GUIDELINE

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Board and batten fixings

The correct fixing method for board and batten cladding is a single nail to the board and to the batten at the top and bottom plates and at each dwangs. Double nailing of boards significantly increases the risk of splitting, as it restricts natural movement. When using NZS 3604 as a means of compliance, board width is limited to 200 mm. The use of wider boards and their specified fixings must be consented as an Alternative Solution.

What is an acceptable tolerance for an installed aluminium window?

Aluminium windows straight off the assembly line must meet the dimensional accuracy requirements of NZS 4211 Section 8. It is BRANZ's view that windows should also be within these tolerance limits when installed. This means that they must be transported, lifted and installed carefully so that they are not forced out of shape.

Required tolerances are a maximum difference of 3 mm between diagonal dimensions, ±2 mm for straightness in the plane of the window and ±3 mm for the overall length and height.

For window installations to E2/AS1 the window flange must have at least 10 mm cover to the cladding/flashing along the jamb and sill (sill cover can be reduced to achieve an effective 8 mm cover by Clause 9.1.10 of E2/AS1). Remember that the Acceptable Solution only covers fixed, hinged, and stayed windows, and doors up to a 5 m square maximum size.

Insulation again

There are a range of insulation products with an equally wide range of thermal performances available. Designers need to be quite specific on the type, brand and performance of the insulation they want used in the building. It is not good enough (as is common practice) to simply specify an insulation R-Value. Builders must also install what was specified. Replacing the specified material with the merchant's monthly special is not acceptable, either contractually or in terms of the consented documents.

Be specific

A designer called the BRANZ helpline recently complaining that the local BCA had rejected his consent application because it lacked sufficient detail. He said "Why is it now not acceptable to have a specification that said all work is to comply with NZS 3604, when it was accepted in the past?".

The reason is that NZS 3604 has always given options or choices, and with the recent addition of the new framing tables for the revised timber grades these options are even wider. Designers must be specific about what they want. It is their responsibility to precisely define the aspects of NZS 3604 or any other compliance document that applies to the specific project.

In this case, the designer regarded NZS 3604 as a document that covers all the requirements of construction – in reality; it only provides guidance on a small but significant part of the total building.

Specifically identifying components and material will give a more accurate price (as the builder knows what to price for) and fewer on-site arguments over interpretation.

Timber grading

Just a reminder that the new tables in NZS 3604 for selecting timber sizes for the specific timber grade came into effect on 1 April 2007.

Keeping documentation up to date

We have just heard of a major home builder's specification that still refers to H1 treated timber, even though it has been a long time since we changed to H1.1 and H1.2.

It is important that designers and design/build companies update specifications to keep them relevant to current requirements.

Safety glazing

The BRANZ helpline recently had a call regarding the need for safety glazing in a pre-school building – the specific requirements are contained in NZS 4223 Part 3. However, there is a "but".

When determining the need for safety glazing, the first reference is NZBC Clause F2 and Compliance Document F2/AS1 – but don't go straight to NZS 4223 Part 3. The reason for this is that F2/AS1 modifies some of the requirements of this part of the standard.

When signing off the installation of safety glazing, make sure there is sufficient supporting evidence from the supplier of the materials that the correct glass has been installed. We are aware of glass being imported and marketed as safety glass that does not have sufficient supporting evidence to verify its performance. Glass that complies with NZS 4223 Part 3 should be clearly branded or labelled by the supplier.

Installing aluminium windows into framed openings

How many fixings are required to secure a 1.5 m x 1.5 m aluminium window into the rough opening? What about one that is even bigger? Typically, this is not something that is shown on the drawings and is left to the builder on site.

Both NZS 3604 and NZS 4211 are silent on this matter. Section 4.2 of the WANZ WIS installation details for aluminium windows and BRANZ Bulletin 366 specify mechanical fixings only (not adhesives) positioned at approximately 150 mm from the corners and at 450 mm centres maximum in between these corner fixings. Fixings should also be aligned with mullions, transoms and door strikers. Drawings show two nails at each fixing position. The BRANZ Bulletin also specifies using 75 mm galvanised jolt-head nails. These fixing requirements are suitable for buildings within the scope of NZS 3604 wind zones.