Choosing nails and screws for framing and cladding

We have had a few calls about Note 5 in Tables 4.1 and 4.3 of NZS 3604:2011. Note 5 refers you to clause 4.4.4, which states that, for fastenings in contact with timber treated to H3.2 or higher with copper preservatives, use Tables 4.1 and 4.3 for your choice.

So you wonder, why have I been directed to this clause? I have just come from those tables. It is because the clause sets a minimum type of fixing (304 stainless steel) for H3.2 or higher when the timber is treated with copper azole (CuAz) or alkaline copper quaternary (ACQ).

So the choice it is directing you to is this:

- If the H3.2 treatment is CCA (copper chrome arsenate – hazard class 01 or 02), go back and make your choice from Table 4.1 or 4.3.
- If the H3.2 treatment is CuAz (hazard class 58) or ACQ (hazard class 90), the default for fixings is 304 stainless steel in exposed or sheltered areas and hot-dip galvanised in all other locations.

For more information on cladding fixings, refer to Building Code compliance document E2/AS1 Tables 20 and 24.

H1 calculations and skylights

We have received a question about using the NZS 4218:2009 calculator (available on the BRANZ website) where skylights are used but the skylight doesn't show up in the summary sheet for the reference building.

The rules in NZS 4218:2009 when using the calculation method require that the reference building roof calculation is roof area plus skylight area. This gives a total roof area, which is divided by the required construction R-value (R2.9 in zones 1 and 2 and R3.3 in zone 3) to obtain a reference building heat loss for the total roof area.

Because the reference building calculates the whole roof area (including the skylight area) at the same R-value, the skylight area is not separated out. In the proposed building, the calculations are separated into the roof area divided by the proposed construction R-value of the designer's choice to obtain a heat loss, then the skylight area is divided by the skylight R-value to give the heat loss for the skylight. The combined total of the heat losses of the proposed roof and skylight are added together to give the heat loss of the total roof area in the proposed building. The proposed building must not have a greater heat loss than the reference building .

To compensate for the additional heat loss through the skylight, which will always be lower than the R-value required for the roof, the roof , walls or floor R-value will need to be increased to compensate for the lower R-value of the skylight.

There is no maximum area for skylights in the calculation method. In the schedule method, there is a maximum of 1.5 m2 or 1.5% of the roof area (whichever is the greater) and a minimum R-value set.

Concrete slab reinforcing

As a result of the B1/AS1 Amendment 11 modifications to NZS 3604:2011 (namely the deletion of Figures 7.13(A), 7.14(A), 7.15(A) and 7.16(A), foundation walls as covered by Section 7 in the standard now require 2 x D12 bars in the wall footing. The options that allowed wall footings with a single D12 bar in the bottom of the wall have been deleted.

Flooring in wet areas

In last month's *Guideline*, we explained that it is reasonably common for H3 CCA-treated plywood to be used as flooring or flooring overlay in wet areas. H3.1 treated reconstituted wood panels are also suitable for use as flooring and flooring overlays in wet areas, and BRANZ has Appraisals of these products for this use.

All BRANZ Appraised wet area waterproofing membranes have been assessed as suitable for use with reconstituted wood panels and should be used under all floor finishes in wet areas, as would be the case for any flooring substrate in a wet area.

Your invitation to participate in the rebuilding Christchurch resourcing study
Reconstruction Resourcing (RecRes) is a national research project funded by BRANZ and The University of Auckland. The study will survey construction industry practitioners and recovery participants across greater Christchurch to understand the real-time resource situation for post-earthquake repair and reconstruction.

You are invited to take part in the Resource Availability for Christchurch Earthquake Reconstruction (RACER) online survey. By participating, you will help develop a better understanding of the on-going resource availability and capacity for recovery and rebuild in Christchurch following the earthquakes.

You will receive a copy of the overall research findings following each phase of the survey. The first baseline results are scheduled for release in January 2012.

You can find more information at www.recres.org.nz. If you are procuring resources for Christchurch, we hope that you will take 10 minutes to complete the survey (www.recres.org.nz/survey). Your contribution will make a difference to the future of disaster response and recovery in this country.

Last seminar of 2011
December dates and locations for the seminar ***Stay on top of your game***, covering key changes to Building Code clauses B1 and E2, are as follows:

1 December	Hokitika	Beachfront Hotel
2 December	Westport	Westport Motor Hotel
5 December	Taupo	Millennium Hotel and Resort Manuels
6 December	Rotorua	Rydges Hotel
7 December	Tauranga	The Sebel Trinity Wharf
8 December	Gisborne	The Emerald Hotel
9 December	Napier	War Memorial Conference Centre

You can find more details on the BRANZ website. Register now at www.branz.co.nz/seminar_details.

2012 BRANZ Seminars

Post-earthquake fire protection

1 February	Dunedin
2 February	Christchurch
3 February	Wellington
7 February	Napier
8 February	Tauranga
9 February	Auckland – Albany
10 February	Auckland – Ellerslie

Learnings from the Canterbury earthquake will begin in mid-March. Check our website for updates – www.branz.co.nz

Upcoming books
The brand new ***House Building Guide*** (3rd edition) is due off the press within the next few days. It incorporates changes from the new NZS 3604:2011.

A new edition of the book ***Selecting Timber*** will be published before Christmas.

A new edition of the **Good Practice Guide *Concrete Slabs and Basements*** will be published early 2012.

You can buy a BRANZ book online at www.branz.co.nz or by calling 0800 80 80 85.

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

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