Weathertightness remediation needs a consent

A building consent is always needed for repairs where a building (or one of its parts) has failed to satisfy the Building Code durability provisions (including, for example, through a failure to comply with the external moisture requirements). Only normal maintenance is exempt from this requirement.

Obtaining a building consent for weathertightness remediation will help ensure the work is done properly and a durable solution is achieved.

Material compatibility

Materials used in construction need to be selected so that performance of one will not be adversely affected by an adjacent material. Typically, compatibility becomes an issue where materials are used in direct contact with each other (for example, corrosion of a fixing in damp timber that has been treated with a copper-based treatment or where run-off from one material can affect the material below such as acidic cedar extractives leached out by rain running down the wall or roof and corroding unprotected aluminium/zinc coated or galvanised steel.

Guidance on the compatibility of materials is given in:

- E2/AS1 Tables 21 and 22
- BRANZ Bulletin 519 *Fasteners selection* (an updated version of Bulletin 453, to be released in February)
- NZS 3604 Section 4.

Construction moisture

A number of building materials such as concrete, stopping compounds, timber and cement plasters contain a significant amount of water. This water must be allowed to safely dry from the materials so that the moisture does not cause a problem later.

For skillion roof structures, it is critical that the framing has dried down to less than 20% (18% is better) before the insulation is installed and the ceiling linings are attached. Once the ceiling is installed, any moisture remaining in the timber will not be able to escape from the roof spaces.

Moisture that remains in stopping compounds and plasters can affect the adhesion of finishes applied to the surfaces.

For concrete floors, proper drying will take at least 4 months under good conditions for a 100 mm slab. Moisture remaining in the slab can lead to bubbling of vinyl flooring, swelling of timber overlays and loss of adhesion with tiled finishes if the concrete is not allowed to dry. (Until fully dry, the concrete will still be shrinking as well.)

BRANZ seminars 2010 –Passive Fire Protection

Passive fire protection is an area that many find complicated and confusing. Passive fire protection measures are an incredibly important part of commercial and multi-unit residential building design and construction. Our next seminar will examine the building element features of passive fire design and help:

- architects and designers to realise the required fire resistance ratings
- builders to better understand the installation requirements
- building officials to be confident that the fire resistance ratings have been met
- Independent Qualified Persons (IQPs) to better understand their role in future building inspections.

Dates and locations are below. Register now on our website www.branz.co.nz.

Monday 15 March	Dunedin
Tuesday 16 March	Queenstown
Wednesday 17 March	Christchurch
Thursday 18 March	Wellington
Monday 22 March	Auckland
Tuesday 23 March	Hamilton
Wednesday 24 March	Tauranga
Thursday 25 March	Palmerston North

This seminar is in partnership with GIB.

External tiling to waterproof decks

A number of waterproof decks have a tiled finish adhered over a waterproofing system – a construction option that must be consented as an Alternative Solution as direct adhesion of tiles to a waterproof deck is not covered by E2/AS1.

Where such a system is proposed, before finalising the membrane selection, designers need to check that it is suitable for external use and for the direct application of tiles. The tile adhesive must also be

compatible with the membrane systems being specified. This information, along with information supporting durability and so on, needs to be submitted with the consent documentation.
Once consented, the specified system needs to be installed on site. In one recent case, a different membrane from that consented was installed – it was not suitable for external use and had to be removed, at the builder's expense, because the consented documents had not been followed.

ALF 3.1
The ALF 3.1 calculation tool (for determining the BPI) is also still available for designers to use. However, only the BPI calculation given by this tool can be used for consent purposes – remember the conversion factor given in the H1 support page on the BRANZ website must be applied to the BPI given in ALF 3.1. The calculation method and schedule method results given in an ALF 3.1 calculation are not valid compliance options despite showing a positive result.

Prefabricated Housing Workshop – 25 February, Victoria University, Wellington
The New Zealand prefabricated housing industry has been studied in depth by Pamela Bell through a two-year Master of Architecture research programme and thesis, *Kiwi Prefab: Prefabricated Housing in New Zealand*. The resulting outcomes and recommendations form the basis for this Kiwi Prefab workshop.

Workshop attendees will hear the latest research findings in New Zealand and overseas, hear about the successes and challenges of the industry, learn more about other members of the New Zealand prefabricated housing industry and discuss how to work together to increase the uptake of prefabricated housing in New Zealand and internationally.

A video-conference link with Buildoffsite in Britain is planned to discuss how their non-profit industry marketing organisation has made a difference to their domestic industry and export relationships.

Please RSVP by 1 February 2010 to Pamela Bell pam_bell@xtra.co.nz.

Do you want to receive Guideline by email? Just send your email address to Desiree Pickering at desiree.pickering@branz.co.nz with Guideline in the subject line or you can download it for free at www.branz.co.nz.

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