Environmental Health Standards for Remote Communities in the Northern Territory

Addendum 1

June 2002

This Addendum came into effect on 1 July 2002

PART 3.1.3 TERMITE RISK MANAGEMENT

Explanatory Information

Replace the first paragraph with the following:
All areas within the Northern Territory are considered to be in a termite risk area. Where the primary building elements of a building are considered to be susceptible to termite attack, the BCA requires protection against termites according to AS 3660.1

Variation to the BCA

Clause 3.1.3 (a) *is to be amended with the addition of the following:*

"All areas within the Northern Territory are considered to be in a termite risk area".

NEW PART

PART 3.4.1 SUB FLOOR VENTILATION

Explanatory Information

Past experience has shown that effort to prevent dogs and other animals from gaining access to the underside of framed houses is generally unsuccessful. Undermining of footings and ponding of water in depressions is common in these situations. Sealing the ground with compacted fill, concrete, bitumen or the like to address this problem is often not practical or cost effective. In addition the incidence of termite infestation and blockage to floor wastes makes it desirable to elevate framed houses a sufficient distance from the ground to enable inspection and maintenance to be carried out.

For the purpose of this variation, the point of measurement is to be taken from the lowest horizontal floor structural member. In most cases this will be the floor bearer.

Variation to the BCA

Clause 3.4.1.2 (d) *is to be replaced by the following:*

(d) The clearance between the ground surface and the underside of the floor framing must be a minimum 600 mm for all sites including over sloping ground.

PART 3.1.2 DRAINAGE

Explanatory Information

Add new first paragraph:
Designers are referred to BCA Clause 3.1.2.3 – Surface Water Drainage.

Add new fifth paragraph:
To achieve the minimum requirement of Clause 3.1.2.3(b), it is recommended that designers include with their design drawings, a site plan and cross-sectional details incorporating finished floor levels.

Clause 3.1 2.3 (b)(iii) *is to be replaced by the following:*

(iii) The finished floor level of the house shall be a minimum of 150 mm (measured at the edge adjacent to the floor slab) above any adjoining verandah or paved area unless a site plan incorporating finished floor levels is provided to ensure that the minimum requirement of Clause 3.1.2.3 (b)(i) is achieved; and

NEW PART

PART 3.3.2. REINFORCED MASONRY

Explanatory Information

Ready-mixed concrete via established concrete batching plants and concrete pumping facilities are not normally available to the people constructing houses in remote areas. As such block work core fill is generally site mixed and grouted manually. Experience has shown variable results from this process and additional precautions need to be taken to ensure that reinforced cores in block work are fully grouted and that the steel reinforcing is centrally located in each core.

The use of purpose-made clean out blocks or a machine cut cleaning hole at the base of each reinforced core is considered essential in remote area construction. After inspection and core filling has been completed the surface of the cleaning hole can be sponge finished to obtain a similar texture as the concrete block work.

Additional Clause to the BCA

Clause 3.3.2.2 (b) External wall construction

(v) have a 75 mm x 75 mm (minimum) cleaning hole located at the base of each reinforced core.

NEW CLAUSE

3.8.20.11 Robust, durable and low maintenance materials, services, fixtures and fittings

Explanatory Information

As outlined elsewhere, overcrowding is a significant issue in Indigenous housing. One of the consequences of this overcrowding is an adverse impact on building elements, fixtures and fittings. It is not uncommon for houses to be cleaned internally using high-pressure water cleaning equipment and aggressive cleaning agents such as chlorine. The design of houses is to incorporate robust, durable and low maintenance materials, which are selected to minimise long-term maintenance costs.

In framed construction, designers need to take specific precautions in the selection of materials, in particular flooring and internal / external wall linings. Experience has shown that sheeting manufactured from timber is an unsuitable product for long term durability.

Designers that use preservative treated timber or naturally treated termite resistant timber in their designs should incorporate steps in their quality control process to ensure that the specified product is installed (and not substituted with a non-complying product). The use of naturally treated termite resistant timber is not approved in areas where *Mastotermes Darwiniensis* is prevalent (BCA NT Variation Amendment No.8 to 3.1.3 (b)(ii)(E)) and thereby overrides Clause 3.8.20.11 (d)(ii)(3).

Where fibre cement sheeting is used the following is recommended:

- Floors- 18 mm compressed fibre-cement sheeting
- Walls- 9 mm impact resistant fibre cement sheeting
- Ceilings- 6 mm-fibre cement sheeting

Designs should incorporate provision for the easy replacement of materials without the need to remove structural elements.

The following requirements must be met:

(a) All houses are to be constructed using robust, durable and low maintenance materials, services, fixtures, and fittings that are suitable for use in remote areas.

(b) Materials and finishes in wet areas are to be suitable for cleaning using high pressure water cleaning equipment and aggressive cleaning agents.

(c) Primary building elements as defined in Part 3.1 of the BCA are to be appropriately detailed to prevent damage through the use of water cleaning.

(d) Deemed to satisfy materials for flooring in suspended floor construction are:

(i) Wet Areas

(1) Compressed cellulose fibre cement sheeting, or

(2) Suspended reinforced concrete

(ii) Non Wet Areas

(1) Compressed cellulose fibre cement sheeting as a platform floor, or

(2) 17 mm (min) tongue and grooved plywood flooring panel using preservative treated timber in accordance with Appendix D of AS 3660.1 as a fitted (cut in) floor, or

(3) Tongue and grooved hardwood floor boards using naturally treated termite resistant timber in accordance with Appendix C of AS 3660.1 as a fitted (cut in) floor, or

(4) Tongue and grooved hardwood floor boards using preservative treated timber in accordance with Appendix D of AS 3660.1 as a fitted (cut in) floor.

(e) The following materials are not considered suitable for use as floor, wall or ceiling linings:

(i) Particle board; or

(ii) Medium density fibreboard; or

(iii) Plasterboard; or

(iv) 4.5 mm fibre cement sheeting; or

(v) Plywood sheeting (preservative treated plywood to AS 3660 exempted).

NEW CLAUSE

3.8.20.12 Hazardous Materials

Explanatory Information

Several materials were used in the past, which are now considered harmful to health. Two of these are asbestos and lead-based paints.
Asbestos was contained in building materials such as fibro-cement sheeting, which was used, for roof sheeting, ceiling linings and internal and external wall cladding. Asbestos may also be present in insulation and vinyl tiles.
Designs should ensure that recycled building materials containing asbestos or lead based paints are not used. During construction and refurbishment projects, a strategy should be adopted with the Community Housing Organisation to identify and replace building materials containing asbestos or lead-based paints.
The eventual aim is to eliminate all building materials containing asbestos and lead-based paints from all community houses.