

## RESIDENTIAL PRE-PURCHASE PEST INSPECTION

Visual Termite Inspection in accordance with AS 4349.3

**Client:**

Aimie Smith

**Property Address:**

16 Violet Street Bronte

**Date of Inspection:**

16<sup>th</sup> August 2018

**Inspector:**

Steve Reynolds



## TERMS AND CONDITIONS

Any person who relies upon the contents of this report does so acknowledging that the following clauses which define the Scope and Limitations of the inspection form an integral part of the report.

### **THIS IS A VISUAL INSPECTION ONLY in accord with the requirements of AS 4349.3 - Inspection of buildings Part 3: Timber Pest Inspections.**

This visual inspection was limited to those areas and sections of the property to which reasonable access (See Section 2.0 Reasonable Access) was both available and permitted on the date and at the time of Inspection. The inspection DID NOT include breaking apart, dismantling, removing or moving objects including, but not limited to, foliage, mouldings, roof insulation/simulation, floor or wall coverings, sidings, ceilings, floors, furnishings, appliances or personal possessions. The Inspector CANNOT see inside walls, between floors, inside skillion roofing, inside the eaves, behind stored goods in cupboards, or other areas that are concealed or obstructed.

The inspector DID NOT dig, gouge, force or perform any other invasive procedures. In an occupied property it must be understood that furnishings or household items may be concealing evidence of Timber Pests or damage which may only be revealed when the items are moved or removed.

Inspection of fence lines and posts is restricted to those timbers above ground level and facing the property inspected. The inspection does not extend or should comments be inferred in respect to timbers, palings, fence posts below ground level or where timbers are obstructed by plant life or overgrowth or other materials which restrict or prevent physical bodily access. No inspection is inferred to areas of trees or external areas over 3.6 metres above the natural ground level. An Invasive Inspection will not be performed unless a separate contract is entered into. In the case of Strata type properties only the interior of the subject dwelling is inspected.

## LIMITATIONS

Nothing contained in the Report implies that any inaccessible or partly inaccessible area(s) or section(s) of the property being inspected by the Inspector on the date of the inspection were not, or have not been, infested by Timber Pests. Accordingly, this Report is not a guarantee that an infestation and /or damage does not exist in any inaccessible or partly inaccessible area(s) or section(s) of the property, nor is it a guarantee that a future infestation of Timber Pests will not occur or be found. Australian Standard for Termite Management Part 2: In and around existing buildings and structures (AS 3660.2-2000) recommends that properties should be inspected at least every twelve (12) months but more frequent inspections are strongly recommended and may be recommended in this report.

## COMPLAINT INVESTIGATION

In the event any litigation is started as a result of the inspection and/or report, you indemnify us against any legal fees and expenses incurred where you have not first allowed Us the opportunity to visit the property to investigate the complaint and provide you with a written response within 28 days.

## SCOPE OF REPORT

This report is confined to the reporting on the discovery, or non discovery, of infestation and/or damage caused by subterranean and dampwood termites (white ants), borers of dry seasoned timber and wood decay fungi (hereinafter referred to as "Timber Pests"), present on the date and at the time of inspection by visual inspection of those areas and sections of the property accessible to the Inspector. The inspection did not cover any other pests and this Report does not comment on them. Dry wood termites ("Family: KALOTERMITIDAE") and European House Borer (*Hylotrupes bujulus Linnaeus*) were excluded from the Inspection, but have been reported on if, in the course of the Inspection, any visual evidence of infestation happened to be found. If *Cryptotermes brevis* (West Indian Dry Wood Termite) or *Hylotrupes bujulus Linnaeus* are discovered we are required by law to notify Government Authorities. If reported a special purpose report may be necessary.

## DISCLAIMER OF LIABILITY

No liability shall be accepted on account of failure of the Report to notify of any Timber Pest activity and/or damage present at or prior to the date of the Report in any area(s) or section(s) of the subject property physically inaccessible for inspection or to which access for inspection is denied by or to the Inspector (including but not limited to) any area(s) or section(s) so specified by the Report.

## DISCLAIMER OF LIABILITY TO THIRD PARTIES

Compensation will only be payable arising for losses payable in contract or tort sustained by the Client named in this report either under the heading Report Commissioned By or the heading Purchaser.

This Report CANNOT be an offer by the Client or any other party other than the Report Author to any other party.

## COMPLAINTS PROCEDURE

In the event of any dispute or claim arising out of, or relating to the Inspection or the Report, or any alleged negligent act or omission on Our part or on the part of the individual conducting the Inspection, either party may give written Notice of the dispute or claim to the other party. If the dispute is not resolved within twenty one (21) days from the service of the written Notice then either party may refer the dispute or claim to a mediator nominated by Us.

The cost shall be met equally by both parties or as agreed as part of the mediated settlement. Should the dispute or claim both be resolved by mediation then one or other of the parties may refer the dispute or claim to the Institute of Arbitrators and Mediators of Australia who will appoint an Arbitrator who will resolve the dispute by arbitration, the Arbitrator will also determine what costs each of the parties are to pay.

## DETERMINING EXTENT OF DAMAGE

This Report is NOT a structural damage report.

We claim no expertise in building and any inexperienced opinion we give on timber damage CANNOT be relied upon.

The Report will not state the full extent of any timber pest damage.

The Report will state timber damage found as 'minor', 'moderate', or 'severe'. This information is not the opinion of an expert.

If any evidence of Timber Pest activity and/or damage resulting from Timber Pest activity is reported either in the structure(s) or the grounds of the property, then You must assume that there may be concealed structural damage within the building(s). This concealed damage may only be found when wall linings, cladding or insulation are removed to reveal previously concealed timbers. An invasive Timber Pest Inspection (for which a separate contract is required) is strongly recommended and You should arrange for a qualified person such as a Builder, Engineer, or Architect to carry out a structural inspection and to determine the full extent of the damage and the extent of repairs that may be required. You agree that neither the person conducting the Inspection is responsible or liable for the repair of any damage whether disclosed by the report or not.

## IMPORTANT INFORMATION

Any person who relies upon the contents of this Report does so acknowledging that the above clauses define the Scope and Limitations of the inspection and form an integral part of the report. The Report is made solely for the use and benefit of the Client named on the front of this Report and no liability or responsibility whatsoever, in contract or in tort, is accepted to any third party who may rely on this Report wholly or in part. Any third parties acting or relying on this report do so at their own risk.

## RECOMMENDATIONS FOR FURTHER ACCESS

Where recommendations are made for further access to be gained, whether those recommendations are made in the the report, such access and any further inspection required subsequent to access being gained must be carried out prior to committing to the property in question.

## SUMMARY IN DETAIL

### IMPORTANT NOTE

This summary must be read in conjunction with the entire report. Some comments and recommendations may be contained in the body of the report and not in the summary. The information contained in the terms and conditions, the body of the report, the summary and general information form the complete report.

### SUMMARY DETAILS

#### Further Access Required:

We were unable to gain access to some of the subfloor void area. It should be noted that the underfloor area is the prime area of timber pest attack. We strongly recommend that access be gained to the currently inaccessible area(s) to allow a more complete report to be submitted. Timber pest attack may be present to areas that were inaccessible at the time of our inspection. This may be achieved by cutting of mantraps or gaining access through foundation walls as appropriate. The lifting of floorcoverings (if present) in an attempt to locate existing floor traps has not been carried out and is not within the scope of a standard visual inspection. Should the floor timbers be exposed and polished, a carpenter should be engaged to cut traps.

Access was not gained to some sections of the roof cavity as detailed in the report. Where any roof void is present but not accessible, suitable access should be made to enable a more complete report to be submitted. Timber pest attack may be present to areas that were inaccessible at the time of our inspection.

#### Evidence of Active Timber Pests:

Inspection revealed no evidence of active termite infestation to visible areas and visible timbers at this time. It is possible that timber pest damage or activity may exist in concealed timbers or areas and no comments made in respect to these concealed timbers or areas. All properties are considered at risk of attack by termites. The risk can be reduced if the property is treated in compliance with Australian Standard 3660. The property should be inspected on a regular basis at intervals not exceeding that of the recommendation made this report.

It should be noted that due to the method of construction and/or conducive conditions noted, undetected concealed termite entry is possible to this structure that may only become apparent at some time in the future when further invasive inspections or modifications to the structure are made.

1. **Type of dwelling** – *Semi Detached*
2. **Number of Storeys** – *Single Storey*
3. **Weather conditions at the time of inspection** – *Clear*
4. **Recent Weather conditions** - *Clear*
5. **The report was commissioned by** – *Prospective Buyer*
6. **Is the property occupied** – *No.*
7. **Was the property furnished at the time of the inspection** – *No*
8. **Who was present during the inspection** – *No one Present.*
9. **Type of floor construction** – *Timber Bearers & Joists*
10. **Roof Structure Type** – *Timber hand pitched*
11. **Roof Covering Type** – *Concrete Tiles, Metal Sheeting*
12. **Was there evidence of a previous termite treatment** – *No*
13. **Were above or below ground baiting stations viewed to be present** – *No*
14. **Is there a durable notice within the meter board or kitchen cupboard noting a previous treatment to the property** – *No*
15. **Exterior wall type** – *Brick/Masonry - Double Brick,*
16. **Type of Fence** – *Metal*
17. **Areas Inspected** – *Interior of the building, exterior of the building, Sub floor space, Roof space.*
18. **Areas not able to be inspected which reasonable access was not available** - *Low pitched roof.*
19. **Areas that access should be gained** – *Sub floor space - limited crawl space in rear, Roof space – limited crawl space due to pitch*
20. **Was Access Available to Roof Space** – *Yes*
21. **Percentage of area of roof space assessed** - *80% - Limited access due to pitch of roof*
22. **Was insulation present within the Roof Space** – *No*
23. **Was the Sub Floor Area Able to be Accessed** – *Yes*
24. **Percentage of area of subfloor area assessed** - *80% - Limited access due to diminished crawl space in the rear of the property, area tapered down below the minimum required of 350mm clearance below timber structure*
25. **Next inspection recommended in** – *12 months*
26. **Is a more invasive inspection required** – *No*
27. **Degree of risk of subterranean termite infestation at the time of inspection was considered to be** – *High – No ant capping seen to be installed and framing to rear portion of the property seen to be in close proximity to the ground.*
28. **Were any timber members deteriorated which could be seen to be a safety risk?** – *No*
29. **Were any structural timber member affected by pest activity** - *No*
30. **Were any structural timber members affected by wet/dry rot** – *No*

## INSPECTION

### 1. Were ant caps installed to piers

*No – There is missing ant cappings within the sub floor area -*

*This is a major issue within the current Building Codes of Australia guidelines*

*But:*

*If you have your home inspected and sprayed every six to nine months it drastically reduces the risk of pest infestation*

*If you have good crossflow ventilation within your sub floor area it reduces the risk for pest infestations, as termites like damp and dark areas*

*If you have no timber or debris stored within your sub floor area it assists in reducing the possibility of pest infestation*

*If you keep the sub floor area dry and free from damp this reduces the risk for termites and other pest activity within the sub floor*

*If you keep all your plumbing (sewer and storm water) in order, this will assist in keeping the site and sub floor areas dry*

*If you keep all external pathways maintained and have the surface water drain away from the sub floor areas, this will assist in keeping the sub floor areas pest free*

*Note:*

*All properties built prior to the 1990's have no termite barriers installed, (Pier Capping, Lineal Capping) as it wasn't legislation then*

*If you want, you can always have ant cappings retrospectively installed to most of the house, if not all areas*

*A contractor can assess and quote on these works and have the works carried out within a few days to have the sub floor area comply with current regulations*

### 2. Was lineal ant capping installed to the perimeter –No

*No – There is missing ant cappings within the sub floor area -*

*This is a major issue within the current Building Codes of Australia guidelines*

*But:*

*If you have your home inspected and sprayed every six to nine months it drastically reduces the risk of pest infestation*

*If you have good crossflow ventilation within your sub floor area it reduces the risk for pest infestations, as termites like damp and dark areas*

*If you have no timber or debris stored within your sub floor area it assists in reducing the possibility of pest infestation*

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*If you keep all your plumbing (sewer and stormwater lines) in order, this will assist in keeping the site and sub floor areas dry*

*If you keep all external pathways maintained and have the surface water drain away from the sub floor areas, this will assist in keeping the sub floor areas pest free*

Note:

*All properties built prior to the 1970's have no termite barriers installed, (Pipe Capping, Lineal Capping) as it wasn't legislation then*

*If you want, you can always have ant cappings retroactively installed to most of the house, if not all areas*

*A contractor can assess and quote on these works and have the works carried out within a few days to have the sub floor area comply with current regulations*

3. **Were pipe penetrations protected from termite access – No**
4. **Were other types of barriers installed – No**
5. **Are any timber members in contact with the ground – Yes – Timber props beneath the wet area seen to be in direct contact with the ground which would be seen to be conducive to pest attack, these items should be removed.**
6. **Is there adequate ventilation to the sub floor space – Yes – The sub floor space appeared to be dry at the time of inspection, minimal wall vents were sighted. With the rear portion being in close proximity to the ground it may require assisted ventilation through the addition of mechanical ventilation.**
7. **Are any of the timber members of the structure sagging or deflecting? – No**
8. **Are there stored items within the sub floor space – Yes – Timber off cuts were seen to the sub floor space which would be advisable to be removed as they can be conducive to pest attack**
9. **Are there stored items within the roof space – Yes – Excess building material were seen to be stored within the roof space, these items did not pose a risk to pest attack.**
10. **Was there a presence of excess moisture found? – No**
11. **Is the finished ground level above the internal floor, damp course, weep holes or air vents – No**
12. **Do hot water services or air conditioning units release water alongside or near the building – Yes**
13. **Are there any water leaks from wet areas, plumbing fixtures or drainage – No**



## TERMITES

1. Were mud tunnels viewed in the areas of the sub floor leading to the floor structure – *No*
2. Were active termites found at the time of inspection – *No*
3. Is a subterranean termite management plan recommended – *Yes*
4. Is a treatment required – *Yes* – *It is recommended that annual inspections be carried out and a preventative treatment applied to ensure the likelihood of pests is minimised.*

## BORERS

1. Was there evidence of wood borer activity found? – *No*
2. Were there active borers found at the time of inspection – *No*

## FUNGAL DECAY

1. Was there evidence of fungal decay/wood rot found? – *No.*

## CHEMICAL DELIGNIFICATION

1. Was evidence of Chemical Delignification found? – *Yes* – *Small areas of the rafters and roof battens were seen to show minor signs of chemical delignification in the areas able to be accessed at the time of the inspection.*

In the past this type of timber damage has been referred to using many different terms, Hairy Timber or Defibrosis.

In the early 1990's it was agreed that the true description of this type of timber deterioration is Chemical Delignification.

This term describes the deterioration. In its true form, the lignin in timber is damaged by airborne chemicals.

Lignin is the natural glue that holds the fibres of wood together and is therefore a major component of any wood. When the lignin is broken down or damaged the fibres then detach from each other creating a visible hairy surface to a section of the timber, as the delignification progresses the structure of the timber section is weakened and therefore chemical delignification is regarded as a structural pest of timber in service.

Chemical Delignification damage is most commonly found in timber sections used as roof tile battens of buildings that are located in close proximity to the sea, large chemical factories or major arterial roads that have heavy traffic.

Buildings close to the sea are exposed to salts brought to land by wind and sea breezes and dwellings within five kilometers of the sea are often found to have chemical delignification in their roof tile battens.

Buildings surrounding chemical factories that have chemical delignification would indicate that the air quality where this building is located is influenced by the chemical production process and/or use of chemicals by the adjoining industry. The cost of repair of the chemical delignification damage would need to be taken into account when this damage is found but it also would be prudent to

consider the possibility that the air quality in the area may be affected by chemicals and therefore if any health hazards are present that could cause long term damage to an occupants health.

Buildings found to have chemical delignification that are in close proximity to a major arterial road would often be affected by fumes from vehicles using the adjoining roads.

Chemical delignification generally will not occur to timbers in service that are sealed, painted or well oiled as the lignin is protected from airborne chemical substances.

Therefore as with most timber damage if we can remove the cause of the damage or protect the timber from exposure to the cause of damage the damage will cease. If the damage is initiating, the timber section can be painted or oiled to stop further deterioration. Where the chemical delignification damage is advanced then replacement of the damaged timbers is needed.

When chemical delignification is found in roof tile battens or rafters then it is recommended not to have persons walk on the roof as collapse may occur and therefore could cause bodily injury.

Chemical delignification is more common in species of softwood timbers although certain species of softwood are more prone to damage than others.

Chemical delignification may only occur after timbers have been exposed to airborne substances for a relatively long period of time, it is not common to find chemical delignification in buildings that are younger than ten years.

The most common timber species that is used in buildings in the Sydney area that we find damaged is the Douglas fir otherwise known as Oregon. Douglas fir is an imported timber species that originates in Northern America and Canada.

#### IMPORTANT INFORMATION - PEST INSPECTION

##### PLEASE NOTE:

The following information is very important and forms an integral part of this report.

Any structure can be attacked by Timber Pests.

Periodic maintenance should include measures to minimise possibilities of infestation in and around a property.

Factors which may lead to infestation from Timber Pests include situations where the edge of a concrete slab is covered by soil or garden debris, filled areas, areas with less than 400mm clearance, foam insulation at foundations, earth/wood contact, damp areas, leaking pipes, etc; form-work timbers, scrap timber, tree stumps, mulch, tree branches touching the structure, wood rot, etc. Gardens, pathways or turf abutting or concealing the edge of a concrete slab will allow for concealed entry by timber pests.

Any timber in contact with soil such as form-work, scrap timbers or stumps must be removed from under and around the buildings and any leaks repaired. You should endeavour to ensure such conditions DO NOT occur around your property.

We further advise that you engage a professional pest control firm to provide a termite management program in accord with AS 3660 to minimise the risk of termite attack.

There is no way of preventing termite attack. Even AS3660 advises that "*the provision of a complete termite barrier will impede and discourage termite entry into a building. It cannot prevent termite attack. Termites can still bridge or breach barriers but they can be detected more readily during routine inspections.*"

**In relying upon this report you should read and understand the following important information. It will help explain what is involved in a timber pest inspection, the difficulties faced by a timber pest inspector and why it is not possible to guarantee that a property is free of timber pests. It also details important information about what you can do to help protect your property from timber pest attack. This information forms an integral part of the report.**

## 1.0 DEFINITIONS

For the purpose of this inspection, the definitions below apply.

**1.1 Active** - The presence of live timber pests at the time of inspection.

**1.2 Inactive** - The absence of live timber pests at the time of inspection.

**Note:** Where visual evidence of active termite workings and/or damage is located, it is possible that termites are still active in the immediate vicinity and the termites may continue to cause further damage. It is not possible, without the benefit of further investigation and inspections over a period of time, to ascertain whether any infestation is active or inactive. Continued, regular inspections are essential.

**1.3 Minor** - Damage that is surface damage only and does not appear to require any timber replacement or repairs to be carried out.

**1.4 Moderate** - Damage that is more than surface damage but is unlikely to necessitate any timber replacement or repairs to be carried out.

**1.5 Severe** - Damage that appears to be significant and the integrity or serviceability of timbers may be impaired. A builder's opinion must be sought in the case of severe damage.

**1.6 Timber Damage** - Where this report includes comments in relation to the severity of timber damage, it must be understood that this is not a qualified builder's opinion. It is essential that any timber damage be referred to a suitably qualified building professional and obtain a special purpose building report relating to the extent of the timber damage.

The full extent of damage may only be revealed by invasive inspection methods including probing and the removal of lining materials.

This type of invasive inspection has not been carried out and you should understand that the extent

and/or severity of timber damage may be found to increase significantly on such an invasive inspection.

The references contained within this report that may refer to the extent of timber damage have only been included to assist in determining treatment specifications and not to quantify the damage and must not be relied upon to determine the costs of repair or replacement.

## 2.0 REASONABLE ACCESS

You should read and understand the following important information.

It will help explain what is involved in a timber pest inspection, the difficulties faced by a timber pest inspector and why it is not possible to guarantee that a property is free of timber pests.

It also details important information about what you can do to help protect your property from timber pests. This information forms an integral part of the report.

Only areas where reasonable access was available were inspected.

The Australian Standard AS 3660 refers to AS 1972:1998 which defines reasonable access.

Access will not be available where there are safety concerns, or obstructions, or the space available is less than the following:

**ROOF VOID** - the dimensions of the access hole must be at least 450mm x 400mm, and, reachable by a 2.1M step ladder or 3.6M ladder, and there is at least 600mm x 600mm of space to crawl;

**SUBFLOOR** - the dimensions of the access hole must be at least 500mm x 400mm and, there is at least 400mm of space to crawl beneath the lowest bearer, or, 500mm beneath the lowest part of any concrete floor;

**ROOF EXTERIOR** - must be accessible by a 3.6M ladder.

Reasonable access does not include the use of destructive or invasive inspection methods. Nor does reasonable access include cutting or making access traps, or moving heavy furniture or stored goods.

## 3.0 A MORE INVASIVE AND PHYSICAL INSPECTION IS AVAILABLE AND RECOMMENDED

This inspection was a visual inspection only.

As detailed above, there are many limitations to this visual inspection.

With the written permission of the owner of the premises we will perform a more invasive physical inspection that involves moving or lifting of insulation, moving stored items, furniture or foliage during the inspection.

We will physically touch, tap, test and where necessary force/gouge suspected accessible timbers.

We will gain access to areas, where physically possible and considered practical and necessary, by way of cutting traps and access holes.

This style of report is available by ordering with several days notice.

Inspection time for this report will be greater than for a visual inspection. It involves disruption in the case of an occupied property, and some permanent marking is likely.

You must arrange for the written permission of the owner and must acknowledge all the above information and confirm that our firm will not be held liable for any damage caused to the property.

Price available on request.

#### 4.0 CONCRETE SLAB HOMES (Part or full slab)

**4.1 Slab Edge Exposure:** Where external concrete slab edges are not exposed there is a high risk of concealed termite entry.

In some buildings built since July 1995 the edge of the slab forms part of the termite shield system.

In these buildings an inspection zone of at least 75mm should be maintained to permit detection of termite entry.

The concrete edge should not be concealed by render, tiles, cladding, flashings, adjoining structures, paving, soil, turf or landscaping etc.

Where this is the case you should arrange to have the slab edge exposed for inspection.

Concealed termite activity may already be taking place but could not be detected at the time of the inspection.

This may have resulted in concealed timber damage.

**Note:**

A very high proportion of termite attacks are over the edge of both Infill and other concrete slab types.

Covering the edge of a concrete slab makes concealed termite entry easy.

Infill slab type construction has an even higher risk of concealed termite ingress as the slab edge is concealed due to the construction design and cannot be exposed.

The type of slab may only be determined by assessment of the construction plans by a qualified person e.g. Builder, Architect.

Construction Plans may be obtainable by your conveyancer.

Termite activity and or damage may be present in concealed timbers of the building.

**We strongly recommend** frequent regular inspections in accordance with AS 3660.2.

Where the slab edge is not fully exposed or the slab is an infill slab or the slab type cannot be determined then we strongly recommend inspections every 3 to 6 months in accordance with AS 3660.2.

**Infill slab: A slab on the ground cast between walls.**

**Other slabs should be in accordance with AS 2870 – 1996 and AS 3660.2-2000.**

**4.2 Weep holes in external walls:** It is very important that soil, lawn, concrete paths or pavers do not cover the weep holes.

Sometimes they have been covered during the rendering of a brick work.

They should be clean and free flowing.

Covering the weep holes in part or in whole may allow undetected termite entry.

## 5.0 EVIDENCE OF TERMITE DAMAGE

Where visual evidence of termite workings and/or damage was noted in any structure, part of any structure OR on the grounds of the property, you must understand that termite damage and/or activity may exist in concealed areas.

Termites are secretive by nature and they will often temporarily desert their workings to later return. It is not possible, without benefit of further investigation and a number of inspections over a period of time, to ascertain whether any infestation is active or inactive.

Active termites may simply have not been present at the time of inspection due to a prior disturbance, climatic conditions, or they may have been utilising an alternative feeding source.

This concealed activity or damage may only be found when alterations are carried out such as when wall linings, cladding, carpets or insulation are removed or if you arrange for an invasive inspection.

As damage or activity may exist in concealed or inaccessible areas, a further **INVASIVE INSPECTION** is available and is **strongly** recommended, see Section 3.0 - Further Invasive Inspections. Additionally, regular inspections are strongly recommended at intervals not exceeding the interval recommended in the report.

## 6.0 CONDUCTIVE CONDITIONS

**6.1 Water Leaks:** Water leaks (if noted in the report), especially in or onto the subfloor or against external walls eg. leaking taps or down pipes and or guttering, increases the likelihood of termite attack. Leaking showers or leaks from other 'wet areas' also increase the likelihood of concealed termite attack.

These conditions are also conducive to borer activity and wood decay. We claim no expertise in building and if any leaks were reported then you must have a plumber or other building expert determine the full extent of damage and the estimated cost of repairs.

**6.2 High Moisture:** High moisture readings (if noted in the report) can be caused by any one of the following: poor ventilation, ineffective drainage, leaking pipes, leaking roofs, defective flashing or by concealed termite activity.

The areas of high moisture (if reported) should be investigated by way of an invasive inspection. If high moisture was reported then you must have a building expert investigate the moisture and its cause and determine the full extent of damage and the estimated cost of repairs.

**6.3 Drainage:** Poor drainage (if reported), especially in the subfloor, greatly increases the likelihood of wood decay and termite attack.

We claim no expertise in plumbing and drainage.

**6.4 Hot water services and air conditioning units** which release water alongside or near to building walls need to be connected to a drain. If this is not possible, then their water outlet needs to be piped several meters away from the building) as the resulting wet area is highly conducive to termites.

## 7.0 SUBTERRANEAN TERMITES

**No Property is safe from termites!**

Termites are the cause of the greatest economic losses of timber in service in Australia.

Independent data compiled by State Forests shows 1 in every 4 homes are attacked by termites at some stage in its life.

Australia's subterranean termite species (white ants) are the most destructive timber pests in the world.

In fact it can take as little as 3 months for a termite colony to severely damage almost all the timber in a home.

## How termites attack your home!

The most destructive species live in large underground nests containing several hundred thousand timber-destroying insects.

The problem arises when a nest matures near your home.

Your home provides natural shelter and a food source for the termites.

The gallery system of a single termite colony may exploit food sources over as much as one hectare, with individual galleries extending up to 50 metres or more to enter your home.

Concrete slabs do not act as a barrier as termites can penetrate cracks through the slab or over the slab edge.

They even build mud tubes to gain access to above ground timbers. In rare cases termites can create their nest in the cavity wall of the property without making ground contact.

In these cases it may be impossible to determine their presence until extensive timber damage occurs.

## Termite Damage!

Once in contact with the timber they can excavate it often leaving only a thin veneer on the outside.

If left undiscovered the economic species can cause many thousands of dollars damage and can be costly to treat.

Treatment costs vary and can range from two to five thousand dollars (or more) to treat.

## Subterranean Termite Ecology.

These termites are social insects usually living in underground nests.

Nests may be in trees or in rare instances they may be in above ground areas within the property. They tunnel underground to enter the building and then remain hidden within the timber making it very difficult to locate them.

Where timbers are concealed, as in most modern homes, it makes it even more difficult to locate their presence.

Especially if gardens have been built up around the home and termite barriers are either not in place or poorly maintained.

Termites form nests in all sorts of locations and they are usually not visible. There may be more than one nest on a property.



The diet of termites in the natural environment is the various hardwood and softwood species growing throughout Australia.

These same timbers are used in buildings.

Worker termites move out from their underground nest into surrounding areas where they obtain food and return to nurture the other casts of termites within the nest.

Termites are extremely sensitive to temperature, humidity and light and hence cannot move over ground like most insects.

They travel in mud encrusted tunnels to the source of food.

Detection of termites is usually by locating these mud tunnels rising from the ground into the affected structure. This takes an expert eye.

Termite barriers protect a building by forcing termites to slow themselves.

Termites can build mud tunnels around termite barriers to reach the timber above.

The presence of termite tracks or leads does not necessarily mean that termites have entered the timber though.

A clear view of walls and piers and easy access to the sub-floor means that detection should be fairly easy, however many styles of construction do not lend themselves to ready detection of termites.

The design of some properties such that they make the detection by a pest inspector difficult, if not impossible.

The tapping and probing of walls and internal timbers is an adjunct or additional means of detection of termites but is not as reliable as locating tracks.

The use of a moisture meter is a useful aid for determining the presence of termites concealed behind thin wall panels, but it only detects high levels of activity.

Older damage that has dried out will not be recorded, it may also provide false readings.

Termite tracks may be present in the ceiling space however some roofs of a low pitch and with the presence of sisalation, insulation, air conditioning ductwork and hot water services may prevent a full inspection of the timbers in these areas.

Therefore since foolproof and absolute certain detection is not possible the use of protective barriers and regular inspections is a necessary step in protecting timbers from termite attack.

## 8.0 BORERS OF DRY SEASONED TIMBERS

Borers are the larval stage of various species of beetle. The adult beetles lay their eggs within the timber.

The eggs hatch out into larvae (grubs) that bore through the timber.

The larvae may reside totally concealed within the timber for a period of several years before passing into a dormant pupal stage. Within the pupal case they metamorphose (change) into the adult beetle that cuts a hole in the outer surface of the timber to emerge, mate and lay further eggs to continue the cycle.

It is only through the presence of these emergence holes that their presence can be detected.

When floors are covered by carpets, tiling or other floor coverings and where no access or restricted access underfloor is available, it is not possible to determine whether borers are present or not.

This is particularly the case with the upper floors of a building.

### **Anobium punctatum borer (furniture beetle and Queensland pine borer).**

These beetles are responsible for instances of flooring collapse, often triggered by a heavy object being placed on the floor (or a person stepping on the affected area).

Pine timbers are favoured by this beetle and while the sapwood is preferred, the heartwood is also sometimes attacked.

Attack by this beetle is usually observed in timbers that have been in service for 10-20 years or more and mostly involves flooring and timber wall panelling.

The *frass* from the flight holes (faeces and chewed wood) is fine and gritty.

Wood attacked by these borers is often honeycombed.

### **Lyctus brunneus borer (powder post beetle).**

These borers only attack the sapwood of certain susceptible species of hardwood timber.

Since it is a requirement that the structural timbers contain no more than 25% Lyctus susceptible sapwood, these borers are not normally associated with structural damage.

Replacement of affected timbers is not recommended and treatment is not approved or required.

Powder post beetles mostly attack during the first 6-12 months of service life of timber.

As only the sapwood is destroyed, larger dimensional timbers (such as rafters, bearers and joists) in a house are seldom weakened significantly to cause collapse.

In small dimensional timbers (such as tiling and ceiling battens) the sapwood may be extensive, and its destruction may result in collapse.

Replacement of these timbers is the only option available.

### 9.0 TIMBER DECAY FUNGI

The fruiting bodies of wood decay fungi vary in size, shape and colour.

The type of fungi encountered by pest controllers usually reside in poorly ventilated subfloors, below wet areas of the home, exterior timbers and in areas that retain water in the soil.

The durability and type of timbers are factors along with the temperature and environment.

Destruction of affected timbers varies with the symptoms involved.

Removal of the moisture source usually alleviates the problem.

Fungal decay is attractive to termites and if the problem is not rectified it may well lead to future termite attack.

### 10.0 MOULD CLAUSE

Mildew and non wood decay fungi is commonly known as Mould and is not considered a Timber Pest.

However, Mould and their spores may cause health problems and allergic reactions such as asthma and dermatitis in some people.

**No inspection for Mould was carried out at the property and no report on the presence or absence of Mould is provided.**

If Mould is noted as present within the property and you are concerned as to the possible health risk resulting from its presence then you should seek advice from your Local Council, State or Commonwealth Health Department or a qualified expert such as an Industry Hygienist.

### 11.0 CONTACT THE INSPECTOR

Please feel free to contact the inspector who carried out this inspection.

Often it is very difficult to fully explain situations, problems, access difficulties or timber Pest activity and/or damage in a manner that is readily understandable by the reader.

Should you have any difficulty in understanding anything contained within this report then you should immediately contact the inspector and have the matter explained to you.

If you have any questions at all or require clarification then contact the inspector prior to acting on this report.

## 12.0 COMPLAINTS PROCEDURE

In the event of any dispute or claim arising out of, or relating to the Inspection or the Report, You must notify Us as soon as possible of the dispute or claim by email, fax or mail.

You must allow Us (which includes persons nominated by Us) to visit the property (which visit must occur within twenty eight (28) days of your notification to Us) and give Us full access in order that We may fully investigate the complaint. You will be provided with a written response to your dispute or claim within twenty eight (28) days of the date of the inspection.

If You are not satisfied with our response You must within twenty one (21) days of Your receipt of Our written response refer the matter to a Mediator nominated by Us from the Institute of Arbitrators and Mediators of Australia.

The cost of the Mediator will be borne equally by both parties or as agreed as part of the mediated settlement.

Should the dispute or claim not be resolved by mediation then the dispute or claim will proceed to arbitration.

The Institute of Arbitrators and Mediators of Australia will appoint an Arbitrator who will hear and resolve the dispute.

The arbitration, subject to any directions of Arbitrator, will proceed in the following manner:

(a) The parties must submit all written submissions and evidence to the Arbitrator within twenty one (21) days of the appointment of the Arbitrator; and (b) The arbitration will be held within twenty one (21) days of the Arbitrator receiving the written submissions.

The Arbitrator will make a decision determining the dispute or claim within twenty one (21) of the final day of the arbitration.

The Arbitrator may, as part of his determination, determine what costs, if any, each of the parties are to pay and the time by which the parties must be paid any settlement or costs.

The decision of the Arbitrator is final and binding on both parties. Should the Arbitrator order either party to pay any settlement amount or costs to the other party but not specify a time for payment then such payment shall be made within twenty one (21) days of the order.

In the event You do not comply with the above Complaints Procedure and commence litigation against Us then You agree to fully indemnify Us against any awards, costs, legal fees and expenses incurred by Us in having your litigation set aside or adjourned to permit the foregoing Complaints Procedure to complete.



Signed on behalf of The Property Inspectors Pty Ltd

Steve Reynolds

----- End Of Pest Report -----

**SAMPLE**