changes of use e.g. converting a garage to a habitable space.

#### **REBATING FRAMING - TIMBER GRADING**

Concerns, not initiated by BRANZ, have been raised within the industry recently regarding the impact on the structural performance of framing, especially with 90 mm wall framing, where the members are rebated to take bracing sheet.

This has been common practice for over 20 years and at present BRANZ believes that there is no reason to change this practice until sufficient information, verified by testing, demands a change to current practices.

#### NEW FREE SERVICE FROM www.branz.co.nz

A full listing of BRANZ Bulletins is to be included on the BRANZ website. The listing from Bulletin No 1 through to the latest issue will give users the ability to check currency of titles, when a bulletin was withdrawn and, where applicable, the bulletin that replaced it.

There is also a significant amount of free information for designers and builders available on the BRANZ website. Go to www.branz.co.nz and click on free information.

# STOP ENDS TO WINDOW HEAD FLASHINGS

A visit to some building sites recently identified window head flashings installed without stop ends in cavity construction and with insufficient cross-fall to drain water. Was this omission due to:

- · stop-ends and cross-fall not being specified by the designer?
- the omission of the stop ends and the insufficient cross-fall not being identified by the building consent authority (BCA) when the consent was processed?
- the builder not installing the stop ends and ordering a head flashing without enough cross-fall (assuming they were specified and consented) and these omissions not being identified by the BCA during site inspections?

To prevent water that might get onto the head flashing draining off the end of the flashing and into the cavity, designs to E2/AS1 require:

- stop-ends are required on all window head flashings installed in cavity construction
- · a minimum cross-fall of 15 degrees.

# TIMBER TREATMENT

The BRANZ poster on timber treatment issued in August 2004 is not a compliance document. Designers and BCA's must refer to NZS 3602 for specific requirements as the poster does not illustrate all the options or provide any explanatory text. Using it as your sole reference may land you in trouble.

# **BOTTOM PLATE FIXINGS – A CAUTIONARY TALE**

Installing bottom plate fixings around the edge of concrete slabs is trickier than it looks. Bottom plate widths of 90 mm plus the 6 mm capillary gap (which can be omitted where a drained and ventilated cavity is installed) means that concrete edge distances are minimal. Cast-in bolts to NZS 3604 are considered safe where construction incorporates an in-situ edge-thickened slab or concrete foundation wall.

Where masonry header blocks are used as permanent slab edge formwork it is believed that cast-in bolts may not meet the performance criteria as set out in NZS 3604, clause 7.5.12.

Tested anchors can be shown to comply for mid slab applications, although depth of penetration in thin slabs could be an issue. It is a different story around the edge especially for post fixed, drilled, proprietary anchors. Non-expanding fixing types (chemical and screw type) are generally satisfactory with an in-situ concrete slab edge but the header block application will usually fail the out-of-plane criterion of NZS 3604. Expanding type fixings will almost always fail it. Note that proprietary anchors for use in bracing walls are still required to comply with NZS 3604 cl 7.5.12.

#### **UNTIL THE NEW ALF ARRIVES...**

If you use BRANZ ALF, keep an eye on our website www.branz.co.nz. We will shortly put up a guide to show you how you can use this tool under the new H1 requirements. We will keep this up until the new version of ALF becomes available.

# level.org.nz

The BRANZ website www.level.org.nz, "The authority on sustainable building", is being updated on a monthly basis. We recommend bookmarking and regularly visiting the site to keep up-to-date with the new information presented.

#### **VALID APPRAISALS**

Not sure whether the Appraisal you are referencing is valid? Then use the BRANZ website to check. It contains a full searchable index of all valid Appraisals. If it is not listed it is not appraised.

## **BRANZ SEMINARS**

# **★** Shortening the Odds – reducing your building risk

Specifically for builders, and to be held in 22 centres nationwide, the focus will be on practical building techniques for achieving weathertight construction and so reducing your risk of liability. Solutions for a number of high risk areas will be covered. The roadshow begins in November and December this year, and continues in March 2008. Specific dates are:

November		December	
14 Wed	Dunedin	3 Mon	Whangarei
15 Thu	Hamilton	4 Tue	Manukau
19 Mon	Kapiti	5 Wed	Albany
20 Tue	Wellington	6 Thu	Ellerslie
21 Wed	Trentham	10 Mon	Christchurch
22 Thu	Masterton	11 Tue	Timaru

# **★** H1 Insulation Changes — joint presentation with the Department of Building and Housing

Revised regulations requiring higher levels of insulation in housing and small buildings come into effect from 31/10/2007. Unlike previous revisions of H1, these changes are major and will require substantial changes in practice. The seminar is aimed at architects, designers and building officials.

November		December	
26 Mon	Hamilton	3 Mon	Christchurch
27 Tue	Auckland	4 Tue	Nelson
28 Wed	Queenstown	5 Wed	Wellington
29 Thu	Dunedin	10 Mon	Taupo

This seminar has been accredited 15 CPD Points by the Registered Architects Board.

Visit our website for more details and to register online – www.branz.co.nz (click on Seminars).

# **CITE COURSES**

Don't forget that BOINZ are arranging the delivery of some CITE courses until at least the end of this year. For more information see the event calendar at <a href="www.boinz.org.nz">www.boinz.org.nz</a> or contact <a href="maining@boinz.org.nz">training@boinz.org.nz</a>.

