New industry body – PrefabNZ
Newly formed PrefabNZ's mission is to double the uptake of prefabrication in New Zealand by 2020. It believes an increased uptake of prefabrication is for the good of New Zealand's wider design and construction industry. BRANZ has measured the current amount of prefabrication in the New Zealand building industry as 17% (by comparing the cost of the prefabricated components of residential and non-residential buildings as a percentage of the total cost). A key aim of PrefabNZ is to have this increase to 40% by 2020.

Their aim is to do this by concentrating on three roles as:

- a catalyst for prefab collaboration
- a front-door portal for prefab information
- an incubator for prefab innovation.

Contact PrefabNZ at info@prefabnz.com to join.

Stair design
The performance requirements of NZBC D1 *Access routes* related to stairs is given in clause D1.3.3. Stair treads must:

- have adequate footing and a uniform rise
- incorporate an easily seen leading edge
- be designed to prevent children falling through or being trapped
- have adequate slip resistance, with D1/AS1 4.1.4 requiring slip resistance in accordance with Table 2
- have no isolated or single risers.

D1.3.3 also requires landings at appropriate intervals and securely fixed handrails.
In D1/AS1 section 4.0, guidance is given on appropriate stair design to ensure they meet the above performance requirements.

Access routes and slip resistance – again
The performance requirements of NZBC clause D1 *Access routes* requires walking surfaces to have adequate slip resistance under all conditions of use but gives no specific performance requirement. For designs following the non-mandatory Acceptable Solution D1/AS1, section 2.1.1 states that "Level access routes **to which the public has access**, including level accessible routes, shall have a mean coefficient of friction μ, of not less than 0.4 when tested in accordance with AS/NZS 3661.1". Therefore, for a dwelling where the public does not have access to the access routes within the building, BRANZ believes the minimum slip resistance requirements of 0.4 cannot be mandatorily applied. There is no specific slip resistance requirement for spaces within the building such as bathrooms and kitchens where the risk of slipping is much higher. We reiterate that BRANZ has always recommended that any walk-on surface – whether an access route or not – should have sufficient slip resistance to make it safe for occupants to walk on.

BRANZ seminars 2010 – Are we there yet?
The current building control system has been in place since 1992, with a major shake-up in 2004, particularly for weathertightness. This seminar series will be presented at 23 centres around the country and aims to see how far we have come and look at where improvements are still able still be made.

This will be done by:

- looking at current and recently completed research and its application to the design and construction of today's buildings
- considering the current approach to building design, with an emphasis on keeping out water and how this can be achieved through design
- analysing performance of details on site during the construction phase.

This seminar series will be of interest to a wide cross-section of industry, especially builders, designers and building officials.
Bookings are heavy, so be in quick to secure your place. **Note:** Tauranga is fully booked.

For architects, 30 CPD points are available.

Dates and locations for this seminar are on our website – see www.branz.co.nz/seminar_venues.

More about selecting proprietary bottom plate fixings to slab on ground
When specifying proprietary bottom plate fixings to slab on ground construction:

1. What is the rating of the fixing proposed? Does it have the required rating for (a) the bottom plates (see NZS 3604:1999 clause 7.5.12) or (b) the proposed proprietary bracing system.
2. What depth of concrete does the fastener require?
3. Can the edge distance requirement for the fastener be achieved?
4. Does it meet the durability requirement? In concrete, 50 mm cover is required in all zones. Permanent concrete masonry formwork requires cover of 60 mm in the sea spray zone, which may not be achievable with 90 mm framing. Both concrete and masonry foundations require a minimum of 25 MPa

concrete in the sea spray zone. Lesser cover may be allowable in other zones but these lesser covers could be overridden by the structural edge distance requirements for proprietary fasteners.

When installing screw anchors, make sure the drill bit used is in good condition and will drill the correct diameter hole. Worn drill bits will cause the fastener to bind in the hole.

Skillion roof ventilation
There are no Building Code requirements for the ventilation of a skillion roof. It is important that the timber in the roof space is dry at the time the ceilings are installed and that they are all installed at the same time. No roof spaces should be open when wet practices such as plastering or painting are being undertaken as this could allow moisture into the roof space.

Open downlights should NOT be installed in skillion roof ceilings as these allow air movement through them, which can carry moisture into the framed space. In wet areas such as kitchens and bathrooms, extracts must be vented to the outside.
Insulation installed in the roof space must be 25 mm minimum clear of a flexible roofing underlay to prevent moisture that has been absorbed by the underlay wicking into the insulation.

More detail on skillion roof construction is given in Build 90 October/November 2005, pages 38-39 'Keeping skillion roofs dry', available free at www.branz.co.nz/cms_show_download.php?id=1269. A new bulletin covering skillion roof construction will be published in August.

ALF 3.2 and opaque doors
When using ALF 3.2, how should opaque doors be dealt with? In the walls and windows part of the help menu in ALF under the title 'Doors', it states that "Opaque doors should be treated as double glazed, timber framed windows with 100% shading if their R-value is not known". If the R-value is known, the door should be modelled as part of the wall using the 'custom' construction type. This also applies for garage doors that form part of the thermal envelope of the building. Glazed portions of doors should be treated as windows.

IGU installation
For setting block positions for IGUs, see AS/NZS 4666, which has positions and the numbers required for various configurations of window types. It also covers edge clearances, edge cover, rebate depths and rebate drainage.

H1 compliance
Having difficulty navigating which standard to use to show H1 compliance or which category applies to which project? In April 2010, BRANZ published Bulletin 522 *H1 compliance options,* which can be used to select which compliance options apply to the various building classifications. The bulletin also lists the Acceptable Solutions and Verification Methods listed in H1 and the applicable NZ standards.

Building basics: Weathertightness
The first title in this new series of BRANZ publications is now available. *Building basics: Weathertightness* is a comprehensive guide illustrated by crystal-clear 3D drawings that is written specifically for builders.

Topics covered include:

- legal issues and building controls
- how water behaves when it hits the building exterior
- how water that leaks through the cladding will behave
- the 4Ds: deflection, drainage, drying and durability
- cladding design and construction
- deck design and construction
- basement design and construction
- house maintenance.

Order your copy on www.branz.co.nz or call 0800 80 80 85 (press 2).

Guideline *is a free monthly update on building issues prepared by BRANZ and funded by the Building Research Levy.*

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