



Post Pour Concrete Slab Report

Inspection Date: 9 Apr 2020

Property Address: Rockbank Area - Melbourne



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If you have any queries with this report or require further information, please do not hesitate to contact the person who carried out the inspection.

Inspection details

Property Address: Rockbank Area - Melbourne

Date: 9 Apr 2020

Report Type: New Home Construction

Client

Name:

Email Address:

Phone Number:

Consultant

Name: Les Camilleri Ph: 0411807766

Email Address: les@masterpropertyinspections.com.au

Licence / Registration Number: A25361

Company Name: Master Property Inspections

Company Address: Victoria

Company Phone Number: 0411 807766

General description of property

Building Type:	Detached house
Number of Storeys:	Two storey
Siting of the building:	Not Applicable
Gradient:	Not Applicable
Site drainage:	The site is inadequately drained, however at this stage of the build
Orientation of the property:	The facade of the building faces north Note. For the purpose of this report the façade of the building contains the main entrance door.
Weather conditions:	Dry

Primary method of construction

Main building – floor construction:	Slab on ground
Main building – wall construction:	Not Applicable
Main building – roof construction:	Not Applicable
Other timber building elements:	NOT APPLICABLE
Other building elements:	Not Applicable

Special conditions or instructions

Special requirements, requests or instructions given by the client or the client's representative -

There are no special conditions or instructions

Accessibility

Areas Inspected

The inspection covered the Readily Accessible Areas of the property. Please note obstructions and limitations to accessible areas for inspection are to be expected in any inspection.

- The site
- Slab

The inspection does not include areas which are inaccessible due to obstructions, or where access cannot be gained due to unsafe conditions.

Obstructions and Limitations

The following obstructions may conceal defects:

- Vapour barrier
- Soil Abutting The Slab

Obstructions increase the risk of undetected defects, please see the overall risk rating for undetected defects.

Summary

SUMMARY INFORMATION: The summary below is used to give a brief overview of observations made in each inspection area. The items listed in the summary are noted in detail under the applicable sub headings within the body of the report. The summary is NEVER to be relied upon as a comprehensive report and the client MUST read the entire report and not rely solely on 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. (See definitions & information below the summary to help understand the report)

Evidence of safety hazards	Not Found
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Evidence of non compliant works	Found
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Evidence of substandard workmanship	Not Found
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Evidence of incomplete works	Not Found
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Additional specialist inspections

It is Strongly Recommended that the following Inspections and Reports be obtained prior to any decision to purchase the Property and/or before settlement. Obtaining these reports will better equip the purchaser to make an informed decision.

Not Applicable

Significant items

Safety Hazard

No evidence was found.

Non Compliant

Non Compliant 2.01

Location: Post Pour Slab - All Areas

Finding: Compaction Of The Slab.(Honeycomb Evident)
At the time of the inspection it appears that the slab has not been mechanically compacted as per the requirements of AS 2870. I refer the builder to:

-/ The contract that states that the builder will build to all regulations.

AS 3600, 9.5 VIBRATION OF SLABS

Vibration in slabs shall be considered and appropriate action taken, where necessary, to ensure that the vibrations induced by machinery, or vehicular or pedestrian traffic, will not adversely affect the serviceability of the structure.

-/ AS 2870, part 6.4.7 and Part C6.1 that calls for the vibration in the 4th paragraph of that clause.

Looking at the side of the slab, it appears evident that the slab has not been vibrated to all parts. The honeycomb effect that is made up of hundreds of air pockets is what should not be present.

Had this slab been vibrated to all parts, then this honeycomb effect would not be present and the concrete would have a smooth like finish.

The defect is that if it has not been done to the outer skin of the exposed areas, then the likely

hood is that the internal of the slab has the same honeycomb effects as well and if this is the case then the density of the concrete will be compromised.

It is highly recommended that you :

-/ Seek engineering advice.

-/ Seek a Compressive Strength Test to check the MPA strength after a certain period of cure time.

-/ Sample the slab via a core hole or several core holes that are taken by a NATA accredited testing agency. Note the NATA testing agency must take the samples to ensure a reliable chain of evidence.

-/ Share the results with my client and the engineer.

-/ Upon all the results a conclusion that meets the AS 2870.

All AREAS to the ENTIRE slab should be checked CAREFULLY to identify any further defects that are the same as this defect.



Non Compliant 2.02

Location: Post Pour Slab - All Areas

Finding: Builder Concrete Waste - Remaining

It was noted that there is excessive amount of concrete (builder waste) on the site in various areas. All builders waste must be removed as per the contract.

The builder must use all endeavours to ensure that the site is safe and left clean whilst in construction and a clean, builders waste free site prior to final handover as per the building act and contractual agreements.

All AREAS to the ENTIRE slab should be checked CAREFULLY to identify any further defects that are the same as this defect.



Non Compliant 2.03

Location: Post Pour Slab - All Areas

Finding: Slab Over Pour - Not Acceptable.

The slab has been installed with what is known as over pour.

The over pour will affect the home owner's ability to install paving and other landscaping.

It is important as well prior to just cutting the excess concrete off, that the bottom procedures take place :

The over pour will need to be removed. This will require:

-/ Seek engineering process and design for rectification of this defect.

-/ Document same.

-/ Send the engineering to the site surveyor for approval.

-/ Have the site surveyor witness the repair of the slab to ensure that the builder has carried out the works in accordance with the process's and rectification statements in the engineering documentation.

-/ Supply a copy of all to my client as per section 26 of the Domestic building contracts Act 1995.

-/ Satisfy the defect has not been hidden by placing soil over the edge beam of the over poured slab.





Non Compliant 2.04

Location: Post Pour Slab - All Areas

Finding: Polyethylene vapour barrier not installed as per BCA - Part 3.2.2.6

It was noted at the time of inspection that a vapour barrier had not be installed in accordance with AS2870 and BCA Part 3.2.2.6.

All of the vapour barrier system has NOT been done correctly and ALL areas of non compliance is required to be repaired.

- 1/ All over laps are not taped as described below.
- 2/ All the rips and/or damaged area needs to be taped.
- 3/ ALL areas are not up to future ground and/or finished paving or concrete heights and must be extended with 200mm overlay and taped.
- 4/ Somes areas whilst listed above are Damaged / Ripped / Not Consistent And Sealed with 200mm Overlay And Taped / Not High Enough / Non Existent must ALL be repaired.

The polyethylene vapour barrier from beneath the concrete floor slab must be turned up the external side faces of its edge beams. Failing to install the vapour barrier correctly will allow moisture ingress via slab edge dampness into the internal timber wall skins and/or the floor coverings if not done.

The polyethylene vapour barrier must properly extended up the external side faces of the edge beams to at least 600mm above the height of the slab for now and then at future finished ground level of the solid, concrete , etc.

Without a vapour barrier installed, these areas are non-compliant with Australian Standards and are susceptible to excessive moisture, which may create major secondary defects as the building ages. Rectification works are necessary as soon as possible to ensure all standards are met.

NCC 2016 Building Code of Australia - Volume Two

3.2.2.6 Vapour barriers

A vapour barrier must be installed under slab-on-ground construction for all Class 1 buildings and for Class 10 buildings where the slab is continuous with the slab of a Class 1 building as follows—

(a) Materials

A vapour barrier must be—

- (i) 0.2 mm nominal thickness polyethylene film; and
- (ii) medium impact resistant, determined in accordance with criteria specified in clause 5.3.3.3 of AS 2870; and
- (iii) be branded continuously “AS 2870 Concrete underlay, 0.2 mm Medium impact resistance”.

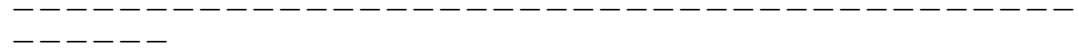
(b) Installation

A vapour barrier must be installed as follows—

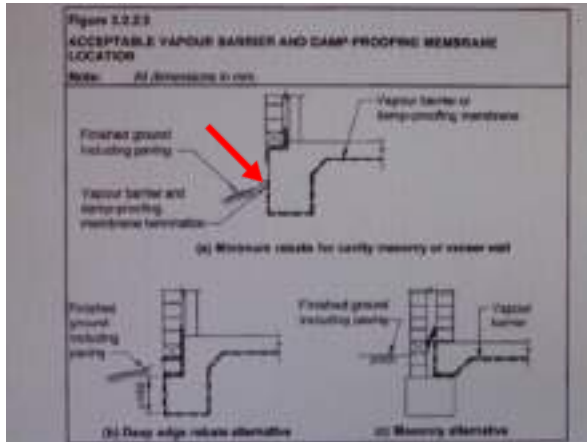
- (i) lap not less than 200 mm at all joints; and
- (ii) tape or seal with a close fitting sleeve around all service penetrations; and
- (iii) fully seal where punctured (unless for service penetrations) with additional

polyethylene film and tape.

(c) The vapour barrier must be placed beneath the slab so that the bottom surface of the slab is entirely underlaid and extends under edge beams to finish at ground level in accordance with Figure 3.2.2.3.



All AREAS to the ENTIRE slab should be checked CAREFULLY to identify any further defects that are the same as this defect.





Non Compliant 2.05

Location: Post Pour Slab - All Areas

Finding: Cold Joint - Rebate Defective, Works not in a proper and workmanlike manner
Evidence is identified generally that works have been completed in a manner which is not considered to be proper and workmanlike.

As per the Domestic Building Contracts Act 1995, each state based legislation contains implied warranties concerning all domestic building work.

These include, but are not limited to, that the builder warrants that the work will be carried out in a proper and workmanlike manner and in accordance with the plans and specifications set out in the contract.

It is obvious that that the brick rebate has had concrete added at a later stage when the original concrete was drying and/or dry as there is a cold joint between the two surface areas.

Cold Pour Joints in concrete foundations which leave visible lines in the concrete foundation wall are not usually a structural problem but may in some cases form a dry joint which permits water leakage through the foundation wall.

Cold pour joints occur because of the time delay between subsequent "pours" into the foundation forms.

An astute inspector, by noting the position, pattern, and slope of the cold pour joint, can probably determine the position from which the concrete was poured into the forms (the high end of the sloping lines) and the extent of delay between pours (evidence of water leaks through the joints indicates that enough time passed for the lower pour to solidify).

This remedial works requires a structural engineer to determine the repair method prior to any further works advancing over the rebate.

All AREAS to the ENTIRE slab should be checked CAREFULLY to identify any further defects that are the same as this defect.



Non Compliant 2.06

Location: Front Garage

Finding: Re Bate - Defective

The front of the garage requires a rebate. The builder has not installed a rebate to the width and front of the garage which is a standard requirement. The builder is required to repair to a tradesman's like level the front rebate required as per the Australian standards.



Substandard Workmanship

No evidence was found.

Incomplete

No evidence was found.

Additional comments

There are no additional comments

Noted Items

For Your Information

For Your Information 5.07

Location: For Your Information
Finding: Finished Concrete Floor Levels - Acceptable
LIQUID DIGITAL ELECTRONIC FLOOR LEVELLING

NOTE :
THE PHOTOS WITH THE BLUE ARROWS INDICATE THE REFERENCE POINTS, WHICH DETERMINES IN MILLIMETRES IF THE OTHER LOCATIONS ARE HIGHER OR LOWER THEN THE REFERANCE POINTS WITH THE BLUE ARROWS.
THIS PROPERTY INDICATES THAT THE FLOORING IS WITHIN TOLERANCES & IS WITHIN THE ACCEPTABLE AUSTRALIAN STANDARDS .

The photos will demonstrate that the floor levels are within Guide To Standards And Tolerances 2015, Footings, Slabs And Setting Out, 2.08 and Australian Standards (AS 1684)

The overall deviation of floor level (concrete slab) to the entire building footprint shall not exceed 20 mm, as per the `Guide to Standards and Tolerances` Section 2.08 and AS 1684.

GUIDE TO STANDARDS AND TOLERANCES 2015

2.08 Levelness of concrete floors

Except where documented otherwise, new floors are defective if within the first 24 months of handover they differ in level by more than 10 mm in any room or area, or more than 4 mm in any 2 m length. The overall deviation of floor level to the entire building footprint shall not exceed 20 mm. Refer to Item I of this Guide where the new floor is to abut an existing floor.

















For Your Information 5.08

Location: For Your Information

Finding: Special Notes.

Particulars of Our Inspection and Report

Our Inspection is a visual inspection of the overall finishes and the quality of those finishes presented by the Builder. This Report is a list of items that in our judgement do not reach an acceptable standard of quality, level of building practice, or have not been built in a proper workmanlike manner, in relation to the Building Code of Australia, (BCA's) the Building Regulations, any relevant Australian Standards and the acceptable standards and tolerances as set down by the Building Commission.

1. Purpose

The purpose of our inspection is to identify any defects in the finishes and the quality of those finishes presented by the builder at the stage of works nominated on the front of this report. This report contains a schedule of building defects that in the writer's judgement do not reach an acceptable standard of quality, level of building practice, or have not been built in a proper workmanlike manner relative to the Building Code of Australia, the relevant Australian Standards or the acceptable standards and tolerances as set down by the Building Control Commission.

2. Scope

Our engagement is confined to that of a Building Consultant and not that of a Building Surveyor as defined in the Building Act, of 1993. We therefore have not checked and make no comment on the structural integrity of the building, nor have we checked the title boundaries, location of any easements, boundary setbacks, room dimensions, height limitations and or datum's, glazing, alpine and bush-fire code compliance, or any other requirements that is the responsibility of the Relevant Building Surveyor, unless otherwise specifically noted within this report.

For Your Information 5.09

Location: For Your Information

Finding: Advice Summary.

This inspection was performed in accordance with current "Australian Standards" & in accordance with current "Standards & Tolerances" as outlined by the Victorian Building Commission.

The inspection is a visual inspection of the property as presented by the builder.

This inspection performed does not in any way attempt to verify site dimensions, finished dimensions of the completed sections or parts of the building, levels, wall alignments, floor alignments, or ceiling alignments.

The inspection performed does not in any way attempt to verify contractual conditions.

This report contains a list of a number of defects that in our judgement require rectification.

For Your Information 5.10

Location: For Your Information

Finding: Concrete Must Comply With :

3.2.3.1 Concrete

Concrete must comply with the following:

- (a) Concrete must be manufactured to comply with AS 3600; and—
 - (i) have a strength at 28 days of not less than 20 MPa (denoted as N20 grade); and
 - (ii) have a 20 mm maximum nominal aggregate size; and
 - (iii) have a nominal 100 mm slump.
- (b) Water must not be added to the mix to increase the slump to a value in excess of that specified.
- (c) Concrete must be placed, compacted and cured in accordance with good building practice.



For Your Information 5.11

Location: For Your Information
Finding: Re-Inspection - Recommended
We highly recommend that a Re-Inspection to inspect the rectified defects are performed prior to further works commencing.



For Your Information 5.12

Location: General Site Photos.
Finding: Site Photos
General site photos are provided for your general reference.



For Your Information 5.13

Location: Post Pour Slab - All Areas

Finding: Concrete Surface Finish - Acceptable
Additional photos are provided for your general reference to show that the concrete surface finish is acceptable and well within Standards & Tolerances 2015.



Conclusion

Building consultant's summary

IMPORTANT NOTE:

I have **ONLY** taken **LIMITED** photos of the defects and attached are **LIMITED** photos of the defects in **SOME AREAS ONLY**.

All AREAS to the entire property should be checked **CAREFULLY** to identify any further defects that are the same.

The post slab has defects as highlighted in the report .

We highly recommend that a Re-Inspection to inspect the rectified defects is performed prior to further works commencing.

Terms on which this report was prepared
