



GUIDELINE

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THE BUILDING
RESEARCH LEVY

FREE MONTHLY UPDATE ON BUILDING ISSUES PREPARED BY BRANZ AND
FUNDED BY THE BUILDING RESEARCH LEVY

ONLY IN THE US

The BRANZ website has been very active lately – with significant interest from New Orleans. It seems that the best information that could be found on the web about restoring flood damaged houses was BRANZ Bulletin 455 *Restoring a house after flood damage*.

BE SPECIFIC

In the DBH document *Guidance for managing variations and amendments to building consents*, the Department is encouraging designers and building consent applicants to use generic product descriptions where specific Building Code compliance is not an issue. **BRANZ believes strongly that products should be specifically not generically identified**, particularly where contractual or client 'performance requirements' are to be met.

Certainly any amendment to a consent must go through the correct process to gain approval for the change.

NEW INSULATION PRODUCTS

BRANZ is hearing of a number of instances where insulation products that incorporate a foil or plastic layer are being installed in New Zealand buildings. As these materials may also be a vapour barrier, their use within a framed structure may create a moisture problem within the wall or roof structure, if not correctly located. Remember, in most New Zealand buildings a vapour barrier is **not** required.

DESIGNING FOR RISK

There has been a lot of discussion about E2/AS1 Third Edition and the risk matrix. Based on the evaluation of a range of reports on the weathertightness failure of buildings, a number of key features, related to failure, were identified. These have been categorised and incorporated as risk features within the risk matrix.

The risk matrix is a tool that can identify the accumulative effect of 'at risk' building elements. This will determine if a building is within the scope of the Acceptable Solution or whether it should be dealt with as an Alternative Solution requiring specific design.

The important thing is for designers to identify the risk early, preferably at the preliminary design stage. The designer can then clearly understand the relative risk of the design, and determine if they can develop a solution to meet that level of risk, or whether they should reconsider the design if the risk seems too high. Higher risk can be satisfactorily designed for, but it takes a bit more care, time and skill.

Remember to include the completed risk matrix with the building consent application, to identify to the TA the weathertightness risk of the building. This will allow them to assess it with respect to the performance requirements of the Building Code.

TABLES 7 AND 23

There are two tables within E2/AS1 Third Edition that can have significant impact on the detailing of buildings.

The first to consider carefully is Table 7: Metal flashing – general dimensions. This table provides guidance on the design of flashings by giving minimum dimensions for under and overlaps to the roof and wall cladding. Minimum cover dimensions to the cladding are dependent on the wind zone the building is located within.

Table 23 covers the properties E2/AS1 requires for roof underlays and building (wall) wraps.

The Acceptable Solution permits only Kraft paper-based material for use as a roof underlay and as a wrap behind direct-fixed non-absorbent (uPVC, profiled metal) wall claddings. However there are absorbent synthetic wall wraps that have been appraised as being suitable for use

behind uPVC or metal claddings – such use must be considered as an Alternative Solution. If in doubt check with the specific product manufacturer.

Table 23 also requires that materials when tested to AS/NZS 4200:

- meet specific water resistance requirements. For roof underlays this is to resist a static water head of greater than or equal to 100 mm, and for wall wraps 20 mm
- have shrinkage of less than or equal to 0.5%
- comply with specific edge tear and tensile strength requirements
- have a specific pH extract.

Where a wall wrap is used as an air barrier (such as over unlined gable end wall framing) the material used must have an air resistance of greater than or equal to 0.1 MN s/m³ when tested to BS 6358 Part 3.

WHAT'S IN A NAME?

In the August *Guideline* we referred to Approved Documents – we should have called them, as a number of our readers pointed out, Compliance Documents. The Building Act 2004 uses the term Compliance Documents to describe Acceptable Solutions and Verification Methods.

COMING EVENTS

Sustainable Procurement Conference

7 – 8 November 2005: Wellington Convention Centre

The target audience for this conference includes:

- leaders wanting to take their organisation down the sustainability path
- procurement officers
- suppliers of sustainably produced goods and services
- academics
- those interested in values-based purchasing.

Contact the Conference Organiser:

Absolutely Organised Ltd
P O Box 38 951
Wellington Mail Centre
Phone +64 4 587 0182
Fax +64 4 587 0181
Email: spc@conferences.co.nz

CITE FUTURE EVENT

CITE Adjudication

31 October-4 November – Christchurch
\$2,000 + GST (\$2,250 incl. GST)

Early bird specials are available.

Contact Fiona Street, CITE Manager, Education Development.
Phone 04 238 1291 or email: BRANZCITE@branz.co.nz.

BRANZ SEMINARS

'Plumbed Out': A plumbing and drainage seminar on the ins and outs of AS/NZS 3500 and NZBC G13 with particular emphasis on consent documentation. Locations and dates for October are:

10 Nelson, 11 Blenheim, 12 Wellington, 13 Kapiti, 17 Gisborne, 18 Whangarei, 19 North Shore, 20 Auckland, 25 Napier, 26 Wanganui, 27 New Plymouth, 28 Palmerston North.

Contact Gail King, Seminar Coordinator (phone 04 237 1170).
Registration online now at www.branz.co.nz