

ABN 12 115 961 487 PO Box 88 **Bacchus Marsh Vic 3340** 



**Site Address:** 

**Client Name:** 

Phone #:

**Email:** 

**Dwelling type:** House and Garage. **Dwelling configuration:** Single Storey.

Nature of works: Single Storey.

New Building.

**Stage of inspection:** Final.

Construction Type: Brick Veneer.
Garage: Attached.
Foundations: Slab.

**Builder:** 

#### **Client Brief**

I was instructed to inspect the client's new home to write a report as to the overall installation of all items required to construct a new home to completion stage. Our role is to assist the clients in outlining any issues that may be identified as being within the scope of the builder to ensure that all construction items are correctly constructed and completed in a workman like manner and meet with all relevant codes and industry practises. As such the client has engaged our services to assist with this report.

# **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.

# Access

Access was gained to all required areas of the residence.

# **Report Conditions**

The terms and conditions that our site inspection and this report are carried out and supplied under are listed on the last page of this report.

The building process is progressive and items in this report may or may not be covered during the build by materials installed over a documented defect. We recommend that all clients book a reinspection and state that the builder must present all defects rectified prior to moving forward with the build. All items that we are unable to look at from a previous report will not be included in any future reports. We will use all endeavours to ensure rectification, however we are limited to non-destructive method of detection.

# **Summary**

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, please do not hesitate to contact the writer via any of the methods detailed at the top of the cover page.

Please note: <u>A fee of \$350.00 per hour</u>, or part thereof, plus GST will be charged for any clarification required by the builder, or any of the builders' employees, and a purchase order for same will be required prior to any contact between Darbecca Pty Ltd and the builder.

An inspection was conducted at the above address on 26/04/2021 for the purpose of a general home inspection, requested by the 'client'.

The inspection was conducted with the 'client' present, and details exterior and interior.

The weather was overcast at the time of the inspection.

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

# **Schedule of Defects:**

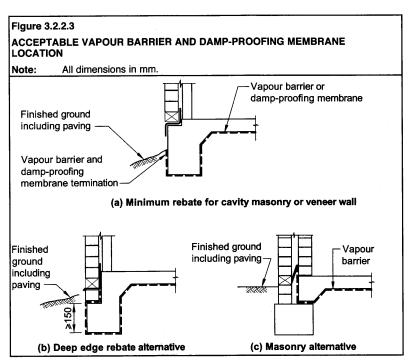
# <u>Defects</u>, observations and other related comments from the Final Inspection on the 26/04/2021:

1. This defect was previously noted and had not been fully rectified at the time of the final inspection on the 26/04/21.

The polyethylene vapour barrier from beneath the concrete floor slab has not been turned up the external side faces of its edge beams. It must be prior to them being back filled up against, which will allow moisture ingress via slab edge dampness into the internal timber wall skins and/or the floor coverings if not done.

I refer the builder to the recent VCAT ruling on this type of defect by Senior Member Mr. Walker in VCAT case Zalega Vs Clarendon Homes (D217/2011) that ruled that also commented on this issue. See section 47 of that ruling.

It is a requirement of Part 3.2.2.6 Vapour Barriers of the BCA that 'The vapour barrier must be placed beneath the slab so that the bottom surface of the slab is entirely under laid <u>and extends under edge beams to finish at ground level</u> in accordance with Figure 3.2.2.3.'



All the existing loose fill that has been placed up against the slabs edge beams will need to be removed and the polyethylene vapour barrier 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.

I also refer the builder to a recent Victorian Building Commission ruling on this defect (Dec 2011). That ruling is binding and states that the Vapour Barrier must be installed. See inserted below.

Items inspected			
Item number			
Description of item in dispute			
Vapour barrier - not extend	ded to ground level		
Reference Contract	Building Code of Australia	Australian Standard	
Structural Engineering drawing No. 3	Clause 3.2.2.6(c)	a fulker it availer Tuesenvo terilo.	
Guide to Standards and Tolerance	s Other	and let per detail accommendation of the	
	Blanke	Blanked out for privacy reasons	
	1		

### Observations and discussion

- The owner complained the vapour barrier under the floor slab is not extended under edge beams to finish at the ground level.
- The vapour barrier under the reinforced concrete waffle slab finishes at the bottom of the edge beams.
- The typical Edge Beam detail on the Structural Engineering drawing shows the vapour barrier finishes up the side edge of the edge beam to the finished ground level.
- 4) The letter from Structural Works provides a detail showing the vapour barrier terminating at the bottom of the edge beam. The letter states that they are satisfied with this detail. However they do not refer to the requirement of the placement of the vapour barrier in the BCA.
- 5) The BCA states that the vapour barrier must be placed beneath the slab so that the bottom surface of the slab is entirely under laid and extends under edge beams to finish at ground level in accordance with Figure 3.2.2.3.
- 6) This is a defect because the vapour barrier does not extend under the edge beam to finish at ground level as required in the BCA.

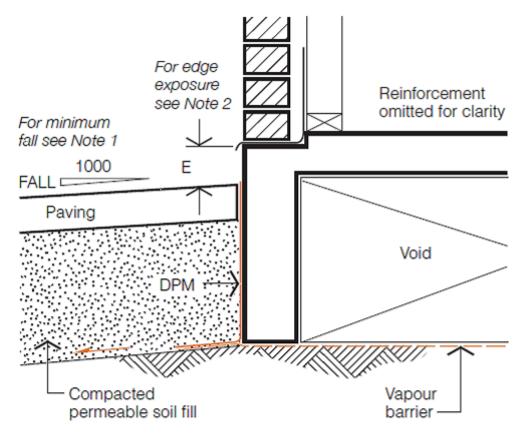
Is the work of the builder defective?	Yes	
Is building work recommended?	Yes	

#### Building work recommended to rectify defective work of the builder

Extend the vapour barrier around the perimeter of the building so it finishes at ground level as shown in Figure 3.2.2.3 of the BCA.

The following is an approved rectification for this defect.

This is out of the Concrete Institute of Australia's current practice note on how to deal with slab edge dampness post construction and looks fairly easy to achieve. Note it is for a Waffle Pod Footing.



- Fall 'cut' benching away from the footing
- 2 Terminate vapour barrier under DPM on 'cut' benching
- 3 Place DPM between paving and footing (see Note 3 for details)

# WAFFLE FOOTING OPTION



2. This defect was previously noted and had not been fully rectified at the time of the final inspection on the 26/04/21.

**The VBA Guide to Standards and Tolerances:** - Voids, holes, mortar smears, and stains in masonry walls are defective if visible from a normal viewing position.

Masonry faces are defective if they are not cleaned and free of excess mortar. Homeowners are entitled to expect that the works are clean and tidy on completion. This would include paint and plaster excesses, etc. to be removed from the brickwork.

The brickwork to this dwelling has not met these requirements.

# **3.09** Voids and holes in mortar

Voids and holes in mortar in masonry walls, with the exception of weepholes and vents, are defective if they are visible from a normal viewing position.

# **3.07** Masonry facing

Unless documented otherwise, masonry is defective if it is not laid with true, fair or finish face outwards.

Unless documented otherwise, masonry faces are defective if they are not cleaned and free of excess mortar.

# **3.11** Cleaning, mortar smears and stains

Stains, mortar smears and damage caused by cleaning are defective if they are visible from a normal viewing position.

# 18.08 Cleaning

Owners are entitled to expect that the building site and works are clean and tidy on completion. Where handover is delayed for any reason the owner must expect that dust may have settled on interior exposed surfaces.

Building sites are defective if they are not clear of building debris.

Building works are defective where windows are not clean, floors are not swept, mopped or vacuumed as appropriate, tiles, sinks, basins, troughs, baths, etc. are not cleaned, and shelving, drawers and cupboards ready for use.









3. This defect was previously noted and had not been fully rectified at the time of the final inspection on the 26/04/21. This is a critical item as will likely result in pooling of water immediately adjacent to footings.

The land to the garage falls back towards the foundations of the slab. Given that this is a zero boundary, the builder must work in provisions for draining the soil to this area.

I noted that the Engineering states that a 50 mm fall away from the footings must be installed. The builder needs to assist us with an understanding of how, with a zero boundary the builder expects to achieve this requirement.

The NCC mandates that water is controlled and must fall away from the dwelling. See part 3.1.2.3 and figure 3.1.2.2.

I also refer the builder to the soil report that would clearly call for the site drainage to be managed via sloping water away from the slab and more so, managing same.

The builder should have allowed a 150 mm set back to the Garage wall to boundary and installed a water management system to divert water away from the foundations and slab edge as an alternate solution to the mandated requirements.

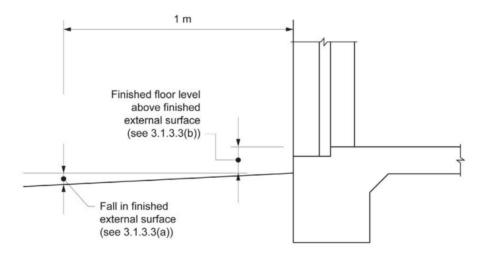
As this has the ability to cause damage it must be addressed without delay, as per section 39.1 of the domestic building contracts act.

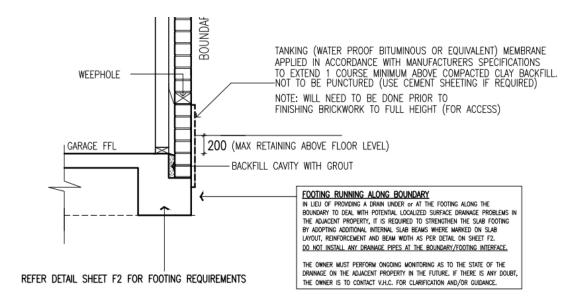
# 3.1.3.3 Surface water drainage

Surface water must be diverted away from Class 1 buildings as follows:

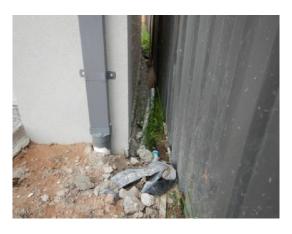
- (a) Slab-on-ground finished ground level adjacent to buildings:
  - the external finished surface surrounding the slab must be drained to move *surface water* away from the building and graded to give a slope of not less than (see Figure 3.1.2.2)—
  - (i) 25 mm over the first 1 m from the building in *low rainfall intensity areas* for surfaces that are reasonably impermeable (such as concrete or clay paving); or
  - (ii) 50 mm over the first 1 m from the building in any other case.
- (b) Slab-on-ground finished slab heights:
  - the height of the slab-on-ground above external finished surfaces must be not less than (see Figure 3.1.3.2)—
  - (i) 100 mm above the finished ground level in low rainfall intensity areas or sandy, well-drained areas; or
  - (ii) 50 mm above impermeable (paved or concreted areas) that slope away from the building in accordance with (a); or
  - (iii) 150 mm in any other case.

Figure 3.1.3.2 Site surface drainage





# TANKING TO GARAGE WALL ADJACENT TO BOUNDARY IF REQUIRED - DETERMINE ON SITE





# 4. This defect was previously noted, engineers comments not recieved at the time of the final inspection on the 26/04/21.

We noted that the slab has been cut and opened. We further noted that the repair is poorly constructed.

In order to open a slab, a builder must;

- Seek engineering process and design for both the opening and reinstallation of any and all support systems such a steel reinforcing.
- Document same.
- Send the engineering to the site surveyor for approval.
- Have the site surveyor witness the opening and closing of the slab to ensure that the builder has carried out the works in accordance with

the processes and rectification statements in the engineering documentation.

- Ensure that termite protection is installed into the opening as required.
- Supply a copy of all to my client as per section 26 of the Domestic Building Contracts Act 1995.

# 26. Builder must supply copies of relevant reports etc.

(1) A builder must give to a building owner a copy of any report, notice, order or other document that the builder is given in relation to the building work being carried out by the builder for the building owner by any public statutory authority, provider of services such as gas, electricity, telephone, water and sewerage or person registered under the **Building Act 1993**, and must do so as soon as practicable after receiving the report, notice, order or document.

Penalty: 20 penalty units.



5. This defect was previously noted and had not been fully rectified at the time of the final inspection on the 26/04/21.

The BlueScope Colorbond roofing products to the dwelling have been damaged during construction.

**BlueScope Technical Bulletin-38**: - BlueScope <u>do not</u> support the use of touch-up paints on 'Colorbond' steel, and that their use will invalidate the BlueScope Warranty.

Damaged areas greater than 2mm in width will need to be replaced.

# **Technical Bulletin 38**

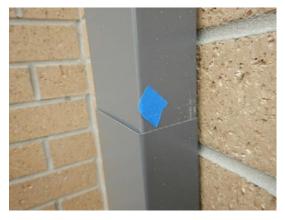
May 2019. Revision 1.

# REPAIR OF MINOR SCRATCHES AND BLEMISHES

BlueScope does not recommend the use of touch-up paint to repair damage or scratches to the painted surface. As explained above, airdrying paints have different weathering characteristics to COLORBOND® steel, which leads to variations in appearance over time where touch-up paint has been used. BlueScope does not have a recommended method for the removal of touch-up paint. Minor scratches (< 2mm in width) should be left alone as the available metallic coating will continue to protect against corrosion providing the scratches are superficial and the metallic coating is not damaged. If scratches are more noticeable on new material, it is the recommendation of BlueScope to replace the affected product.

BlueScope does not recommend or support the use of touch-up paint on COLORBOND® steel. The application of post paint treatments or systems to the material will invalidate the BlueScope Warranty\*.









6. This defect was previously noted and had not been rectified at the time of the final inspection on the 26/04/21.

**AS 3500.3:** - The minimum allowable gradient is 1:500 to achieve an effective gradient with no permanent ponding.

Areas of the eaves gutter installation to this dwelling have not met this requirement.

#### 4.5.1 Installation

Installation of each new or altered section of the roof drainage system shall conform with the following:

- (a) There shall be no restrictions to the free flow of stormwater due to-
  - (i) protrusions or other obstructions; or
  - (ii) debris (e.g. cement, mortar, clippings and similar debris).
- (b) All accessories shall be effectively fixed and securely anchored.

### 4.5.3 Eaves gutters

Eaves gutters shall be installed as follows:

(a) Gradients Deviations from nominal gradients shall be smooth and not cause permanent ponding.

#### NOTES:

- 1 Where a building is likely to move due to reactive soils, gradients should not be flatter than—
  - (a) 1:250 to achieve an effective gradient not flatter than 1:500; or
  - (b) 1:500 to achieve an effective gradient with no permanent ponding.
- 2 Light condensation does not generally cause permanent ponding, whereas heavy condensation, particularly in conjunction with retained silt, can reduce the design lifetime of the product.













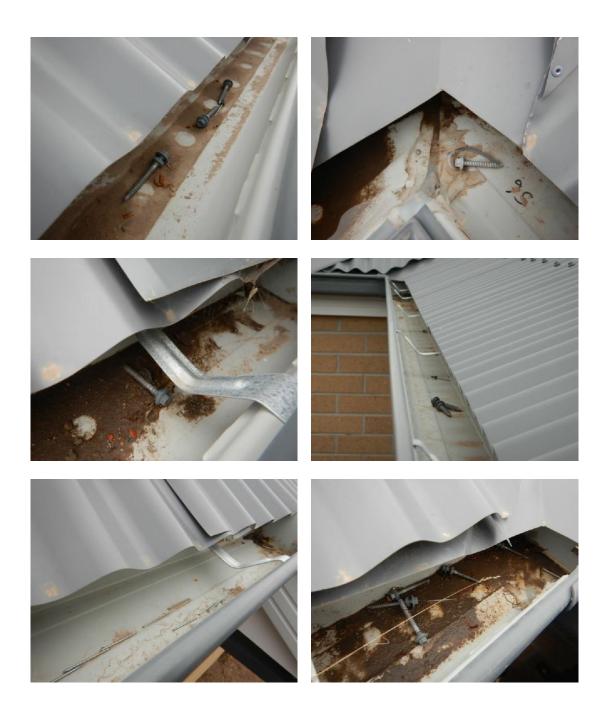
7. This defect was previously noted and had not been rectified at the time of the final inspection on the 26/04/21.

**Standards Australia HB 39:** - The gutters and roof sheeting must be fully cleaned of metal particles, roof screws, pop rivets, mortar, paint, and the like.

The roof and gutter installation to this dwelling has not met this requirement.

# 3.6 CLEANING UP

Normal installation practices such as drilling and cutting usually leave offcuts and metallic swarf on or around the roof area. These materials and all other debris, including blind rivet shanks, nails and screws are to be cleaned from the roof area and gutter regularly during the installation process as unsightly staining of the surface due to oxidation of the metal particles will result, leading to corrosion and possible failure of the roofing material or guttering. Where practicable, the entire installation should be cleaned down with a blower vac, swept or, alternatively, if a water supply is available, hosed down at the completion of the work.



# 8. This defect was previously noted and had not been rectified at the time of the final inspection on the 26/04/21.

A number of roof screws have been over tightened deforming the washers. This must be avoided as it can lead to a loss of the water seal and lead to future water leaks. All screws must be completed in accordance with the minimum requirements of AS 1562.1-2018 clause 4.4.2 & Figure 3.6.1 of the manufacturer's specifications.

# 4.4.2 Pierced-fastened cladding

Fasteners in valleys or crests shall be tightened to compress flexible seals without deforming the cladding or damaging any washers.

Where nails are used, any local distortion shall not extend beyond the area covered by the washer and seal.

#### NOTES:

- 1 Compressed washers should be used to minimize water leakage and provide cladding performance as per design documentation (see Clause 3.5).
- 2 Care is to be exercised to prevent the entrapment of swarf between the seal and the cladding for both crest and valley fasteners.



Figure 3.6.1
It is important that you set screws correctly

# 3.6 Setting of screws

Fasteners with sealing washers should be tightened only until the washer is gripped firmly enough to provide a weathertight seal. The fasteners should not be over-tightened because this may split the sealing washer or deform the sheet, either of which could lead to water penetration. Take particular care when valley fixing because there is no flexibility with the sheet hard against its support. Take particular care to ensure the fastener is driven perpendicular to the sheeting to avoid deformation of the washer.





9. This defect was previously noted and had not been fully rectified at the time of the final inspection on the 26/04/21. Critical item potentially allowing water ingress to roof frame.

NCC 2019; 3.5.1.5: - Roof sheets must be fixed off as per Table 3.5.1.4.

Roof sheet fixing has not met this requirement.

# 3.5.1.5 Fixing of metal sheet roofing

Metal sheet roofing must—

- (a) be either fixed through the roofing (crest fastening) or have concealed fasteners; and
- (b) be fixed at spacings in accordance with Table 3.5.1.4; and

Table 3.5.1.4 Fixing requirements for sheet roofing

Sheet roofing profile	Fixing: End span	Fixing: Internal spans	
Corrugated	Side lap and every second rib	Side lap and every third rib	
Close pitched trapezoidal	Side lap and every second rib Side lap and every third		
Trapezoidal	Every rib	Every rib	
Concealed fasteners	Every rib	Every rib	



10. This defect was previously noted and had not been fully rectified at the time of the final inspection on the 26/04/21.

**Victorian Domestic Building Contracts Act; Part 9 s.137:** - The vendor (builder) warrants that materials must be good and suitable for the purpose which they are used. Unless otherwise stated in the contract, materials shall be new.

s. 137D

- (b) the vendor warrants that all materials used in that domestic building work were good and suitable for the purpose for which they were used and that, unless otherwise stated in the contract, those materials were new, and
- (c) the vendor warrants that that domestic building work was carried out in accordance with all laws and legal requirements, including, without limiting the generality of this warranty, this Act and the regulations.



Damaged fly screen's multiple locations



# 11. This defect was previously noted and had not been fully rectified at the time of the final inspection on the 26/04/21.

Some of the bottom reveals too wide windows are presenting with significant fall back towards the window.

Many window manufactures require a 7 mm cement sheet or pine board strip placed in the cavity to support the heavy glazed section; this was not present at the time of inspection. This often also results in bows to the top styles long after the windows are installed.

We refer the builder to AS2047 - 2014.

#### 7.2 INSTALLATION

#### 7.2.1 General

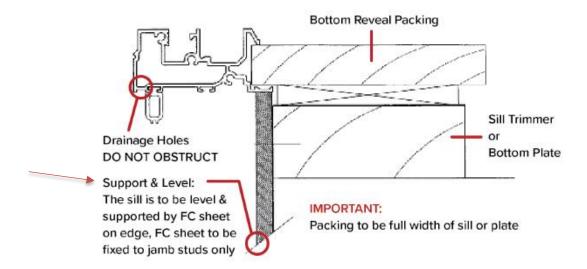
Openings in buildings into which windows are to be installed shall be of sufficient size to allow the window frame to be installed level and plumb.

Windows shall only be installed in locations for which they are designed in accordance with this Standard.

Window assemblies shall be fixed into the building using recognized building practices. Fixing shall not deform the window assembly. Non-loadbearing window assemblies shall not carry building loads.

Installed windows assemblies shall prevent water penetration and excessive air infiltration.

NOTE: Window manufacturers' installation procedures may need to be followed for particular installations.





All areas to comply

# 12. This defect was previously noted and had not been fully rectified at the time of the final inspection on the 26/04/21.

There are a number of areas in the home that exceed the allowance of 4 mm tolerance over 2 m.

• out of plumb walls (OOP)

• out of square skirting (OOS)

Please refer to photographs below:

As stated, the acceptable allowance is 4 mm over 2 m. These walls will need to be reworked to ensure that the builder complies with this requirement.

# **4.03** Straightness of steel and timber frame surfaces

Frames are defective if they deviate from plane (horizontal or vertical bow) by more than 4 mm in any 2 m length of wall. Refer to Diagram E.

We also refer the builder to AS 2589, clause 4.2.2.

# 4.2.2 Finished framing deviations and tolerances

The deviation in the position of the bearing surface of the finished framing immediately prior to installation of lining from a 1.8 m straight edge shall not exceed the values given in Table 4.2.2 when measured over a 1.8 m span at any point [see Figure 4.2.2(A)].

Where the dimensional tolerances of the fixing surface plane fall outside these tolerances, a suitable levelling system shall be used [see Figure 4.2.2(B)].

For wall and ceiling framing that is in accordance with the dimensional tolerances of this Clause, gypsum linings may be fixed directly to the framing with an appropriate fastening system in accordance with Clause 4.4.3.

TABLE 4.2.2

DEVIATION IN THE POSITION OF THE
BEARING SURFACE OF THE FINISHED FRAMING

	Levels 3 and 4		Level 5	
Substrate type	Deviation of 90% of area	Deviation of remaining area	Deviation of 90% of area	Deviation of remaining area
	mm	mm	mm	mm
Steel and timber framing, and battened masonry	4	5	3	4

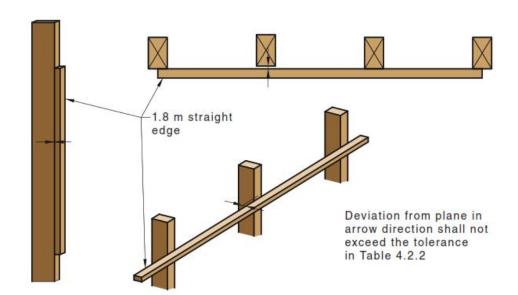


FIGURE 4.2.2(A) ASSESSING FRAMING TOLERANCE









OOS Kitchen



**OOP** Lounge

# 13. This defect was previously noted and had not been fully rectified at the time of the final inspection on the 26/04/21.

The insulation in the ceiling has the following defects.

- Large areas of ceiling batts have been left out around the ducts and exhaust fans. The batts will need to be installed snug to the ducts and just clear of the fan outlet.
- Batts have been installed over pipes wires and timber. The 90 mm plus gap between the top of the plaster and the bottom of the batts is making all installed batts that have this gap completely ineffectual. The R rating on the dwelling has been greatly reduced and the overall performance of the roof installing does not meet the requirements of the energy report on the dwelling. The whole roof will need to be reworked so that all batts are installed hard to the plaster with no gaps or holes to the installation.
- Other trades appear to have removed batts from their work areas with little regard for the information inserted below. Note that batts must be installed up to the 50 mm area around protected down lights.

These areas require insulation as per the energy rating requirements of the dwelling.

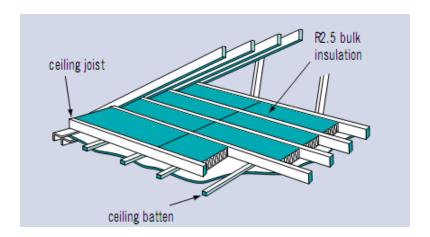
The insulation needs to be reworked so as to be installed in a manner that complies with AS 3999 with all areas covered and the batts flush to the top of the plaster.

The inserted diagram demonstrates the minimums that must be achieved.

# Installing insulation

#### INSTALLATION GUIDELINES

It is vital that insulation is installed with careful attention to detail, as incorrect or inappropriate installation will significantly decrease performance. For instance, failure to butt all ends and edges of batts to give a snug fit could result in 5% of the ceiling area not being covered, losing up to 50% of the potential insulation benefits.



#### The NCC 2019 Volume 2:

# **Acceptable Construction Practice**

### 3.12.1.1 Building fabric thermal insulation

- (a) Where required, insulation must comply with AS/NZS 4859.1 and be installed so that it-
  - abuts or overlaps adjoining insulation other than at supporting members such as columns, studs, noggings, joists, furring channels and the like where the insulation must butt against the member; and
  - (ii) forms a continuous barrier with ceilings, walls, bulkheads, floors or the like that inherently contribute to the thermal barrier; and

#### **Explanatory information:**

- For example, in a two storey house with the second storey set back, the insulation in the first storey wall, the second storey wall and the roof over the set-back must be continuous. Therefore if the roof over the set-back has insulation on a horizontal ceiling, then insulation is also needed on the vertical in any ceiling space in order to connect the ceiling insulation to the second storey wall.
- To form a continuous barrier, insulation should be placed in gaps between window and door jambs, heads and sills, and the adjoining wall framing unless a gap is otherwise *required*. This may need to be compressible to allow for movement between members.
  - (iii) does not affect the safe or effective operation of a domestic service or fitting.

#### **Explanatory information:**

Care should be taken when installing insulation to ensure that it does not interfere with the safety or performance of domestic services and fittings such as heating flues, recessed light fittings, light transformers, gas appliances and general plumbing and electrical components. This includes providing appropriate clearance as detailed in relevant legislation and referenced standards such as for electrical, gas and fuel oil installations.









14. This defect was previously noted and had not been fully rectified at the time of the final inspection on the 26/04/21.

**3500.2 - 2018, part 4.3.1 (g): -** the interior of each pipe must be cleared of any foreign matter prior to commissioning.

The shower wastes and floor waste gullies are presenting with an amount of trade waste.

# 4.3 DRAINS

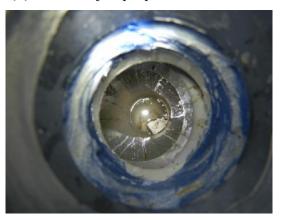
### 4.3.1 Below ground

Drains below ground shall—

- (a) be laid to an even grade, be straight and have no lipped joints or internal projections;
- (b) have a minimum number of changes of grade and direction;
- (c) be sized in accordance with the fixture unit loading given in Table 3.1;
- (d) be continuously supported under the barrel, other than for cast iron and ductile iron pipes and fittings;
- (e) be protected against damage;
- (f) be watertight;



- (g) have the interior of each pipe cleared of any foreign matter before it is laid and prior to commissioning; and
- (h) have a jump-up installed to connect drains at different elevations.





#### 15.

It was noted the concrete paving has not been caulked to the dwelling at the isolation joints. This caulking will need to be completed in accordance with AS 3727.1, figure, 5.4.3.

Whilst this new standard may not be common building practice it is now a requirement that needs to be achieved.

# 5.4.3 Isolation joints

Isolation joints shall be provided where a pavement abuts a building or other rigid structure such as a drainage pit or access hole. Isolation joints shall—

- (a) extend the full depth of the pavement;
- (b) allow freedom of movement both vertically and horizontally between the pavement and the structure; and
- (c) resist the entrance of detritus.

NOTE: A typical isolation joint is shown in Figure 5.4.3.

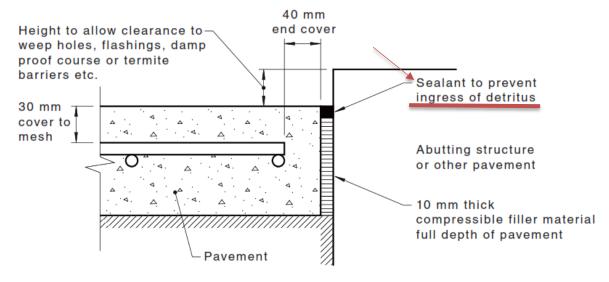


FIGURE 5.4.3 TYPICAL ISOLATION JOINT





**AS 4773.2, part 9.6.2.1:** - Veneer walls shall be drained to weep holes spaced at 1200 mm maximum centres. The raking of the perpendicular joints shall extend the full width of the masonry including the bed joint.

Blocked and/or partially blocked weep holes to this dwelling do not meet these requirements.

Special care must be taken to ensure the DPC flashing is not damaged / breached.

# 9.6.2 Flashings and weepholes

# **9.6.2.1** Cavity flashings

A cavity flashing that is also a DPC shall extend across the full width of the masonry skin. Flashing that protrudes past the face of the wall shall be either cut off or turned down.

Veneer walls shall be drained by weepholes at 1200 mm maximum centres. The raking of perpendicular joints to form weepholes shall extend the full width of masonry (through the wall) including bed joint at the level of the flashing.

Where cavity flashings are penetrated, the flashing shall be punched through or cut from the inside of the wall, and be fitted around the penetration and sealed.









### **17.**

Section 8 of the Domestic Building Contract Act 1995 mandates the implied warranties. That being the materials will be new and reasonable care and skill will be adopted whilst carrying out works.

# PART 2—PROVISIONS THAT APPLY TO ALL DOMESTIC BUILDING CONTRACTS

### Division 1—General Warranties4

# 8. Implied warranties concerning all domestic building work

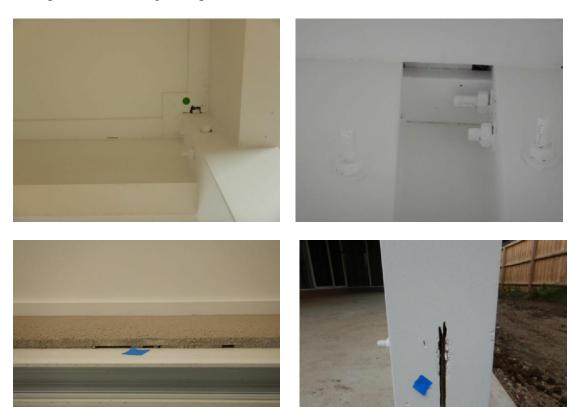
- (b) the builder warrants that all materials to be supplied by the builder for use in the work will be good and suitable for the purpose for which they are used and that, unless otherwise stated in the contract, those materials will be new;
- (d) the builder warrants that the work will be carried out with reasonable care and skill and will be completed by the date (or within the period) specified by the contract;

The powder coat finish on aluminium frames has been damaged through the finished coating. The damage could have been avoided with appropriate protection and care. Individuals are often tempted to spray over the scratches with an aerosol lacquer, which is an inferior product. Acrylic lacquer is soft and offers only moderate durability to ultraviolet, pollution and general dirt and grime. Also, the layer of chromate has not been replaced, which greatly reduces the durability of the coating. Dark colours will fade after moderate UV exposure. If this occurs, we recommend our clients use this paper trail to seek replacement, at that time.



18.

It is noted in multiple locations the building is presenting with gaps to the building exterior, these are both unsightly and potentially allow the entry of water, excess ventilation or vermin. All areas to be reworked with suitably sealed with quad, silicon, infill panels or flashing as required.



19. VBA Guide to Standards and Tolerances: - Rendered surfaces that show spot rust marks and other blemishes are defective if visible from a normal viewing position.

Rendered surfaces to this dwelling have not met this requirement.

# **9.04** Cracking and other blemishes in rendered or hard plastered surfaces on a masonry substrate

Assess damage categories and defects in rendered or hard plastered surfaces on a masonry substrate, in accordance with Item 3.02.

Obvious spot rust marks, due to the composition of the material and other blemishes are defective if they are visible from a normal viewing position.











All areas to comply

**20. The Victorian Building Authority: -** Calls for all glass to be protected during the build. Allowance is made for minor damage. This dwelling glass in parts exceeds the allowance stated in the VBA advice below.

I have applied the test of the inserted below in relation to why I have called these glass panels defective.

Given this item can be difficult to see, it can be assumed not all areas have been marked. The owner and builder will need to check for additional scratches in different lighting conditions.

# **18.04** Glazing

Scratches, fractures, chips or surface blemishes on glazing and mirrors are defective if they exist at handover and can be seen from a normal viewing position.

Minor scratches, fractures, chips or other blemishes that are not more than 10 mm long and where there are not more than three blemishes per pane, are not defects.





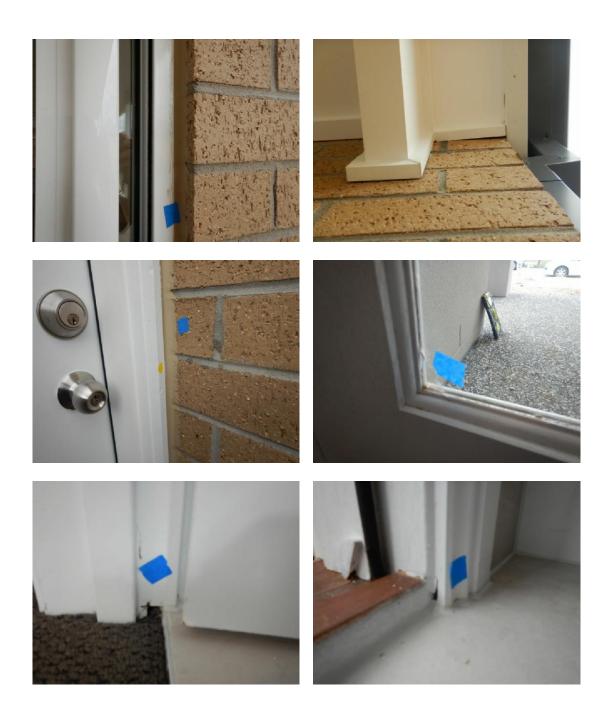




All areas to comply

# 21.

We noted poorly installed or missed caulking/gapping/grouting throughout the dwelling. The Builder will need to rework all areas prior to handover.



**22. AS 2311, Appendix C Inspection and Testing:** - Painted areas shall meet the requirements C4 Final Inspection.

Painted areas have not met these requirements.

<u>Note</u> - not all areas have been marked. The following images are an example of this <u>defect</u>.

#### C4 FINAL INSPECTION

The final inspection should ensure the following where appropriate:

- (a) The painted surface shows—
  - (i) uniformity of gloss, colour and opacity;
  - (ii) correct range of dry film thickness of paint;
  - (iii) freedom from painting defects such as-
    - (A) tackiness and paint application defects; and
    - (B) brush marks, roller coater marks, spray application defects and those irregularities in texture, which are inconsistent with good trade practice.

NOTE: Differences in appearance will occur; however, where such differences are not clearly discernible from a distance of typically 1.5 to 2 m when viewed under normal lighting conditions the finish is usually considered acceptable. Joinery should be also inspected for the presence of light surface grit or coarse particles which may only be identified by touching the surface.

- (iv) General cleanliness and absence of disfigurement, related to paint application. NOTE: Surfaces, fixtures and fittings should be checked to ensure that they have been masked or removed, and that all paint spills or stains have been removed as set out in the specifications.
- (b) The surrounding area is clean, tidy and undamaged, and all of the paint contractor's materials, equipment and debris related to the work performed, are removed from the premises or site.

# VBA Guide, part 12: -

### 12 PAINTING

# **12.01** Standard of painting

Coatings used are to be suitable for the relevant conditions and relevant wear and tear.

Painting is defective if it does not comply with the manufacturer's installation instructions or AS/NZS 2311.

# **12.02** Surface finish of paintwork

Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position.

Paintwork is defective if the application results in excessive over-painting of fittings, trims, skirtings, architraves, glazing and other finished edges.

# **12.03** Nail and screw fixings

Fixings or unfilled depressions caused by fixings are defective in painted or stained surfaces if they can be seen from a normal viewing position.

# **12.04** Natural characteristics and mechanical imperfections/damage

Unless the contract specifies otherwise, natural characteristics such as gum pockets, surface splits or sap bleeding are defective if they can be seen from a normal viewing position.

Mechanical imperfections/damage, holes or any other unfilled depressions are defective if they can be seen from a normal viewing position.

# Defect noted through out dwelling, refer to tape on site.







23.

A number of door margins will need to be reworked to comply with the inserted.

# **8.04** Internal door clearances

Unless documented otherwise, the installation of doors is defective if, within three months of completion:

- a) clearances between door leaves and frames, and between adjacent door leaves are not uniform
- b) clearances between door leaves, or between a door leaf and the frame, is less than 2 mm or greater than 5 mm in width.

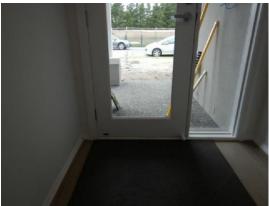
Unless additional clearance is required for removable toilet doors or air ventilation, a clearance between the door and the floor finish is defective if it is greater than 20 mm after installation of the floor covering.

Note: Clearances under doors will generally be determined by the nominated floor coverings.









### 24.

A number of doors will not latch closed, others when closed rattle. All door furniture must operate as intended; the builder will need to ensure all areas are compliant.

# **8.03** Door furniture

During the documented maintenance period after completion, handles, locks and latches are defective if they do not operate as intended by the manufacturer. If the maintenance period is not documented, three months is the assumed time period after completion. After the end of the maintenance period, failure is not a defect unless it is caused by the builder's workmanship or a faulty product supplied by the builder.





#### **25.**

**VBA Guide to Standards and Tolerances:** - Cabinet door and drawer fronts are defective if they do not align, or do not have consistent gaps, and can be seen from a normal viewing position.

Cabinetry to this dwelling has not met this requirement.

# **10.04** Bench tops, cabinet doors and drawer fronts<sup>6</sup>

Unless otherwise specified, cabinet door and drawer fronts are defective if they are not aligned, or do not have consistent gaps between them at handover, and can be seen from a normal viewing position.

Where the time limit for defects in bench tops, cabinet doors, drawer fronts and similar joinery is not documented, it is to be taken as six months from completion.

# Page 23



Small number of locations

#### 26.

All installed grout needs to be installed as per AS 3958.1, part 5.7.1. Any area presenting with these defects will need to be reworked prior to settlement.

# 5.7 GROUTING

# 5.7.1 General

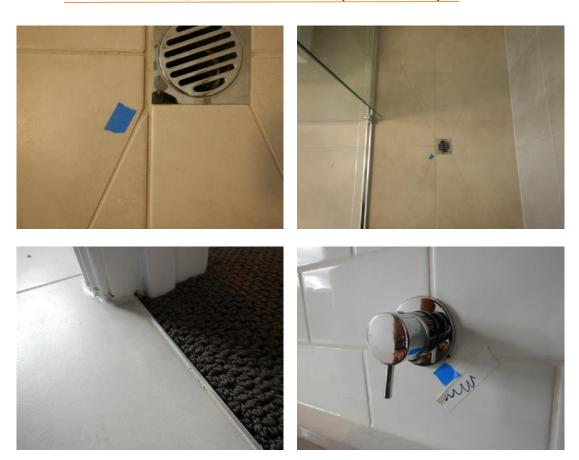
Grouting of the joints may be carried out at any time to suit the convenience of the work but should preferably be left for at least 12 h after fixing of tiles, unless otherwise specified. Sufficient time should elapse to ensure adequate setting, and to preclude disturbance of the finish during the grouting operation. It is not advisable to delay the grouting unduly as the open joints may collect general building dust and deleterious material.

Where proprietary coloured grouts or cement grouts containing coloured oxides are used, a sample tile or small inconspicuous area should be tested to determine if staining will occur. The application of a grout release or penetrating sealer may facilitate the use of such grout without staining the tile. This may be particularly relevant when using porous or polished tiles.

Where a sand/cement grout is required a suitable mix is 1 part Portland cement to 2–4 parts fine sand mixed to a paste consistency with the minimum of water (too wet a mix may result in the joint-filling cracking on drying out). If a proprietary grouting material is specified, it should be mixed and applied strictly in accordance with the manufacturer's recommendations. For optimum strength and resistance to wear and cleaning agents, the grouting mix should be fresh and with a higher proportion of cement (within the specified range). It should, however, be pointed out that higher strength grout mixes may not take up induced stresses as well as a lower strength mix.

The procedure is as follows:

(f) Fill all gaps so that adhesive does not show through grouted joints. Remove surplus grout from the tiles with the aid of a damp, not wet, cloth and tool the joints with a piece of wood or other material of suitable size and shape. When a proprietary grouting material is used, observe the manufacturer's recommendations for cleaning. Do not use sawdust for removing surplus grout from floors. The finished grout should be uniform in colour, smooth and without voids, pinholes or low spots.



AS 4386, part 11.4: - Mandates all sinks to be sealed to the benchtop. The Victorian Building Authority advise to all builders is to seal all sinks, basins, and benchtops. When cutting out or drilling into the benchtop, the cut-out area must also be sealed. The restriction of water into the benchtop material is mandatory. See inserted from the VBA and the Standard. This dwelling fails these requirements. Extract As 4386, part 11.4.

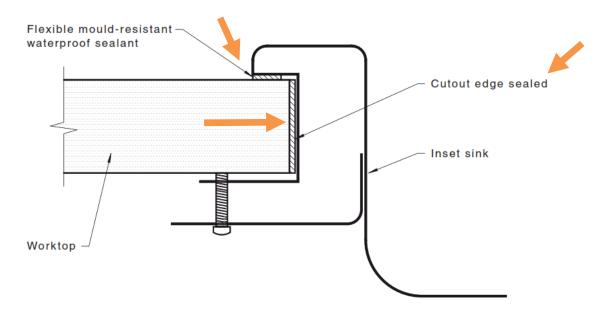


FIGURE 15 TYPICAL SEALING OF SINK TO WORKTOP JOINT Extract Victorian Building Authority.

# 10.09 Sealing around benches and items installed in benches

Where required, junctions between bench tops and adjoining surfaces are defective if they are not sealed with a suitable flexible sealant of matching or agreed colour.

Seals around items such as sinks, hand basins or the like are defective if the joint leaks or they are not installed in accordance with the manufacturer's installation requirements.



28. We refer the builder to the implied warranties where the builder agreed to build the dwelling in a proper and workmanlike manner and with care and skill.

# 8. Implied warranties concerning all domestic building work

The following warranties about the work to be carried out under a domestic building contract are part of every domestic building contract—

- (a) 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;
- (d) the builder warrants that the work will be carried out with reasonable care and skill and will be completed by the date (or within the period) specified by the contract;



100mm cover to pipe



Rusted screws



DW service pen

# **Rectification Required: YES**

# TERMS & CONDITIONS OF Darbecca Pty Ltd SITE INSPECTION AND REPORT

### 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.

#### 3. Assumed Finishes

Our inspection was carried out on the quality of the fixtures and finishes as installed, and no investigation of any documentation or statuary requirements was carried out to verify their correctness.

#### 4. Documentation

Unless otherwise noted any contractual documentation made available to us during our inspection is only viewed on an informal basis and we make no certification that the building has been constructed in accordance with them.

#### 5. Non-Destructive Inspection

Unless otherwise noted our inspection was carried out on a non-destructive basis and exclude anything that would have require the removal of any fixtures, fittings, cladding, insulation, sisalation, roofing, lining materials, excavated of any soil or the removal of any part of the plastic membrane.

# 6. Measurements/Levels

Unless otherwise noted all measurements have been taken with a standard ruler, and levels with either a 900 or 2100mm long spirit level.

### 7. Services, Appliances, Plants and Equipment

Unless otherwise noted, we did not test or check for appropriateness, capacity, correct installation or certification of any service, appliances, plant, and equipment, i.e., heaters, hot water units, air conditioners, ovens, hotplates, dishwashers, range hoods, spa pump, electrical wiring, gas lines, electricity and water supply, sewer, stormwater, and agricultural drains.

# 8. Client Use

This report has been prepared for the exclusive use of the client/s whose name/s appear/s on the front of this report as supplied by Darbecca ABN 12 115 961 487. Any other person who uses or relies on this report without the authors written consent does so at his or her own risk and no responsibility is accepted by Darbecca Pty Ltd or the author of this report for such use and or reliance.

#### 9. Report Reproduction

This report cannot be reproduced in part; it must only be done so in full.

#### 10. Reference

Any reference contained within this report to the Building Code of Australian, an Australian Standard, a manufacturers technical data sheet or installation instruction is neither exhaustive nor a substitute for the original document and are provided as a guidance only. Darbecca Pty Ltd or the author of this report for the use or reliance upon of the part references contained within this report will accept no responsibility.

### 11. Report Exclusions

- a) Defects in inaccessible parts of the building including, but not limited to, the roof space and or the sub-floor area unless otherwise noted,
- b) Defects not apparent by visual inspection, or only apparent in different weather or environmental conditions as to those prevailing at the time of the inspection.
- c) Defects that we did not consider significant enough to warrant any rectification work at the time of our inspection,
- **d)** Defects outside the scope of the client brief
- e) Check measure of rooms, walls, and the overall building, for size, parallel and squareness unless otherwise noted,
- **f**) Landscaping, retaining wall/s, or any structures outside the roofline of the main building unless otherwise noted,
- g) Enquiries of Council or any other Authorities,
- h) Investigation for asbestos and or soil contamination,
- i) Investigation for the presence of any termites or borers and for the correct installation of any termite barriers and or other risk management procedures or devices.
- **j**) Defects in relation to PVC sewage and storm water pipes are not covered in this inspection. Clients must seek the services of a licenced plumber to check all sewage and storm water pipes.

### 12. VCAT Suitability

Unless specifically noted this report has not been prepared in-line with the requirements of Practice Note VCAT 2.