

# **Pre-Pour Concrete Slab**

Inspection Date: 22 May 2020

Property Address: Lot 516, No 12, Mantle Street, Wollert, Vic



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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 Page 3

# **Inspection details**

Property Address: Lot 516, No 12, Mantle Street, Wollert, Vic

Date: 22 May 2020

Report Type: New Home Construction

### Client

Name: Yash Sooroojebally

Email Address: yashsooroojebally@gmail.com

Phone Number: 0450400176

## 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 Page 4

# **General description of property**

Building Type:	Detached house
Number of Storeys:	Single storey
Gradient:	The land is relatively flat
Site drainage:	The site is inadequately drained, however at this stage of the build
Orientation of the property:	The facade of the building faces east  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 Page 5

# **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:

- Not Applicable

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

### Inaccessible Areas

The following areas were inaccessible:

- Not Applicable

Any areas which are inaccessible at the time of inspection present a high risk for undetected building defects. The client is strongly advised to make arrangements to access inaccessible areas urgently.

Summary Page 6

# **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	Found
Evidence of non compliant works	Found
Evidence of substandard workmanship	Found
Evidence of incomplete works	Found

## 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

### **Safety Hazard 1.01**

Location: Post-Pour Slab - All Areas

Finding: Defective Earthing To Steel Mesh.

The earthing facility installed to the dwellings slab steel as required in AS 3000 has not been

completed as per AS3000.

I refer the builder to AS 3000, clause 5.6.2.5 that states "Any conductive reinforcing within a concrete floor or wall forming part of a shower or bathroom shall be bonded to the earthing

system".

Whilst the earth bar is in location and tied, it needs to be tied and/or secured tight so that the

bar is not loose to the steel mesh of the slab.

In this case I recommend a couple of additional ties that secure the earth bar to the steel

mesh tight.





Non Compliant

#### Non Compliant 2.02

Location: Post-Pour Slab - All Areas

Finding: Mesh Too Close To The Perimeter.

1. The reinforcement mesh is sitting too close to the perimeter boxing to sections of the dwelling. 40mm to external exposure, to the entire perimeter boxing is required.

This mesh will need to be cut back or repositioned before the slab is poured to provide sufficient concrete cover to the reinforced steel.

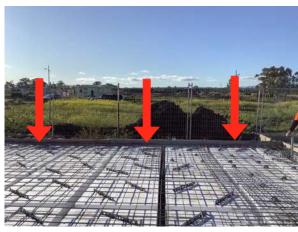
Extract from NCC Volume 2:

(D). Footings and slabs on ground must have concrete cover between the outermost edge of the reinforcement (including ligatures, tie wire Etc.) and the surface of the concrete of not less than:

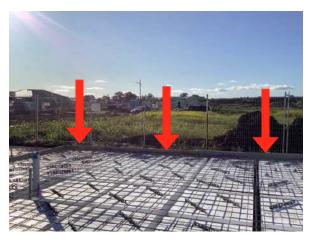
- (i). 40mm to unprotected ground.
- (ii) 30mm to a membrane in contact with the ground.
- (iii) 20mm to an internal surface.
- (Iv) 40mm to external exposure.

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: polyethylene vapour barrier not installed as per BCA - Part 3.2.2.6

Defective Vapour Barrier Installation - Damaged/Punctured and/or overlapping Defective.

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.

Whilst the majority of the vapour barrier system has been done correctly there are minor areas of non compliance to repair.

1/ All over laps are not taped as described below.

2/ All the ripps and/or damaged area needs to be taped.

3/ Some 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 the height of future finished ground level or paving i.e. 75mm below the damp-proof course and bottoms of the weepholes, after which any termite barriers that are in place, if required, will also need to be properly instated.

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

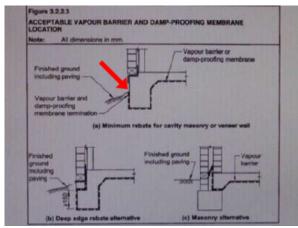
A vapour barrier must be installed as follows—

(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 2.04

Location: Post-Pour Slab - All Areas
Finding: Plumbing Pipe Clearance.

At the time of inspection it was found that distance between the plumbing pipes and the

Mesh/Reo is NOT at a minimum clearance of 20mm.

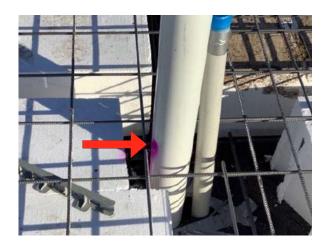
It is advised that all the Mesh/Reo that is not 20mm clearance to any plumbing be rectified

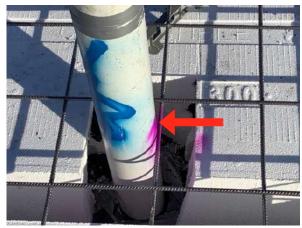
before the concrete is poured.

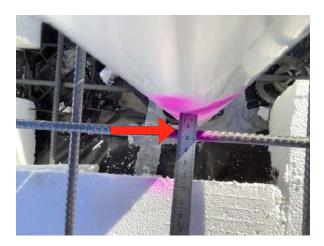
Note all repairs required are sprayed with pink paint.

All AREAS to the ENTIRE slab should be checked CAREFULLY to identify any further defects  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left$ 

that are the same as this defect.











### **Non Compliant 2.05**

Location: Post-Pour Slab - All Areas

Finding: Pipe penetrations through the vapour barrier.

The pipe penetrations through the vapour barrier have not been fully taped and require

further works.

There are also numerous cuts and tears throughout the vapour barrier that have not been

taped correctly.

These will need to be taped up and photographed before the pour is started.

I refer the builder to the NCC Volume 2.

3.2.2.6 Vapour Barriers.

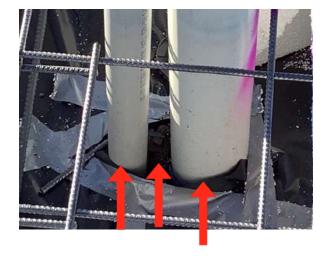
(b) Installation.

A vapour barrier must be installed as follows -

- (i) lap not less then 200 mm at all joins. And
- (ii) tape or seal with a close fitting sleeve around all service penetrations.

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







# Substandard Workmanship

## **Substandard Workmanship 3.06**

Location: Post-Pour Slab - All Areas

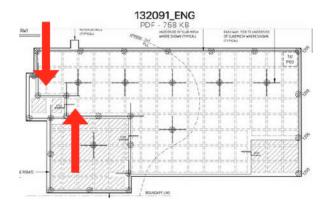
Finding: Completion - Not Satisfactory

The waffle slab support and steel mesh in these areas needs to be supported better.









Incomplete

### **Incomplete 4.07**

Location: For Your Information

Finding: Additional Site Visit Required.

The results of our inspection have been fully detailed in the attached schedule of Building

Defects.

Should the reader of this report have any additional queries or questions in relation to the items set out within it and due to the urgency for rectification works prior to the concrete pour please do not hesitate to contact the writer via my phone number of 0411807766.

Entry to site was obtained under the Building Act, 1993, section 240 and the Domestic Building Contracts Act, 1995, part 2, section 17 and 19. We act and make limited representations under the direction of the dwellings owners under these two acts.

### Incomplete 4.08

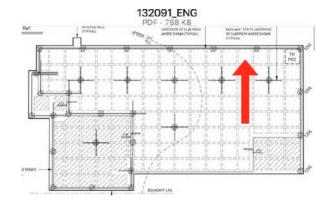
Location: Post-Pour Slab - All Areas

Finding: Slab alterations or trenching (AS2870)

It was identified that the slab steel has been cut and/or altered in this location.

The slab steel mesh and waffle does not comply or correspond with the engineering

drawings in this location. This must be completed prior to concrete pour.





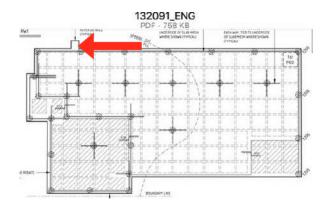


### **Incomplete 4.09**

Location: Post-Pour Slab - All Areas
Finding: No Pad Installed For HWS.

The pad for the hot water service is not complete.

I recommend the vapour barrier system, be completed in this area.







## **Additional comments**

#### 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.

Additional comments Page 19

# For Your Information

### For Your Information 5.10

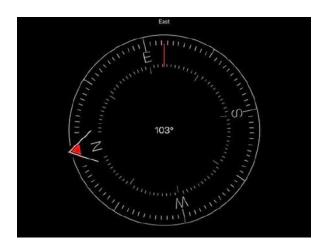
Location: General Site Photos

Finding: Site Photos.

Additional photos are provided for your general reference.









Observations Page 20

#### For Your Information 5.11

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.

Observations Page 21

#### For Your Information 5.12

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.

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Observations Page 22

#### For Your Information 5.13

Location: For Your Information

Finding: Concrete Mix 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 5.14

Location: Post-Pour Slab - All Areas
Finding: Thickness Of Steel Mesh.

Additional photos are provided for your general reference.





# **Conclusion**

Conclusion Page 23

# Building consultant's summary

The Pre-Pour has defects that have NOT been repaired, whilst I was on site as the contractors had left, before I arrived.

Definitions Page 24

# Terms on which this report was prepared

SERVICE As requested by the Client, the inspection carried out by the Building Consultant ("the Consultant") was a 'Standard Property Report'.

PURPOSE OF INSPECTION The purpose of this inspection is to provide advice to the Client regarding the condition of the Building and Site at the time of inspection.

SCOPE OF INSPECTION This Report only covers and deals with any evidence of: Major Defects in the condition of Primary Elements including Structural Damage and Conditions Conducive to Structural Damage; any Major Defect in the condition of Secondary Elements and Finishing Elements; collective (but not individual) Minor Defects; and any Serious Safety Hazard discernible at the time of inspection. The inspection is limited to the Readily Accessible Areas of the Building and Site (see Note below) and is 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 The building was compared with a building that was constructed in accordance with the generally accepted practice at the time of construction and which has been maintained such that there has been no significant loss of strength and serviceability.

Unless noted in "Special Conditions or Instructions", the 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. The 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, 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 the Report was based please discuss your concerns with the Consultant on receipt of the 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. 'Visual only' inspections are not recommended. A visual only inspection may be of limited use to the Client. In addition to a visual inspection, to thoroughly inspect the Readily Accessible Areas of the property requires the Consultant to carry out when ever necessary appropriate Tests.
- 2. This Report does not include the inspection and assessment of items or matters outside the scope of the requested inspection and report. Other items or matters may be the subject of a Special-Purpose Inspection Report, which is adequately specified (see Exclusions below).

erms and conditions Page 25

- 3. This Report does not include the inspection and assessment of items or matters that do not fall within the Consultant's direct expertise.
- 4. The inspection only covered the Readily Accessible Areas of the property. 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.
- 5. Australian Standard AS4349.0-2007 Inspection of Buildings, Part 0: General Requirements recognises that a property report is not a warranty or an insurance policy against problems developing with the building in the future.
- 6. This Report was produced for the use of the Client. The Consultant is not liable for any reliance placed on this report by any third party.

#### **EXCLUSIONS**

The Client acknowledges that this Report does not cover or deal with:

- (i) any individual Minor Defect;
- (ii) solving or providing costs for any rectification or repair work;
- (iii) the structural design or adequacy of any element of construction;
- (iv) detection of wood destroying insects such as termites and wood borers;
- (v) the operation of fireplaces and chimneys;
- (vi) any services including building, engineering (electronic), fire and smoke detection or mechanical;
- (vii) lighting or energy efficiency;
- (viii) any swimming pools and associated pool equipment or spa baths and spa equipment or the like;
- (ix) any appliances such as dishwashers, insinkerators, ovens, stoves and ducted vacuum systems;
- (x) a review of occupational, health or safety issues such as asbestos content, the provision of safety glass or the use of lead based paints;
- (xi) a review of environmental or health or biological risks such as toxic mould;
- (xii) whether the building complies with the provisions of any building Act, code, regulation(s) or by-laws;
- (xiii) whether the ground on which the building rests has been filled, is liable to subside, swell or shrink, is subject to landslip or tidal inundation, or if it is flood prone; and
- (xiv) in the case of strata and company title properties, the inspection of common property areas or strata/company records.

Any of the above matters may be the subject of a special-purpose inspection report, which is adequately specified and undertaken by an appropriately qualified inspector.