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BUILDING ON KNOWLEDGE
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GUIDELINE

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

OVER THE EDGE

Before the use of cavities, bottom plates were installed with the front face cantilevered at least 6 mm past the slab edge. With direct-fix claddings, this requirement remains to provide a capillary separation to prevent water being drawn up behind the cladding. For builders, don't get carried away with the overhang – we have heard of over 20 mm being provided. This can create problems when fixing the 100 x 50 plate to the slab. BRANZ also has photos of a site where the bottom plate was set back 6 mm from the edge of the slab.

Where a drained and vented cavity is installed, overhanging the plate is not necessary as the cavity provides the capillary break. However, if the plate is installed with the overhang, the cavity closure needs to have a sufficient back upstand that rises up to the top of the bottom plate. Where a cavity closure is fitted after the battens, close off the risk of vermin entry through the gap between the cavity and the foundation wall.

ACCESS, CLEARANCES AND TOLERANCES

In looking over construction drawings the person who has drawn the details sometimes has limited appreciation of how they will actually be constructed on-site. Examples seen recently include:

- sealant joints shown in positions where there was no access to apply the sealant – surrounding components had to be installed before the sealant prevented application
- fitting tolerances for a cladding that are less than expected construction tolerances for the materials or elements they are to fit between
- subsequent construction blocks access to inspect or replace a sealant joint
- insufficient access to install fixing and locating screws
- window head, jamb and sill details which show the window frame in a different position in each drawing.

The message is: before finalising drawings, check that the details can actually be constructed.

BARRIERS AND FALL DISTANCE

The performance requirement of NZBC Clause F4.3.1 says: "*Where people could fall 1 m or more from an opening in the external envelope or floor of a building or from a sudden change of level within or associated with a building, a barrier must be provided*".

For a deck, most interpret this as saying that as long as the dimension from the deck to the immediately adjacent ground is less than 1 m a barrier is not required. For flat ground, this may be true, but what if the deck is in the side of the hill with clear ground falling steeply away from the edge of the deck? For example, the deck may only be 600 or 700 mm above the ground, but anyone falling would certainly travel more than 1 m before being stopped so a barrier would therefore be required.

Schedule 1 exempt building work "item g" relating to platforms and similar structures says of a structure: "*which is not possible to fall more than 1 m even if it collapses*". Note that the wording in the comment varies from the wording of F3.4.1. The "notes to exemption g" say: "*the fall distance is to be interpreted in a way that measures the total descent whether the descent be through air or water*". Therefore the fall distance is to be measured to the point where the fall is arrested. So lower decks may need a barrier, regardless of the height above ground of the structure itself.

Areas where barriers may also be needed are sites that utilise retaining walls to create level surfaces for parking and public access to private buildings. If the height of these walls is 1 m or more, a barrier is needed. Determination No. 99/012 says: "*Barriers are required above retaining walls exceeding 1 m in height where people, particularly those unfamiliar with the area, would frequently be expected to be close to the top of the wall in the course of their normal activities*". Note again the variation in wording from F3.4.1.

HANDRAILS OR NOT

It is amazing the number of New Zealand buildings shown in magazines that do not have handrails on the main stairs within the building. One can only assume that the Code Compliance Certificate for these buildings has not been applied for, the missing handrail was not noticed during the final inspection or the owner has removed the handrail afterwards.

QUOTE

A quote from a cladding installer: "*We do not have a problem with our cladding installed too close to the ground, but we do have a problem with the ground too close to the cladding*".

On this near flat site, the finished slab levels for about a third of the townhouses being built were below the natural unexcavated ground level.

CITE Future Events

- **CITE Weathertight Design**
  Week 1: 27–29 March – Christchurch
  Week 2: 1–5 May – Christchurch
  $3,500 excl. GST ***($3,937.50 incl. GST)***
- **CITE Building Compliance for IQPs / LBPs**
  10–12 April – Christchurch
  $1,200 excl. GST ***($1,350 incl. GST)***
- **CITE Fire Design**
  Week 1: 14–17 March – Christchurch
  Week 2: 16–19 May – Christchurch
  $3,000 excl. GST ***($3,375 incl. GST)***

Early bird specials are available.
Contact Natasha Breen, CITE Administrator, phone 04 238 1291, or email BRANZCITE@branz.co.nz.

SEMINARS

Profiled metal wall cladding – describing the issues around selecting, detailing and installing profiled metal cladding is well under way with Des Molloy and Trev Ashman.

Dates and venues for March are: 1 Wellington, 2 Kapiti, 6 Gisborne, 7 Whangarei, 8 North Shore, 9 Auckland, 13 Napier, 14 Palmerston North, 15 New Plymouth, 16 Wanganui, 20 Hokitika, 21 Timaru, 22 Christchurch, 27 Invercargill, 28 Queenstown, 29 Oamaru, 30 Dunedin. The March *Guideline* will remind you of the dates and venues for April.

Register online at www.branz.co.nz. Please note that online registrations close three working days before each seminar. For late registrations please email SeminarRegistrations@branz.co.nz.

Contact Gail King, Seminar Coordinator (phone 04 237 1170)