

Joins in top plates

NZS 3604 sets out specific construction requirements for joints in top plates. One of the options specified is to use metal plate connectors with a capacity of:

- 3 kN for walls that contain bracing elements that provide less than 100 bracing units
- 6 kN for walls that contain bracing elements that provide 100 or more bracing units.

Designers should specify the capacity of the connectors they require. As it is not practical to show all joint locations on the drawings, the easiest option is to specify 6 kN connectors for all junctions as it is likely that most walls will contain a bracing element.

Descriptions of both 3 kN and 6 kN connectors and where they can be used are given in NZS 3604 Section 8; Figures 8.15 and 8.16.

Polystyrene R-values

R-values for polystyrene depend on material type (EPS or XPS), thickness and for EPS, grade. All R-values are product specific.

Designers need to be sure that the specified product will give the required R-value. On site it's up to the builder to purchase what was specified and install it correctly to ensure performance will be met.

ALF and the H1 BPI

When using the current BRANZ ALF for H1 compliance, designers must use the BPI conversion calculation given on the H1 Support page on the BRANZ website to bring the BPI calculation into line with the revised BPI requirements of H1 Third Edition.

Tested

Usually in construction it is patience that is tested but in this case the heading refers to claims about the testing a product may have been subjected to. A test report typically evaluates one aspect of a specific product's performance at a specific point in time within clearly defined boundaries and conditions. Designers and BCAs will need to be satisfied as to:

- the type of testing that was actually carried out – fire, structural, thermal, durability etc
- whether the testing was to a recognised New Zealand or international standard
- whether the testing was relevant to the performance characteristics under consideration
- whether the product passed the test
- whether the product is being used in accordance with the test parameters (to ensure the test data is valid)
- whether the product is exactly the same as that which was tested (material composition and installation).

Manufacturers may need to provide a producer statement that confirms the testing carried out and the results.

For BRANZ, a test report is one of the components of a product Appraisal. Please note that from March 2007 BRANZ no longer permits BRANZ test reports to be issued to third parties. This has been brought about as a result of inappropriate use of these reports.

It is common to see advertising which says 'product tested' (sometimes with a test report reference) but gives no information about the testing actually done. In one example, the only testing done had been to an early fire hazard performance standard so the testing gave no indication as to structural performance or durability – points not clarified in the advertisement. Also seen are statements that 'the product is being tested' – which actually means nothing until the testing is completed and (hopefully) the product has passed the specific test.

Bottom plates and a DPC

While it is not a requirement of NZS 3604, BRANZ recommends the installation of a damp-proof course (DPC) between all timber internal wall bottom plates and concrete floor slabs. The reason for this is that there is still a lot of water in the slab when the plates are put down and this can be absorbed into kiln-dried

timber if the DPC is not installed. Similarly, the DPC is recommended where internal framing timber is being fixed to concrete or concrete masonry walls.

Roof fixing

This might be stating the obvious, but metal roof fixings also require sealing washers. A recent insurance claim for damage caused by a leaking roof identified the cause of the leak as spiral shank nails having been installed without a washer.

Metal roofing product manufacturers have nominated fixing types with specific washer recommendations that should be followed when the roof is installed.

Changes to work not requiring a consent

In October 2008, Schedule 1 of the building Act was expanded, with the introduction of 12 new exemptions for work not requiring a building consent. A summary of the expansion to the schedule is given in Codewords No 33 issued in December 2008. The descriptions in Codewords are high-level summaries only and some conditions may also apply.

The DBH has also published Building Act 2004: Guide to exemptions from building consent requirements (October 2008). A free copy of this document can be ordered by phoning **0800 242 243**. It is available on the Department's website at: www.dbh.govt.nz/publications-about-the-building-act-2004

Govt3 programme

As of January 2009 new government buildings are required to use passive solar design and integrated whole building design principles. Information is available on:

- passive solar design guidance - commercial building focus
<http://www.mfe.govt.nz/publications/sus-dev/passive-solar-design-guidelines/index.html>
- integrated whole building design guidelines - mainly a commercial building focus
<http://www.mfe.govt.nz/publications/sus-dev/integrated-whole-building-design-guidelines/index.html>

BRANZ Helpline

The BRANZ Helpline is a service that provides advice to callers by telephone. The Helpline service is unable provide written advice or provide advice in response to faxed or emailed questions.

BRANZ Seminars 09 – Water Efficiency

Registrations are open for this March seminar aimed at architects and designers.

There is a range of pressures on New Zealand's water resources such as urban water supply competing with rural irrigation, the desire to have an untouched natural environment and the expectation that water be available whenever we want it. Restrictions on water use are likely to be tighter in the future. This means water is becoming a precious resource that we must consider when we design and construct our buildings.

The seminar will cover:

- coming changes in legislation
- how we use water in our homes
- recent appliance developments
- building consent requirements
- options for utilising rain water
- using grey water and black water effectively.

Venues and dates are: Dunedin 16 March, Christchurch 17 March, Auckland 18 March, Hamilton 19 March and Wellington 20 March.

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

Webstreaming

Webstreaming of eight 2007 and 2008 BRANZ seminars is now available and allows you to view our past seminars online on a pay-per-view basis. Registered architects and Licensed Building Practitioners will be able to gain CPD points by taking an online quiz afterwards. Check out our online seminars now at www.branz.co.nz (and click on Seminars/Webstreaming).