GUIDELINE
Free monthly update on building issues prepared by BRANZ and funded by the Building Research Levy
SEPTEMBER 2009

BRANZ

Mind the gap... again

A BRANZ representative recently visited a house with a builder who was constructing an addition to it. Where the addition butted onto the existing structure, the wall cladding and the eaves lining had been removed, and this exposed insulation that had been retrofitted under the government's home insulation subsidy scheme. What was immediately obvious was that there was no gap between the insulation and the roof underlay.

In this case, the roof pitch was low so access was not easy, but the method of installing the insulation with a long pole to get it to the extremities of the roof meant that the insulation had been left curled up at the perimeter and in contact with the roof underlay.

In all roof installations, whether new or retrofit, it is important that that a 25 mm gap is maintained between the roof underlay and the insulation to prevent water being transferred from the underlay into the insulation.

Manufacturers' instructions

We've learned of situations where designers and builders are choosing to ignore the manufacturer's specific instructions for the use of their product. The end result is that the manufacturer is not likely to be willing to warrant the performance of their products because their specific instructions have not been followed.

Where the contract documents specify that the manufacturer's instructions must be followed but the builder chooses not to, they run the following risks:

- They are likely to be in breach of contract because they are not building what the documentation asked for – in these cases, the designer/client is well within their rights to ask for the work done to be removed and built as specified at no cost to them.
- The Code Compliance Certificate may not be issued because the consented documents have not been followed on site.

Foil-backed plasterboard

Imported foil-backed plasterboard has recently appeared on the New Zealand market. Using this product as a wall and ceiling lining is not a means of compliance with Building Code clause H1. In fact, its use as a sole means of providing insulation has never met previous regulations for energy efficiency, and once fill insulation is installed (as it must be), it negates the slight benefit the foil might have provided.

If the product is being specified or installed for vapour control (which is not required in New Zealand domestic buildings), the butted joints in the sheets mean that it cannot provide continuity of the vapour barrier that is necessary for performance.

Material origins

The origin of a number of materials and components being imported into New Zealand for use in our buildings may be suspect. In one recent example, the writing on the tubes of sealant being used by the plumber on a large project were in a language that our 'informant' didn't recognise – but it did look and smell like sealant. This raises some questions:

- Where it did come from?
- What was the quality of the manufacturing process?
- Was it the right sealant for the job?
- What were the specific installation instructions?
- Was it being used correctly?
- What standard was it made to, if any?
- What were the warranty terms, if any?
- Would it be suitable for New Zealand's high UV conditions if used externally?

When specifying products or materials for use in construction:

- identify a manufacturing standard for the product or system if possible
- be specific – name the specific brand or product that you want used
- check that the supplier/or manufacturer has a credible reputation
- determine the warranty offered and assess the ability of those offering the warranty to be able to honour it.

Wall cladding performance

Designers that specify and BCAs that consent proprietary wall claddings that have not been tested at an IANZ-accredited laboratory to NZBC E2/VM1 are increasing their risk of exposure to liability.

Cavity closures and drip edges

BRANZ is aware that some claddings being installed do not provide sufficient drip edge along the bottom of the cladding and across the top of openings in the cladding such as windows.

E2/AS1 specifies a 15 mm drip edge above windows measured from the bottom of the cladding to the base of the cavity closure. For the bottom edge of the cladding E2/AS1 requires 10 mm generally but asks for 20 mm for stucco and 15 mm for profile metal. All BRANZ Appraised claddings have a 15 mm drip edge in all situations.

External waterproofing membrane durability

Tanking and damp-proof membranes require a verified durability of "not less than **50 years**".

Decking and roofing membranes require a verified durability of "not less than 15 years". Note that when the membrane is covered, with tiles for example, the membrane's serviceability must be equivalent to the expected life of the tile finish (typically 20–25 years).

BRANZ *Weathertight Solutions Volume 4 Roofing* – clarification

The article in the August Guideline regarding an angled transition between the gutter base and the side wall rather than a tight fold should have included the word 'metal' – an angled fillet is always required for membrane gutters.

BRANZ Seminars 2009

Two years on from our *H1 Insulation Changes* seminar, it's clear from the calls to the BRANZ Helpline that many people in our industry are still coming to grips with the requirements these Building Code changes have brought about. Our upcoming H1 Energy Efficiency seminar will:

- help you apply H1 more easily in your everyday work
- explain the changes in the new version of NZS 4218
- clarify how H1 and NZS 4218:2009 fit together as a compliance route
- enable you to better produce or inspect consent documentation relating to H1.

Dates and locations are below. Registration is available now on our website **(www.branz.co.nz/seminar_register).**

Dates and locations		Dates and locations	
2 Nov Mon	Invercargill	18 Nov Wed	Nelson
3 Nov Tue	Queenstown	23 Nov Mon	Hamilton
4 Nov Wed	Dunedin	24 Nov Tue	Tauranga
5 Nov Thu	Timaru	25 Nov Wed	Rotorua
6 Nov Fri	Christchurch	26 Nov Thu	Gisborne
9 Nov Mon	Whangarei	27 Nov Fri	Napier
10 Nov Tue	Albany	30 Nov Mon	Palmerston North
11Nov Wed	Manukau	1 Dec Tue	Kapiti
12 Nov Thu	Ellerslie	2 Dec Wed	Wellington
13 Nov Fri	New Plymouth	3 Dec Thu	Masterton
17 Nov Tue	Greymouth	4 Dec Fri	Trentham