

CONSENTED FLOOR PLANS



SUE & DAMIEN

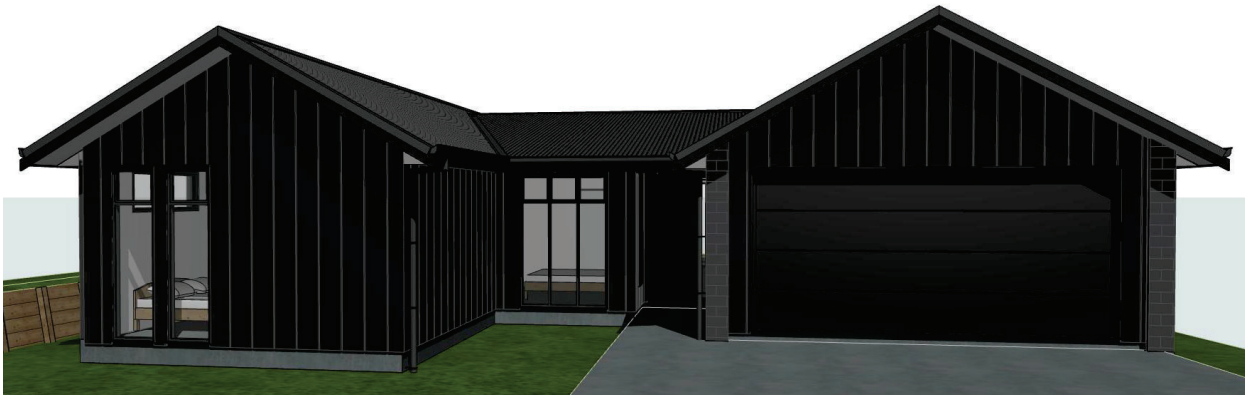
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ownrealestate.co.nz

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OWN
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45 Rock Ridge Drive

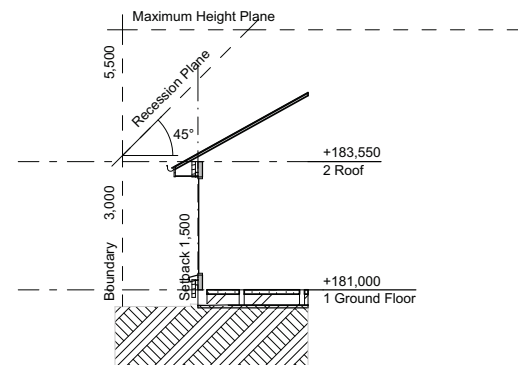
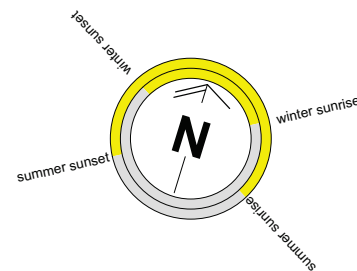
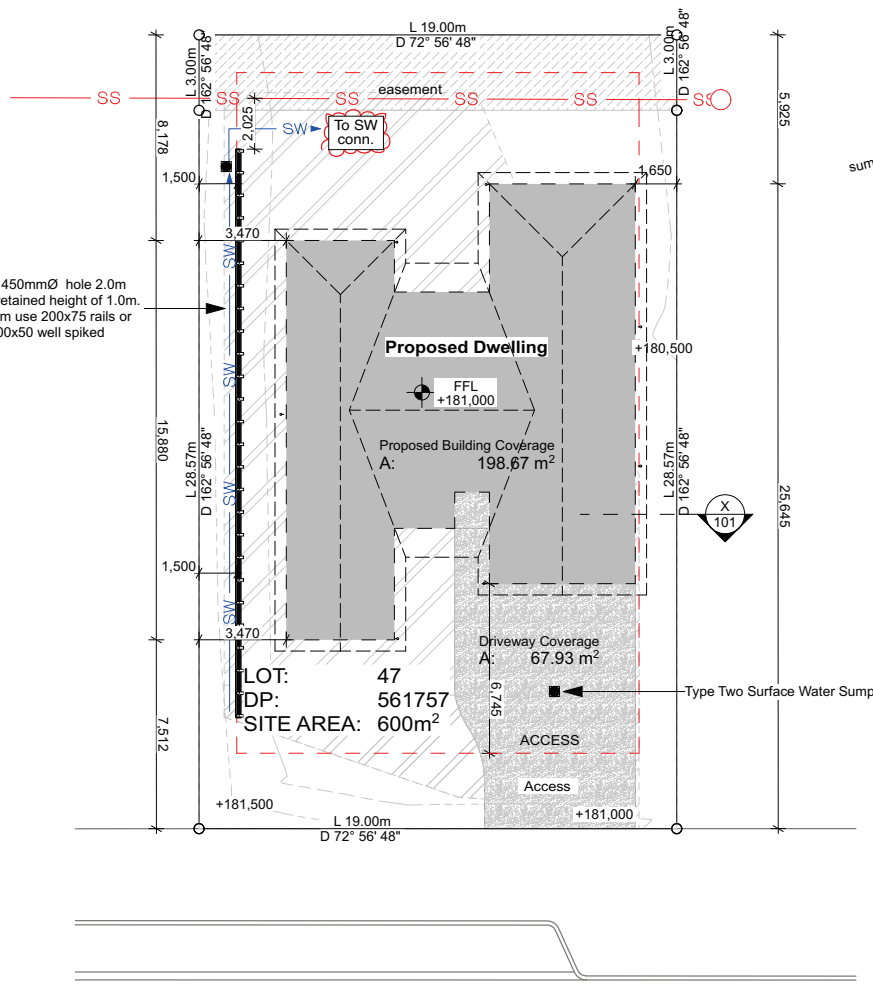


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DISTRICT PLAN	
Environment Zone	General Residential
Resource Area	n/a
Max Building Height	8m
Building Setbacks	3m road + 1.5m sides/ rear
DESIGN INFORMATION	
Wind Zone	High
Earthquake Zone	1
Exposure Zone	C
AREAS	
Site	600 m2
House Coverage	198.67m2 (33.11%)
Driveways/Deck Coverage	67.93m2
Total Impervious Area	266.6 (44.43%)

Retaining Wall:
175SED HD pole in a 450mmØ hole 2.0m deep for a maximum retained height of 1.0m. Below a depth of 0.66m use 200x75 rails or double thickness of 200x50 well spiked together.



2 Height to Boundary
105 Scale 1:100

Sediment Control

Control sediment run-off with:

- vegetation
- silt fences to screen and filter sediment
- hay or straw bales to trap sediment
- sediment ponds

Keep silt control devices clear and ensure that cleared material cannot run into waterways or drains.

General Drainage and Services notes

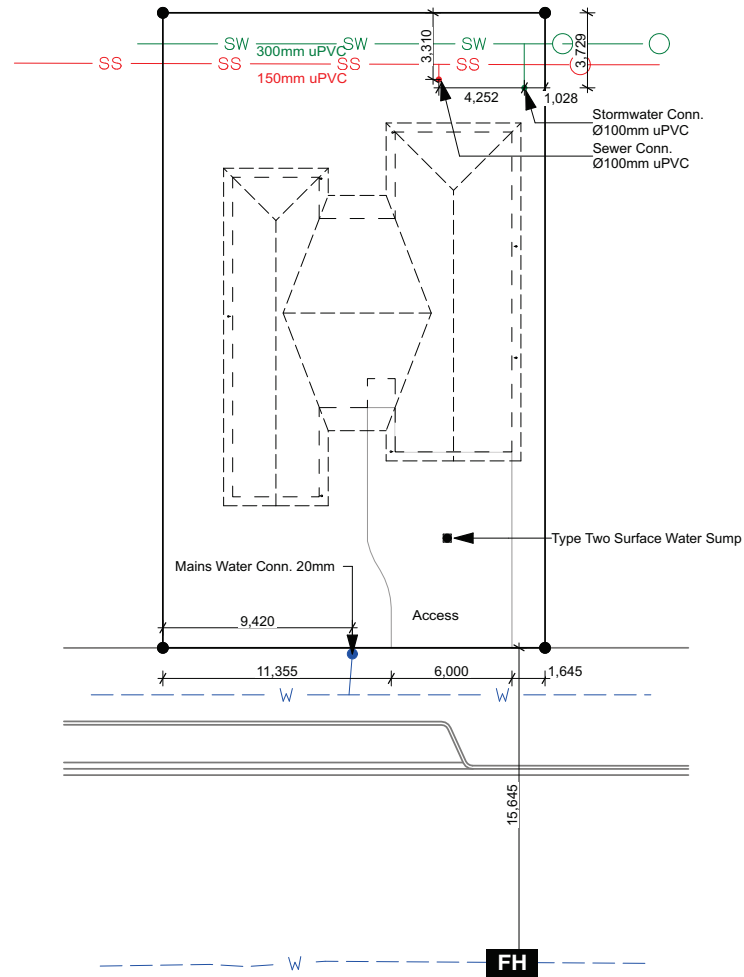
Locate existing power, water, telephone and sanitary drainage services. Allow to inform network operators as necessary

Slip Resistance

Provide Slip Resistant broomed concrete finish to entry.



1 Site Location
105 Scale 1:1



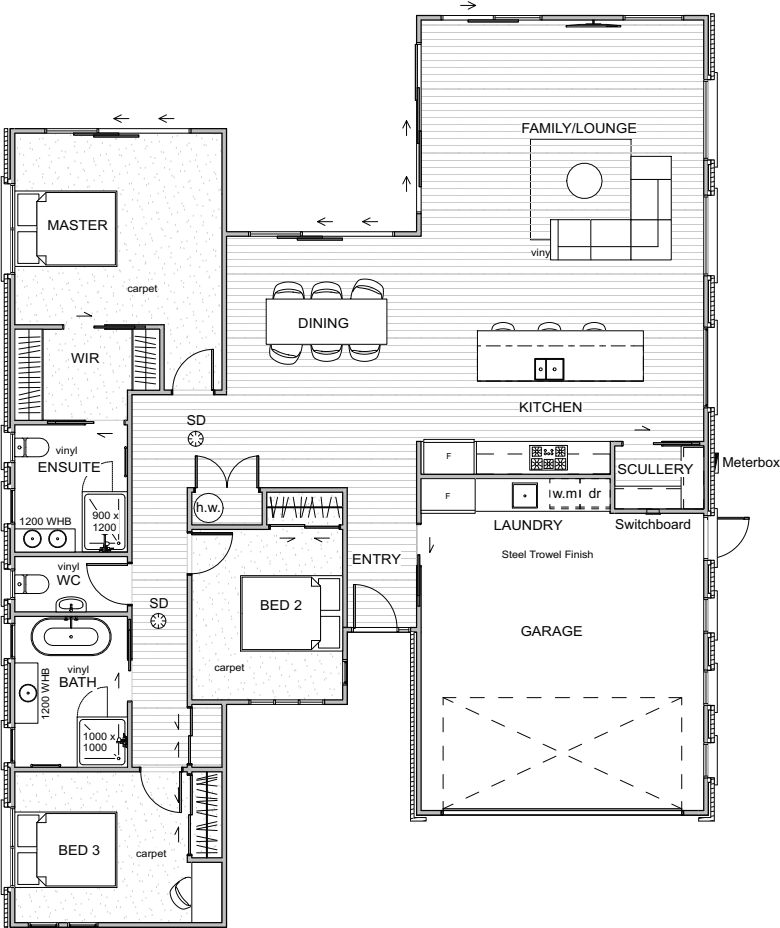
Floor Finishes

Slab-on ground concrete floor having a steel trowel or polished finish, sealed at edges where water splash may occur, including laundry within a garage.

In areas where water splash may occur and in open plan spaces, this surface shall extend at least 1.5m from all sanitary fixtures and sanitary appliances.

A thin bead of waterproof sealant should be applied to the perimeter of the polished/ trowelled floor where the floor meets the skirting boards or the cabinetry (toe-kicks), along with any penetration of the flooring e.g. pipes etc.

SOLID TIM		4.8		7.05	
		1.2	3.41	2.4	3.21
2240 x 45	2.4	3.21	3.05	4.8	2.91
	3.6	3.05	3.97	2.4	3.76
	4.8	3.97	3.59	3.6	3.59
	6.0	3.59	3.44	4.8	3.44
2290 x 45	7.5	3.44	3.31	6.0	3.31
	10.0	3.31	3.09	7.5	3.09
			2.58	10.0	2.58



HOUSE AREA:	156.59 m ²
GARAGE AREA:	37.46 m ²
TOTAL AREA:	194.05 m ²

General Notes

All construction shall be carried out in accordance with NZBC, and NZS 3604:2011 + Amendments. Aswell to comply with any local authority bylaws.

Corrosion Zone 1,2,3,4:

Durability of fixings to comply with NZS 3604:2011 Section 4 and NZBC B2/AS1

ALL FIXINGS SUBJECT TO WEATHERING TO BE STAINLESS STEEL.
ALL FIXINGS WITHIN 600mm OF THE GROUND TO BE STAINLESS STEEL.

Slip Resistance

Provide Slip Resistant broomed concrete finish to entry.

Timber Wall Framing

High Wind Zone

Studs all H1.2 SG8.

EXTERNAL LOADBEARING WALLS.

up to 2.7m 90 x 45 @ 400 crs

GABLE END WALLS.

up to 2.4 M 90 x 45 @ 400 crs

INTERNAL NON-LOADBEARING WALLS.

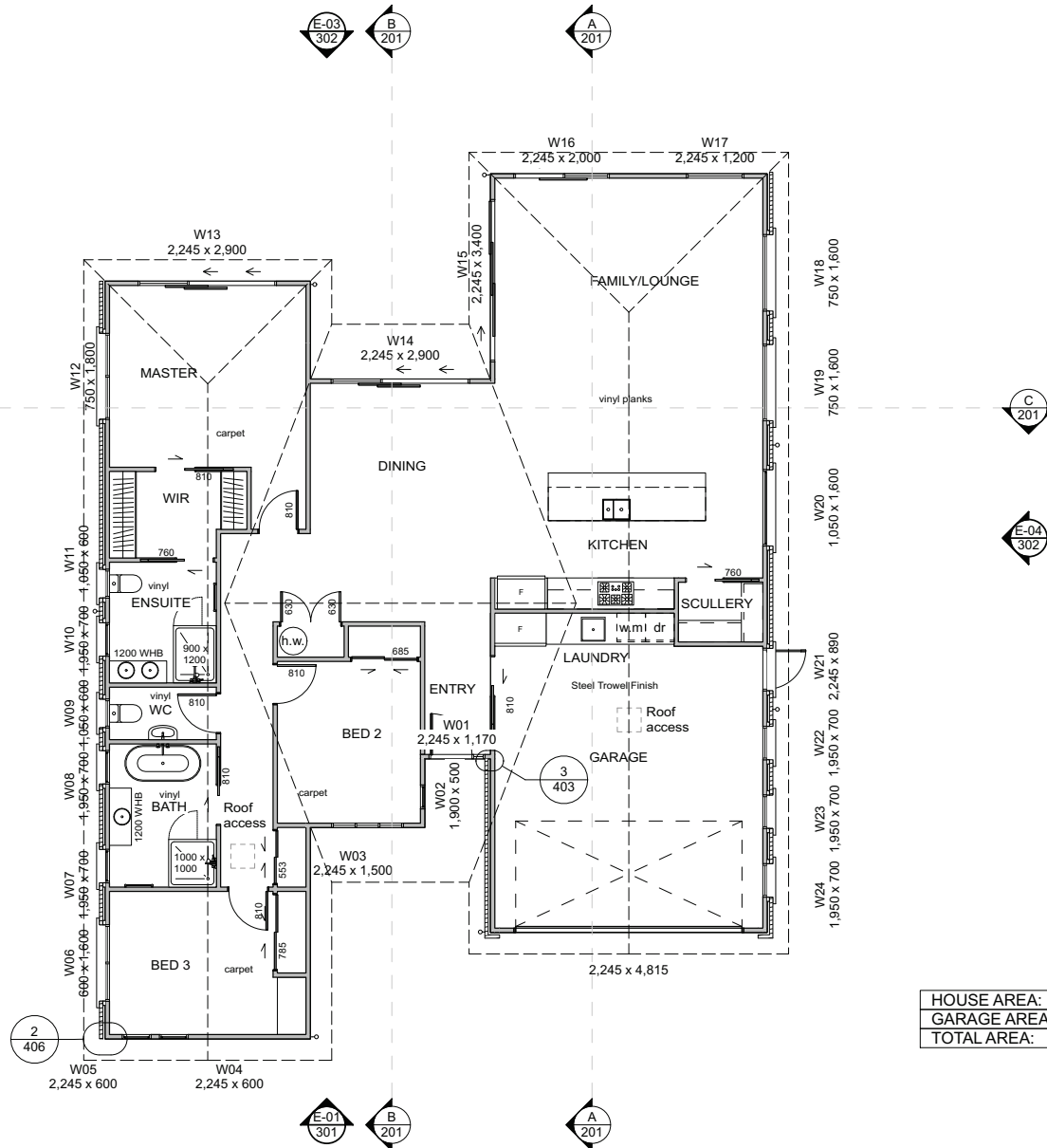
up to 2.7m 90 x 90mm @ 600 crs

NOGS.

Provide 2 rows of nog. For BGC cladding nog. @ 600crs

Internal Doors

All Internal doors unless otherwise noted to be 1980 H x 35mm thick Pre-Primed MDF Skins with Honeycomb Core.



HOUSE AREA:	156.59 m ²
GARAGE AREA:	37.46 m ²
TOTAL AREA:	194.05 m ²



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Whangarei

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Print Date 19/10/23
Scale @ A3 1:100

Sheet Title
Floor Plan

Sheet No.

105

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Timber Wall Framing

High Wind Zone
Studs all H1.2 SG8.

EXTERNAL LOADBEARING WALLS.
up to 2.7m 90 x 45 @ 400 crs

GABLE END WALLS.
up to 2.4 M 90 x 45 @ 400 crs

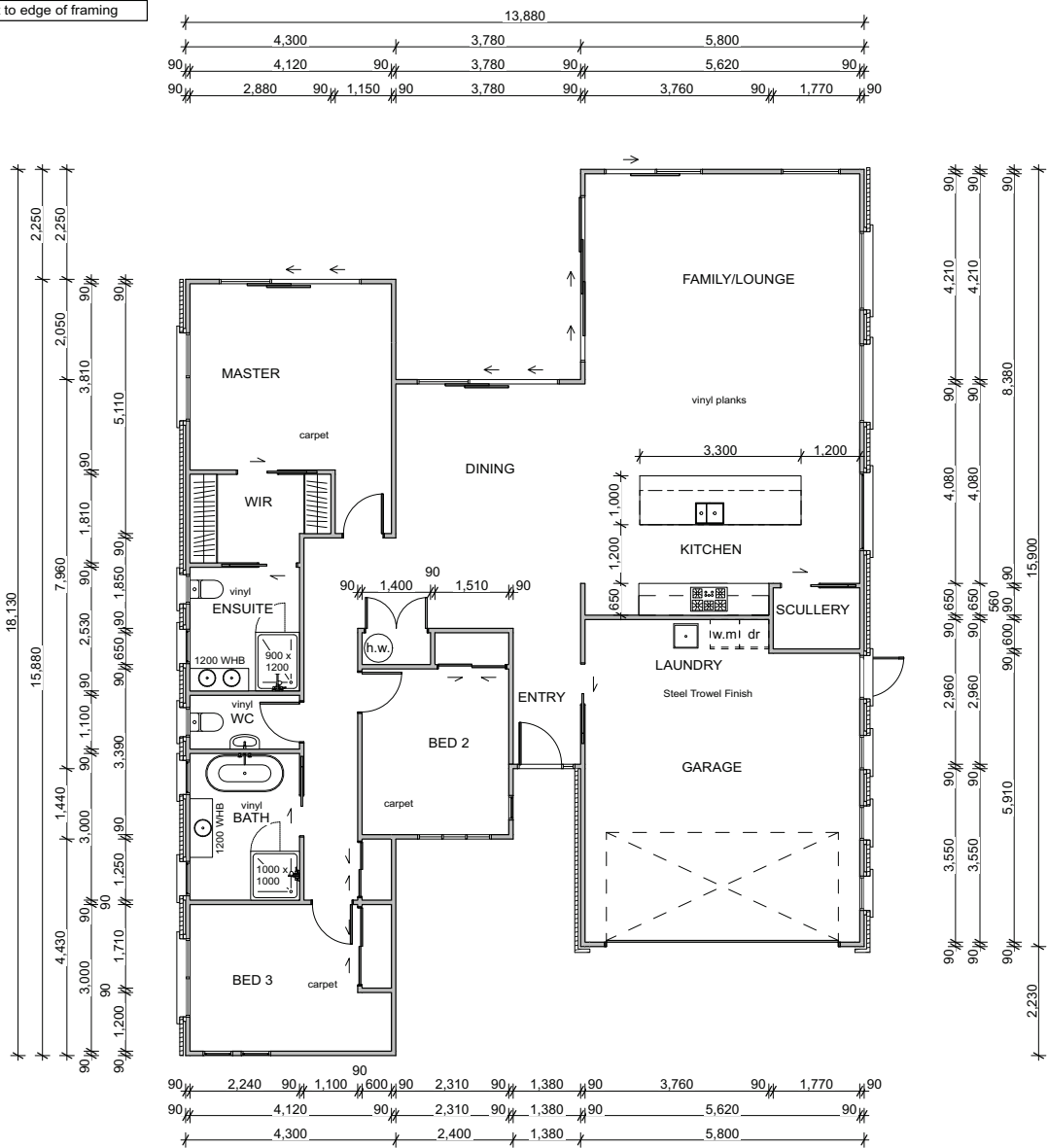
INTERNAL NON-LOADBEARING WALLS.
up to 2.7m 90 x 90mm @ 600 crs

NOGS.
Provide 2 rows of nog.

Stud to Top plate Fixing

NZS3604 Type B
2/90 x 3.15 end nails + 2 wire dogs OR
alternative 4.7kN capacity fixing

NOTE: Measurement to edge of framing



General Notes

All construction shall be carried out in accordance with NZBC, and NZS 3604:2011 + Amendments. Aswell to comply with any local authority bylaws.

Corrosion Zone 1,2,3,4:
Durability of fixings to comply with NZS 3604:2011 Section 4 and NZBC B2/AS1

ALL FIXINGS SUBJECT TO WEATHERING TO BE STAINLESS STEEL.
ALL FIXINGS WITHIN 600mm OF THE GROUND TO BE STAINLESS STEEL.

Slip Resistance

Provide Slip Resistant broomed concrete finish to entry.

RibRaft Concrete Floor

25 mPa RibRaft concrete floor, 3/HD12 bottom bars and 2/HD12 top bars to the edge beams plus SE82 slab mesh on damp-proof membrane, over 25mm deep sand blinding on 150mm compacted hardfill extending 1.0m beyond building footprint.

Bottom Plate to Slab Fixing

External.
90x45mm H1.2 bottom plate + DPC fixed to floor with M12 Trubolts @ 900 crs min 50mm inset from slab edge

Internal.
3/90x3.15mm powder actuated nails @ 600mm crs on internal walls.

Note: Install all bracing elements to manufactures specifications to comply with NZS 3604:2011

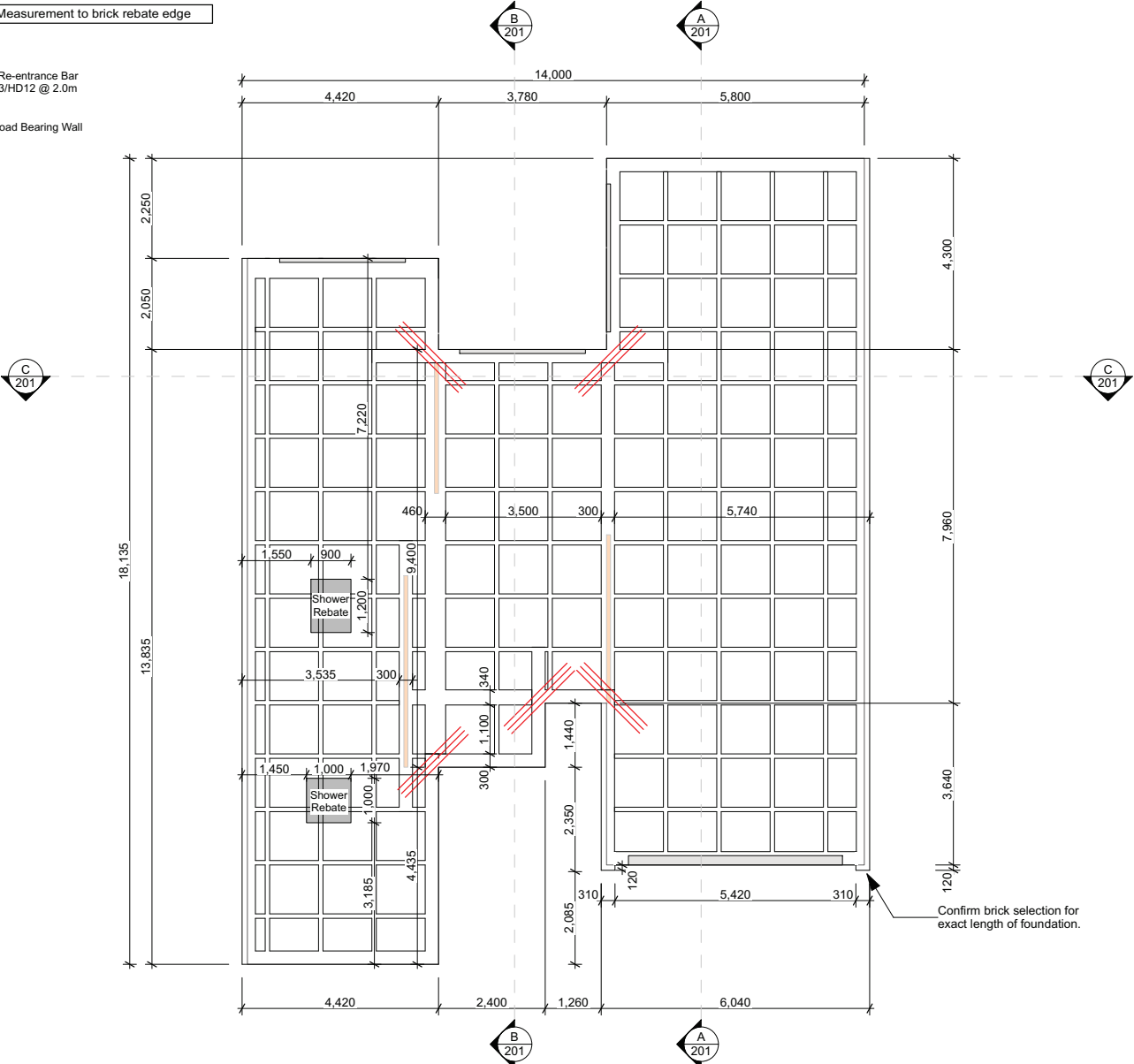
Slab Edge Insulation


Resene Construction Systems Duratherm Blue edge insulation added to the exterior or the slab edge as per foundation details.

NOTE: Measurement to brick rebate edge

Re-entrance Bar
3/HD12 @ 2.0m

Load Bearing Wall



per  16/10/2023
Chartered Professional Engineer


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Sheet Title
Foundation Plan

Sheet No.

107

General Notes

All construction shall be carried out in accordance with NZBC, and NZS 3604:2011 + Amendments, Aswell to comply with any local authority bylaws.

Corrosion Zone 1,2,3,4:
Durability of fixings to comply with NZS 3604:2011 Section 4 and NZBC B2/AS1

ALL FIXINGS SUBJECT TO WEATHERING TO BE STAINLESS STEEL.
ALL FIXINGS WITHIN 600mm OF THE GROUND TO BE STAINLESS STEEL.

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External.
90x45mm H1.2 bottom plate + DPC fixed to floor with M12 Trubolts @ 900 crs min 50mm inset from slab edge

Internal.
3/90x3.15mm powder actuated nails @ 600mm crs on internal walls.

Note: Install all bracing elements to manufactures specifications to comply with NZS 3604:2011

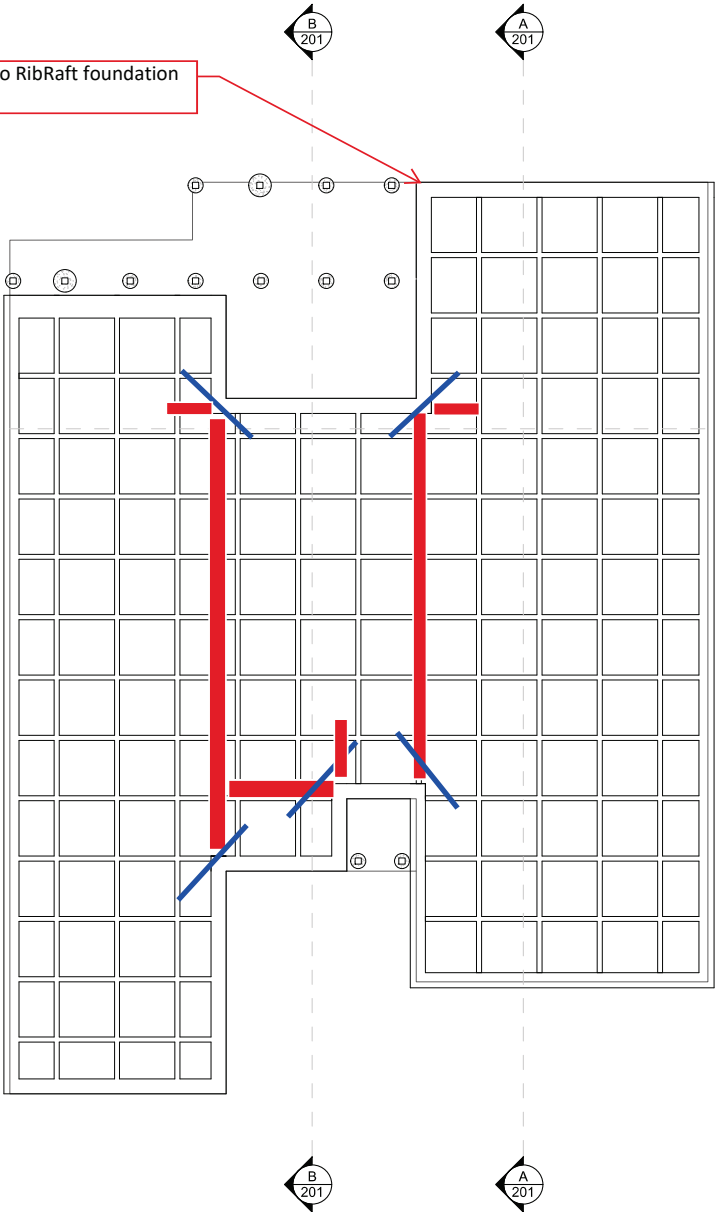
Retaining wall
175SED HD pole in a 0.45m diameter hole 2.0m deep for a maximum retained height of 1.m. Below a depth of .66m use 200x75 rails or double thickness of 200x50 well spiked together.



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Refer to RibRaft foundation calcs



Foundation Markup
LW
25/09/2023

Legend
3/HD12 2.0m re-entrance bar
Potential load bearing wall beams. Confirm location from truss plan

Project Location
45 Rock Ridge Drive,
Whangarei

Drawn	KK
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Sheet Title
Foundation Plan

Sheet No.

105

KEY

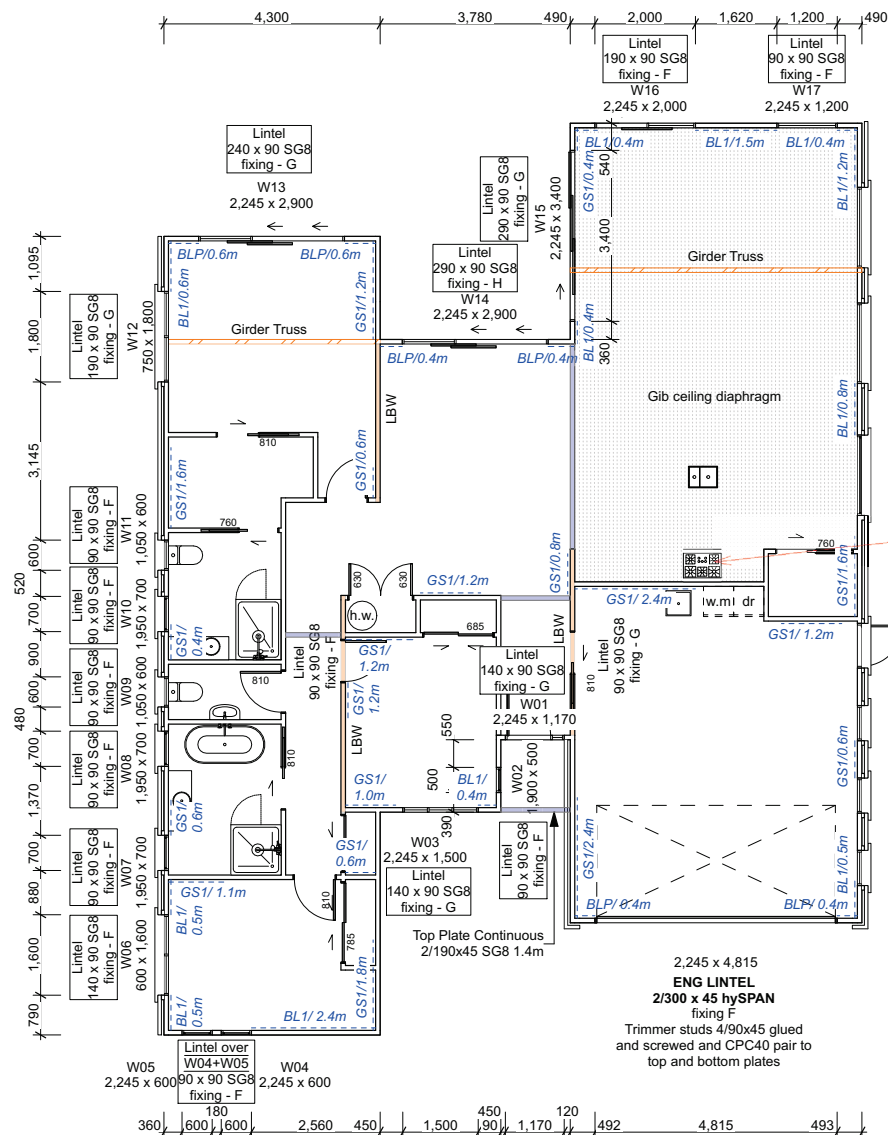
- Top Plate Continuous 2/190x45 SG8
- Load Bearing Wall
- Girder Truss

NOTE: Dimensions to wall framing

Lintel W12 as per Mitek Gang-Nail Ganglarm manual
Table 7A : Lintel supporting girder/setback trusses with light roof

SOLID TIMBER	LINTEL SIZE	SETBACK (m)	5.0
	2/140 x 45	1.2	2.14
		2.4	1.83
		3.6	1.50
		4.8	1.25
	2/190 x 45	1.2	2.63
		2.4	2.31
		3.6	2.00
		4.8	1.75
	2/240 x 45	1.2	3.41
		2.4	3.21
		3.6	3.05
		4.8	2.91
	2/290 x 45	1.2	3.97
		2.4	3.76
		3.6	3.59
		4.8	3.44
		6.0	3.31
		7.5	3.09
		10.0	2.58

Lintel W15 as per Design IT Calcs



RS Eng Ltd
Consulting Engineers
This drawing is in accordance with
our calculations where applicable.
per 16/10/2023 Chartered Professional Engineer

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Sheet Title
Bracing Plan

Sheet No.

108

Stud to Top plate Fixing
NZS3604 Type B
2/90 x 3.15 end nails + 2 wire dogs OR
alternative 4.7kN capacity fixing

General Drainage and Services notes

Locate existing power, water, telephone and sanitary drainage services. Allow to inform network operators as necessary

Plumbing and Drainage Notes.

All work to comply with NZBC, NZS3604 and all relevant local authority by laws and council regulations.

All drainage to comply with AS/NZS 3500 & NZBC G13

All drainage is Diagrammatical, Drainlayer to determine on site drainage layout and provide asbuilt plan when complete.

Mechanical Ventilation

Provide Mechanical ventilation through soffit penetration in all bathrooms and Mechanical ventilation via rangehood through roof penetration.

Mechanical extract fans (including associated ducting) must have a flowrate not less than:

a) 25L/s for showers and Baths.

b) 50L/s for cooktops.

Hotwater Cylinder

Hotwater Cylinder. Provide safe tray below, Temperature and Pressure relief Valve and Sismic Restraint. Refer to specifications for more detail

PRINT THIS PLAN IN COLOUR

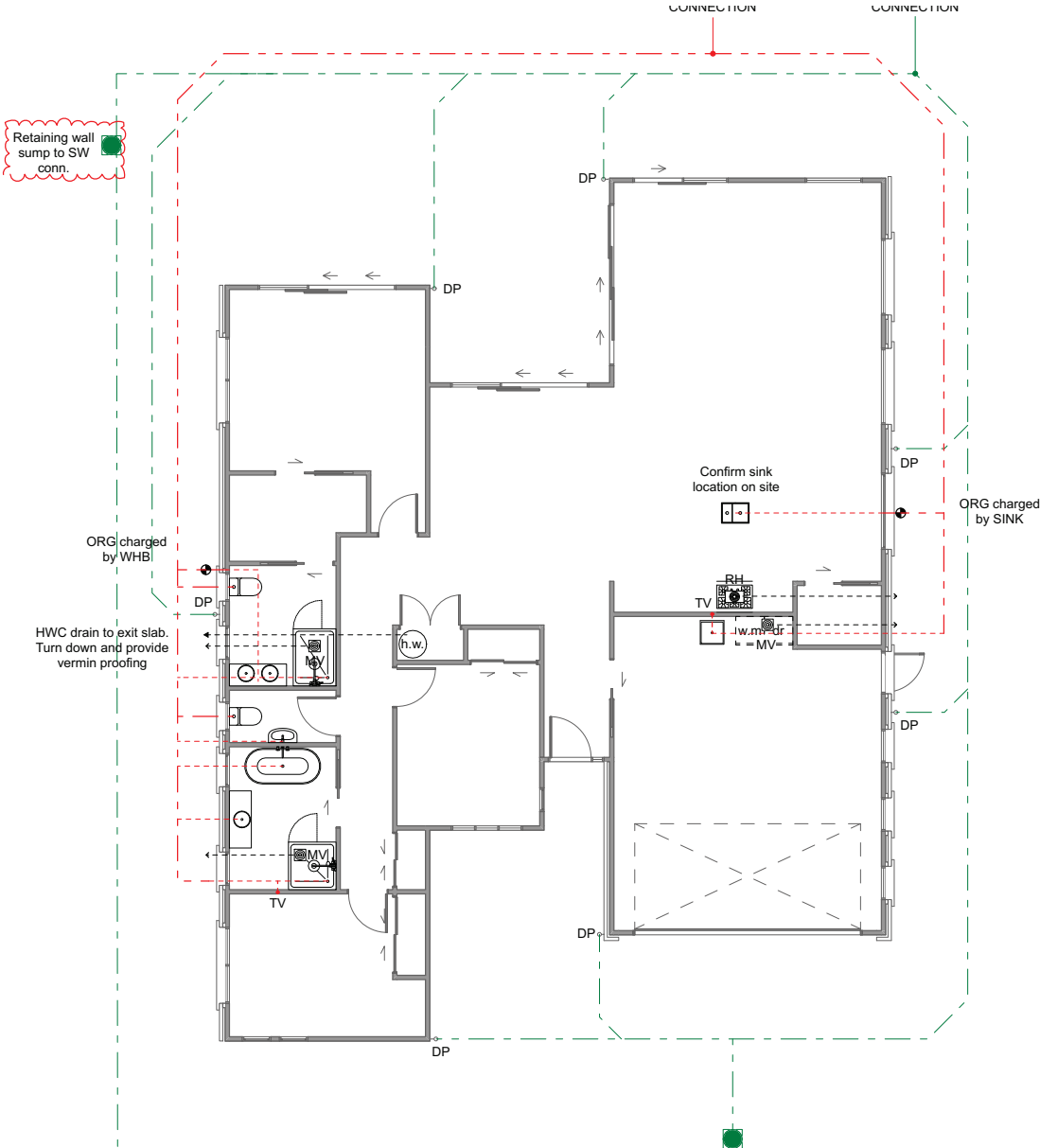
KEY

- 65 Ø PVC-U Sewer branch pipe Grade - 1:40
- 100 Ø PVC-U Sewer Drain pipe Grade - 1:60
- 100 Ø PVC-U Stormwater line Grade - 1:60
- ORG
 - 20mm above paved areas sloping away
 - 75mm above grass & garden areas
 - 150mm below finished floor level
- TV
 - 50 Ø Terminal Vent
- Rodding Point
- DP
 - 80 Ø PVC-U Downpipes
- MV
 - Mechanical Vent
- RH
 - Rangehood Vent over Hobbs
- Sump



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Sheet Title
Plumbing Plan

Sheet No.

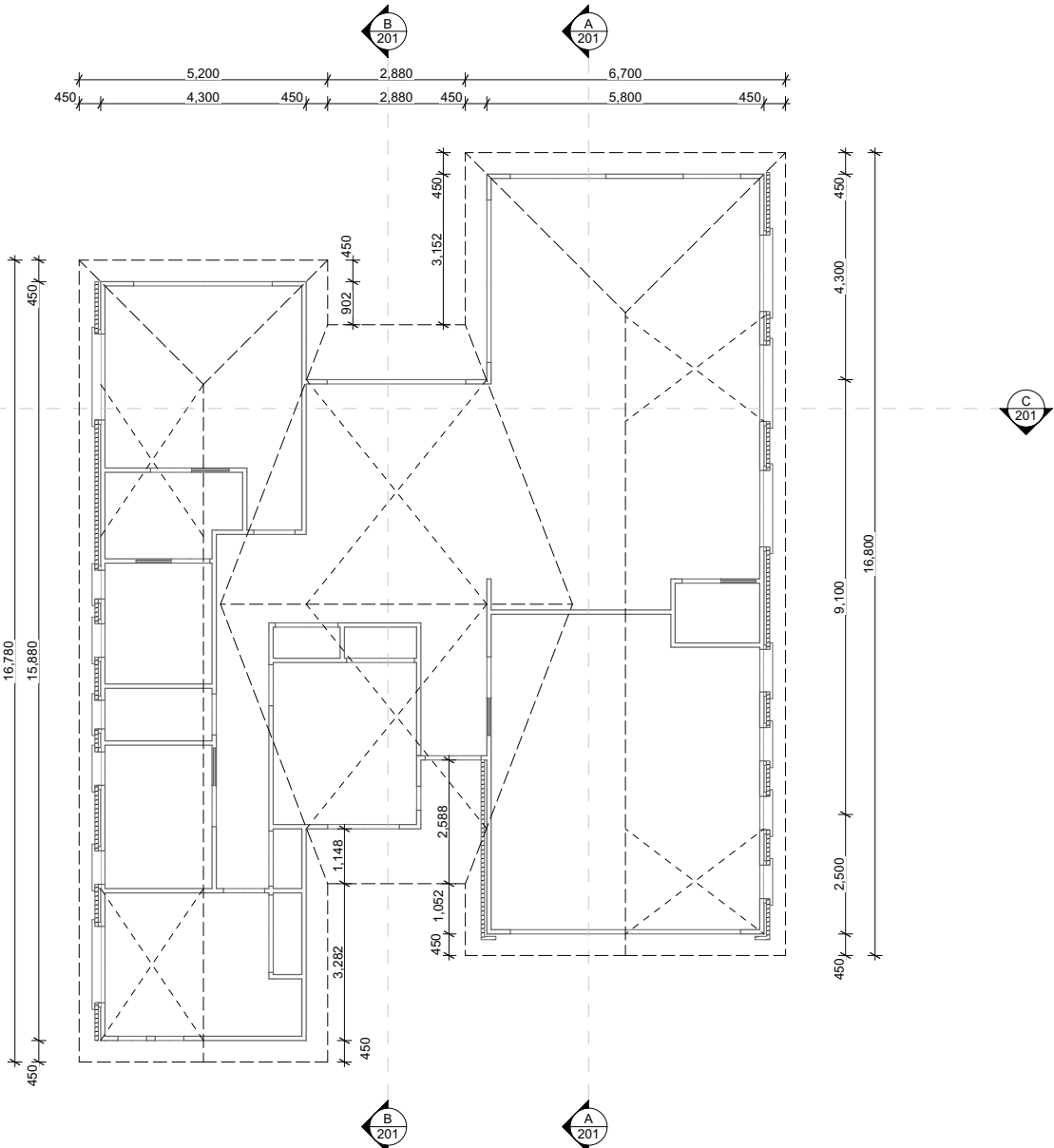
109

Pre-fab Roof Trusses @ 900 crs

Prefabricated roof trusses at 900 crs to manufacturers specification. Manufacturer to supply producer statement

Purlins - High

70x45 H1.2 purlins on flat @900 crs. Purlin end span 600mm.
2.4kN Fixing: 1 / 10g self-drilling screw, 80 mm long. OR Alternative 2.4kN fixing



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Print Date	16/10/23
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Sheet Title
Roof Framing Plan

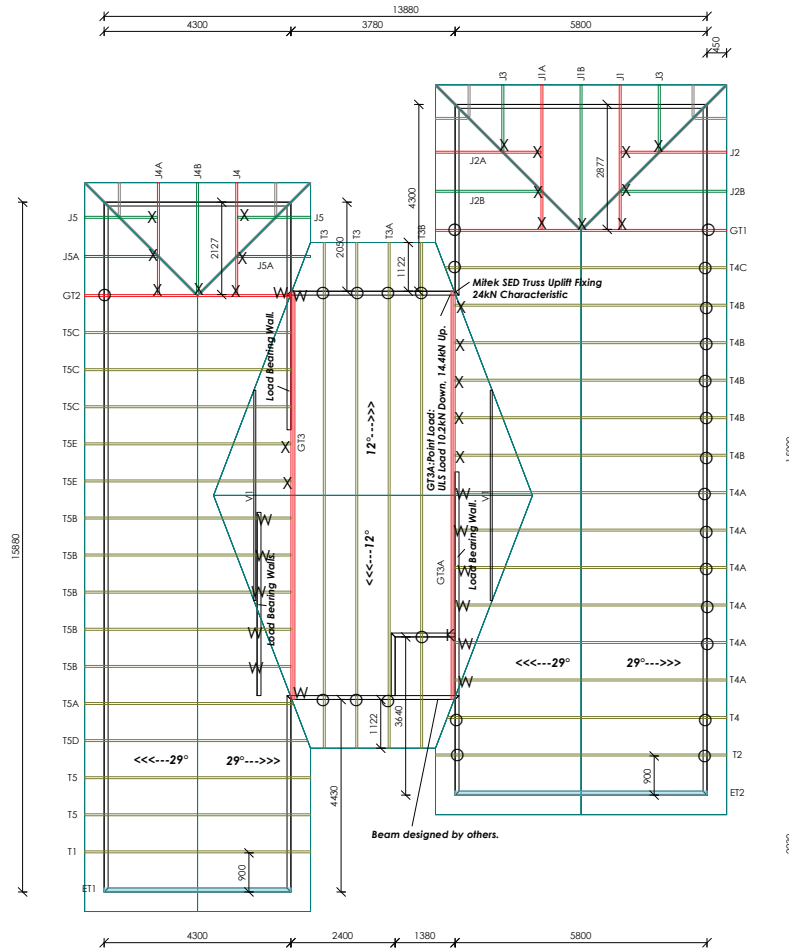
Sheet No.

110



Truss Fixings

X - LUMBERLOK JH47x90 Joist Hanger
 Z - LUMBERLOK JH47x120 Joist Hanger
 P - LUMBERLOK JH47x190 Joist Hanger
 E - LUMBERLOK JH95x165 Joist Hanger
 O - Pair of LUMBERLOK CT200 Ceiling Ties
 H - LUMBERLOK CT400 Cyclone Tie
 B - LUMBERLOK CT600 Cyclone Tie
 M - Pair of LUMBERLOK Multi Grips
 NP - LUMBERLOK Nailon Plate
 N - LUMBERLOK N21 Diagonal Cleat
 W - LUMBERLOK 9kN Truss to Top Plate set
 K - LUMBERLOK 16kN Truss to Top Plate set
 S - Single LUMBERLOK CT200 Ceiling Tie
 C - Single LUMBERLOK CPC80 Truss to Top Plate.

All other areas must have a minimum of a pair of wire dogs (Z nails) for truss to top plate connections.
 Refer to: LUMBERLOK Timber Connectors Characteristic Loadings Data brochure 08/2014



BUILDABLE TRUSS NOTES:
 THIS LAYOUT IS DESIGNED USING PLANS SUPPLIED BY THE CLIENT.
 PLACEMAKERS IS TO BE NOTIFIED IF ANY CHANGES ARE MADE TO THE ORIGINAL PLANS.
 ANY POINT LOADS SHOWN ARE THE ULTIMATE LIMIT STATE LOADS.
 ALL WALLS SHOWN ON PLAN ARE LOADBEARING WITH LOADS BEING LESS THAN 10kN UNLESS NOTED OTHERWISE.
 THIS LAYOUT WILL BECOME NULL AND VOID IF NOT MANUFACTURED BY PLACEMAKERS.

	Site Address : 45 Rock Ridge Drive Whangarei Lot 47 DP 561757	Sheet Title : For Building Consent Truss Layout and Fixings	Job Details: Roof Pitch : 29+12 Deg Roof Material : Longrun Iron .5mm Ceiling Material : Gib Board 13mm Wind Zone : Very High Roof Snow Load : 0.000 kPa	Truss Centres : 900 mm Roof Live Load : 0.250 kPa Floor Live Load : kPa Wind Speed : 50.0 m/s		PrimeCad v4.7.346 Job Title :
						23082 Sheet : 1 Revision Number :

Corrugated Roof Cladding
0.40mm thick corrugated Colorsteel ENDURA roofing system, over COVERTEK 407 Roof Underlay, 70x45 H1.2 purlins on flat @900c/s, over H1.2 Rafters/Trusses. Fixing pattern: Hit one Miss One

4.5mm Hardieflex soffit lining
4.5mm Hardieflex soffit lining. Selected colour paint finish.

Marley Pvc Spouting & Downpipes
Marley Pvc Spouting on 180 Metal Fascia

Bargeboard
180 Coloursteel Metal Bargeboard

Valley Gutters NZBC E2.

8.1.6.2 Valley Gutters and Hidden Gutters

Valley gutters and hidden gutters shall be constructed as shown in Figures 50 and 51 for the applicable roof cladding (except for membrane roofing) and:

- a) Not change direction in plan
- b) Have a minimum underlap to roof cladding as specified in Figures 27, 37, 50, and 51 for the relevant roof cladding
- c) Be formed from any of the materials outlined for flashings in Paragraph 4.3 except 4.3.10 and 4.3.11
- d) Be fixed at upper ends only, and be secured with a purpose-made clip system for the remaining length to enable expansion/ contraction along the length of the gutter
- e) Discharge into an internal gutter or eaves gutter/ spouting. In addition:

f) Have minimum slopes of 8° for hidden gutters, and to Table 8 for valley gutters

g) Hidden gutters receive no discharge from downpipes or spreaders

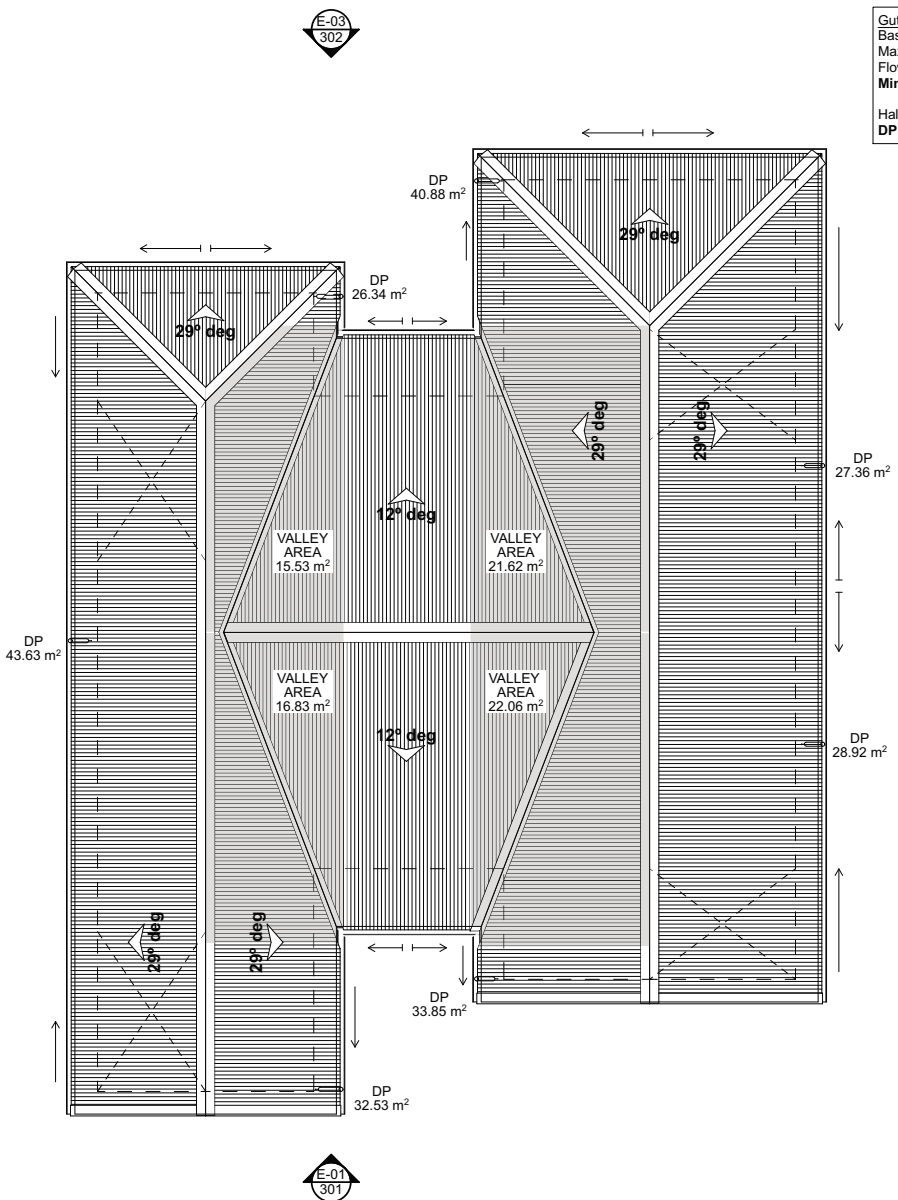
h) Spreaders not discharge directly into a valley gutter

i) Valley gutters be minimum 250 mm wide where receiving run off from spreaders.

Table 8: Maximum catchment areas for valley gutters		
Paragraphs 8.1.6.2, 8.4.16.2, 9.7.7.1, 9.9.4.4, 9.9.10.1, Figures 27, 37 and 51		
Gutter width	Maximum catchment area	Minimum roof pitch
250 mm	25 m ²	8°
160 mm to 249 mm	16 m ²	12.5°

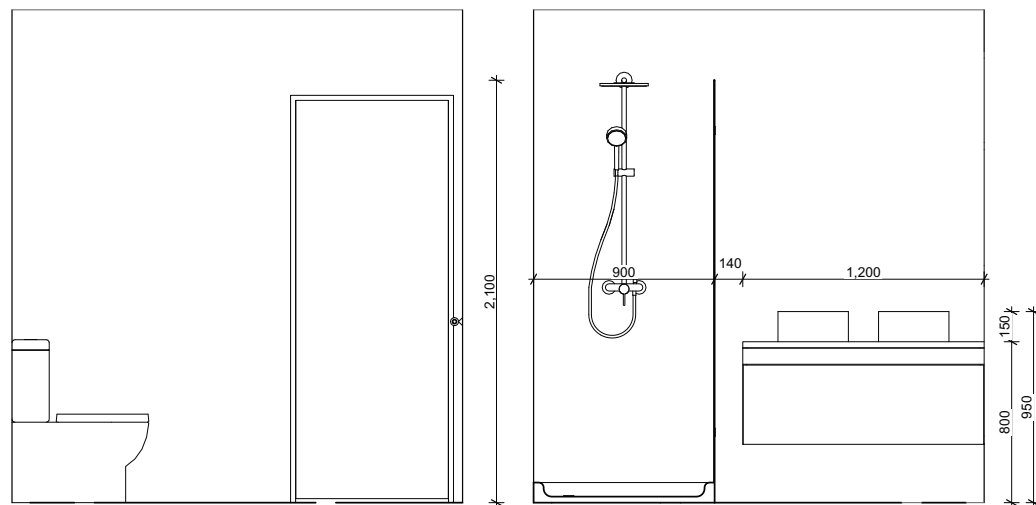
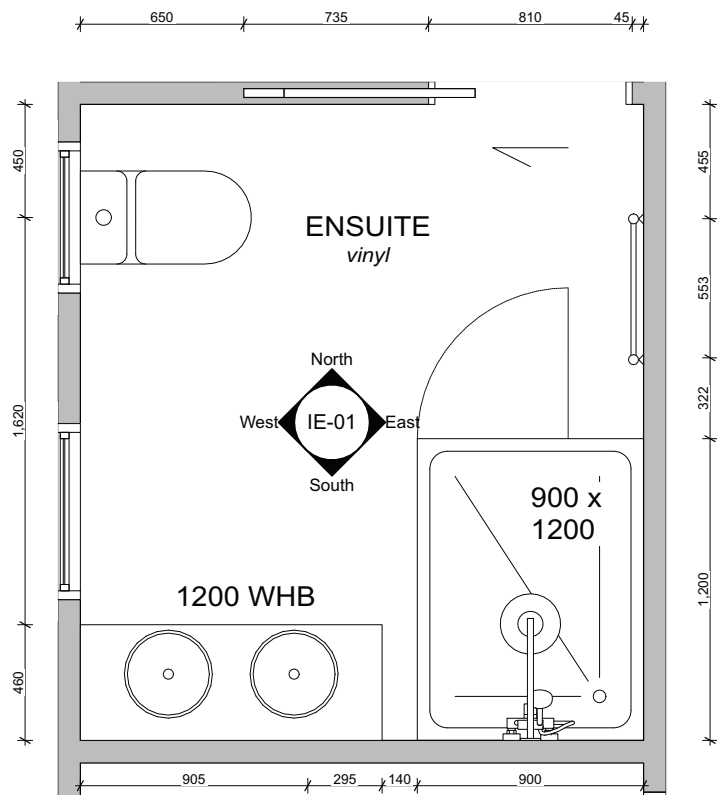
NOTE: Catchment areas are limited to:

- (1) Gutters in accordance with Paragraph 8.1.6.2.
- (2) Rainfall intensity with average recurrence interval (ARI) no greater than 200 mm per hour.



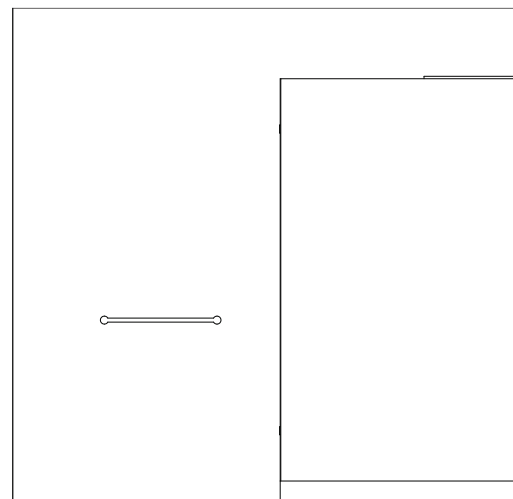
Gutter Cross Sectional Area
Based on 100mm/Hr
Max serviced roof area = 43.63m²
Flow capacity = 43.63 x 1.67 = 72.86
Min Gutter Cross Sectional Area = (72.86/0.0016)0.8 = **5'329.73mm²**

Half Round Gutter Cross Section = 5958.00mm² - **COMPLIES**
DP sizes - 74Ø DPs can serve 85m² of roof plane area - **COMPLIES**

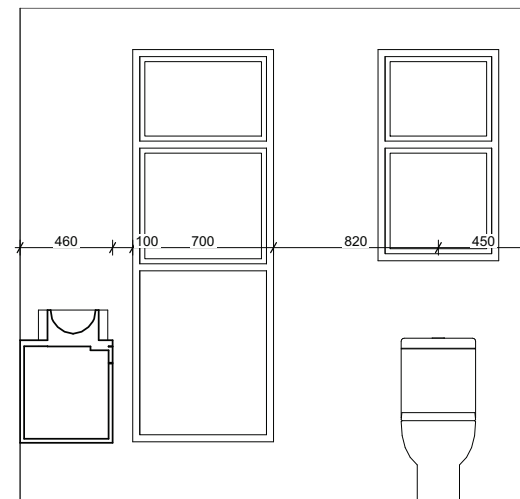


2 North
105 Scale 1:25

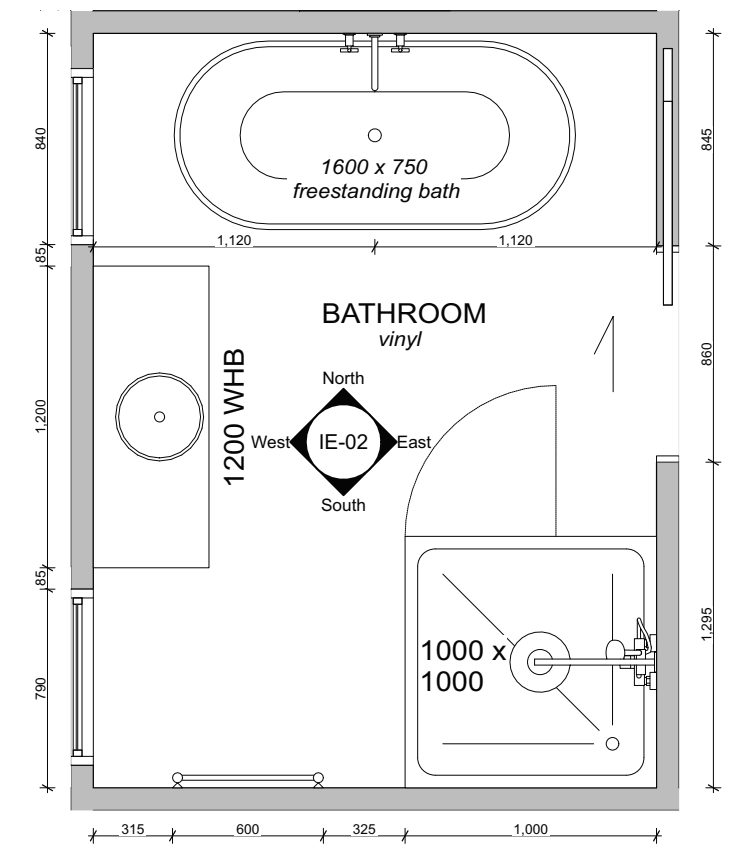
3 South
105 Scale 1:25



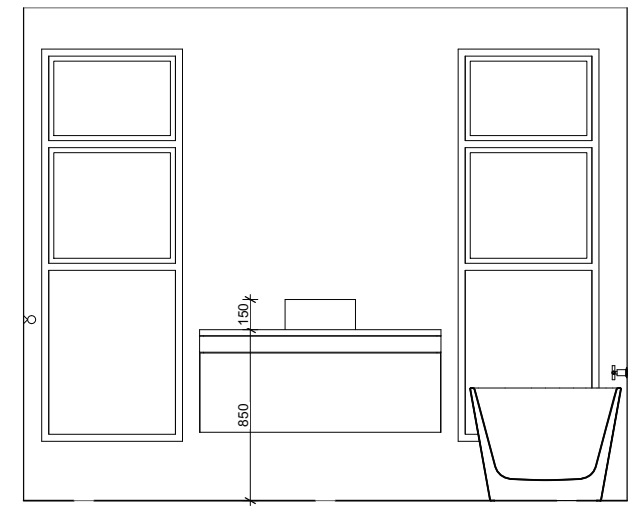
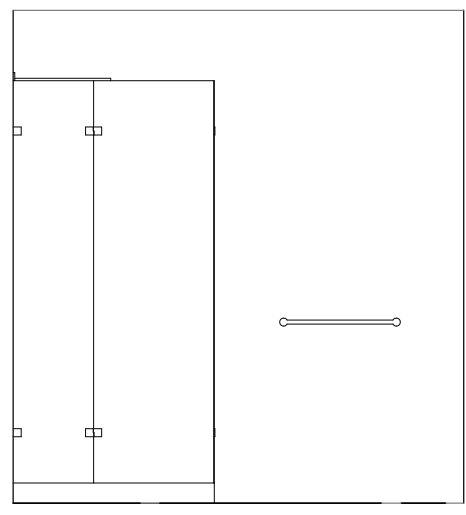
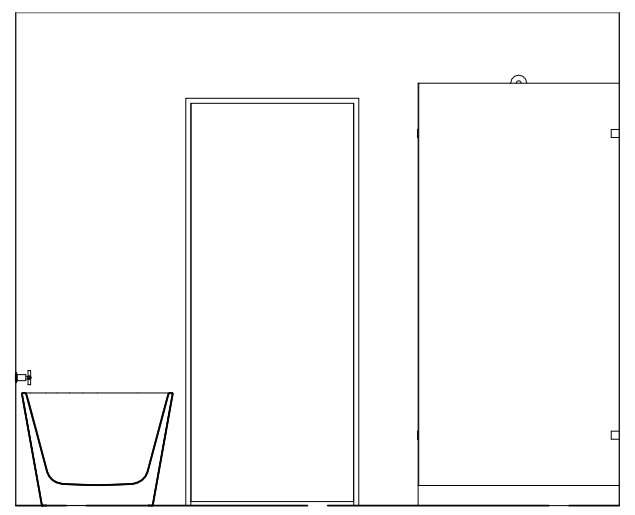
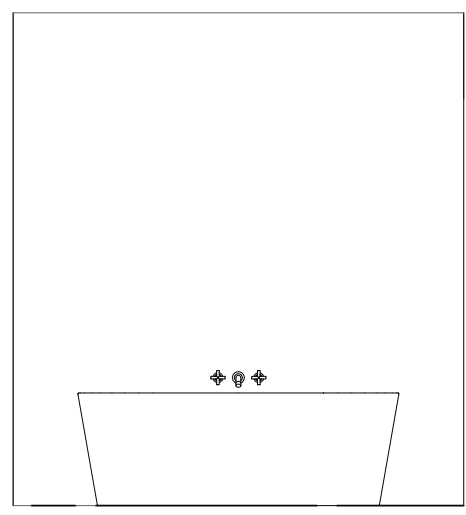
4 East
105 Scale 1:25

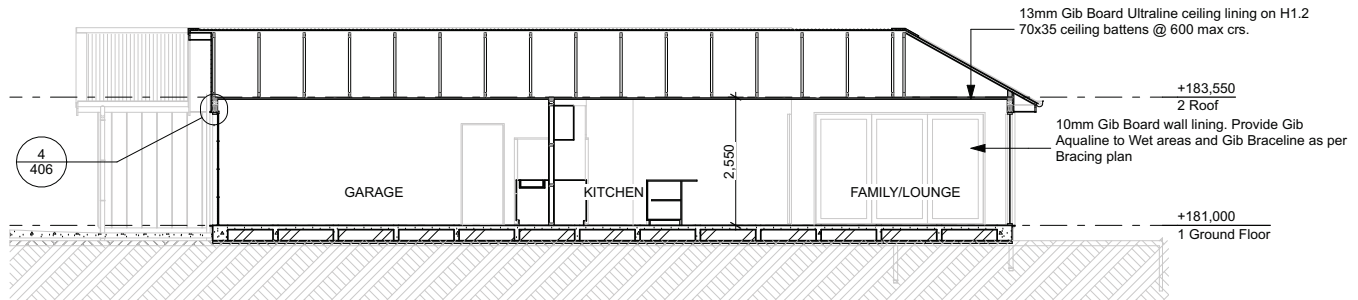


5 West
105 Scale 1:25

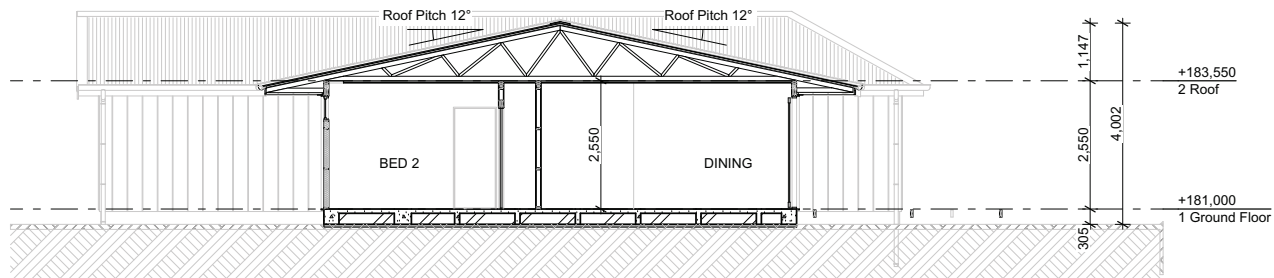


1 Floor Interior
105 Scale 1:20

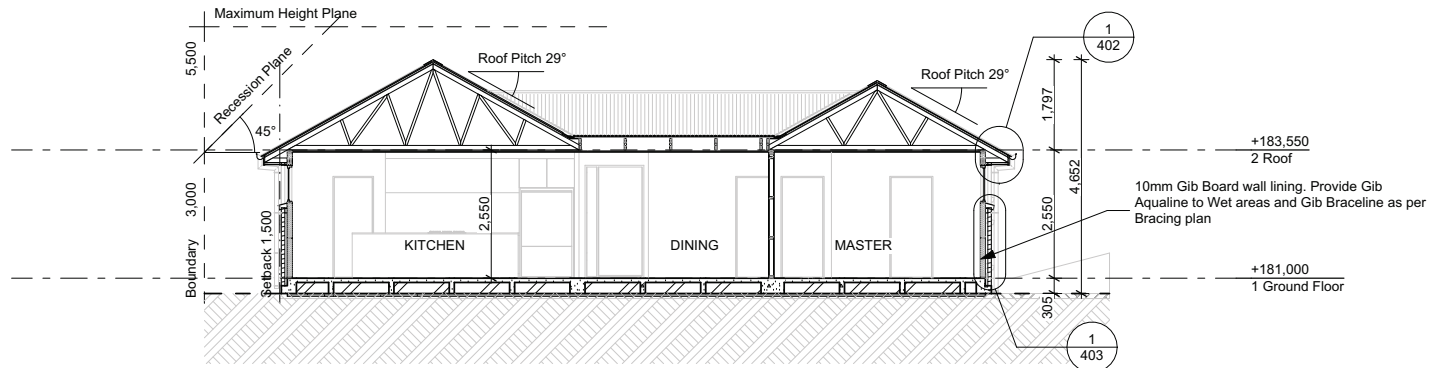




A Section
105 Scale 1:100



B Section
105 Scale 1:100



C Section
105 Scale 1:100

General Notes

All construction shall be carried out in accordance with NZBC, and NZS 3604:2011 + Amendments. Aswell to comply with any local authority bylaws.

Corrosion Zone 1,2,3,4:
Durability of fixings to comply with NZS 3604:2011 Section 4 and NZBC B2/AS1

ALL FIXINGS SUBJECT TO WEATHERING TO BE STAINLESS STEEL.
ALL FIXINGS WITHIN 600mm OF THE GROUND TO BE STAINLESS STEEL.

Finished Floor to Ground levels:

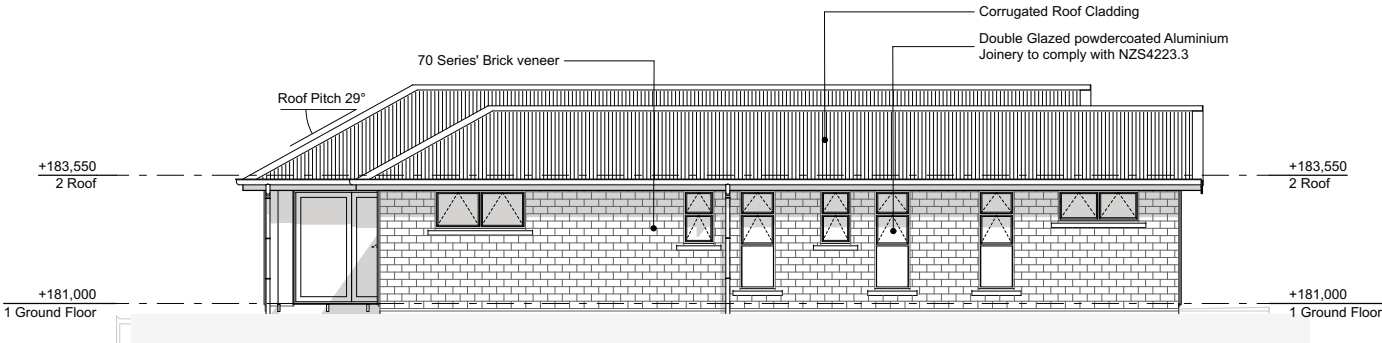
To unprotected ground 225mm min.
To Permanent paving 150mm min.

Brick.
To unprotected ground 150mm min.
To Permanent paving 100mm min.

BUILDING ENVELOPE RISK MATRIX		
All Elevations		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Low	0
Eaves width	High risk	2
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		4



1 North Elevation
105 Scale 1:100



2 East Elevation
105 Scale 1:100

General Notes

All construction shall be carried out in accordance with NZBC, and NZS 3604:2011 + Amendments. Aswell to comply with any local authority bylaws.

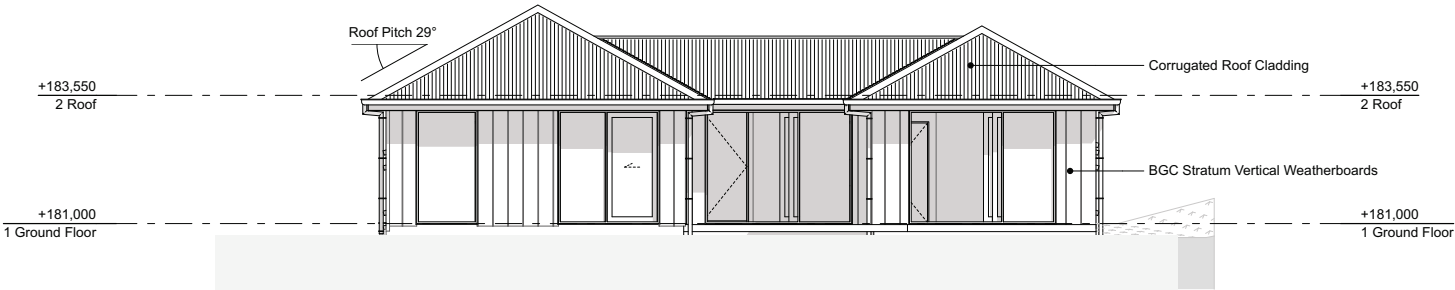
Corrosion Zone 1,2,3,4:
Durability of fixings to comply with NZS 3604:2011 Section 4 and NZBC B2/AS1

ALL FIXINGS SUBJECT TO WEATHERING TO BE STAINLESS STEEL.
ALL FIXINGS WITHIN 600mm OF THE GROUND TO BE STAINLESS STEEL.

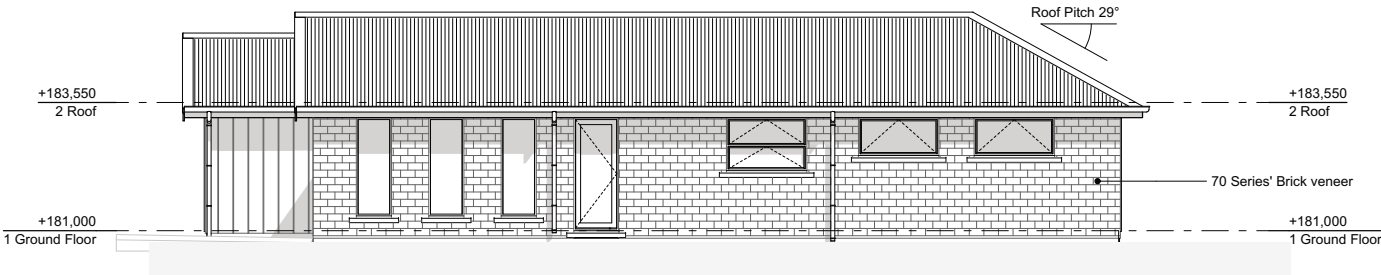
Finished Floor to Ground levels:

To unprotected ground 225mm min.
To Permanent paving 150mm min.

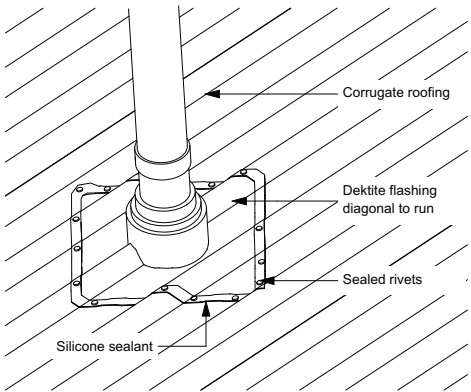
Brick.
To unprotected ground 150mm min.
To Permanent paving 100mm min.



1 South Elevation
Scale 1:100

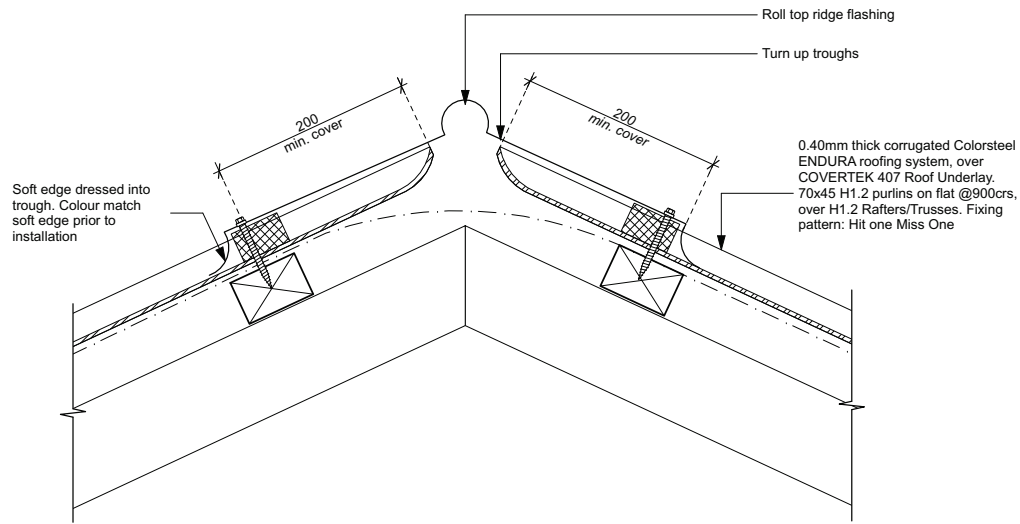


2 West Elevation
Scale 1:100

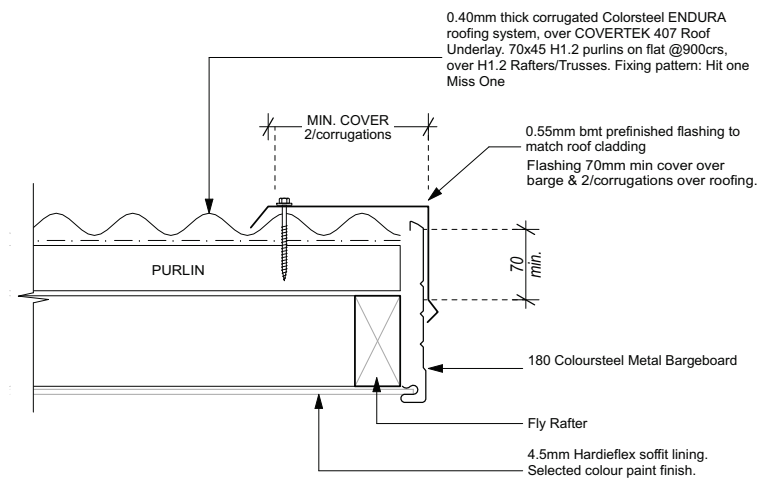


NOTE:
1) Max. roof pitch for this flashing 45° deg, min. pitch 10° deg if base of flange covers one or more complete troughs.
2) For pipes up to 85mm diameter.

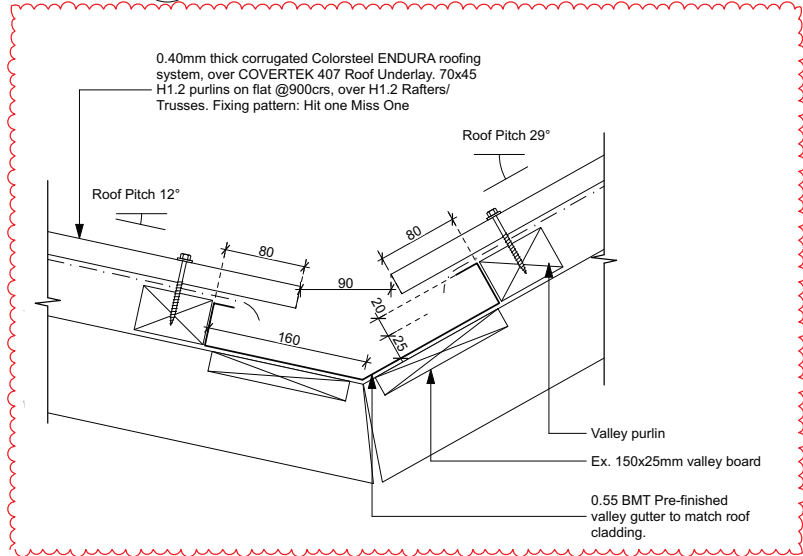
1 Roof Penetration Detail
Scale 1:10



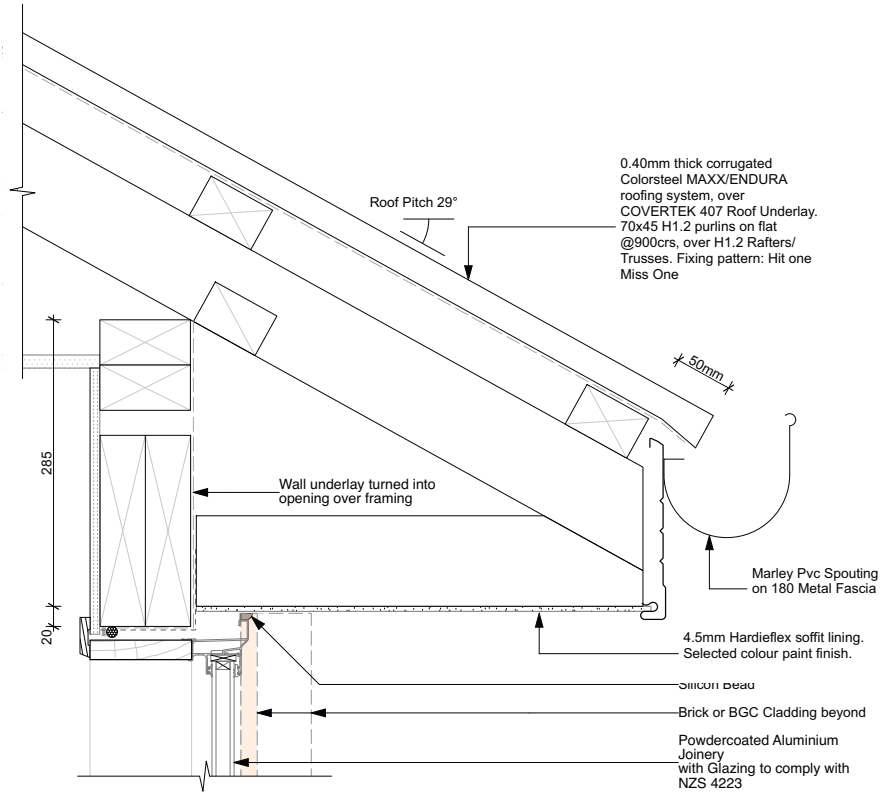
2 Ridge Detail
Scale 1:5



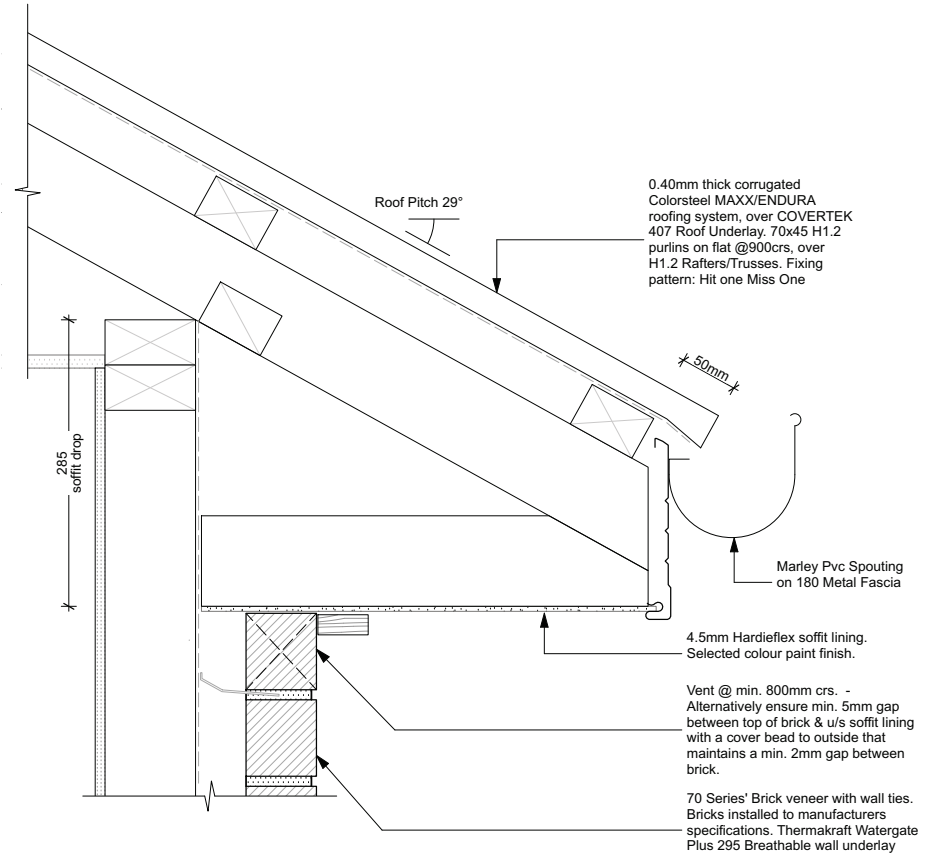
4 Barge Detail
Scale 1:5



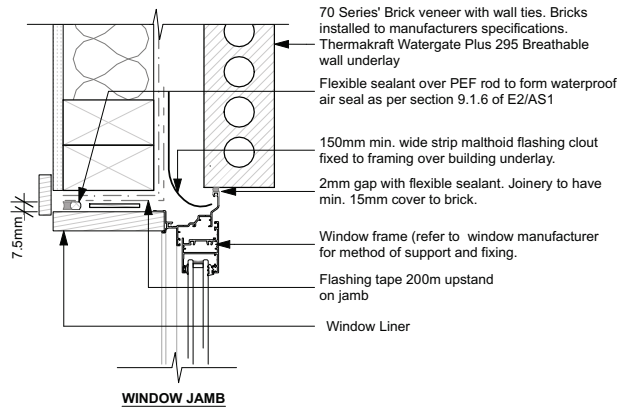
3 Valley Detail
Scale 1:5



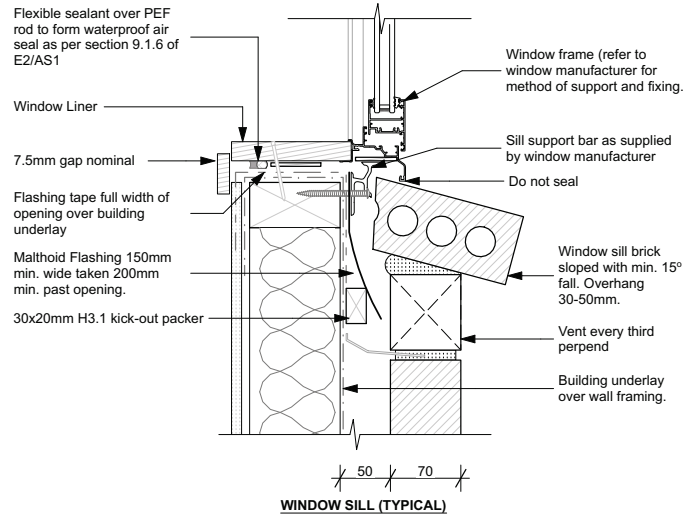
1 Joinery to Soffit Detail
201 Scale 1:5



2 Brick to Soffit Detail
Scale 1:5

1
201**Brick Joinery Detail**

Scale 1:5

2
201**Brick Joinery Sill Detail**

Scale 1:5

20x20mm H3.2 kick out batten or 40mm clouts left proud 20mm

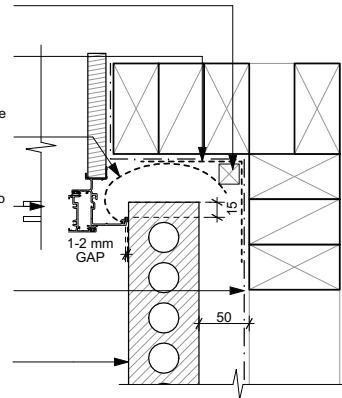
Flashing tape continuous around corner (100mm min. wide each side)

200mm super-course 500 polyethylene flashing or similar, clout lined over building underlay. NOTE: Jamb flashing to overlay sill flashing (if any)

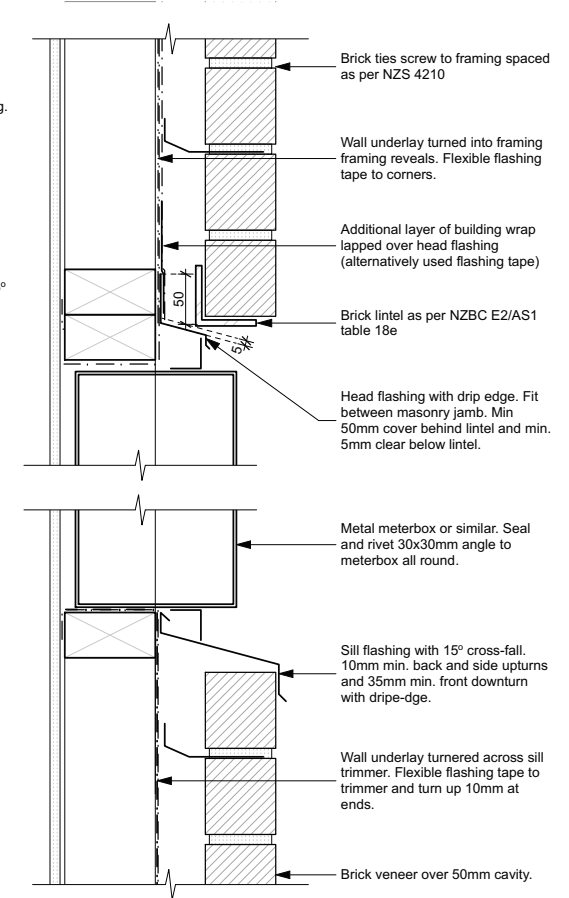
Selected joinery. Ensure 1-2mm gap to brick face.

Thermakraft Watergate Plus Building underlay continuous around corner, installed as per manufacturers specifications.

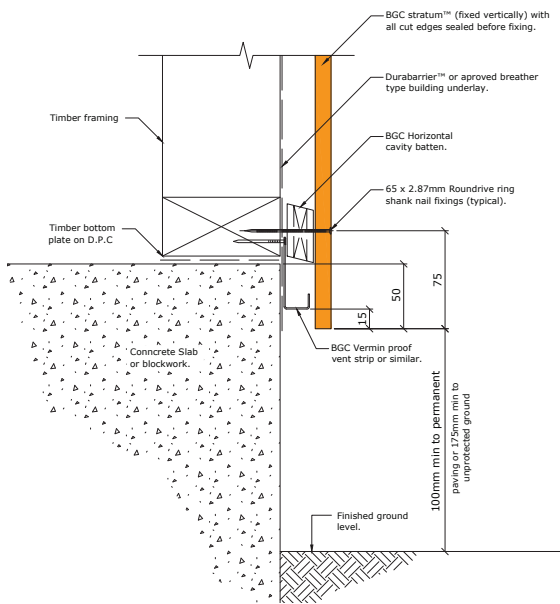
70 Series Brick veneer over 50mm nominal cavity.

3
105**Brick to Joinery Jamb Detail**

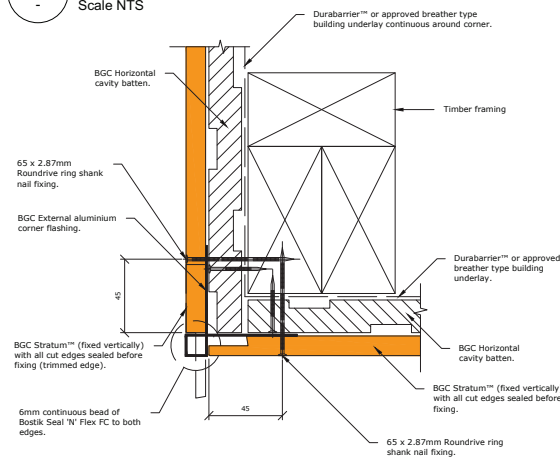
Scale 1:5

4
-**Brick Meterbox Detail**

Scale 1:5



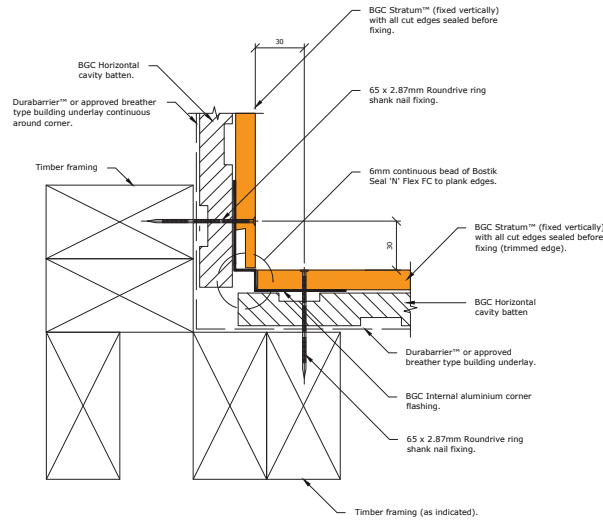
1 BGC Stratum Base Detail
Scale NTS



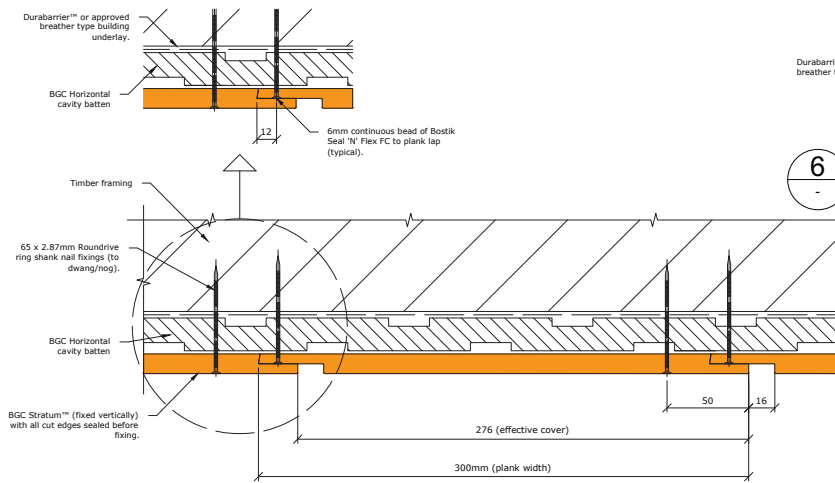
2 BGC Stratum External Corner Detail
Scale NTS



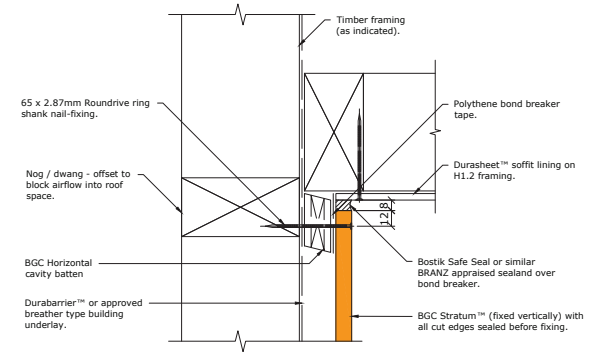
Kyle Kake
027 567 8808
kyle@masonstreet.co.nz
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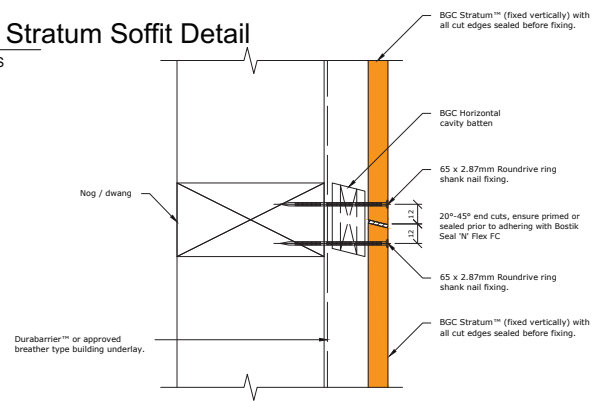
3 BGC Stratum Internal Corner Detail
Scale NTS



4 BGC Stratum Plank Joint Detail
Scale NTS



5 BGC Stratum Soffit Detail
Scale NTS



6 BGC Stratum Scarf Joint Detail
Scale NTS

Project Location
45 Rock Ridge Drive,
Whangarei

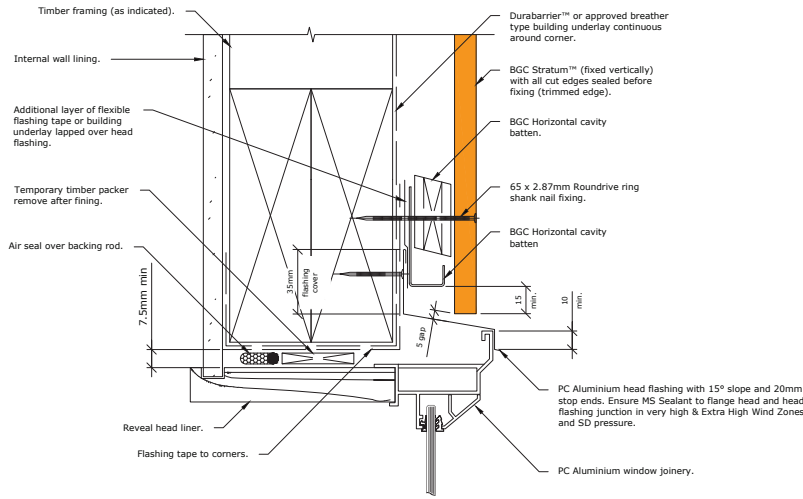
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Checked	Kyle Kake_ BP130188
Print Date	16/10/23
Scale @ A3	1:1

Sheet Title
BGC Cladding Details

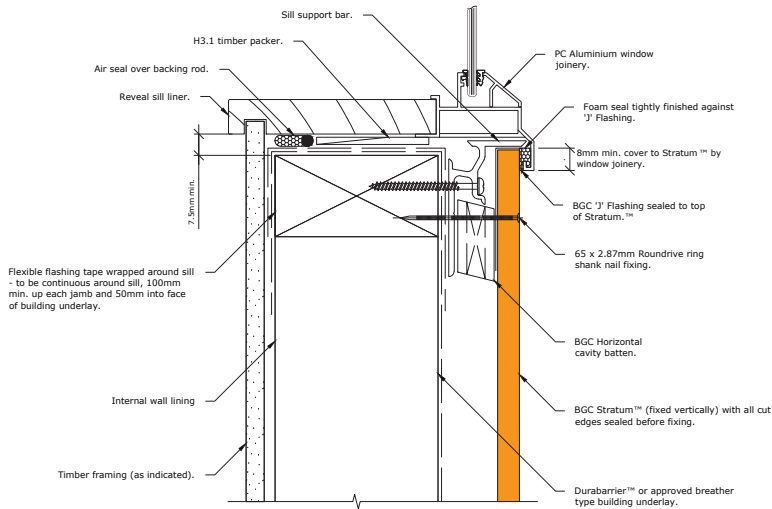
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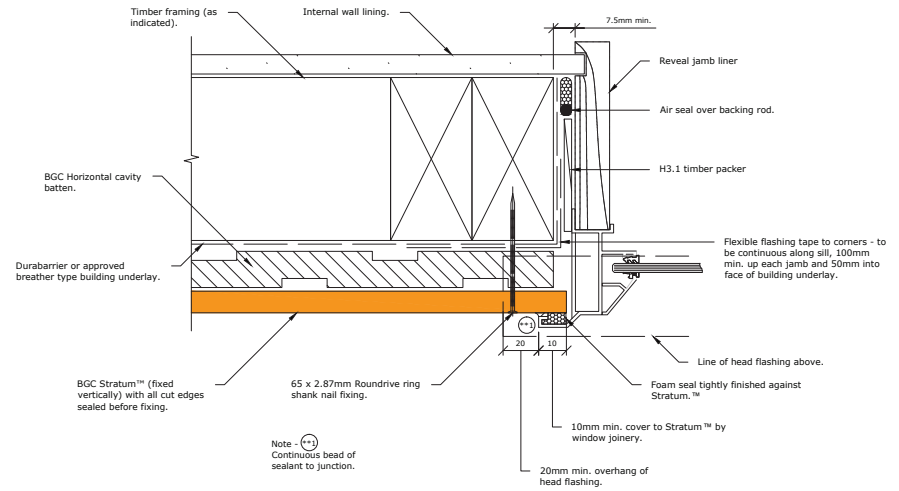
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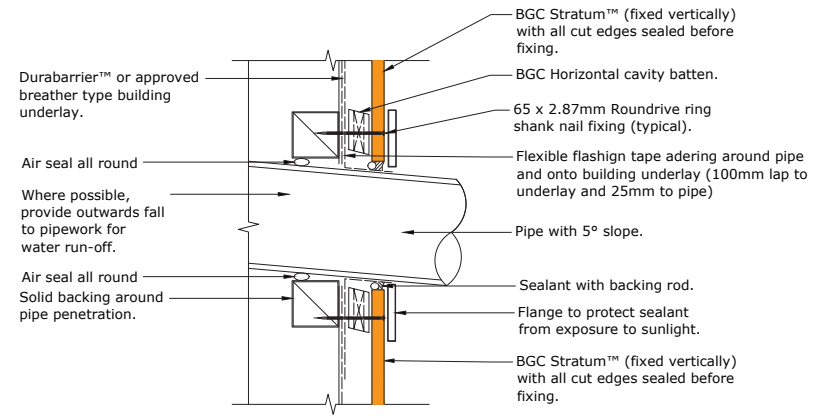
1 BGC Stratum Joinery Head Detail
Scale NTS



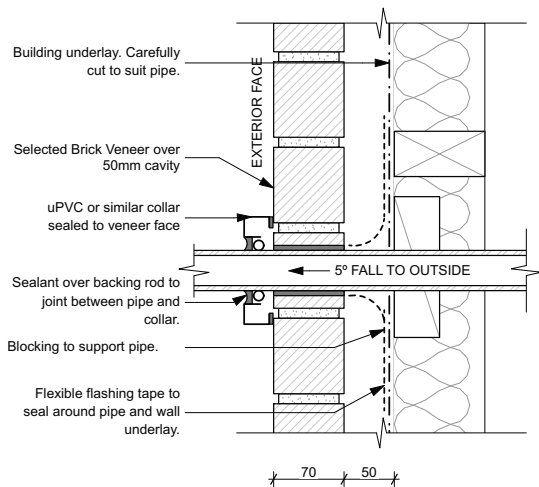
3 BGC Stratum Joinery Sill Detail
Scale NTS



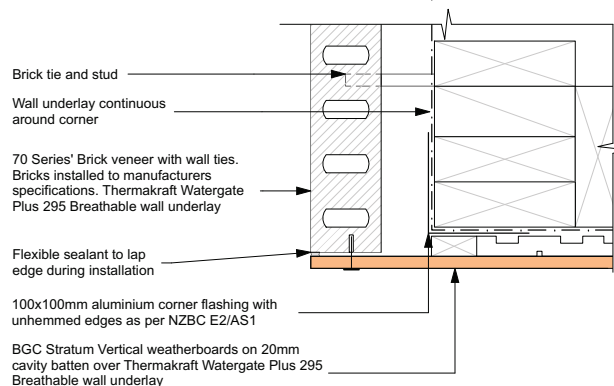
2 BGC Stratum Joinery Jamb Detail
Scale NTS



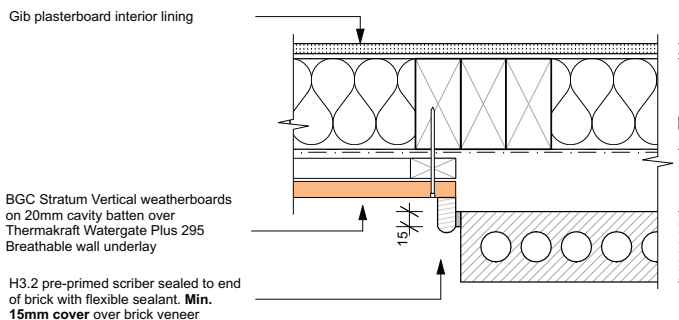
4 BGC Stratum Pipe Penetration Detail
Scale NTS



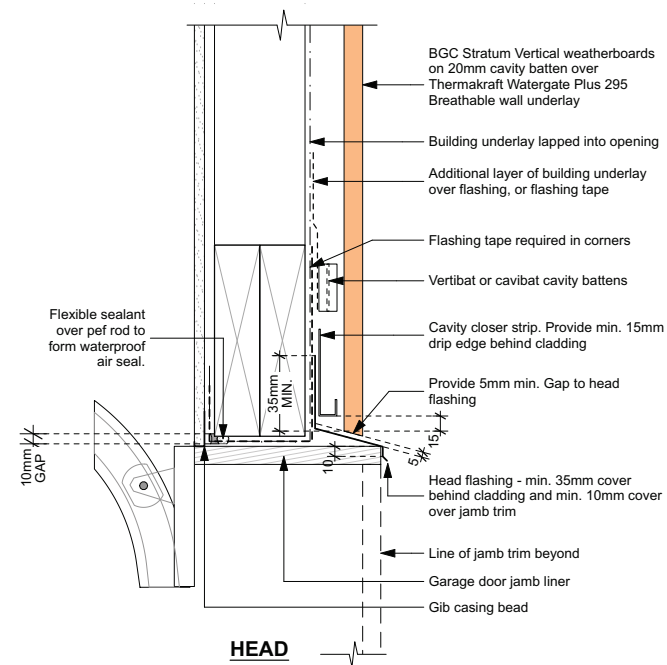
1 Brick Pipe Penetration Detail
Scale 1:5



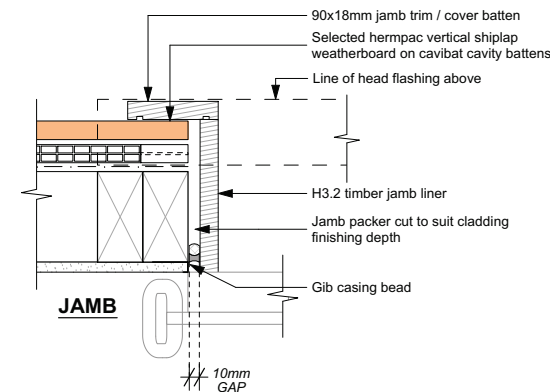
2 Brick to BGC External Corner Detail
Scale 1:5

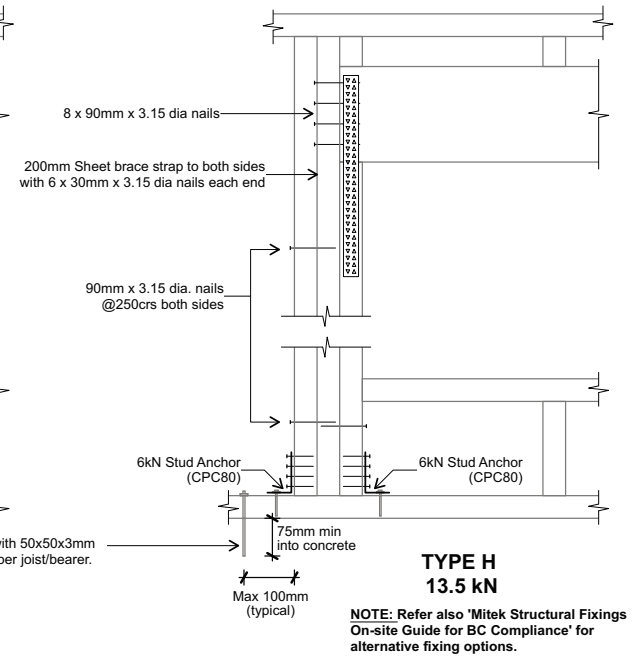
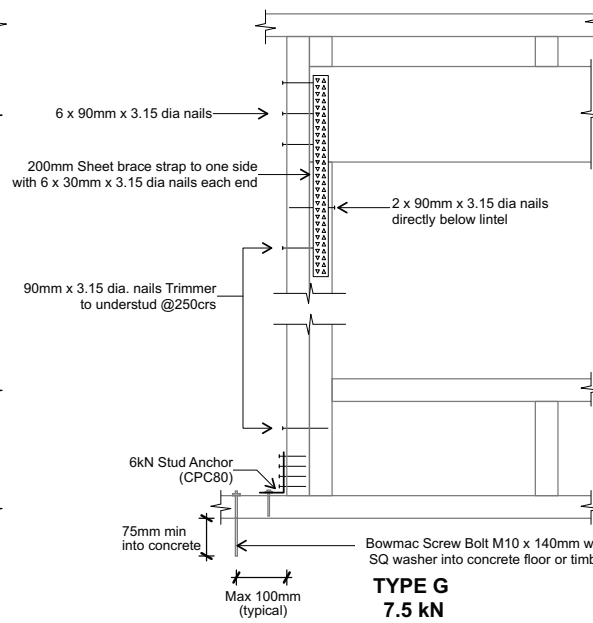
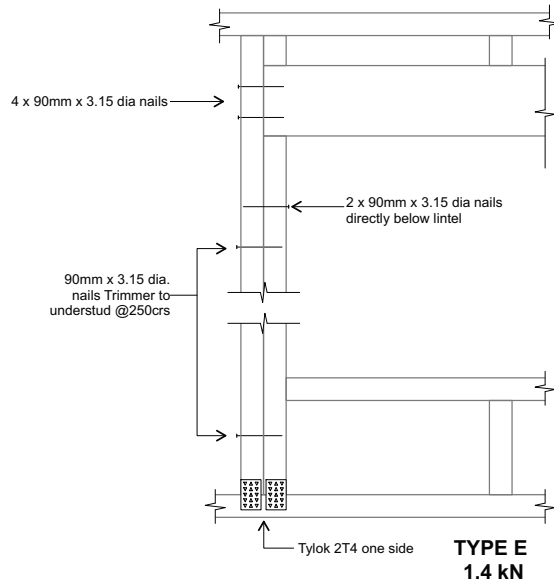
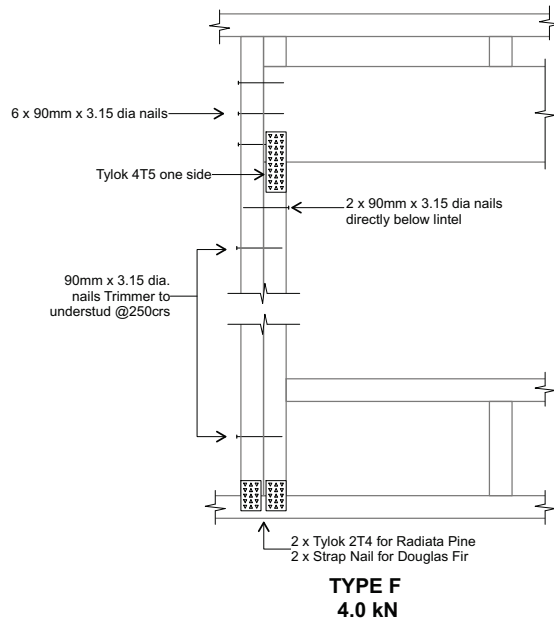


3 Brick to BGC Detail
Scale 1:5



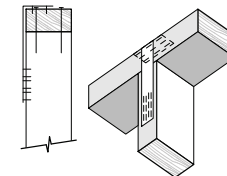
4 Garage Door Details
Scale 1:5





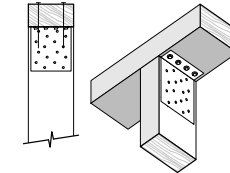
FIXING TYPE B - 4.7kN

2/90 x 3.15mm Plain steel wire nails driven vertically into stud



PLUS Lumberlok stud strap (one face only)
EXTERNAL WALLS

2/90 x 3.15mm Plain steel wire nails driven vertically into stud

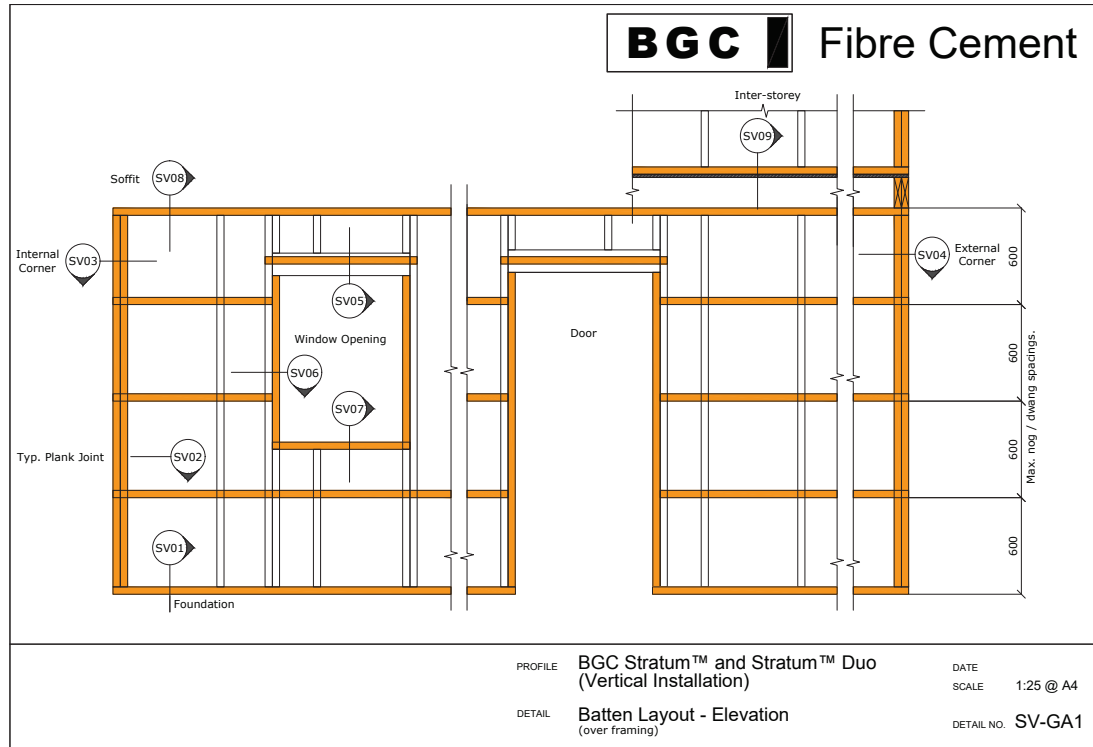


PLUS Lumberlok 6kN stud anchor (CPC380)
INTERNAL WALLS

NOTE: Locate fixings as evenly as possible along the wall length. Install as per Lumberlok top plate specifications

1 Top Plate Fixing Details

Scale 1:10



Ceiling diaphragms

GIB® plasterboard ceiling diaphragms are stiff and strong horizontal elements which effectively transfer loads to bracing walls. They themselves do not have a bracing unit rating but are used when bracing lines exceed 6m separation. The basic shape of a ceiling diaphragm is square or rectangular. Protrusions are permitted but cut-outs are not. The length of a ceiling diaphragm shall not exceed twice its width. Dimensions are measured between supporting bracing lines. Supporting bracing lines shall have a bracing capacity no less than the greater of 100 bracing units or 15 bracing units per metre of diaphragm dimension, measured at right angles to the line being considered, see figure 21.

Limitations for GIB® plasterboard ceiling diaphragms

Ceiling diaphragms may be constructed using any GIB® plasterboard provided perimeter fixing is at;

150mm centres for: Diaphragms up to 7.5m in length, no steeper than 15°.

100mm centres for: Diaphragms up to 7.5m in length, no steeper than 45°. Diaphragms up to 12m in length, no steeper than 25°.

Diaphragms outside these parameters must be specifically designed.

General fixing requirements for GIB® Ceiling Diaphragms:

- Linings must be installed over the entire area of the diaphragm.
- Fastening must be no less than 12mm from sheet edges and not less than 18mm from sheet ends.
- Sheets must be supported by framing members (e.g., ceiling battens) spaced at no more than 500mm centres for 10mm GIB® plasterboard and at no more than 600mm centres for 13mm GIB® plasterboard.
- Sheets within the diaphragm area may be fastened and finished conventionally in accordance with the publication entitled, "GIB® Site Guide". All joints shall be GIB® Joint Tape reinforced and stopped. It is recommended that sheet butt joints are formed off framing and back-blocked (see "GIB® Site Guide").
- Use full width sheets where possible. At least 900mm wide sheets with a length not less than 1800mm shall be used. Sheets less than 900mm wide but no less than 600mm may be used provided all joints with adjacent sheets are back-blocked (see "GIB® Site Guide" and figure 22).
- Fasteners are placed at the specified centres around the ceiling diaphragm with the corners fastened using the GIB EzyBrace® fastener pattern.

FIGURE 20: PROTRUSIONS AND CUTOUTS

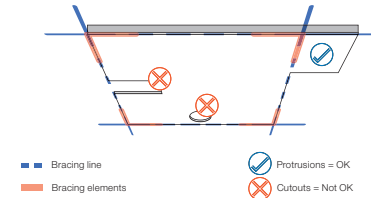


FIGURE 21: DIAPHRAGM BRACING LINING SPACINGS

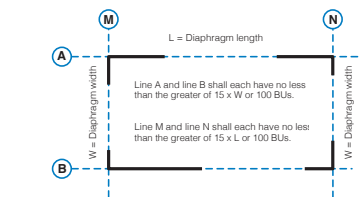


FIGURE 22: GIB® CEILING DIAPHRAGM SHEET WIDTHS AND LENGTHS

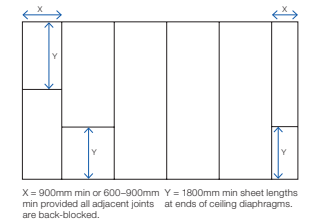
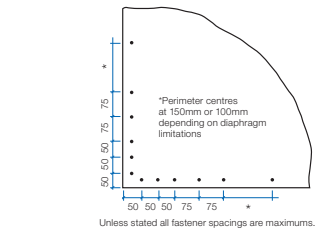
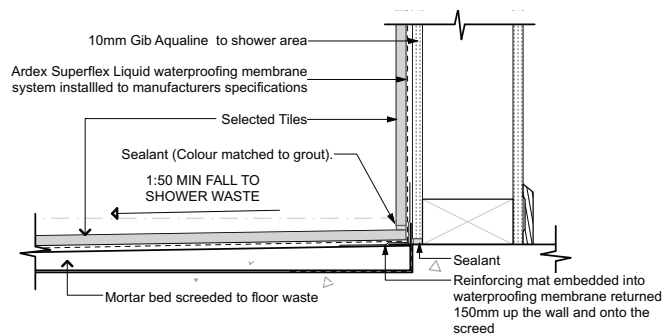


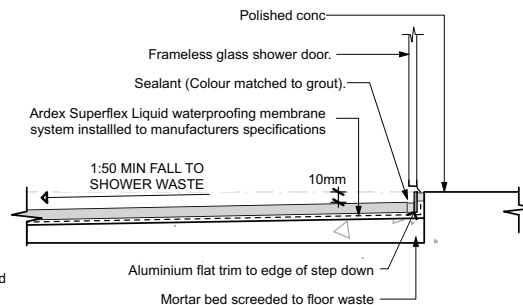
FIGURE 23: GIB EZYBRACE® FASTENER PATTERN



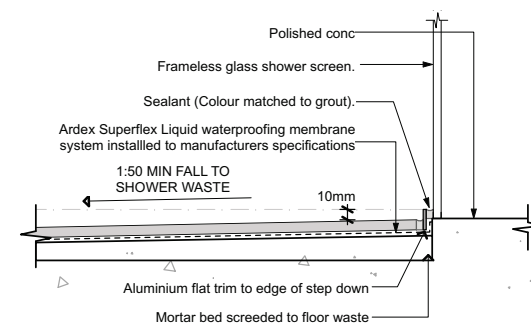
GIB015



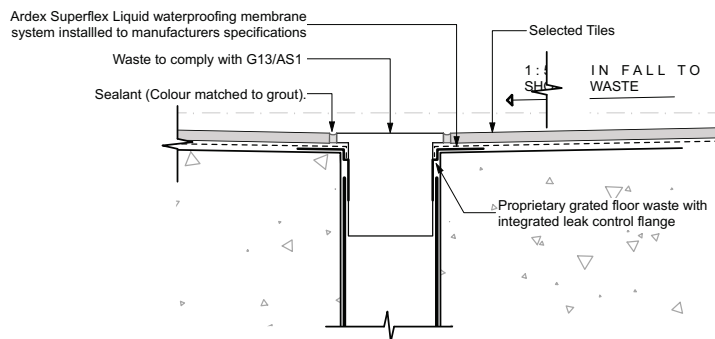
**TYPICAL WATERPROOFING JUNCTION
AT SHOWER WALL/FLOOR**



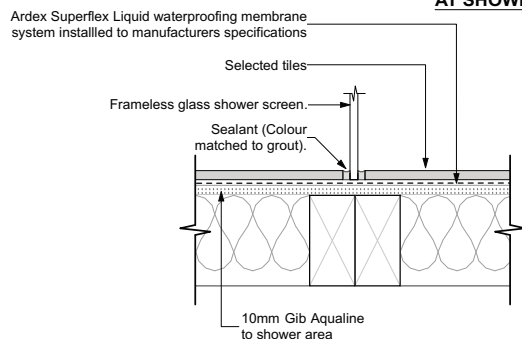
**TYPICAL WATERPROOFING JUNCTION
AT SHOWER DOOR THRESHOLD**



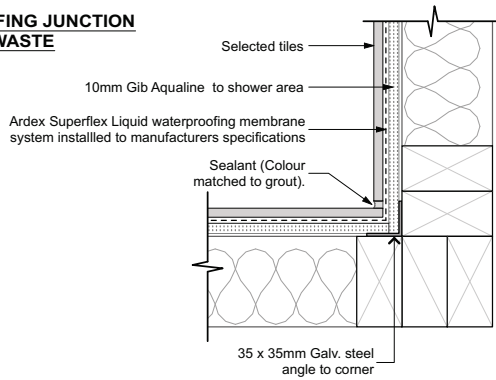
**TYPICAL WATERPROOFING JUNCTION
AT SHOWER SCREEN THRESHOLD**



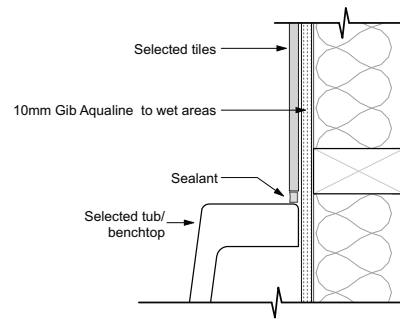
**TYPICAL WATERPROOFING JUNCTION
AT SHOWER WASTE**



**TYPICAL WATERPROOFING JUNCTION
AT SHOWER SCREEN WALL JUNCTION**



**TYPICAL WATERPROOFING JUNCTION
AT SHOWER WALL CORNER**



**TYPICAL SPLASHBACK
WATERPROOFING**

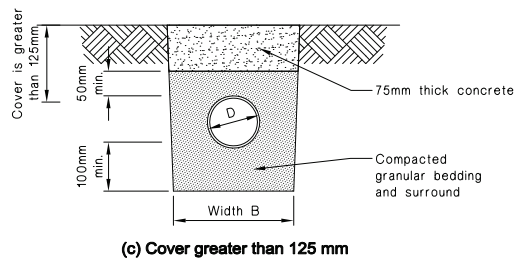
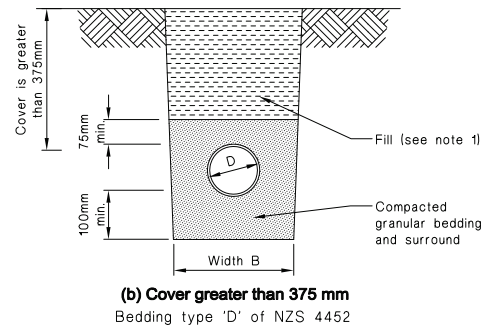
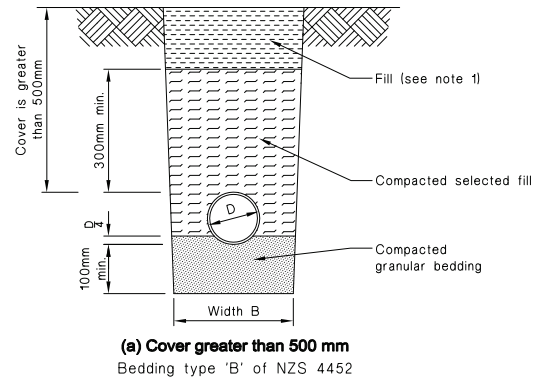
NOTES:

- WATERPROOFING MEMBRANE TO EXTEND 1.5M MIN RADIUS FROM SHOWER HEAD

-When enclosures, such as walls, screens, doors or curtains are used they shall be continuous from floor level or top of upstand to 1800 mm minimum above floor level and not less than 300 mm above the shower rose

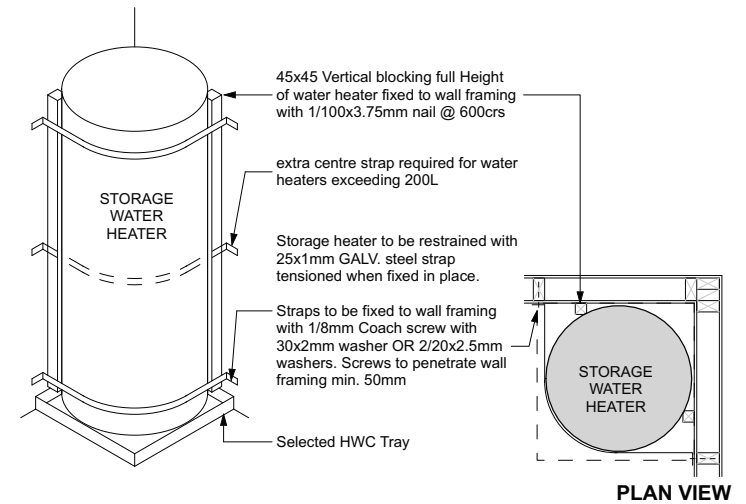
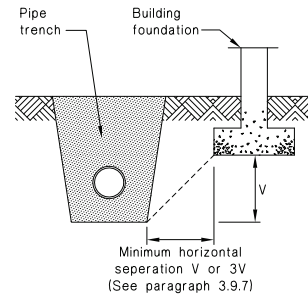
-Where the shower floor has no upstand or where a wall, screen, door or curtain is omitted, the floor shall have a fall of no less than 1:50 towards the floor waste. The fall shall apply to the floor area within a radius of 1500 mm taken from a point vertically below the shower rose, or from any wall within that radius

Figure 13: Bedding and Backfilling
Paragraphs 3.9.2, 3.9.4 and 3.9.5

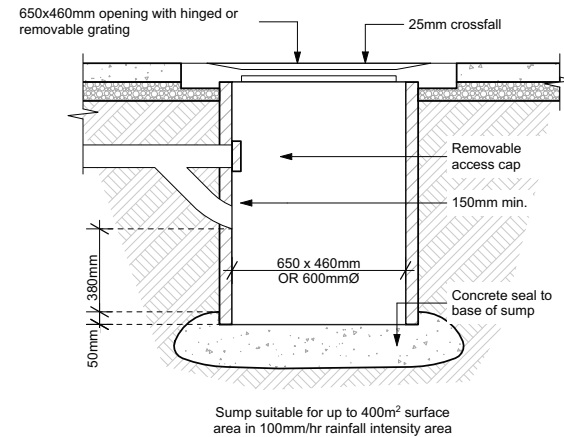


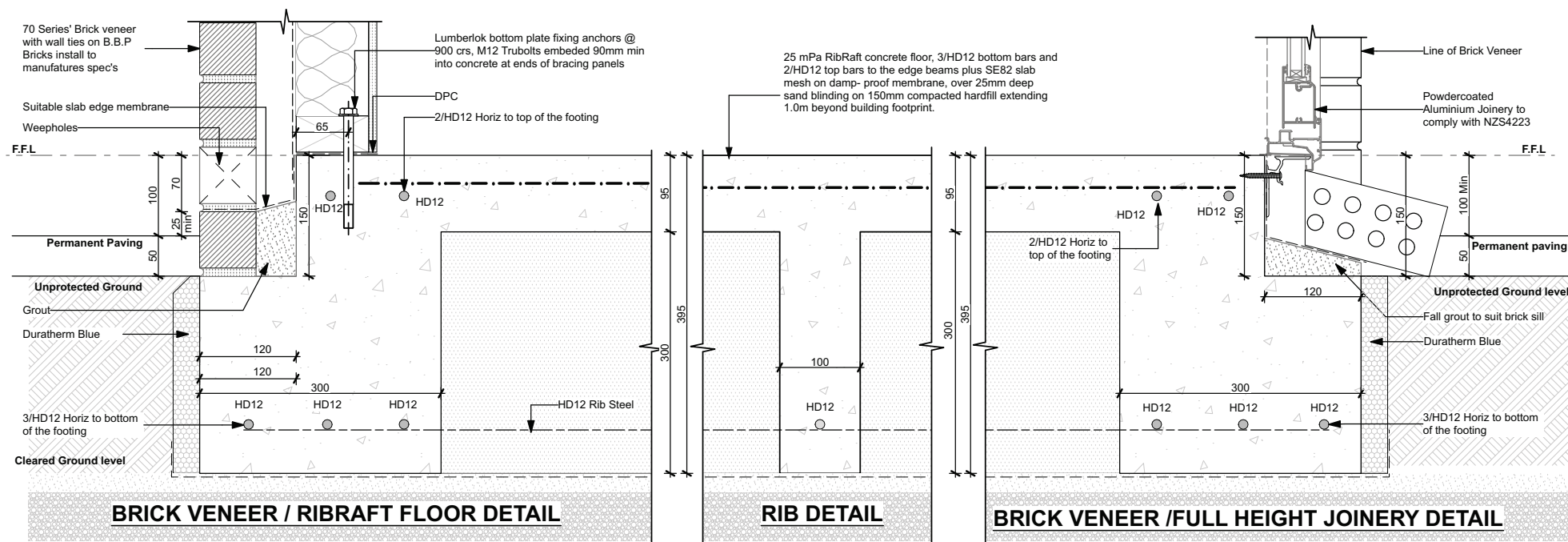
NOTE:
1. Fill shall be:
- Ordinary fill where drains are located below gardens and open country.
- Compacted selected fill where the drains are located below residential driveways and similar areas subjected to light traffic.

Figure 14: Relationship of Pipe Trench to Building Foundation
Paragraph 3.9.7

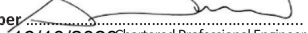


TYPE-TWO SURFACE WATER SUMP
AS PER E1/AS1 FIGURE 9 / PARAGRAPH 3.6.2





RS Eng Ltd
Consulting Engineers
This drawing is in accordance with
our calculations where applicable.

per 
16/10/2023 Chartered Professional Engineer


MASON STREET
architectural drafting

Kyle Kake
027 567 8808
kyle@masonstreet.co.nz
www.masonstreet.co.nz

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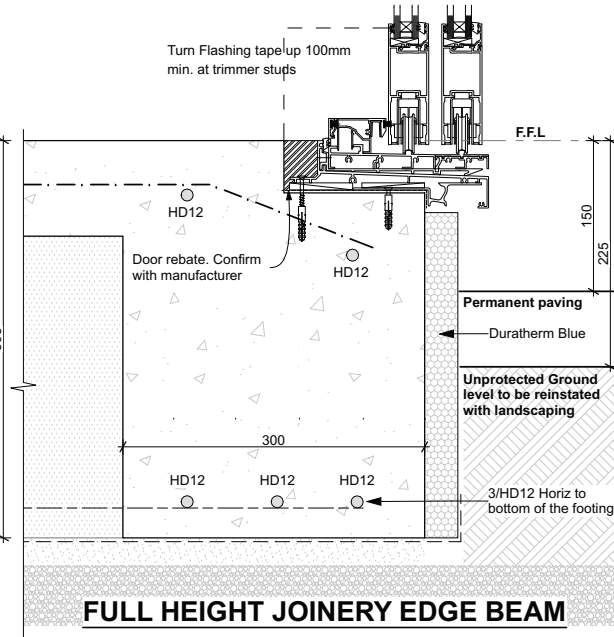
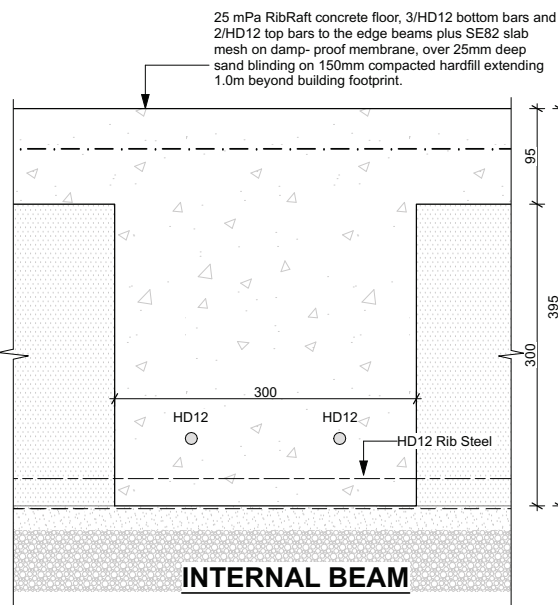
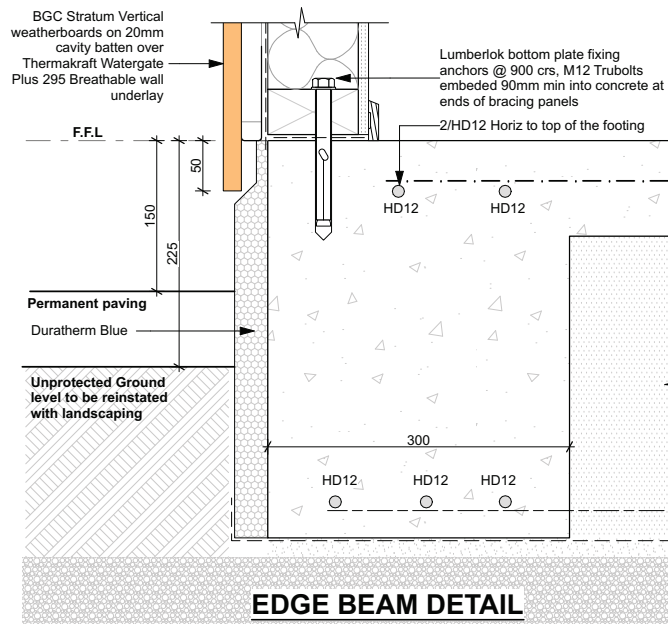
Project Location
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Whangarei

Drawn	KK
Checked	Kyle Kake_ BP130188
Print Date	16/10/23
Scale @ A3	1:5

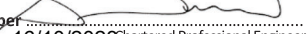
Sheet Title
Ribraft Details

Sheet No.

501



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Consulting Engineers
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per 
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MASON STREET
architectural drafting

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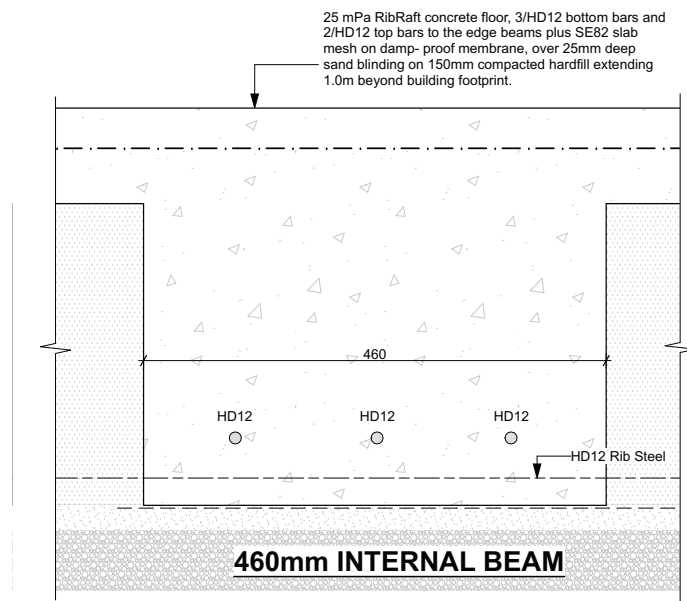
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Whangarei

Drawn	KK
Checked	Kyle Kake_ BP130188
Print Date	16/10/23
Scale @ A3	1:5

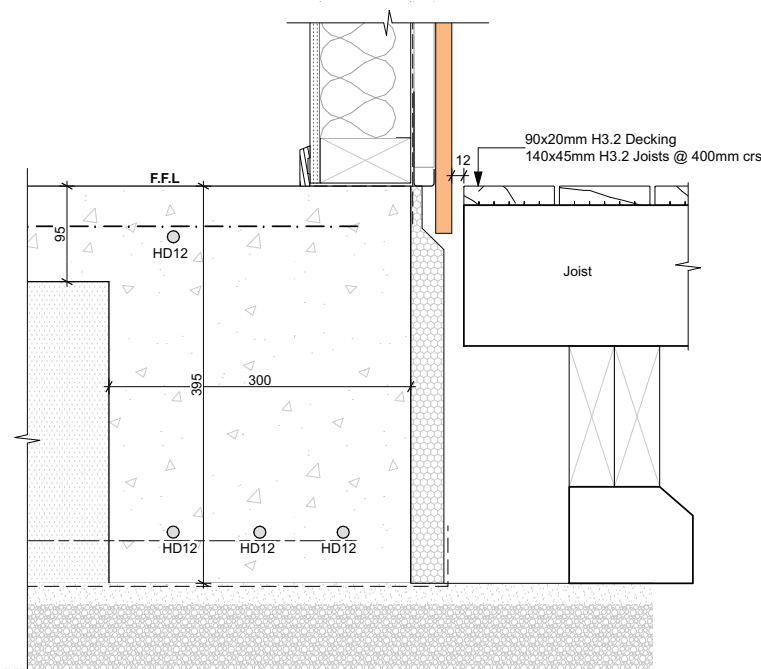
Sheet Title
Ribraft Details

Sheet No.

502



1 Internal Beam (460mm) Detail
Scale 1:5



2 Deck to Dwelling Detail
Scale 1:5

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Consulting Engineers
This drawing is in accordance with
our calculations where applicable.
per 16/10/2023 Chartered Professional Engineer

MASON STREET
architectural drafting

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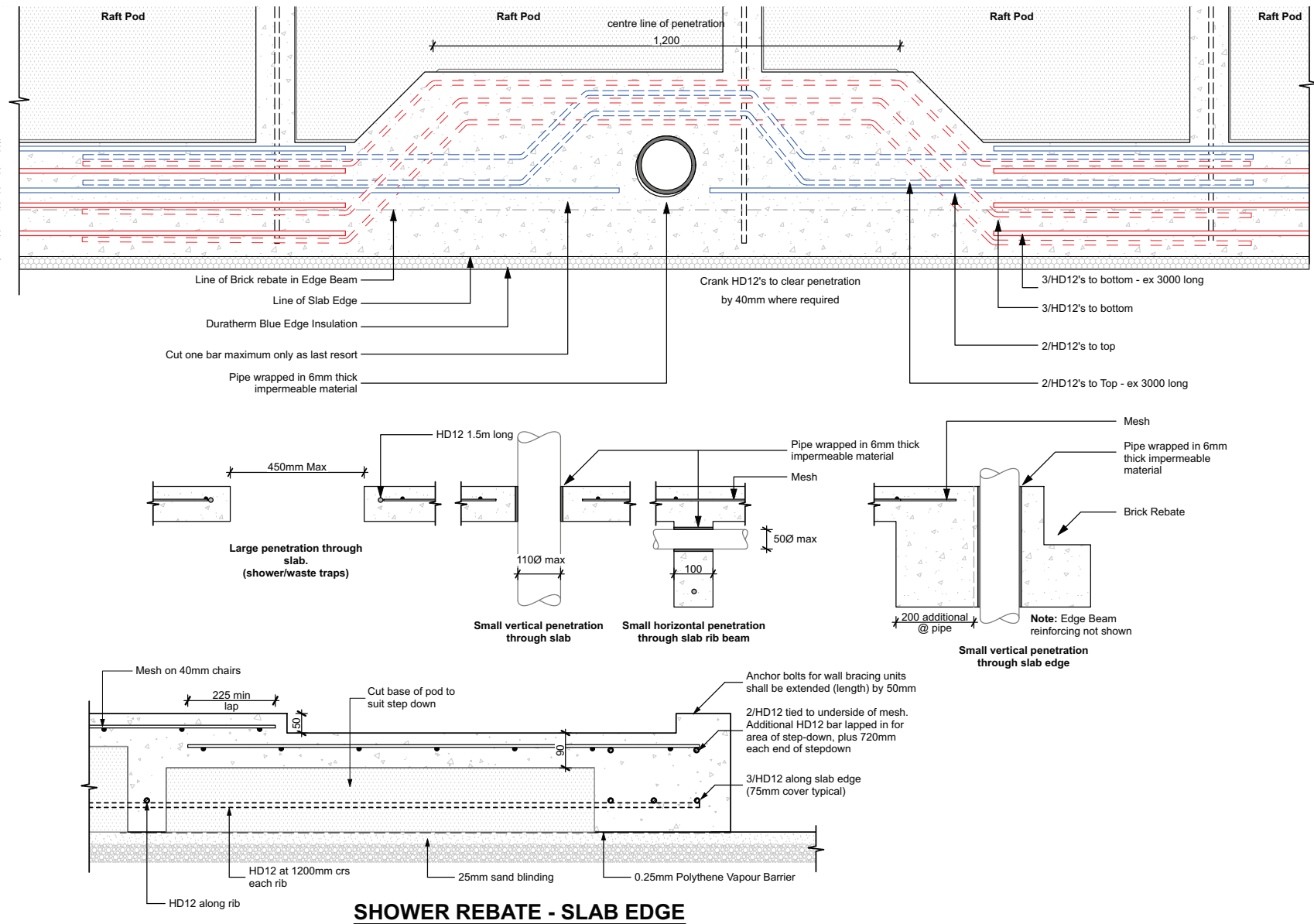
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Whangarei

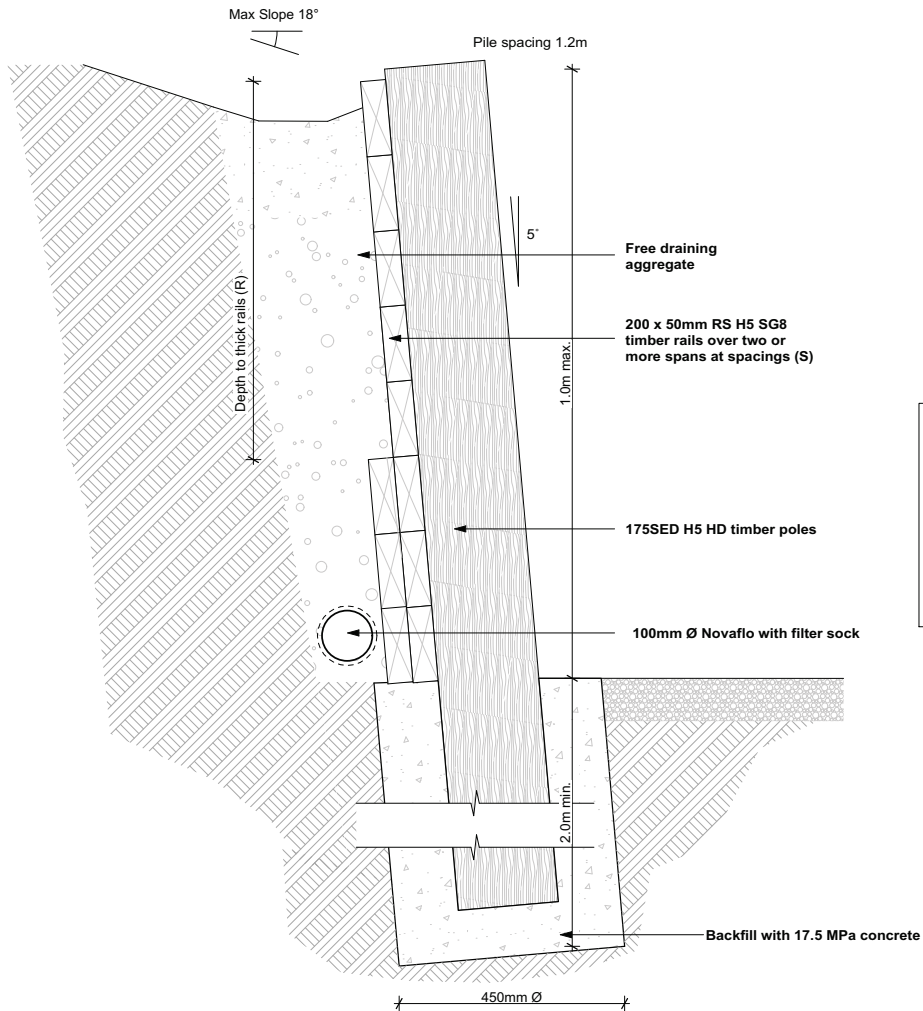
Drawn	KK
Checked	Kyle Kake_ BP130188
Print Date	16/10/23
Scale @ A3	1:5

Sheet Title
Ribraft Details

Sheet No.

503





RETAINING WALL:
 175SED H5 HD pole in a 750mm Ø hole 2.0m deep for a maximum retained height of 1.0m.
 Below a depth of 0.66m use 200x75 H5 rails or double thickness of 200x50 well-spiked together.

1

Retaining Wall Details

Scale 1:10



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 architectural drafting

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Project Location
 45 Rock Ridge Drive,
 Whangarei

Drawn	KK
Checked	Kyle Kake_ BP130188
Print Date	16/10/23
Scale @ A3	1:10

Sheet Title
Retaining Wall Details

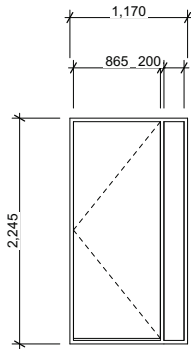


RS Eng Ltd
 Consulting Engineers
 This drawing is in accordance with
 our calculations where applicable.

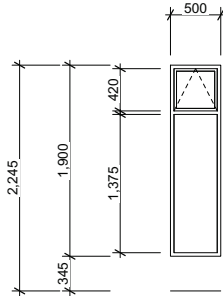
per 16/10/2023 Chartered Professional Engineer

Sheet No.

505

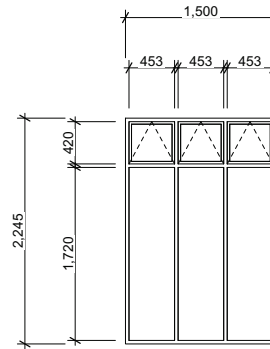


W01



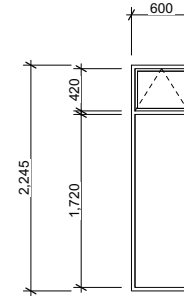
W02

Safety Glass



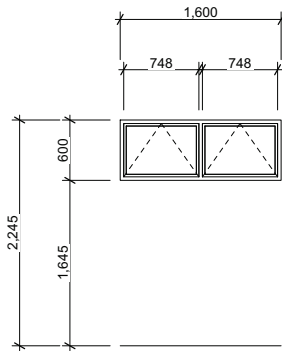
W03

Safety Glass

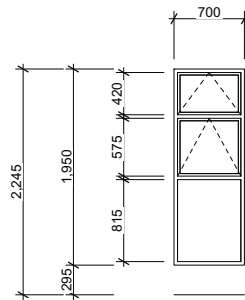


W04, W05

Safety Glass

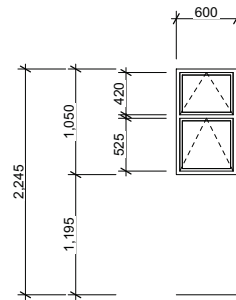


W06



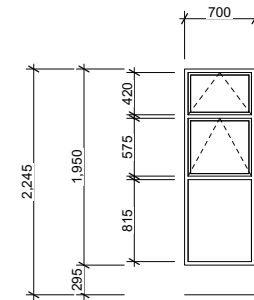
W07, W08

Safety Glass



W09, W11

Safety Glass



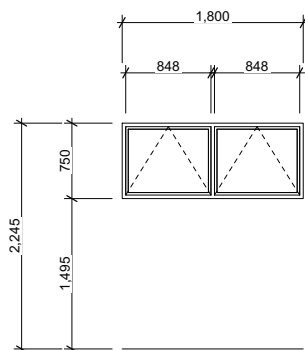
W10

Safety Glass

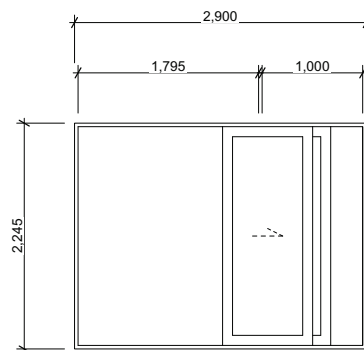
★ **Safety Glass to comply with NZS 4223.3**

Provide Safety Glass to comply with NZS 4223.3 in the following locations:

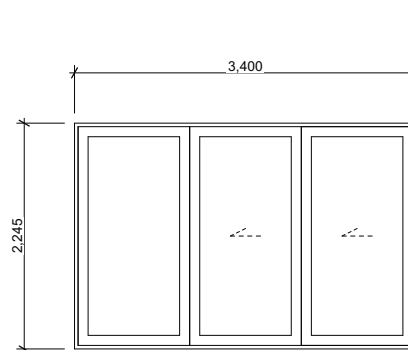
- All glazed doors where the area of the glass is more than 0.5 m²
 - Glazed side panels to doors where the area of the glass is more than 0.5 m²
 - Glazed panels that may be mistaken for an unimpeded path of travel
 - Low level glazing (wholly or partly within 800mm of FFL)
 - Bathrooms and wet areas that may have slippery floors
 - Glazing in and around stairs
 - Balustrades and barriers, including glazing that protects people from a fall of 1.0m or more
- Joinery manufacturer to confirm final joinery arrangements with contractor onsite



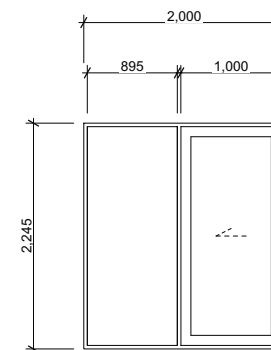
W12



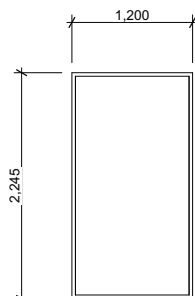
W13, W14



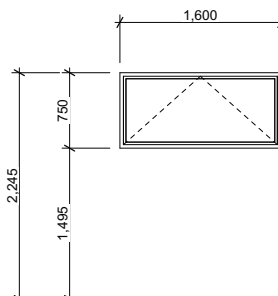
W15
Safety Glass



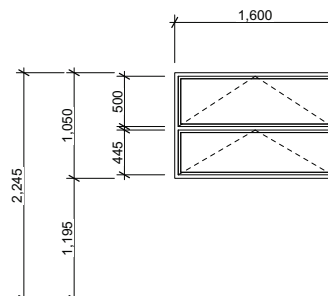
W16



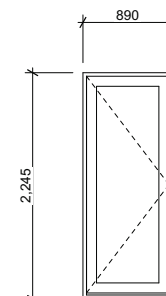
W17
Safety Glass



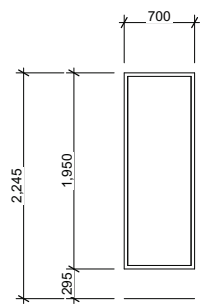
W18, W19



W20



W21
Safety Glass



W22, W23, W24
Safety Glass



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H1 Calculation Report

H1 calculation in accordance with H1 Energy Efficiency Acceptable Solution H1/AS1 Fifth Edition Amendment 1 (4/08/2022) clause 2.1.3

Date 8/09/2023
Project 45 Rock Ridge Dr Whangarei

Client Mason Street Architectural Drafting
Contact Anna Parke
Email anna@masonstreet.co.nz
Plan Date 31/08/2023
Climate Zone 1



Thank you for choosing Mammoth® insulation for your H1 calculations. Mammoth's thermal and acoustic insulation is made from 100% polyester using fibre from recycled PET plastic bottles.

The Mammoth products specified below represent the equivalent of 34,876 recycled plastic bottles.*

Made by NZ's first carbonZero insulation manufacturing company, everything from Mammoth's packaging to product is recyclable at the end of its life.

Below is the summary of the construction elements and the insulation required for your project.

Congratulations for helping NZ protect our environment by keeping the carbon content locked up in the polyester fibre and reducing landfill waste.

Construction Element	Insulation
Truss bottom chord	R3.6 Mammoth blanket (225mm)
Truss second layer	R3.2 Mammoth blanket (200mm)
Truss heel	R2.5 Mammoth wall sections (90mm)
Ceiling battens to single layer ceilings	R1.0 Mammoth blanket (compressed to 35mm)
External walls	R2.5 Mammoth wall sections (90mm)

Glazing percentage:	28.0%
Proposed building exceeds reference performance by:	0.27%
H1 Result:	PASS

H1 calculation in accordance with H1 Energy Efficiency Acceptable Solution H1/AS1 Fifth Edition [29/11/21] clause 2.1.3**
The accompanying H1 calculation is valid only when the specified insulation products are used.
Substitution of any product listed above voids the H1 report. This H1 report complies with H1v5 where lodged by 2/11/2023.

Terms and Conditions:

- This calculation qualifies as an acceptable solution under Energy Efficiency Acceptable Solution H1/AS1 5th edition amendment 1 clause 2.1.3 (4/08/22) where the proposed building total heat loss is less than the reference building total heat loss, and the glazing area is no greater than 40% of the total wall area. This H1 report complies with H1v5 where lodged by 2/11/2023.
- Construction R-values are based on the following sources:
 - BRANZ House Insulation Guide (6th edition)
 - Mammoth® Insulation Test Methodology & Results
 - Design Navigator R-Value Calculator
 - H1 Energy Efficiency Acceptable Solution H1/AS1
- Where Mammoth products are specified, changing to another brand will void this report due to potential changes to construction R-values

Proposed Building Construction Elements

Roof	Insulation	Area (m2)	R Value	Reference
Profiled metal roofing, trusses @ 900c	R3.6+R3.2 Mammoth blanket (225+200mm)	123.7272	6.87	6.6
Truss roof (low clearance)	R3.6+R1.0 Mammoth blanket (225+45mm)	22.40767	4.21	6.6
Truss heel	R2.5+R1.0 Mammoth blanket (90+45mm)	11.2951	3.31	6.6

Wall	Insulation	Area (m2)	R Value	Reference
Brick veneer, 90x45 @ 400c	R2.5 Mammoth wall sections (90mm)	53.305	2.05	2
BGC Stratum, 90x45 @ 400c	R2.5 Mammoth wall sections (90mm)	49.52234	2.04	2
90x45 @ 600c, to garage	R2.5 Mammoth wall sections (90mm)	24.38	2.13	2

Joinery	Glazing	Area (m2)	R Value	Reference
Aluminium joinery	Low-E IGU argon filled	49.4327	0.37	0.37

Floor (slab on grade)	Insulation	Area (m2)	R Value	Reference
Ribraft concrete slab floor	HotEdge Extra	157.43	1.42	1.5

Floor (suspended floor)	Insulation	Area (m2)	R Value	Reference
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Skylight	Area (m2)	R Value	Reference
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H1 Calculation

Proposed Building Heat Loss Calculation									
	$\frac{A_{\text{roof}}}{R_{\text{Roof}}}$	$\frac{A_{\text{wall}}}{R_{\text{wall}}}$	$\frac{A_{\text{glazing}}}{R_{\text{Glazing}}}$	$\frac{A_{\text{door}}}{R_{\text{Door}}}$	$\frac{A_{\text{floor1}}}{R_{\text{floor1}}}$	$\frac{A_{\text{floor2}}}{R_{\text{floor2}}}$	$\frac{A_{\text{skylight}}}{R_{\text{skylight}}}$		
Net Heat Loss	26.7	61.7	133.6	110.9	0.0	0.0		=	332.9

Reference Building Heat Loss Calculation									
	$\frac{A_{\text{roof}} + A_{\text{glazing}}}{R_{\text{RefRoof}}}$	$\frac{A_{\text{wall}}}{R_{\text{RefWall}}}$	$\frac{A_{\text{glazing}}}{R_{\text{RefGlazing}}}$	$\frac{A_{\text{door}}}{R_{\text{RefDoor}}}$	$\frac{A_{\text{floor1}}}{R_{\text{RefFloor1}}}$	$\frac{A_{\text{floor2}}}{R_{\text{RefFloor2}}}$			
	157.43	123.648	52.99201	157.43	0				
	6.6	2	0.37	1.5	2.5				
Net Heat Loss	23.9	61.8	143.2	105.0	0.0			=	333.9

Glazing percentage of proposed building: 28.0%
Proposed building thermal performance exceeds reference performance by: 0.27%
H1 Result: PASS

Table 8.19 – Nailing schedule for hand-driven and power-driven nails (see 8.8.6)

Joint	Hand-driven nails		Power-driven nails	
	Length (mm) x diameter (mm) and type	Number/ Location	Length (mm) x diameter (mm) and type	Number/ Location
Bottom plate to floor framing at:				
(a) External walls and internal wall bracing elements	100 x 3.75	2 at 600 mm centres	90 x 3.15	3 at 600 mm centres
(b) Internal walls (may be nailed to floor decking)	100 x 3.75	1 at 600 mm centres	90 x 3.15	1 at 600 mm centres
(c) Trimmer not exceeding 4.2 m long	100 x 3.75	4 (end nailed)	90 x 3.15	6 (end nailed)
Dwang to stud	75 x 3.15 or 100 x 3.75	2 (skewed) 2 (end nailed)	75 x 3.06 90 x 3.15	2 (skewed) 2 (end nailed)
Fishplate to straightened stud	60 x 2.8	4 each side of cut	60 x 2.8	4 (each side of cut)
Half joint in top plate	75 x 3.15	3	75 x 3.06	4
Lintel to trimming stud	75 x 3.15 or 100 x 3.75	4 (skewed) 2 (end nailed)	90 x 3.15	3 (end nailed)
Ribbon board to stud	100 x 3.75	2	90 x 3.15	3
Sill or header trimmer to trimming stud for:				
(a) Trimmer not exceeding 2.4 m long	100 x 3.75	2 (end nailed)	90 x 3.15	3 (end nailed)
(b) Trimmer not exceeding 3.0 m long	100 x 3.75	3 (end nailed)	90 x 3.15	5 (end nailed)
(c) Trimmers not exceeding 3.6 m long	100 x 3.75	4 (end nailed)	90 x 3.15	6 (end nailed)
Solid plaster batten to stud	60 x 2.8 (galv.)	500 mm centres	60 x 2.8 (galv.)	500 mm centres
Stud to plate	75 x 3.15 or 100 x 3.75	4 (skewed) 2 (end nailed)	75 x 3.06 90 x 3.15	4 (skewed) 3 (end nailed)
Top plate 140 mm x 35 mm to 90 mm x 45 mm and top plate to lintel	100 x 3.75	2 at 500 mm centres	90 x 3.15	3 at 500 mm centres
Trimming studs at openings, blocking and studs at wall intersections	100 x 3.75	600 mm centres	90 x 3.15	600 mm centres
Trimming stud to doubled stud immediately under lintel	100 x 3.75	2	90 x 3.15	2
Waling to stud	60 x 2.8	2	60 x 2.8	2
NOTE –				
(1) Nail lengths and diameters are the minimum required.				
(2) Refer to 4.4 for required protective coatings for metal fasteners.				
(3) For studs up to 2.7 in length, 2 / 90 x 3.15 power-driven nails (end nailed) are sufficient.				

Table 10.18 – Nailing schedule for hand-driven and power-driven nails (see 10.5.1)

Joint	Hand-driven nails		Power-driven nails	
	Length (mm) x diameter (mm) and type	Number/ Location	Length (mm) x diameter (mm) and type	Number/ Location
Roof framing				
Rafter or jack rafter to ridge board or top plate (except skillion roofs) (see 10.2.1.3.7)	See table 10.1	See table 10.1	See table 10.1	See table 10.1
Truss to top plate of external wall	See tables 10.14 and 10.15	See tables 10.14 and 10.15	See tables 10.14 and 10.15	See tables 10.14 and 10.15
Truss to top plate of internal wall	100 x 3.75	2	90 x 3.15	2
Ceiling batten to parallel top plate of internal wall bracing element	75 x 3.15	2 at 400 mm centres	90 x 3.15	2 at 400 mm centres
Collar tie or cleat to rafter	75 x 3.15	4	75 x 3.06	4
Flitches to ridge board and roof members for each side on both joints	60 x 2.8	3	60 x 2.8	3
Hip rafter to top plate	See table 10.1	See table 10.1	See table 10.1	See table 10.1
Underpurlin strut to underpurlin or top plate or strutting beam	100 x 3.75 together with fixing types as set out in table 10.5	2	90 x 3.15 together with fixing types as set out in table 10.5	3
Strutting beam to top plate	See table 10.7	See table 10.7	See table 10.7	See table 10.7
Roof braces at each connection to a framing member:				
(a) 90 mm x 19 mm brace	75 x 3.15	3	75 x 3.15	3
(b) 70 mm x 45 mm brace runner	100 x 3.75	2	90 x 3.15	3
(c) 90 mm x 45 mm brace	100 x 3.75	3	90 x 3.15	5
(d) Steel strip brace				
(i) At ends	60 x 3.15	3	–	–
(ii) Other cases	60 x 3.15	2	–	–
(iii) To ends of braces	–	–	–	–
NOTE –				
(1) Nail lengths and diameters are the minimum required.				
(2) Refer to 4.4 for required protective coatings for metal fasteners.				
(3) Proprietary fixings with the required fixing capacity indicated in the tables may be used.				