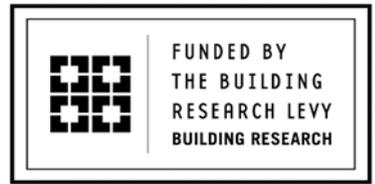


GUIDELINE

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



MARCH 2007

THANK YOU

The February *Guideline* article on designers and documentation stimulated a lot of feedback – most of it positive. Thank you for the responses and please keep them coming.

In the article on roof underlays horizontal laying to E1/AS1 is required when the roof slope is less than 8 degrees (not 8 degrees and less as said in the original faxed and emailed copy).

BEREAVEMENT

Bill Ash, the Building Research representative in the South Island, passed away this week after a short illness.

BEVEL-BACK TIMBER WEATHERBOARDS

Bevel-back timber weatherboards have become a fashionable cladding, and significant amounts of them are being used in new developments. The boards are designed to have a 32 mm minimum overlap to protect against water entry.

Timber is a natural product and may move after it is installed, meaning that small gaps may open up. These are best left as is. The effect of movement will be reduced where light colours are used, timber is finger-jointed and the boards have been correctly fixed with a single fixing at each stud.

Sealant should not be applied to the bottom edge of the lap for any reason.

ZINC COATINGS AKA HOT-DIP GALVANISING

How much hot-dip galvanising is enough? We are aware of some products that are marketed as having greater hot-dip galvanising coating mass than that required by NZS 3604, meaning that the additional coating requirement does not apply. However, the maximum amount of zinc that can be deposited on the steel depends on the thickness of the item being coated – more thickness equals more zinc. Small items may not have sufficient metal thickness to take sufficient zinc to adequately protect them without the application of the additional coating system given in NZS 3604.

We know that additional coating weight of galvanising does increase the level of protection, but the question that remains is, how much is enough? To obtain the answer will require significant investment in testing to determine the actual minimum coating weights to give the same level of protection as the duplex coating specified in NZS 3604.

It is BRANZ's recommendation that stainless steel components be used to obtain a 50-year durability with all copper-based H3.2, H4 and H5 timber treatments.

PLASTERED BRICK VENEER

We are commonly asked whether ventilation and drainage needs to be provided for a brick veneer cladding that has been rendered and painted so that it acts like a face seal.

The short answer is yes. Why? While the paint finish will stop water being absorbed into the brick veneer, it is likely that the windows and doors have been installed in the common way for veneer. That is, they are not sealed into

the cladding and water can enter between them and the edge of the brick. Drainage and ventilation is therefore required.

If the windows were to be installed following the principles of E2/AS1 for other cladding systems where the heads, jambs and sill are flashed so that no water can get into the cavity at all (which will be very difficult to do), then omitting the drainage and ventilation slots may be accepted by a building consent authority (BCA) as an Alternative Solution. Always consult with your BCA before completing the detail drawings.

ENGINEERED TIMBER

There are a number of engineered wood products, such as 'I' beam floor joists, on the market. Each is manufactured to slightly different material properties (e.g. modulus of elasticity or strength), and the performance (such as maximum span or load capability) of each specific product is not the same.

Designers need to refer to the specific manufacturer's literature to determine the spans and spacings when designing and then specify the particular product by name.

Builders must then install the named product – where a substitution is proposed, the change needs to be verified by the building's designer as being suitable and an amendment to the consent documents sought.

VENTILATION OF LOW-SLOPE MEMBRANE ROOFS

In previously published documents BRANZ has shown details that provide ways of ventilating the space between the membrane substrate and the ceiling for low-slope membrane clad skillion roofs. Current research is being carried out at BRANZ, using a specially built research building, to determine if there is a need for membrane roof ventilation.

Until this research is published our advice is to only provide ventilation when required by the roofing manufacturer using the specific details they provide.

BRANZ CITE 2007

Upcoming courses are:

- ★ Access, Egress and Barriers
Auckland: 16–18 April
- ★ Building Compliance for IQPs
Christchurch: 21–23 May
- ★ Building Controls
Christchurch: week 1: 14–18 May and
week 2: 18–22 June
- ★ Domestic Sprinkler Design
Christchurch: 18 & 19 April

For registration details contact Cite Co-ordinator Natasha Breen 04 2381291 or natashabreen@branz.co.nz

BRANZ Seminars 2007

In 2007 BRANZ is holding seminars which are targeted at various sectors of the industry. This is to ensure that the information covered is specifically relevant, and of sufficient depth, to produce the best learning experience possible for attendees. Topics planned for the remainder of the year include: *Passive Fire Design*, the *Construction Contracts Act* and *Weather-tightness for Builders*. Keep an eye on our website for more information and details of dates and locations.