



ManseGroup

04 Independent Quality Assurance: Waterproof/Fix Inspection

04 Independent Quality Assurance:
Waterproof/fix Inspection / [REDACTED]

Complete

Flagged items

15

Inspection type

04 Independent Quality Assurance: Waterproof/fix Inspection

Job Name

Client

Site Address

Australia

Inspection Date

[REDACTED] 2023

Property description

Single storey
Slab on ground
Timber frame
Sheet roof
Brick Veneer
Rendered brickwork
Rendered lightweight cladding

Inspection completed by

Weather

7:22am: 9°C
Cloudy, Wind
W 7 km/h,
Wind Gusts
10 km/h

1.0: GENERAL

4 flagged

INSPECTION PROCESS:

Visual appraisal under normal or special lighting





BOUNDARIES OF THE INSPECTION:

The dwelling and its immediate surroundings within the title boundary on the aforementioned property address. Items inspected are as per the list below.

REPORTING:

Any defects listed in reports will be based on elements that are known to not comply with the following but not limited to; Client supplied project drawings and specifications, the Building Act 1993, the Building Regulations 2018, National Construction Code/Building Code of Australia Volume 2, AS 4349.0 - 2007 Inspection of buildings, relevant Australian Standards, the Victorian Building Authority Guide to Standards and Tolerances 2015, manufacturers guidelines, and other similar relevant documents.

LEGEND

-  DEFECT
-  SIGNIFICANT DEFECT
-  CLOSED OUT
-  OBSERVATION

1.1: GENERAL

4 flagged

1.1.1: Any significant items visibly outstanding from previous report?

YES

Outstanding item

Outstanding item 1

Sump not secured.

Refer to Standards Australia HB 39:2015 Installation code for metal roof and wall cladding section 5.3.4 Gutter support systems:

"5.3.4.1 General

Gutter support systems are to be designed and manufactured so as to be able to support the entire weight of the gutter and sumps when full of water as well as a trafficable load at any point in the gutter and sumps and installed as follows:

- (a) Supports are to be manufactured from materials compatible with the gutter.
- (b) Supports are to be installed with a uniform fall of not less than 1 in 200 towards the outlets.
- (c) Support systems are to be securely fastened to structures to resist all appropriate live and dead loads.

1.1.2: Perimeter surface drainage

SIGNIFICANT DEFECT



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9

Surface drainage is to be maintained throughout the construction of the house. This is to prevent moisture differences in the soil around the perimeter which could result in movement of footings and foundations. Attention should be made to AS 2870-Residential slabs and footings, part 5.6.3 which outlines specific requirements for class M, H1, H2 and E sites

5.6.3 Drainage requirements

Buildings on moderately, highly or extremely reactive sites shall be provided with drainage systems designed in accordance with the following:

- (a) Surface drainage shall be considered in the design of the footing system and necessary modification shall be included in the design documentation. Surface drainage of the site shall be controlled from the start of site preparation and construction. The drainage system shall be completed by the finish of construction of the building.

Other item 1.1.3.

3 flagged

Other item 1.1.3. 1

1 flagged

SIGNIFICANT DEFECT

Temporary downpipes not connected throughout.

As per ENG S18:

4. SURFACE DRAINAGE OF THE SITE SHALL BE CONTROLLED FROM THE START OF THE SITE PREPARATION AND CONSTRUCTION; SURFACE DRAINAGE INCLUDES SURFACE WATER RUN-OFF AND BUILDING WATER (ROOF/FLOOR/CONCRETE) RUN-OFF:

- ALL WATER RUN-OFF SHALL BE CONTROLLED AT ALL TIMES
- USE TEMPORARY DOWNPIPES TO COLLECT WATER FROM THE ROOFED BUILDING FRAME;



Photo 10



Photo 11



Photo 12



Photo 13

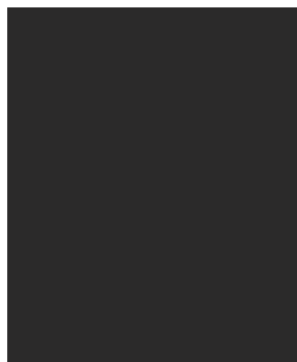


Photo 14

Other item 1.1.3. 2

1 flagged

DEFECT

Membrane not protected:

Membrane not protected. Refer to AS 3740: Waterproofing of domestic wet areas; section 3.5 CURING OF MATERIALS:

Materials shall be cured adequately for their intended use.

NOTE: The membrane should be protected from physical and/or chemical damage until covered by the finished surfaces.

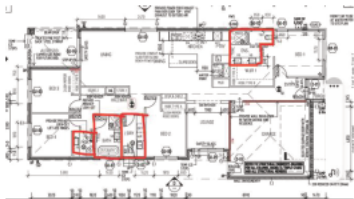


Photo 15



Photo 16



Photo 17

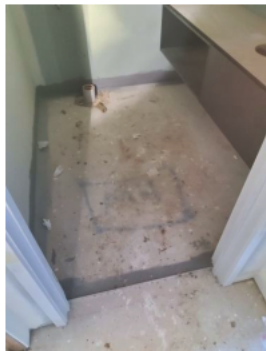


Photo 18



Photo 19



Photo 20

Other item 1.1.3. 3

1 flagged

SIGNIFICANT DEFECT

Wall positioning not as per WD A03. Bulkhead finishes above doorway, not as per Drawings.

Added reference of Lot 14 Serene as a visual reference.

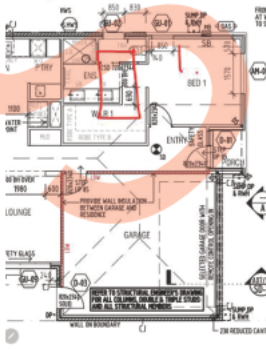


Photo 21

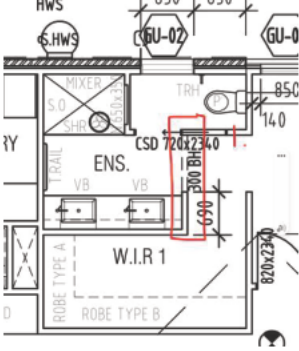


Photo 22



Photo 23



Photo 24



Photo 25



Photo 26

SAMPLE

2.0: BATHROOM WATERPROOFING

1 flagged

2.2: BATHROOM SHOWER AREA

1 flagged

2.2.1: Shower area

YES

2.2.2: Niche?

YES

2.2.2.1: Fall to base?

DEFECT

Fall in shower niche in opposite direction.

AS 3740-2010 Figure 3.4 Typical detail for recessed soap holders requires fall to the base

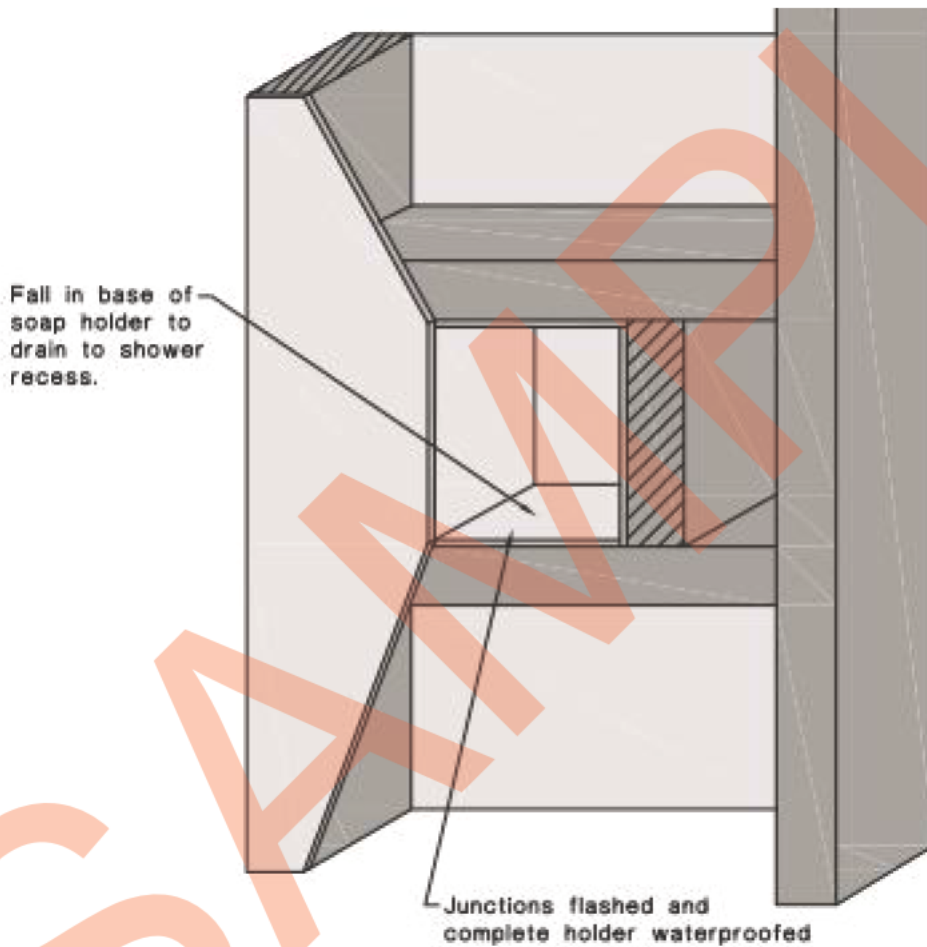


FIGURE 3.4 TYPICAL DETAIL FOR RECESSED SOAP HOLDERS

3.0: ENSUITE WATERPROOFING

2 flagged

3.1: ENSUITE GENERAL

1 flagged

3.1.1: Concrete and compressed fibre cement sheeting applicable?

YES

3.1.2: Waterstop doorway

SIGNIFICANT DEFECT

Waterstop significantly gapped. Waterstop performance solution required.



Photo 27



Photo 28



Photo 29



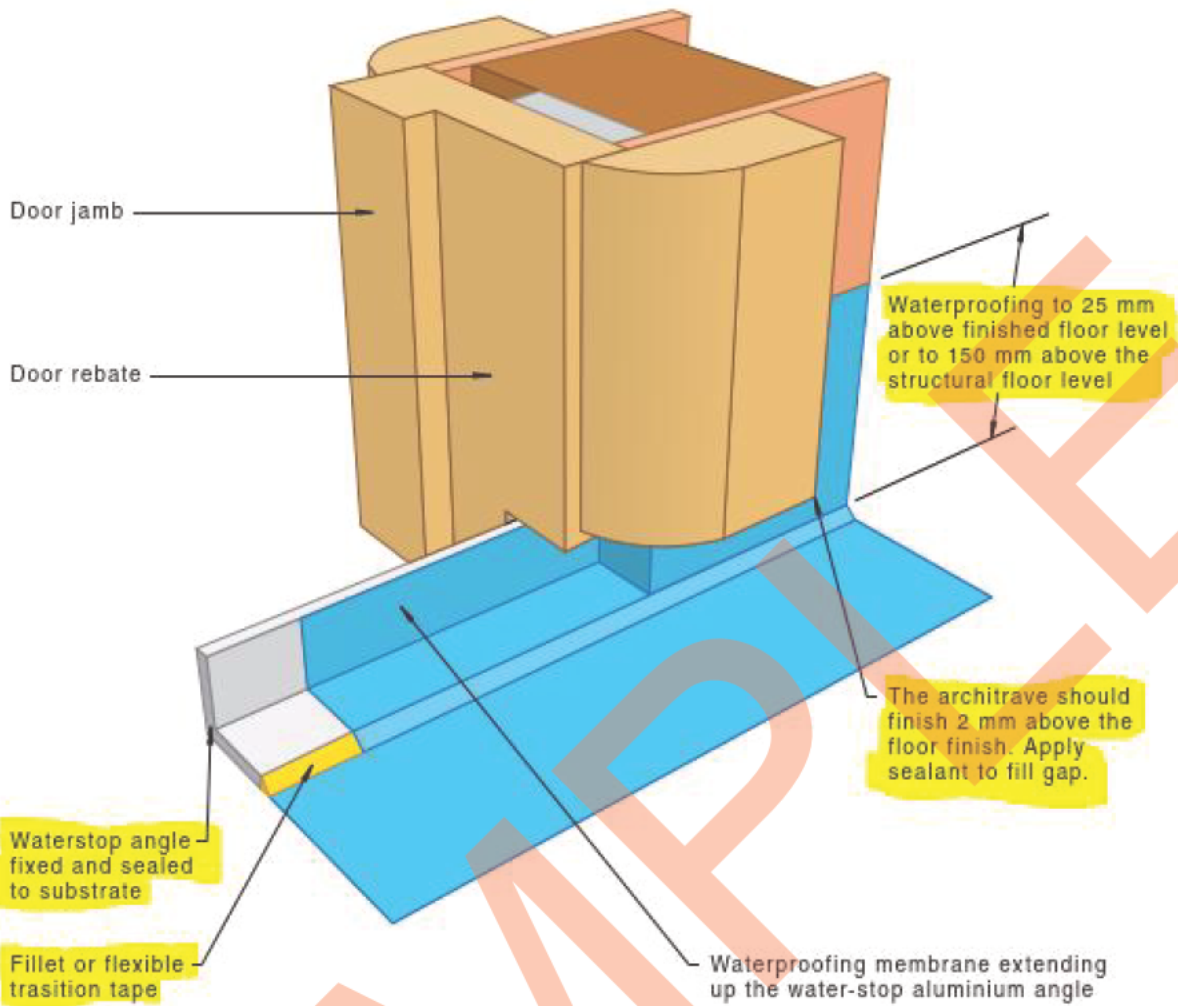
Photo 30

A waterstop is required to be installed at floor level openings as per AS 3740:2021-Waterproofing of domestic wet areas section 4.9.1: Perimeter flashing at floor level openings:

"The following requirements apply to perimeter flashing at floor level openings:

- (a) Whole wet area floor waterproofing shall incorporate -
 - (i) a waterstop that has a vertical leg finishing flush with the top of the finished floor level shall be installed at floor level openings; and
 - (ii) a floor membrane terminated to create a waterproof seal to the waterstop and to the perimeter flashing.
- (b) Waterproofing other than whole wet area floor waterproofing shall incorporate a waterstop that
 - (i) has a vertical leg finishing flush with the top of the finished floor level installed at floor level openings; and
 - (ii) is integral with the perimeter flashing.
- (c) Perimeter flashing to wall, floor surfaces, and door openings shall -
 - (i) be continuously sealed to the horizontal surface;
 - (ii) have a vertical leg of a minimum of 25 mm above the finished floor level, except across doorways; and
 - (iii) have a horizontal leg with a minimum width of 50 mm.
- (d) Waterstops at cavity sliders shall -
 - (i) be returned across the cavity opening; and
 - (ii) have a membrane applied to form a continuous perimeter flashing.

NOTE For an example of waterproofing installation, see Figure 4.9.1(B)."



NOTE The waterstop angle may be located at the face of the door jamb or at the rebate.

Figure 4.9.1(A) — Example of liquid waterproofing at door opening framework

3.2: ENSUITE SHOWER AREA

1 flagged

3.2.1: Shower area

YES

3.2.3: Niche?

YES

3.2.3.1: Fall to base?

DEFECT

No fall to base.



Photo 31



Photo 32



Photo 33

AS 3740-2010 Figure 3.4 Typical detail for recessed soap holders requires fall to the base

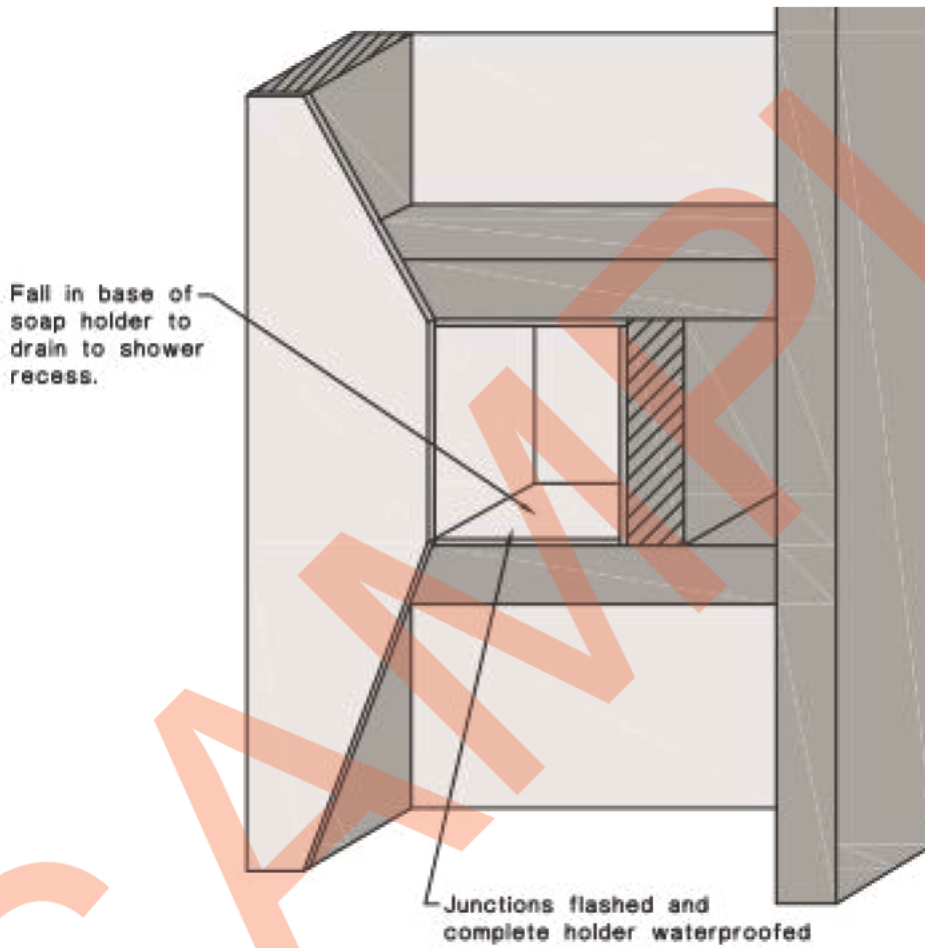


FIGURE 3.4 TYPICAL DETAIL FOR RECESSED SOAP HOLDERS

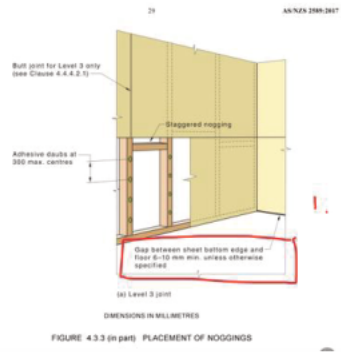


Photo 42

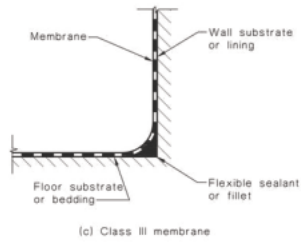


FIGURE 3.7 TYPICAL BOND BREAKER DETAILS

Photo 43

SAMPLE

6.0: LAUNDRY WATERPROOFING

2 flagged

6.2: Wall/floor junctions

SIGNIFICANT DEFECT

Junctions underneath joinery not sealed/waterproofed prior to cabinetry installation.

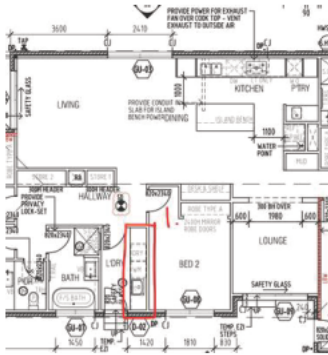


Photo 44



Photo 45



Photo 46



Photo 47



Photo 48

The Building Code of Australia Volume Two Part 3.8.1.2 Wet Areas states "Building elements in wet areas within a building must— (a) be waterproof or water resistant in accordance with Table 3.8.1.1 ; and (b) comply with AS 3740." Table 3.8.1.1 requires wall and floor junctions to be "water resistant"

Vessels or area where the fixture is installed	Floors and horizontal surfaces	Walls	Wall junctions and joints	Wall / floor junctions	Penetrations
Other areas					
Laundries and WCs	Water resistant floor of the room	N/A	N/A	Water resistant wall / floor junctions.	N/A

6.5: Waterstop doorway

SIGNIFICANT DEFECT

Waterstop not continuous & door architrave flush with the floor.

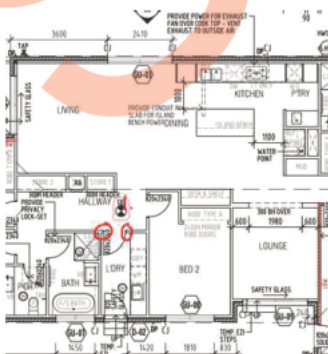


Photo 49



Photo 50



Photo 51



Photo 52

A waterstop is required to be installed at floor level openings as per AS 3740:2021-Waterproofing of domestic wet areas section 4.9.1: Perimeter flashing at floor level openings:

"The following requirements apply to perimeter flashing at floor level openings:

...(b) Waterproofing other than whole wet area floor waterproofing shall incorporate a waterstop that

(i) has a vertical leg finishing flush with the top of the finished floor level installed at floor level openings; and

(ii) is integral with the perimeter flashing.

(c) Perimeter flashing to wall, floor surfaces, and door openings shall -

(i) be continuously sealed to the horizontal surface;

(ii) have a vertical leg of a minimum of 25 mm above the finished floor level, except across doorways; and

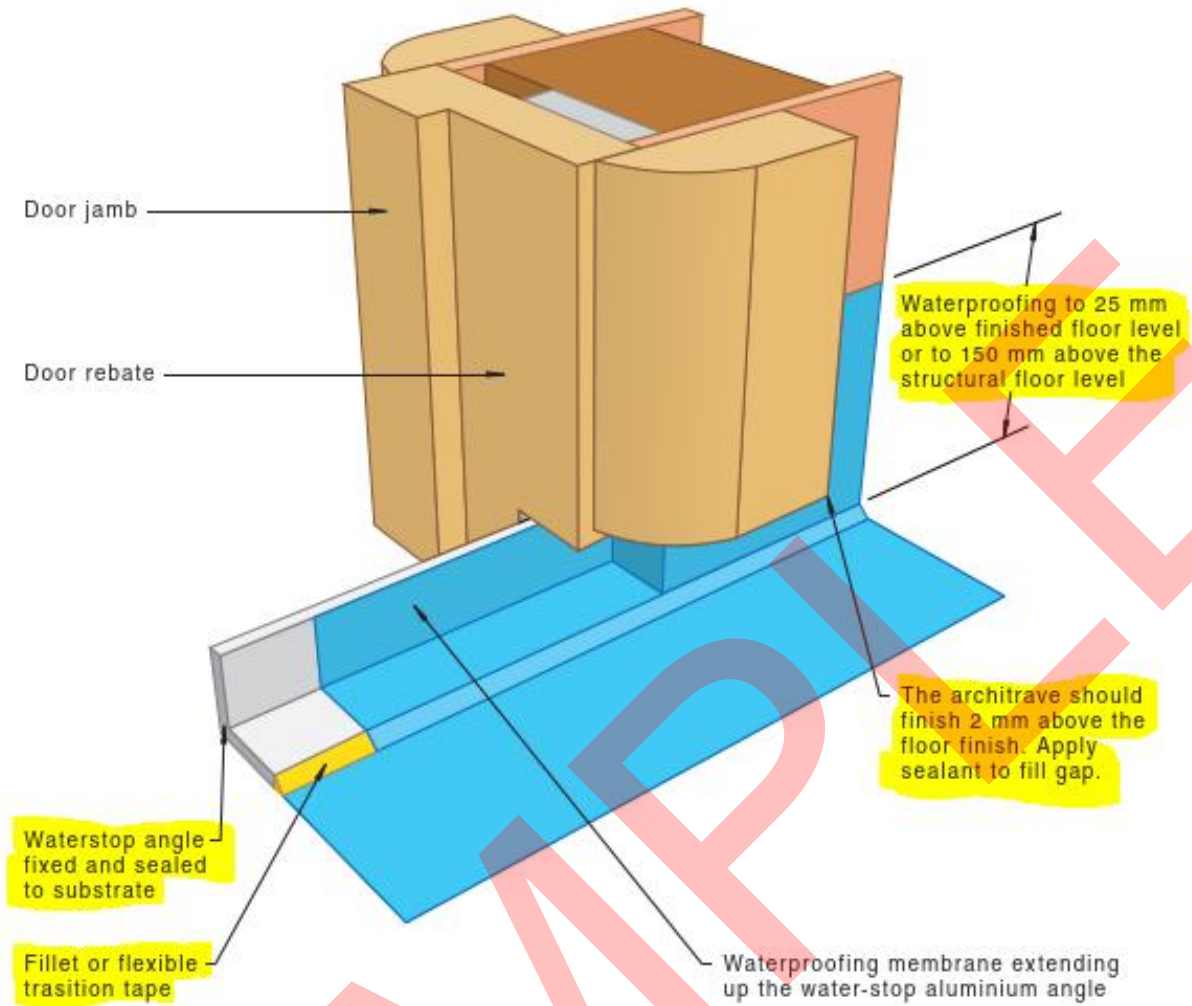
(iii) have a horizontal leg with a minimum width of 50 mm.

(d) Waterstops at cavity sliders shall -

(i) be returned across the cavity opening; and

(ii) have a membrane applied to form a continuous perimeter flashing.

NOTE For an example of waterproofing installation, see Figure 4.9.1(B)."



NOTE The waterstop angle may be located at the face of the door jamb or at the rebate.

Figure 4.9.1(A) — Example of liquid waterproofing at door opening framework

9.0: PLASTER

4 flagged

9.1: No visible bows at external corners

DEFECT

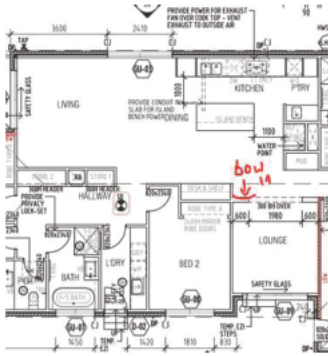


Photo 53

As per Australian Standard 2589: Gypsum linings—Application and finishing, section 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)].”

TABLE 4.2.2

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

Substrate type	Levels 3 and 4		Level 5	
	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

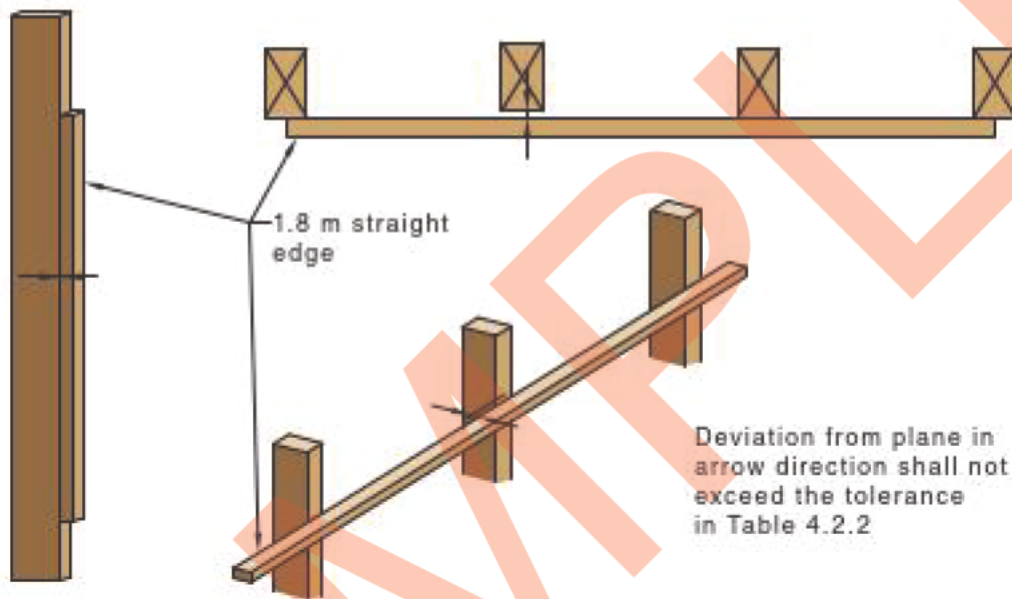


FIGURE 4.2.2(A) ASSESSING FRAMING TOLERANCE

9.2: Cornice lines visibly straight (up and down)

SIGNIFICANT DEFECT

Large 30mm bow in ceiling/cornice. Refer to Pre-plaster Inspection report which shows sump dropping below ceiling line.

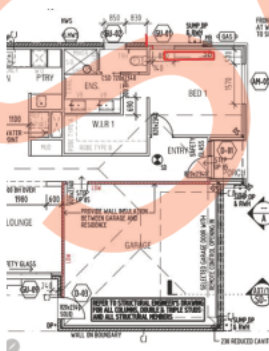


Photo 54



Photo 55



Photo 56

As per Australian Standard 2589: Gypsum linings—Application and finishing, section 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)].”

TABLE 4.2.2

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

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

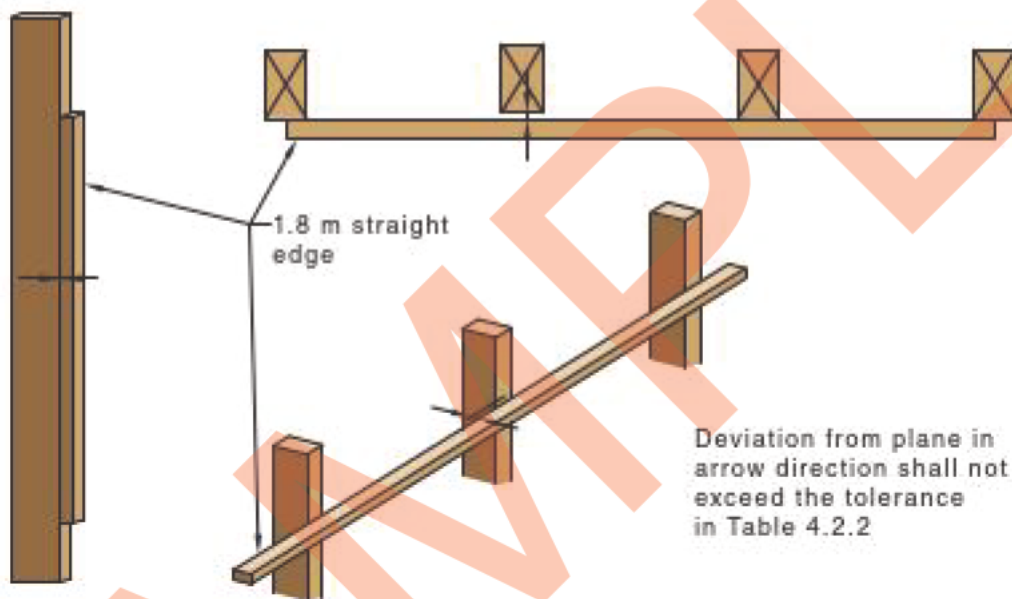


FIGURE 4.2.2(A) ASSESSING FRAMING TOLERANCE

+9.3: Visible bulge/lump/bump in plaster

DEFECT

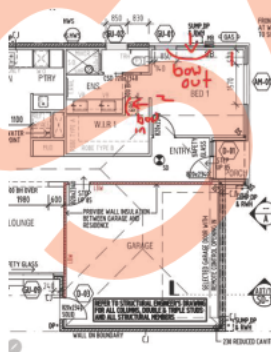


Photo 57

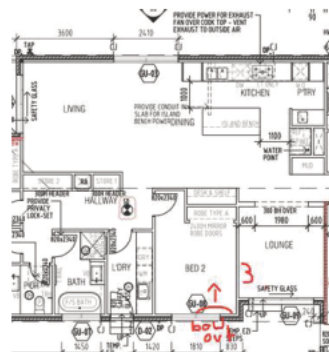


Photo 58

As per Australian Standard 2589: Gypsum linings—Application and finishing, section 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)].”

TABLE 4.2.2

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

Substrate type	Levels 3 and 4		Level 5	
	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

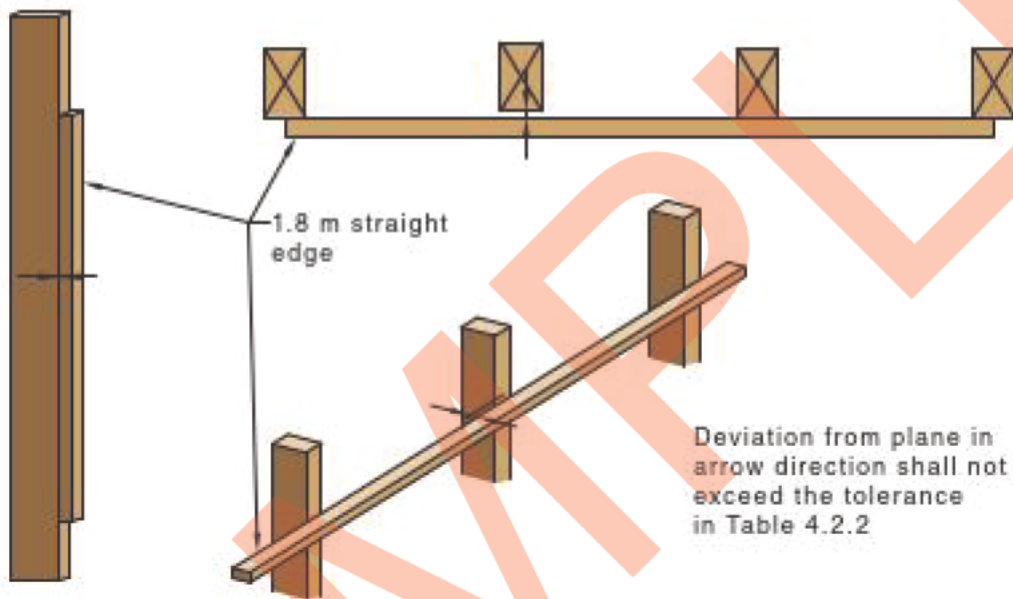


FIGURE 4.2.2(A) ASSESSING FRAMING TOLERANCE

Other item 9.4.

1 flagged

Other item 9.4. 1

1 flagged

DEFECT

Corner out of square. Refer to AS1684.4-2010, Figure 4.2.2. Image below.

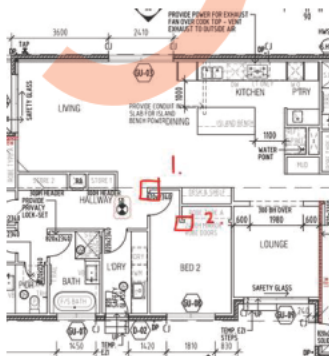


Photo 59



Photo 60



Photo 61



Photo 62

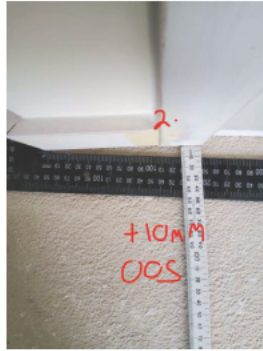


Photo 63

TABLE 4.2.2
DEVIATION IN THE POSITION OF THE BEARING SURFACE OF THE FINISHED FRAMING

Substrate type	Level 3 and 4		Level 5	
	Deviation of 90% of area mm	Deviation of remaining area mm	Deviation of 90% of area mm	Deviation of remaining area mm
Steel and timber framing and barbed concrete	4	5	3	4

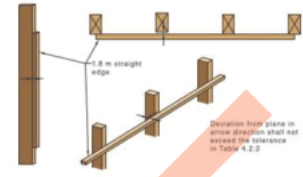


Photo 64

SAMPLE

CONCLUSION

Limitations:

Specific limitations

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

This report is prepared in accordance with AS 4349.0 - 2007: Inspection of buildings. It is not a certificate of compliance of the property within the requirements of any Act, regulation, ordinance, local law or by-law, and is not a warranty against problems developing with the building in the future.

Has there been any previous Quality Assurance Inspections by Manse Group

[REDACTED]

[REDACTED]

[REDACTED]

CONCLUSION

Conclusion

[REDACTED]

Report completed by

[REDACTED]

[REDACTED]

[REDACTED]

QUALIFICATIONS:

- Registered Building Practitioner [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]