500E reinforcing steel
When using grade 500E MA (micro alloyed) and QT (quenched and tempered), specific requirements of this grade are:

- no welding
- bending to the correct radii in one operation – **steel MUST not be rebent after that initial bending operation**
- not exceeding the recommended bend radii for the steel diameter.

More information is given in:

- Cement & Concrete Association of NZ (CCANZ) Information Bulletin IB79 *Recommended Industry Practice on Bending and Re-bending of Reinforcing Bars*
- DBH Practice Advisory 1: *Bend the bar not the rules* (revised 2005)
- DBH Practice Advisory 11: *Grade 500E reinforcing steel – good practice.*

It is also important that the grade of the reinforcing steel is verified on delivery to site and that lap dimensions are correct for the grade of steel – higher strength grade steel requires increased laps.

MultiProof or National Multiple-Use Approval
The DBH has announced that, from 1 February 2010, it will be possible for a MultiProof or National Multiple-Use Approval to be obtained from the National Multiple-Use Approval Service of the Department of Building and Housing for standardised building designs that are intended to be replicated several times.

The DBH website also advised that a building consent will still be needed and that the Building Consent Authority's (BCA's) role will be to:

- approve site-specific details, including foundations and utilities
- ensure that any MultiProof conditions have been met
- undertake normal inspections during construction.

For information, visit www.dbh.govt.nz/multiproof.

Timber treatment in flat roofs
Under NZS 3602 *Timber and wood-based products for use in buildi*ng, the minimum level of treatment required for radiata pine framing within enclosed flat roofs (under 10º pitch) is H3.1. The standard also requires that the timber has a moisture content of 20% or less when enclosed. It is BRANZ's view that the treatment requirement applies to flat roofs constructed using a parallel chord or other truss system, joists and engineered timber such as I beams.

While NZS 3602 uses the term 'flat roofs', BRANZ literature uses the term 'low slope', as it is our recommendation that all roofs have a positive slope or fall to drain rainwater.

Free joint spacing
NZS 3604 clause 7.5.1 states that the maximum dimension of a slab (between free joints) shall be 24 m **either way**, which allows a slab to be a maximum of 24 m x 24 m. The 24 m as given in NZS 3604 is a maximum slab edge dimension and not a diagonal dimension (which we hear some BCAs are applying).

BRANZ seminars 2010 –Passive Fire Protection

Passive fire protection is an area that many find complicated and confusing. Passive fire protection measures are an incredibly important part of commercial and multi-unit residential building design and construction. Our next seminar will examine the building element features of passive fire design and help:

- architects and designers to realise the required fire resistance ratings
- builders to better understand the installation requirements
- building officials to be confident that the fire resistance ratings have been met
- Independent Qualified Persons (IQPs) to better understand their role in future building inspections.

Dates and locations are below. Register now on our website www.branz.co.nz.

Monday 15 March	Dunedin
Tuesday 16 March	Queenstown
Wednesday 17 March	Christchurch
Thursday 18 March	Wellington
Monday 22 March	Auckland
Tuesday 23 March	Hamilton
Wednesday 24 March	Tauranga
Thursday 25 March	Palmerston North

This seminar is in partnership with GIB.

As slabs get towards the maximum size, control of the mix properties (particularly slump) and attention to curing is required to minimise the impact of curing shrinkage.

BRANZ *Build* 89 (Aug/Sep 05) has an article on concrete slabs and control joints and is available for free.

Licensed Building Practitioners
We are now into the second month of 2010, and while we tend to think that it is still a long time off in the future, from 1 March 2012, building practitioners must be licensed in order to carry out or supervise work on homes and small-medium sized apartment buildings that is critical to the integrity of the building. Those of you that are planning to be a LBP should be starting on the path now so that you will be ready when the date comes.

There are currently 563 people registered for carpentry, 13 as brick and blocklayers, 7 as external plasterers and18 roofers. A full list of registered LBPs in all classes is given on the DBH website www.dbh.govt.nz/lbp-register.

Registered architects and chartered professional engineers will not appear on this register. Under section 219 (2) of the Building Act 2004, registered architects and chartered professional engineers are treated as if they are licensed in the Design 3 class. They will not show on the Licensed Building Practitioner Register as they appear on the registers of their own registration schemes. For registered architects, refer to www.nzrab.org.nz, and for chartered professional engineers, visit www.ipenz.org.nz.

ALF 3.2 – tips for use
When using ALF 3.2, leave blank any selection boxes that do not apply to your project. (If a 0 is entered, the program will not complete the calculation.)

For example, if you have a slab-on-ground floor, leave all the fields that apply to a suspended floor empty.

Glazing R-values
Glazing R-values can be found in:

- BRANZ *House Insulation Guide* (third edition)
- NZS 4218:2004 *Energy efficiency – Small building envelope* Tables G1, G2
- NZS 4218:2009 *Thermal insulation - Housing and small buildings* Tables C1, C2, C3 and C4.

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Guideline *is a free monthly update on building issues prepared by BRANZ and funded by the Building Research Levy.*