

# **HomeGuard**®

**Precision Termite Management** 



#### **Builders and Council Guide**

Version 1 2005

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Patent Number 2005901087 CSIRO Building approval no. 323
APVMA Number 59621/1M/1005 and 59621/4M/1005
Patent Pending Number- 2005901087

#### What is HomeGuard®

#### Overview

**HomeGuard** is an innovative-patented Precision Termite Management System that has been developed by FMC Australasia Pty Ltd - a company with a proud reputation for providing reliable Termite Management Solutions to the Australian Pest Management industry, for over 10 years.

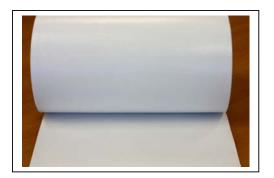
Under the Australian Standard AS3660.1 Termite Management Part 1: New building work HomeGuard is classified as a termite barrier in a non-soil matrix and can be utilised as a chemical and/or a physical Termite Management System meeting the 'Performance Appraisal' requirements of the Building Code of Australia (BCA).

#### **Purpose of a Termite Management System**

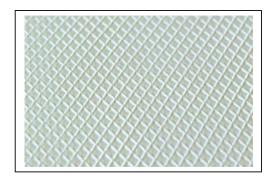
The purpose of a termite management system is defined under Section 2 – Performance criteria of AS3660.1 Termite Management Part 1: New building work as – 'A termite barrier system shall deter concealed entry to the building by termites'. The purpose of HomeGuard is to deprive subterranean termites possible entry into the structure via concealed access. A regular inspection regime is required to identify the possible bridging of a Termite Management System and so minimise the potential for damage to the structure.

#### HomeGuard Sheet.





**HomeGuard DPC 0.5mm** 



HomeGuard Collars easy to install in 100mm, 80mm, 50mm and 40mm



# HOMEGUARD VS THE PHYSICAL TERMITE BARRIER YOU'RE CURRENTLY INSTALLING.

The HomeGuard Precision Termite Management System wins hands down because HomeGuard:

- is the first ever AVPMA registered termite barrier in single sheet form
- proactively and effectively kills, repels and physically restricts termites from the building – the triple whammy! that no other physical barrier can offer
- · is kind to the environment (non-invasive and odour free)
- is installer friendly (non-scheduled and non-sensitising with no sharp edges)
- · is effective on termites in all regions
- · is lightweight and approved for building works in all states
- · won't corrode, crack or delaminate
- is proudly Australian made
- · it doubles as an approved moisture barrier to save you money
- is backed by a full 10-Year Warranty\*

You've tried the rest. Now try the best.



For more information FreeCall 1800 066 355 or visit www.homeguardptm.com.au

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"HomeGuard Warranty is limited and special terms and conditions must be met for it to apply. Contact FMC on 1800 066 355 for full details.

#### Why is HomeGuard Unique?

- HomeGuard is the first physical termite barrier in a non-soil matrix, ever registered by the Australian Pesticides and Veterinary Medicines Authority (AVPMA). HomeGuard also carries a CSIRO Technical approval- no. 323
- HomeGuard encompasses the combined strengths of both physical and chemical barriers to deliver triple action termite management. Unlike common physical termite barriers that are a passive system, HomeGuard is a pro-active termite management system, effectively killing termites on contact and repelling attacking termites.
- HomeGuard is user friendly and can be installed in wet weather, it will not
  delaminate or cut like some physical barriers and being non-scheduled and
  non-sensitizing is unlikely to cause installer or builder discomfort. Designed
  as a tough and flexible barrier, it will not delaminate, split or tear, is noncorrosive and is designed to last the life of the building.
- HomeGuard is the first and only single sheet physical termite moisture barrier containing an Australian registered termiticide.
- HomeGuard is environmentally friendly and incorporates the benefits of a chemical barrier with those of the physical barriers. Installed only to areas of the building that requires termite protection. HomeGuard will not leach or diffuse, effectively locking in the active ingredient to enhance its efficacy, longevity while remaining environmentally friendly and safe to the homeowner.
- HomeGuard suits a multitude of building construction situations.
- HomeGuard saves you money because HomeGuard TMB 0.2mm sheet complies with the Australian Standard AS2870, as a high impact, moisture barrier. HomeGuard DPC 0.5mm sheet meets the Australian Building Codes Board requirements for a perimeter cavity DPC, with slabs installed in accordance with AS 2870; HomeGuard collars meet the Australian Standards for the protection of service penetrations.
- HomeGuard is backed with a 10 Year Limited and conditional Product Warranty when installed by a HomeGuard Accredited Installer, in accordance with the product label, and the installation guide.
- HomeGuard is non-evasive. Installed during the pre-construction phase of a home, the materials in HomeGuard are designed to last the life of the building. There is a need for, at least, one annual timber pest inspection (more often in High Termite pressure areas) to ensure that the barrier has not been tampered with or breached.

#### HomeGuard - The new Standard in Precision Termite Management





HomeGuard TMB 0.2mm sheet product being installed





HomeGuard DPC 0.5mm product being installed in the perimeter cavity

HomeGuard® should only be installed by a HomeGuard Accredited Installer. Phone 1800 066 355 for contact information on your closest HomeGuard Accredited Installer

#### **How does HomeGuard Work?**

HomeGuard provides a unique 3-way action to ensure protection of the structure.

- Repelling termites away from the barrier
- Killing termites upon contact
- Acting as a physical vapour barrier and damp proofing membrane.

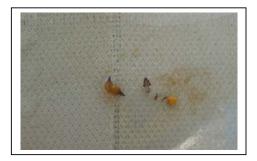
HomeGuard is manufactured using the same active ingredient used in FMC's core bifenthrin termiticide product - Biflex® the market leader liquid termiticide in Australia giving long-term protection from subterranean termite attack. Incorporated uniformly throughout a polymer matrix the termiticide acts exactly the same way it does in any soil matrix, effectively killing any termites that challenge the barrier and repelling attacking termites from the protected structure.

Unlike chemical sprays, however, HomeGuard is installed in specifically targeted areas, under the slab and in the perimeter cavity during the construction of the structure. This means that the homeowner has no access or exposure to the termite barrier as it is incorporated and locked into the structure as an effective long-term termite management system.

One of the most common causes of failures in soil applied termite treatments is homeowner gardening practice. The addition of garden beds, paving and paths in the treated area effectively removes or disturbs chemically treated soil, allowing termites to breach and gain entry into the structure. HomeGuard does not use soil as the carrier matrix meaning there is less chance that homeowner activities can affect or alter the HomeGuard Termite Management System.

Common physical barrier systems like Stainless Steel Mesh and Granite chips, are passive barrier systems, designed to **only impede** concealed termite entry to the structure by forcing attacking termites into exposed areas, where they can be treated with a soil applied chemical treatment.

HomeGuard is a pro-active physical barrier system. It actively stops termites entering the structure via concealed access, by repelling them away from the site or by killing them if they come in contact the barrier. HomeGuard does more than a normal physical termite barrier.



A close-up shot of termite remains on the surface of HomeGuard sheet under CSIRO trials displays the termite killing power of HomeGuard.

### HomeGuard has been extensively trialled in Australia and around the world.

#### Trials conducted in Australia.

FMC in conjunction with the CSIRO has conducted field trials of the HomeGuard sheet in both temperate and tropical climatic zones of Australia. This efficacy work builds on the already extensive knowledge of bifenthrin barriers built around FMC's Research and Development program in Australia and around the world.

Field trial sites are specifically chosen to represent ultra high termite pressure situations to fully challenge the HomeGuard barrier. Trials are ongoing and results have proven that HomeGuard protects the structure from termite attack. As HomeGuard is a proactive termite barrier system it not only respells termites but also actually kills termites that came into contact with the sheet.

Australian trials of FMC's bifenthrin (the active ingredient of HomeGuard) are still ongoing after 16 years. These trials have tested the product in various climatic zones and states of Australia, on all common termite species including Mastotermes spp., Coptotermes spp., Schedorhinotermes spp., Heterotermes spp., and Microcerotermes spp. and have all demonstrated effective control of termites in all situations.

HomeGuard has allowed builders to incorporate the product into the structure as a targeted precision termite management system, using products they currently use in the construction of a home. At the same time HomeGuard reduces untargeted exposure of the termiticide to homeowners and the environment.

FMC in Japan has marketed a similar plastic sheet product for full under slab constructions for over six years. The Japanese product has provided excellent results and no failures of the sheet product have been reported since its introduction into that country.



Repellent effect of HomeGuard TMB

L-R UTC, 0.05%, 0.1% sheet. Termites will not track on sheet leaving it totally clean after 2 years in ground contact.

# Which HomeGuard Product will your Accredited HomeGuard Pest Manager be installing.

Only licensed Professional Pest Managers who are accredited as HomeGuard Accredited installers can offer to builders and their client's the FMC HomeGuard 10 year limited and conditional warranty.

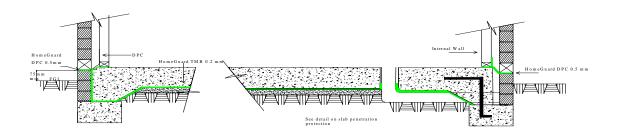
Builders should insist on sighting a HomeGuard Installer licence from their Pest manager to ensure that they are accredited to install the product.

#### **Full Under-slab installations**

HomeGuard TMB - 4m X 50m rolls (UV protected white flat - 0.2mm high impact sheets) should be used in full under slab installations and no additional moisture vapour barriers are required. Sheets can be cut to suit odd shapes.

Full Under slab installations.



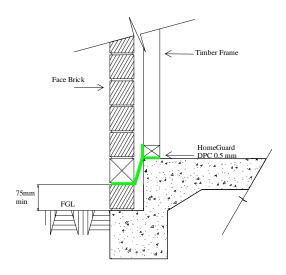


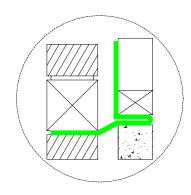
#### Perimeter Cavity installations using HomeGuard as a complete DPC

For Perimeter Cavity installations, HomeGuard DPC 0.5mm sheet (UV Protected whiteembossed DPC) and is installed as the Damp Proof Course in the perimeter cavity, in either a two brick rebate or a one brick rebate situation.

HomeGuard DPC 0.5mm complies with building codes as a DPC in the perimeter cavity when installed in accordance with AS 2780.

HomeGuard DPC 0.5mm is specifically designed to provide strength and reduce any brick slippage. It is designed to last the life of the building.





Perimeter Cavity installation – DPC



Typical HomeGuard corner construction.

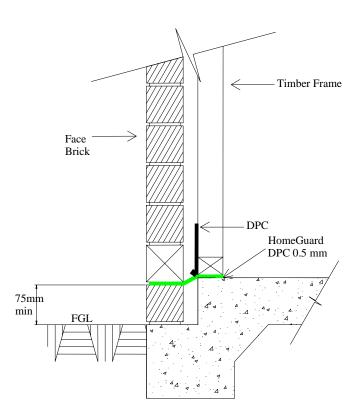


#### Perimeter Cavity installations as a barrier and partial DPC

For Perimeter Cavity installations HomeGuard DPC 0.5mm - (UV Protected whiteembossed sheet) is installed only as a termite barrier in the perimeter cavity with a separate standard Damp Proof Course installed above the Termite Barrier.

The HomeGuard DPC 0.5mm is securely pinned to the slab with the bottom plate timbers or the first course of inner bricks. The Black builders DPC is not tied into the brickwork and sits on the HomeGuard sheet in the cavity to direct moisture away from the cavity.

With this method of installation an additional DPC should be installed above the HomeGuard DPC 0.5mm to comply with building codes in accordance with AS 2780. Speak to your accredited installer about the most suitable installation design for your situation and budget.







#### **Service Penetrations and HomeGuard Collars**

FMC Australasia Pty Ltd has also developed another 1<sup>st</sup> for the industry - a service penetration collar that is also impregnated with Biflex. HomeGuard Collars must be used in conjunction with the installation of HomeGuard sheet or as a stand-alone installation in conjunction with a concrete slab, which conforms to AS2870-1996. When

HomeGuard collars are used on their own (i.e. not in combination with HomeGuard under slab and/or perimeter cavity sheet) no warranty applies to the structure.



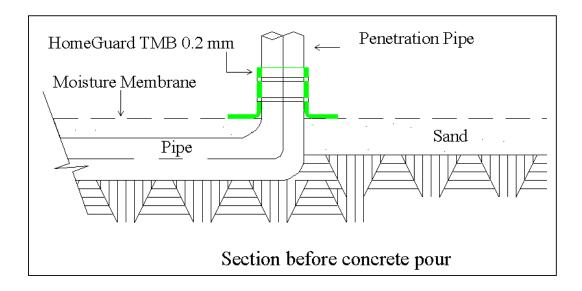


#### Failsafe Installation by Design

The HomeGuard Collar is innovative in its design and conforms to the AS3660.1 requirement to have "all interfaces between the penetrations and slab provided with a Termite Management System integrated with the slab" as it will always integrate with the slab thus eliminating any chance of possible installer error.

HomeGuard Collars are available from your HomeGuard Installer in standard sizes – 40mm, 50mm, 80mm & 100mm.

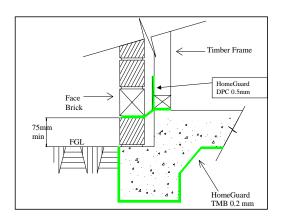
Penetrations of a different size such as, Telstra and electrical conduits and/or clusters etc. are protected using a HomeGuard sheet collar custom made by the installer.

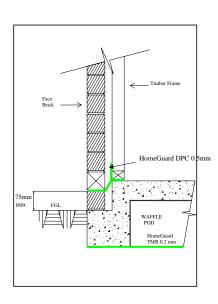


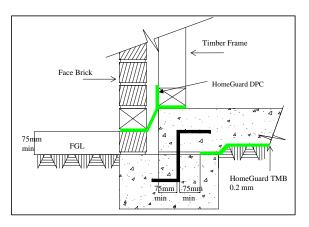
#### **Installation Types**

Speak to your Accredited HomeGuard Installer about suitable installations. The diagrams below are a small selection of HomeGuard installations your Accredited HomeGuard installer can offer Speak to your installer about designs that suit your situation.

# Samples of some of the Instillation Diagrams - Full Under Slab and Perimeter Cavity.

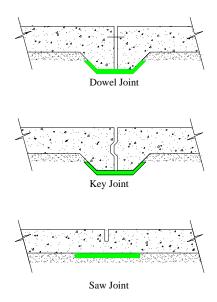






#### **Critical Joints**

#### **Construction joints**

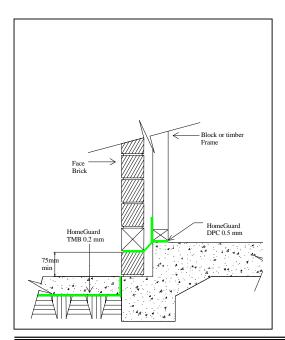


**Critical joint detail – Construction joint** 

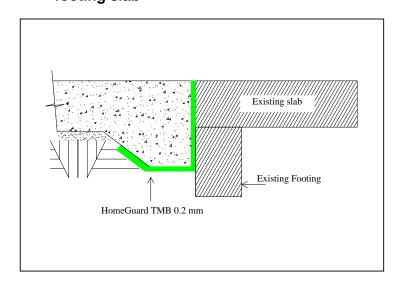
#### Paths and Additions-

For existing masonry to new concrete joints – including additions, paths, etc

#### External perimeter detail - path

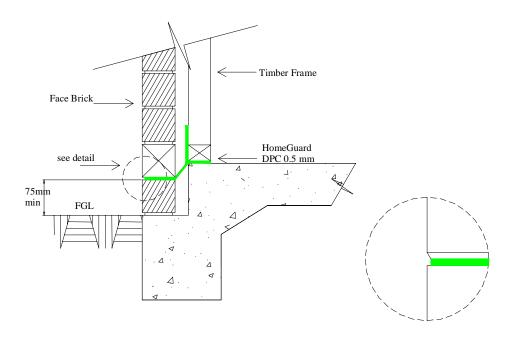


## External perimeter detail – additional footing slab

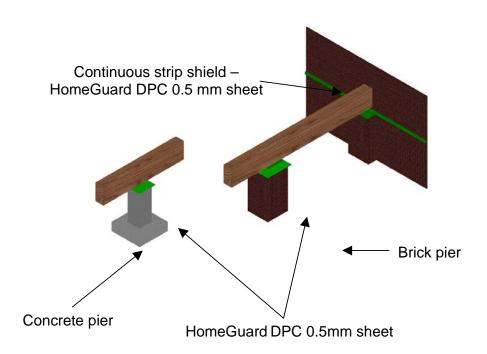


#### **Miscellaneous Installation Details.**

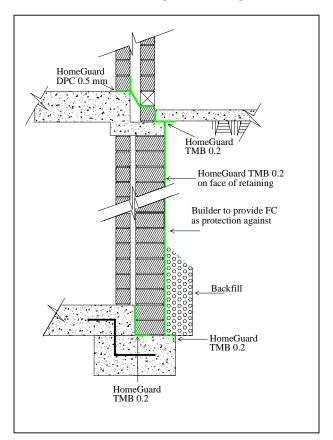
#### Face Brick - Detail

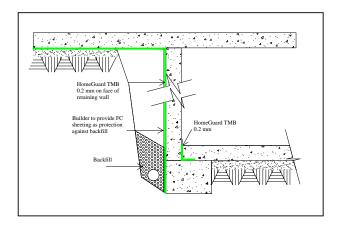


#### Suspended Floor - various

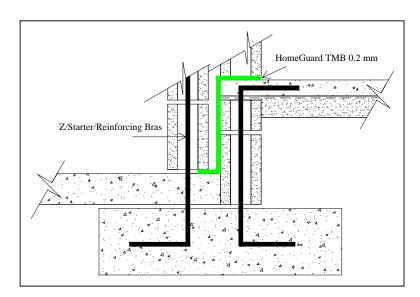


# Structural Retaining walls. Structural Retaining wall designs





#### **Step Down**



# 'If it was my new home, I'd choose HomeGuard.'

#### John Jones, Builder

"As a licensed builder, I know there are lots of termite protection companies around with all sorts of weird and wonderful ways to try to stop termites. Most of 'em work... up to a point!

For my money, there's only one that truly does it all. HomeGuard is the only registered physical termite barrier, proof that it works."

HomeGuard not only repels and physically stops termites, but actually kills them on contact - that's a triple whammy for my clients.

Built into the home, protecting areas where termites attack, it's environmentally friendly and completely non-invasive to the family and their pets.

Australian made HomeGuard won't corrode, crack or delaminate like other physical barriers and is backed by a 10 Year Warranty\*.

HomeGuard even doubles as an approved moisture barrier to save you money.

"Yeah, if it was my home, installing HomeGuard would be the first thing I'd do. Wouldn't you?"



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Contact FMC on 1800 066 355 for full details.

#### YOUR ACCREDITED HOMEGUARD INSTALLER IS