



# GUIDELINE

OCTOBER 2004



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

## INSTALLATION OF GAS DISTRIBUTION/METER BOXES IN EXTERIOR WALLS OF HABITABLE BUILDINGS

BRANZ has recently fielded a question about a potential for metal distribution/meter boxes to act as a thermal bridge if installed with the back of the box in contact with the interior lining of habitable buildings.

There is a potential for thermal bridging to occur, so we recommend that the installers consider fixing/adhering a layer of bitumen coated softboard or 12 mm thick expanded polystyrene (EPS) to the back of the boxes before installation as a thermal break. That would be consistent with the requirements of NZBC Clause E3/AS1 as such breaks apply to steel framing. Note that bitumen coated softboard at 10 mm is of equivalent R value to 12 mm EPS and is therefore acceptable as a thermal break under E3/AS1. We further recommend that the boxes be installed in exactly the same way as E2/AS1 (third edition 2004) requires a window to be fitted, i.e. complete with air seals and appropriate weather proofing.

### YOU ASKED

**Q.** *If I specify the timber weatherboard cladding options covered by the revised New Zealand Building Code External Moisture Acceptable Solution (NZBC E2/AS1-third edition June 2004) is it necessary to include a "wind barrier" in my detailing.*

**A.** No. The specific requirement for rigid wind barriers for some types of timber weatherboard was first introduced with the re-write of New Zealand Standard (NZS) 3604:1999. Wind barriers were to be either rigid or non-rigid type, depending on the timber weather-board profile being specified and the wind zone of the building site. Wind barriers are specific to timber weatherboards only, and only apply when NZS 3604 is called up as the compliance document. No other NZBC compliance document mandates rigid wind barriers.

If using (remember Acceptable Solutions are only one option of showing compliance – they are not mandatory) NZBC E2/AS1 (third edition) which comes into effect on 1 July 2005 makes no reference to the need or use of wind barriers. (air barriers yes: e.g. un-lined gable ends – wind barriers no) The "second line of defence" notion on which the need for wind barriers was based has been replaced with drained and ventilated cavities and air seals. Where a "direct fix" option is allowed under E2/AS1, it is always in a lower-risk situation where the need for a wind barrier (of a type other than a building paper, underlay or wall wrap) is deemed unnecessary.

## INSTALLATION OF ACRYLIC SHOWER WALL LINERS IN WET AREAS

BRANZ has fielded questions recently about the correct method of installing acrylic shower wall liners in bathrooms. The question was triggered by an astute building official who had

noted that the top edge of the panel had not been sealed along its length to prevent the entry of condensation from the wall area above the liner.

After discussing what was described as "industry practice" with some "key players" typical practices are that the adhesive is kept just free of the outer edge of the liner and is applied in vertical strips at intervals across the width of the liner. This method of application leaves paths for moisture to follow between the glue lines. Given that the substrate to which the panel is adhered is usually a gypsum based material without any protective coating applied to it prior to the liner being positioned it is a likely that the wall lining will become wet.

BRANZ recommends that the complete perimeter edge is protected to eliminate any possibility that moisture can migrate into any area behind the wall liner.

### Brookers Building Act 2004 Seminar

Interpreting the Building Act 2004

Wednesday 24 November, The Wellesley Hotel, Wellington

Thursday 25 November, The Heritage Hotel, Auckland

For further information contact: Mary Aitken, Brookers Publishing on 0800 10 60 60 or [Mary.Aitken@thomson.com](mailto:Mary.Aitken@thomson.com)

### BRANZ Certificate in Domestic Sprinkler Design

23 & 24 November 2005

Hotel Grand Chancellor Auckland Airport

Cost: \$850.00 plus GST (\$956.25 inc. GST)

Contact Fiona McColl, CITE Education Officer on 04 238 1291 or [BRANZCITE@branz.co.nz](mailto:BRANZCITE@branz.co.nz)

Programme for 2005 will be published shortly.

### Building Weathertightness – Achieving Solutions

We are now into the last two weeks of our current seminar series and it has been a great success. This is part two of two seminars by the Building Industry Authority and BRANZ on E2/AS1 – making buildings weathertight.

This seminar focuses on designing weathertight solutions and methods of assessing alternative solution details for effectiveness in keeping water out. Topics being covered include:

- Alternative Solutions in context
- Ways of assessing compliance with the performance criteria in NZBC E2
- Designing and evaluating Alternative Solutions
- Worked examples

The last available dates are:

8-Nov	Trentham	Trentham Racecourse
9-Nov	Invercargill	Working Mens Club
10-Nov	Alexandra	Alexandra District Club
11-Nov	Dunedin	The Dunedin Centre
15-Nov	Mt Wellington	Waipuna Hotel and Conference Centre
16-Nov	Hamilton	Kingsgate- Hamilton
17-Nov	Rotorua	Rotorua District Council
18-Nov	Tauranga	Bureta Park Motor Inn

Achieving Solutions is an important seminar to attend – not one to be missed.

For any information or registration details contact Gail King at [GailKing@branz.co.nz](mailto:GailKing@branz.co.nz) or phone 04 237 1170.