Building Information Note

Treatment against entry of Termites

REFERENCE DOCUMENTS

NCC	National Construction Code (Building Code of Australia)
AS 3660.1	Australian Standard 3660.1
AS 2870	Australian Standard 2870

Please note that the NCC provides the minimum Standard that must be achieved. *It most definitely doesn't specify maximum standards.*

The standard (Australian Standard 3660.1) lays out the various requirements necessary to provide protection to the dwelling against penetration of termites.

Many forms of protection are available for the different forms of construction. The type of protection being proposed will determine if a type of treatment may be used singularly or in combination.

There are two fundamental differences with the types of treatment:

1. A chemical barrier against the entry of termites or,
2. A physical barrier against the entry of termites.

A combination of the above mentioned may be needed to meet the necessary minimum requirements.

Chemical Barrier Treatment

Organophosphates are the type of chemical used to provide a chemical treatment against termite activity. *(We are not able to recommend brand names or applicators, and suggest you approach the various companies dealing in treatment methods and make a comparison to choose a method that best fulfils your needs).*

1. A full under slab treatment (a two part treatment).

This is referred to within the standard and known as a *Part A and Part B Treatment.*

The Part A treatment (under slab) is carried out prior to laying the waterproof membrane, which is laid down before pouring the concrete slab. *Re-treatment may require drilling through the slab to apply the treatment.*

The Part B treatment (perimeter treatment) is provided to the perimeter of the building.

Where a building is closer to the allotment building, Part B may not be able to be applied in this area and a physical barrier method will be required.

2. A partial irrigation type method.

Usually this entails a network of pipe work adjacent to the inner and outer side of the footings that form the perimeter of the building. Additionally, spurs may run from the perimeter in under the slab to provide protection to locations where the slab is breached by penetrations for plumbing and any other service.

Re-treatment is achieved by re-charging the network installation. *This method does not provide a full protective barrier to the under side of the slab. The remaining unprotected portion of the slab will require protection by some other means such as a physical barrier.*

3. A full irrigation type method.

This method may be similar to a partial irrigation type method except that it will provide a treatment to the total under side of the slab. Re-treatment is achieved by re-charging the network installation.

Physical Barriers

Methods of treatment vary and include:

1. The slab itself.

It is necessary that the design either comply with the criteria as stated under AS. 2870 (Residential Slabs and Footings Construction) or the design engineer (your practising structural engineer) certify that the slab design will function as a physical barrier against termite entry in accordance with AS. 3660.1.

Where a penetration is provided within the slab, then another form of protection may be required. *This may be through the use of a special collar around the pipe or penetration.*

Another aspect to be taken into account is a wet area (bathroom, ensuite and laundry etc). Wet areas are usually slightly stepped down from the finished floor level of the main slab. This would enable the provision of a screed to be formed to form the appropriate falls to the required floor waste. Though the slab may remain structurally sound, it may be unclear as to whether the slab remains within the required specification of AS 3660.1 and would then be required to have this portion certified by the structural engineer. *Due to the moisture, special attention should be provided to these areas.*

2. A woven stainless steel fabric mesh

This method is commonly used to bridge the cavity at a lower level and being glued to the top of the concrete slab and under the brickwork of the inner leaf of the perimeter walls. *The common configuration of this method usually only will provide a partial treatment.*

It is not uncommon that a woven stainless steel fabric mesh collar be fitted to the each pipe that penetrates the slab located mid way between the top and bottom of the ground slab.

A similar configuration may be used where the brickwork is breached for gas pipes etc.

This method does not provide a full protective barrier to the under side of the slab. The remaining unprotected portion of the slab will require that the slab be certified as a physical barrier as described in item 2.1.

3. Graded granite.

This is usually located within the base of cavity between the outer leaf of brickwork to the cavity wall and the slab edge, and around penetrations breaching the slab.

It is not common that this method be used to provide a full protective barrier to the under side of the slab. The remaining unprotected portion of the slab will require that the slab be certified as a physical barrier as described in item 1. "The slab itself"

Durable Notice

Please note that irrespective of what type of treatment is used, it is necessary that you locate in a conspicuous place in the residence, eg (inside of meter Box) a Durable Notice and it must be a well protected label indicating;

- The method/s of protection,
- The date of installation of the system and,
- Where a chemical barrier is used, its life expectancy as listed on the National Registration Authority label and,
- The installer's or manufacturer's recommendations for the scope and frequency for future inspections for termite activity.

The above mentioned is not a comprehensive list of treatment methods and nor does it purport to be a comprehensive list. It is provided as a guide only and in good faith. No liability will be accepted for any exclusions or errors. For a complete set of requirements covering **Protection of buildings from subterranean termites**, please refer to AS. 3660.1. Also see AS.2870 and the NCC.