

Determinations

A determination is a binding decision made by the Department of Building and Housing. It provides a way of solving disputes or questions about the rules that apply to buildings, how buildings are used, building accessibility, and health and safety. Determination decisions are able to be appealed through the courts.

A determination can be applied for:

- in advance of a building consent to determine (if successful) a matter of Code compliance – an example might be the submission of a proposed detail to obtain a determination on whether or not it complies with (say) clauses E2 and B1 – and if successful, this determination can be included with the consent documents as a deemed to comply solution for the Building Code clauses identified in the determination
- by a Building Consent Authority (BCA) or the consent applicant as to whether (or not) a building or building work complies with the Building Code
- during construction, to resolve a matter of Code compliance
- after completion, where a BCA may have refused to issue a Code compliance certificate.

A determination can also be made about:

- a notice to fix issued by the BCA
- a compliance schedule (including time extensions to building consents and Code compliance certificates)
- a BCA's decision to issue a waiver to or modify the Building Code
- a BCA's decision on a certificate of acceptance or a certificate for public use
- a BCA's decision on building alterations, a change of building use, subdivision of buildings, or classification of a dangerous, earthquake-prone or insanitary building
- a council's decision on dams.

Curing

Allowing sufficient time for curing to occur is generally associated with concrete, but there are a number of other materials used in buildings that must be allowed sufficient time to cure or dry before subsequent work is carried out.

Calls to the BRANZ Advisory Helpline recently have indicated that the curing requirements of liquid-applied waterproofing membranes, such as those used under wet area tiles, are not being properly considered on site. Membranes that have not been allowed sufficient time and warm enough temperature to cure will not perform as expected. Refer to the supplier's installation instructions for the specific curing minimum temperature requirements.

Flexible flashing tapes

Specific manufacturer's instructions for a number of flexible flashing tapes on the market give a minimum air temperature requirement at time of installation – for some it is 5°C and others 10°C. Some flexible flashing tape may also require the use of a sprayed adhesive primer to assist in the bond to the wall underlay.

When installing tape, it is important that the tape fits flat with full contact to the wall underlay – any small creases or folds in the tape or wall underlay can allow water to track behind the tape.

Details in BRANZ Weathertight Solutions show the installation of a second layer of wall underlay lapped over the flashing upstand, although E2/AS1 allows the top of flashings to be taped to the wall underlay.

Timber fixings in enclosed framing

Currently fixings for timber framing (including H3.2 treated material) in a dry enclosed environment can be bright mild steel; the key references are NZS 3604 Table 4.3 for nails and Table 4.1 for other fixings.

As H3.2 treated timber is often wet when erected, time must be allowed for it to dry to below 20% moisture content (NZS 3602 103.9.3) before linings are installed.

For corrosion to occur, there need to be three conditions present (if anyone is missing, there will not be corrosion):

1. A corrosive agent, e.g. a copper-based timber preservative.
2. Moisture.
3. Air.

However, designers and/or manufacturers are entitled to place rules or specific requirements around the use of their products that may be more stringent than that allowed by NZS 3604. For a designer requiring a more stringent specification, this then becomes a contractual requirement for that building project.

Is it cost-effective to insulate?

Some recent as yet unpublished work by BRANZ has shown that installing ceiling, wall and floor insulation to most pre-1978 houses is a cost-effective option. Retrofitting double glazing is economic in climate zones 2 and 3.

Where should renovation effort be focussed?

The work above has also identified houses built between 1940 and 1970 as the prime candidates in need of upgrading. Also, the 150,000 houses built in the 1970s – before the minimum insulation requirements were increased in 1978 – are also likely to be in need of upgrading.

Plywood cladding

Under NZS 3602, H3 LOSP-treated plywood can be used as an external cladding provided it is finished with a recognized paint system – using a stain finish is not permitted by the standard. Sufficient time must also be allowed for the LOSP solvents to fully evaporate before the coating is applied – typically, at least a month from treatment. CCA-treated plywood may be used as a cladding either unfinished or with a stain.

H3 LOSP-treated plywood in accordance with AS/NZS 1604.3 is considered to be comparable to H3.1 treatment of timber, and similarly, H3 CCA-treated plywood is considered to be comparable to H.3.2.

Manufacturers require that plywood claddings used as wall bracing must be:

- painted with a paint system recommended by the manufacturer that is maintained through the life of the building (some require a light reflectance value of 40% or more for the coating)
- fixed with stainless steel or silicon bronze annular grooved nails or screws.

BRANZ Seminars 09

BRANZ research has identified wet areas within buildings, such as bathrooms, as a potential problem if the spaces are not detailed and constructed to contain the water and/or the materials selected are not durable in a damp environment. Excessive levels of moisture, mould and coldness were also identified as significant problems. Our next seminar will visit 22 centers nationwide (beginning in Invercargill on 3 August) and looks at the design and construction principles for these areas. This is a must for designers – including specialist kitchen and bathroom designers – builders, building officials, tilers, waterproofing applicators and plumbers. See www.branz.co.nz (click on Wet Areas seminar) for details and to register online.

Webstreaming via the BRANZ website for the recently completed Compliance Paths seminar will be available from mid July. For those who missed the seminar, a condensed 1-hour version will be presented each afternoon at BUILDNZ in Auckland.