GUIDELINE

Free monthly update on building issues prepared by BRANZ Ltd and funded by the Building Research Levy

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OCTOBER 2006

NEW COPPER-BASED TIMBER TREATMENTS AND CORROSION

Just released research by BRANZ has shown that there is an increased risk of corrosion of steel and galvanised steel components when used in contact with timber treated with solutions containing higher levels of copper such as CuAZ (copper azole) and ACQ (alkaline or ammoniacal copper quaternary). When used in an exterior exposed structural application, BRANZ recommends stainless steel, copper-based or durable equivalent fasteners are used within all copper-based H3.2, H4 and H5 timber treatments. Watch BUILD magazine for more information.

DID YOU KNOW?

For designs to E2/AS1, window openings are limited to a maximum frame size of 5 m x 5 m. The Acceptable Solution is also limited to fixed hinge stayed doors and windows. Windows that are bi-fold, sliding and other opening types (or are larger than 5 m) must be consented as an Alternative Solution.

WHAT WE CAN'T SEE DOES MATTER

When construction is not readily visible, the standard of that construction can often be less than ideal. While the appearance of the work may not be a major concern, in a number of instances the quality of the installation is.

This is particularly important for fire-rated construction. The quality of the installation can have a significant impact on how the completed construction will perform in the event of a fire.

Ensure fire and smoke separations are installed so that when completed they will be capable of:

- preventing fire spread through buildings
- protecting adjacent household units and other properties from fire
- providing for occupant safety from fire when evacuating a burning building
- providing protection for fire service personnel during fire-fighting operations.

For example, framed construction needs to be checked on-site for the correct:

- framing type, size and spacing for framed fire separation (penetrations through solid construction also require specific detailing at the penetration)
- lining material specifications, its thickness and number of layers
- fixing method
- sheet joint finish
- method of sealing around the perimeter of the wall
- installation of fire collars, fire dampers and fire doors
- location and installation of services such as electrical boxes.

Another area of concern is where careless work practices damage fire-rated construction. Often the significance of the damage on the performance of the wall is not recognised and is either not repaired or unsatisfactorily patched.

HOW MUCH IS ENOUGH?

When it comes to providing documentation to obtain a Building Consent the question often asked is "How much is enough"? Here we can't hope to cover every possible facet of consent documentation, but we can talk about principles.

"Enough" is when the documentation demonstrates to the Building Consent Authority (BCA) that all performance requirements of the NZ Building Code (NZBC) applicable to the project will be met. While this sounds glib, it is the crux of good consent documentation. The actual amount of information needed will depend on:

- the complexity and scale of the project – the more complex the project, the more detail required, and the more Building Code clauses that will need to be complied with
- the level of weathertightness risk of the design
- whether the design follows or is outside the scope of the Acceptable Solutions to the Building Code. If it is an Alternative Solution, more detail or evidence may be needed to show compliance with the performance clauses of the Building Code than if an Acceptable Solution is being followed.

The level of documentation will vary with the type and scope of the project, but it must show (to the BCA's satisfaction) that the requirements of the Building Code will be met if built in accordance with the consent documentation.

REFERENCING AN E2/AS1 DETAIL TO SHOW ALTERNATIVE SOLUTION COMPLIANCE

A common feature of much documentation is a reference to an E2/AS1 detail in support of a detail being submitted as an Alternative Solution. This is fine if the building the detail applies to falls within the scope of E2/AS1. However, if the building falls outside the scope it is usually considered a higher weathertightness risk (e.g. it is in a specific design wind zone or taller than 10 m). In these instances what a BCA will be expecting to see is supporting evidence to show how the higher level of risk has been addressed – a reference to an unmodified E2/AS1 detail may not be enough.

SITE ETIQUETTE FOR BUILDERS

Some tips for good site relations:

- ensure sub-trades are given a full set of documents to price and work from – not just the bits you think are relevant to their work
- keep precise up-to-date records of meetings, site instruction conversations and decisions made
- complete work to meet specific milestones
- if you make promises – keep them
- be on time for meetings
- be courteous to sub-trades, the designer, the building official, staff etc
- regularly monitor on-site progress – the aim is to identify and deal with a potential problem before it becomes a real one
- ensure progress payments are claimed from the client and paid to sub-trades on time
- regularly monitor the quality of work in progress and completed work (including work of sub-trades)
- give sufficient notice of when work will be ready for inspection by the BCA
- don't take it upon yourself to make design and detailing decisions – if you don't think a detail will work or cannot be built as detailed, refer it to the designer for resolution.

CITE Future events

CITE Access, Egress and Barriers
28–30 November, Auckland
$1,200 excl. GST ($1,350 incl. GST)

Contact Natasha Breen, Programme Coordinator, phone 04 238 1291, or email BRANZCITE@branz.co.nz.

SEMINARS

Development of the seminar series *Weathertightness Beyond E2/AS1* beginning in November is nearing completion. It is a joint presentation between BRANZ and the DBH that will focus on how weathertightness design principles should be applied to Alternative Solutions in day-to-day situations.

Online registrations can be carried out on www.branz.co.nz.

Dates and venues for **November** are:

6 Gisborne, 7 Whangarei, 8 Albany, 9 Auckland, 13 Napier, 14 Palmerston North, 15 New Plymouth, 16 Kapiti, 20 Invercargill, 21 Alexandra, 22 Oamaru, 23 Dunedin, 27 Auckland, 28 Hamilton, 29 Rotorua and 30 Tauranga.

Please note that the dates and venues differ from those published in the BRANZ 2006 seminar leaflet.

For more details contact Gail King, Seminar Coordinator, phone 04 237 1170, or email GailKing@branz.co.nz.