

0184P ENSYSTEX TERMITE MANAGEMENT**Branded worksection**

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Worksection abstract

This branded worksection *Template* is applicable to NOVITHOR™ and TRITHOR Termite Protection Systems by Ensystem which may be used, alone or in combination, for termite management. The core standard is AS 3660.1.

Guidance text

All text within these boxes is provided as guidance for developing this worksection and should not form part of the final specification. This *Guidance* text may be hidden or deleted from the document using the NATSPEC Toolbar or the hidden text *Hide* and *Delete* functions of your word processing system. For additional information visit FAQs at www.natspec.com.au.

Optional style text

Text in this font (blue with a grey background) covers items specified less frequently. It is provided for incorporation into *Normal* style text where it is applicable to a project.

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:

- *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 - having the different types collected in one worksection permits ready specification coordination of composite installations. 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 or AS 3600 are used as part of the termite control system. AS 3660.1 cites both standards for this purpose and advises that, if using AS 3600, 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 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: Allow for landscaping and site management requirements on drawings or other worksections such as surface and subsurface drainage, vegetation clearing (to plant roots) and use of fill without vegetative matter.

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 termite management and warranty periods.

Specifying ESD

The following may be specified by retaining default text:

- Non-chemical management systems.

The following may be specified by including additional text:

- Low toxicity chemical treatments.
- Chemical free accessories, e.g. resins, grouts, mortars and collars.

Refer to the NATSPEC TECHreport TR 01 on specifying ESD.

1 GENERAL

Ensystem is a global, research-based company with the vision to be 'the first choice for environmentally responsible, effective, long-term termite management solutions'. The company's key brands for protecting new buildings are the NOVITHOR™ Pesticide-Free Termite Protection System and TRITHOR™ Termite Protection. Both Systems hold ABCB Codemark Accreditation.

Ensystem has the largest technical sales support team of any innovation based termite protection company in Australia, and we are present in all States to assist you.

1.1 RESPONSIBILITIES

General

Requirement: Provide NOVITHOR™, TRITHOR or both termite management materials and systems, as documented.

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

Performance

Objective: Protection of the whole of the building from damage caused by termite attack.

Delete if BCA level of protection only is required as defined in BCA B1.4(i) and BCA 3.1.3.

1.2 COMPANY CONTACTS

Ensystem technical contacts

Website: www.ensystem.com.au

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 STANDARDS

General

Termite management systems: To AS 3660.1.

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

1.5 MANUFACTURER'S DOCUMENTS

Ensystem technical manuals

NOVITHOR™: www.novithor.com/downloads.html

TRITHOR: www.trithor.com.au/builders/

1.6 SUBMISSIONS

Certification

Certificate of installation: Submit certificates to AS 3660.1 Appendix A.

Records

Completion: Submit record drawings identifying the locations of the installed system.

Management system report: At the end of the defects liability period, inspect all components of the termite management system and submit a report on the efficiency and status of the system.

Subcontractors

General: Submit names and contact details of proposed Ensystem authorised operators.

Warranties

Requirement: Submit the manufacturer's warranty.

NOVITHOR and TRITHOR both offer a fifty year manufacturer's warranty. Describe the requirements of warranties in **PRODUCTS** or **EXECUTION**, as appropriate, and list the submissions required here.

1.7 INSPECTIONS

Notice

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

- Completed earthworks or substrate preparation before system application/installation.
- The completed termite management system.

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 PRODUCTS, **GENERAL**, **Substitutions** in 0171 General requirements.

The 0171 General requirements clause 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 NOVITHOR™ PESTICIDE FREE TERMITE PROTECTION SYSTEM

General

Application: Pesticide-free tested and CodeMark certified termite protection system that creates an impenetrable barrier to subterranean termites including:

- Concrete slab poured and cured to AS 2870 or AS 3600.
- Bearer and joist construction and piers.
- As a complete termite protection system.

Description: Physical termite management system, including:

- NOVITHOR™ Termite Proofing Resin: Liquid formulation with NOVITHOR™ resins.

Liquid formulation containing resins which lock together with sand and cement particles to form an impenetrable barrier.

- NOVITHOR™ Termite Proof Cementitious Parge: Cement mortar with NOVITHOR™ resins.

Resinous cement mortar containing NOVITHOR resins to form a granite-like barrier.

- NOVITHOR™ Termite Proof Flexi-Gel: Silicon sealant and adhesive.

High performance, neutral cure silicon sealant and adhesive.

Certification: CodeMark Certificate No. SAIG-CM20063.

See CodeMark Certificate for conditions and limitations. See www.abcb.gov.au to check if the Certificate of Conformity is valid.

2.3 TRITHOR TERMITE PROTECTION

General

Description: Low toxic sheet material termite management system, including:

- TRITHOR: Fibre blanket incorporating termite control agent deltamethrin, laminated to LDPE on both sides.

Application: Termite management system for perimeter (cavity) installations and critical joints.

- TRITHOR collars: Fibre blanket incorporating termite control agent deltamethrin, laminated to LDPE on both sides formed into the shape of collars.

Application: Termite management system for penetrations.

Certification: CodeMark Certificate No. SAIG-CM 20008.

See CodeMark Certificate for conditions and limitations. See www.abcb.gov.au to check if the Certificate of Conformity is valid.

3 EXECUTION

3.1 INSTALLATION

General

Requirement: To AS 3660.1 and the manufacturer's recommendations:

- NOVITHOR™: To the NOVITHOR™ termite protection system installation manual.
- TRITHOR: To the TRITHOR termite protection system reference manual.

Concrete slab

Standard: To AS 3660.1 Section 4.

3.2 COMPLETION

Termite management system notice

General: Permanently fix a durable notice in a prominent location to BCA B1.4(i)(ii) or BCA 3.1.3.4.

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

Waste materials

Progressive cleaning: Remove waste building materials, which could attract termites, from the site.

Warranties

Residential construction: Conform to the following:

- Warranty form: As provided on the Ensystem website.
- Warranty period: 50 years on materials and 10 years on workmanship.
- Renewability: Renewable on a continuous basis without limit.

Non-residential construction: Conform to the following:

- Warranty form: As provided on the Ensystem website.
- Warranty period: 50 years on materials and 10 year on workmanship.
- Renewability: Renewable on a continuous basis without limit.

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

Completion inspection

Report: At the end of the defects liability period, inspect the termite management systems and report on their efficacy and status.

Annual inspection is recommended. Accordingly, there should be one at the end of the normal 12 month defects liability period.

4 SELECTIONS

Schedules are a way of documenting a selection of proprietary or generic products or systems by their properties. Indicate their locations here and/or on the drawings. Refer to NATSPEC TECHnote GEN 024 for guidance on using and editing schedules.

4.1 SCHEDULE

Termite management systems schedule

Property	TB1	TB2	TB3
Under slabs			
Slab penetrations			
Slab control joints and footing/slab joints			
Building perimeters			
Under suspended floors			

Property	TB1	TB2	TB3
Timber poles and posts			

Refer to AS 3660.1 and the NOVITHOR™/TRITHOR installation manuals to assist in making appropriate selections. Select NOVITHOR™ if a pesticide free solution is required.

TB1, TB2, TB3: These designate each instance of type or location of the item scheduled. Edit to align with the project's codes or tags. Edit codes in the **Schedule** to match those on drawings.

Under slabs: e.g. NOVITHOR™ Termite Protection System or TRITHOR Termite Protection.

Slab penetrations: e.g. NOVITHOR™ Termite Protection System or TRITHOR Termite Protection.

Slab control joints and footing/slab joints: e.g. NOVITHOR™ Termite Protection System or TRITHOR Termite Protection.

Building perimeters: e.g. NOVITHOR™ Termite Protection System or TRITHOR Termite Protection.

Under suspended floors: e.g. NOVITHOR™ Termite Protection System or TRITHOR Termite Protection.

Timber poles and posts: e.g. TRITHOR Termite Protection.

Composite systems are possible, as are different types in different locations (e.g. some parts of the building may have slab-on-ground floors, others may have suspended timber floors). Careful reading of AS 3660.1 is essential.

REFERENCED DOCUMENTS

The following documents are incorporated into this worksection by reference:

BCA 3.1.3.4	2016	Acceptable construction - Site preparation - Termite risk management - Durable notices
BCA B1.4(i)(ii)	2016	Structure - Structural provisions - Determination of structural resistance of materials and forms of construction
ENSYSTEX N		NOVITHOR™ termite protection system installation manual
ENSYSTEX T		TRITHOR termite protection system reference manual

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

AS 2870	2011	Residential slabs and footings
AS 3600	2009	Concrete structures
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
AS 4349		Inspection of buildings
AS 4349.3	2010	Timber pest inspection
BCA 3.1.3	2016	Acceptable construction - Site preparation - Termite risk management
BCA B1.4(i)	2016	Structure - Structural provisions - Determination of structural resistance of materials and forms of construction
NATSPEC GEN 006	2007	Product specifying and substitution
NATSPEC GEN 024	2015	Using NATSPEC selections schedules
NATSPEC TR 01	2017	Specifying ESD