

Building Newsflash

Building Certifiers

Building Designers

Architects

A Guide To The New Termite Standards (revised 09/02/2001)

Introduction

On 1 January 2001, the Building Code of Australia (BCA) was amended to incorporate new provisions that address the installation of termite management systems in class 1 (houses) and class 10 buildings (sheds, garages and the like).

Questions and Answers

During the consultation phase and since the introduction of the amendments, a number of questions have been raised. The following questions and answers are provided to assist in the correct implementation of the changes.

Q1 When did the amendments to the termite provisions of the Building Code of Australia (BCA) come into force?

A The amendments came into force on 1 January 2001. They are not retrospective. Houses and sheds, etc, will be able to be built using the termite provisions in force prior to 1 January 2001 if:

- Approval was received before 1 January 2001; or
- An application for approval was lodged before 1 January 2001.

Q2 What buildings do the changes apply to?

A The amendments only apply to buildings addressed in Volume 2 of the BCA, that is, class 1 and class 10 buildings (houses and associated sheds, garages, etc). They do not apply to other types of accommodation buildings, commercial buildings or industrial buildings.

Q3 What effect will the amendments have on the use of hand sprayed chemical barriers?

A Australian Standard 3660.1 is a recognised standard under the BCA. It currently permits the use of a hand sprayed chemical barrier under a concrete slab-on-ground.

The amendments to the BCA will override the part of AS 3660.1 that currently allows a hand sprayed chemical barrier under a concrete house slab as a barrier in its own right. The

amendment will not ban the use of a hand sprayed chemicals under a slab. However, if a hand sprayed chemical barrier is used by itself, special approval will be required from the building certifier before it can be used in the building (refer to question 13 for more detail on “approved”).

Q4 Can chemicals still be hand sprayed under a slab if there is another barrier in place that satisfies the BCA?

A Yes. Provided an approved system of termite management is used (for example a physical barrier complying with AS3660.1), a hand sprayed chemical barrier may also be used under the slab as an additional precaution, without the need to obtain any special approval from the building certifier.

Q5 How will the changes impact on alterations to existing buildings?

A A building certifier must decide if any new building work involving an alteration or addition to an existing building can comply with the previous termite provisions of the BCA or whether the new work must comply with the new provisions. For example, it may be proposed to add a new slab-on-ground bedroom extension to an existing slab-on-ground house. If the existing house was treated using a hand sprayed chemical barrier under the concrete slab, the building certifier may allow the same treatment to be used on the extension provided it can be shown that the structural standards of the building will not be at risk by complying with the previous requirements. When making the decision, a simple “yes” or “no” answer is not adequate. The building certifier must give reasons for the decision that will demonstrate how the proposal will meet the relevant regulations. Reasons for the decision should also be properly documented by the building certifier and attached to the development application.

Q6 If a new path, driveway, fixture (such as a garden light or plumbing fixture) or landscaping, which may bridge or damage an existing barrier installed prior to the new laws coming into force, is proposed around the perimeter of an existing house, does the termite barrier need to be reinstated in accordance with the new termite management laws?

A The termite barrier must be reinstated and while it is recommended that treatment be carried out in accordance with the new laws, in this case there is no mandatory requirement to do so (see Q 1 and Q5). If for example, a hand sprayed chemical barrier was originally used, it can continue to be used under the path, driveway etc.

If contractors are carrying out the new work, they should recommend to the homeowner that they seek the advice of a licensed pest control applicator before the new work commences. If the homeowner chooses not to seek this advice, the contractor should inform the homeowner that reinstatement of the termite barrier is required and ongoing retreatment, if it is necessary, may be difficult unless adequate provision is made to do so before the work is completed. If the owner does not want the termite barrier installed or reinstated as recommended, the contractor should receive that response in writing.

Q7 Do the changes impact on termite management systems installed prior to the amendments coming into force?

A No. The new provisions cannot be applied retrospectively to existing buildings. For example, if a building was previously approved with a hand sprayed chemical perimeter barrier, the protective concrete cap does not have to be applied now.

Q8 Why is a protective cap required around perimeter chemical barriers?

A Available evidence suggests that concealed termite entry is more predominant via the perimeter of the building. This may be as a result of inadequate treatment, or by an unsuspecting homeowner or a contractor inadvertently breaching or bridging the barrier. For example, placing a new garden bed over an existing barrier would breach or bridge the barrier. In the case of slab-on-ground construction, AS3660.1 requires an under slab barrier and a barrier around the perimeter of the building to reduce the likelihood of concealed termite entry into the building.

Where a chemical perimeter barrier is used, the amendments will require the barrier to be capped with a 300mm wide concrete “mowing strip”. This is to reduce the likelihood of inadvertent bridging or breaching the termite barrier.

The amendments will also require a perimeter chemical barrier to be applied by excavating trenches, treating the exposed trench, backfilling with a suitable material and treating the backfill. This will provide a greater level of assurance that the perimeter barrier will be installed correctly.

Q9 Can 300x300 pavers be used as a protective capping around the perimeter of a building?

A The acceptable solution requires the protective cap to be constructed out of continuously poured concrete. However, a reasonable alternative to the poured concrete, which will need to be approved by the building certifier, would be ~~a~~ 300x300 pavers. Smaller pavers may not be suitable because of the ease in which they can be moved and the number of joints that exist when in place.

Q10 Does a protective cap have to be placed over the top of a perimeter chemical barrier that is applied using a reticulation system?

A Yes. The cap is intended to reduce the likelihood of inadvertent bridging or breaching of a chemical barrier. This can occur whether it is hand sprayed or applied by a reticulation system.

Q11 If a physical or chemical termite management system is installed, do the primary building elements have to be termite resistant?

A No. Primary building elements include all structural members of a building (such as roof battens, the floor frame, rafters, etc), window frames and reveals, architraves, skirtings and doorjamb. If a termite management system (for example, a chemical perimeter barrier with an approved slab and penetrations protected) is installed nothing further has to be done to satisfy the termite management requirements of the BCA.

Q12 What materials can be used if architraves, skirtings door jamb window frames and reveals are required to be termite resistant?

A In the case of naturally termite resistant timbers, AS 3660.1 provides a list of timbers that have demonstrated natural resistance to subterranean termites. If any of these timbers are used for the primary building elements, they will satisfy the BCA. If preservative treated timbers are to be used, they must achieve a hazard level of H2 when used in the interior of

the building and above ground. When used in the exterior of the building and in ground contact, a H4 and H5 hazard level is applicable (refer to AS 3660.1 for further details).

Wood products such as particleboard, MDF board, etc, should not be considered as termite resistant unless the manufacturer of the product can demonstrate that they are termite resistant.

Q13 What termite management systems are “approved” for use and who approves them?

A Termite management system can be “approved” in a number of ways. They are:

1. Obtaining a Certificate of Conformity from the Australian Building Codes Board (ABCB); or
2. Using a system that is recognised by AS 3660.1 and which has not been excluded by the BCA; or
3. Individual approval by a building certifier.

Certificate of Conformity

The Standard Building Regulation provides the scope for a material, product or, method of construction to be issued with a Certificate of Conformity. **It is not compulsory** to obtain a Certificate of Conformity but if one is issued, a building certifier must accept the use of the material, product or method of construction, etc, as long as it is used within the scope of the Certificate.

The ABCB issues a Certificate of Conformity only if it can be shown that a material, product or method of construction meets the performance criteria specified in the BCA. This will normally involve the submission of research data, appraisals from testing authorities, details of laboratory or field trials and other expert opinion.

Using a termite management system recognised by AS3660.1

By complying with AS 3660.1, an applicant has satisfied the acceptable solution for termite management in the BCA. AS 3660.1 refers to a number of systems including graded stone particles, woven stainless steel mesh and chemical soil barriers. Provided it can be proven that the system being used meets the specifications of the Standard, it will be adequate proof that the system meets the BCA requirements. In some cases, the BCA will override a provision of a Standard. In Queensland, this is the case with hand sprayed chemical barriers under concrete slabs, which can only be approved using the performance criteria of the BCA.

Individual approval by a building certifier

If a person proposes to use a termite management system that is not covered by a Certificate of Conformity or is not a system that forms part of the acceptable solution of the BCA, the building certifier responsible for assessing the building application must approve the use of the system before it is installed in the building. In considering whether the system is suitable for use, the applicant must be able to provide evidence that will demonstrate to the building certifier that the termite management system will meet the performance criteria of the BCA.

Q14 Will there be any additional requirement to advise homeowners of the termite management system installed in their home?

A Yes. At least 2 advisory notices must be installed in every house. Homeowner awareness of the type of termite management system that has been installed in and around the building is important. The termite notice advises of the type of system installed (for example a chemical

barrier that needs replenishment) and the responsibilities of the homeowner with regard to the need of on-going maintenance. The BCA currently requires a notice to be installed in a conspicuous location, such as the meter box, informing the homeowner of those details. However, because of the possibility of infrequent access to a meter box, a constant reminder of the existence of a termite management system may not be provided.

The amendments will not make it mandatory to place the additional notice in any specific location, however, as a guide, it has been suggested a kitchen cupboard is an appropriate location.

Q15 If it is necessary to underpin a house because it has suffered structural failure, does the termite barrier have to be reinstated if it is damaged?

A Yes. Underpinning invariably involves extensive excavation, which may interfere with or destroy an existing termite barrier. Because of the nature of the work and the method of treatment previously used, it may be difficult to provide a barrier that will provide the same level of protection as previously existed. Where underpinning is being carried out, it is recommended that a licensed pest control applicator be engaged to advise on the most appropriate method of providing an effective termite management system.

Q16 If an exposed slab edge is to be used as the perimeter termite management treatment, can the builder leave the site, on handover, with the 75mm exposed slab edge having been formed by running a bobcat around the perimeter of the slab?

A No. The exposed slab edge must be 75mm above finished ground, landscaping or paving level in accordance with AS3660.1. If the provision of landscaping, paving, etc, is not part of the builders contract, the builder should make allowance when finalising site levels to enable future site work to occur so that the 75mm exposed slab edge will always be maintained.