0184P TERMSHIELD TERMITE MANAGEMENT

Branded worksection

This branded worksection *Template* has been developed by NATSPEC in conjunction with **TermShield Pty Ltd** (the Product Partner) and may be used whilst the Product Partner is licensed to distribute it. The copyright remains with NATSPEC. As with all NATSPEC worksections, it is the responsibility of the user to make sure it is completed appropriately for the project. The user should also review its applicability for local conditions and regulations. Check www.natspec.com.au for the latest updated version.

Worksection abstract

This worksection *Template* is applicable the TermShield Termite Management System.

How to use this worksection

Customise this worksection *Template* for each project. See A guide to NATSPEC worksections (www.natspec.com.au) for information on *Template* structure, word styles, and completing a worksection.

Related material located elsewhere in NATSPEC

If a listed worksection is not part of your subscription package and you wish to purchase it, contact NATSPEC.

Related material may be found in other worksections. See for example:

- *0185 Timber products, finishes and treatment* for preservative treatment of timber products.
- *0314 Concrete in situ* for concrete slab used as a termite management system.

Documenting this and related work

You may document this and related work as follows:

- Termite management systems are not described elsewhere. Coordinate with other worksections, such as *0222 Earthwork*, *0314 Concrete in situ*, *0331 Brick and block construction*, *0381 Structural timber* and *0382 Light timber framing*.
- Slabs on ground: Coordinate with the concrete worksections where slabs on ground to AS 2870 (2011) or AS 3600 (2018) are used as part of the termite management system. AS 3660.1 (2014) cites both standards for this purpose and advises that, if using AS 3600 (2018), due regard must be given to minimising shrinkage cracking.
- For structural elements below the termite management system and for suspended floors, see AS 3660.1 (2014) Section 3.
- Termite resistant materials used as a stand-alone method: In addition to structural elements, allow for termite resistant non-structural timber elements such as architraves, door jambs, window frames and reveals, skirtings, and fascias and barge boards.
- Site management: Document landscaping and site management requirements, such as surface and subsurface drainage, vegetation clearing (to plant roots) and use of fill without vegetative matter, on drawings or in other worksections.

The *Normal* style text of this worksection may refer to items as being documented elsewhere in the contract documentation. Make sure they are documented.

Search acumen.architecture.com.au, the Australian Institute of Architects' practice advisory subscription service, for notes on the following:

- Guarantees and warranties.
- Termite management.

Specifying ESD

Refer to NATSPEC TECHreport TR 01 on specifying ESD.

1 GENERAL

TermShield are Australian termite specialists with extensive experience in installing physical termite management systems for residential, commercial and industrial buildings. As an Australian owned and operated company, we pride ourselves on providing a friendly, personalised and professional service for all our clients. Our expert team is trained and skilled in stainless steel physical termite management systems. TermShield is CodeMark certified and is backed by TermShield's industry first 60 Year $1,000,000 Diamond Warranty.

1.1 RESPONSIBILITIES

General

Requirement: Provide TermShield physical termite management systems, as documented.

Documented is defined in *0171 General requirements* as meaning contained in the contract documents.

BCA (2022) B1D4(i) and BCA (2022) H1D3(3) only require protection for *Primary building elements*.

Performance

Requirement: Building protection from termite attack, including to the following:

- Subfloor areas.
- Perimeters of concrete slabs-on-ground.
- Control joints in concrete slabs.
- Termite caps.
- Service penetrations and other vulnerable areas.

Delete if the required level of protection is as defined in BCA (2022) B1D4(i) and BCA (2022) H1D3(3) as applicable.

1.2 COMPANY CONTACTS

TermShield technical contact

Website: www.termshield.com.au

TermShield's website addresses the particular needs of architects, builders and home owners.

1.3 CROSS REFERENCES

General

Requirement: Conform to the following:

- *0171 General requirements*.

0171 General requirements contains umbrella requirements for all building and services worksections.

List the worksections cross referenced by this worksection. *0171 General requirements* references the *018 Common requirements* subgroup of worksections. It is not necessary to repeat them here. However, you may also wish to direct the contractor to other worksections where there may be work that is closely associated with this work.

NATSPEC uses generic worksection titles, whether or not there are branded equivalents. If you use a branded worksection, change the cross reference here.

1.4 STANDARD

General

Termite management systems: To AS 3660.1 (2014).

See AS 3660.2 (2017) for termite management in existing buildings and AS 3660.3 (2014) for assessing the effectiveness of proposed systems and the termite resistance of materials and components. For timber pest inspections in existing buildings, see AS 4349.3 (2010).

1.5 MANUFACTURER'S DOCUMENTS

Technical manuals

Reference: TermShield Installation Manual.

Website: www.termshield.com.au/architects/

Requests for documents can be made from the website.

1.6 INTERPRETATION

Definitions

General: For the purposes of this worksection the definitions given in AS 3660.1 (2014) apply.

Edit the **Definitions** subclause to suit the project or delete if not required. List alphabetically.

1.7 SUBMISSIONS

Certification

Installation: On completion, submit certificate to AS 3660.1 (2014) clause A3.

Operation and maintenance manuals

Requirement: Submit manuals to **COMPLETION**, **Operation and maintenance manuals**.

Products and materials

Manufacturer's data: Submit manufacturer's data including the following:

- Product data sheet.
- Recommendations for installation.

Type tests: Submit results, as follows:

- Termite management systems to AS 3660.3 (2014).

Type tests are carried out off-site. However, submission of evidence of a successful type test may be called up here for requirements specified in SELECTIONS or PRODUCTS, when there are no SELECTIONS.

Records

Photographs: Provide record photographs to TermShield Instruction Manual requirements, including:

- Penetrations before slab is poured.
- Slab joint installations.
- Any difficult or intricate installation procedures.

See TermShield Instruction Manual, clause 4.2.

Termite management system: Submit report to **MAINTENANCE**, **Inspection**.

Edit, as appropriate.

Subcontractors

Requirement: Submit names and details of proposed TermShield accredited installers.

Delete if supplier/installer details are not required.

Warranties

Requirement: Submit warranties to **COMPLETION**, **Warranties**.

1.8 INSPECTION

Notice

Inspection: Give notice so that inspection may be made of the following:

- Completed earthworks or substrate preparation before system installation.
- Completed termite management system before concealing.
- Termite management system at the end of the defects liability period.

Amend to suit the project, adding critical stage inspections required.

Hold points, if required, should be inserted here.

2 PRODUCTS

2.1 GENERAL

Product substitution

Other products: Conform to **SUBSTITUTIONS** in *0171 General requirements*.

SUBSTITUTIONS in *0171 General requirements* sets out the submissions required if the contractor proposes alternative products. Refer also to NATSPEC TECHnote GEN 006 for more information on proprietary specification.

Product identification

General: Marked to show the following:

- Manufacturer’s identification.
- Product brand name.
- Product type.
- Quantity.
- Product reference code and batch number.
- Date of manufacture.

Edit the list to suit the project or delete if not required.

2.2 TERMSHIELD TERMITE MANAGEMENT SYSTEM

General

Slab penetration and joint protection: TermShield termite management system.

AS 3660.1 (2014) clause 4.3.2.4.1 requires penetrations be fitted with collars or an alternative method.

TermShield termite caps and sheeting: To AS 3660.1 (2014) Section 5.

Material: TermShield TS1000 steel mesh.

Components:

- TermLok cementitious parge adhesive to bond TS1000 to substrate.
- TermBlok collars to service penetrations.
- TermGrip clamps to secure the TermBlock collars.

3 EXECUTION

3.1 GENERAL

Concrete slabs
Standard: To AS 3660.1 (2014) Section 4.

3.2 TERMSHIELD TERMITE MANAGEMENT SYSTEM

Installation
General: To the recommendations of TermShield Installation Manual.

Termite caps, collars and sheeting
General: To AS 3660.1 (2014) Section 5.

Collars: To AS 3660.1 (2014) clauses 4.3.2.4.2 and 5.3.6.

See AS 3660.1 (2014) Figure 5.3.

3.3 COMPLETION

Termite management system notice
Signage: Permanently fix a durable notice in a prominent location to BCA (2022) B1D4(i)(ii).

See BCA (2022) H1D3(3) for Class 1 and 10 buildings.

This sign is nominated in *0581 Signage* for statutory signs. If *0581 Signage* is included in the project specification delete and cross reference as appropriate.

Cleaning
Requirement: Clean progressively and remove from the site waste building materials that could attract termites.

Operation and maintenance manuals
Requirement: For systems requiring post-construction monitoring, prepare a maintenance manual that includes the following:

- Inspection frequency.

For example, monthly, quarterly, annually.

- Instructions for inspection of termite activity and treatment effectiveness.

See AS 3660.2 (2017) Section 3.

- Contact details of installers and manufacturer's authorised supplier of replacement components.

Edit, as appropriate.

Compliance with this subclause targets the Operations and Maintenance requirement within the Minimum Expectation level of the Verification and Handover credit in Green Star Buildings (2021).

Warranties
Requirement: Cover materials and workmanship in the terms of the warranty in the form of interlocking warranties from the supplier and installer.

Minimum period: [complete/delete]

Form of warranty: [complete/delete]

The form(s) required should be provided as part of the contract documentation.

TermShield offer a 60 year warranty. See Appendix 1 of the Installation Manual for terms and conditions.

3.4 MAINTENANCE

Inspection
Requirement: At the end of the defects liability period, inspect the termite management system to AS 3660.2 (2017) clause 3.3.2.2. Prepare a report on the efficacy and status to AS 3660.2 (2017) clause 3.4.

AS 3660.2 (2017) clause 3.3.1 recommends inspections are undertaken at least annually. Accordingly, there should be one at the end of the typical 12 month defects liability period.

4 SELECTIONS

Schedules are a tool to specify properties required for products or systems. If the principal permits documentation of the product or system by proprietary name, some of the properties may be unnecessary and can be deleted. Document the product or system's location or application here and/or on the drawings with a matching project code. Refer to NATSPEC TECHnote GEN 024 for guidance on using and editing schedules.

4.1 SCHEDULE

Termite management systems schedule

Location	Type	Product	Material
Under concrete slabs-on-ground			
Under suspended floors			
Building perimeters			
Internal foundation walls			
Slab penetrations			
Slab control and movement joints			
Poles and posts			

Combined systems are available, as are different systems for different locations. Some parts of the building may have slab-on-ground floors, while others may have suspended floors requiring a different management system. Refer to AS 3660.1 (2014) to assist in making appropriate selections.

Delete locations not applicable to the project and add locations if required.

Type:

- Under concrete slabs-on-ground: e.g. Sheet material, granular material, chemical system with reticulation system.
- Under suspended floors: e.g. Sheet material (capping), granular material, chemical system.
- Building perimeters: e.g. Sheet material, granular material, chemical system.
- Internal foundation walls: e.g. Sheet material.
- Slab penetrations: e.g. Collar, granular material with cap.
- Slab control and movement joints: e.g. Sheet material, granular material, granular material with cap, chemical system.
- Poles and posts: e.g. Sheet material (pole sock), granular material, chemical system.

Product: Nominate a proprietary product and edit the schedule to suit.

Material: Nominate based on the type selected:

- Collar: e.g. Stainless steel, stainless steel Type 316 mesh, chemically treated sheet. AS 3660.1 (2014) clause 4.3.2.4.2 notes galvanized steel collars are not suitable for use with concrete slabs.
- Sheet material: e.g. Galvanized steel, stainless steel, stainless steel Type 316 mesh, PVC sheeting, chemically treated sheet. See AS 3660.1 (2014) clause 5.2.
- Granular material: Nominate the size and depth of granules. Capping systems used with granular materials, if required, may consist of concrete, bituminous material, acrylics or other plastics.
- Chemical system: Seek advice on the chemical to be used as part of the chemical system, and reticulation system if required, and the method of application. See the *APVMA PubCRIS*.

REFERENCED DOCUMENTS

The following documents are incorporated into this worksection by reference:

AS 3660		Termite management
AS 3660.1	2014	New building work
AS 3660.2	2017	In and around existing buildings and structures
AS 3660.3	2014	Assessment criteria for termite management systems
BCA B1D4	2022	Structure - Structural provisions - Determination of structural resistance of materials and forms of construction

The following documents are mentioned only in the *Guidance* text:

AS 2870	2011	Residential slabs and footings
AS 3600	2018	Concrete structures
AS 4349		Inspection of buildings

AS 4349.3	2010	Timber pest inspections
BCA H1D3	2022	Class 1 and 10 buildings - Structure - Site preparation
APVMA PubCRIS		Public Chemical Registration Information System (PubCRIS) database for registered Agricultural and Veterinary Chemical Products and Approved Actives
GBCA Buildings	2021	Green Star Buildings
NATSPEC GEN 006		Product specifying and substitution
NATSPEC GEN 024		Using NATSPEC selections schedules
NATSPEC TR 01		Specifying ESD