1300-013-023
www.mbtcn.com.au
Building 8 Room 225, Boxhill Institute

真题

真题

全新题, 10%

花样常规题目, 15%

常规题目（Qset）, 30%

常规题目（课堂）, 45%

20230918 Johny Curini 2hrs

1. Background by trades
2. What is your relationship to your 2 technical referees?
3. How do you involve in the project?
4. How did you builder pay you?
5. How did you apply for building permit
6. What documents you need to give to building surveyor for applying OP?
7. What are the minimum mandatory inspections?
8. You are applying for final inspection from building surveyor, how do you look for defects?
9. If you start a new business as a builder, how do you run the business?
10. Now you are signing a contract $16,000, how much deposit can you take?
11. Provisional sums?
12. What is the variation? How do you proceed a variation?
13. How do you order material?
14. How do you calculate the quantity?
15. Now you are doing plaster for 3 bedrooms, how do you order plaster board?
16. Project 1, what is the reference level of this project?
17. You are replacing a boundary fence, how do you know the fence is in the right place.

20230918 Johny Curini 2hrs

18. Now you are replacing the fence, do you need a BP?
19. When you replace the fence what you need to talk to your neighbour?
20. When you demolish, what do you need to do to the house?
21. Are you abolish the water as well?
22. How do you protect others from the bore hole?
23. How do you do a raft slab?
24. How do you do a waffle slab?
25. How do you fix bearer to a concrete pier?
26. Which truss do you put on first? What do you see underneath that?
27. Bracing angle?
28. How do you cut the angle on rafters to join the ridgeboard?
29. You passed framing inspection, now you are contacting roof tiler, what do you do before that?
30. What is the height of DPC?
31. Where do you put AJ on your plan?
32. Can you tell me symbol A/WD06 means?
33. Can you tell me D1.1 is left hand door or right hand door?
34. What is the structural member above the opening of U1 garage?
35. What is PFC?
36. Now you are ordering the PFC here, what length you will order?
37. What is the safety issue of your photo? Barrier around swimming

20230918 Johny Curini 2hrs

pool.

38. What do you see on the pipe vertically?
39. You are doing insulation, you run out of the batts, you do not know what is the R value required, where do you find it?
40. You are buying exhaust fan for your electrician what you need to see?
41. Kitchen rangehood requirements?
42. Renovation in bathroom needs BP? New shower screen, new tile, new basin do you need BP?
43. Do you need building permit for retaining wall? Fence?
44. Tell me what so special about swimming pool gate?
45. Protection work, will you give a report to neighbour, what is that?
46. Pre-plaster check?
47. How do you install a door jamb? Do you need to assemble the door jambs on site?
48. When you put in the door jamb, which side do you put in first?
49. Do you paint the top and bottom of the internal door?
50. Balcony in the final inspection?
51. Have you done posi strut or I beam?
52. Where do you put the strong back? How do you fix it?
53. You are buying a toilet for your plumber, what kind of toilet do you buy?

以及很多全部来自我们QSet的小题目，穿插在这些问题之间

真题

1. Press record button and ask you series of questions
2. Background by trades
3. What is your relationship to your 2 technical referees?
4. How do you involve in the project?
5. How did you builder pay you?
6. How did you apply for building permit
7. What documents you need to give to building surveyor for applying OP?

Building Act, Real plan in test

4. Notices and Orders (BR Part 8)
   - Notice- issued by a Building Surveyor and enforced by the Building Surveyor
   - Order-issued by the Building Surveyor and enforced by the VBA - Victorian Building Authority
5. Building permit (BR Sect 25)
   - Building Regulation 2018 Schedule 4 - forms. BS need forms.
   - Form 1-Application for a Building Permit
   - Features, Levels and Re-Establishment plan from Land Surveyor
   - Planning Permit -from Council with Endorsed Plans
   - Soil Report
   - Working Drawings
   - Engineering-Civil (Endorsed by Council), Structural Plan Certificate of Computation Compliance
   - Copy of Contract & Specifications
   - Insurances - DBI, Public Liability, Contracts Works
   - Title and Plan of Subdivision
6. Issuing a BP 发放 Building Permit (BR Schedule 4)
   - Form 1- Application for a Building Permit
   - Form 2 - Building Permit
   - Within 7 days after issuing permit, must give relevant council copy of building permit and all plans and documentation
   - Must be signed by building surveyor. Permit must contain commencement & completion date, mandatory inspection
   - Building Surveyor must provide a copy of the building permit to both the owner and the builder within 7 days of issuing the permit.

5. Building permit (BR Sect 25) 必考第一题

1. Building Regulation 2018 Schedule 4 - forms. BS need forms.
2. Form 1-Application for a Building Permit
3. Features, Levels and Re-Establishment plan from Land Surveyor
4. Planning Permit -from Council with Endorsed Plans
5. Soil Report
6. Working Drawings
7. Engineering-Civil (Endorsed by Council), Structural Plan Certificate of Computation Compliance
8. Copy of Contract & Specifications
9. Insurances - DBI, Public Liability, Contracts Works
10. Title and Plan of Subdivision
11. Legal Point of Discharge – Location from local council
12. 6 Star Energy Report
13. Landscape Plan – endorsed by council
14. Details of Owner
15. Details of Builder
16. Appointment of a Registered Building Surveyor – signed by owner
17. Build Over Easement Consent from Water, Gas, Electricity, NBN if applicable
18. Environmental Sustainability Report

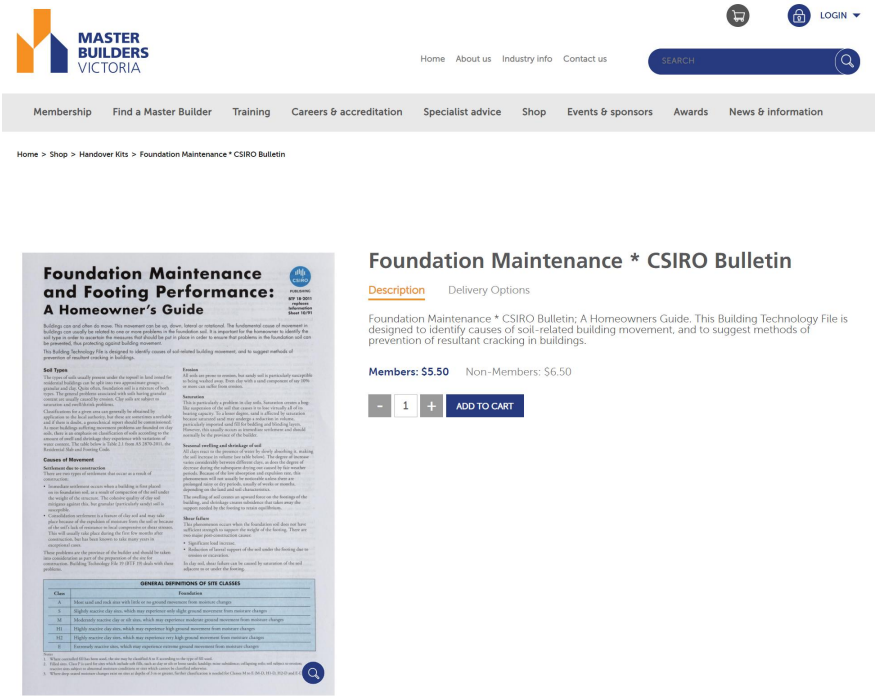
7. What documents you need to give to building surveyor for applying OP?

6.4 Occupancy permit application documents

1. Electrical certificate
2. Plumber certificate
3. Glazing certificate
4. Termite certificate and durable notice
5. Insulation certificate
6. Waterproof certificate
7. Party wall statement from builder
8. Form 15

6.5 Handover to client

1. Occupancy permit
2. Keys and manuals of appliance, warranties,
3. CSIRO maintenance manual(footing performance and foundation maintenance manual) + documents given for OP



8. You are applying for final inspection from building surveyor, how do you look for defects?

6.5 Handover to client

1. Occupancy permit
2. Keys and manuals of appliance, warranties,
3. CSIRO maintenance manual(footing performance and foundation maintenance manual) + documents given for OP
4. 1500 for wall with non-critical light, 600 for fixture and fittings with non-critical lights
5. Timber floor, gap less than 2mil in 1m, no squeak in 2 yrs
6. Door to floor gap less than 20 mil in 2 yrs, to frame should not be less than 2 mil or bigger than 5 mil

6.6 How do you do your final inspections

External

1. Masonry

DPC visible 150/75/50, weepholes, bed joint 10+3 and perpend 10+5,AJ, overhang 15/25, sill bricks 5mil gap

2. Drainage systems, Roofs plumbing

Detention system(council) may be inspected

Eave gutter: 1:500 fall minimum, 1.2m spacing of fixing bracket

Box gutter:1:100 fall minimum, 200*75 domestic, 300*100 commercial

Valley gutter: more than 12.5 degree, 400 width and 150 overhang minimum. Less than 12.5, as box gutter

Gutter overlap > 25 mil, Gutter water retained<10 mil

Parapet flashing fall 5 degree, capping fall: 5 degrees, minimum 500 intervals fixing

Downpipe(12m close to valley),

3. Roof Tiles

15<pitch<35, sarking<18, overhang Tile roof: 35-65mm, Sheet roof: 50-65mm

4. Windows

Overlooking, under 1.7 frosted, 9m distance principle

5. Height of fence

On boundary: ave 3.2, max 3.6

6. Front porch step

Less than 190mil

7. Front door

Seal required, foam or rubber strip

Miscellaneous

Internal

1. Hallway

Smoke detectors

1a: hallway leading to bedroom, if no bedroom storey, in a shared area

1b: in bedrooms, in hallway with light

2. Bathroom:

Ventilation: 25L/s for bathroom, to roof no sarking, to duct in posi, 5% of the floor area,Can open to kitchen or pantry when access to airlock, hallway or other room/exhaust fan in toilet

Waterstops: door entrance, caulk in bathroom

Natural lights: Windows:10% of floor area, Roof lights:3% of floor area,

Artificial light:One light per 16mm2, 5W/m2

Lift off hinges: 1.2m between pan to hinge of the door, Open outwards/Slide/Removable(lift off)

Glazing: under 2m should be A grade safety glass,under 1.7m should have open restriction, shower screen, mirror

3. Room heights:

Habitable 2.4m, Others 2.1m.

4. Kitchen:

Ventilation: 40L/s for kitchen,

Cook top, range hood distance: 650mm height or per manual,

Splash back: 200mil away from burners, fire rated

8. You are applying for final inspection from building surveyor, how do you look for defects?

General table of contents

Final Inspection

1. Hallway

1a: hallway leading to bedroom, if no bedroom storeys, in a shared area

1b: in bedrooms, in hallway with light

总结：

- 1a是一般民宅

走廊连卧室，放走廊

卧室无走廊，放公共区域

无卧室，每层一个

- 1b是群居房

走廊连卧室，每个卧室放，走廊放

其他与1a一样

- 需要独立线路hardwired together

画书

NSW 9.5.1

9.5.1 Smoke alarm requirements

[2019: 3.7.5.2]

Smoke alarms must—

(a) be located in—

(i) a Class 1a building in accordance with 9.5.2 and 9.5.4; and

(ii) a Class 1b building in accordance with 9.5.3 and 9.5.4; and

(b) comply with AS 3786, except that in a Class 10a *private garage* where the use of the area is likely to result in smoke alarms causing spurious signals, any other alarm deemed suitable in accordance with AS 1670.1 may be installed provided that smoke alarms complying with AS 3786 are installed elsewhere in the Class 1 building; and

(c) be powered from the consumer mains source where a consumer mains source is supplied to the building; and

(d) be interconnected where there is more than one alarm.

Explanatory Information

A smoke alarm can give spurious alarms if the atmosphere contains particles which obscure vision, such as could occur in a Class 10a *private garage* part of a building. 9.5.1(b) therefore allows the use of a more suitable alarm, such as a heat alarm, in these locations.

9.5.1(d) requires alarms to be interconnected where there is more than one alarm. This only applies within a single dwelling. Therefore, alarms in a Class 1a dwelling need not be interconnected with alarms in another dwelling or a *private garage* which does not belong to the Class 1a dwelling.

9.5.2 Location – Class 1a buildings

[2019: 3.7.5.3]

In a Class 1a building, smoke alarms must be located in—

(a) any storey containing bedrooms, every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building; and

(b) each other storey not containing bedrooms.

Notes

Figure 9.5.2a and 9.5.2b illustrates requirements of this provision.

Final Inspection

1. Hallway

1a: hallway leading to bedroom, if no bedroom storeys, in a shared area

1b: in bedrooms, in hallway with light

总结:

- 1a是一般民宅

走廊连卧室，放走廊

卧室无走廊，放公共区域

无卧室，每层一个

- 1b是群居房

走廊连卧室，每个卧室放，走廊放

其他与1a一样

- 需要独立线路hardwired together

画书

Figure 9.5.2a: Class 1a building where all bedrooms are grouped together and served by a hallway

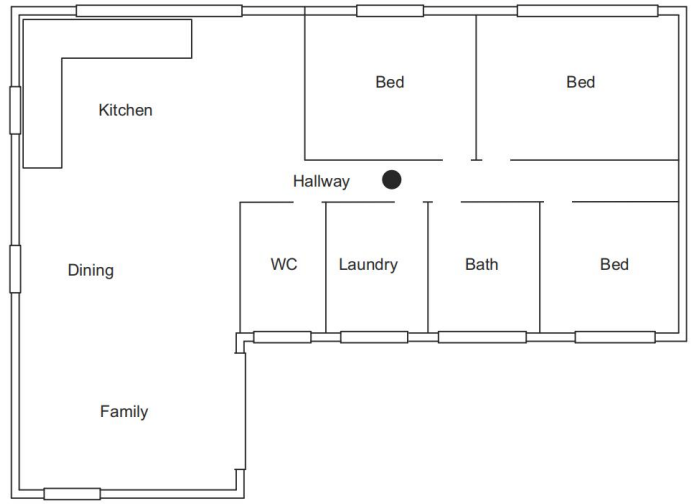
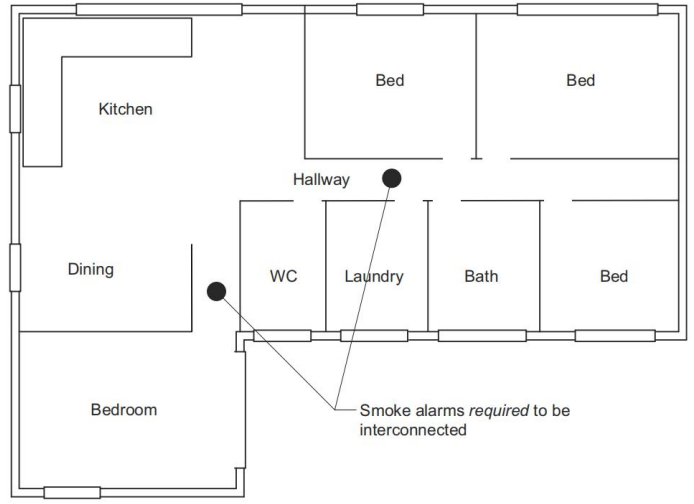


Figure Notes
In this diagram, the location of the smoke alarm is indicated by a black dot.

Figure 9.5.2b: Class 1a building where bedrooms are located in separate areas



Final Inspection

1. Hallway

1a: hallway leading to bedroom, if no bedroom storeys, in a shared area

1b: in bedrooms, in hallway with light

总结：

- 1a是一般民宅

走廊连卧室，放走廊

卧室无走廊，放公共区域

无卧室，每层一个

- 1b是群居房

走廊连卧室，每个卧室放，走廊放

其他与1a一样

- 需要独立线路hardwired together

画书

Figure Notes

(1) In this diagram, the location of each smoke alarm is indicated by a black dot.

(2) Smoke alarms are *required* to be interconnected by 9.5.1(d).

9.5.3 Location – Class 1b buildings

[2019: 3.7.5.4]

In a Class 1b building, smoke alarms must be located in—

(a) every bedroom; and

(b) every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building; and

(c) each other storey.

Notes

Figure 9.5.3 illustrates requirements of this provision.

Figure 9.5.3: Class 1b building where multiple bedrooms are served by a hallway

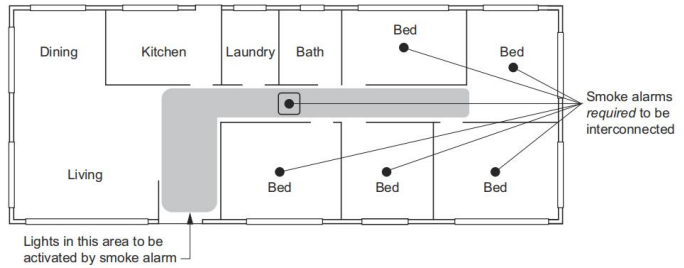


Figure Notes

(1) In this diagram—

(a) the location of each smoke alarm is indicated by a black dot; and

(b) the location of a smoke alarm with evacuation lighting is indicated by a black dot within a square; and

(c) the area served by evacuation lighting is indicated by grey shading.

(2) Smoke alarms are *required* to be interconnected by 9.4.1(d).

(3) Lighting in the grey shaded area is to be activated by a smoke alarm if using 9.5.5(b)(ii).

9.5.4 Installation of smoke alarms

[2019: 3.7.5.5]

Smoke alarms *required* by 9.5.2 and 9.5.3 must be installed on or near the ceiling, in accordance with the following:

(a) Where a smoke alarm is located on the ceiling it must be—

(i) a minimum of 300 mm away from the corner junction of the wall and ceiling; and

(ii) between 500 mm and 1500 mm away from the high point and apexes of the ceiling, if the room has a sloping ceiling.

(b) Where (a) is not possible, the smoke alarm may be installed on the wall, and located a minimum of 300 mm and a maximum of 500 mm off the ceiling at the junction with the wall.

8. You are applying for final inspection from building surveyor, how do you look for defects?

VICTORIAN BUILDING AUTHORITY

Miscellaneous

1. What is the CSIRO Document that you should provide to your customer at handover?

CSIRO document BTF18 Foundation Maintenance and Footing Performance

Reference: Guides to Standards and Tolerances 2015 - Diagrams 18.09 Maintenance

2. What is the minimum level of finish that must be applied to plasterboard before t is classified as defective?

Level 4

Reference: Guides to Standards and Tolerances 2015 - 9.13 Level of finish for plasterboard

3. What is the main purpose of the Guides to Standards and Tolerances?

For dispute resolution between a builder and the home owner

Reference: Guides to Standards and Tolerances 2015 - B The authority of the guide

4. When is the cracking of cornice joints defective?

When the crack exists at handover or exceeds 1 mm within the first 12 months of completion

Reference: Guides to Standards and Tolerances 2015 -9.15 Cracking in cornice

5. What is the normal viewing distance when inspecting a fixture or appliance for defects?

600mm - the surface or material must be illuminated by 'non-critical' light Guides to Standards and Tolerances 2015 - F Inspecting surfaces from a normal viewing position

6. It is suggested that silicon sealants in a shower recess may require replacement after 5 years. Whose responsibility is this?

The owner

Reference: Guides to Standards and Tolerances 2015 - 13.03 Shower recess and components

9. If you start a new business as a builder, how do you run the business?

Business 公司运营

1. Profit and Lost Statement 损益表

Profit and loss of the business over a period of time 一段时间的利润和亏损报告

Profit = revenue - expenses - cost

revenue 是收入

expense 是花在运行公司上的费用

cost 是花在工程上的材料和人工

2. Balance sheet 资产负债表

How much your company worth at a certain time, reflected by assets, liability, owners equity

公司在一定时候值多少钱，通过三个部分体现：

1. Assets 公司资产，包括房子，车等等
2. Liability 公司负债或法律债务，贷款和信用卡属于 liability
3. Owners' equity 老板投资在公司上的钱

3. Working Capital

Money you can use 能用的钱

4. Cash flow forecast 现金流预测

Money earning ability forecast 预测公司的盈利能力

5. GST

Good and service tax, 10%

Turnover(营业额)<$75000 no need 不需要申报 GST

$75000<Turnover<$3mil, quarterly lodge 7 万 5 到 300 万，每季度申报

Turnover>$3mil lodge monthly 300 万以上每月申报

6. BAS

Business activity statement lodge to Tax office quarterly reflects tax obligation.

每季度提交到 ATO 反映公司税务义务的报表

7. 公司的税都有哪些？

GST

PAYG, pay as you go tax is for employees, company pays that for employees 公司替员工代缴的

Topic 3 Everything before concrete

8. Work cover 是什么？

If you are hiring someone, you need work cover insurance for them 雇人买的保险

9. 《Security of Payment Act》

Purpose is to make sure tradies and suppliers can be paid on time, invoice should be paid within 10 days after received。 完活收到发票 10 天内要付款。

10. Insurance 保险

DBI(home warranty insurance), maximum payout $300k or 20% uncompleted works, covers 6 yrs structural and 2 yrs non-structural, triggers only when the builder is disappear, become insolvent, bankrupt.

Public liability, maximum payout $20mil, covers someone gets hurt on your site or damage the neighbor's property

Contract work insurance, covers act of God, stolen, accident

11. Accountant software 会计软件

Xero

12. Estimating and scheduling software, how do you estimate the job 报价和报价软件

1. Buildxact software, template, per lineal or square meters
2. Send plan out and get quotes in, put in software.
3. Put contingency and margin on it
4. If the price increase, consider prime cost items when estimating jobs, they can`t refuse.
5. Gant Chart for schedule the process.

报价用 buildxact/cubit 软件，拉线取长和面积，算料加人工

报价用 office 办公软件参考之前项目的模板

报价也可以根据项目经验，发图纸，收报价，加利润

报价也可以找 quantity（quote） surveyor。

计划工作主要用甘特图，里面可以分配人工资源，拉线分配前后顺序

真题

10. Now you are signing a contract $16,000, how much deposit can you take?

11. Provisional sums?

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计划工作主要用甘特图，里面可以分配人工资源，拉线分配前后顺序

类似题目： You just received building permit by email, and you are sitting in the office, what you will do at that moment?

- Before ordering the material, I normally schedule the job first. Then I can allocate materials for different jobs.
- Per lineal meter or sqm, I need to estimate in the software and generate a takeoff sheet.
- When we order materials, we need to consider wastage. Bricks, Roof tiles, tiles, timber floor, plaster board etc.
- For trusses and windows, fixture and fittings etc., if the supplier can provide full range of service, we need to make sure they are in stock.
- Lead time need to be considered.
- We contact our suppliers and always pay on time and build our relationship and loyalty even during hard times.

14. How do you calculate the quantity?

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报价也可以根据项目经验，发图纸，收报价，加利润

报价也可以找 quantity（quote） surveyor。

计划工作主要用甘特图，里面可以分配人工资源，拉线分配前后顺序

类似题目： How do you calculate bricks?

How to comp up the total quantity of the bricks in your project?

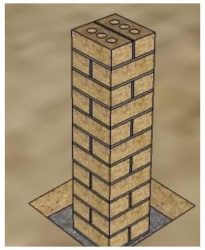
想到项目中所有用到砖的地方

2.5.1 Double brick wall

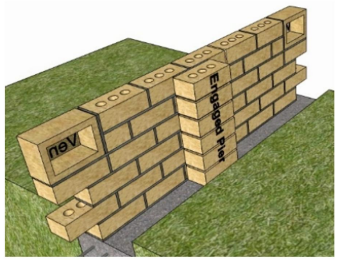
2.5.2 Sill bricks

2.5.3 Cut bricks

2.5.4 Isolated pier



2.5.5 Engaged pier



2.5.6 Retaining wall

2.5.7 Front fence

真题

14. How do you calculate the quantity?

类似题目： How do you calculate bricks?

11. Accountant software 会计软件

Xero

12. Estimating and scheduling software, how do you estimate the job 报价和报价软件

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报价用 buildxact/cubit 软件，拉线取长和面积，算料加人工

报价用 office 办公软件参考之前项目的模板

报价也可以根据项目经验，发图纸，收报价，加利润

报价也可以找 quantity（quote） surveyor。

计划工作主要用甘特图，里面可以分配人工资源，拉线分配前后顺序

15. Now you are doing plaster for 3 bedrooms, how do you order plaster board?

类似题目： How do you calculate bricks?

举一反三： How to order foams? How to order weatherboard? How to order external cladding?

Plasterboard Sheet Sizes

Stocked
Non-Stocked
Not Available in VIC

Gyprock™ Plasterboard

Sheet Size	10mm	13mm
2400 x 1200 mm		
2400 x 1350 mm		
2740 x 900 mm		
2700 x 1200 mm		
3000 x 1200 mm		
3000 x 1350 mm		
3600 x 1200 mm		
3600 x 1350 mm		
4200 x 1200 mm		
4200 x 1350 mm		
4800 x 1200 mm		
4800 x 1350 mm		
5400 x 1200 mm		
6000 x 1200 mm		
6000 x 1350 mm		

Gyprock Soundchek™

Sheet Size	10mm	13mm
3000 x 1200 mm		
4800 x 1350 mm		

Gyprock Fyrchek™

Sheet Size	13mm	16mm
2400 x 1200 mm		
2700 x 1200 mm		
3000 x 1200 mm		
3600 x 1200 mm		

Gyprock Aquachek™

Sheet Size	10mm	13mm
2400 x 1200 mm		
2700 x 1200 mm		
3000 x 1200 mm		
3600 x 1200 mm		
3600 x 1350 mm		
4200 x 1200 mm		
4800 x 1350 mm		

Gyprock FyrchekMR™

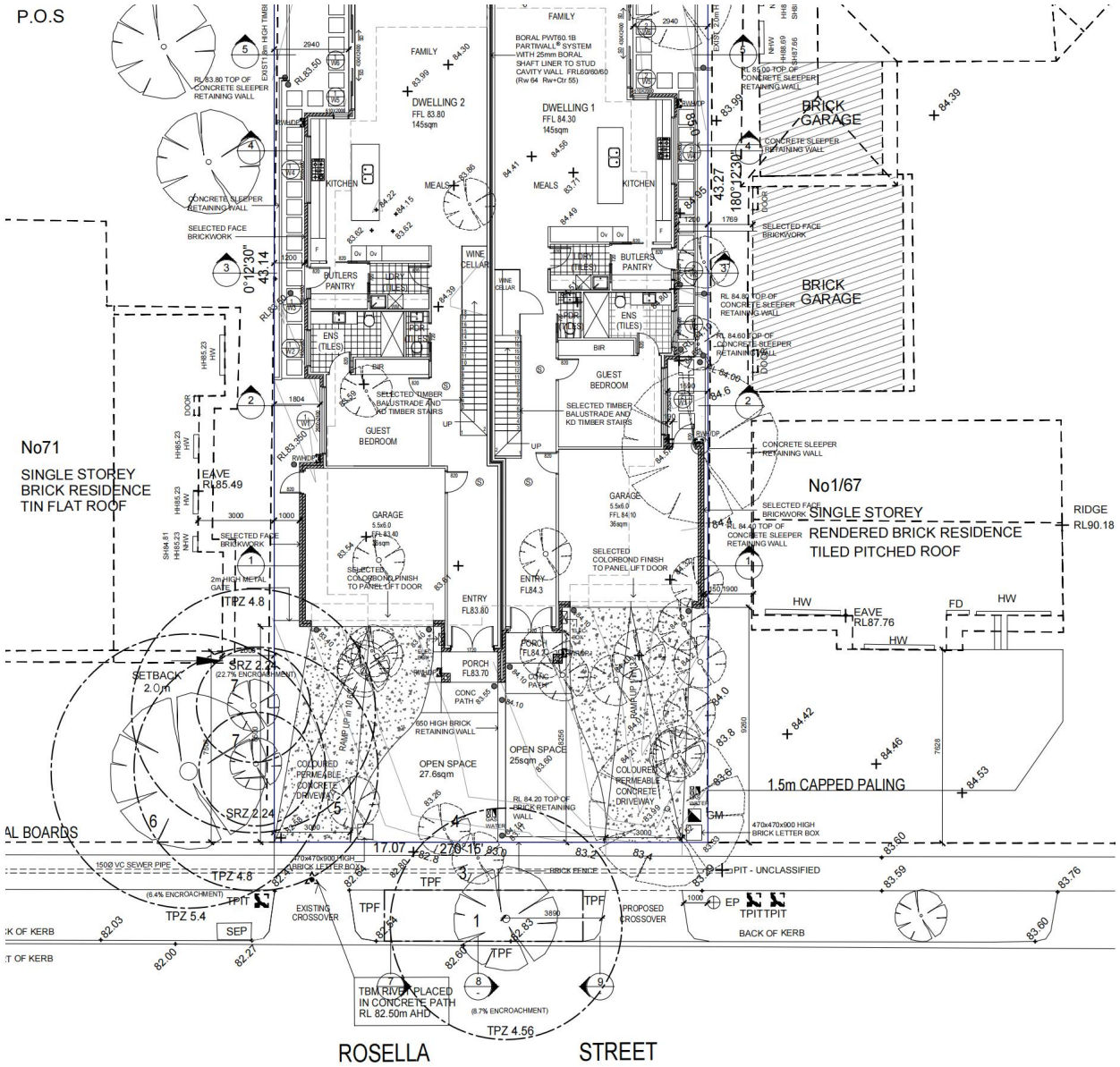
Sheet Size	13mm	16mm
2700 x 1200 mm		

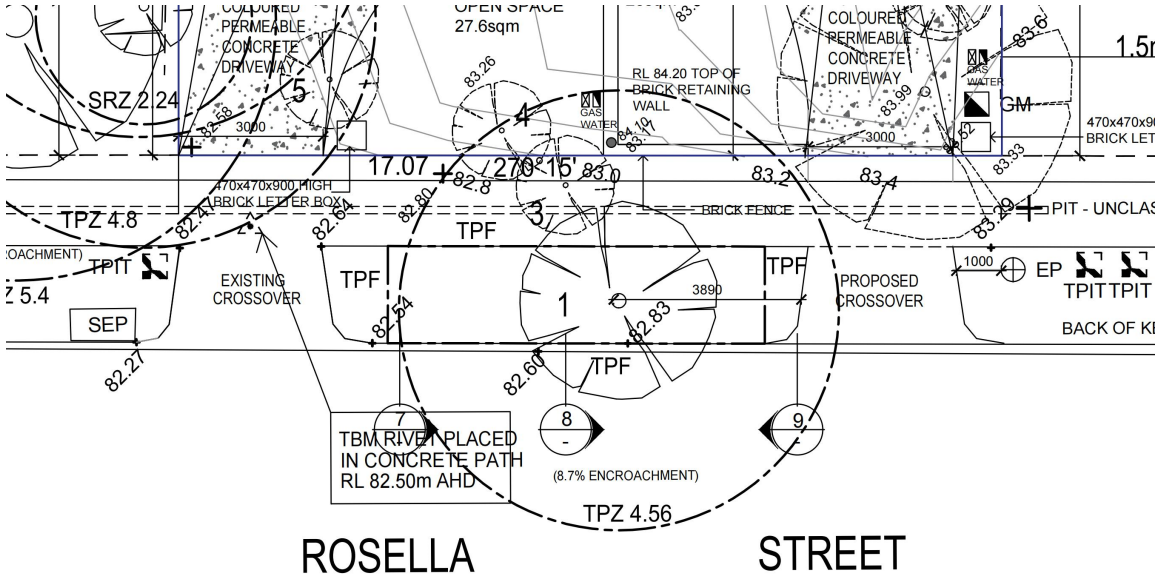
Gyprock Impactchek™

Sheet Size	13mm
3000 x 1200 mm	

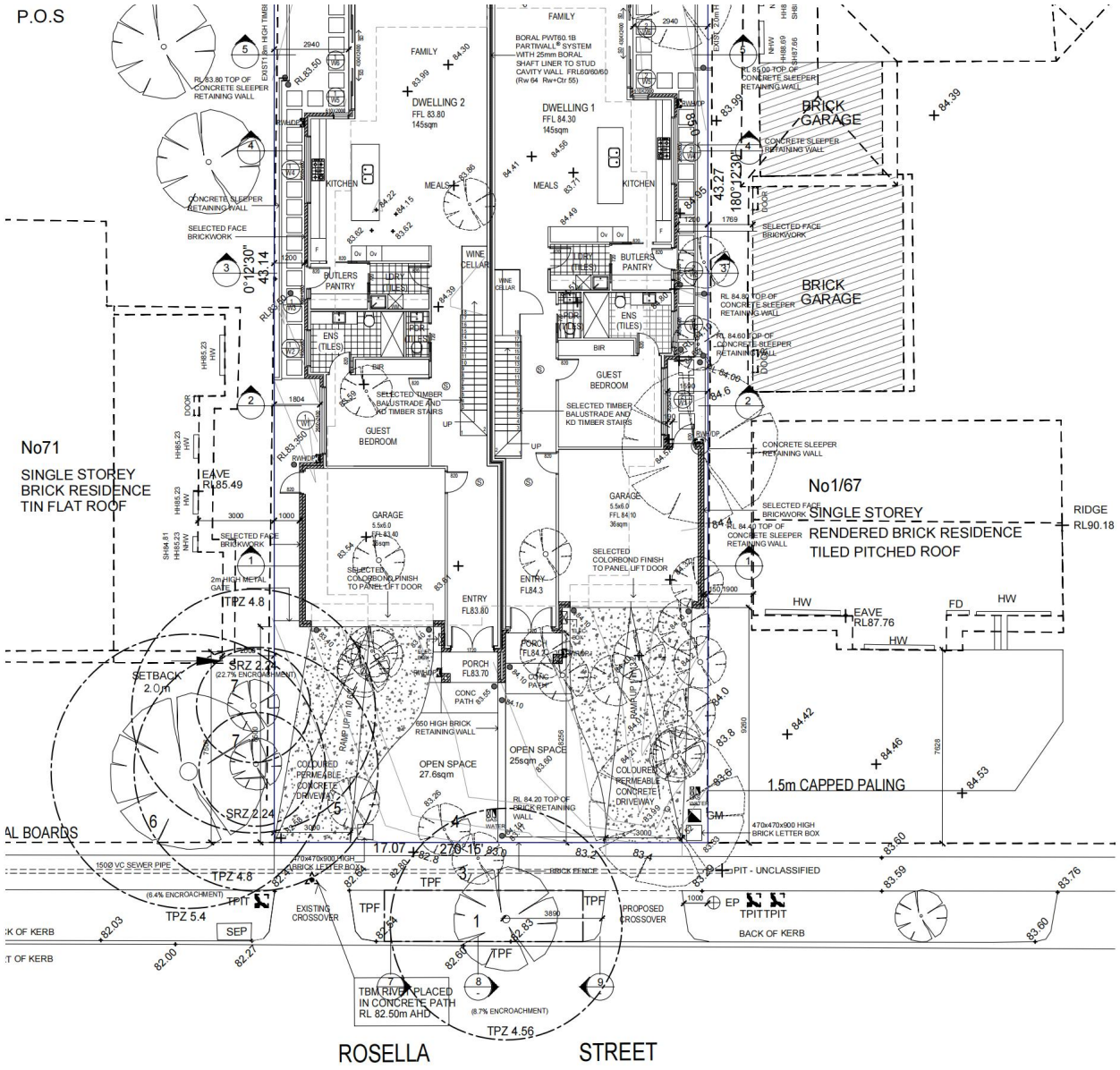
- We estimate the quantity of plaster by sqms
- We do not take openings out of the area cause the sheets are in whole length.
- For the ceiling plaster, normally we need to minimize the joints and cuts thus we always prefer bigger coverage area sheet.
- For wall plaster, we need to know different areas need different plaster, bathrooms need WR board or Cement Sheet or Vila board, Splash back needs Fyrchek board, laundry needs WR board.
- Depends on different purpose of usage, different thickness of plaster might be used, 10/13mm.
- We need to consider the wastage of plasterboard as 10% or bit more.

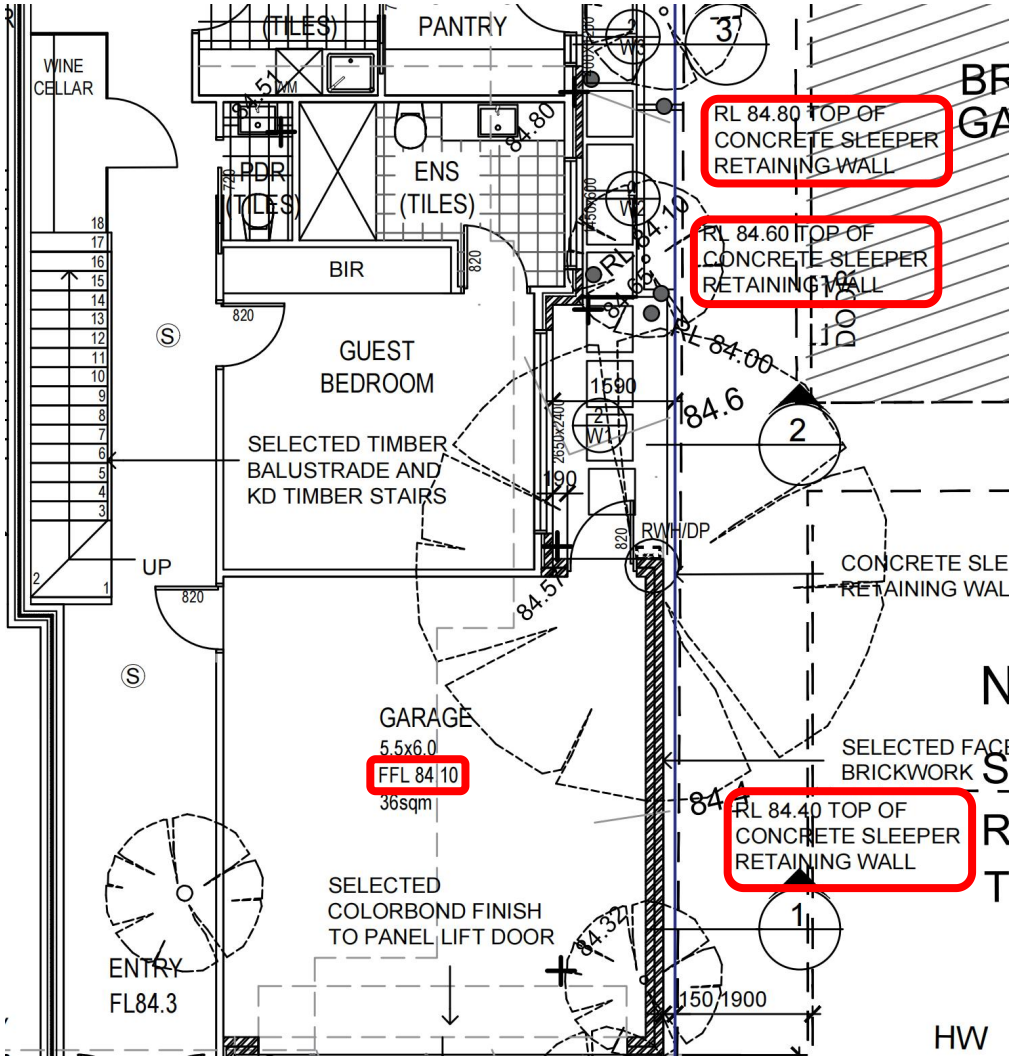
16. Project 1, what is the reference level of this project?





16. Project 1, what is the reference level of this project?





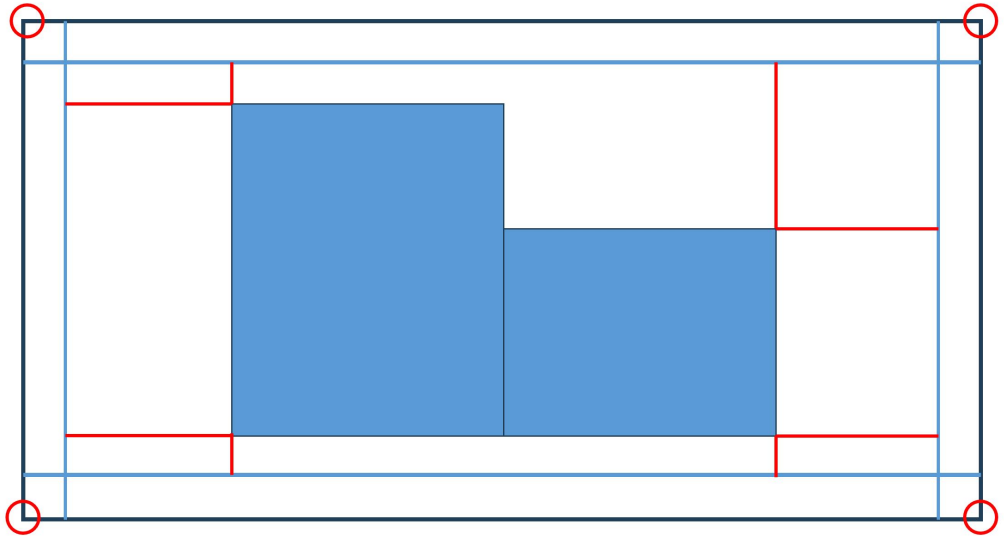
17. You are replacing a boundary fence; how do you know the fence is in the right place.

类似题目： How to build retaining wall? How to set out a land? Can you set out by yourself? Why do you use land surveyor?

经典问题

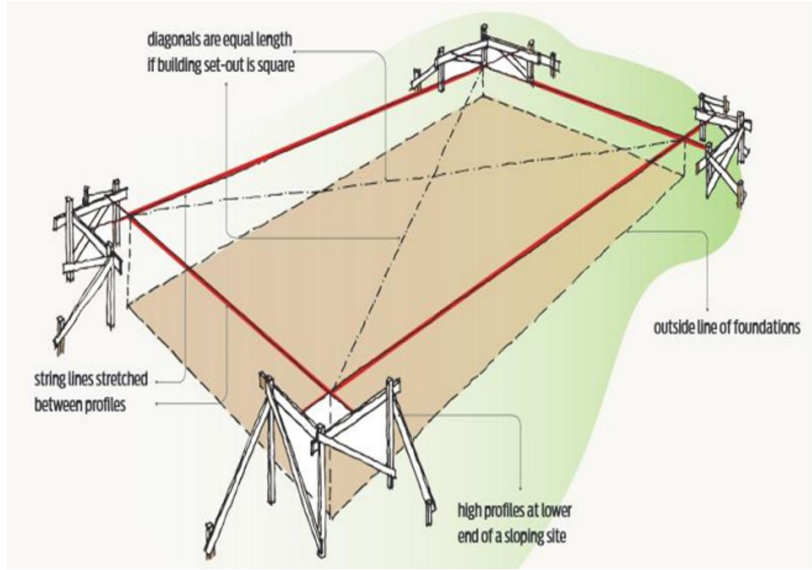
If you do the set out by yourself, how do you do that?

- Offset is marked and nailed on fence
- String line
- Set back
- Pythagoras
- Put the rest Pegs and Hurdles on



经典问题

Who does your site set out?



18. Now you are replacing the fence, do you need a BP?

2. BP required 什么情况需要building permit

- Construction of New Buildings
- Alterations & Additions
- Decks & Balconies
- Retaining Walls
- Verandahs
- Swimming Pools
- Fences
- Demolition

- Building Act有一些规定，但很难完全找出具体规定
- 没有金额的要求
- 需要有building surveyor检查
- 本地council也会附加一些规定

所有结构性的建筑， all structural

19. When you replace the fence what you need to talk to your neighbour?

类似题目： Protection works. When is BP required?

- We need to apply for building permit from building surveyor because it is structural.
- If the building surveyor determine the work needs protection works, he will issue Form 6.
- Then the process of protection works will be triggered.
- The height of the boundary fence should be 3.2m average and 3.6m maximum due to Building Regulation and we also need to comply local councils' requirement.
- If protection works are not required, we need to negotiate with the neighbour about what we are doing, when we will do that and whether they are willing to share the bill.
- Notify the council if required.
- Maintenance agreement and dispute resolution should be considered.
- If applicable, we better have a signed document.

20. When you demolish, what do you need to do to the house?

21. Do you abolish the water as well?

Demolition

1. Service abolishment, gas and electricity, should be done by owner, leave the water on site.

申请断气和电，场地内要留水。要跟客户要meter number（NMI），和零售商申请

2. Owner designate demolish building surveyor.

拆房公司可以推荐DBS，但原则上需要业主同意

3. Form 29A to council when 50% of the structure or the facade, they give 29B back

如果需要拆除的部分超过总结构的一半或改动了外部面貌，需要给council申请，申请表格是Form 29A,政府同意后会发回Form 29B

4. We should have the owner`s consent and bank`s consent

需要有业主同意书和银行同意书

5. Owner application of Asset Protection Permit from council

业主需要和council申请公保护许可

6. We should check the OHS perspective of demolition team

Builder要检查拆除团队的OHS

7. Certificate of clearance for asbestos, everything demolished.

工作完成后，要和拆除队伍要certificate

8. Before demolition OHS

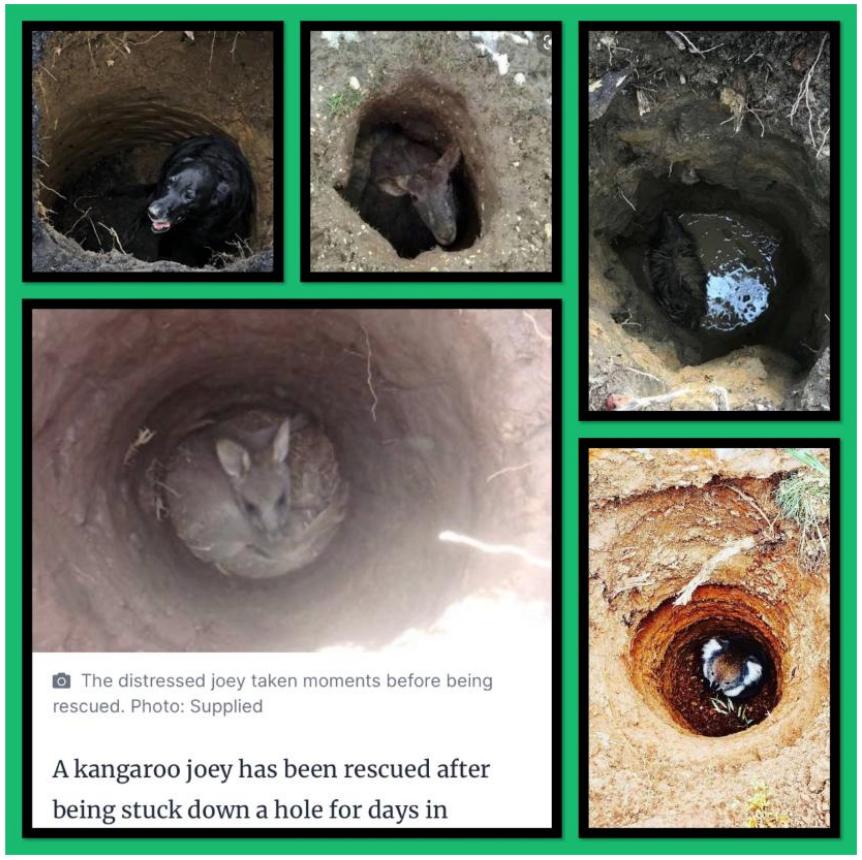
安全四项 + Fence, cage, toilet

- Feature plan, re-establishment plan from land surveyor
- Land title from landata

20. How do you protect others from the bore hole?

类似题目： OHS, above 2 meters handrail required. Process of different foundation systems, bore piers are always first to do.

Pier hole protector



真题

23. How do you do a raft slab?

24. How do you do a waffle slab?

25. How do you fix bearer to a concrete pier?

26. Which truss do you put on first? What do you see underneath that?

27. Bracing angle?

1. Concrete stump embed in ground and back fill with concrete and dirt

- Stump to bearer fixing: draw bar hook over or threaded in and notch out on bearer
- 探出来的钢筋弯折过去，木头上铣槽。或者螺丝螺母固定，木头上铣槽

1. Concrete stump embed in ground and back fill with concrete and dirt

- Bearer set up first

实例

真题

23. How do you do a raft slab?

24. How do you do a waffle slab?

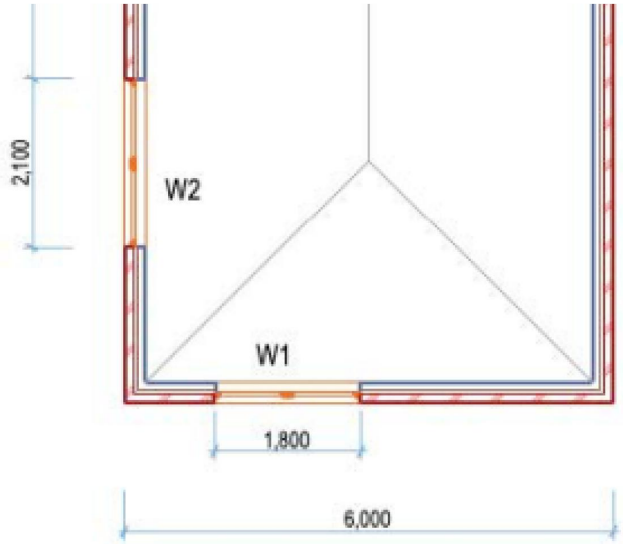
25. How do you fix bearer to a concrete pier?

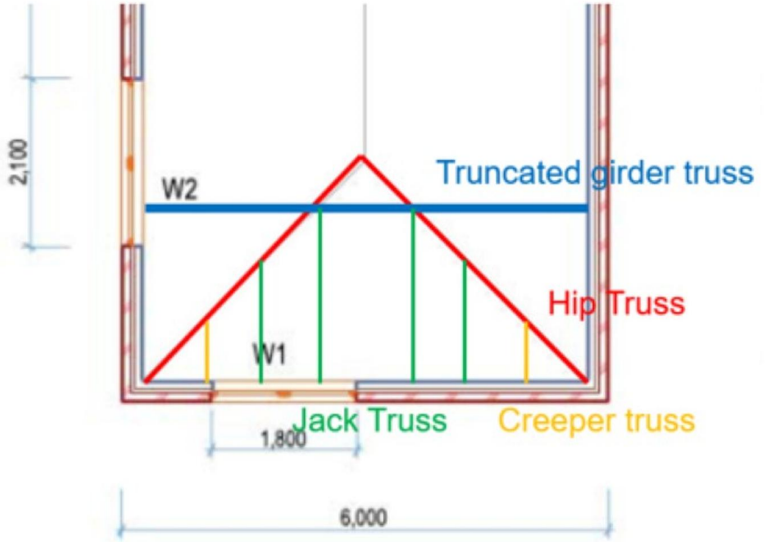
26. Which truss do you put on first? What do you see underneath that?

27. Bracing angle?

Window 2: Underneath the girder truss which is the load path.

解题步骤:



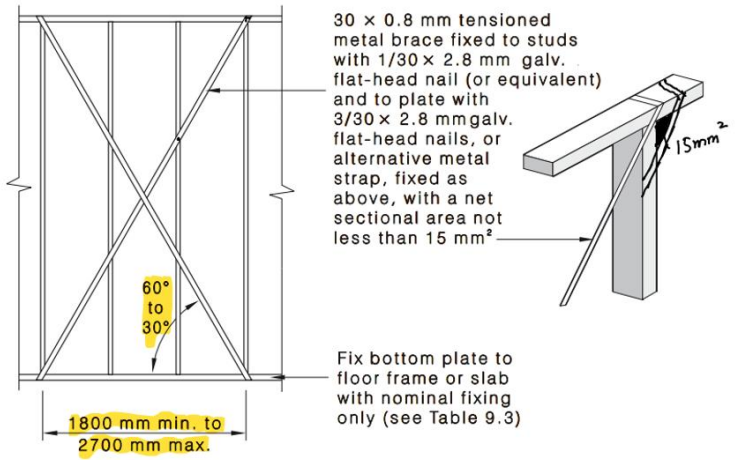
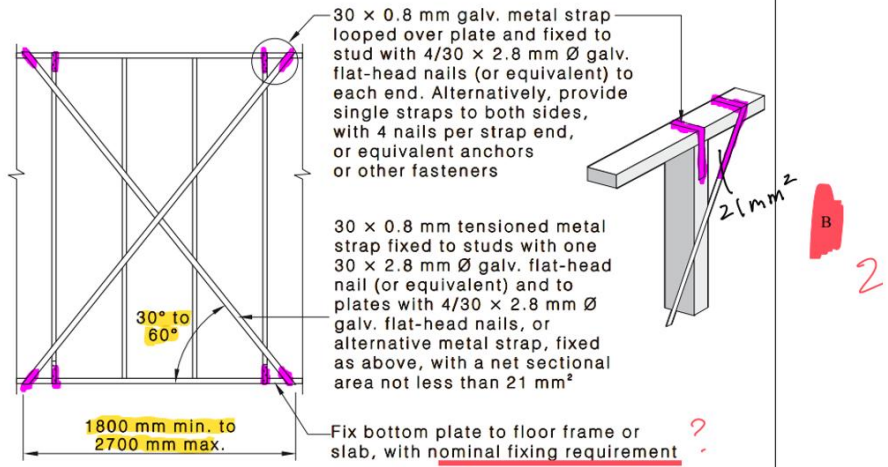


真题

27. Bracing angle?

TABLE 8.3

STRUCTURAL WALL BRACING (MAXIMUM WALL HEIGHT 2.7 m)

Type of bracing	Bracing unit type
(b) *Metal straps—Tensioned* 	A
(d) *Metal straps—Tensioned—With stud straps* 	B

28. How do you cut the angle on rafters to join the Ridgeboard?

Conventional Roof

2. Ridgeboard P63

1. Hold up the rafters 连接rafter
2. Ridgeboard joints(Fish Plate with 6 nails) 六钉Fish plate

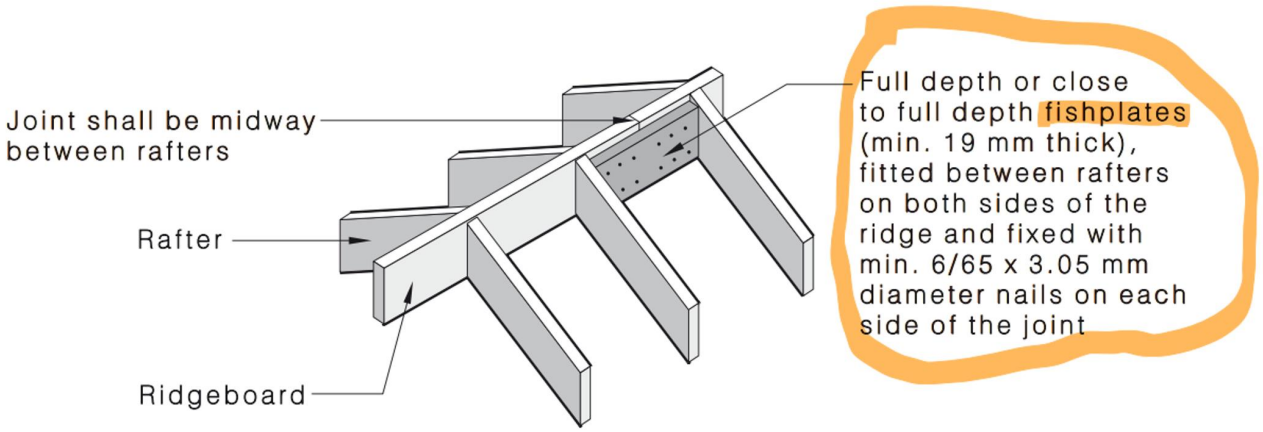


FIGURE 7.8 FISHPLATED RIDGEBOARD SPLICE

About Carpenter

T bevel

28. How do you cut the angle on rafters to join the Ridgeboard?

About Carpenter

T bevel

真题

29. You passed framing inspection, now you are contacting roof tiler, what do you do before that?

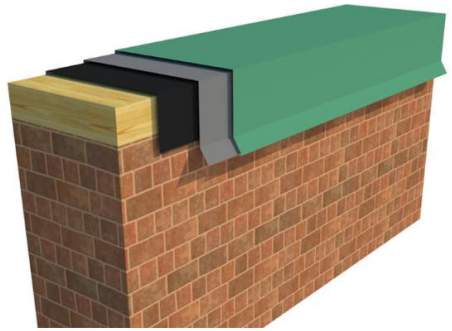
Roof Plumber

1. Gutter, capping 老NCC+Guide

新NCC怎么办？先把已有内容画出来，考试中能说出
用老NCC问题不大，新NCC自己慢慢积累

- Eave gutter: 1:500 fall minimum, 1.2m spacing of fixing bracket 坡度和固定的间距
- Box gutter:1:100 fall minimum, 200*75 domestic, 300*100 commercial 坡度，民用商用box gutter的尺寸
- Valley gutter: more than 12.5-degree, 400 width and 150 overhang minimum. Less than 12.5, as box gutter 坡度，宽度，瓦悬空，低于12.5度，看做box gutter
- Capping fall: 5 degrees, Minimum 500 intervals fixing
- Gutter water retained<10 mil 存水深度 Guide 7.03
- Gutter overlap > 25 mil 安装gutter时候的重叠尺寸 Guide 7.04

实例



29. You passed framing inspection, now you are contacting roof tiler, what do you do before that?

Roof Tiler

6. When does it need sarking? NCC2022 P163

Less than 18 degree should have sarking, more than 18 degree depends on rafter length, 40mil sag maximum

画书

7.3.4 Sarking

[2019: 3.5.2.4]

Sarking must—

(a) be provided in accordance with Table 7.3.4; and

(b) comply with AS 4200.1 and be installed with—

(i) each adjoining sheet or roll being—

(A) overlapped not less than 150 mm; or

7.3.4 Roof and wall cladding

(B) taped together; and

(ii) sarking fixed to supporting members at not more than 300 mm centres; and

(iii) no sags more than 40 mm in the sarking.

Table 7.3.4: Sarking requirements for tiled roofs

Roof pitch	Maximum rafter/truss top chord length without sarking (mm) Note 1
<18°	N/A Note 2
≥18° <20°	4 500
≥20° <22°	5 500
≥22°	6 000

29. You passed framing inspection, now you are contacting roof tiler, what do you do before that?

Roof Tiler

7. Fixing of roof batten for tile and sheet?

Tile roof: 28*40, 75 nails shoot in

Sheet roof: top hat and batten screw

30. What is the height of DPC?

31. Where do you put AJ on your plan?

Masonry

9. Articulation Joints P32

9.4 Where to put AJ（根据结构师图纸要求，没标不需要）

- 整墙无开口，6米开中间
- 900开口，5米内
- 拐角两砖外，4.5米内

5.6.8 Vertical articulation joints

[2019: 3.3.5.13]

(1) Vertical articulation joints must be provided in masonry walls in accordance with (2), except in walls constructed on *sites* where the soil classification is A or S (see 4.2.2).

(2) Articulation joints between masonry elements must have a width of not less than 10 mm and be provided (see Figures 5.6.8a and 5.6.8b)—

(a) in straight, continuous walls with openings less than 900 mm x 900 mm or walls without openings — at not more than 6 m centres and within 4.5 m, but not closer than 470 mm of all corners; and

(b) in straight, continuous walls with openings more than 900 mm x 900 mm — at not more than 5 m centres and located so that they are not more than 1.2 m away from openings; and

(c) where the height of the wall changes by more than 20% — at the position of change in height; and

(d) where a wall changes in thickness; and

(e) at control or construction joints in footings or slabs; and

(f) at junctions of walls constructed of different masonry materials.

(3) Articulation joints must not be located adjacent to arched openings.

(4) Articulation joints must be filled with flexible sealant that is supported during installation by—

(a) a compressible foam or polystyrene filler (see Figures 5.6.8d and 5.6.8e); or

(b) a purpose made backer rod (see Figures 5.6.8c, 5.6.8d, 5.6.8e and 5.6.8f).

6米算中间一个

小窗、小门（900×900），6米一个，离开口0.47<x<4.5m

大窗、大门，5米一个，离开口 1.2 m 以内

画书

AJ要放在哪里

Where articulation joints are required in unreinforced masonry walls, they shall be provided at the following locations:

参考 NCC P98

(a) In straight, continuous walls having no openings, at centres not more than the values given in Table 7.1. 整墙无开口

(b) Where the height of the wall changes abruptly by more than 20% of its lesser height, at the position of change in height.

(c) Where openings more than 900 mm × 900 mm occur, at not more than 5000 mm centres. 900×900 以上，5m以内

(d) Where walls change thickness.

NOTE: Engaged piers are not considered to be a change of thickness. Chases that have less than 75% of the leaf thickness remaining are considered to be changes of thickness.

(e) At control or construction joints in footings or slabs.

(f) Within 4500 mm of all corners, but not closer than 470 mm for cavity walls or 230 mm for veneer walls. 拐角 0.23/0.47 ~ 4.5米以内 双砖

Where articulation joints are required to be weatherproof or insect-proof, they shall be closed by incorporating— 单砖

(i) flexible sealant and backing rod (see Figure 7.3);

(ii) material that will both expand and contract (see Figure 7.3); or

(iii) a proprietary system designed for this application.

TABLE 7.1
SPACING OF ARTICULATION JOINTS FOR UNREINFORCED MASONRY WALLS

Site class	Masonry wall construction and surface finish	Joint spacing, m		
		Up to 4 m high for 10 mm joints	4 m to 8.5 m high for 10 mm joints	4 m to 8.5 m high for 15 mm joints
M, M-D	External face finish masonry	6.0	4.2	6.0
	External rendered and/or painted masonry	5.5	3.9	5.5
	Internal face finish or sheeted masonry	6.0	4.2	6.0
	Internal rendered and/or painted masonry	5.5	3.9	5.5
H1, H1-D	External face finished masonry	5.5	3.9	5.5
	External rendered and/or painted masonry	5.0	3.5	5.0
	Internal face finish or sheeted masonry	5.5	3.9	5.5
	Internal rendered and/or painted masonry	5.0	3.5	5.0
H2, H2-D	External face finished masonry	5.0	3.5	5.0
	External rendered and/or painted masonry	4.5	3.2	4.5
	Internal face finish or sheeted masonry	5.0	3.5	5.0
	Internal rendered and/or painted masonry	4.5	3.2	4.5

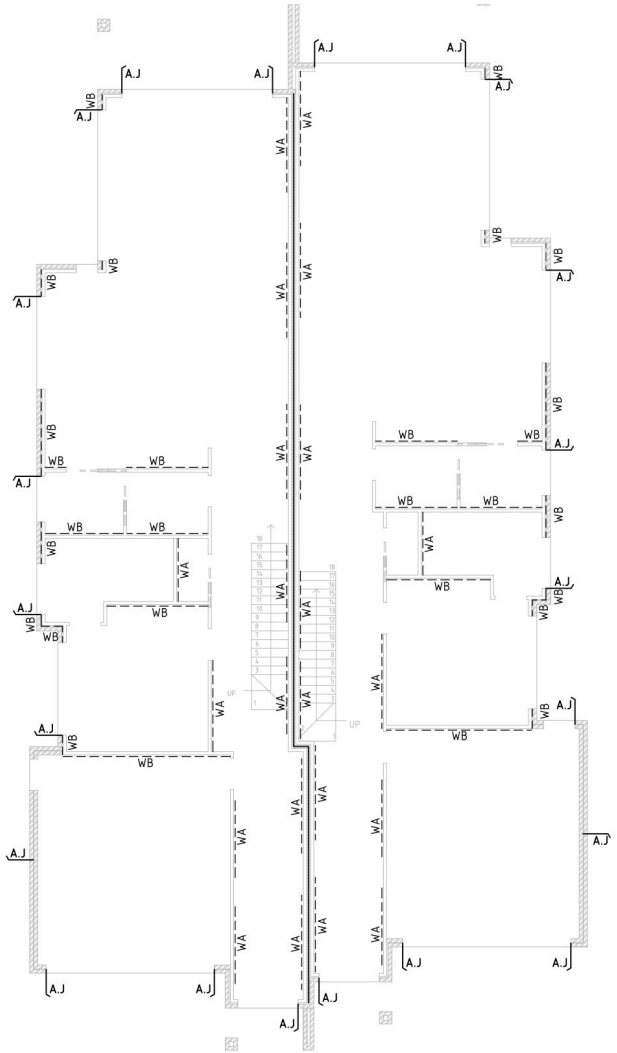
都不超过6米

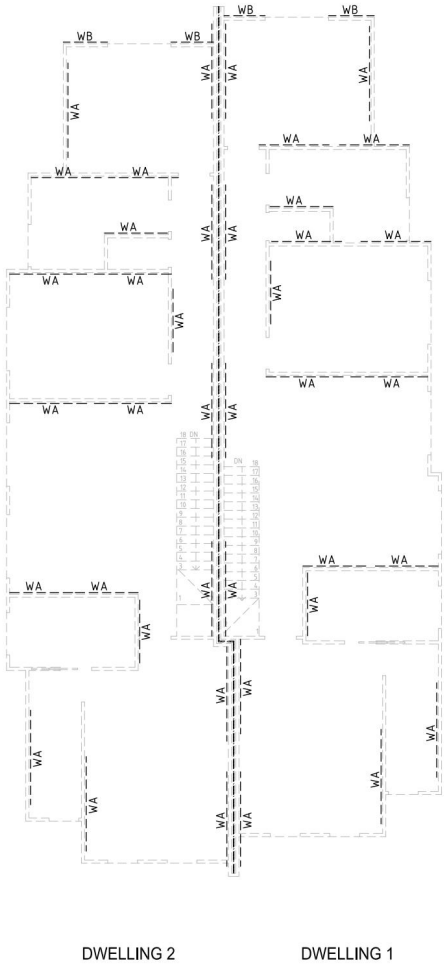
NOTE: Site class as defined in AS 2870. For further information and guidance on site classification, see AS 2870.

真题

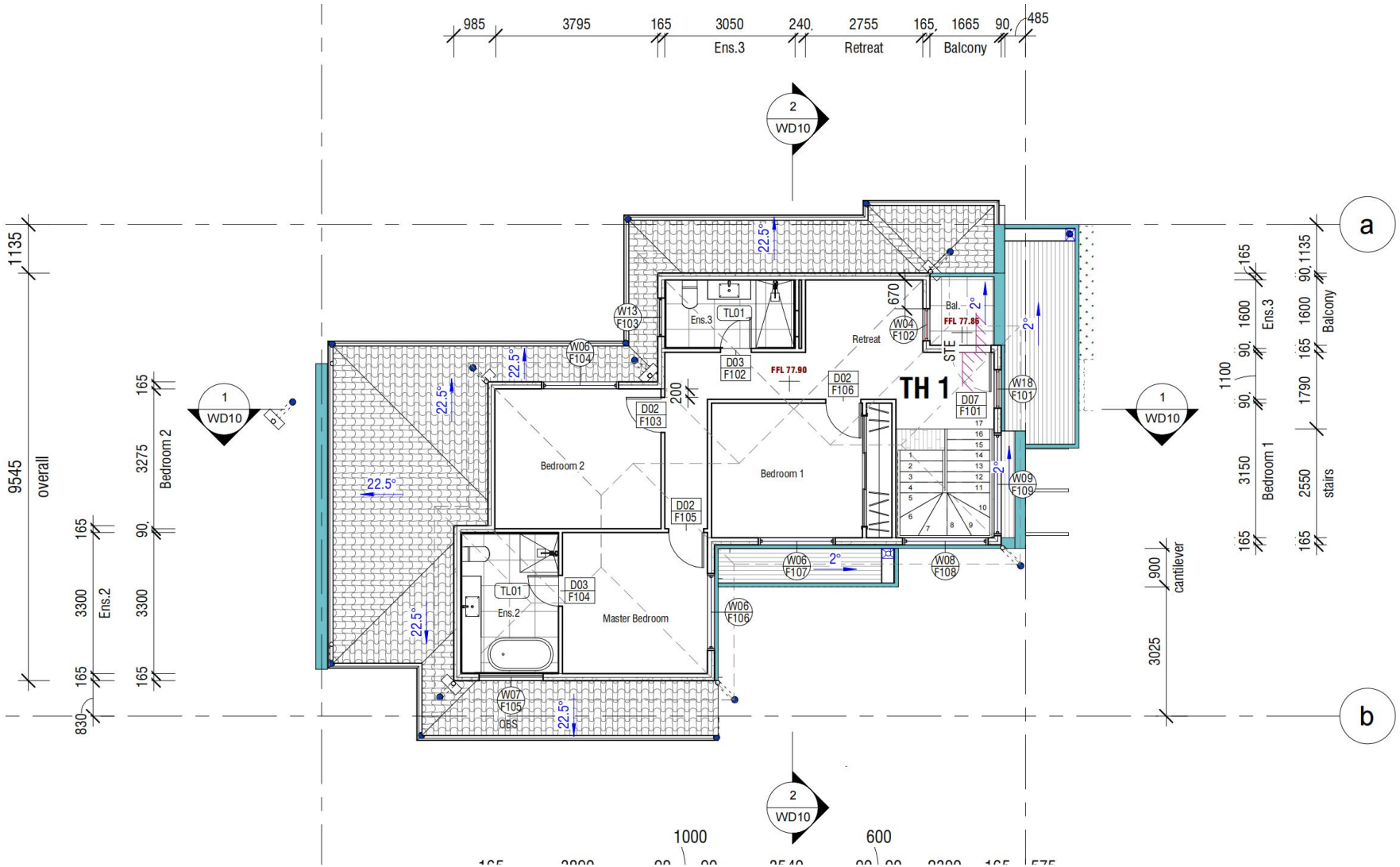
30. What is the height of DPC?

31. Where do you put AJ on your plan?

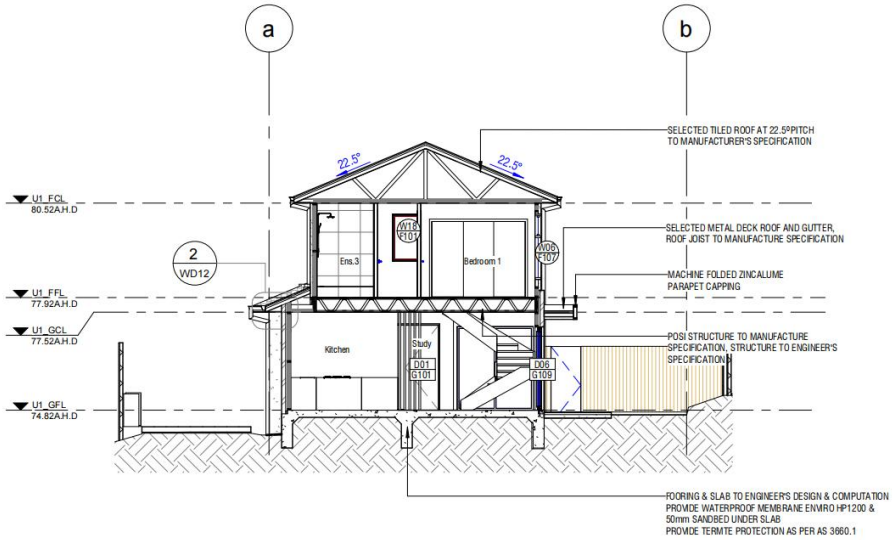




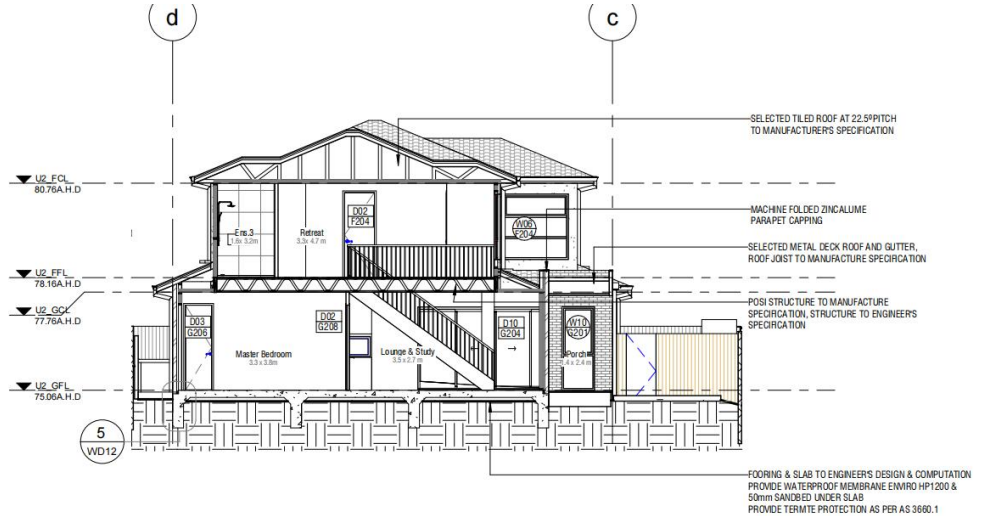
32. Can you tell me symbol A/WD06 means?



32. Can you tell me symbol A/WD06 means?



2 Townhouse 1_SecB
1 : 100



3 Townhouse 2_SecA
1 : 100

	CHECKED	APPROV.
	YP	BS
	YP	BS

PRELIMINARY DRAWING

DO NOT SCALE OFF THESE DRAWINGS.
Report any discrepancies to Mushan Architects prior to carrying out construction works.
It is the Builders / Contractors responsibility to confirm with Mushan Architects that this drawing is current and has not be revised or superseded prior to construction works.

Architecture Pty. Ltd

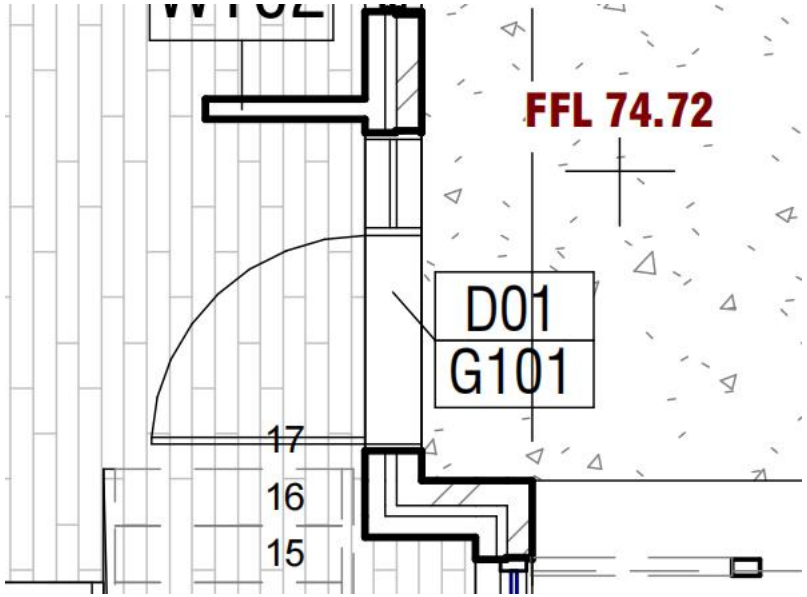
Builders / Contractors shall verify job dimensions before any job commences. Figured dimensions shall take precedence over scaled work. Work shall also conform to the specification, other drawings and job dimensions. All shop drawings shall be submitted to Mushan Architects / consultant and manufacture shall not commence prior to the return of inspected shop drawings signed by Mushan Architects / consultant.

PROJECT: **2 x Double Storey Townhouse Development**
SITE ADDRESS: **6 Hirst Street Blackburn Vic 3130**

TITLE: **Sections**

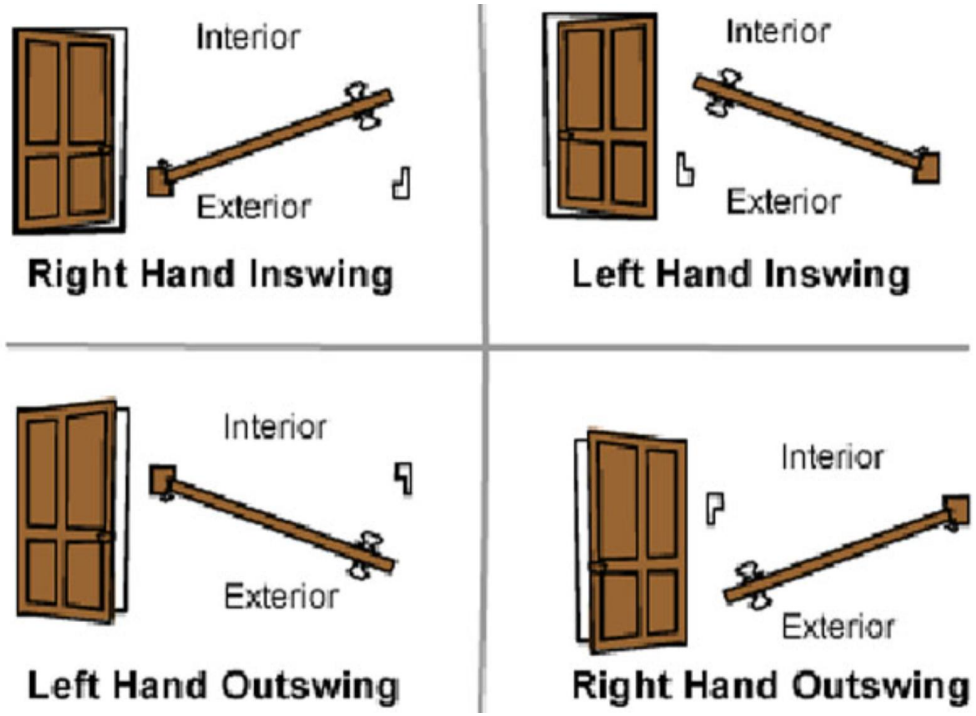
Project Date: **12.04.19**
Scale: **1 : 100 @A1**
Job Number **120419**

33. Can you tell me D1.1 is left hand door or right-hand door?



'Handing' is the term used to describe the side of the door the hinges are on when the door is opening towards you (think of a refrigerator door). In Australia, if the hinges are on the left, it is a left-handed door, and if they are on the right, it is a right-handed door. Australia's a confusing exception to the rule when it comes to 'handing' – in most other parts of the world it seems to be the other way around.

When in doubt it is best to prepare a simple sketch and take this with you when going to purchase your door.

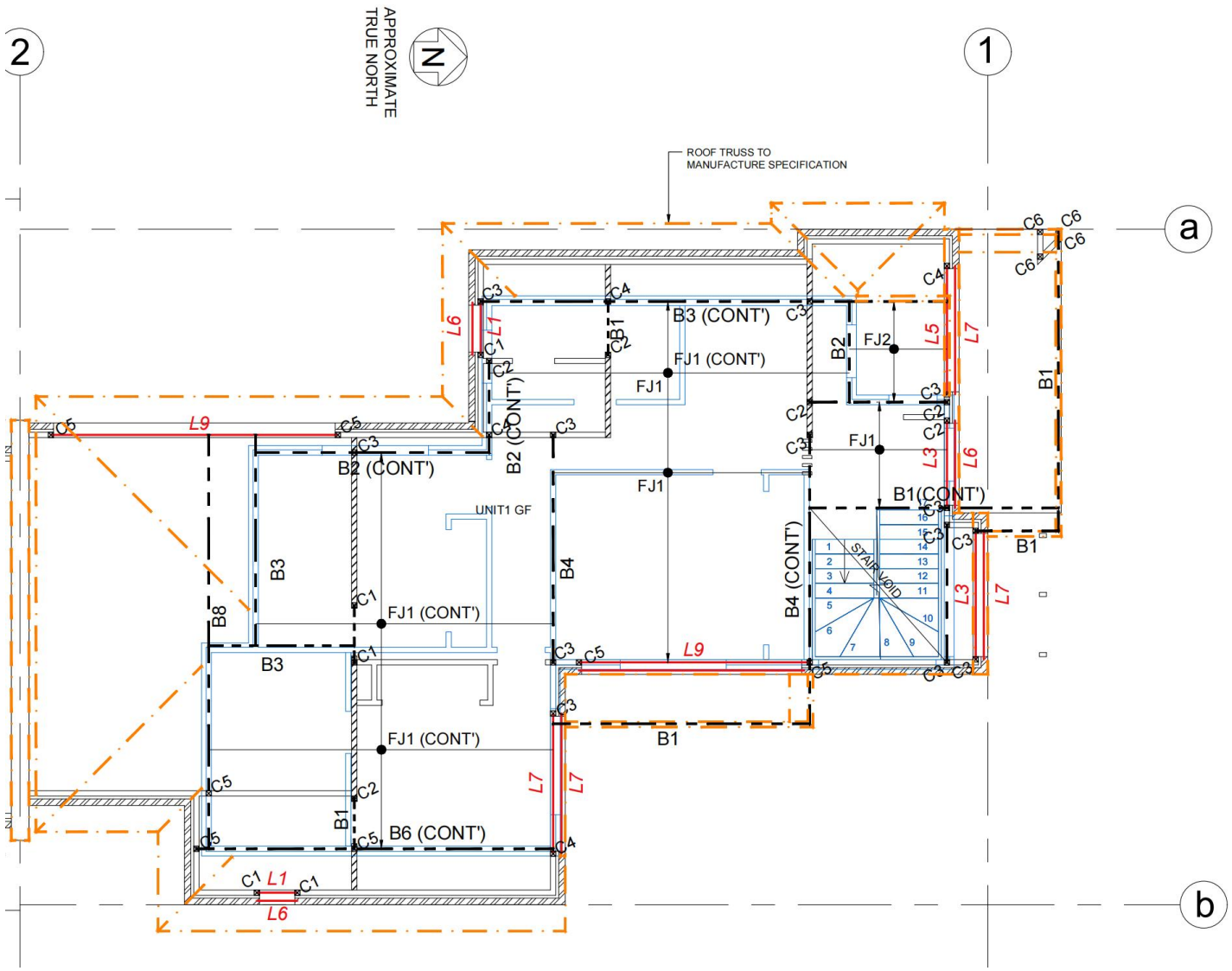


真题

34. What is the structural member above the opening of U1 garage?

35. What is PFC?

36. Now you are ordering the PFC here, what length you will order?

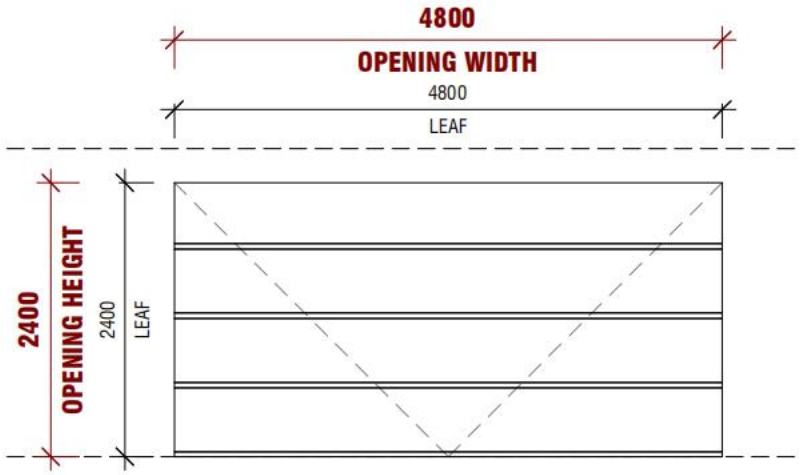


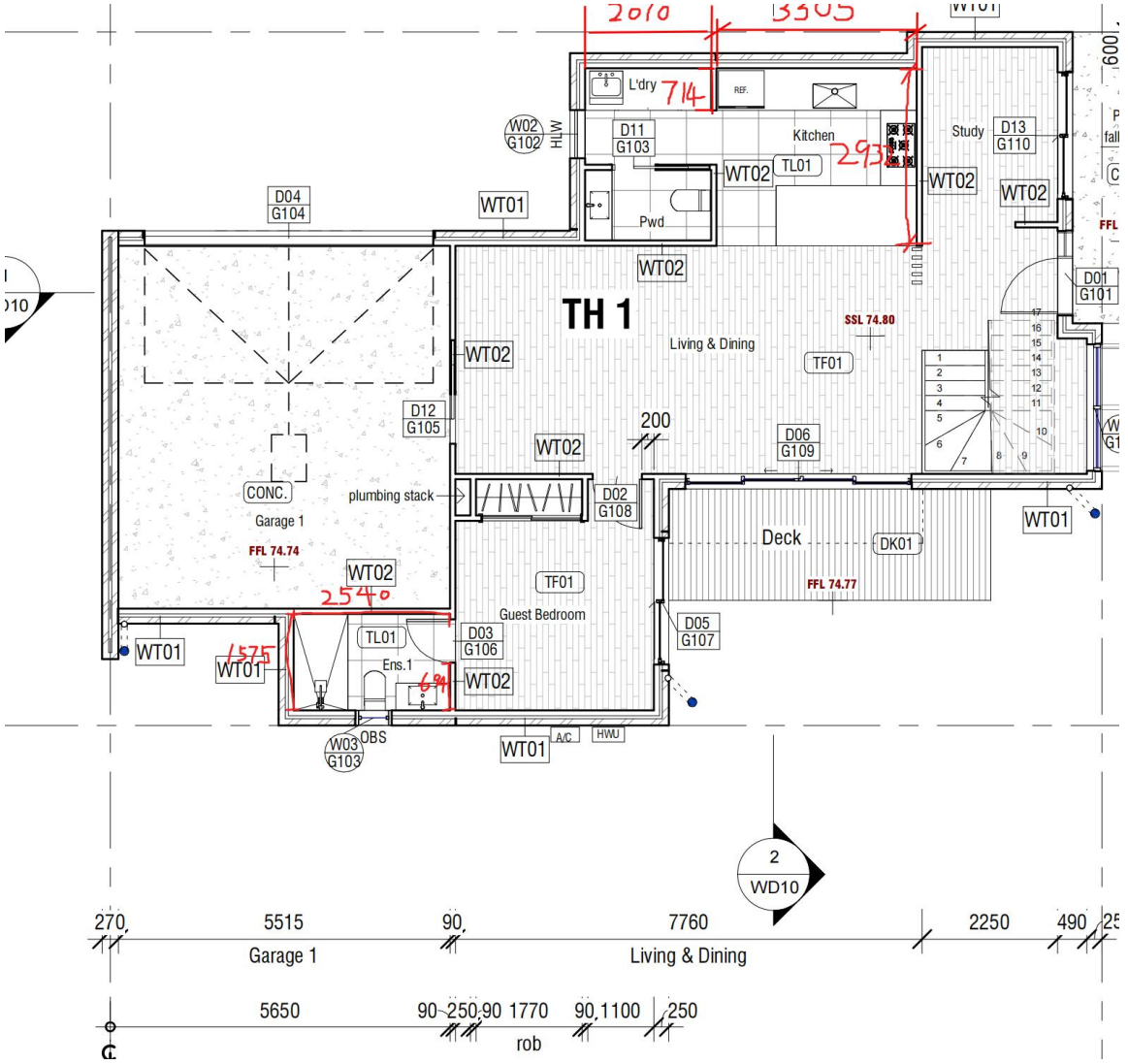
FRAMING SCHEDULE	
MARK	SIZE / GRADE
FJ1	SJ300 X 40 SMARTJOIST AT 450mm SPACING
L1	2 / 90 X 45 MGP10
L2	2 / 120 X 45 MGP10
L3	170 X 45 F17 KDHW
L4	190 X 45 F17 KDHW OR 200 X 45 LVL HYSPAN
L5	240 X 45 F17 KDHW OR 300 X 45 LVL HYSPAN
L6	100 X 100 X 6 EA GR.300
L7	100 X 150 X 12 UA GR.300
L8	150PFC GR.300 + 10mmTHK PL
L9	250PFC GR.300 + 10mm PL GR.250
L10	2 / 300 X 45 LVL HYSPAN
B1	240 X 45 LVL HYSPAN
B2	300 X 45 LVL HYSPAN
B3	2 / 300 X 45 LVL HYSPAN
B4	2 / 360 X 45 LVL HYSPAN OR 250UB25.7 GR.300
B5	2 / 400 X 45 LVL HYSPAN OR 250UB25.7 GR.300
B6	200UB18.2 GR.300
B7	250UB25.7 GR.300
B8	310UB32 GR.300
B9	310UB46.2 GR.300
B10	150PFC GR.300
C1	90 X 45 MGP10
C2	2 / 90 X 45 MGP10
C3	2 / 90 X 45 F17 KDHW
C4	3 / 90 X 45 F17 KDHW
C5	89 X 89 X 5 SHS C350
C6	90 X 90 F7 H3 KD TREATED PINE

NB: SIZES SHOWN ARE MINIMUM ONLY. APPROVED EQUIVALENT OR LARGER SIZE MAY BE USED

FIRST DIMENSION CORRESPONDS TO THE HORIZONTAL LINTEL LEG e.g. 100 X 75 X 6 EA, 100mm HORIZONTAL LEG

36. Now you are ordering the PFC here, what length you will order?





真题

37. What is the safety issue of your photo? Barrier around swimming pool.

真题

38. What do you see on the pipe vertically?

3.3 Pipe should be provided with lagging or sleeves, normally 10mm thick foam

水管需要用20mm厚的海绵保护起来

3.4 Steel required around penetration 4-N12 around pipe

管子周围井字型放四条钢筋

3.5 Vapour barrier should tape and seal on the penetrations

管子周围的塑料布必须要封好

画书

AS 2870—2011 66

6.4.6 Fixing of reinforcement and void former

Reinforcement and void formers shall be fixed in proprietary spacers, bar chairs with bases, ligatu achieve the required reinforcement position and c placed or located after concreting.

6.4.7 Placing, compaction and curing of concr

The concrete shall be transported, placed, comp building practice.

6.5 CONSTRUCTION OF STRIP AND PAD F

6.5.1 General

The construction of strip and pad footings shall Class H2 or Class E sites, additional requirements

6.5.2 Foundation

For the strip and pad footing designs in Sec following:

(a) The foundation shall have minimum bearin be founded on controlled sand fill on a Clas

(b) Topsoil containing grass roots shall be remo to rest.

(c) On sandy sites or sites subject to wind or finished ground level of the underside of the

(d) Trenches shall be dewatered and cleaned significant softened or loosened material rem

6.6 ADDITIONAL REQUIREMENTS FOR MODERATELY, HIGHLY AND EXTREMELY REACTIVE SITES

For stiffened rafts, waffle rafts, or strip footings on moderately, highly and extremely reactive sites, the following requirements apply to the building services and footing system in addition to the requirements of Clauses 6.4 and 6.5:

(a) Where the design of the footing system relies on particular detailing of masonry construction to minimize any damage caused by foundation movement, that detailing shall be included on the drawings.

(b) Penetrations of the edge beam and footing by drain pipes shall be sleeved using closed-cell polyethylene lagging or similar.

(c) During construction, water run-off shall be collected and channelled away from the building.

(d) Excavations near the edge of the footing system shall be backfilled in such a way as to prevent access of water to the foundation as described in Clause 5.6.3(b).

NOTES:

1 For example, excavations should be backfilled above or adjacent to the footing with moist clay compacted by hand-rodding or tamping.

2 Porous material such as sand, gravel or building rubble should not be used.

(e) Water shall not be allowed to pond in the trenches.

39. You are doing insulation, you run out of the batts, you do not know what is the R value required, where do you find it?

Miscellaneous

6.2 Pre-plaster check, what do you need to do

1. Carpenters blocking for tower rail, blocking for the garage door, blocking for mixers and taps.Make sure the walls are straight and buzzed, door jambs are plumbed.
2. Plumber job(as what we told to the plumber)
3. Electrician mark out is done and not erased(LV and ELV, data, intercom, security)
4. Air-con outlet and mark out
5. Insulation is not missing, R2 minimum in the wall, min. R4 in the ceiling
6. Bulkhead is prepared
7. Angle trim in bathroom for waterproof is sealed and ready

Nationwide House Energy Rating Scheme
NatHERS Certificate No. S15EM6Y8UT
Generated on 15 Jul 2020 using FirstRate5: 5.3.0a (3.21)

6 The more stars the more energy efficient
NATIONWIDE HOUSE ENERGY RATING SCHEME
124.5 MJ/m²
Predicted annual energy load for heating and cooling based on standard occupancy assumptions.
For more information on your dwelling's rating see: www.nathers.gov.au

Property
Address 1, 6 HIRST ST, BLACKBURN, VIC, 3130
Lot/DP -
NCC Class* Class 1a
Type New Home

Plans
Main plan 120419 - 17/07/2020
Prepared by PENGPENG

Construction and environment

Assessed floor area (m²)*		Exposure type
Conditioned*	139.4	suburban
Unconditioned*	5.1	NatHERS climate zone
Total	177.5	62, BLACKBURN
Garage	33	

Thermal performance

Heating	Cooling
105.2 MJ/m²	19.3 MJ/m²

About the rating
NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor
Name Matthew Morelli
Business name NRG EFFICIENT HOMES
Email matthew@nrgefficienthomes.com.au
Phone 0401 565 629
Accreditation No. DMN/16/1737
Assessor Accrediting Organisation DMN
Declaration of interest Declaration completed: no conflicts

Verification
To verify this certificate, scan the QR code or visit https://www.fr5.com.au/QRCodeLanding?PublicId=S15EM6Y8UT When using either link, ensure you are visiting www.FR5.com.au.

National Construction Code (NCC) requirements
The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

* Refer to glossary.
Page 1 of 11
Generated on 15 Jul 2020 using FirstRate5: 5.3.0a (3.21) for 1, 6 HIRST ST, BLACKBURN

39. You are doing insulation, you run out of the batts, you do not know what is the R value required, where do you find it?

Miscellaneous

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6. Bulkhead is prepared
7. Angle trim in bathroom for waterproof is sealed and ready

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
GARAGE	NRG - TIM FLOOR INS	R2.5	No
GARAGE	FR5 - Timber	R0.0	No
GARAGE	NRG - TIM FLOOR INS	R2.5	No
GARAGE	Plasterboard	R6.0	No
ENS1	FR5 - Timber	R0.0	No
ENS1	FR5 - Timber	R0.0	No
ENS1	Plasterboard	R6.0	No
ENS1	FR5 - Timber	R0.0	No
ENS1	Plasterboard	R2.5	No
G.BED	FR5 - Timber	R0.0	No
G.BED	Plasterboard	R2.5	No
G.BED	FR5 - Timber	R0.0	No
G.BED	Plasterboard	R6.0	No
KIT/LIV/DIN	Plasterboard	R2.5	No
KIT/LIV/DIN	FR5 - Timber	R0.0	No
KIT/LIV/DIN	Plasterboard	R6.0	No
KIT/LIV/DIN	FR5 - Timber	R0.0	No
KIT/LIV/DIN	FR5 - Timber	R0.0	No
KIT/LIV/DIN	Plasterboard	R2.5	No
KIT/LIV/DIN	FR5 - Timber	R0.0	No
KIT/LIV/DIN	FR5 - Timber	R0.0	No
KIT/LIV/DIN	Plasterboard	R2.5	No
PWD	FR5 - Timber	R0.0	No
PWD	FR5 - Timber	R0.0	No
LDRY	FR5 - Timber	R0.0	No

39. You are doing insulation, you run out of the batts, you do not know what is the R value required, where do you find it?

Miscellaneous

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External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
1	NRG - BRICK VENEER	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No
2	NRG - Double Brick	0.5	Medium		No
3	NRG - EPS50mm	0.5	Medium	Polystyrene expanded (k = 0.039) (R1.3);Glass fibre batt: R2.5 (R2.5)	No

40. You are buying exhaust fan for your electrician what you need to see?

Miscellaneous

Internal

1. Hallway

Smoke detectors

1a: hallway leading to bedroom, if no bedroom storey, in a shared area

1b: in bedrooms, in hallway with light

2. Bathroom:

Ventilation: 25L/s for bathroom, to roof no sarking, to duct in posi, 5% of the floor area,Can open to kitchen or pantry when access to airlock, hallway or other room/exhaust fan in toilet

Waterstops: door entrance, caulk in bathroom

Natural lights: Windows:10% of floor area, Roof lights:3% of floor area,

Artificial light:One light per 16mm2, 5W/m2

Lift off hinges: 1.2m between pan to hinge of the door, Open outwards/Slide/Removable(lift off)

Glazing: under 2m should be A grade safety glass,under 1.7m should have open restriction,

shower screen, mirror

10.8.2 Exhaust systems

[2019: 3.8.7.3]

(1) An exhaust system installed in a kitchen, bathroom, *sanitary compartment* or laundry must have a minimum flow rate of—

(a) 25 L/s for a bathroom or *sanitary compartment*; and

(b) 40 L/s for a kitchen or laundry.

(2) Exhaust from a kitchen, kitchen range hood, bathroom, *sanitary compartment* or laundry must discharge directly or via a shaft or duct to *outdoor air*.

(3) Where a venting clothes dryer is installed, it must discharge directly or via a shaft or duct to *outdoor air*.

(4) An exhaust system that is not run continuously and is serving a bathroom or *sanitary compartment* that is not ventilated in accordance with 10.6.2(a) must—

(a) be interlocked with the room's light switch; and

(b) include a run-on timer so that the exhaust system continues to operate for 10 minutes after the light switch is turned off.

(5) Except for rooms that are ventilated in accordance with 10.6.2(a), a room with an exhaust system in accordance with (1) must be provided with make-up air—

(a) via openings to an adjacent room with a free area of 14,000 mm^2; or

(b) in accordance with AS 1668.2.

Explanatory Information

A range hood installed in a kitchen must comply with 10.8.2(2).

10.8.2(3) requires venting clothes dryers to be provided with exhaust ducting directly from the clothes dryer to *outdoor air*. This requirement only applies to venting clothes dryers and not other types of clothes dryers, such as condensing clothes dryers.

10.8.2(5) and 10.8.2(6) requires some rooms that have exhaust systems and are not naturally ventilated (e.g. rooms without openable windows) to be provided with make-up air. The make-up air openings *required* by 10.8.2(5)(a) are based on the minimum flow rates of 10.8.2(1). An opening with a free area of 14,000 mm^2 can by achieved by a 20 mm undercut to a 700 mm wide door. If the exhaust flowrates exceed the minimum flowrates of 10.8.2(1), additional make-up air openings may be required for the correct operation of the exhaust system.

40. You are buying exhaust fan for your electrician what you need to see?

Backdraft Shutter Plastic 150mm

$17.00

ADD TO CART

Backdraft Shutter for non Ductable Fans

~~$55.00~~ $49.00

ADD TO CART

Backdraft Shutter Metal 150mm

$34.00

ADD TO CART

Additional Notes

NOTES:

ALL EXHAUST FANS TO BE SELF CLOSING. MAX 250mm DIA.

ALL WINDOW FRAMES TO BE WEATHER STRIPPED.

ALL GAPS AND CRACKS SEALED.

ALL INSULATION TO BE INSTALLED IN ACCORDANCE WITH AS.3999

CEILING INSULATION MUST PROTRUDE NO LESS THAN 50mm FROM THE BUILDING

INSULATION ENVELOPE,

R2.5 INSULATION HAS BEEN ALLOWED TO CEILING PERIMETER DUE TO HEIGHT RESTRICTIONS WHERE APPLICABLE.

THIS NOTE IS ONLY APPLICABLE TO FLAT OR PITCHED ROOFS ONLY WITH NO ATTIC SPACE

R VALUE NOMINATED IS CEILING BATT + R1.3 FOIL BLANKET

EXAMPLE

R5.3 WOULD REPRESENT A COMBINATION OF

R4.0 CEILING BATT & R1.3 FOIL BLANKET LOCATED TO THE UNDERSIDE OF THE ROOF.

PLEASE ENSURE A MIN. 50mm SPACING BETWEEN THE CEILING AND ROOF INSULATION

IN ACCORDANCE WITH AS.3999

41. Kitchen rangehood requirements?

4. Kitchen:

Ventilation: 40L/s for kitchen,

Cook top, range hood distance: 650mm height or per manual,

Splash back: 200mil away from burners, fire rated

10.8.2 Exhaust systems

[2019: 3.8.7.3]

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(b) in accordance with AS 1668.2.

42. Renovation in bathroom needs BP. New shower screen, new tile, new basin do you need BP?

2. BP required 什么情况需要building permit

- Construction of New Buildings
- Alterations & Additions
- Decks & Balconies
- Retaining Walls
- Verandahs
- Swimming Pools
- Fences
- Demolition

- Building Act有一些规定，但很难完全找出具体规定
- 没有金额的要求
- 需要有building surveyor检查
- 本地council也会附加一些规定

所有结构性的建筑， all structural

43. Do you need building permit for retaining wall? Fence?

2. BP required 什么情况需要building permit

- Construction of New Buildings
- Alterations & Additions
- Decks & Balconies
- Retaining Walls
- Verandahs
- Swimming Pools
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所有结构性的建筑， all structural

真题

44. Tell me what so special about swimming pool gate?
45. Protection work, will you give a report to neighbour, what is that?
46. Pre-plaster check?

6.2 Pre-plaster check, what do you need to do

1. Carpenters blocking for tower rail, blocking for the garage door, blocking for mixers and taps.Make sure the walls are straight and buzzed, door jambs are plumbed.
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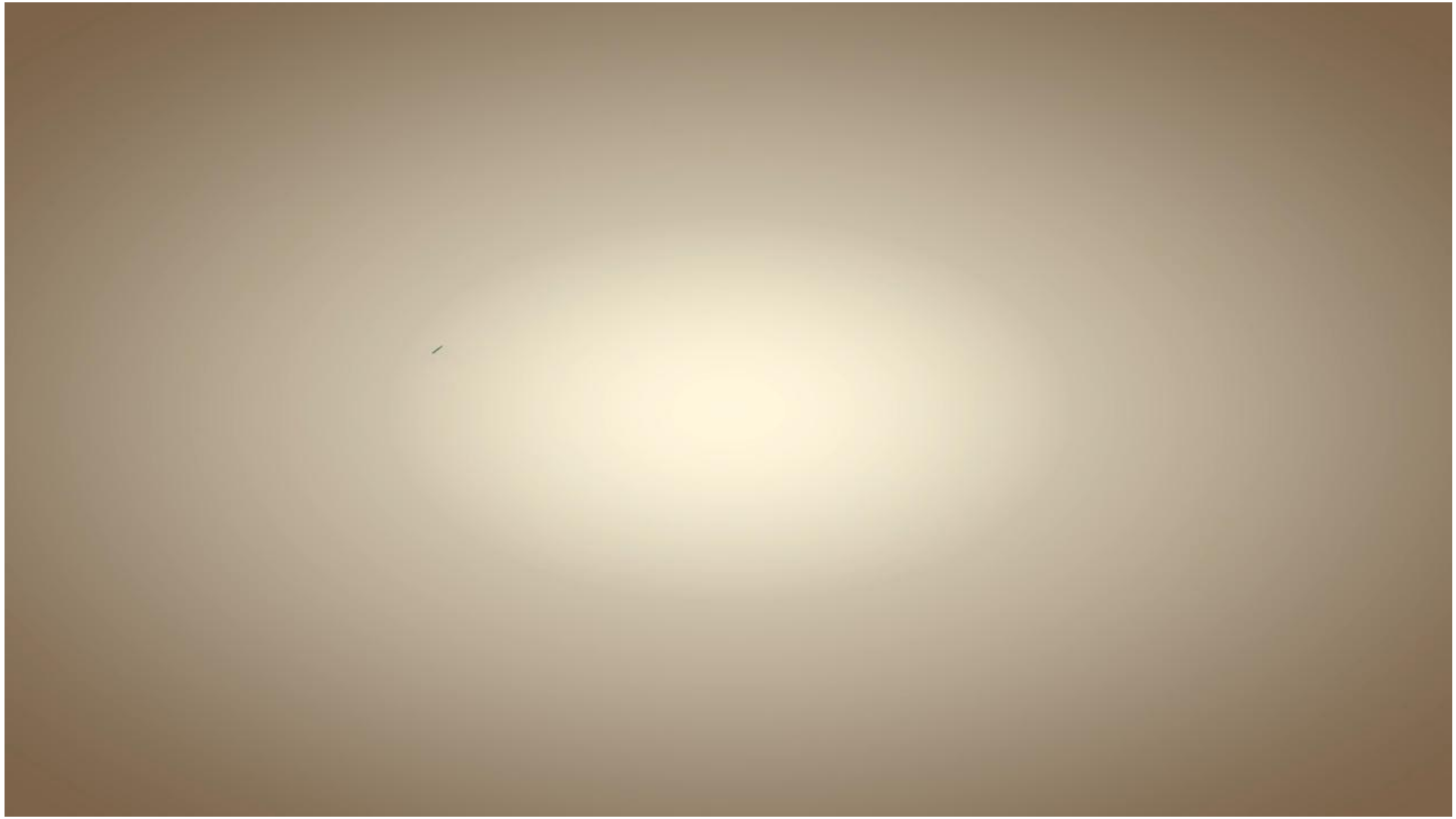
真题

47. How do you install a door jamb? Do you need to assemble the door jambs on site?
48. When you put in the door jamb, which side do you put in first?
49. Do you paint the top and bottom of the internal door?



50. Balcony in the final inspection?

- Freeboard requirements for balcony is 40mm step down minimum.
- Fall of the floor is 1:100.
- Overflow drainage should be provided.
- Different waterproofing system for external use only.
- 1m high barrier.
- 125mm opening for barrier.
- If using wire barriers, minimum 60mm spacing of the wire
- Fall more than 4m, 150-760mm horizontal NCZ

11.3.4 Construction of barriers to prevent falls

[2019: 3.9.2.3]

(1) A barrier *required* by 11.3.3 must comply with (2) to (11).

(2) The height of a barrier must be in accordance with the following:

(a) The height must not be less than 865 mm above the nosings of the stair treads, the floor of a ramp or the like (see Figure 11.3.4a).

(b) The height must not be less than—

(i) 1 m above the floor of any *landing*, corridor, hallway, balcony, deck, verandah, access path, *mezzanine*, access bridge, roof top space or the like to which general access is provided (see Figure 11.3.3b and Figure 11.3.4a); or

(ii) 865 mm above the floor of a *landing* to a stairway or ramp where the barrier is provided along the inside edge of the *landing* and does not exceed a length of 500 mm.

Table 11.3.6a: Wire barrier construction – Minimum required tension (N) for stainless steel horizontal wire

Wire dia. (mm)	Lay	Wire spacing (mm)	Clear distance between posts (mm)								
			600	800	900	1000	1200	1500	1800	2000	2500
2.5	7x7	60	55	190	263	415	478	823	1080	1139	x
		80	382	630	730	824	1025	1288	x	x	x
		100	869	1218	1368	x	x	x	x	x	x
2.5	1x19	60	35	218	310	402	585	810	1125	1325	x
		80	420	630	735	840	1050	1400	1750	x	x
		100	1140	1565	x	x	x	x	x	x	x
3.0	7x7	60	15	178	270	314	506	660	965	1168	1491
		80	250	413	500	741	818	1083	1370	1565	x
		100	865	1278	1390	1639	x	x	x	x	x

真题

51. Have you done posi strut or I beam?

52. Where do you put the strong back? How do you fix it?

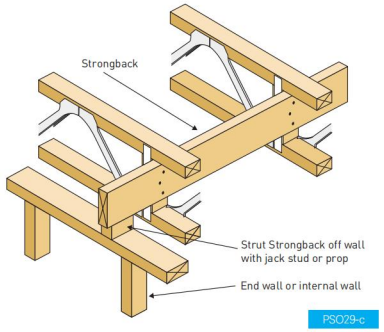
Note

1. Unless specified otherwise in the fabricator drawings, the recommended strongback sizes are shown in Table 12.
2. The recommended timber grade for strongbacks in Table 11 is equal to or higher than the grade in the PosiStrut chords.
3. For optimal performance, the strongback should preferably be located hard against the underside of the top chord before fixing to timber web or block.

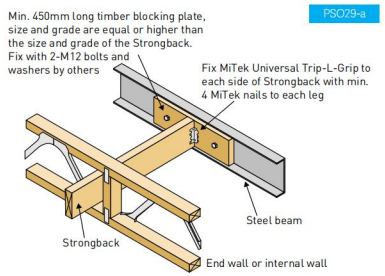
Table 12. Recommended Strongback Sizes

PosiStrut Depth	200	250	300	360	400
Strongback Size	90 x 35	120x35	140x35	170x35	190x35

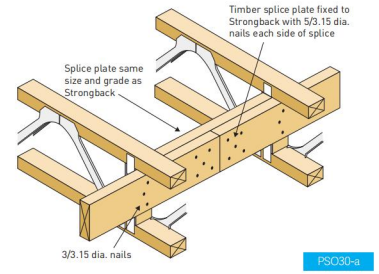
Strongback supported off wall



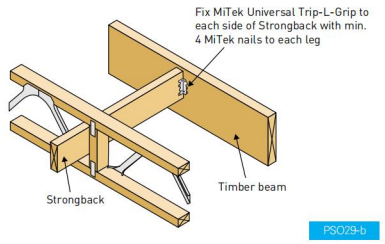
Strongback fixing to Steel Beam

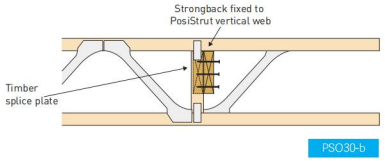


Strongback fixing and splice



Strongback fixing to Timber Beam





53. You are buying a toilet for your plumber, what kind of toilet do you buy?

6.1 Talk to plumber first day they rough in

1. Cabinetry layout and mark out on the ground and make sure cold and hot water outlet is in the same spacing
2. Toilet and shower and basin, tap, shower head specs and location should be given to plumber
3. Wall hang vanity, no holes should be drill in the bottom plate of structural wall, bath notch
4. Holes 25mil, 3D spacing minimum, notch 20 mil, bath notch 25 mil.
5. HWS away from windows 500mil
6. Gas meter 1m away from openings
7. Falls of pipes 1:60
8. Pressure Test
9. Silicon the hot and cold water

实例