

# STANDARD VISUAL PRE PURCHASE TIMBER PEST INSPECTION REPORT

This Timber Pest Inspection Report has been performed in accordance with Australian standard AS4349.3-2010 The report is subject to the scope and limitations exclusions definitions and terms and conditions as defined within the Australian Standards

Property Address:	12 Raintree Road Templestowe
Client Name:	Nicole Pan
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Inspection Date:	12 <sup>th</sup> August 2015

This Pre-Purchase Standard Visual Pest Inspection Report (hereinafter called "the Report") is issued subject to the Scope, Limitations, Exclusions and Definitions of the inspection and report as set out in this document.

<u>IMPORTANT NOTE</u>: The clients acknowledge that unless stated otherwise. All recommendations or advice given in this report should be implemented immediately and should be implemented by either the vendor or purchaser. It is important that the client understands that termites can attack a property at any time. Although we cannot guarantee that termites will never attack the property reducing the risks reduces the chance of an attack. So the quicker the risk/s are reduced the less the chance there is of termites attacking the property. We accept no responsibility for any live termites found within a 28 day period after the date of this report if the client fails to adhere to any of the advice or recommendations given in this report.

This Summary is not the Report. The following Report must be read in full in conjunction with this Summary. If there is a discrepancy between the information provided in this Summary and that contained within the body of the Report, the information in the body of the Report shall override this Summary. Please note that the inspection covered only the readily accessible areas of the property. The inspection did not include those areas that were not readily accessible, obstructed or inaccessible at the time of the inspection. It is therefore highly recommended that a more invasive inspection to any area/s not inspected or not readily accessible at the time of the inspection be re-inspected before a purchasing decision is made.

So that there is no misunderstanding it is also recommended that the client takes the time to read the entire report and not just the observation points in the report.

If there is anything in the report that that client does not understand or requires more information on then, please do not hesitate to call the inspector who will be able to answer your questions before a purchasing decision is made



# 1.1 ACCESSIBILITY

Due to the level of accessibility for inspection including the presence of obstructions, the overall degree of risk of undetected Timber Pest Attack and Conditions conductive to Timber Pest Attack was considered to be EXTREMELY HIGH (see Section 5 of the Report)

#### 1.2 THIS PAGE IS A SUMMARY ONLY PLEASE READ THE ENTIRE REPORT

- Where there areas that could not be gained and Inspected Yes (see section 5.2 below)
- Active (live) Termites were observed at the time of the inspection in the areas that were inspected. (See Section 6.2 of the Report)
- In addition to this Report Installation or reinstatement of a Subterranean Termite Management Programme is considered Essential (See Section 6.3 of the Report).
- Evidence of Termite activity (including workings) and/or damage was observed in the areas that were inspected. (See Section 6.4 of the Report)
- Evidence of a possible previous Termite Management Programme was not observed (See Section 6.5 of the Report).
- The next inspection to detect any future Timber Pest Attack is recommended in 3 months (See Section 6.6 of the Report).
- Evidence of New Timbers was observed (see Section 6.7 of the Report)
- Evidence of Chemical Delignification damage was not observed (See Section 7 of the Report).
- Evidence of Fungal Decay activity and/or damage was observed (See Section 8 of the Report).
- Evidence of Wood Borer activity and/or damage was observed (See Section 9 of the Report).
- Evidence of Conditions Conductive to Timber Pest Attack was observed (See Section 10 of the Report).
- Areas found Conductive to Termite Infestation that Require Rectification was observed (See Section 11 of the Report)
- Evidence of Safety Hazards caused by Timber Pest Attack was observed (See Section 12 of the Report)
- Terms & Conditions (See Section 16 of the report)



### 2. CONCLUSION

#### In the opinion of this Timber Pest Detection Consultant

That following the inspection of the surface work in the readily accessible areas of the property, the overall susceptibility of the building inspected to timber pest infestation, assuming the building has been maintained during all its life not to attract or support timber pest infestation, was considered:

EXTREMELY HIGH

It should be noted that even if a risk factor is high, this is not meant to deter a purchaser from purchasing the property; it is just to make them aware that increased vigilance is warranted and any recommendations regarding reducing conditions or frequency of inspections should be headed by any property owner. Often, by reducing or eliminating some or all conditions, the risk factor may be lowered

It is strongly recommended that:-

- a) A pest management consultant be engaged to manage any reported timber pest activity and provide and ongoing timber pest management plan and system.
- **b)** For all reported evidence of timber pest workings or damage a further investigation should be conducted to establish the extent of any hidden activity and damage not identified during this inspection.
- c) That all reported conditions conductive to timber pest attack be removed.
- d) That a further inspection be conducted of areas identified in Sections 5 that were not readily accessible and or inaccessible or obstructed once access has been provided or the obstruction removed

It is important that the Client appreciates that timber pest activity present at the time of the inspection that is not readily detectable or atypical and may not be reported and that Timber Pest Activity not present or not readily detectable at the time of inspection may become readily detectable at a later date or may only be detectable to an inspection process more invasive in scope.

### **3. SERVICE REQUESTED BY CLIENT**

The service requested by the client is a Standard Timber Pest Inspection report. To avoid any misunderstanding as to the type of inspection we will carry out and as to the scope of the resulting report you should immediately read, sign and return a copy of the pre-purchase agreement to us. If you fail to return the copy to us and do not cancel the requested inspection then you agree that this document forms the agreement between you and us. We will carry out the inspection and report as ordered by you in accordance with this agreement and you agree to pay for the inspection on delivery of the report.

#### 3.1 PURPOSE

The purpose of this inspection is to assist the client to identify and understand any Timber Pest issues observed at the time of the inspection. Please Note: this is not a structural report

### **3.2 SCOPE OF INSPECTION**

SCOPE OF INSPECTION This Report only deals with the detection or non-detection of Timber Pest Attack and Conditions Conducive to Timber Pest Attack discernible at the time of inspection. The inspection was limited to the Readily Accessible Areas of the Building & Site (see Note below) and was based on a visual examination of surface work (excluding furniture and stored items), and the carrying out of Tests.

Note. With strata and company title properties, the inspection was limited to the interior and the immediate exterior of the particular residence inspected. Common property was not inspected.



### 4. PROPERTY INFORMATION

#### **4.1 ORIENTATION**

To establish the way in which the property was viewed. Note: for the purpose of this report the façade of the building contains the main front door.

The façade of the building faces West

#### **4.2 RESIDENTIAL BUILDING TYPE**

The Type of building is a Detached Property

4.3 NUMBER OF STORIES

#### The Dwelling is a Single Storey

Note: where a dwelling is high set and has had room's built-in the sub floor area, the numbers of stories are counted from the original lowest living area floor.

### 4.4 SITE FACTORS

The building is sited towards the front of an average sized Sloping block and what appears to be a poorly drained block of land at the time of the inspection

### **4.5 OCCUPANCY STATUS**

At the time of the inspection the Property was Furnished

#### 4.6 PRIMARY METHOD OF CONSTRUCTION

Main Building floor Construction- Suspended Timber Framed

Main property foundations- Concrete Stumps

Main Building Wall Construction- Brick Veneer

Main Roof Construction- Timber Framed with Tiles

Internal Timber Elements- Internal joinery including Flooring

External Timber Elements- Pergola, Veranda, Decking, Retaining Walls, Fences, Posts

#### 5. ACCESSIBILTY

This section of the report describes which areas of the property were included in the scope of the inspection and what parts of those areas the timber pest detection consultant was unable to inspect and why. The timber pest detection consultant has included an assessment of the risk of there being structural defects or damage in areas unable to be inspected because they were inaccessible or restricted. The client should give careful consideration to the need or otherwise of further inspection of restricted or inaccessible areas.

# 5.1 READILY ACCESSIBLE AREAS INSPECTED

Unless specified in writing, the inspection only covered the readily Accessible Areas of the building and Site. The inspector did not include areas which were inaccessible was not readily accessible or obstructed at the time of the inspection. Areas which were not normally accessible and were not inspected include- but are not limited to- inside wall structures (cavities, voids, etc.) the interior of flat or low pitched roofing or beneath a suspended floor filled with earth.

The inspection covered the readily accessible parts of the following Areas:

Building Interior, Building Exterior, Roof space, Roof Exterior, Subfloor Space and Site



#### 5.2 AREAS NOT INSPECTED

The inspection did not include the following areas because they were not readily accessible or inaccessible or obstructed at the time of the inspection. As it is possible that these uninspected areas may show evidence of timber pest activity and or damage, we strongly recommend that a further inspection be conducted once these obstructions have been removed. Where the obstruction is of a permanent nature, i.e. part of the building structure or fitted flooring coverings, a more invasive inspection of these areas is recommended. An invasive inspection may require actions such as the cutting of traps in floors, removal of wall linings, lifting of floor coverings, removal of insulation and the like. Underground inspections are beyond the scope of this standard. For example, house stumps below ground level, tree roots, soil side of timber retaining walls and parts of fence posts and other timbers buried below ground level are excluded from this standard.

- No inspection was carried out to the soil side of any timber retaining wall or garden timbers. Any un-treated timbers used for the construction of timber retaining walls or other garden features are known to attract termites and these timbers are more susceptible to fugal decay. <u>Recommendations</u>: replaced non treated timbers with less susceptible materials
- No inspection was carried out to the cavity areas under the front veranda landing area due to there being no access into this area. <u>Recommendations</u>: A more invasive inspection to this area is carried out as the cavity may be concealing timber pest activity and or damage. Where this is impractical it is then recommended that a termite management program as per AS 3660 is undertaken.

### 5.2.1 OBSTRUCTIONS TO AREAS INSPECTED

### 5.2.1.1 Building Interior

The Timber Pest Detection Consultant did not move or remove any ceilings, wall coverings, floor coverings (including carpeting and wooden floorboards), and furnishing, equipment, appliances, and pictures, items hanging over door frames or other household goods including personal items in cupboards, items placed on window sills. In an occupied property, furnishings or household items may be concealing evidence of timber pest attack or damage which may only be revealed when the items are moved or removed. A further inspection of the vacant property is strongly recommended in this case.

The following part or parts of the building interior were not accessible or inaccessible or obstructed at the time of the inspection because of;-

- Floor coverings were present and obstructed the inspection to the upper side of the flooring. Floor coverings can conceal timber pest activity and or damage and it is not until the floor covering/s have been removed that possible activity and or damage is found
- Internal Wall linings are obstructing a visual inspection to the wall framing timbers. It is important that you understand that sometimes timber pest damage may exist to concealed cavity wall timbers and cannot not be identified at the time of the inspection. Damaged framing timbers may only be found when wall lining/s are removed due to renovation works or some other reason.
- Furniture, stored items and personnel items were present to various rooms and cupboards throughout the property which restricted, or obstructed the inspection. Stored items should be removed to allow a more complete inspection to be carried out. Active termites or other timber damaging pest may be present and not detected in the areas were the inspection was limited, obstructed or access could not be gained. <u>Recommendations:</u> A re-inspection of the property is recommended once all furniture and stored items have been removed

## 5.2.1.2 Building Exterior, Roof Exterior, Garage and Site

The Timber Pest Detection Consultant did not move or remove any obstructions such as wall cladding, awnings, trellis, earth, plants, bushes, foliage, stored materials or rubbish. Due to the 'secretive' nature of timber pests, it is possible that hidden damage may exist in concealed areas e.g. wall framing. Damage may only be found when the obstruction is removed. In the case of buildings constructed on concrete slabs, if the edges of the slab or any weepholes or vents at the base of the external walls are concealed by pavement, gardens, lawn or landscaping then it is possible for termites to gain undetected entry into the building. The building of gardens or planting of shrubs close to the perimeter of the building can promote and conceal termite entry points. The storage of cellulose materials such as building materials and firewood in close proximity to the ground or building may encourage termite activity



The Following part or parts of the building exterior were not readily accessible or inaccessible or obstructed at the time of the inspection because of:-

• Only a visual inspection was carried out to cladding above 3.6 meters due to OH&S. When working above 3.6 meters. Specialised equipment is required such as an elevated platform, a safety harness that can be attached to a suitable anchor point or scaffolding.

### 5.2.1.3 Roof Space

Obstructions such as roofing, stored articles, thermal insulation, sarking and pipe/duct work may be concealing evidence of timber pest activity and or damage which may only be revealed when the obstructions are moved or removed. Also bodily access should be provided to the interior of all accessible roof spaces. In accordance with Australian Standard AS 4393 the minimum is a 400mm by 500mm access manhole. The removal of thermal insulation including sarking and boarding is not within the scope of AS 4349.3. If there is no access to the roof void then access should be gained to allow for a more complete report to be submitted. The inspector is willing to return to the property and carry out a full reinspection of the roof void for a fee once the obstruction/s have been removed or access has been provided

The following part or parts of the roof space were not accessible or inaccessible or obstructed at the time of the inspection because of: -

 Visual inspection to the roof void was limited due thermal insulation covering the sides of the ceiling joists to the main property. Thermal insulation can conceal timber pest activity and or damage. A further more invasive inspection is recommended. Removal of insulation is not within the scope of a standard visual inspection report.

# 5.2.1.4 Subfloor Space

Subfloor areas should be kept free from all vegetation (including tree stumps and roots) and other cellulose material which may encourage timber pest activity. Also, storage of materials in subfloor areas is not recommended as it reduces ventilation and makes inspection difficult. Obstructions may be concealing evidence of timber pest attack and or damage which may only be revealed when the obstructions are moved or removed. Please note the inspector is willing to return to the property and carry out a full re-inspection of the subfloor area for a fee once the obstruction/s have been removed or access has been provided

Bodily access should be provided to all accessible sub floor areas. In accordance with Australian Standard AS 4349.3 the minimum is a 500mm x 400mm access manhole. If the subfloor has been sprayed for subterranean termites or if the area is susceptible to mould growth appropriate health precautions must be followed before entering the area. Also special care should be taken not to disturb the treated soil.

The following part or parts of the subfloor space were not accessible or inaccessible or obstructed at the time of the inspection because of: -

Inspection to the subfloor area was limited due to heights restrictions preventing access under the dining room
area. Height limitations is very hard to overcome so we recommend that a number of the internal floorboards are
removed so that an inspection from within the property can be carried out from within the property or carry out
annual termite inspections. Please note if termites do attack the property at some stage then the flooring will
need to be lifted in order to get the chemical to all areas

If we were unable to gain access to the entire sub floor area/s then it should be noted that the underfloor area is the prime area for 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. This may be achieved by cutting mantraps or gaining access through foundation walls or if applicable removing base boards as appropriate. The lifting of floor coverings (if Present) in an attempt to located 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 qualified carpenter or builder should be engaged to cut traps. Please note sometimes even after cutting traps the inspector may still not be able to gain access due to height or other restrictions that cannot been seen until the trap/s have been cut.

### 5.2.1.5 Termite Shields (Ant Caps)

Termite shields should be in good order and condition so termite workings are exposed and visible. This help stop termites gaining undetected entry. Joins in the shielding should have been soldered during the installation. Whenever it is observed that the joins in the shielding have not been soldered then the shielding must be reported as inadequate. It may



be possible for a builder to repair the shielding. If not, a chemical treated zone may need to be installed to deter termites from gaining concealed access to the building. Missing, damaged or poor shields increase the risk of termite infestation.

We claim no expertise in building. However, in our opinion the termite shields appear to be

• There are no termite shields installed. Please note although they do not prevent termite attack but they do aid in their detection. If the property has timber stumps termites can gain entry into the property via the centres of these stumps undetected. Installing termite shields once the property has been built can be expensive and may cause cracking to internal walls and or ceiling as the floor bearers need to be jacked up off the stumps so the shields can be installed to the top of the stumps. <u>Recommendations</u> carry out annual termite inspections

#### 5.2.1.6 Retaining Walls and Fences

The Timber Pest Detection Consultant cannot trespass on adjoining property to inspect retaining walls and fences. Some defects to retaining walls and fences may only be visible from the adjoining property. Timber retaining walls and other garden bed timbers can and do attract termites. Termites often build nest behind un-treated timbers used to construct retaining walls. We highly recommend that all timber retaining walls and other garden bed timbers be replaced with less susceptible materials

The following part or areas were not readily accessible or inaccessible or obstructed at the time of the inspection because of:-

- Only the exposed timbers to the fencing base boards, palings and posts were carried out. Fencing posts and base boards buried below the surface of the ground or covered by soil and or vegetation were not inspected. <u>Recommendations</u>: A gap of at least 75mm should be maintained between the fencing baseboards and ground to help prevent termites from gaining direct concealed entry into these timbers
- Only the exposed timbers to the retaining wall/s were inspected. No inspection was carried out to the soil side of
  the walls as this is not within the scope of a standard timber inspection. Termites are known to build their nest/s
  in behind these walls and use the walls as a food source. <u>Recommendations:</u> Any un-treated timbers used in the
  construction of retaining walls should be replaced with less susceptible/conductive materials has untreated
  timbers are also more susceptible to fungal decay

# 5.2.1.7 Outbuilding

• There are no outbuildings on this property

#### 5.2.1.8 Common Property

• Not applicable due to the property not being a common property

In the case of strata and company title properties or other equivalent, if the inspection was limited to assessing the interior of a particular unit or lot, the client may have additional liability for timber pest activity and damage in the common property.

# 5.3 TIMBER PEST RISK ASSESSMENT BASED ON ACCESSIBLITY

Due to the level of accessibility for inspection including the presence of obstructions, the overall degree of risk of undetected timber pest attack and conditions conductive to timber pest attack was considered EXTREMELY HIGH

RECOMMENDATIONS: where the risk is considered "Moderate" or "Moderate to High" or "High", a further inspection is strongly recommended of areas that were not readily accessible and of inaccessible or obstructed areas once access has been provided or the obstruction removed. This may require the moving, lifting or removal of obstructions such as floor coverings, furniture, stored items, foliage and insulation. In some instances, it may also require the removal of ceiling and wall linings, and the cutting of traps and access holes. For further advice consult your Timber Pest Detection Consultant.



# 6. TERMITES

# 6.1 IMPORTANT NOTES ON TERMITES

As a delay may exist between the time of an attack and the appearance of tell-tale signs associated with the attack, it is possible that termite activity and damage exists though not discernible at the time of inspection.

Due to the secretive nature of termite behaviour and the fact that no active termites were observed despite the best endeavours of our Timber Pest Detection Consultant at the time of the inspection should not be taken as a guarantee that no termites were present. Termites may be present but undetectable or may have temporarily vacated at the time of the inspection.

Termites are capable of extensive activity and damage over a short period where the conditions are conductive to such activity. The client should be aware that significant damage and activity can occur in a period as short as a few weeks. The client is encouraged therefore to implement recommendations in this Report promptly to reduce the risk of such activity.

General Description of Attack: Timber hollowed beneath; some cracking at the surface of timber; earthen channels present; pale faecal spots present.

Identification: Identification of termite genus and species is essential if the correct management programme is to be adopted. Whilst the consultant has identified the termite from a visual characteristic of the solder caste, a positive identification can only be achieved by laboratory analysis by an entomologist.

Treatment: After discovery of the termite activity, it is imperative that the species of termite is accurately identified before costly (and sometimes unnecessary or inappropriate) methods of treatment are initiated. Only economically important species which are known to attack timber structures should be treated.

In the case of economically important species, it is important that the termite workings are not further disturbed until the proposed method of control has been determined by a licensed pest control operator. Premature attempts to repair or replace infested timber may cause the termites to withdraw from the area temporarily, thereby hindering effective treatment. Any repair or replacement of infested timber should be carried out after the appropriate treatment has been completed.

Where evidence of active termites is detected within a building or within 30 meters of any building on the property, it must always be assumed that the termites may also be active in the areas of the property not inspected. Accordingly, where the termites are known to be economic significance, a further (more invasive) inspection is strongly recommended of areas which were inaccessible, not readily accessible or obstructed at the time of the inspection.

Where evidence of inactive termites is located within the building it is possible that termites are still active in areas of the property not inspected and they may continue to cause damage. A further more invasive inspection is strongly recommended of the areas which were inaccessible, not readily accessible or obstructed at the time of the inspection

Where evidence of an inactive termite infestation exists, it is not possible, without 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

Where evidence of termite attack exists to any trees or tree stumps a more conclusive search should be undertaken. This may require the tree or stumps to be drilled to determine the existence of a termite nest. In addition, the soundness and stability of any trees identified as being affected by the termite attack should be confirmed. For further advice consult your Timber Pest Detection Consultant.

Previous Treatments where evidence of a possible termite treatment was located, the client should obtain and keep on file all relevant documents pertaining to the extent of the treatment, any service warranties and advise in regards to the building owner's obligation to maintain the treatment and/or barrier. If evidence of a previous treatment of termite infestation is noted, and appropriate documentation is not available, the client must assume that the termite infestation may still be active in areas of the property, which were inaccessible, not readily accessible or obstructed at the time of the inspection. Accordingly, a re-treatment may be required. For further advice consult your Timber Pest Detection Consultant.

Frequency of Future Inspections Australian Standards AS3660 recognises that regular inspections will not prevent termite attack, but may help in the detection of termite activity. Early detection will allow remedial treatment to be commenced sooner and damage to be minimised.



Inspections at intervals not exceeding twelve (12) months are recommended, where the termite risk is high or the building type susceptible to termite attack, more frequent inspections (3-6 months) should be undertaken, For further advice consult your Timber Pest Detection Consultant.

Damp wood termites

Damp wood termites do not have large centralised nests but live as small, independent groups in diffuse networks of galleries in the wood they feed upon, most commonly the damp, decaying parts of tree stumps. Colonies can exist without any contact with the ground and obtain the moisture they require from the timber they live in. Damp wood termites can be found in power poles, weathered external timbers and decaying (rotting) Timber Stumps However, they are rarely responsible for significant economic damage to sound, seasoned timber in man-made structures.

#### **6.2 ACTIVE TERMITE OBSERVATIONS**

At the time of the inspection were active (live) Termites observed under the test conditions outlined in section 2 of this report

- Live termites were observed but not limited to the areas listed below.
  - Termites were found in subfloor inside mud tubes running up a stump under the kitchen/lounge room area. <u>Recommend:</u> that a termite treatment in accordance with AS 3660 is carried out immediately. Please call the inspector that carried out this inspection. The inspectors name and number will be found at the bottom of this report
- The species of termite found is believed to be Coptotermes acinaciformis and are capable of causing extensive damage. <u>Recommend</u> that a treatment in accordance with AS 3660 is carried out immediately to help prevent further damage

# 6.3 SUBTERRANEAN TERMITE MANAGEMENT PROGRAMME RECOMMENDATION

As with most dwellings in Victoria a termite management programme is considered essential. This may involve a chemical soil treatment to the exterior and/or interior of the dwelling, environmental modification, the installation, reinstatement or repair of physical barriers or the installation of a monitoring system designed to intercept and aggregate termites for treatment. A management programme should also include regular inspections by a licensed pest controller.

• I highly recommend that a termite barrier as per AS 3660 is installed immediately to help protect the property from any further damage to the property. Please call the consultant for advice on 0425-742-270

### 6.4 TERMITE MUDDING AND/OR DAMAGE OBSERVATIONS

At the time of the inspection was there any evidence of Termite workings and/or damage observed or revealed under the test conditions outlined in section 2 of this report.

- Evidence of termite workings and damage was found but not limited to the following area/s:
  - To an old piece of retaining wall timber,
  - Scrap timbers in the subfloor,
  - Old decking bearer under the deck and to various pieces of firewood under the deck.
- Evidence of termite mud tubes were observed in the subfloor area under the subfloor on a stump, floor bearer, floor joist and the bottom wall plate. Mud leads are constructed by subterranean termites that allow them to travel over obstacles and surfaces while remaining protected from the outside environment. These are typically constructed from a "mud like" material of soil, faeces and re-worked building materials. <u>Recommendations:</u> if there is no evidence of a termite treatment being carried out then a treatment in accordance with AS 3660 should be carried out immediately
- You also need to be made aware that termite damage may exist to concealed areas such as the wall framing timbers and ceiling timbers and could not be identified at the time of the inspection unless a further more invasive inspection is carried out such as the removal of wall linings or insulation. Permission from the vendor would be required and the appropriate qualified person/s should be engaged to carry out the removal of wall linings, floor boards, and or the cutting of access points



Important note: if the client requests a more invasive inspection they need to understand that when a hole or holes are cut through internal plasterboard walls or flooring to selected areas, only that or those immediate area can be inspected for evidence of active timber pests or timber pest damage. Having an invasive inspection to selective areas does not always show evidence of timber pest activity and or damage and there can be no assurances that active timber pests or damage does not exist to other concealed areas of the property. Damage may only be found when carrying out renovations or for some other reason. Please keep this in mind when making a purchasing decision. It is also the clients' responsibility to arrange for the appropriate qualified tradesmen to carry out any work that requires the removal of plasterboard or the cutting of traps into the flooring timbers. There is also that possibility that even after having trap door/s cut through the floor/s, access may still be very limited due to unforseen obstructions such as pipework and or height restrictions

This report will not state the full extent of any timber pest damage. If 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 floor coverings, furniture, wall lining, cladding or insulation is removed to reveal previously concealed timbers. An invasive Timber Pest Inspection 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

Please Note: If termite damage and or working were evident at the time of the inspection and there is no evidence that a termite management program has been carried out in accordance with AS 3660 then we strongly recommend that you to have a termite management program carried out in accordance with AS 3660 this is considered to be essential and should be carried out as soon as possible to help reduce the risk of further damage and costs. You should also be aware that there may be termite damage to concealed timbers such as cavity wall timbers and may only be found once the wall linings or floor coverings have been removed

# 6.5 EVIDENCE OF PREVIOUS TERMITE MANAGEMENT PROGRAM

Evidence of a possible previous Termite management Programme at the time of the inspection.

If a termite treatment has been carried out or a termite system has been installed then further information on the type of termite protection installed and its life expectancy, maintenance and warranties should be sought from the vendor

WARNING: If evidence of drill holes in concrete paths or paving or evidence of trenching / scarifying of the soil to the subfloor interior perimeter foundations was found or any other signs of a possible previous treatment are reported then this was possibly due to an earlier termite attack. Extensive structural damage may exist in concealed areas. You should have an invasive inspection carried out and have a builder or structural engineer determine the full extent of any timber damage /if any and the estimated cost of repairs as the possible timber damage may only be found when wall linings etc. are removed.

It is not always easy to determine if a property has been treated for subterranean termites particularly is such a treatment was carried out during construction or the evidence of a treatment has been concealed. Treatments may consist of physical or chemical barriers or a combination of both. Where no visible evidence of a treatment was found, it does not necessarily mean that the property was not or has not been treated. Some signs of treatment are not readily visible during an inspection. Where any evidence of a termite treatment was noted, and the treatment was not carried out by this firm, we can give no assurances with regards to work performed or other work carried out as a result of timber pest attack. Further enquiries should be made and any documentation obtained to verify work carried out. Where no evidence of a pre-construction treatment is noted (or any subsequent treatment), any prospective purchaser should make their own enquiries to determine what protective measures were taken during the construction of the property to protect against termite attack.

#### **Reticulation Systems**

This is a flexible system that uses pipes which are installed around the entire concrete slab edges of the property. The pipework has emitters fabricated into the pipe. These emitters distribute chemical evenly at measured rate. The chemical levels are topped up as per the installer's recommendations to maintain effective barrier. Important note it is imperative to have yearly termite inspections in order to monitor your home.

• There is no evidence of a previous termite management programme being carried out.



### 6.6 FREQUENCY OF FUTURE INSPECTIONS RECOMMENDATION

The next inspection to detect any future activity is recommended in 3 months and thereafter as recommended by your Timber Pest Inspector. Please note should you suspect evidence of termite activity between the regular 6-12 monthly inspections it is very important that you contact a licensed pest management company immediately to carry out a Termite inspection to ascertain what type of treatment needs to be carried out should the need arise.

### 6.7 EVIDENCE OF NEW TIMBERS

If evidence of timber replacement is noted then this replacement may be due to timber pest attack or some other factor. We recommend if you are using this report to purchase this property, further enquiries should be made to determine the reason for the timber replacement from the vendor.

### 6.7.1 OBSERVATIONS

Evidence of new timber(s) at the time of the inspection.

• Evidence of new timbers was found to the following areas: New perimeter fencing timbers around the property, various new retaining wall timbers, a new bearer under the deck near the front door and new flooring in various areas. <u>Recommendations:</u> enquiries should be made to determine the reason for the timber replacement from the vendor.

### 7. CHEMICAL DELIGNIFICATION

### 7.1 GENERAL INFORMATION

General Description of Attack Surface of timber appears very hairy; and wood and 'hairs' separate.

Economic Significance: Chemical Delignification of wood in service is only rarely encountered and then only in certain areas. Small dimensional timber members such as roof tiling battens may collapse when the wood becomes delignificated. However, in large dimensional timber members such as rafters, bearers and joists, delignification takes many years to affect the strength of timbers to the point of collapse.

Where evidence of Chemical Delignification exists, competent advise (e.g. from a licensed or registered building contractor) should be sought to determine the extent of any structural damage and as to the need or otherwise for rectification or repair work.

### 7.2 OBSERVATIONS

Evidence of Chemical Delignification damage at the time of the inspection

#### • No evidence of chemical delignification was found to the areas inspected

#### 8. FUNGAL DECAY

# **8.1 GENERAL INFORMATION**

General description of attack decaying wood contains sufficient moisture to retain its original shape and may have sufficient strength to withstand normal loads. In contrast decayed wood is reduced both in moisture content and size as indicated by cracking either along or across the grain or fibres coming apart in a stringy manner. Decayed wood will have undergone considerable strength reduction.

Economic Significance Fungal Decay can cause at one extreme, Structural failure of the affected timber, and at the other, purely superficial surface damage. The most critical determination is that of which timber is affected and decaying, because decay will most likely spread (unless sources of moisture are quickly removed). Affected and decaying timber may warrant timber replacement, but the rot should not spread unless a new moisture source becomes available in that area.

Where evidence of decayed timber exists, competent advice (e.g. from a licensed or registered building contractor) should be sought to remove the condition(s) conductive to attack, and to determine the extent of any structural damage, and as to the need or otherwise for rectification or repair work

Where the full extent of damage or the overall condition of the timber is undetermined a further inspection is strongly recommended by a competent person (e.g. from a licensed or registered building contractor). This may require monitoring



of the timber over a period of time and include the assessment of conditions conductive to attack in different weather conditions (e.g. to determine the adequacy of existing drainage).

Management Programme the client to remove any conditions conductive to attack (e.g. lack of ventilation or the presence of excessive moisture). Regular inspections are recommended at intervals not exceeding 12 months. For further advice consult your Timber Pest Detection Consultant.

## **8.2 OBSERVATIONS**

Evidence of Fungal Decay damage. It is recommended that any timbers affected by fungal decay are replaced and the moisture issues causing the problem be rectified. Please note most of the time fungal decay is caused through lack of general maintenance or using timbers that are not for made for outdoor use. You should seek advice from either a licensed builder or qualified carpenter to have the effected timber/s replaced.

- Varying degrees of decay was observed to the fascia boards in areas
- Moderate-heavy fungal decay was observed to the retaining walls in areas
- Light-moderate fungal decay was observed to the garage access door frame
- Moderate-heavy fungal decay was observed to the flooring timbers under the shower
- Moderate-heavy fungal decay was observed to the handrails in areas on the deck
- Moderate-heavy fungal decay was observed to the pergola roof beam at the top at the back of the pergola
- · Moderate-heavy fungal decay was observed to the veranda post at the bottom in various posts
- Varying degrees of decay was noted to various scrap timbers lying on the ground throughout the subfloor area. Scrap/loose timbers lying on the ground in the subfloor areas are a food source for termites and we recommend that these are removed immediately

### 9. WOOD BORERS

# 9.1 GENERAL INFORMATION

General Description of Attack As the attack proceeds, the borer larvae eat through the wood leaving a dust called "frass" Ejection of the frass occurs through the adult beetle's flight (exit) and it is usually present beneath any timber that has been attacked. The presence of frass however, does not indicate whether the attack is active or not. Borer larvae cannot be sighted unless the susceptible timber is broken open.

IMPORTANT NOTE: As a delay may exist between the time of an attack and the appearance of tell-tale signs associated with the attack, it is possible that borer activity and damage exists though not discernible at the time of the inspection.

Economic Significance Evidence of borer activity is rarely cause for alarm, but rather for careful consideration of three main points, namely the identification of the particular borer responsible, whether the infestation is still active and the extent of the damage. Full consideration should be given to each of these items before any action is taken.

The following wood borer cause damage most frequently encountered by building owners.

The Lyctid Borer The most common Lyctid borer in Australia is Lyctus brunneus (powder post beetle). Attack usually takes place during the first six to twelve months of the service life of timber. However the powder post beetle is not considered a significant pest of timber and treatment of infestation is not usually required. As only the sapwood of certain hardwoods is destroyed, larger dimensional timbers (such as rafters, bearers, and joists) in a building 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 cause collapse. This may require the support or replacement of the affected



battens. Competent advise (e.g. from a licensed or registered building contractor) should be sought to determine the extent of any structural damage, and as to the need or otherwise for rectification or repair work.

The Anobiid Borer There is many different species of Anobiid borer; the most frequently encountered being the Anobium punctatum (furniture beetle) and Calymmaderus incisus (Queensland pine beetle). Attack mainly occurs to softwoods especially pine timbers such as floorboards that have been in service for at least 10 years. Should any structural timbers be attacked by Anobiid borers it is often difficult to determine what extent the borer damage has weakened such timbers and replacement is often the only way of ensuring safety from the timber collapsing

In the case of Anobiid borers, once an attack is initiated it is unlikely to cease or die out of its own accord without some sort of eradication treatment. Therefore, unless proof of treatment is provided, evidence of an attack must always be considered active. Although a chemical treatment is an option, replacement of infested timbers with non-susceptible, or treated timber, is the most effective method of treatment. Before any option is considered, competent advice (e.g. from a licensed or registered building contractor should be sought to determine the extent of any structural damage, and as to the need or otherwise for rectification or repair work.

In other cases, a further (more invasive) investigation id strongly recommended to determine whether infestation is still active and to positively identify the borer species responsible for the attack. Seek further advice from your Timber Pest Detection Consultant

Management Programme, wherever practical remove any conditions that are conductive to attack (e.g. Anobium borer thrive in badly ventilated subfloor areas). Regular inspections are recommended at intervals not exceeding 12 months. For further advice consult you Timber Pest Detection Consultant.

# 9.2 OBSERVATIONS

Evidence of wood borer activity and/or damage under test conditions at the time of the inspection in the areas that were able to be accessed and inspected. The client also needs to be made aware that evidence of borer damage is normally identified by the damage or frass to the surface of the effected timbers. Sometimes borer activity and or damage may be deep within the timbers themselves and cannot be identified at the time of the inspection. Only a more invasive inspection (breaking the timber/s open) will reveal possibly activity and or damage

• Light Lyctid borer damage was found to a joist just inside the subfloor access door on the left hand side.

#### **10. CONDITIONS CONDUCTIVE TO TIMBER PEST ATTACK**

Evidence of conditions conductive to Timber Pest Attack was observed under test conditions at the time of inspection

#### 10.1 IMPORTANT NOTE

The Timber Pest Detection Consultant sought evidence of noticeable building deficiencies or environmental factors that may contribute to the presence of timber pests. Competent advice (e.g. from a licensed or registered building or plumbing contractor) should be obtained in regard to removing any conditions conductive to timber pest attack and as to the need or otherwise for rectification or repair work.

### 10.2 LACK OF ADEQUATE SUBFLOOR VENTILATION

### 10.2.1 GENERAL INFORMATION

Inadequate ventilation provides a condition suitable for timber pest infestation, for example, subterranean termites thrive in damp, humid conditions typical of those provided in a poorly ventilated subfloor space. Where necessary, competent advice (e.g. from a licensed or registered building contractor) should be obtained in regard to providing adequate ventilation. 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 the brick work. They should be clean and free flowing. Covering the weep holes in part or in whole may allow undetected termite entry.

# **10.2.2 OBSERVATIONS**

Evidence of inadequate ventilation at the time of the inspection

• The subfloor bearers are running across the back of the subfloor vents which is restricting air flow into the sub floor area. <u>Recommend</u> you seek the advice of a licensed builder to see if it is possible to improve the air flow into the sub floor area

# 10.2.3 WEEP HOLES TO EXTERNAL WALLS

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 the brick work. They should be clean and free flowing. Covering the weep holes in part or in whole may allow undetected termite entry.

• Not Applicable due to the property being a suspended timber framed construction

# 10.3 THE PRESENCE OF EXCESSIVE MOISTURE

# 10.3.1 GENERAL INFORMATION

In many cases the presence of excessive moisture is directly related to the ventilation limitations and the resultant high humidity. Also, plumbing, oversights and defects such as leaking drains or taps will provide a microclimate conductive to timber pest attack. Other concerns that cause excessive moisture build up in or around a property are, leaks from storm water disposal systems, Missing guttering and or downpipes, downpipes discharging straight to the ground, poor subfloor and or surrounding site drainage, absent or ineffective moisture barriers, leaks through damp-proof courses or flashings, plumbing leaks, leaks through waterproofing membranes, water tanks with either no overflow attached or the overflow running straight to the ground, blocked drains and or guttering, hot water system and air conditioning system overflows, grey water outlets, driveways, pathways and the surrounding garden areas that slope towards the property.

The presence of dampness (including moisture) is not always consistent, as the prevailing and recent weather conditions at the time an inspection is carried out may affect the detection of damp problems. The absence of any dampness at the time of inspection does not necessarily mean the building will not experience some damp problems in other weather conditions. Likewise, whether or not services have been used for some time prior to an inspection being carried out will affect the detection of dampness.

Importantly, precipitation at or near the time of inspection does not necessarily guarantee that a damp problem will automatically be evident due to such circumstances as prevailing wind conditions or intensity of rainfall.

Where necessary, competent advice (e.g. from a licensed or registered plumbing contractor) should be obtained to determine the adequacy of existing drainage and remove any conditions conductive to the presence of excessive moisture. The building may need to be monitored over a period of time to detect or confirm a damp problem. Excessive moisture can help to create conditions conductive to timber pests including termites and any moisture problems should be rectified to as soon as possible

NOTE: It is very important that regular checks are made to all external water tanks. You should look for leaks around the base of the tank or to any connecting pipe work it is especially important to inspect those tanks that are situated close to the main property or to any outbuildings external walls. Termites require moisture in their environment to survive and having leaking tanks and or pipe work could result in these areas becoming highly conducive to termites. We highly recommend that should find that any tank/s or any connecting pipe work is leaking then you should acquire the services of a licensed plumber and have any leaks repaired immediately.



## **10.3.2 OBSERVATIONS**

The weather conditions prevailing at the time of the inspection was Fine

Evidence of excessive moisture or the potential for excessive moisture at the time of the inspection. Please note any items listed below should be repaired, replaced or modified immediately by a gualified licensed plumber or the appropriate qualified person. Moisture is a condition highly conductive to timber pests which include termites

- Rusted out downpipe/s should be replaced immediately. Having moisture building up around the external areas • of any structure will help to create conditions conductive to timber pests including termites. Recommend that you seek advice from a licensed plumber immediately
- Rusted out guttering should be replaced immediately. Having moisture building up around the external areas of • any structure. This in turn will help to create conditions conductive to timber pests including termites. Recommend that you seek advice from a licensed plumber immediately
- Leaking downpipes should be repaired immediately in order to stop rain water from building up around the external areas of the any structure. This in turn can create ideal conditions conductive to timber pests including termites. Recommend that you seek the advice of a licensed plumber to rectify this problem immediately
- Leaking guttering should be repaired immediately in order to stop rain water from building up around the external areas of the any structure. This in turn can create ideal conditions conductive to timber pests including termites. Recommend that you seek the advice of a licensed plumber to rectify this problem immediately
- Moisture damage to the cupboard under the kitchen sink. Recommend that you seek advice from a licensed plumber to ascertain were the moisture is coming from and rectify immediately
- Moisture damage to the ceiling in the garage. <u>Recommend</u> that you seek advice from a licensed plumber to ascertain were the moisture is coming from and rectify immediately
- Site Drainage needs to be improved. Recommend that you seek advice from either a licensed plumber or drainage contractor to assess and rectify. Having moisture building up around the external areas of any structure will help create conditions conductive to timber pests including termites

### 10.4 BRIDGING OR BREACHING OF A TERMITE BARRIER SYSTEM AND/OR INSUFFICENT SLAB EDGE **EXPOSURE**

# **10.4.1 GENERAL INFORMATION**

Physical and/or chemical barriers systems are installed to impede and discourage subterranean termite entry into buildings. However, termites may easily enter the building if the barrier is bridged or beached. With a concrete slab building it is essential that the edges of the slab be permanently exposed, to a minimum of 75mm, so that termites are forced into the open where they can be detected more readily during regular inspections.

Unless appropriate written evidence of the property's previous protection history is provided in accordance with Australian Standard AS3660 any visible evidence of 'bridging' or 'breaching' or insufficient slab edge exposure' should be treated as a condition conductive to subterranean termite attack. Where this condition exists, to minimise risk of infestation seek further advice from your Timber Pest Detection Consultant

# **10.4.2 OBSERVATIONS**

Evidence of bridging or beaching of the termite barrier system, and/or insufficient slab edge exposure

Not Applicable due to there being no evidence of a previous treatment being carried out **Smart Move Inspection Services** 



Slab Edge Exposure: Where external concrete slab edges are not exposed there is a high risk of concealed termite entry. 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, concrete pathways, driveways, paving, soil, turf or landscaping etc. Where this is the case you should arrange to have the slab edge exposed for inspection. Concealed termite entry 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 slabs 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 conveyance. 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 3660.1-2000.

#### 10.5 EARTH-WOOD OR DAMP MASONRY-WOOD CONTACT

# 10.5.1 GENERAL INFORMATION

Susceptible timber in direct contact with the ground or damp masonry provides an ideal condition for timber pest attack. Where necessary, competent advise (e.g. from a licensed or registered building contractor) should be obtained in regards to any rectification work or if possible removed by the vendor or purchaser

# 10.5.2 OBSERVATIONS

Evidence of earth- wood or masonry- wood contact

We recommend a gap of at least 75-100mm is maintained between all timbers and the ground. . Soil up against fencing especially to the base boards should also be removed. Pergola and Veranda posts should not be placed directly into the ground it is recommended that these posts are placed into stirrups to prevent contact with the soil. It is also a good idea to fill the hollow centres of stirrups with some type of filler to try and stop termites entering the timber via the hollow centres of the stirrups. Firewood and or stored timbers should be kept as far away from the property as possible and stored up off the ground. Timbers in contact with the ground make it easier for termites to gain concealed entry into a property or structure un-detected and these timbers are also prone to fungal decay

- Untreated timbers used for the construction of retaining walls should be replaced with less susceptible materials. Termites are known to build their nest/s and feed off the back of these walls which over time will make the wall/s unstable and the possibility of the wall/walls collapsing. Because these timbers are untreated they will also be more susceptible to fungal decay. Important Note: you should seek advice from either a licensed builder or engineer before removing any retaining walls over 700mm in height.
- Stored timber is a food source for termites and can attract and also conceal termite activity. Recommend that stored timber is removed immediately and a re-inspection of this area carried out
- There are garage post that are in direct contact with the ground. This is a way termites can gain enter into a structure or even the property un-detected. For future reference it is advisable to not to place pergola posts straight into the ground. A gap of at less 75-100mm should be maintained between the soil and any timbers
- The base boards to the fencing are in contact with the ground. This will allow termite's easy access into the fencing timbers. A gap of at less 75-100mm should be maintained between the soil and any timbers



- There is timber stored against the external walls of the property. This should be removed immediately and stored well away from the property as it is a food source for termites and could attract has well as conceal termite activity
- There is firewood stored under the deck of the property that should be removed immediately and stored well away from the property as it is a food source for termites and could attract termites has well as conceal termite activity
- There is scrap/loose timber off cuts lying on the ground throughout the sub floor area which should be removed immediately. These timber off cuts and loose timbers are a food source for termites as these timbers may attract timber pests including termites

# **10.6 CONDITIONS CONDUCTIVE TO TIMBER PEST ATTACK**

Other than those conditions detailed above, there are many situations where an environment conductive to timber pest attack can be created. For example; Termites have a poor diet (wood) and seek environments which minimise the energy they need to expend on maintaining the humidity and temperature they require. If man creates an environment in a home by heating and air conditioning that is more attractive than the climate conditions of their current location, termites will seek out this environment, sometimes in large numbers.

The following observations detail any such conditions conductive to termites that were identified during the inspection.

If the cause or solution to a problem is not obvious, competent advice (e.g. from a licensed or registered building contractor) should be obtained in regard to removing and conditions conductive to timber pest attack.

# **10.6.2 OBSERVATIONS**

Other conditions conductive to timber pest attack at the time of the inspection.

- External hot water system overflow/s runs straight to the ground. If possible the overflow pipe/s should be redirected into a drain, downpipe or several meters away from the building. The reason we ask for the overflow to be redirected is because sometimes these hot water systems can breakdown allowing moisture to run out of the overflow and onto the ground. This moisture then builds up around the external areas of the property which in turn creates conditions conductive for termites. Important Note: if you find the hot water system leaking you should call a licensed plumber immediately
- There are trees on surrounding neighbouring properties that may contain termite nests. It is important for the client to understand that termites can travel long distances underground from their nest to a food source this distance can on average be anywhere from between 50-100 meters from the nesting site. The only way these trees can only be checked for termites is to test drill them and if a termite nest is suspected then the effected tree or trees should be treated with an approved chemical immediately. There is always the possibility that these termites could attack the inspected property
- There are trees and or stumps within the property boundary lines that may contain a termite nest/s. The only way to check a tree and or stump for termite activity is to test drill the base of the tree/s and or stumps and if activity is found or suspected then these tree/s need to be treated with a registered chemical immediately
- Cardboard products in a sub floor area can also attract termites due to the cellulose content in the cardboard and can also conceal termite activity. Cardboard products should be removed from the sub floor area immediately

The exterior of Trees within the property boundary up to a height of 2m have been visually inspected, where possible and practicable, for evidence of termite activity. However, it is very difficult, and generally impossible to locate termite nests since they are underground and evidence in trees is usually well concealed. We therefore strongly recommend that you arrange to have any trees or stumps on site test drilled for evidence of termite nests and treated if required. Any garden timbers and or timber retaining walls should be replaced with less susceptible materials or removed. Termites are well known for building their nests in behind timber retaining walls, and or attacking garden bed timbers. Hot water services



and air conditioning units which release water alongside or near to building walls should be piped to a drain (if not possible then several meters away from the building) as the resulting wet area is highly conducive to termites. Garden beds situated next to the external walls of a property or outbuildings should either be moved well back away from the wall/s especially concrete slab edges or removed all together as garden beds can conceal termite entry points and the soil helps to contain moisture which is also highly conductive to termites

Scrap timber off cuts lying on the ground in a sub floor area/s or under external decking areas can and do attract termites the same applies to any formwork left from the construction process. It is very important that all scrap timber and or formwork is removed immediately

Please Note: Some sub floor areas have large amounts of scrap timber off cuts lying on the ground the inspector will turn a number of these off cuts over to see if they have either been attacked by timber pests at some stage in the past or are currently under attack by live (Timber Pests). It is important that you understand that the inspector cannot inspect ever piece of timber lying on the ground in a sub floor area. Every effort should be made to remove all cellulosed based materials including cardboard products from the sub floor area immediately and it is recommended that garden timbers and timber retaining walls are replaced with less susceptible materials.

# 11.0 SUMMARY OF AREAS FOUND CONDUCTIVE TO TERMITE INFESTATION THAT REQUIRE RECTIFICATION

<u>Important Note:</u> The following observations detail any such conditions conductive to termites that were identified during the inspection. Please note any items listed below should be repaired, replaced or modified immediately by an appropriate qualified person to help reduce the risk of termite infestation

- <u>RUSTED OUT DOWNPIPES</u> is a condition conductive to termites the degree of risk is <u>HIGH</u> recommend that you engage a plumber to rectify immediately
- <u>RUSTED OUT GUTTERING</u> a condition conductive to termites the degree of risk is <u>HIGH</u> recommend that you engage a plumber to rectify immediately
- <u>SITE DRAINAGE</u> needs to be improved the degree of risk is <u>MODERATE-HIGH</u> recommend that you seek advice from either a licensed plumber or drainage contractor to rectify
- <u>FUNGAL DECAY</u> is a condition conductive to termites. The degree of risk is <u>HIGH</u> recommend that you engage a carpenter to replace the effected timbers and have the moisture issue causing the problem rectified
- <u>UN-TREATED RETAINING WALL TIMBERS</u> are a conductive and will also conceal termite nest/s the degree of risk is <u>HIGH</u> recommend that you replace the timbers with non-susceptible/conductive materials
- <u>HOT WATER SYSTEM OVERFLOW</u> this is a conductive condition to termites the degree of risk is <u>MODERATE-HIGH</u> recommend that you engage a plumber to divert the overflow into a drain or downpipe or several meters away from the property
- <u>GARAGE POSTS IN CONTACT WITH THE GROUND</u> this provides conductive and concealed termite entry and the degree of risk is <u>HIGH</u> recommend that you either remove the soil in contact with these posts or reinstall the posts using post stirrups
- <u>FENCING TIMBERS IN CONTACT WITH THE GROUND</u> this provides conductive conditions. The degree of risk is <u>HIGH</u> recommend that the soil in contact with these timbers is removed
- <u>NO ACTIVE TERMITE MANAGEMENT SYSTEM</u> appears to be in place. The degree of risk is MODERATE-HIGH recommend that a termite management program is implemented
- <u>THERE ARE NO TERMITE SHIELDS OR ANT CAPPING INSTALLED</u> this makes it difficult to observe termite workings into the sub floor timbers. The degree of risk is <u>MODERATE</u>. recommendations: Not much can be done about this other than having regular termite inspections at least once every 12 months or have a termite barrier installed which would last for 10 years



- <u>OLD TREE STUMPS OR LOGS</u> are located in the garden areas the degree of risk is <u>MODERATE-HIGH</u> recommend that these stumps and or logs are removed, as they are conductive conditions for termites.
- <u>SUBFLOOR VENTS COVERED OR PARTLY COVERED</u> this provides concealed entry for termites. The degree of risk is <u>HIGH</u> Recommend that the obstruction or obstructions are removed immediately
- <u>POOR SUBFLOOR VENTILATION</u> is a condition conductive to termite infestation. The degree of risk is <u>MODERATE-HIGH</u> recommend that you seek advice from a licensed builder to see if the ventilation can be improved
- <u>FIREWOOD STORED AGAINST THE EXTERNAL WALLS</u>. This provides conductive and concealed entry for termite infestation and the risk is <u>HIGH</u> recommend that you remove all timber and store well away from the property up off the ground
- <u>TIMBER STORED IN THE SUBFLOOR AREA</u> this provides conductive and concealed entry for termite infestation. The risk is <u>HIGH</u> recommend that all stored timber are removed and store well away from the property up off the ground
- <u>FIREWOOD STORED UNDER THE DECK</u> this provides conductive and concealed conditions for termites. Recommend that the firewood is moved well away from the property and stored up off the ground
- <u>SCRAP/LOOSE TIMBERS THROUGHOUT THE SUBFLOOR AREA/S</u> this is a conductive condition for termite infestation The degree of risk is <u>HIGH</u> recommend that all the scrap/loose timbers are removed from the subfloor area
- <u>TREE/LEAFY ENVIRONMENT</u> the property has trees within its boundary fences. The degree of risk is <u>MODERATE-HIGH</u> recommend that the trees are drilled and checked for possible evidence of termites. if termites are found then a treatment in accordance with AS3660 should be carried out
- <u>CARDBOARD PRODUCTS STORED IN THE SUBFLOOR AREA</u> cardboard can also attract termites due to the cellulose in the cardboard The degree of risk is <u>MODERATE-HIGH</u> recommend that you remove all cardboard products from the sub floor area immediately and keep the subfloor area clean and clear at all times

## 12.0 SAFTEY HAZARDS

In the course of the inspection the inspector will record any visual major safety hazard/s which has resulted directly from the activity of timber pests only and which are present and observed during the course of the inspection. Examples of a safety hazard include balustrades made unsafe by timber decay and the imminent collapse of a structural member.

### 12.1 OBSERVATIONS

During the inspection the inspector did see any visual safety hazards that requires immediate attention by a licensed builder

• The inspector did see a visual safety hazard which have resulted directly from timber pest activity and need immediate attention from a licensed builder or qualified carpenter. The timber handrail around the deck is has heavy decay in various areas and the veranda posts have heavy decay at the bottom.

### 13.0 OVERALL ASSESMENT OF THE PROPERTY

Where the evidence of live termites or termite damage or termite workings (mudding) was found in the building(s) then the risk of a further attack is extremely high. Where evidence of live termites or termite damage or termite workings was found in the grounds but not in the buildings then the risk to buildings must be reported as high to extremely high.

At the time of the inspection the DEGREE OF RISK OF SUBTERRANEAN TERMITE INFESTATION to the overall property was considered to be extremely high



SUBTERRANEAN TERMITE TREATMENT RECOMMENDATION: A management program in accord with AS 3660-2000 to protect against subterranean termites is considered to be essential

### 14. RISK MANAGEMENT OPTIONS

To help protect against financial loss, it is essential that the building owner immediately control or rectify any evidence of destructive timber pest activity or damage in this Report. The client should further investigate any high risk areas where access was not gained. It is strongly advised that appropriate steps be taken to remove or rectify and evidence of conditions conductive to timber pest attack

To help minimise the risk of any future loss, the client should consider whether the following options to further protect their investment against timber pest damage are appropriate for their circumstances:

- Undertake thorough regular inspections at intervals not exceeding twelve months or more frequent inspections where the risk of timber pest attack is high or the building type is susceptible to attack
- To further reduce the risk of subterranean termite attack, implement a management programme in accordance with Australian Standard AS3660. This may include the installation of a preventive chemical and/or physical barrier(s). However, AS3660 stresses that termites can bridge or breach barrier systems and that ongoing, thorough, and regular inspections of the Property is necessary. Please contact the Timber Pest Inspector on the number at the bottom of this report should you wish for a preventive treated zone to be installed or if the report mentions that active (live termites) were found then the timber pest consultant can also offer you a quote to treat the infestation.

Please note it is recommended that any areas not inspected or not readily accessible at the time of the inspection be re-inspected before a purchasing decision is made. We accept no responsibly whatsoever any timber pest activity and or damage should be found to any of these areas should you property be purchased

#### 15. GENERAL REMARKS

There are no general remarks	
Company Name:	Smart Move Inspection Services
Company Address:	PO Box 2041 Pakenham 3810 Vic
Phone:	0424-597-655
Consultant Name:	Keith Letts
Consultant License No:	L001390
Authorised Signatory:	K. Letts
Date of Issue:	12 <sup>th</sup> August 2015



### **16. TERMS AND CONDITIONS**

### SERVICE

As requested by the *Client,* the inspection carried out by the *Timber Pest Detection Consultant* ("the Consultant") was a "Pre-Purchase Standard Timber Pest Detection Report".

**PURPOSE** The purpose of this inspection is to assist the Client to identify and understand any Timber Pest issues observed at the time of inspection.

**SCOPE OF INSPECTION** This Report only deals with the detection or non-detection of Timber Pest Attack and Conditions Conducive to Timber Pest Attack discernible at the time of inspection. The inspection was limited to the Readily Accessible Areas of the Building & Site (see Note below) and was based on a visual examination of surface work (excluding furniture and stored items), and the carrying out of Tests.

Note. With strata and company title properties, the inspection was limited to the interior and the immediate exterior of the particular residence inspected. Common property was not inspected.

**ACCEPTANCE CRITERIA** Where possible, the building being inspected was compared with a similar building. To the Consultant's knowledge the similar building used for comparison was constructed in accordance with generally accepted timber pest management practices and has since been maintained during all its life not to attract or support timber pest infestation.

Note. If the building was not comparable to a similar building (e.g. due to unusual design or construction techniques), then the inspection was based on the general knowledge and experience of the Consultant.

Unless noted in "Special Conditions or Instructions", this Report assumes that the existing use of the building will continue.

This Report only records the observations and conclusions of the Consultant about the readily observable state of the property at the time of inspection. This Report therefore cannot deal with:

- (a) possible concealment of defects, including but not limited to, defects concealed by lack of accessibility, obstructions such as furniture, stored items in cupboards, wall linings and floor coverings, or by applied finishes such as render and paint; and
- (b) undetectable or latent defects, including but not limited to, defects that may not be apparent at the time of inspection due to seasonal changes, recent or prevailing weather conditions, and whether or not services have been used some time prior to the inspection being carried out.

These matters outlined above in (a) & (b) are excluded from consideration in this Report.

If the Client has any doubt about the purpose, scope and acceptance criteria on which this Report is to be based please discuss your concerns with the Consultant before ordering the Report or on receipt of this Report.

The Client acknowledges that, unless stated otherwise, the Client as a matter of urgency should implement any recommendation or advice given in this Report.

#### LIMITATIONS

The Client acknowledges:

- 1. This Report does not include the inspection and assessment of matters outside the scope of the requested inspection and report.
- 2. The inspection only covered the Readily Accessible Areas of the Building and Site. The inspection did not include areas which were inaccessible, not readily accessible or obstructed at the time of inspection. Obstructions are defined as any condition or physical limitation which inhibits or prevents inspection and may include but are not limited to roofing, fixed ceilings, wall linings, floor coverings, fixtures, fittings, furniture, clothes, stored articles/materials, thermal insulation, sarking, pipe/duct work, builder's debris, vegetation, pavements or earth.
- **3.** The detection of dry wood termites may be extremely difficult due to the small size of the colonies. No warranty of absence of these termites is given.
- 4. European House Borer *(Hylotrupes bajulus)* attack is difficult to detect in the early stages of infestation as the galleries of boring larvae rarely break through the affected timber surface. No warranty of absence of these borers is given. Regular inspections including the carrying out of appropriate tests are required to help monitor susceptible timbers.



- 5. This is not a structural damage report. Neither is this a warranty as to the absence of Timber Pest Attack.
- 6. If the inspection was limited to any particular type(s) of timber pest (e.g. subterranean termites), then this would be the subject of a Special-Purpose Inspection Report, which is adequately specified.
- 7. This Report does not cover or deal with environmental risk assessment or biological risks not associated with Timber Pests (e.g. toxic mould) or occupational, health or safety issues. Such advice may be the subject of a Special-Purpose Inspection Report which is adequately specified and must be undertaken by an appropriately gualified inspector. The choice of such inspector is a matter for the Client.
- 8. This Report has been produced for the use of the Client. The Consultant or their firm or company are not liable for any reliance placed on this report by any third party.

# EXCLUSIONS

The Client acknowledges:

1. This Report does not deal with any timber pest preventative or treatment measures, or provide costs for the control, rectification or prevention of attack by timber pests. However, this additional information or advice may be the subject of a timber pest management proposal which is adequately specified.

#### DEFINITIONS

**Timber Pest Attack** means Timber Pest Activity and/or Timber Pest Damage.

**Timber Pest Activity** means tell-tale signs associated with 'active' (live) and/or 'inactive' (absence of live) Timber Pests at the time of inspection.

**Timber Pest Damage** means noticeable impairments to the integrity of timber and other susceptible materials resulting from attack by Timber Pests.

**Major Safety Hazard** means any item that may constitute an immediate or imminent risk to life, health or property resulting directly from Timber Pest Attack. Occupational, health and safety or any other consequence of these hazards has not been assessed.

**Conditions Conducive to Timber Pest Attack** means noticeable building deficiencies or environmental factors that may contribute to the presence of Timber Pests.

**Readily Accessible Areas** means areas which can be easily and safely inspected without injury to person or property, are up to 3.6 metres above ground or floor levels, in roof spaces where the minimum area of accessibility is not less than 600 mm high by 600 mm wide and subfloor spaces where the minimum area of accessibility is not less than 400 mm high by 600 mm wide, providing the spaces or areas permit entry. The term 'readily accessible' also includes:

- Accessible subfloor areas on a sloping site where the minimum clearance is not less than 150 mm high, provided that the area is not more than 2 metres from a point with conforming clearance (i.e. 400 mm high by 600 mm wide); and
- (b) Areas at the eaves of accessible roof spaces that are within the consultant's unobstructed line of sight and within arm's length from a point with conforming clearance (i.e. 600 mm high by 600 mm wide).

**Client** means the person or persons for whom the Timber Pest Detection Report was carried out or their Principal (i.e. the person or persons for whom the report was being obtained).

**Timber Pest Detection Consultant** means a person who meets the minimum skills requirement set out in the current Australian Standard AS 4349.3 Inspections of Buildings. Part 3: Timber Pest Inspection Reports or state/territory legislation requirements beyond this Standard, where applicable.

**Building and Site** means the main building (or main buildings in the case of a building complex) and all timber structures (such as outbuildings, landscaping, retaining walls, fences, bridges, trees and stumps with a diameter greater than 100 mm and timber embedded in soil) and the land within the property boundaries up to a distance of 50 metres from the main building(s).

**Timber Pests** means one or more of the following wood destroying agents which attack timber in service and affect its structural properties:

a) Chemical Delignification - the breakdown of timber through chemical action.

Page | 22

Smart Move Inspection Services



- b) **Fungal Decay** the microbiological degradation of timber caused by soft rot fungi and decay fungi, but does not include mould, which is a type of fungus that does not structurally damage wood.
- c) **Wood Borers** wood destroying insects belonging to the order 'Coleoptera' which commonly attack seasoned timber.
- d) Termites wood destroying insects belonging to the order 'Isoptera' which commonly attack seasoned timber.

**Tests** means additional attention to the visual examination was given to those accessible areas which the consultant's experience has shown to be particularly susceptible to attack by Timber Pests. Instrument testing of those areas and other visible accessible timbers/materials/areas showing evidence of attack was performed.

- a) **Instrument Testing** means where appropriate the carrying out of Tests using the following techniques and instruments:
- b) Electronic moisture detecting meter an instrument used for assessing the moisture content of building elements;
   c) Stethoscope an instrument used to hear sounds made by termites within building elements;
- d) Probing a technique where timber and other materials/areas are penetrated with a sharp instrument (e.g. bradawl or pocket knife), but does not include probing of decorative timbers or finishes, or the drilling of timber and trees; and
- e) **Sounding** a technique where timber is tapped with a solid object.

#### A.2 ACCESSIBILITY

Unless specified in writing, the inspection only covered the Readily Accessible Areas of the Building and Site. The inspection did not include areas which were inaccessible, not readily accessible or obstructed at the time of inspection. Areas which are not normally accessible were not inspected and include - but not limited to - inside walls, the interior of a flat roof or beneath a suspended floor filled with earth.

<u>Building Interior</u> The Consultant did not move or remove any ceilings, wall coverings, flooring, floor coverings (including carpeting), furnishing, equipment, appliances, pictures or other household goods. In an occupied property, furnishings or household items may be concealing evidence of timber pest attack which may only be revealed when the items are moved or removed.

**Building Exterior, Roof Exterior and Site** The Consultant did not move or remove any obstructions such as wall cladding, awnings, trellis, earth, plants, bushes, foliage, soil, stored materials, debris or rubbish. Due to the 'secretive' nature of timber pests, it is possible that hidden damage may exist in concealed areas, e.g. wall framing. Damage may only be found when the obstruction is removed. In the case of buildings constructed on concrete slabs, if the edge of the slab or any weephole or vent at the base of external walls is concealed by pavements, gardens, lawns or landscaping then it is possible for termites to gain undetected entry into the building. The building of gardens or planting of shrubs close to the perimeter of the building can promote and conceal termite entry points. The storage of cellulose materials such as building materials and firewood in close proximity to the ground or building may encourage termite activity.

**<u>Roof Space</u>** Obstructions such as roofing, stored articles, thermal insulation, sarking and pipe/duct work may be concealing evidence of timber pest attack which may only be revealed when the obstructions are moved or removed. Also, bodily access should be provided to the interior of all accessible roof spaces. In accordance with Australian Standard ASS 4349 the minimum requirement is a 400mm by 500 mm access manhole.

**Subfloor Space** Subfloor areas should be kept free from all vegetation (including tree stumps) and other cellulose material which may encourage timber pest activity. Also, storage of materials in subfloor areas is not recommended as it reduces ventilation and makes inspection difficult. Obstructions may be concealing evidence of timber pest attack which may only be revealed when the obstructions are moved or removed. Bodily access should be provided to all accessible subfloor areas with the minimum requirement being a 500 mm x 400 mm access manhole. In the case of suspended floors, if the clearance between the ground and structural components is less than 400 mm, then the ground should be excavated to provide the required clearance, subject to maintaining adequate drainage and support to footings. If the subfloor has been sprayed for subterranean termites or if the area is susceptible to mould growth, appropriate health precautions must be followed before entering the area. Also, special care should be taken not to disturb the treated soil. Always seek further advice from the Consultant.



# A.3 TERMITES

**General Description of Attack** Timber hollowed beneath; some cracking at the surface of timber; earthen channels present; or pale faecal spots present.

**IMPORTANT NOTE**. As a delay may exist between the time of an attack and the appearance of tell-tale signs associated with the attack, it is possible that termite activity and damage exists though not discernible at the time of inspection.

**Treatment** After discovery of an active infestation, it is imperative that the species of termite is accurately identified before costly (and sometimes unnecessary or inappropriate) methods of treatment are initiated. Only economically important species which are known to attack timber structures should be treated.

In the case of economically important species, it is important that the termite workings are not further disturbed until the proposed method of control has been determined by a licensed pest control operator. Premature attempts to repair or replace infested timber may cause the termites to withdraw from the area temporarily, thereby hindering effective treatment. Any repair or replacement of infested timber should be carried out after the appropriate treatment has been completed.

Where evidence of active termites is detected within a building or within 50 metres of any building, it must always be assumed that the termites may also be active in areas of the property not inspected. Accordingly, where the termites are known to be of economic significance, a further (more invasive) inspection is strongly recommended of areas which were inaccessible, not readily accessible or obstructed at the time of inspection.

**Termite Workings and Damage** Where evidence of damage to building timbers exists, competent advice (e.g. from a licensed or registered building contractor) should be obtained to determine the extent of any structural damage and as to the need or otherwise for rectification or repair work.

Where evidence of inactive termites is located within the building, it is possible that termites are still active in areas of the property not inspected and they may continue to cause damage. A further more invasive inspection is strongly recommended of areas which were inaccessible, not readily accessible or obstructed at the time of inspection.

Where evidence of an inactive termite infestation exists, it is not possible, without 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.

Where evidence of termite attack exists to any trees or tree stumps a more conclusive search should be undertaken. This may require the tree or stump to be drilled to determine the existence of a termite nest. In addition, the soundness and stability of any standing trees identified as being affected by termite attack should be confirmed. Always seek further advice from the Consultant.

**Previous Treatments** Where evidence of a possible termite treatment was located, the Client should obtain and keep on file all relevant documents pertaining to the extent of the treatment, any service warranties and advice in regard to the building owner's obligation to maintain the treatment and/or barrier. If evidence of a previous treatment of termite infestation is noted, and appropriate documentation is not available, the Client must assume that the termite infestation may still be active in areas of the property not inspected. Accordingly, a re-treatment may be required. Always seek further advice from the Consultant.

**Frequency of Future Inspections** Australian Standard AS 3660 recognises that regular inspections will not prevent termite attack, but may help in the detection of termite activity. Early detection will allow remedial treatment to be commenced sooner and damage to be minimised.

Inspections at intervals not exceeding twelve (12) months are recommended. Where the termite risk is high or the building type susceptible to termite attack, more frequent inspections (3-6 months) should be undertaken.

# A.4 CHEMICAL DELIGNIFICATION

**General Description of Attack** Surface of timber appears very hairy; and wood and 'hairs' separate.

**Economic Significance** Chemical Delignification of wood in service is only rarely encountered and then only in certain areas. Small dimensional timber members such as roof tiling battens may collapse when the wood becomes defribrated. However, in large dimensional timber members such as rafters, bearers and joists, delignification takes many years to affect the strength of timber to the point of collapse.



Where evidence of Chemical Delignification exists, competent advice (e.g. from a licensed or registered building contractor) should be sought to determine the extent of any structural damage, and as to the need or otherwise for rectification or repair work.

### A.5 FUNGAL DECAY

**General Description of Attack** *Decaying* wood contains sufficient moisture to retain its original shape and may have sufficient strength to withstand normal loads. In contrast *decayed* wood is reduced both in moisture content and size as indicated by cracking either along or across the grain or fibres coming apart in a stringy manner. *Decayed* wood will have undergone considerable strength reduction.

**Economic Significance** Fungal decay can cause at one extreme, structural failure of the affected timber, and at the other purely superficial surface damage. The most critical determination is that of which timber is affected and *decaying*, because decay will most likely spread (unless sources of moisture are quickly removed). Affected and *decayed*\_timber may warrant timber replacement, but the rot should not spread unless a new moisture source becomes available in that area.

Where evidence of *decayed* timber exists, competent advice (e.g. from a licensed or registered building contractor) should be sought to determine the extent of any structural damage, and as to the need or otherwise for rectification or repair work. It is important to correct any condition conducive to attack prior to replacing *decayed* wood.

Where evidence of *decaying* timber exists, competent advice (e.g. from a licensed or registered building contractor) should be sought to remove the condition(s) conducive to attack, and to determine the extent of any structural damage, and as to the need or otherwise for rectification or repair work.

Where the full extent of damage or the overall condition of the timber is *undetermined* a further inspection is strongly recommended by a competent person (e.g. from a licensed or registered building contractor). This may require monitoring of the timber over a period of time and include the assessment of conditions conducive to attack in different weather conditions (e.g. to determine the adequacy of existing drainage).

**Management Program** Remove any conditions conducive to attack (e.g. lack of ventilation or the presence of excessive moisture). Regular inspections are recommended at intervals not exceeding 12 months. Always seek further advice from the Consultant.

# A.6 WOOD BORERS

**General Description of Attack As** the attack proceeds, borer larvae eat through the wood leaving a dust called "frass'. Ejection of the frass occurs through the adult beetles' flight (exit) holes, and it is usually present beneath any timber that has been attacked. The presence of frass however, does not indicate whether the attack is active or not. Borer larvae cannot be sighted unless the susceptible timber is broken open.

### **IMPORTANT NOTE:**

As a delay may exist between the time of an attack and the appearance of tell-tale signs associated with the attack it is possible that borer activity and damage exists though not discernible at the time of inspection.

**Economic Significance** Evidence of borer activity is rarely cause for alarm, but rather for careful consideration of three main points, namely the identification of the particular borer responsible, whether the infestation is still active, and the extent of the damage. Full consideration should be given to each of these items before any action is taken.

The following wood borers cause damage most frequently encountered by building owners.

*The Lyctid Borer* The most common lyctid borer in Australia is *Lyctus brunneus* (powder post beetle). Attack usually takes place during the first six to twelve months of the service life of timber. However, the powder post beetle is not considered a significant pest of timber and treatment of infestation is not usually required. As only the sapwood of certain hardwoods is destroyed, larger-dimensional timbers (such as rafters, bearers and joists) in a building 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 cause collapse. This may require the support or replacement of the affected battens. Competent advice (e.g. from a licenses or registered building contractor) should be sought to determine the extent of any structural damage, and as to the need or otherwise for rectification or repair work.

*The Anobiid Borer* There are many different species of Anobiid borer, the most frequently encountered being *Anobium punctatum* (furniture beetle) and *Calymmaderus incisus* (Queensland pine beetle). Attack mainly occurs to softwoods



especially pine timbers such as floorboards that have been in service for at least ten years. Should any structural timbers be attacked by Anobiid borers it is often difficult to determine what extent the borer damage has weakened such timbers and replacement is often the only way of ensuring safety

In the case of *Anobiid borers*, once an attack is initiated it is unlikely to cease or die out of its own accord without some sort of eradication treatment. Therefore, unless proof of treatment is provided, evidence of an attack must always be considered active. Although a chemical treatment is an option, replacement of infested timbers with non-susceptible, or treated timber, is the most effective method of treatment. Before any option is considered, competent advice (e.g. from a licensed building contractor) should be sought to determine the extent of any structural damage, and as to the need or otherwise for rectification or repair work.

*Other Borers* A further (more invasive) investigation is strongly recommended to determine whether infestation is still active and to positively identify the borer species responsible for the attack. Always seek further advice from the Consultant.

**Management Program** Wherever practical, remove any conditions conducive to attack (e.g. Anobium borer thrive in badly ventilated subfloor areas). Regular inspections are recommended at intervals not exceeding 12 months. Always seek further advice from the Consultant.

# A.7 CONDITIONS CONDUCIVE TO TIMBER PEST ATTACK

Lack of Adequate Subfloor Ventilation Inadequate ventilation provides a condition suitable for timber pest infestation. For example, subterranean termites thrive in damp humid conditions typical of those provided in a poorly ventilated subfloor space. Where evidence of a lack of adequate ventilation has been identified in the report, the Client should seek competent advice (e.g. from a licensed or registered building contractor) in regard to upgrading ventilation.

**The Presence of Excessive Moisture** Ground levels around the building should be maintained in such a way to minimise water entering under the building. Also the ground surface in subfloor areas should be kept graded to ensure that moisture does not pond or accumulate in any area. Where necessary, sub-surface drains should be installed and maintained to assist with drainage around and under the building. Likewise, the presence of excessive moisture can often be directly related to ventilation limitations and the resultant high humidity.

Also, plumbing oversights and defects such as a leaking drain or tap will provide a microclimate conducive to timber pest attack.

Where necessary, the Client should seek competent advice (e.g. from a licensed or registered plumbing contractor) to determine the adequacy of existing drainage and remove any conditions conducive to the presence of excessive moisture.

The building may need to be monitored over a period of time to detect or confirm a damp problem. The presence of dampness (including moisture) is not always consistent as the prevailing and recent weather conditions at the time an inspection is carried out may affect the detection of damp problems. Importantly, precipitation at or near the time of inspection does not necessarily guarantee that a damp problem will automatically be evident due to such circumstances as prevailing wind conditions or intensity of rainfall. The absence of any dampness at the time of inspection does not necessarily mean the building will not experience some damp problems in other weather conditions. Likewise whether or not services have been used for some time prior to an inspection being carried out will affect the detection of dampness.

**Bridging or Breaching of Termite Barriers and Inspection Zones** Physical and/or chemical barrier systems are installed to impede concealed subterranean termite entry into buildings. However, termites may easily enter the building if the barrier is bridged or breached.

With a concrete slab building it is essential that the edge of the slab be permanently exposed. An inspection zone of at least 75 mm should be maintained so that termites are forced into the open where they can be detected more readily during regular inspections. In the case of physical sheet material barriers, a minimum inspection zone of 75 mm should be maintained from the sheet material to the finished ground. Importantly, the edge of the slab or sheet material should not be rendered, tiled, clad or concealed by flashings, adjoining structures, paving, soil, turf or landscaping.



Where perimeter termite barriers have been installed, the building owner should ensure that the integrity of the barrier remains intact and that the inspection of possible termite entry points is not impaired. This is especially important where an exposed slab edge is used as an inspection zone around the building (if the edge of the slab or any weepholes at the base of external walls are concealed by pavements, gardens, lawns or landscaping then it is possible for termites to gain undetected entry).

Also, bridging often occurs when items such as attachments to buildings allow termites to gain access to the building over or around a termite barrier. Where attachments to buildings such as steps are not provided with a termite barrier or cannot be easily inspected, they should be separated by a clear gap of at least 25 mm from the main structure. Where it is not possible to separate attachments from the main building, regular inspections of these areas should be undertaken.

In addition, termite barriers are often breached by the installation of services. Any disturbance of the barrier should be promptly repaired.

Where evidence of bridging or breaching exists, to minimise risk of infestation seek further advice from the Consultant.

**Untreated or Non-Durable Timber Used in a Hazardous Environment** to reduce the risk of timber pest attack, it is essential that timber used in a hazardous environment (e.g. in direct contact with the ground or damp masonry) is of sufficient durability and/or is adequately preservative treated. Where evidence of this condition exists, the Client should seek competent advice (e.g. from a licensed or registered building contractor) in regard to the need or otherwise for rectification or repair work.

**Other Conditions Conducive to Timber Pest Attack** If the cause or solution to a problem is not obvious, the Client should seek competent advice (e.g. from a licensed or registered building contractor) in regard to removing any conducive condition.

# A.8 RISK MANAGEMENT OPTIONS

To help protect against financial loss, it is essential that the building owner immediately control or rectify any evidence of destructive timber pest activity or damage identified in this inspection report. The Client should further investigate any high risk area where access was not gained. It is strongly advised that appropriate steps be taken to remove, rectify or monitor any evidence of conditions conducive to timber pest attack.

To help minimise the risk of any future loss, the Client should consider whether the following options to further protect their investment against timber pest infestation are appropriate for their circumstances:

Undertake thorough regular inspections at intervals not exceeding twelve months or more frequent inspections where the risk of timber pest attack is high or the building type is susceptible to attack. To further reduce the risk of subterranean termite attack implement a management program in accordance with Australian Standard AS 3660. This may include the installation of a monitoring and/or baiting system, or chemical and/or physical barrier. However, AS 3660 stresses that subterranean termites can bridge or breach barrier systems and inspection zones and that thorough regular inspections of the building are necessary.

If the Client has any queries or concerns regarding this Report, or the Client requires further information on a risk management program, please do not hesitate to contact the person who carried out this Report.