Insulation – material thicknesses
Some insulation suppliers have recently increased the thickness of their products for a given R-value. For roof and wall construction, this means checking that the material being specified will fit in the space available.

For roofs with a flexible roof underlay, the 25 mm clearance between the roof underlay and the insulation material must be maintained.

Energy efficiency – hot water and HVAC provisions
As a reminder, new Building Code (NZBC) provisions for hot water and HVAC systems came into force on 1 February 2009. There are currently no Acceptable Solutions or Verification Methods published for these Building Code provisions; however, guidance is available using the following links and information on the DBH website:

- Building Controls Update No.95 – New H1 performance requirements for hot water and HVAC systems
- Guidelines for energy efficient HVAC plant
- Regulation SR 2008/97 (HVAC amendment)
- Regulation SR 2008/256 (hot water amendment).

Reported misuse of BRANZ Appraisals
BRANZ has been informed that BRANZ Appraisals are being used by suppliers other than the Appraisal holder to show compliance for a material that is a component of an appraised system. Whilst the product being supplied may be similar to that appraised and it may be being used in a very similar manner, there are often other significant issues that are assessed during the Appraisal process that may not be met by the other supplier including:

- structural design – How is the product attached to the building? Will this method be able to carry all expected loads?
- durability – How will the product interact with other components in the system that have not been assessed?
- weathertightness – Has the alternative supplier's system undergone E2/VM1 or AS/NZS 4284 testing?
- energy – Will the alternative system have the same overall R-value?
- installation – Have the installers been assessed as being suitably qualified? Have they received suitable training?

Only the BRANZ Appraisal holder can use their Appraisal to demonstrate compliance of their product or system with the NZBC as only the Appraisal holder has had their complete system assessed by BRANZ. Using only part of the relevant information to make approvals creates exposure to significant risks.

BRANZ seminars 2010 – Passive Fire Protection
Passive fire protection measures are an incredibly important part of commercial and multi-unit residential building design and construction but this is an area that many find complicated and confusing. Our latest seminar series examines 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 for the final three seminars are below. Register now on our website www.branz.co.nz.

Date	Venue
Wednesday 24 March	Tauranga
Thursday 25 March	Palmerston North

Moisture content of LVL framing
When using moisture meters with laminated veneer lumber (LVL) timber, care needs to be taken to determine its moisture content, as different readings will be given compared with solid timber. Glue lines through the LVL will affect the electrical conductivity (which is what the moisture meter reads) of the member as a whole, giving incorrect readings.

When using moisture meters with LVL, equivalence tables should be used to relate reading on the moisture meter to true moisture levels in the LVL framing. Equivalence tables should be available from the LVL manufacturer.

The power of the internet blog
It is interesting reading a number of internet blogs and articles related to building matters, but unfortunately, they are often vehicles for misinformation. One read recently was trotting out the perennial misconception that condensation moisture was the cause of leaky building problems. BRANZ Bulletin 439 *Condensation risk in walls*

covers the risks of condensation becoming moisture within walls. In essence, because we have mild climatic conditions, there is little risk of this happening – the exceptions are high alpine buildings such as ski lodges and those where there is a large amount of moisture generated such as a room containing a pool or spa or where wet processes are carried out. This means that, for New Zealand's domestic buildings, a vapour barrier is not required.

Skillion roofs have limited ability to deal with moisture, so it is good practice to provide an air barrier between the inside and the roof spaces and avoid the use of open downlights. Research has shown that moisture condensing within these roofs is transported into the space by air movement. Typically, the plasterboard lining acts as an air barrier. Where the ceiling lining is air leaky such as T&G boarding, an air barrier meeting the requirements of Table 23 of E2/AS1 should be installed before the ceiling is fixed in place.

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

Minor variations to building consents
From 1 February 2010, section 45A of the Building Act enables a building consent authority (BCA) to grant a minor variation before or during construction without having to go through the formal process of issuing an amendment to the building consent.

The DBH document *Minor variations to building consents: Guidance on definition, assessment and granting* provides information and guidance to BCAs and to others such as builders, designers and project managers about:

- the legislation that provides for minor variations to building consents
- how to define minor variations in practice
- how BCAs should assess and grant minor variations
- recommended BCA systems and processes for dealing with minor variations.

Do you want to receive Guideline by email?
Just send your email address to Desiree Pickering at desiree.pickering@branz.co.nz with Guideline in the subject line or you can download it for free at www.branz.co.nz.