

Termites and your home

Termites, often referred to as 'white ants', serve an important function in nature by feeding off dead trees and converting them into organic matter. Unfortunately for us, the wood in buildings and other structures, such as pergolas, is equally as appetising.

There are more than 300 termite species in Australia. Approximately 20 of these species can eat through the solid wood in buildings causing serious damage and considerable expense. These species require ideal temperature and humidity levels to survive, live in colonies of 200,000 – sometimes seven metres below the soil surface – and have extensive tunnel networks that can extend up to 100 m from the nest.

Many timbers in your home and garden can provide an ideal environment for these termites.

Prevention of termite damage

Sensible building design helps to minimise the risk of termite damage. Strategies can include:

- reducing the susceptible amount of timber used in buildings;
- designing the concrete slab with edges exposed for inspection for termite activity; and/or
- laying timber floors with under-floor inspection access points.

Installing a reticulated system under the concrete slab will allow chemical barriers to be applied and re-applied when necessary.

The National Construction Code (NCC) requires termite prevention to be incorporated during the construction of new and existing buildings in Australia.

These measures rely heavily on barriers to stop termites entering the premises or timber from the underlying soil. Currently, two types of barriers are used, physical or chemical, often in combination.

Physical barriers

Metal shields, stainless steel mesh or granite chip barriers can be used to stop termites getting into buildings.

Continuous sheets of fine stainless steel mesh can be installed under concrete slabs and in external walls during construction. Mesh can also be used to protect penetrations in floors and walls. In certain situations, the mesh may be adapted for the wall cavities of existing structures.

Stone barriers consisting of a thick layer of small granite chips that are graded to a size and shape which cannot be transported by termites, and having spaces between the particles too small for termites to get through, can be installed.

Stone barriers can be installed surrounding and/or underneath concrete slabs or beneath a suspended floor. Unfortunately this type of barrier is not suitable for tropical northern areas, which are inhabited by large termites (*Mastotermes Darwiniensis*) that can make their way through a standard granite chip barrier.



Chemical barriers

In the past new homes were protected by spraying the sand pad with organochlorine chemicals. An increased awareness of the effects of these chemicals on both health and on the environment resulted in the Commonwealth Government banning the use of organochlorines from 30 June 1995.

It is however important to remember that the pesticides or termiticides that have replaced organochlorines are not as effective in the longer term.

There are environmentally friendly methods of control available through some pest controllers. These methods may not always be as effective as the physical barriers described in this fact sheet.

Many new buildings use a termiticide treated layer of soil surrounding and under the building. This forms an integrated barrier, together with the physical methods discussed above. The termiticide is applied to the soil under the slab and around the footings, pipes, conduits and other structures of the house during construction to create a vertical barrier. Any loosened soil around the perimeter of the house, including around all the pipes and service facilities, is treated during construction to form a horizontal barrier.

Timber used to construct houses, outbuildings, fences and other outdoor structures can be treated with chemicals. These are commonly referred to as treated timbers and should be considered at the time of designing or constructing the buildings.

To successfully incorporate termite barriers into existing buildings, strategic drilling through concrete slabs, porches, floors and wall footings

may be needed, as well as under floor treatment. Building and Energy recommends only licensed pest controllers carry out this work.

Chemical baits

Strategically placed bait stations can be used to lure termites to a food source, such as dry wood or paper refuse. About 30 bait stations are needed for a typical house and they need to be inspected regularly to assess termite activity. Once the termites are attracted to the bait station, a particular termiticide is added that sticks to the termite.

It is quickly spread through the colony by foraging termites due to their communal grooming activity and ultimately reach and kill the queen. If you decide on this treatment, remember that the external 'bait and treat' approach is not always possible in built-up areas, as adequate space is required around the building for the bait stations.

Detection

For early detection in your home and garden it is advisable you hire licensed pest controller to inspect all accessible timber and potential termite entry points every six to 12 months. Often the first sign of termites will be when you see their wafer thin mud tunnel on timber (this protects them from the environment and maintains humidity levels).

To deal with termites in the garden, specialised pest managers drill into wood or the trunk of a tree to insert temperature probes that help to locate the termite nest.



Despite regular inspections of the garden, termites may still enter the home. In the home, the first indicator may be a slight discolouration of a wall surface, followed by warping if wood panelling is used to line the wall. If you find termites in your home, don't disturb them by using household sprays or removing infested wood. Take time to investigate the size and nature of the problem as well as the options available for termite eradication.

Whichever system you select, it is important to do regular inspections – in particular inspect your property every six months for any obvious signs of infestation. Building and Energy recommends you arrange for an inspection by a licensed pest control operator at least once a year to look for signs of infestation and to undertake any preventative measures.

Treatment for existing homes

Treating a termite infestation in an existing building requires an integrated approach including:

- killing termites within the timber structures;
- locating and destroying the termite nest;
- re-establishing chemical and/or physical barriers; and
- regular inspections to detect ongoing or new termite activity.



For existing buildings, where you have already found signs of infestation, chemical treatment is usually the only option for destroying the termite nest.

This treatment can include re-establishing a chemical and/or physical barrier plus regular inspections to detect any ongoing or new termite activity.

Treatment with a termiticide directly into tunnels of the nest where termites are known to be active can reduce numbers, but it rarely eliminates the colony altogether unless it is used in conjunction with another method.

Buying an existing home

When buying an existing home, Consumer Protection recommends including a White Ant Certificate clause in the Offer and Acceptance form. This is intended to make sure the home is free of termites and there is no structural damage from any previous infestation.

A separate fact sheet about the need for timber pest inspections and reports when buying property is available from the Department of Local Government, Industry Regulation and Safety by contacting the Consumer Protection Advice Line on **1300 30 40 54**.

Building a new home or renovating

If you are constructing a new home or building or renovating an existing one you will need to comply with the termite risk management and barrier requirements of the NCC and relevant standards. In most cases a building permit will be required prior to carrying out building work and the details of the type of termite barrier are to be submitted as part of the building permit application process. Further advice can be obtained from your builder or building surveyor.

The NCC requirements aim to reduce the risk of termite damage to primary building elements which are mostly the structural elements of a building but do not include non-structural elements such as cabinet work and furniture.

Durable notice

It is a requirement of the NCC that a durable notice be permanently fixed to the building in a prominent location, such as in a meter box. The notice should indicate the type and method of termite risk management and the date the system was installed, along with the installer's

or manufacturer's recommendations for the scope and frequency of future inspections.

The notice provides advice to future owners of the barrier's life expectancy and type of system installed.

For specific advice about termite protection for a proposed new home, contact a building surveyor, a builder or architect, or a licensed pest control professional.

If you have had building work carried out in the past six years and the builder did not provide termite protection as required by the NCC, you can refer the matter to Building and Energy. Visit www.wa.gov.au/government/multi-step-guides/building-dispute-resolution or phone **1300 489 099**.

Checklist

You should check your home regularly for anything that may attract termites.

The following tips are designed to reduce the risk of infestation and damage:

- ☐ Plumbing leaks, drainage problems and roof leaks should all be dealt with quickly, as damp conditions attract termites.
- ☐ Garden beds and plants should be kept away from direct contact with outside walls. Hard paving should be substituted.
- ☐ Do not allow soil from garden beds to block drainage or ventilation openings in walls.
- ☐ Nothing should be stored against outside walls. This could allow termites to gain easy access to the wall cavity without early detection.

Durable notice courtesy of the Housing Industry Association.



- ☐ Proposed extensions or alterations to the building must not result in the removal of existing termite barriers or access for inspections.
- ☐ Spaces under the floor must be kept well ventilated. Make sure that airflow through the vents is not obstructed.
- ☐ Watch for termite infestation in piles of firewood or stacks of stored timber. These must be kept well away from the house, raised above the ground and covered to keep them dry.
- ☐ Consider using termite resistant timber for work on your home.
- ☐ Remove dead trees and stumps as soon as possible.
- ☐ Metal stirrups should be used for setting pergola, gate and verandah posts in the ground.
- ☐ The use of untreated timber sleepers for retaining walls and garden beds should be avoided.
- ☐ Timber decking around verandahs and swimming pools should be cleaned and inspected regularly.

Further advice

Advice about all types of pesticide treatments can be obtained from the:

- Pesticide Safety Section of the WA Department of Health – 9222 2000.
- Housing Industry Association (for HIA members only) – 1300 650 620.
- Master Builders WA – 9476 9800.
- Consumer Protection Advice Line – 1300 30 40 54.

Building and Energy can provide information relating to home building or renovation work.

Phone **1300 489 099** or email be.info@lgirs.wa.gov.au

**Department of Local Government,
Industry Regulation and Safety**
www.lgirs.wa.gov.au

Regional Offices:

Goldfields/Esperance	(08) 9021 9494
Great Southern	(08) 9842 8366
Kimberley	(08) 9191 8400
Mid West	(08) 9920 9800
North West	(08) 9185 0900
South West	(08) 9722 2888

Building and Energy Division

Level 1 Mason Bird Building
303 Sevenoaks Street
(entrance Grose Avenue)
Cannington Western Australia 6107
Locked Bag 14, Cloisters Square
Perth WA 6850

Call: 1300 489 099

Email: be.info@lgirs.wa.gov.au

www.lgirs.wa.gov.au/building-and-energy

Disclaimer: The information contained in this fact sheet is provided as general information and a guide only. It should not be relied upon as legal advice or as an accurate statement of the relevant legislation provisions. If you are uncertain as to your legal obligations, you should obtain independent legal advice.

This publication is available in other formats on request.

National Relay Service: 13 36 77

Translating and Interpreting Service (TIS): 13 14 50