



# **New Home Inspections**

**BUILDING CONSULTANTS AND QUALITY INSPECTORS**

## **FRAME STAGE INSPECTION REPORT AND DEFECTS LIST**

**Address of Subject Property:**  
Lot 55 Sample Pde, Sampleville

**Client:**  
Mr John Sample

**Date of Inspection – Monday 9<sup>th</sup> September 2013**

**Start Time of Inspection – 9:00 am**

**Prevailing Weather Conditions – Overcast**

**Builder – Sampling Homes**

**Date of Report – Wednesday 11<sup>th</sup> September 2013**

## **Client Brief**

We have been requested by the client to attend their property and carry out a building inspection on the quality of work produced to date by their builder and thereafter to prepare an inspection report identifying any defects that exist in the finishes and the quality of those finishes, for which rectification can reasonably be expected to be the responsibility of the builder.

## **Property Details**

Dwelling Type:- House & Garage	Main Construction Type:- Brick Veneer
Class of Buildings:- BCA 1a and 10a	Dwelling Configuration:-Double Storey
Stage of Building Works:- Frame	Footing Type:- Concrete Slab

## **Inspection & Report Particulars**

Our inspection is a visual inspection of the finishes and the quality of those finishes completed by the Builder up to the stage of our site attendance. This report contains a 'Schedule of Building Defects' that lists the items that in the writers judgement and 30 years of industry experience do not reach the minimum acceptable standard of quality, level of building practice, or have not been built in a proper workmanlike manner with regard to the requirements of the Building Acts and Regulations, the National Construction Code (BCA), the relevant Australian Standards or to within the Building Commission's guide to acceptable Standards & Tolerances.

## **Client Authority**

None of the rectification methods, procedures or products suggested within this report are to be read as an instruction to the builder, nor are they an authorisation to vary from the original contractual documentation, a manufacturers installation instruction, any Australian Standards or the BCA. Therefore, depending on the rectification works required, the builder must obtain a signed variation and/or agreement from the client prior to carrying out any such work, whenever one would normally be necessary.

This report must be read by the builder in addition to any list or other correspondence provided by the owner/s.

## **Terms & Conditions**

All site inspections, meetings, this report, all future reports, correspondence and advice that we provide in relation to this property, whether written or verbal, are provided subject to the limitations and exclusions detailed in our standard terms and conditions set out on the last page of this report.

## **Access**

Access was gained to all required areas in accordance with clause 6 of the terms and conditions listed on the last page of this report.

## **Inspection Notes**

At the time of our inspection – 1/. I had not been provided with a copy of the floor joist and roof truss layouts; 2/. The majority of the floor slabs edge beams had been covered over; 3/. There was a top plate hung scaffold in place around the upper walls, which will require the upper wall to be re-checked for plumb once it has been removed.

## **Summary**

A check of the framework found that the walls had been plumbed to within their allowable tolerance and the trusses and joists were bearing and connected correctly onto the wall frames, generally, the framing materials are of a good quality and put together well. However the items detailed in the attached 'Schedule of Building Defects' require further rectification and/or justification prior to this home proceeding to the next stage.

Should the reader of this report have any additional queries or questions in relation to the items set out within it, please do not hesitate to contact the writer via any of the methods detailed below.

Yours faithfully,



Kevin McDonald

Mobile: 0421 646 611

Email: kevin@newhomeinspections.com.au

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**Please direct all postal correspondence to: P.O.Box 448, Patterson Lakes 3197.**




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**Bookings and Enquiries Ph: 9708 2500**

**Web Site: [www.newhomeinspections.com.au](http://www.newhomeinspections.com.au)**

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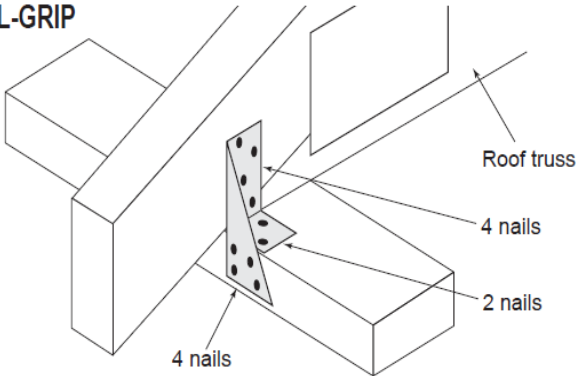
## SCHEDULE OF BUILDING DEFECTS




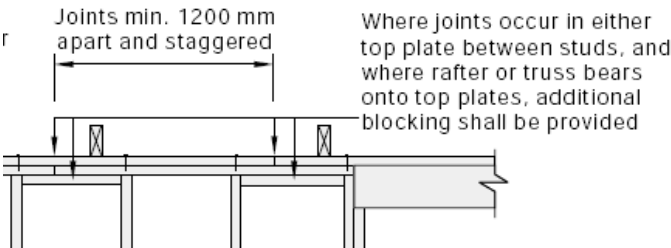
Item	Observations, Considerations and Recommendations:-
1. Approved Engineering Design Issues	<p>From the engineering drawings that I was provided with, the following items have not been constructed on site as set out and detailed within them-</p> <ol style="list-style-type: none"> <li>i. The specified prop has not been installed under 1L7 beneath 1B13.</li> <li>ii. The specified prop has not been installed under 1B10.</li> <li>iii. The specified 2no. F17 KDHW studs to be installed under 1B12 have been installed using ordinary pine studs.</li> <li>iv. The specified oversized washers have not been installed on the bolts through 1B1 and 1B2 to the timber face of these beams.</li> <li>v. The trimmers to the Kitchen window have not been nailed at the specified 300mm centres staggered along their top and bottom faces.</li> <li>vi. Only 2no. of the 4no. specified trip-l-grips have been installed between each end of the Kitchen window trimmers to the opening studs.</li> <li>vii. The specified seat section of the cleat has not been provided to the L1 junction to the C1 column.</li> <li>viii. The second specified 150 x 100 x 10 bracket has not been installed between the junction of 1B10 to 1B12.</li> <li>ix. The specified oversized washers have not been installed on the bolts through 1B10 to the timber face of this beam.</li> <li>x. The second specified 100 x 100 x 10 bracket has not been installed between the junction of 1B11 to 1B12.</li> <li>xi. The specified oversized washers have not been installed on the bolts through 1B11 to the timber face of this beam.</li> <li>xii. The specified oversized washers have not been installed on the bolts through 1B9 and 1B10 to the timber face of these beams.</li> <li>xiii. 1B11 has not been strap braced down to the studs supporting in as specified.</li> <li>xiv. All of the BR3 braces have been fixed into the top and bottom plates with only 3no. nails instead of the 4no. specified.</li> </ol> <div style="display: flex; justify-content: space-around;">   </div> <ol style="list-style-type: none"> <li>xv. The specified 1.1m wide BR4A type brace on the left hand side of the Porch has not been installed.</li> <li>xvi. The specified 1.3m wide BR4 type brace on the front wall of the Guests Bed WIR is only 1.17m long.</li> <li>xvii. The left hand side Ankascrew in the above brace is not down tight to the bottom plate.</li> </ol> <div style="text-align: center;">  </div> <ol style="list-style-type: none"> <li>xviii. The BR3 brace on the Garage/Laundry wall is not straight.</li> </ol>

Item	Observations, Considerations and Recommendations:-
	 <p>xix. The specified Anka-screw needs to be installed to the Garage rear wall bottom plate at the end of the above brace panel.</p> <p>xx. There have been no Anka-screws installed into the bottom plate of the BR3 braced wall between the Laundry and the Stairwell.</p> <p>xxi. The BR4A brace on the side wall of the Guests Bed WIR needs to be trimmed across under the meterbox so that the plywood brace can be fixed sufficiently.</p> <p>xxii. The specified BR4A type brace on the Rumpus side wall has not been installed.</p> <p>xxiii. The specified 1.2m wide BR5 type brace on the rear wall of the Rumpus (boundary side of the window) is only 1.1m long.</p> <p>xxiv. The Anka-screws through the bottom plate of the above brace are up to 180mm away from the end of the brace panel instead of within the max. 100mm specified.</p> <p>xxv. The specified 1.2m wide BR5 type brace on the rear wall of the Rumpus (Alfresco side of the window) is only 1.165m long.</p> <p>xxvi. The tops of the Garage/Laundry and Guests Bed/ENS braced walls need to be fixed into the floor joist with shear block fixings for the equivalent capacity of the brace type as per clause 8.3.6.9 Fixing of Top of Bracing Walls of AS 1684 Residential Timber-Framed Construction.</p> <p>xxvii. The shear blocks installed over the Master robe/Bed 2 wall are in the wrong orientation as to that specified on Drawing No. 13 and AS 1684 Residential Timber-Framed Construction.</p> <p>xxviii. The specified shear blocks have not been installed over the Retreat/WIR wall.</p> <p>xxix. The specified shear blocks have not been installed over the Activity/ENS wall.</p> <p>xxx. The specified shear blocks have not been installed over the Bath/Retreat wall.</p> <p>xxxi. The specified shear blocks have not been installed over the Bed 2/Stairwell wall.</p> <p>xxxii. The specified shear blocks have not been installed over the Stairwell/WIL/WIR wall.</p> <p>All of these items will need to be re-constructed on site to reflect the designed requirements of the approved drawings or otherwise re-computed and certified by the original design engineer. The original building permit may also need to be amended by the relevant Building Surveyor to reflect the changes to the original approved drawings.</p>
2.	<p>Floor Slab</p> <p>The floor slab has been boxed and poured short across the front left hand side of the Garage, which has left the bottom of the wall studs overhanging the edge of the slab by up to 30mm.</p>  <p>The Building Commission's Guide to Standards and Tolerances clause 4.08 Bottom Plates that Overhang Concrete Slabs, states '<i>Bottom plates that are at least 90mm wide and overhang concrete slabs are defective. An overhang of up to 10mm is permissible</i>'.</p>



Item	Observations, Considerations and Recommendations:-
3.	<p>This overhanging bottom plate will need to be supported by an appropriately designed and certified engineered system so that it complies with this tolerance.</p> <p>The floor slab has been boxed and poured short across the rear wall of the Garage at the step-down from the Laundry, which has left the bottom plate of the wall frame overhanging the edge of the floor slab by up to 13mm under the combined four stud point load.</p> <p>The Building Commission’s Guide to Standards and Tolerances clause 4.08 Bottom Plates that Overhang Concrete Slabs, states ‘<i>Bottom plates that are at least 90mm wide and overhang concrete slabs are defective. An overhang of up to 10mm is permissible</i>’.</p> <p>This overhanging bottom plate will need to be supported by an appropriately designed and certified engineered system so that it complies with this tolerance.</p>
4.	<p>Framing Items</p> <p>The upper braced Master robe/Bed 2 wall that is bearing onto the particleboard flooring between the floor joists has not been tied down to the floor joists.</p> <p>The floor joist manufacturer installation instructions require these walls to be tie down as detailed below:-</p> <div> </div> <p>The tie down of these walls must be rectified as detailed above.</p>
5.	<p>There are at least two single spans within the particleboard sheet flooring that have not had the required additional support provided to them.</p> <div> </div> <p>The relevant Australian Standard, A.S 1860 Particleboard Floor Part 2 Installation, requires that ‘<i>Where possible, each panel shall be supported by not less than three joists. Where this is not possible, or where small insert-panels are necessary for finishing off the floor area, panels spanning only two joists shall be additionally supported by a trimmer, not less than 70mm x 35mm, fixed between these two joists to support the middle of the panel (see Figure 3)</i>’.</p> <div> </div> <p>FIGURE 3 PANEL SPANNING TWO JOISTS ONLY— TRIMMER TO SUPPORT MIDDLE OF PANEL</p> <p>These sheets will need to have the required additional support fitted to them.</p>
6.	<p>The bottom edges of the valley boards need to be extended to the fascia as well as being supported between the trusses so that they and the valley iron are properly supported.</p>

Item	Observations, Considerations and Recommendations:-
	
7.	<p>The 3600mm wide opening above the robe doors in the Master Suite does not contain a lintel to support the top plate that run across it.</p>  <p>It is a requirement of Australian Standard, A.S 1684 Residential Timber-Framed Construction, clause 6.3.6.5 Lintels in Non-Loadbearing Walls, that <i>'For internal walls where ceiling loads are not supported and wall openings are wider than 1800mm, the size of the lintel shall be determined from Span Table 23 using a ceiling load width of 1800mm'</i>.</p> <p>The builder must establish the correct sized lintel for this opening (170 x 35 MGP10 or similar) and install it into it, in compliance with this requirement of A.S 1684.</p>
8.	<p>The trip-l-grips fitted to hold the roof trusses down only have two or three nails into the side of the trusses and top plates but have not been bent down the sides of the top plate and fixed with the required additional four nails into the sides.</p>  <p>The manufacturer's installation guidelines require four nails into the side of the top plates, two into the top of the top plate, and four into the side of the truss, as per their detail below-</p> <p><b>TRIP-L-GRIP</b></p>  <p>The trip-l-grips need to be correctly fitted with the required number of nails fitted through each face.</p>
9.	<p>The bottom chord of the truss over the Bed 2 WIR/Master Suite wall has a crack through it and will need to be repaired under its manufacturer's instruction.</p>

Item	Observations, Considerations and Recommendations:-
	
10.	<p>The outer wall skin over the Living firebox needs to be installed so that the brickwork can be properly tied back to the frame as required by the BCA.</p> 
11.	<p>There is a truss over the Bed 2/Living wall that is up to 250mm away from over a supporting wall stud and there is an unsupported join in one of the double top plates between the wall studs, thereby reducing it back to only a single plate span.</p>  <p>It is a requirement of Australian Standard, A.S 1684 Residential Timber-Framed Construction, clause 2.4 Stud/Plate Lamination, that <i>'where joints occur in either top plate between studs, and where rafters or trusses bears onto top plates, additional blocking shall be provided (see Figure 2.9).'</i></p> <div style="text-align: center;">  <p><b>Figure 2.9 Stud/Plate Lamination</b></p> </div> <p>The join in this top plate must be properly rectified in accordance with the above.</p> <p style="text-align: center;">-:End of Schedule:-</p>

# THE STANDARD TERMS & CONDITIONS THAT WE PROVIDED OUR SERVICES SUBJECT TO:-

## 1. Engagement

Our engagement is confined to that of a Building Consultant and not that of a Building Surveyor or Inspector as defined in the Building Act of 1993. Our inspectors do not hold qualifications as Engineers, Land Surveyors or Pest & Timber Infestation Inspector and therefore have not check and make no comment on:- The structural integrity of the building; The capacity and/or consistency of the sites foundation material; The correctness of the buildings footing system; The site and roof drainage systems; The title boundaries and the location of any easements and/or their assets; The buildings boundary setbacks; Compliance with any requirement of Part 4, Siting, of the Building Regulations; Glazing for compliance with their codes and standards; The presents of termites & borers or at the completeness of any termite risk management procedures and barriers; All other requirements that are the responsibility of the above mentioned professions.

## 2. Assumptions

2.1. Our inspections are carried out on the quality of the fixtures, fittings and materials as installed and presented at the time of our site attendance and we rely on as fact that they have been installed in accordance with their manufacturer's installation instructions and/or designer's specification, including all associated and substrate works. 2.2. We assume that all items identified in our previous inspection report/s in relation to this property have been rectified to the owner's satisfaction, with the exception of any item that is still fully visible and capable of being properly inspected by us, and that our inspector believes still requires further rectification and/or justification, will be carried forward into this report.

## 3. Interpretation

3.1. Words in the singular include the plural and vice versa, according to the requirements of their context; 3.2. Words importing a gender include every gender; 3.3. References to a person includes an individual, firm or corporate or unincorporated body and vice versa, according to the requirements of the context.

## 4. Discrepancies or Ambiguities

4.1. Due to the fast moving nature under which our reports are produced they are provided on an E&OE basis; 4.2. If a reader of this report believes there may be a discrepancy or ambiguity contained within it they should notify the writer immediately, via email, for clarification of the suspected discrepancy or ambiguity.

## 5. Documentation

Documentation provided to us to facilitate the carrying out of our inspections and to prepare our reports and/or other correspondence is only viewed on an informal basis and we make no certification that the building has been constructed in accordance with it.

## 6. Photographs

6.1. Photographs provided within our reports will have been taken at the subject property on the day of our inspection by our inspector, unless otherwise noted. 6.2. Photographs are provided for the clients understanding of the item identified and any defects noted are not limited to those shown in the photograph provided within this report. 6.3. We do not provide binding comment or opinion on photographs provided to us on any rectification work allegedly carried out on any item identified within our reports, regardless of who provided it, and all comments that we do provide must only ever be considered to be of a loose general nature only.

## 7. Non-Destructive Inspection

Our inspections are carried out on a non-destructive basis and exclude any area that would require the dismantling, removal or relocation of any fixture, fitting, plaster, timber, cladding, insulation, sarking, membrane, roof covering, lining, steelwork, scaffolding or excavation of any soil.

## 8. Measurements/Levels

8.1. Measurements taken during our inspections are with a standard 4 fold carpenters ruler or 8 metre steel tape; and levels with either a 900 or 2000mm long spirit level, unless otherwise stated within this report; 8.2. Floor levels are only checked if the area/rooms are clear of builder's equipment, materials, debris, and furniture. Further, as floor levels need only be rectified just prior to the installation of the floor coverings they will be treated as a builder's Work in Progress until such time, unless otherwise stated within this report, and we rely on as fact that the builder levels and straightens all ceiling lines prior to the installation of plaster.

## 9. Access

Our inspections are limited to areas that can only be safely accessed with the standard equipment that we carry, being an 1800mm high set of aluminium steps, and that can be readily accessed without causing our inspectors to breach any of WorkSafe Victoria's current Code of Practices or any part of the current Occupational Health and Safety Act.

## 10. Services, Appliances, Plant, Equipment and Materials

We do not check or test for the correctness, appropriateness, sizing, grading, capacity, installation, certification, and completeness of any service, plant, equipment, appliances and materials i.e. heaters; hot water units; air conditioners; evaporative coolers; ovens; hotplates; dishwashers; rangehoods; spa pump; electricity supply; electrical and data wiring, switches and fittings; smoke detectors; duct work; insulation R-values; gas lines and fittings; water supply; sewer drains, stormwater and agricultural drains; solar panels; garage doors operating mechanisms; framing members, bracing and tie-down etc.

## 11. Copyright

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## 13. Reference

References contained within this report to the Building Acts & Regulations, the Building Code of Australia (BCA), any Australian Standards, a Building Commissions document, a manufacturers technical data sheet or installation instruction, or any other document are neither exhaustive, complete or a substitute for the original document and are provided to facilitate the understanding of this report only. We therefore accept no responsibility for any loss, damage or expense incurred for reliance upon the part references contained within this report.

## 14. Exclusions

- 14.1. Defects outside the scope of our client brief;
- 14.2. Defects not evident by visual inspection, or only visible from outside the subject properties boundary lines;
- 14.3. Defects in inaccessible parts of the building or site, including but not limited to, areas with limited boundary wall set-backs, within the roof cavity space and sub-floor areas;
- 14.4. Defects only apparent under artificial light;
- 14.5. Defects only apparent in different weather or environmental conditions as to those prevailing at the time of our inspectors attendance;
- 14.6. Defects not consider significant enough to warrant any rectification work at the time of our inspectors attendance;
- 14.7. Defects that would be rectified as a consequence of any other defect detailed within this report;
- 14.8. Defects that our inspector considers to be Work in Progress or already clearly marked for rectification by your builder;
- 14.9. Check measure of rooms, walls and the overall building, for size, height, parallel and squareness;
- 14.10. Compliance with contractual documents such as electrical, heating, cooling, joinery, detailed plans; and/or colour selection specifications.
- 14.11. Landscaping, water tanks, retaining walls and any other structures outside the roofline of the main building;
- 14.12. Enquiries of Councils, the relevant Building Surveyor and/or any Statutory Authority;
- 14.13. Items that meet accepted industry practices and/or generally comply with the Performance Requirements of the BCA even if they are not meeting the Deemed-to-Satisfy provisions of that document.
- 14.14. The identification and reporting of inconsequential paint touch-ups, minor plaster and other small cosmetic defects.
- 14.15. The identification and reporting of minor cracking of cornice and architrave joints; minor alignment of cupboard doors and draw fronts; minor alignment of doors and their latches as it is our considered opinion that these items are best addressed at the maintenance stage.

## 15. VCAT Compliance

In the normal course of quoting our services, we do not allow to present our reports in accordance with Practice Note 2 under Section 158 of the Victorian Civil & Administrative Tribunal Act 1998. Therefore, if this report is to be submitted to VCAT an additional addendum will have to be prepared by us to be attached to it.