AS 3660.1:2014
(Incorporating Amendment No. 1)

AS 3660.1:2014

Termite management

Part 1: New building work

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The following are represented on Committee BD-074:

- Australian Building Codes Board
- Australian Environmental Pest Managers Association
- Australian Pesticides and Veterinary Medicines Authority
- Cement Concrete and Aggregates Australia
- CHOICE
- Forest and Wood Products Australia
- Forest Corporation of NSW
- Housing Industry Association
- Institute of Building Consultants
- Local Government and Shires Associations of New South Wales
- Master Builders Australia
- Timber Preservers Association of Australia
- Total Environment Centre

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Australian Standard®

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PREFACE

This Standard was prepared by the Standards Australia Committee BD-074, Termite Management, to supersede AS 3660.1—2000.

This Standard incorporates Amendment No. 1 (September 2017). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide builders, building designers, regulatory authorities, termite management system manufacturers and installers, and those people requiring termite management systems, with methods of termite management for implementation during construction of new building work.

The objective of this revision is to update the Standard to reflect current needs and practices for termite management in new buildings and new building work.

This Standard is part of a series on termite management, as follows:

AS		
3660	Termite management	
3660.1	Part 1:	New building work (this Standard)
3660.2	Part 2:	In and around existing buildings and structures—Guidelines
3660.3	Part 3:	Assessment criteria for termite management systems

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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FOREWORD

This Standard is primarily concerned with providing measures to reduce the risks of undetected subterranean termite attack on buildings. Improving the design and construction of buildings to minimize termite damage is one of several risk reduction measures available to building owners and occupiers.

This Standard describes measures to deter termite attack arising from concealed entry into a building. The system options provided rely on a combination of partial measures to termite passage combined with perimeter inspection zones so that when termites attack, evidence of their workings is in the open where it may be detected more readily during regular inspections. The measures contained in this Standard cannot guarantee that a building will never be entered by termites nor will ever suffer some form of termite attack.

The requirements for an effective termite management system depend on design, location, site conditions and building characteristics.

More than 350 species of termites have been recorded in Australia, about 30 of which achieve economic importance as pests of timber-in-service. With the exception of drywood termites, all species of economic importance are soil dwelling (subterranean) and have similar habits.

Subterranean termites may eat timber and timber products, plant fibre, or any material containing cellulose (their principal food); this could include building contents, e.g. cabinetry, furniture, books and papers, fabrics, clothing, footwear, packing cases and tools. Termites can also damage some non-cellulose materials, e.g. mortar, soft metals, soft plastics such as cable insulation, building sealants and rigid foam insulation.

Typically, termites form their nests in the soil, near ground level in a stump, in the trunk of a living tree or other suitably large pieces of wood. Sometimes the nest takes the form of a conical or dome-shaped mound. A colony may exist for many years and, as it matures, can have a population well in excess of one million termites. Attack by subterranean termites originates from the nest. Wood or timber lying on or buried in the ground may be reached by underground foraging galleries but attack may occur well above ground level, either inside the wood or by way of mud-walled shelter-tubes ‘plastered’ to exposed surfaces. Timber resting on an impenetrable substructure may be reached by means of these shelter tubes or through independent, freestanding columns built by the termites. In some cases, where a source of permanent moisture, e.g. leaking plumbing, is available to subterranean termites within a building, they can form a nest inside the building, without soil contact. Where such a colony arises within a building, it may be several years before the termites are sufficiently numerous to be detected.

‘Drywood termites’ are economically important only in restricted coastal, tropical, subtropical and adjacent tableland areas of Australia. This Standard does not cover measures to manage the risk of drywood termite attacks. Unlike subterranean termites they do not construct galleries or tunnels connecting the infested timber with the soil, but form their nest inside the wood upon which they feed and so may attack any piece of susceptible timber, regardless of its position in a building. The evidence of infestation by these species is the presence of dry, granular faecal pellets that may be stored in disused galleries or ejected through small openings in the surface of the wood.

STANDARDS AUSTRALIA

Australian Standard
Termite management

Part 1: New building work

SECTION 1 SCOPE AND APPLICATION

1.1 SCOPE

This Standard sets out requirements for the design and construction of subterranean termite management systems for new buildings and new building work. It includes solutions for both physical and chemical termite management systems. Options are provided so that various approaches may be used either singly, or in combination, to provide an integrated termite management system.

This Standard includes methods to deter concealed entry by termites from the soil to the building above the termite management system inspection zone.

This Standard does not cover procedures or details on maintenance and inspection.

This Standard does not apply to the following:

(a) The provision of termite management systems to existing buildings (see Note 3).

(b) Drywood termite infestations, as the systems described herein will not be effective against access by drywood termites or termite nests established without soil contact.

(c) Durability, maintenance and inspection procedures or details.

NOTES:

1 The treatment of existing buildings is covered in AS 3660.2. For the interface between new and existing structures, see Paragraph A1, Appendix A.

2 For testing of systems and materials, refer to AS 3660.3.

3 A termite management system constructed in accordance with this Standard cannot prevent termite attack as systems may be bridged or breached. Termite-bridged or termite-breached systems may be detected during inspections.

4 The diagrams used in this Standard are indicative only and are deemed to meet the design requirements outlined in Section 2. The diagrams apply to domestic construction techniques. Some diagrams may have construction details (e.g. damp-proof courses, vapour barriers, and the like) omitted for clarity.

5 Issues such as the detection of termite infestation, and the necessity and accessibility for regular, competent inspections can be found in AS 3660.2. It is recommended that access for inspection, maintenance and durability issues be considered part of the design process.

6 It is stressed that the installation of a termite management system does not negate the need for regular competent inspections after installation.

7 Activities such as turfing, paving and landscaping adjacent to the building might compromise the inspection zone clearances required by this Standard. Where it is known that these activities will be undertaken, the design should ensure that sufficient dimensions are provided so that the required minimum inspection zones are not compromised.

8 Where construction is at or close to the property boundary, it may not be possible to apply the solutions of this Standard. See Paragraph A2, Appendix A.

9 Termite management systems may not be effective where a nest is established inside the building above inspection zones. Such nests typically require significant plumbing or drainage faults for their water supply.

