

Approved Building Consent documents

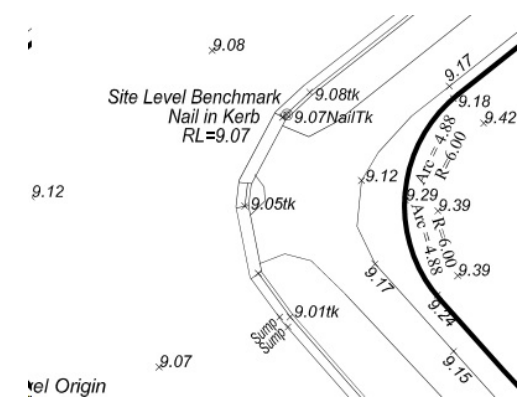
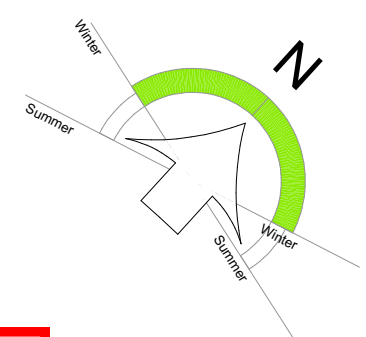
Please note: A copy of the stamped approved documents must be available on site for all inspections.

Inspection booking timeframes

Call received	before 3pm inspection will be done	after 3pm inspection will be done
Monday	Wednesday	Thursday
Tuesday	Thursday	Friday
Wednesday	Friday	Monday
Thursday	Monday	Tuesday
Friday	Tuesday	Wednesday

**Please ensure all work for inspection is ready the day before.
Incomplete work requiring re-inspection will incur an additional inspection fee.**

For building inspections and enquiries please ContactUs on:
03 347 2800.



Planning Approved
14/03/2025 amanda.duke

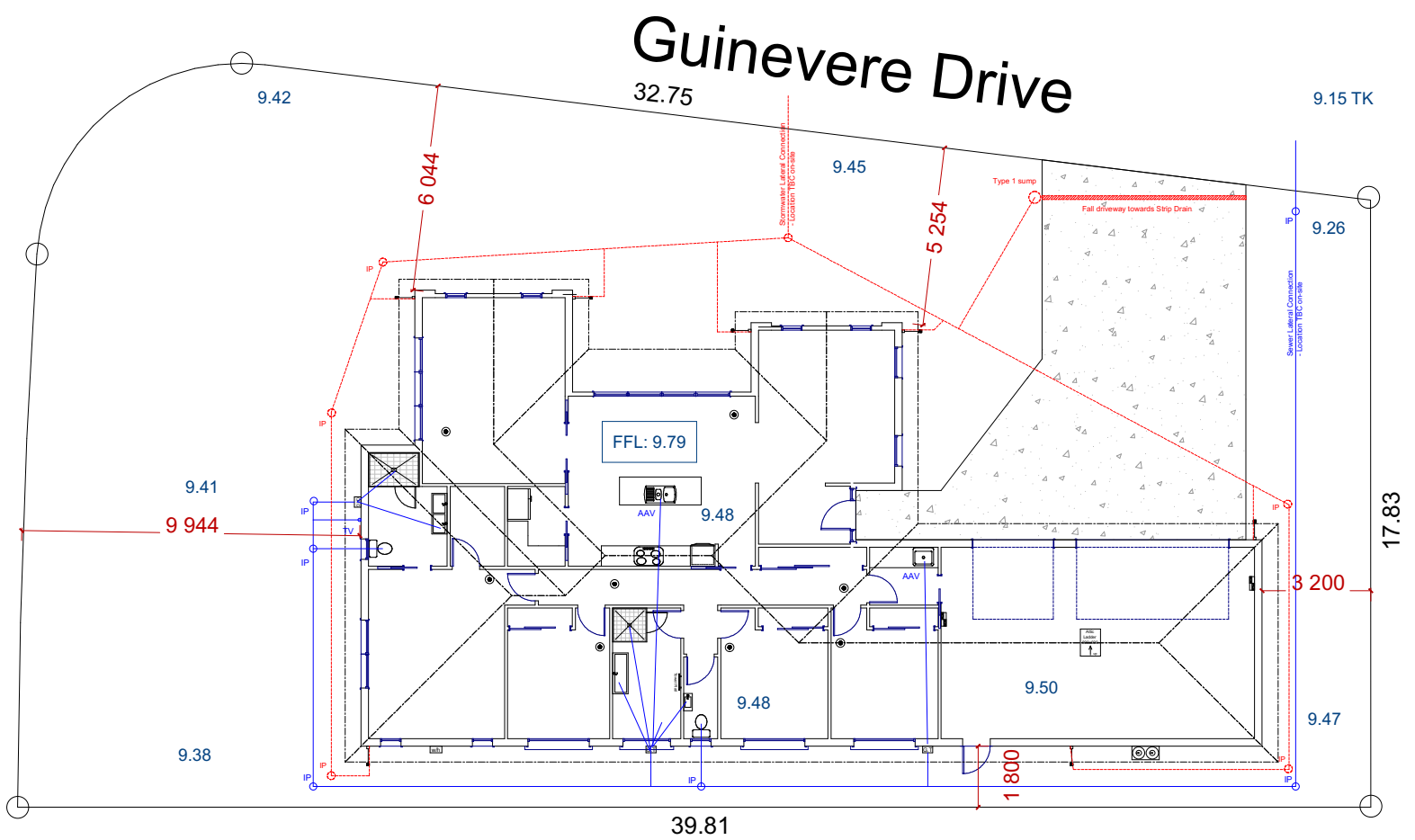
LEGEND	
LEGEND.	
Sewer Pipe	—
S/W Pipe	- - - -
Down Pipe	DP
Gully Trap	GT
Terminal Vent	TV

SITE PLAN NOTES	
Refer to Drainage Plan for specific drainage information	
Refer to sediment control plan in specification and implement where required.	
Convey surface water from sealed drive areas to an appropriate approved outfall.	

SITE INFORMATION	
Zone	5
Wind	High
Earthquake	2
Durability	C
Snow	As per truss design

BUILDING AREA AND SITE COVERAGE	
Net Site Area =	790 m²
Building Area =	248 m²
Actual Site Coverage=	31.4 %

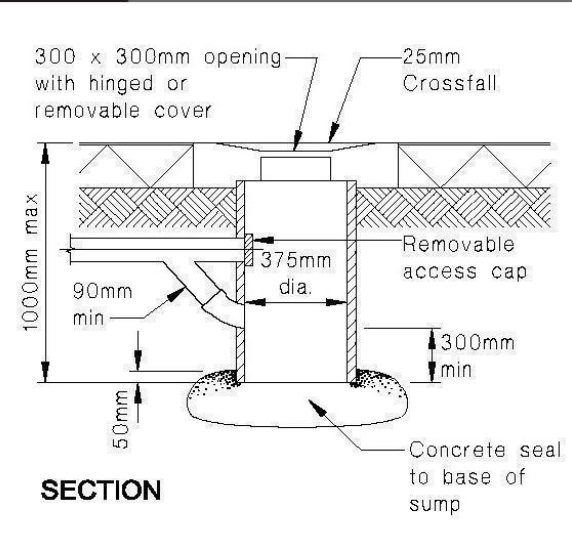
Whitehorn Drive



Level Datum:
LVD1937 (Local Datum)
(prior to 2010/11 EQ's)
Origin of Levels:
MA7 DP608596 - RL=8.98
MA6 DP608596 - RL=9.23
MA8 DP608596 - RL=9.22
Origin Source:
Davie Lovell-Smith
Asbuilt plan E.20764 AB.FL01 R0 Nov 2024,
Produced for Flood Assessment
Certificate CF240540 01/11/24.
(Verified by Davie Lovell-Smith as being the
level datum to use for site levels
and FFL determination.)

Minimum FFL = 9.79
(Flood Assessment
Certificate FC240540 01/11/24)

Figure 8: Type-one Surface Water Sump
Paragraph 3.6.2





Key To Elevations

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ROOF & WALL CLADDING	
Roof -	25 ° Corrugated Coloursteel Roof
Walls -	70 Series Brick Veneer on a 50mm Cavity Vertical Cedar Shiplap on a 20mm Cavity

BUILDING AREA	
AREA:	248 m² O/V
	Not Incl Covered Areas

GENERAL FLOOR PLAN NOTES

SMOKE ALARMS:

Domestic Smoke Alarms(Hush Type) to be Interconnected and Located in each bedroom, Hallway and Living Room Sapce.

To Comply with:NZS4514

Alarms to be Not Less than 75dB(A) and Not more than 110dB(A)

Battery Operated Alarms to have a 10 Year Life.

MISCELLANEOUS:

Dimensions shown are to the frame, GIB thickness not shown.

Refer to Construction Schedule (Page 2 & 3 of Specification) for additional construction information.

Entry through external doors

Mechanical ventilation

Air Seals to have PEF rod & low expansion foam

All windows and doors centered in room unless shown otherwise

FOUNDATION SYSTEM

Raft Foundation Design

WALL FRAMING - designed to high wind zone

Stud Height: 2420 mm

Exterior Walls: 90x45mm studs @ 600 mm crs

Interior Loadbearing wall:

90x45mm studs @ 600 mm crs

Dwangs Ext: 90x45 @ 800 crs

Non loadbearing: 90x45mm studs @ 600 mm crs

Dwangs Int: 90x45mm @ 800mm crs

LINTELS AND BEAMS

Lintels and beams can be found on the Truss Design

BUILDING WRAP

Masons UNI Wrap, refer to manufacturers specifications attached

DOORS

Internal Height: 2200mm

INSULATION

Wall - Knuff Earthwool Batts R2.6 Wall Batts

Ceiling - Knuff Earthwool Batts R6.6 Ceiling Batts

WALL AND CEILING LININGS

Wall - Standard 10mm GIB

(unless required for bracing)

Ceiling - Standard 13mm GIB

13mm GIB Aqualine (bathrooms)

Bathroom - 10mm GIB Aqualine

Corner Finish - Square

FLOOR FINISHES

Carpet, Tiles, Vinyl

EXTERIOR JOINERY

All Windows to be Thermally broken Aluminium frame

Double glazed with Ug of 1.10

with a thermally improved spacer

as per ISO 10077 Annex G

Glass: Low E4/Clear, argon filled , to achieve R0.5.

Air Seals to have PEF rod and low expansion foam

Interior - Shelf and rail to wardrobes

Gas Hot water system

Gas Hobb

ROOF CLADDING AND STRUCTURE

Purlins - 70x45 SG8 H1.2 @ 900crs

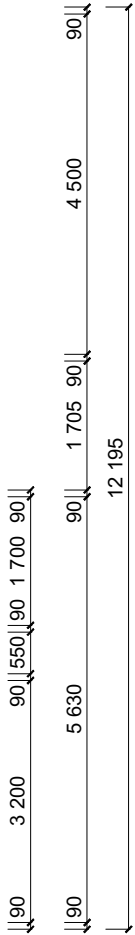
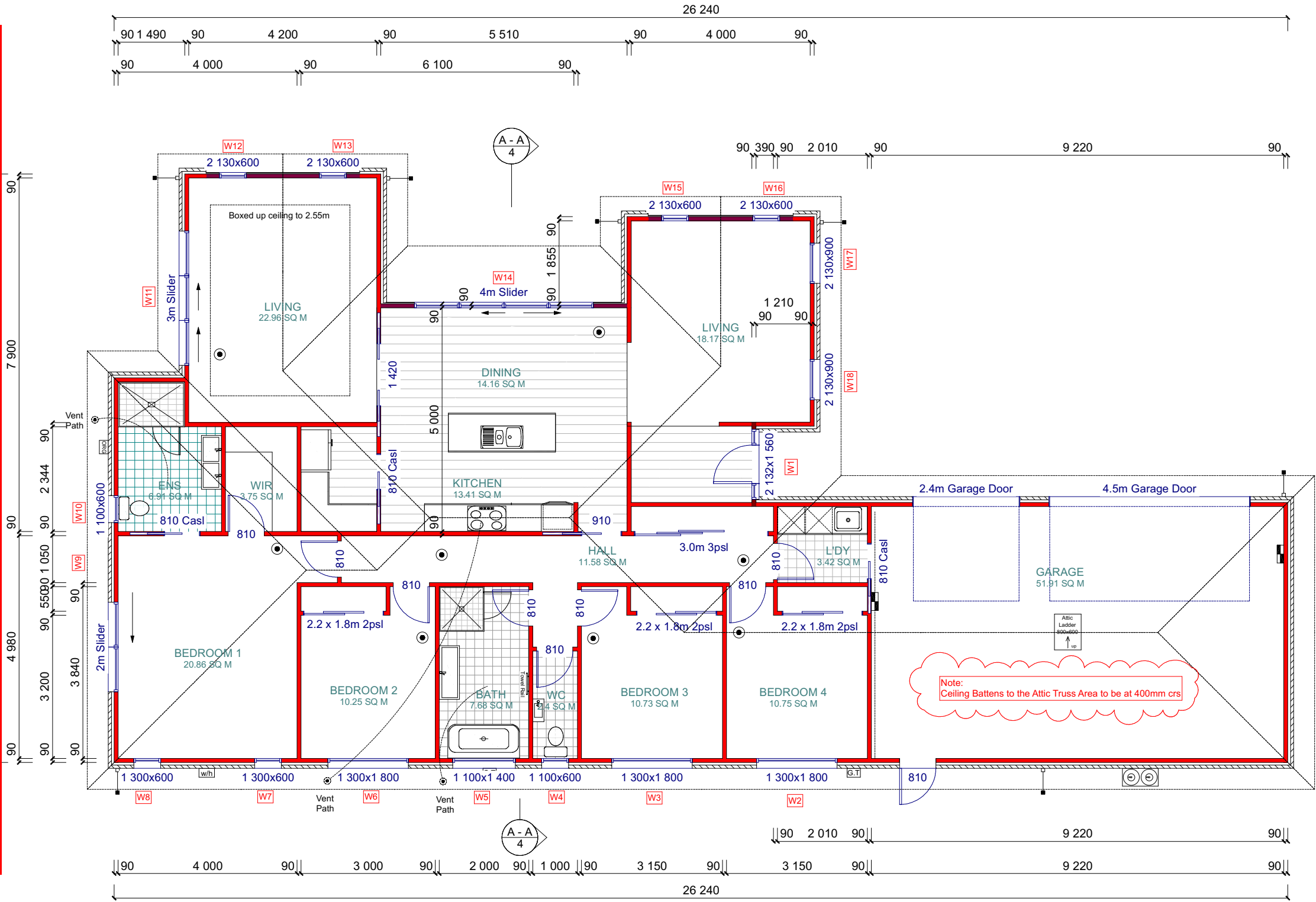
GUTTER/FASCIA/DOWNPIPES/SOFFITS

Gutter - Metalcraft Metalline Quad Gutter

Fascia - Metalcraft Metalline 185 Fascia

Downpipes - Coloursteel 80mm Dia

Soffits - Hardiflex 4.5mm



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Email : admin@jandadesign.co.nz

Project:

Grant Property Group Ltd
Proposed Dwelling At:
Lot 870
75 Whitehorn Drive , Lincoln

Floor Plan

Consent plans

Drawn:
Jeremy Harrison
LBP # 105491

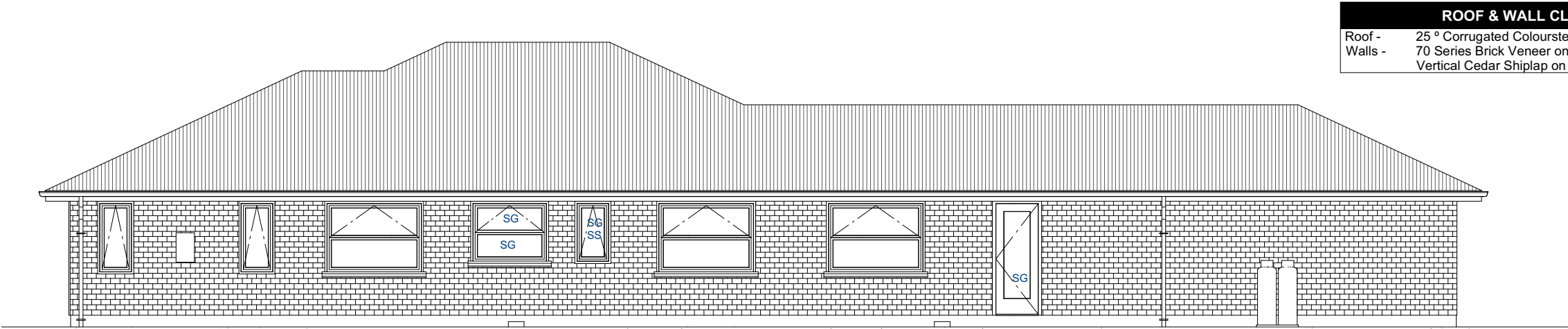
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Job Number:
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Date:
9/04/2025

SHEET:
2

OF:
13

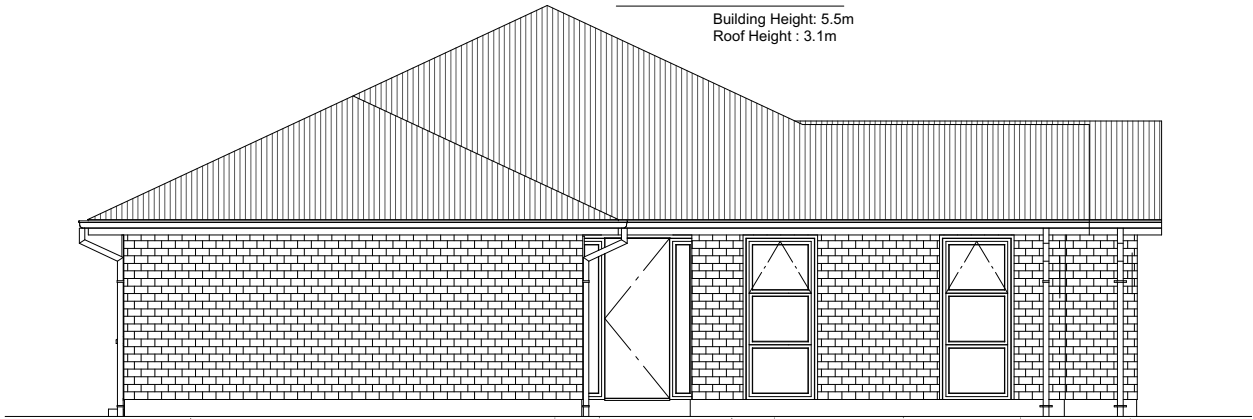


ROOF & WALL CLADDING	
Roof -	25 ° Corrugated Coloursteel Roof
Walls -	70 Series Brick Veneer on a 50mm Cavity
	Vertical Cedar Shiplap on a 20mm Cavity

GENERAL ELEVATION NOTES	
Air Barrier to unlined wall and gables, refer to the Construction Schedule in the Specification for type.	
This sheet to be read in conjunction with the Risk Matrix in specification.	
Driveway to fall from 20mm max below garage rebates (By Others).	
Key SS: Security Stay SG: Safety Glass	

Risk Matrix Elevation A	Risk Factor	low medium high Extra high				
	Wind Zone			1		1
	No of Storeys	0				0
	Roof/Wall	0				0
	Eaves Width	0				0
	Building Envelope	0				0
	Decks & Balconies	0				0
		Total				1

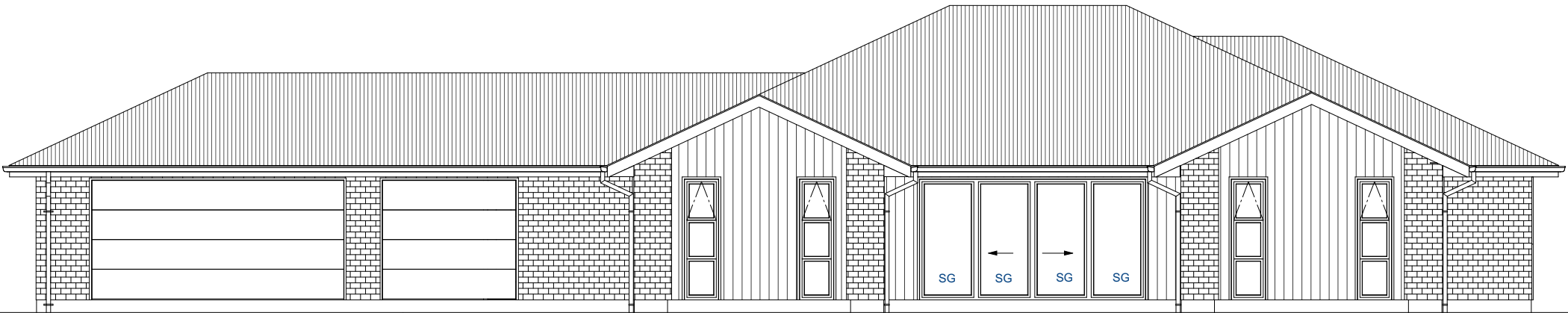
Elevation A



Building Height: 5.5m
Roof Height : 3.1m

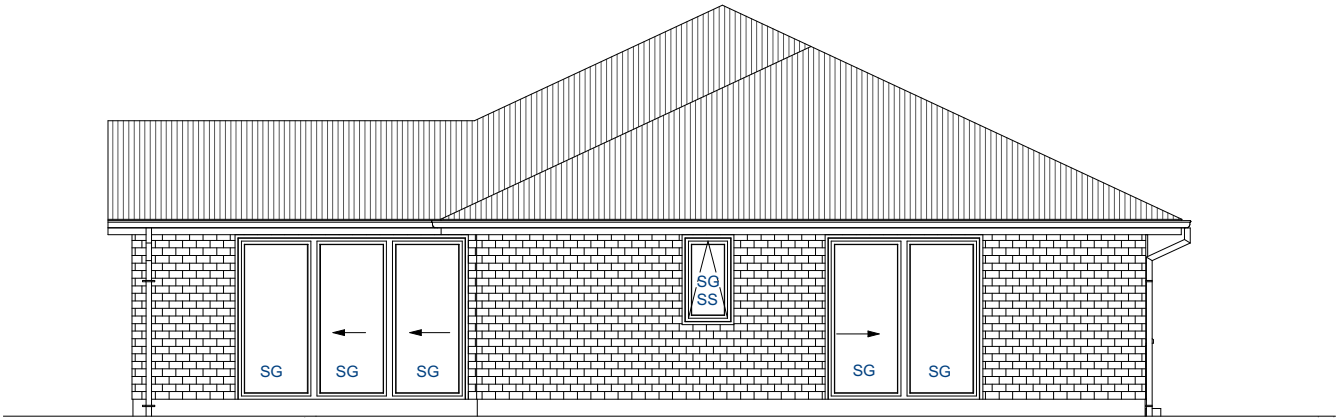
Risk Area 2 Elevation B	Risk Factor	low medium high Extra high				
	Wind Zone			1		1
	No of Storeys	0				0
	Roof/Wall	0				0
	Eaves Width	0				0
	Building Envelope	0				0
	Decks & Balconies	0				0
		Total				1

Elevation B



Risk Area 3 Elevation C	Risk Factor	low medium high Extra high				
	Wind Zone			1		1
	No of Storeys	0				0
	Roof/Wall	0				0
	Eaves Width		1			1
	Building Envelope			3		3
	Decks & Balconies	0				0
		Total				5

Elevation C

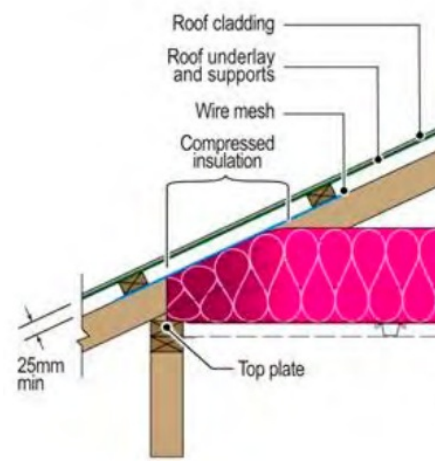
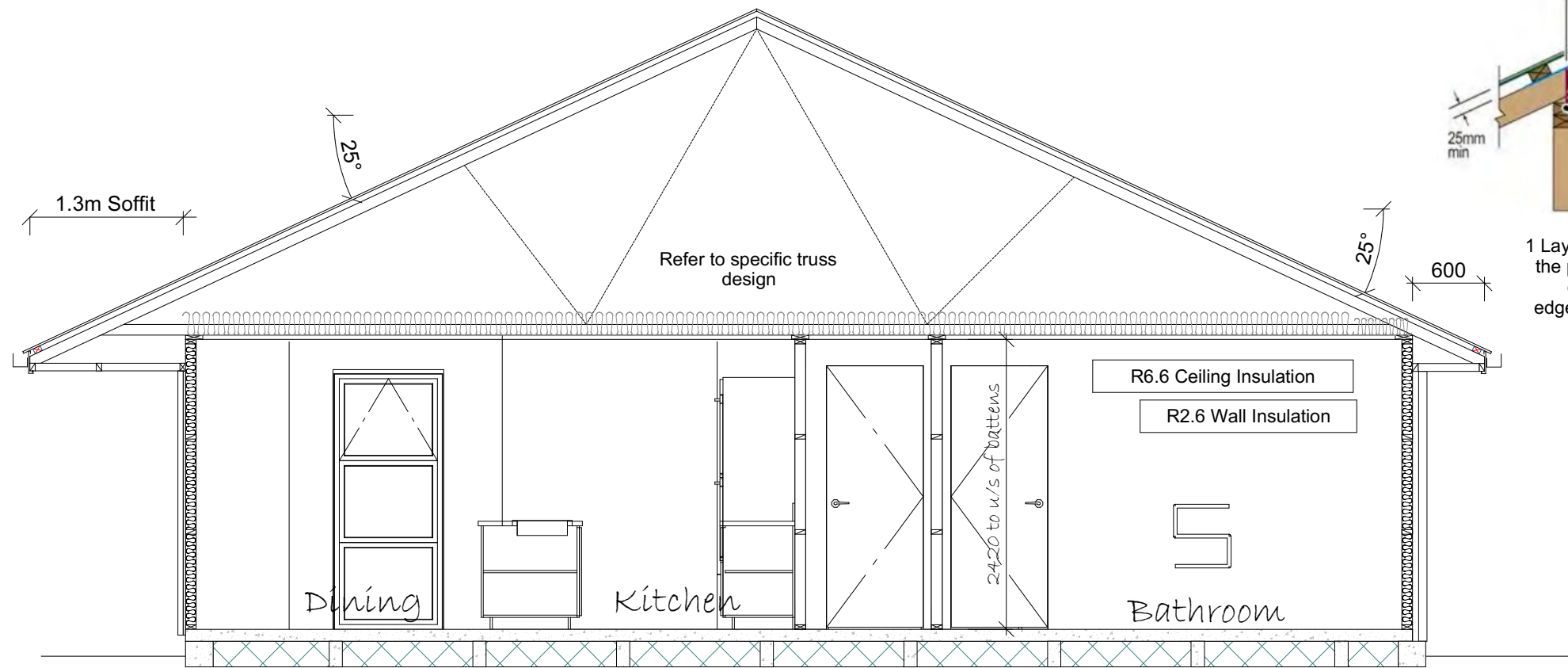


Risk Area 4 Elevation D	Risk Factor	low medium high Extra high				
	Wind Zone			1		1
	No of Storeys	0				0
	Roof/Wall	0				0
	Eaves Width	0				0
	Building Envelope	0				0
	Decks & Balconies	0				0
		Total				1

Elevation D

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Note:
25mm Min Gap between the Roof underlay and the ceiling Insulation.

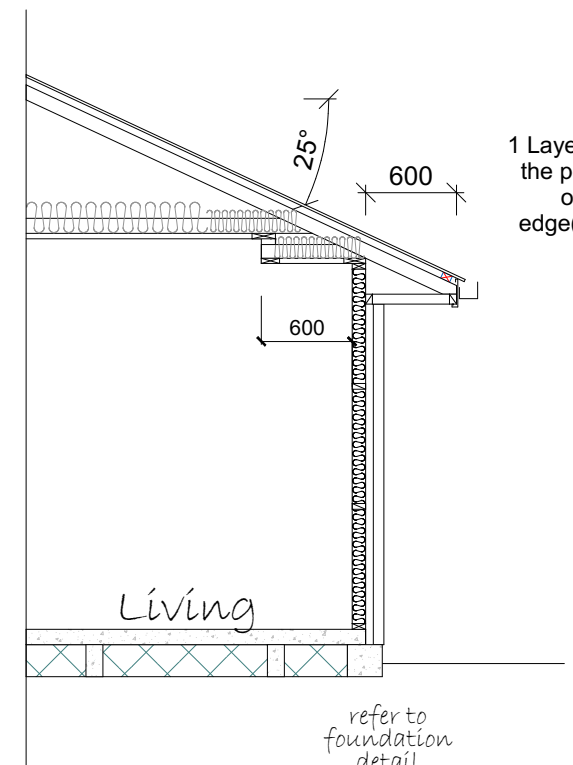


1 Layer of R3.6 Batts to the perimeter 500mm of the soffit edge(Excluding gable ends)

refer to foundation detail

refer to foundation detail

Cross Section A - A



1 Layer of R3.6 Batts to the perimeter 500mm of the soffit edge(Excluding gable ends)

refer to foundation detail

LEGEND
Refer to the Construction Schedule (Page 2 & 3) in the Specification for sizing of Building Elements. General Notes:
1 - Corrugated Colorsteel roofing by Metalcraft on self supporting ThermoKraft 215 roof underlay on 70x45mm SG8 H1.2 Purlins @ 900crs fixings 1/10g self-drilling screw, 80mm long
2 - Metalcraft fascia & quad gutter system with 4.5mm Hardies soffit lining on 70x35mm H1.2 eaves bearers on edge fixed to ribbon board.
3 - 4.5mm Hardies Soffit lining
4 - 13mm Standard GIB ceiling lining to underside of Timber ceiling battens @ 600 crs with R6.6 Pink Batts insulation.
5 - 70 Series Brick Veneer on a 50mm cavity (refer to specification) Masons UNI building wrap on stud framing with R2.6 Pink Batts insulation & 10mm Std. GIB wall lining (Aqualine to wet areas).
6 - Cedar Shiplap with 20mm cavity (refer to manufacturers details). Masons UNI wrap on stud framing with R2.6 Pink Batts insulation & 10mm Std. GIB wall lining (Aqualine to wet areas). (Dwangs to Cedar areas @ 480mm crs)
7 - Bottom Plate fixings: Lumberlok bottom plate fixing anchors as per manufacturers spec's @ 900mm crs on all external walls and within 150mm of each end of the plate. 75mmx4mm dia shot fired fasteners @ 600mm crs and within 150mm of each end of the bottom plate to interior load bearing walls. DPC between bottom plate & floor slab (Refer to Mi Tek spec's attached for specific bottom plate fixing details required for bracing lintels)
8 - Studs 90x45 @ 600crs SG8, Dwangs @ 800crs. (exterior walls) unless otherwise stated
9 - Studs 90x45 @ 600crs SG8, Dwangs @ 800crs. 2 min. (interior loadbearing & non-loadbearing walls) unless otherwise stated

PROTECTION OF FIXINGS
Fixings shall comply with NZS 3604:2011 Section 4 Durability Tables 4.1-4.3
CONCRETE STRENGTH
All concrete to comply with NZS3604:2011 Section 4 Durability Clause 4.5.2
TIMBER GRADE
Timber members specified on these drawings are to be a minimum of SG8 strength graded as per NZS3604:2011



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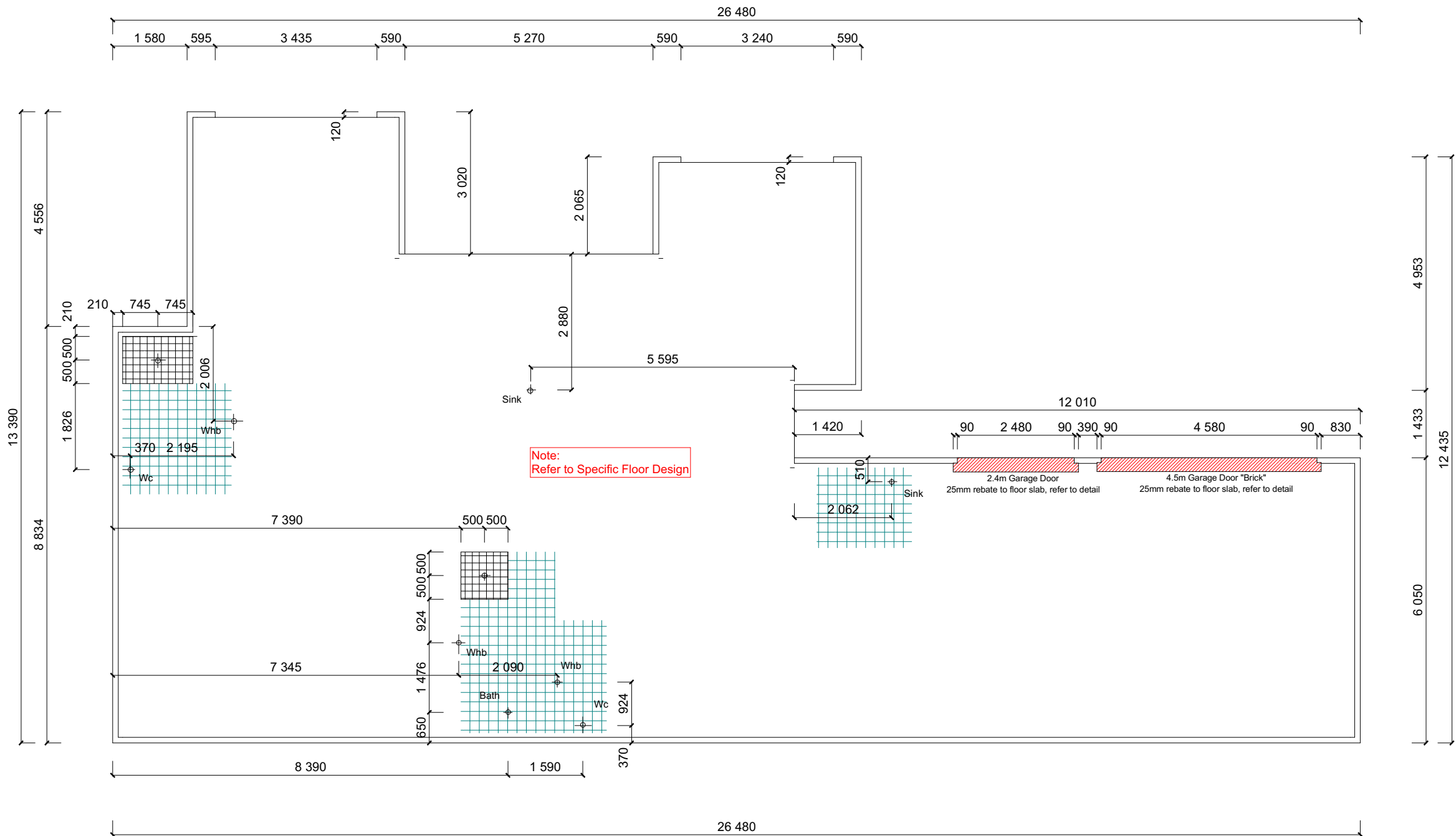
Project: Grant Property Group Ltd
Proposed Dwelling At:
Lot 870
75 Whitehorn Drive , Lincoln

Cross Section
Consent plans

Drawn:
Jeremy Harrison
LBP # 105491
Scale:
1:50

Job Number:
2484
Date:
10/03/2025

SHEET:
4
OF:
13



GENERAL FOUNDATION NOTES

- 1) All dimensions over foundation face.
- 2) W/C location indicated on plan has assumed a 160mm offset from internal frame line, please consult manufacturer's documentation to confirm offset. Contractor to consult manufacturer's documentation to determine the correct location for all wastes positioned through floor slabs.
- 3) Gully trap positions indicated on ground floor plan.
- 4) Earth bar to be bonded to the reinforcing mesh
- 5) Refer to Truss design for exact location of slab thickenings

BOTTOM PLATE FIXING

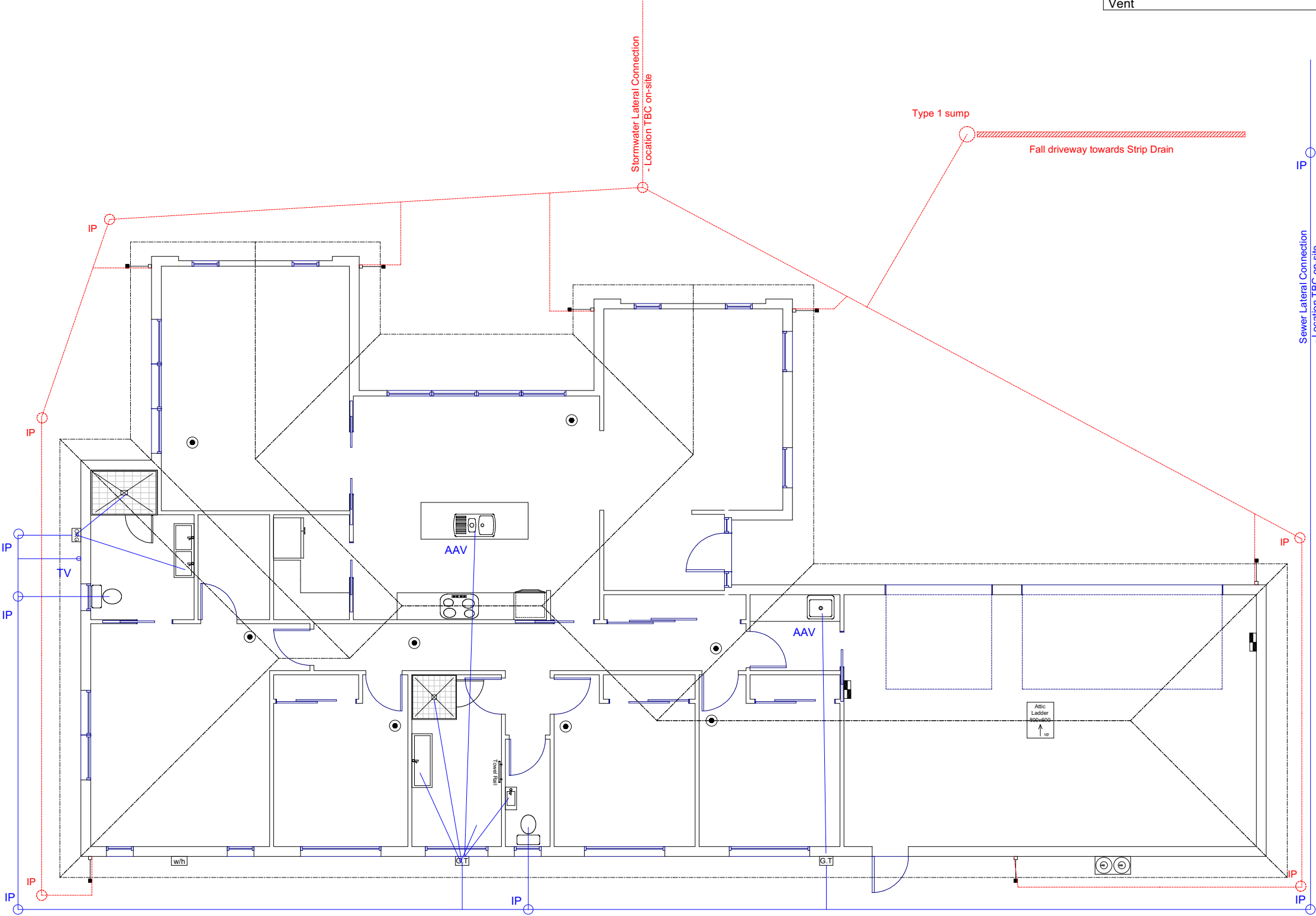
Bottom Plate fixings: Lumberlok bottom plate fixing anchors as per manufacturers spec's @ 900mm crs on all external walls and within 150mm of each end of the plate.

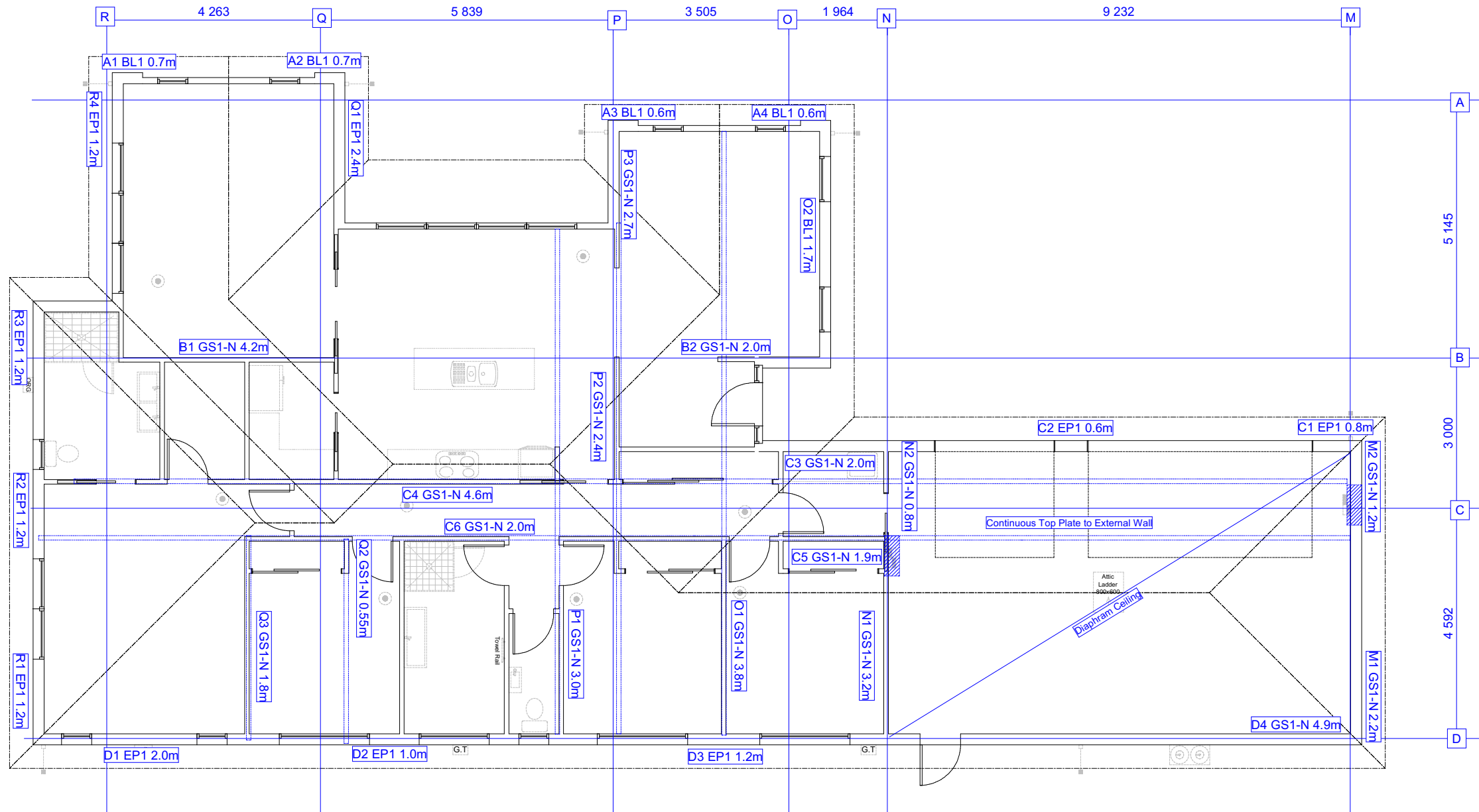
75mmx4mm dia shot fired fasteners @ 600mm crs and within 150mm of each end of the bottom plate to interior load bearing walls.

DPC between bottom plate & floor slab (Refer to Mi Tek spec's attached for specific bottom plate fixing details required for bracing lintels)

Drainage Schedule	NZBC G13	
(Drainage as per Schedule unless specified otherwise)		
Kitchen		
Sink:	Ø65mm @1:40	(3 discharge units)
Bathrooms		
Vanity:	Ø40mm @ 1:40	(1 discharge units per basin)
Shower:	Ø40mm @1:40	(2 discharge units)
Bath:	Ø40mm @1:40	(4 discharge units)
WC:	Ø100mm @1:40	(4 discharge units)
Laundry		
Sink:	Ø65mm @1:40 min	(5 discharge units)
Main Foulwater Drain	Ø100mm @1:60	
Stormwater Drain	Ø100mm @1:60 (1:120min)	
Terminal Vent	Ø80mm	
Vent	Ø50mm	

LEGEND.	
Sewer Pipe	_____
S/W Pipe	-----
Down Pipe	DP
Gully Trap	GT
Terminal Vent	TV
Vent	V
Inspection Point	IP
Air Admittance Valve	AAV





GENERAL BRACING NOTES

Bracing plan to be read in conjunction with supplementary bracing calculations

Refer to the supporting documents in the specification for purlin/batten fixing, truss fixing, stud to top plate fixing & lintel fixing schedules.

To be read in conjunction with minimal length bracing detail TAJ002AWA

BRACING SYSTEM

Wall bracing designed in accordance with NZS 3604:2011 & GIB Ezybrace system

Designed to:
Wind:
Earthquake:

High 2

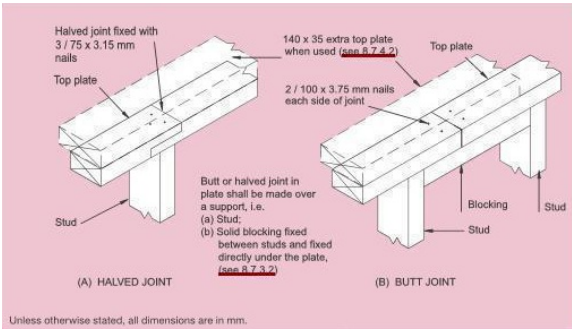


Figure 8.14 - Connecting top plates - Walls not containing bracing (see 8.7.3.2)

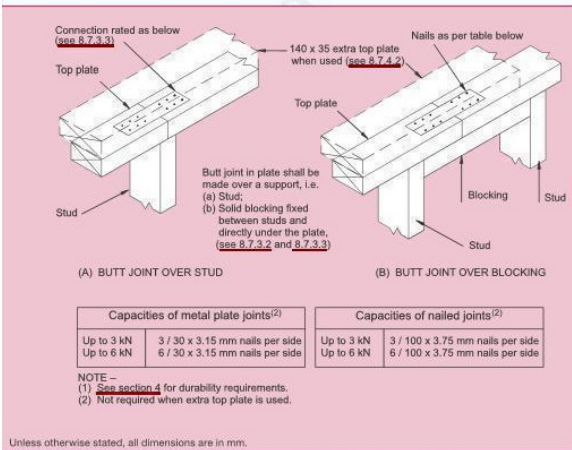


Figure 8.15 - Connecting top plates in line - Walls containing bracing (see 8.7.3.3)

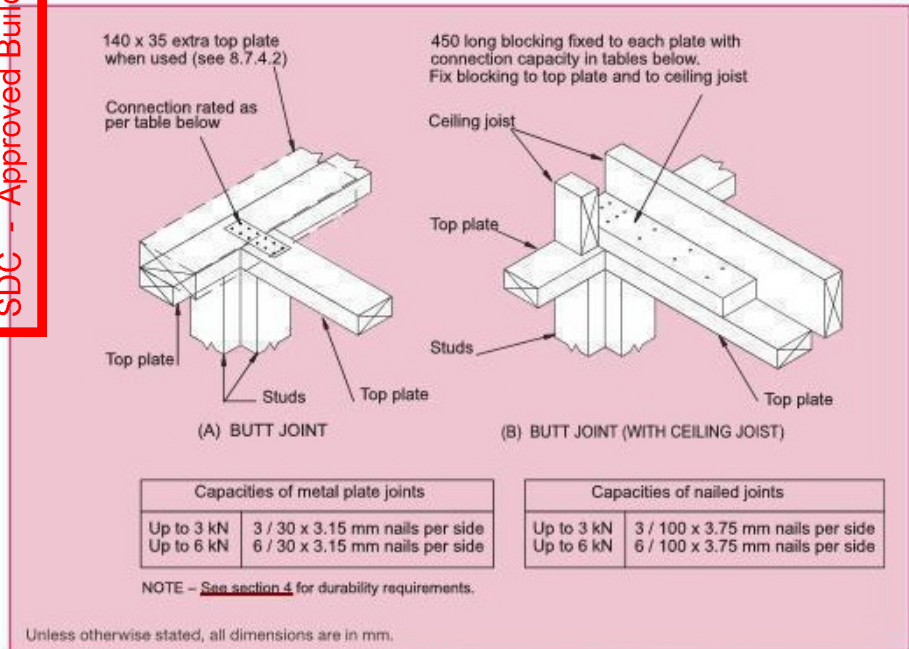


Figure 8.16 - Connecting top plates to external walls at right angles - Walls containing bracing (see 8.7.3.4)

LUMBERLOK® EASY-FIX

A SIMPLE ON-SITE GUIDE FOR 3kN, 6kN & 12kN LOADS AS SPECIFIED IN NZS 3604:2011

FIXING LOAD	CONNECTION TYPE			
	Top Plate Joint over Stud	Top Plate Joint	Hip Rafter & Ridge Board Joint	Ceiling Joist to Runner
3kN				
6kN				
12kN				

LUMBERLOK® EASY-FIX

TOP PLATE JOINTING

AS PER CLAUSE 8.7.3 NZS 3604:2011

Top Plates at Right Angles

Connection capacity: LUMBERLOK Connector

Top Plates in Line

Connection capacity: LUMBERLOK Connector

3kN / 6kN

6kN / 12kN

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Project: Grant Property Group Ltd
Proposed Dwelling At:
Lot 870
75 Whitehorn Drive, Lincoln

Bracing Plan

Consent plans

Drawn: Jeremy Harrison
LBP #105491

Scale: 1:100

Job Number: 2484

Date: 10/04/2025

SHEET: 7
OF: 13

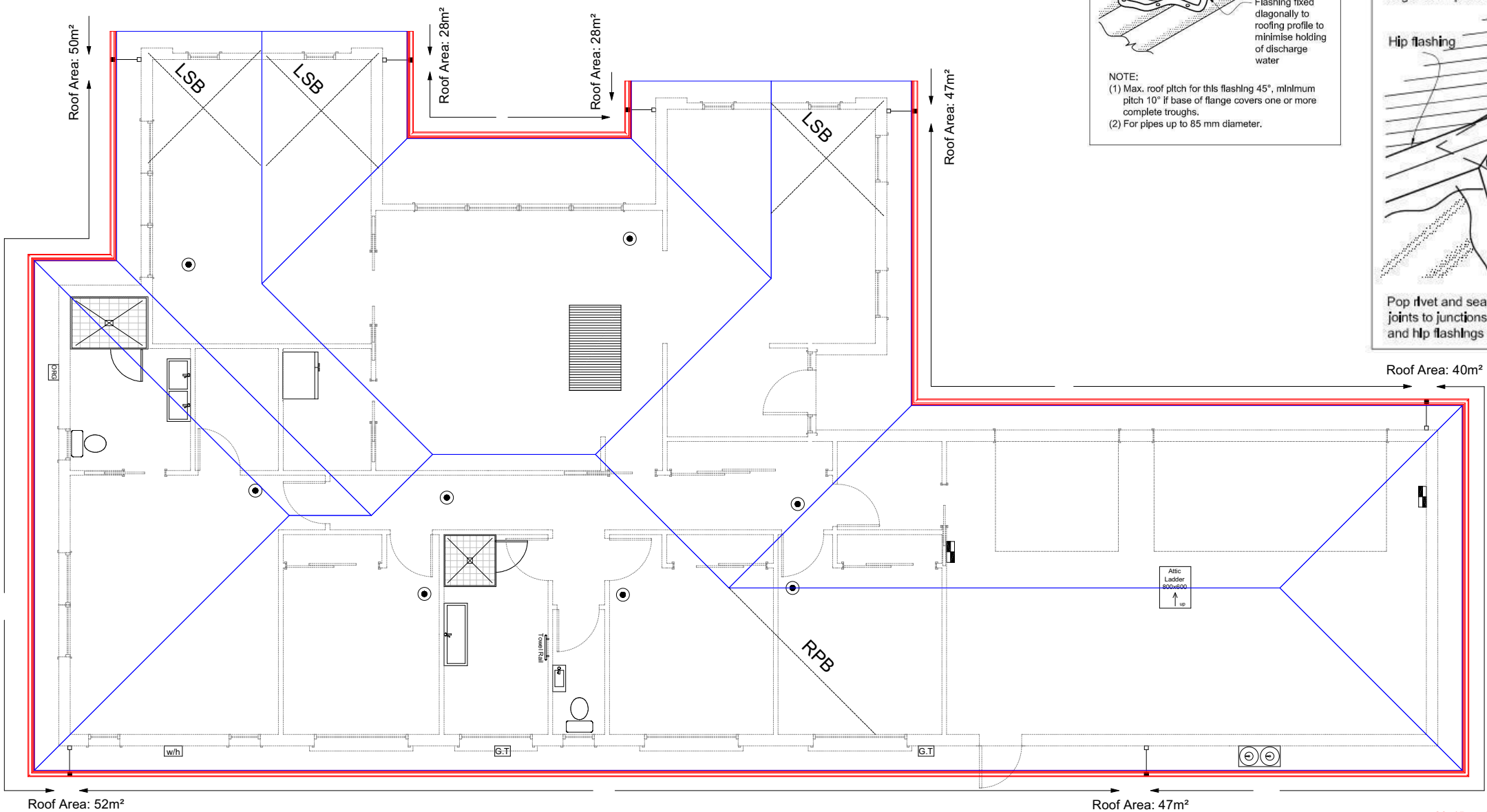


Figure 53: Flashing for small pipes
Paragraphs 8.3.10, 8.4.17, 9.6.8.5 and 9.6.9.6

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

Figure 43: Ridge to hip flashings
Paragraphs 8.4.11 and 8.4.12

NOTE: Flashing cover varies according to wind zone - refer Table 7.
For other ridge to hip flashings refer to New Zealand Metal Roofing and Wall Cladding Code of Practice.

Pop rivet and sealant joints to junctions of ridge and hip flashings

GENERAL ROOF PLAN NOTES	
Refer to the Construction Schedule (Page 2 & 3) in the Specification and the manufacturer's specification attached for the gutter and down pipe rainfall catchment area calculations.	
RPB - Roof Plane Bracing as per NZS:3604 (Figure: 10.22)	
LSB - Lumberlok Strip bracing as per Lumberlok Roof Bracing Specification	
ROOF CLADDING	
Roof -	25 ° Corrugated Colorsteel Profile on Thermakraft 215 roof underlay
TRUSS FIXINGS	
Refer to the Truss design for truss fixings	
PURLINS OR BATTENS	
Purlins: 70x45 SG8 H1.2 @ 900crs, fixings 1/10g self-drilling screw, 80mm long End span of purlins to be 600 crs as per E2 Table 11	
TOP PLATE FIXING	
Use Lumberlock top plate fixing chart attached to the main specifications to determine top plate fixings	
TIMBER GRADE	
Timber members specified on these drawings are to be a minimum of strength of SG8 graded as per NZS3604:2011	
PROTECTION OF FIXINGS	
Fixings shall comply with NZS 3604:2011 Section 4 Durability Tables 4.1-4.3	

A pair of tensioned and crossed LUMBERLOK Strip Brace running continuously from ridge to top plate installed as detailed below.

5 x 30mm x 3.15 dia. nails each end

1 x 30mm x 3.15 dia. nail at crossing (after tensioning)

When purlin depth above truss chord is 50mm or less, Strip Brace can be installed over top of purlins. Fix with 1 x 30mm x 3.15 dia. nail at the purlin closest to the rafter/truss crossing.

90x45mm H1.2 Outriggers @ 450mm crs

Canilever length max. 750mm

Dwang to support purlins

Purlin outline

Fly rafter min. 90x45

Top drop on gable end same depth as outrigger

Top dropped gable end truss/rafter

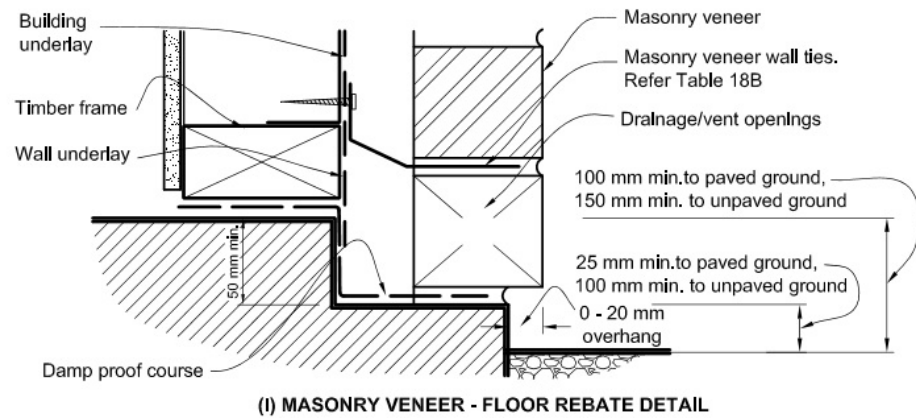
Minimum 900mm spacing

3/ 90mm nails (typical)

Standard trusses/rafters

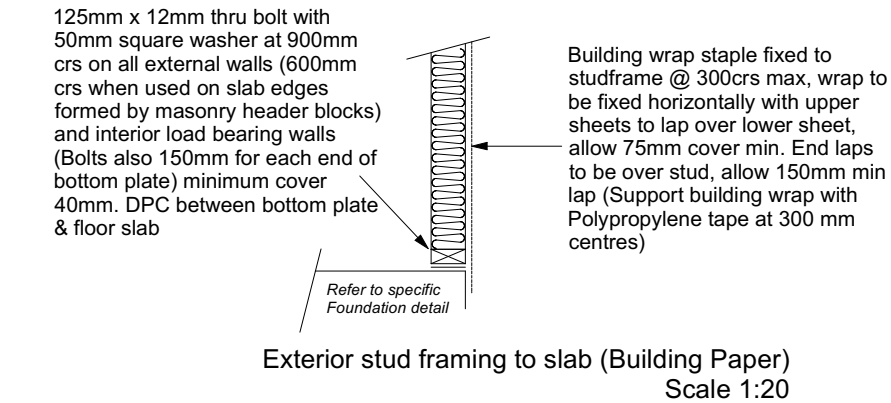
Outrigger

LUMBERLOK CT200 fully nailed with 30 x 3.15mm or Wire Dog fixing plus 2/ 90mm skew driven nails



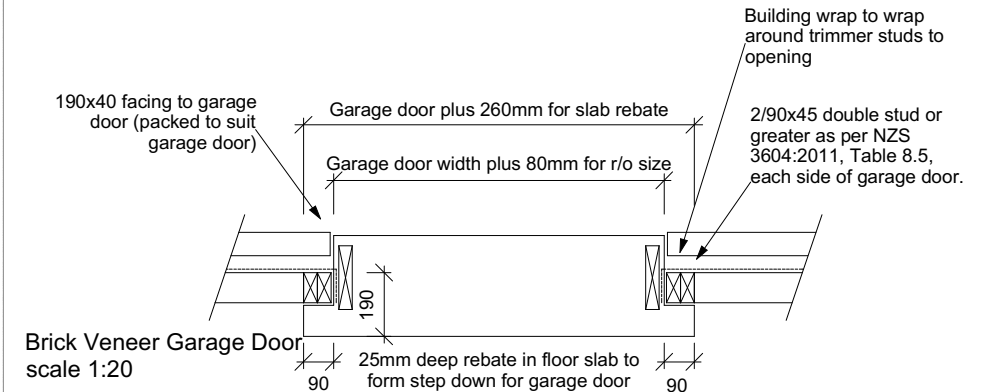
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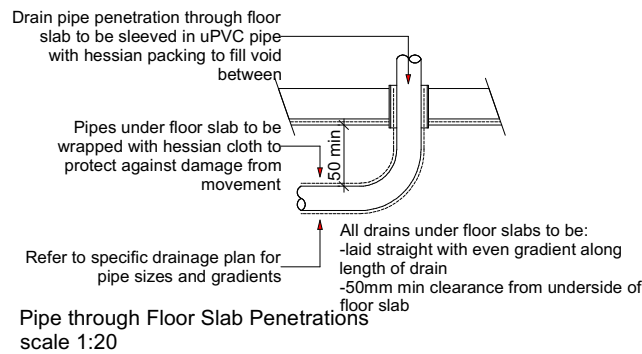
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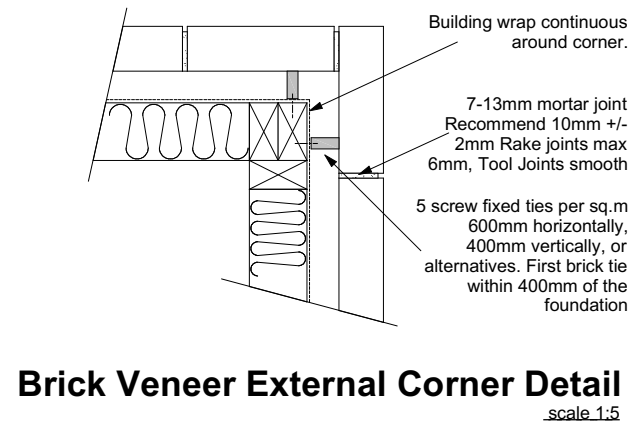
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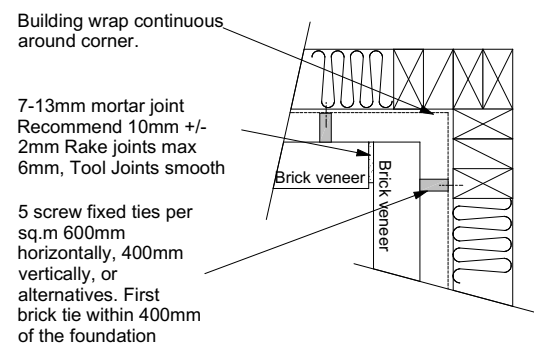
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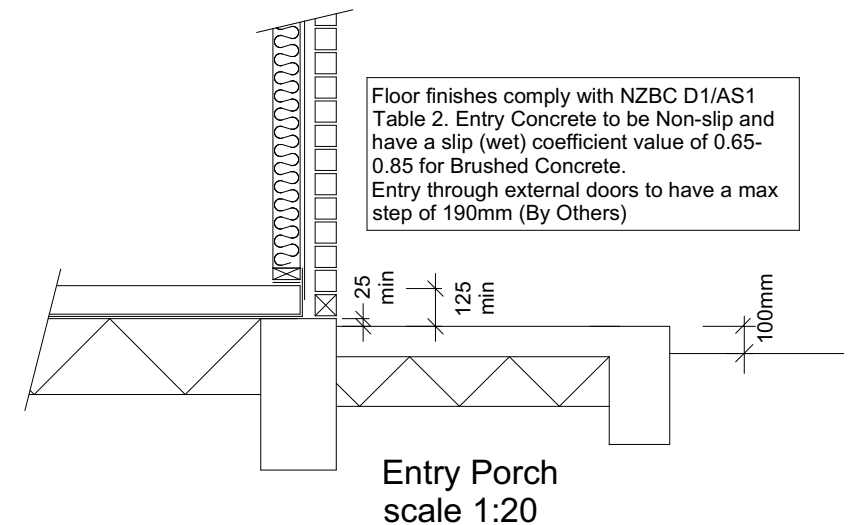


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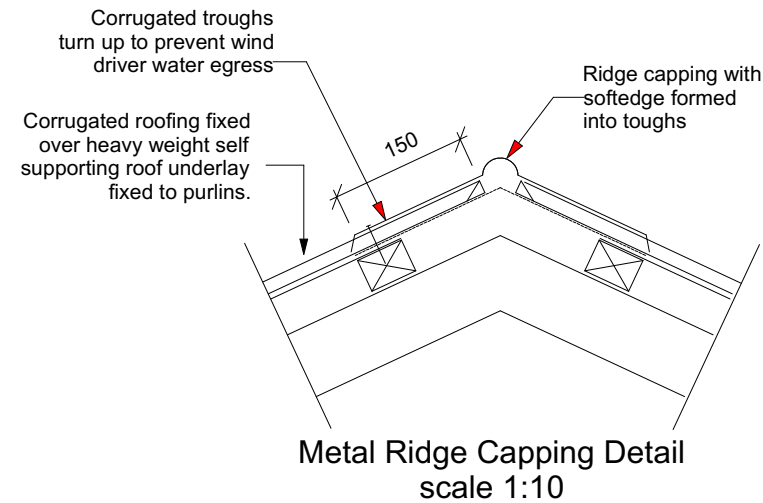


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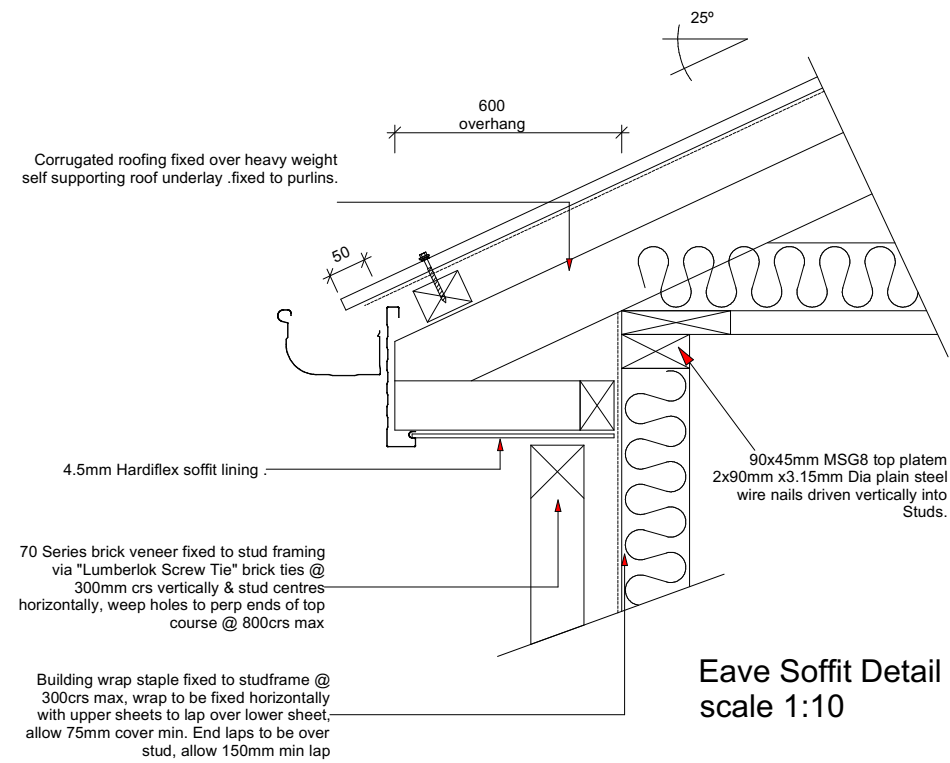


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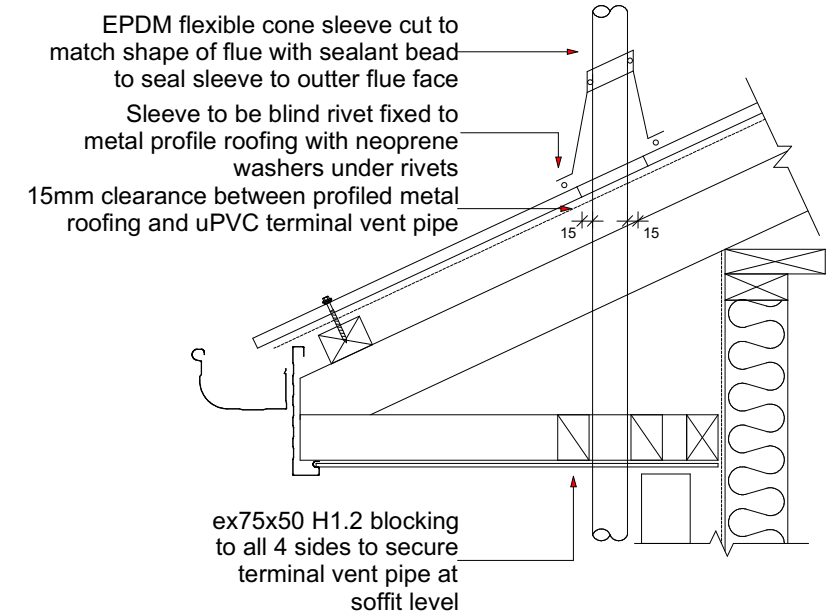
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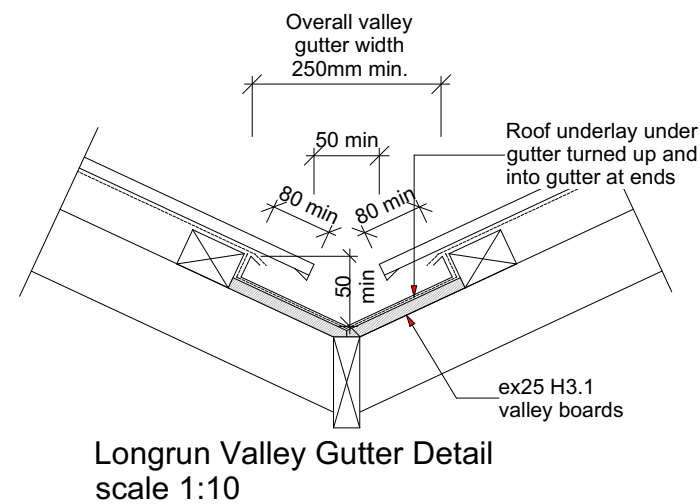
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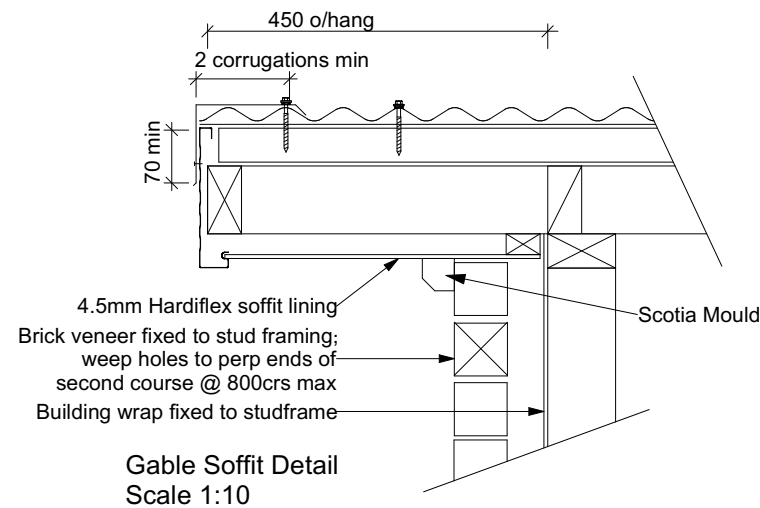
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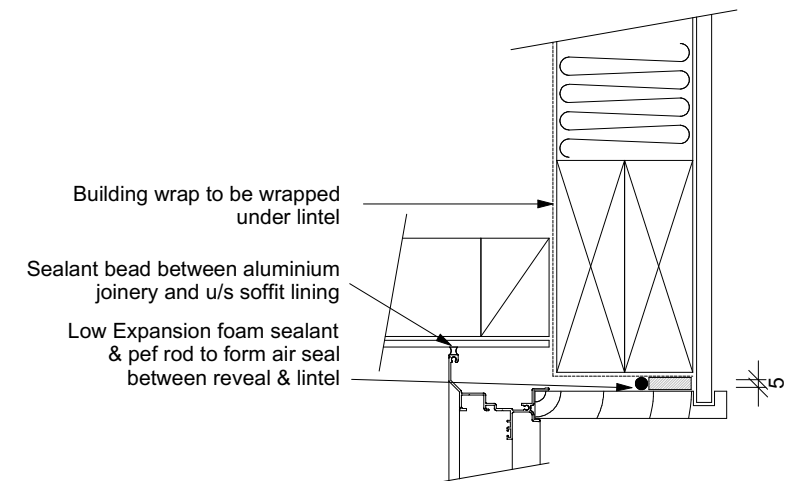
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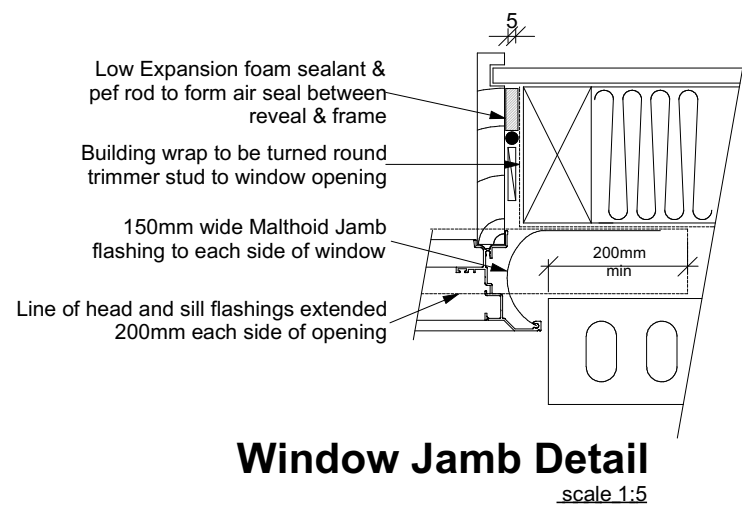
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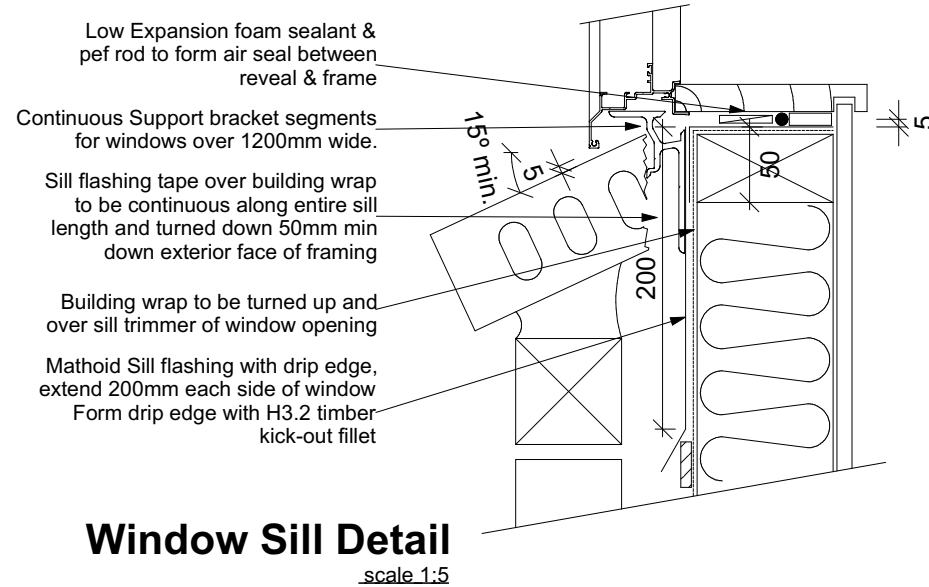
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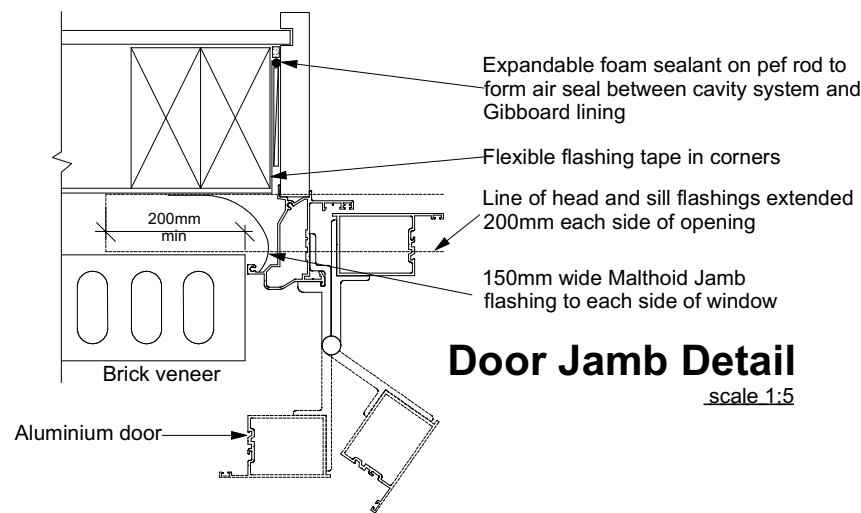
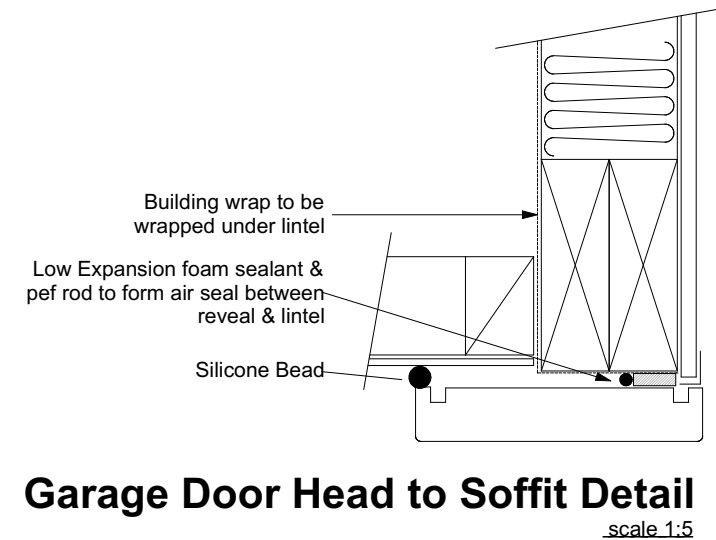
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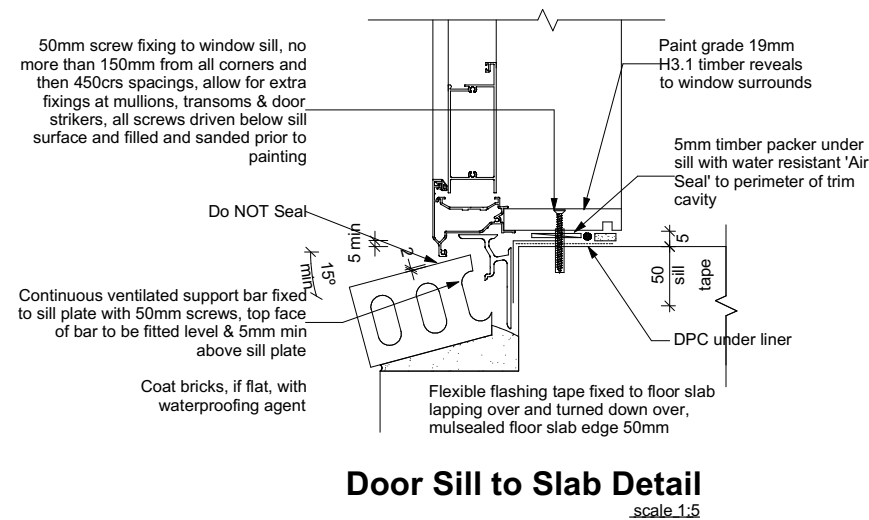
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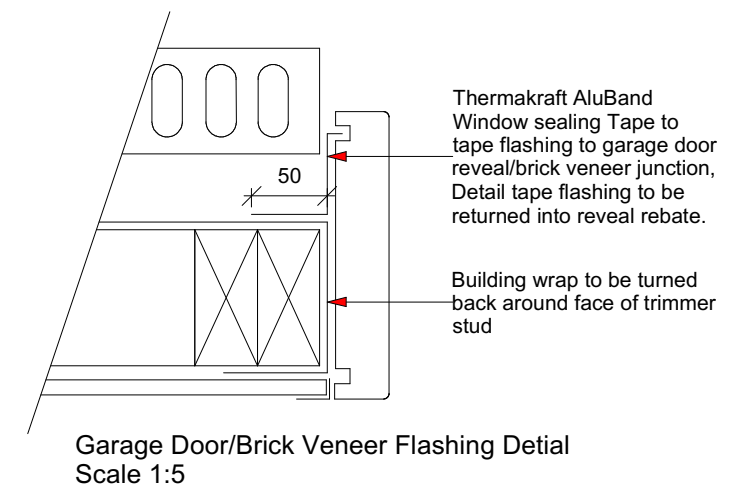
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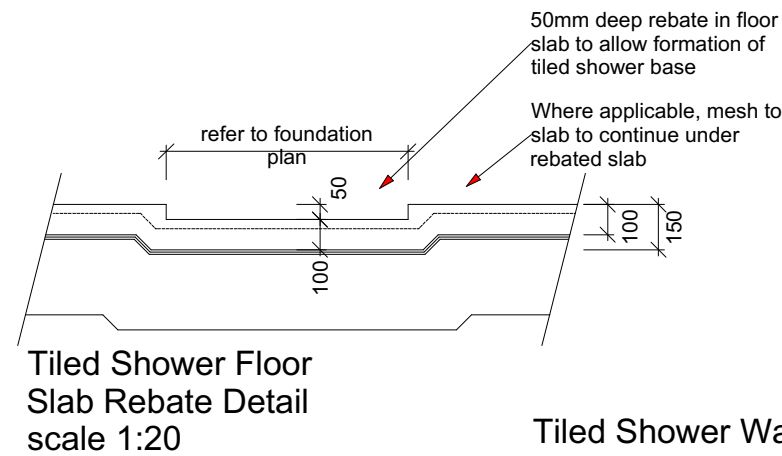
D16



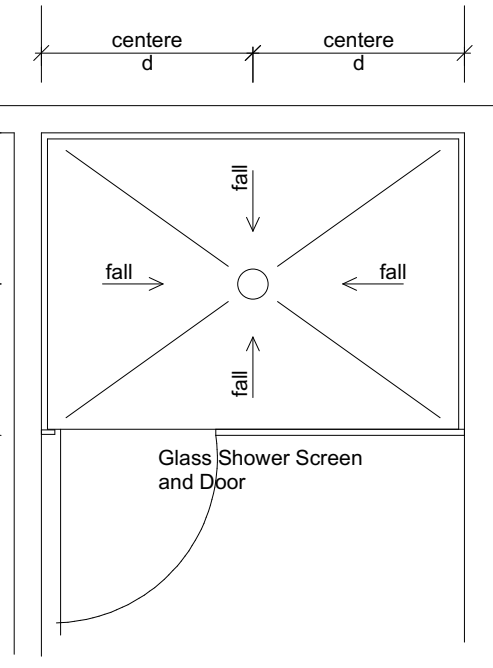
D17



D18



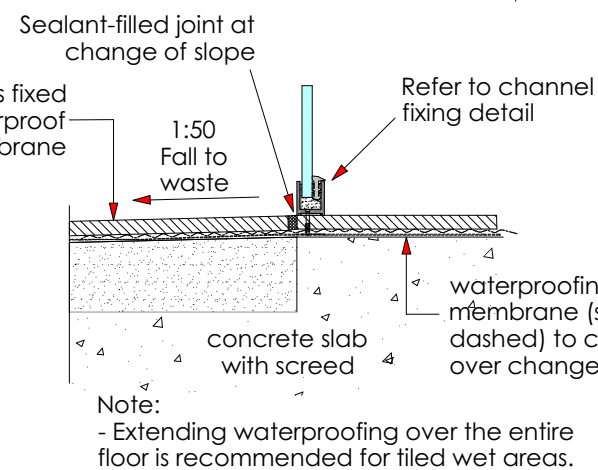
Tiled Shower Waterproof Sealing Detail scale 1:20



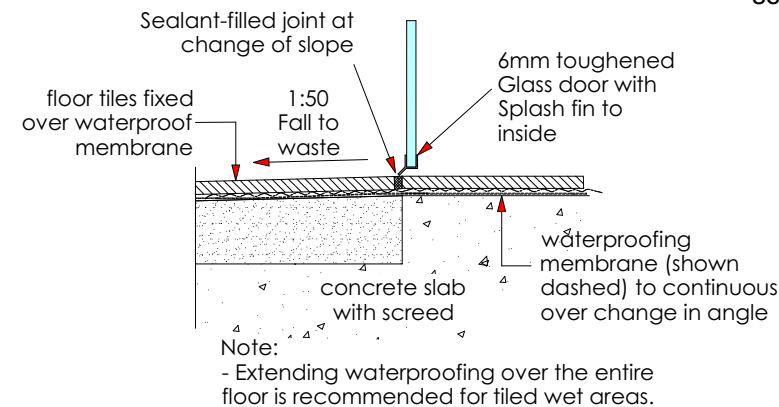
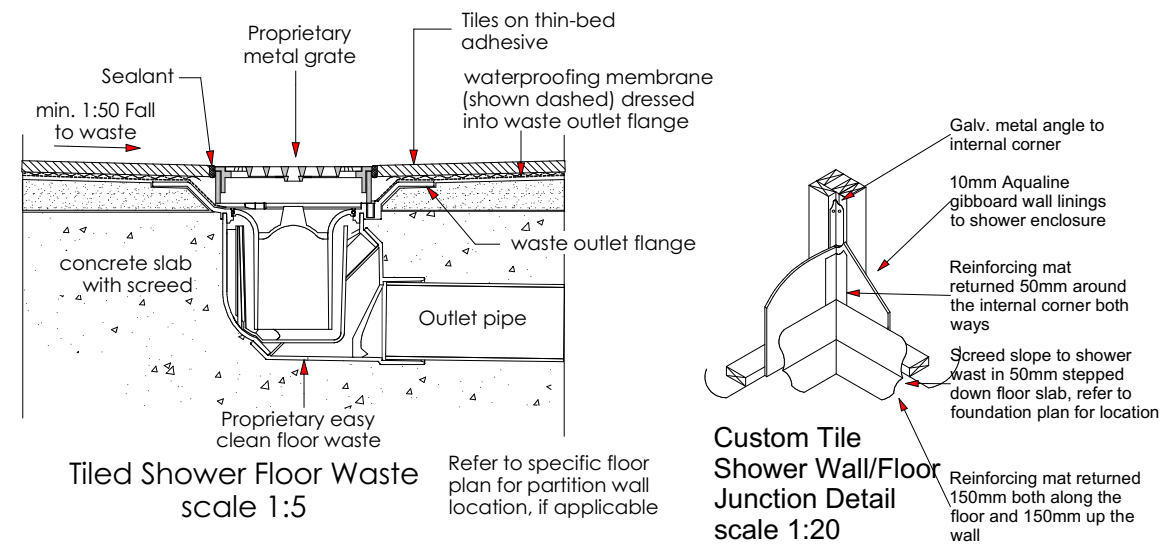
50mm deep rebate in floor slab for tiled shower to allow for screeded fall to specific tile shower waste

Tiles fixed to Aqua Line Gib sheet lining on stud frame wall

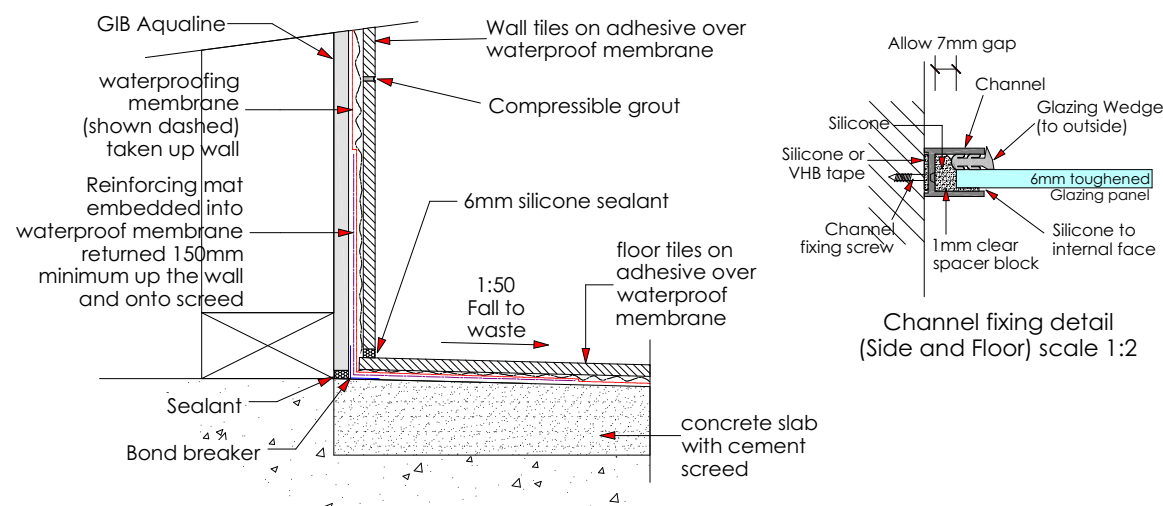
Water proof membrane to the Entire Bathroom Floor As per E3/ AS1



Level-access shower Entry - Glass screen to floor detail scale 1:5



Level-access shower Entry - falls formed in the floor scale 1:5



A - Tiled Shower Wall to floor junction detail scale 1:5

C: BATH LINING JUNCTION

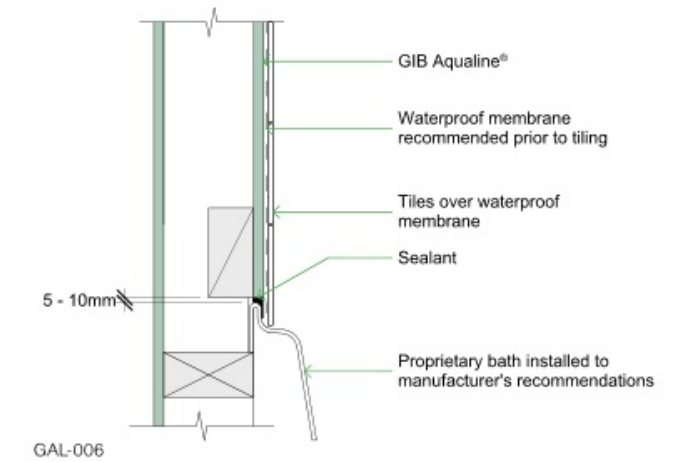
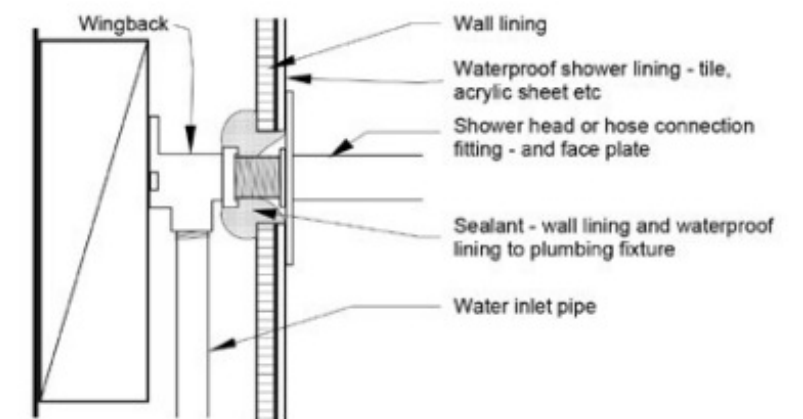
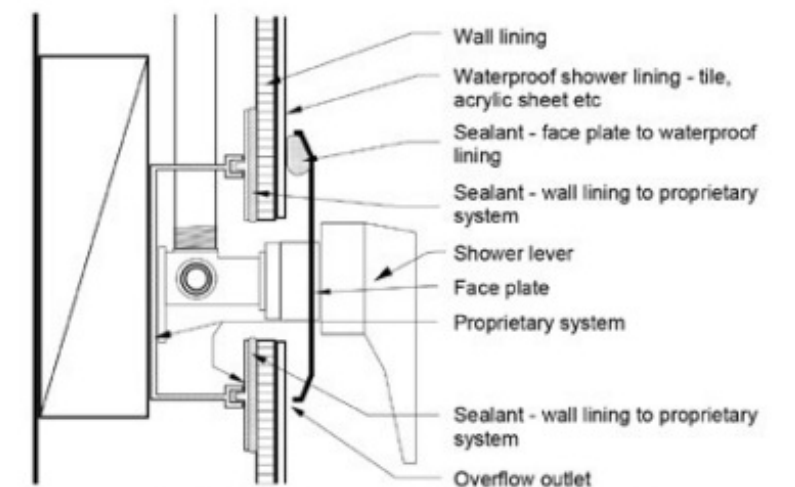


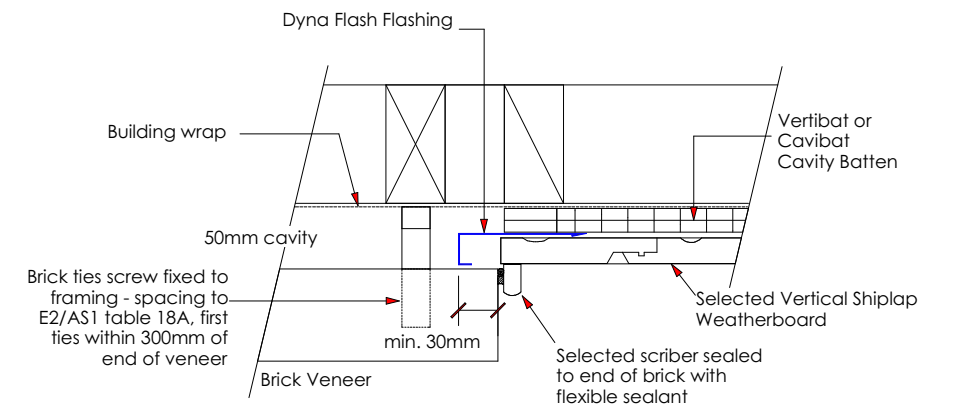
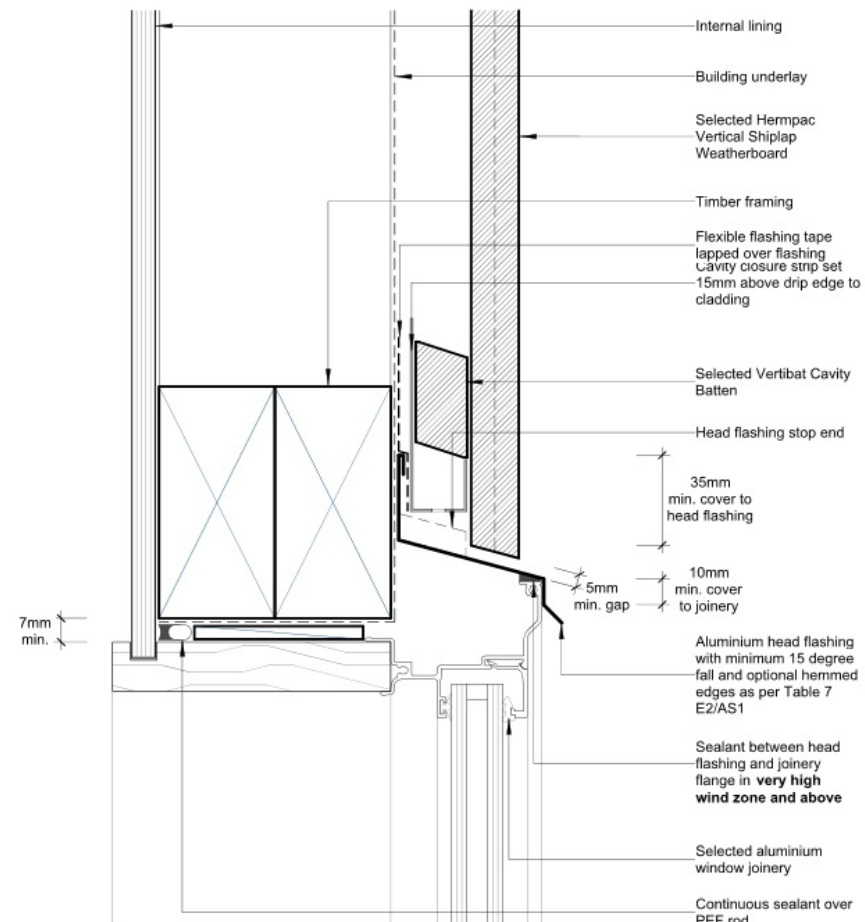
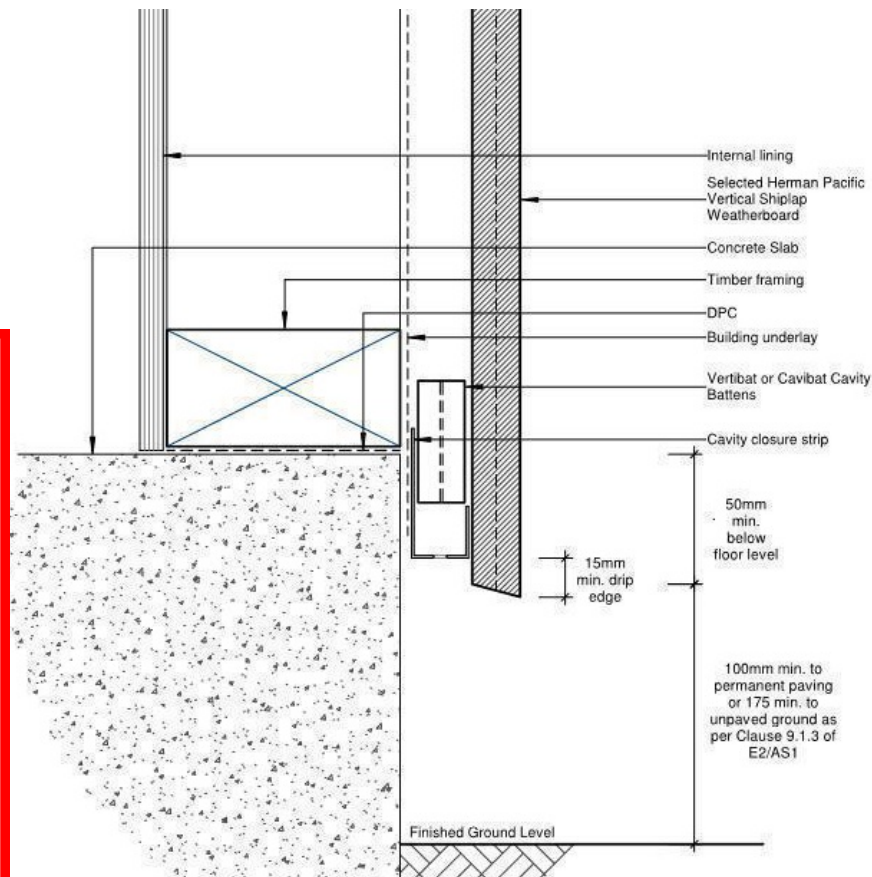
Figure 6: Examples for waterproofing through shower walls Paragraph 3.3.1



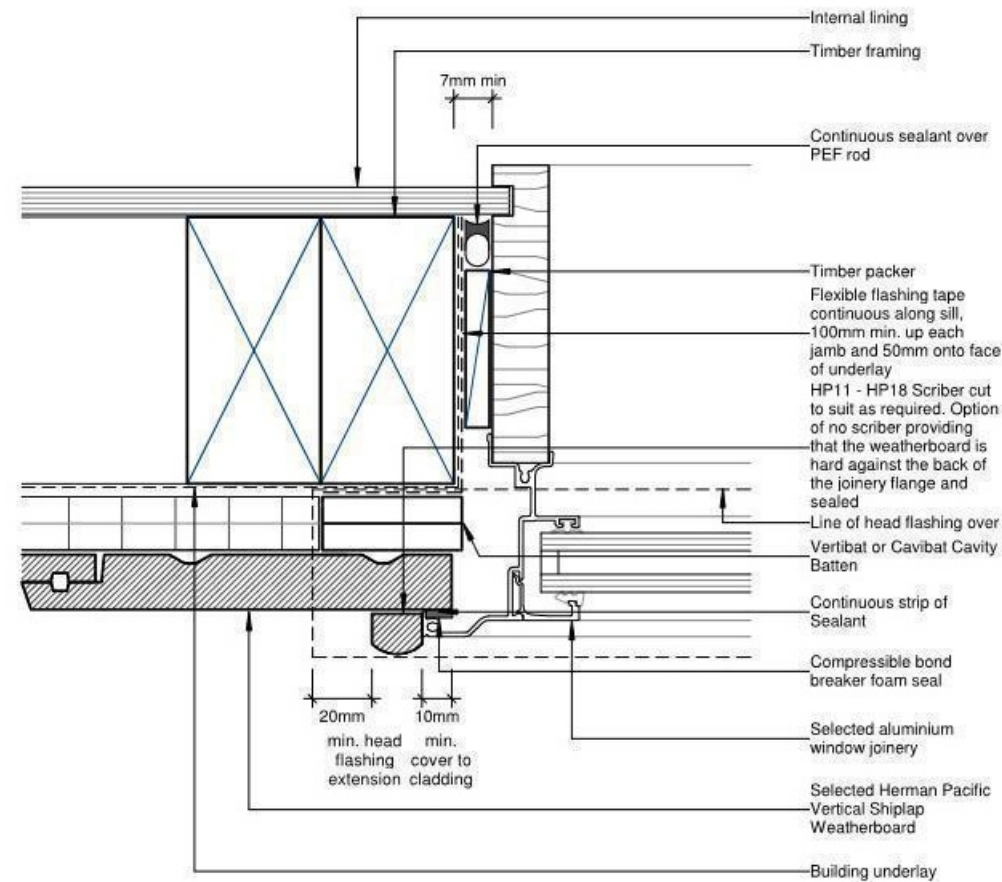
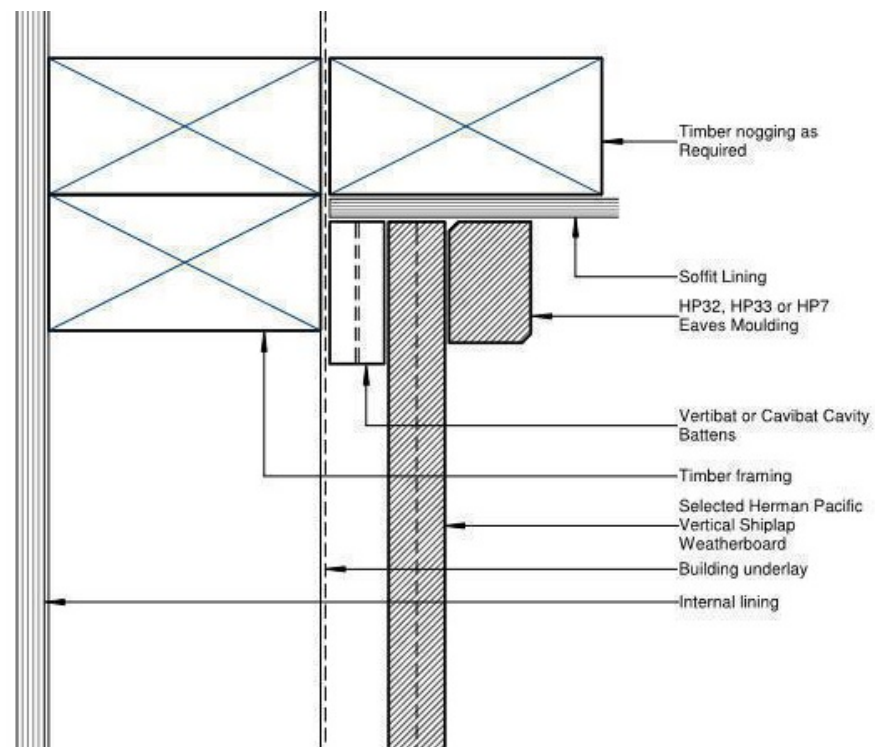
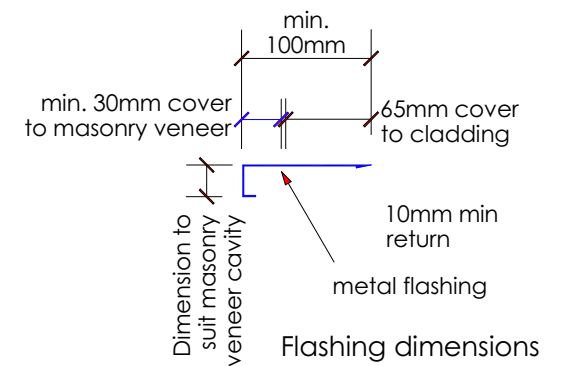
(a) Shower head or flexible hose connection using sealant

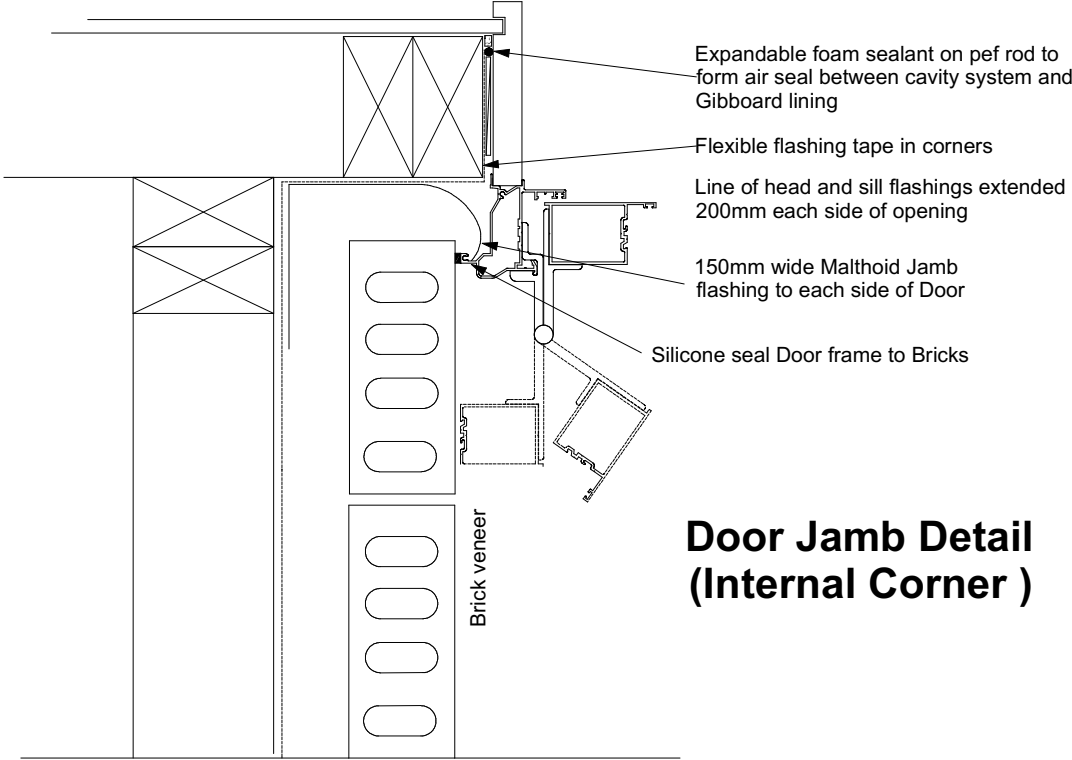
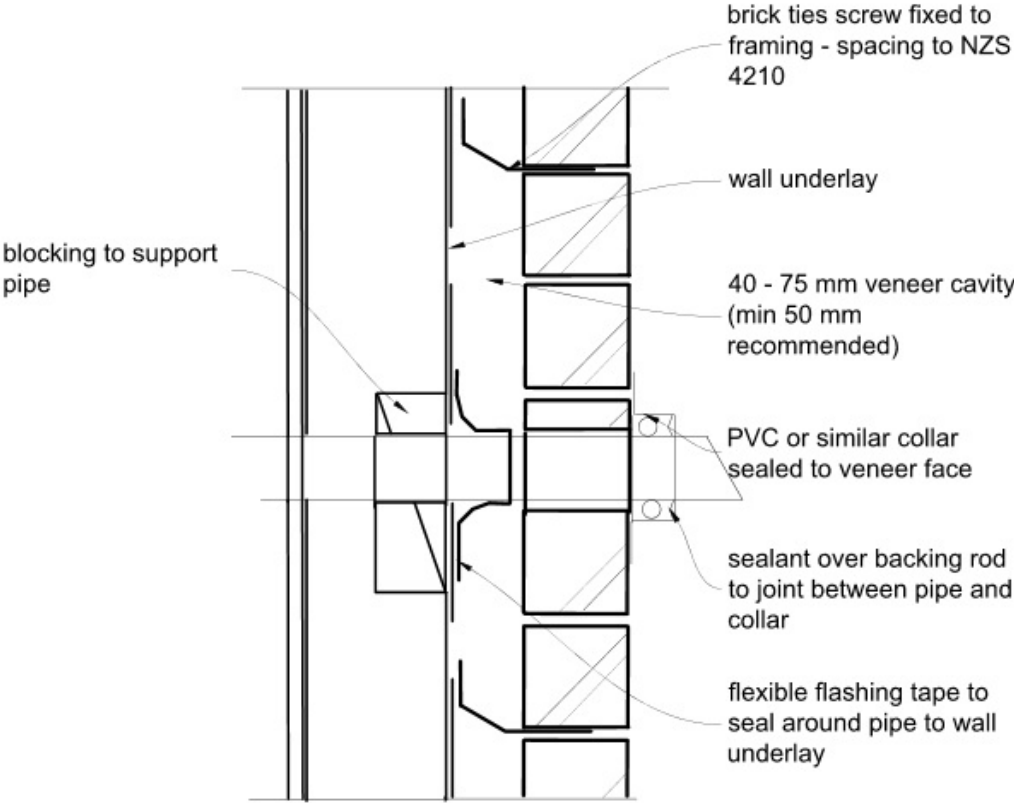


(b) Shower mixer using proprietary system (example only)

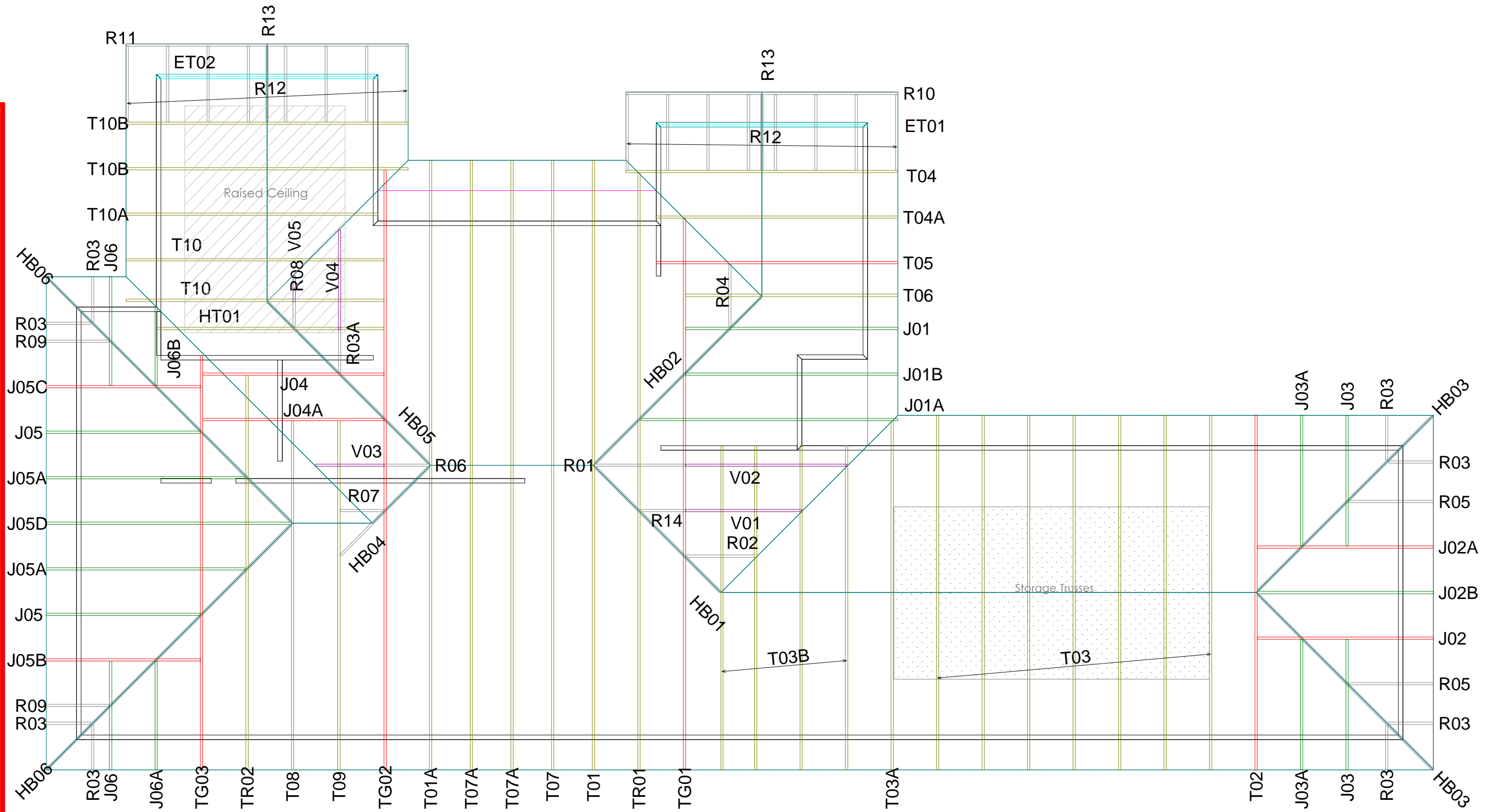


Weatherboard/Brick "vertical junction" detail below window
Scale 1:5





**Door Jamb Detail
(Internal Corner)**



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WESTLAKE

FRAME TRUSS STEEL

(03) 348 3401
sales@westlake.co.nz
www.westlake.co.nz

17 Frank Coxon Road,
Belfast,
Christchurch

Site Address :
Grant Property Group Ltd
Lot 870
75 Whitehorn Drive
Lincoln

Sheet Title :
For Building Consent
Buildable Truss Layout

Date : 19 Feb,2025	Drawn : Michael Woodrow
Scale : 1: 150	System : MiTek 20/20

Job Details:	
Roof Pitch	: 25.00deg
Roof Material	: Galv Iron .5mm
Ceiling Material	: Standard Plaster Board 13mm
Wind Zone	: High
Roof Snow Load	: 0.441kPa
Truss Centres	: 900mm
Floor Live Load	: 0.250kPa
Wind Speed	: 44m/s
Overhang	: 600mm



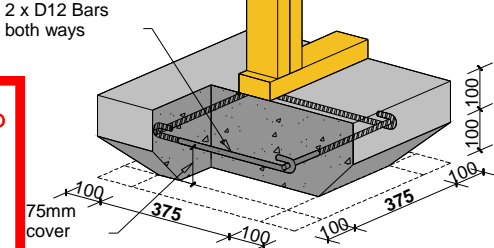
Job Title :
250085
Sheet :
1
Revision Number :

SDC - Approved Building Consent Document - BC250384 - Pg 17 of 28 - 10/04/2025 - xiangs

SLAB THICKENING & STUD REQUIREMENTS

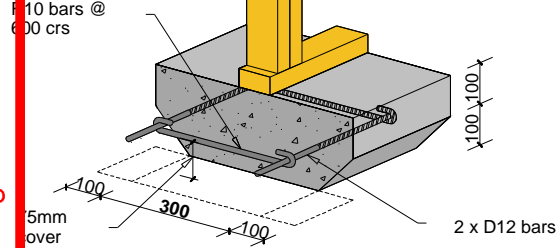
TYPE FP1
375mm² Pad

2 3



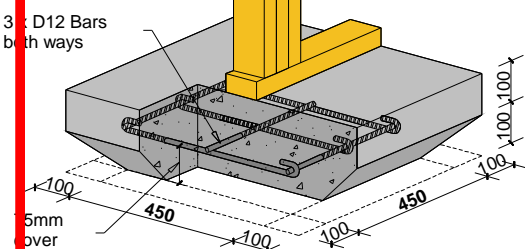
TYPE FS1
300mm Strip

2 3



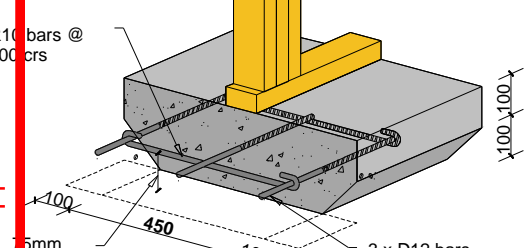
TYPE FP2
450mm² Pad

3 4



TYPE FS2
450mm Strip

3 4



Notes:
- The numbers found in the hatched areas are the numbers of studs required below each truss
- Standard 100mm reinforcing concrete slab, as per NZS3604:2011

Refer to:
MiTek Internal Load Bearing on Concrete Floor Slabs 10/2011
MiTek Structural Fixings **On-Site Guide** for Building Code Compliance



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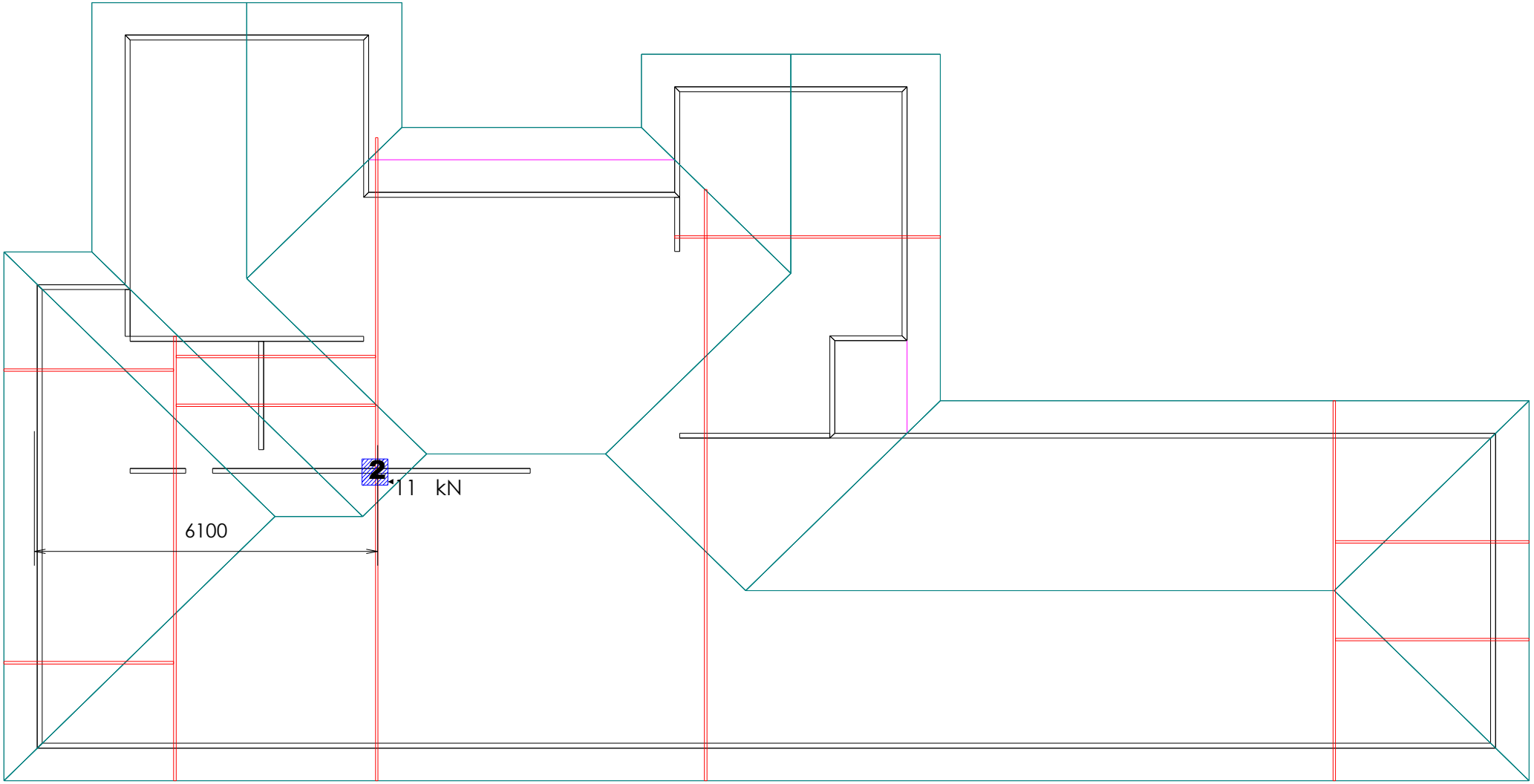
Site Address :
Grant Property Group Ltd
Lot 870
75 Whitehorn Drive
Lincoln

Sheet Title :
**For Building Consent
Slab Thickening**
Date : 19 Feb,2025
Scale : 1: 150
Drawn : Michael Woodrow
System : MiTek 20/20

Job Details:
Roof Pitch : 25.00deg
Roof Material : Galv Iron .5mm
Ceiling Material : Standard Plaster Board 13mm
Wind Zone : High
Roof Snow Load : 0.441kPa
Truss Centres : 900mm
Roof Live Load : 0.250kPa
Floor Live Load :
Wind Speed : 44m/s
Overhang : 600mm



Job Title :
250085
Sheet :
2
Revision Number :



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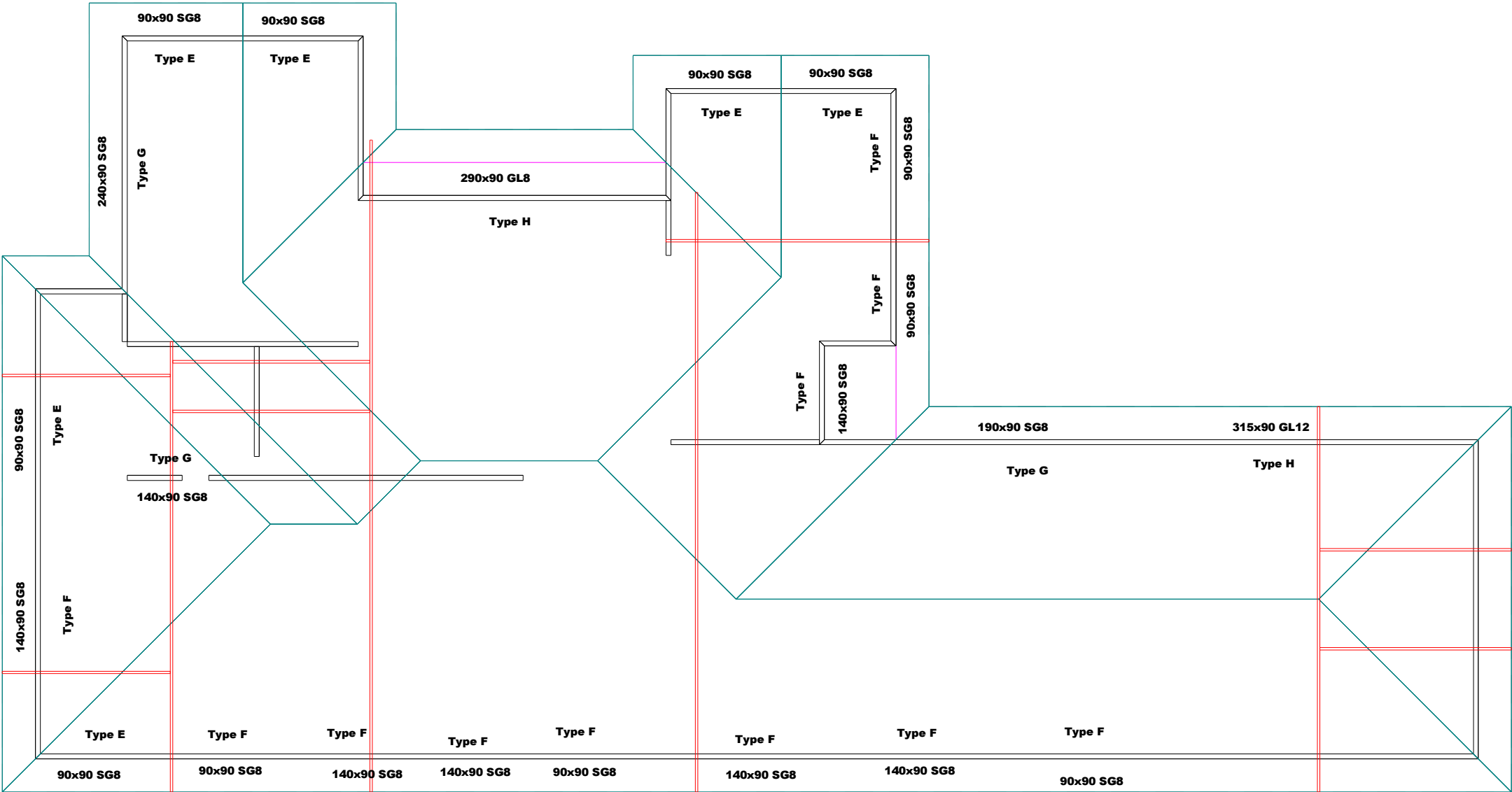
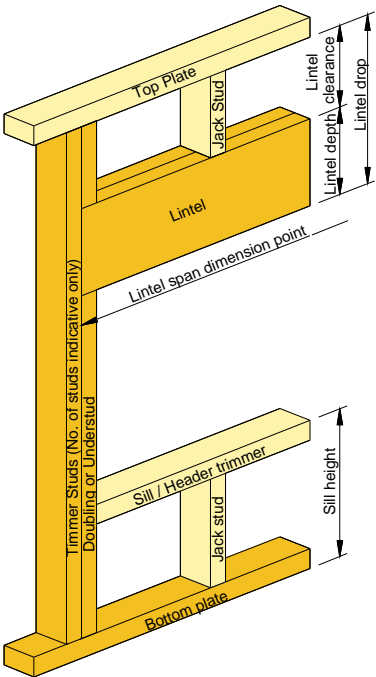
LUMBERLOK®
LINTEL FIXING OPTIONS

TYPE E
1.4 kN

TYPE F
4.0 kN

TYPE G
7.5 kN

TYPE H
13.5 kN



Timber Lintels Designed Using Ganglam Chart 2008.

Refer to:
LUMBERLOK Lintel Fixing Schedule 10/2011
MiTek Structural Fixings **On-Site Guide** for Building Code Compliance
(Alternative to Table 8.14 & Figure 8.12 NZS 3604:2011)

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Grant Property Group Ltd
Lot 870
75 Whitehorn Drive
Lincoln

Sheet Title :
**For Building Consent
Lintel Fixing**
Date : 19 Feb,2025
Scale : 1: 150
Drawn : Michael Woodrow
System : MiTek 20/20

Job Details:
Roof Pitch : 25.00deg
Roof Material : Galv Iron .5mm
Ceiling Material : Standard Plaster Board 13mm
Wind Zone : High
Roof Snow Load : 0.441kPa
Truss Centres : 900mm
Roof Live Load : 0.250kPa
Floor Live Load :
Wind Speed : 44m/s
Overhang : 600mm

MiTek
MiTek

Job Title :
250085
Sheet :
3
Revision Number :

SDC - Approved Building Consent Document - BC250384 - Pg 19 of 28 - 10/04/2025 - xiangs

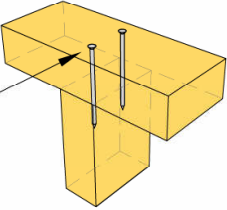
B BOWMAC[®]
STUD-LOK

STUD TO TOP PLATE FIXING OPTIONS

TYPE A - 0.7 kN

Non-Load Bearing Walls

2 x 90mm x 3.15 Ø plain
steel wire nails driven
vertically through single Top
Plate into stud



*Images are indicative only.
Timber sizes may vary.

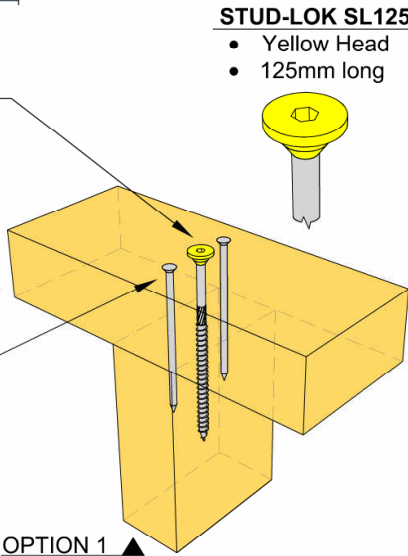
TYPE B - 4.7 kN

Load Bearing Walls

1 x STUD-LOK **SL125**
screwed vertically through
single Top Plate into stud.

Max.Top Plate
Depth = 45mm

2 x 90mm x 3.15 Ø plain
steel wire nails driven
vertically into stud.

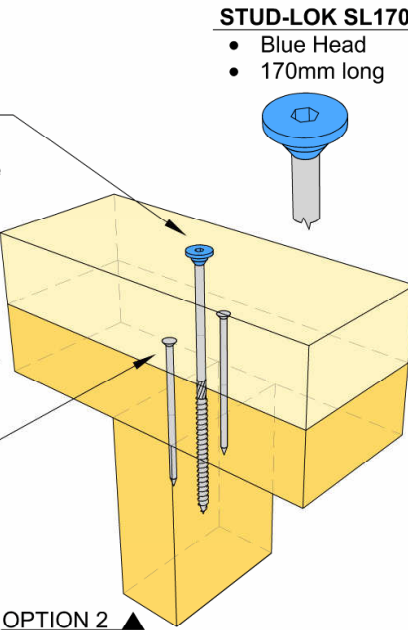


STUD-LOK SL125
• Yellow Head
• 125mm long

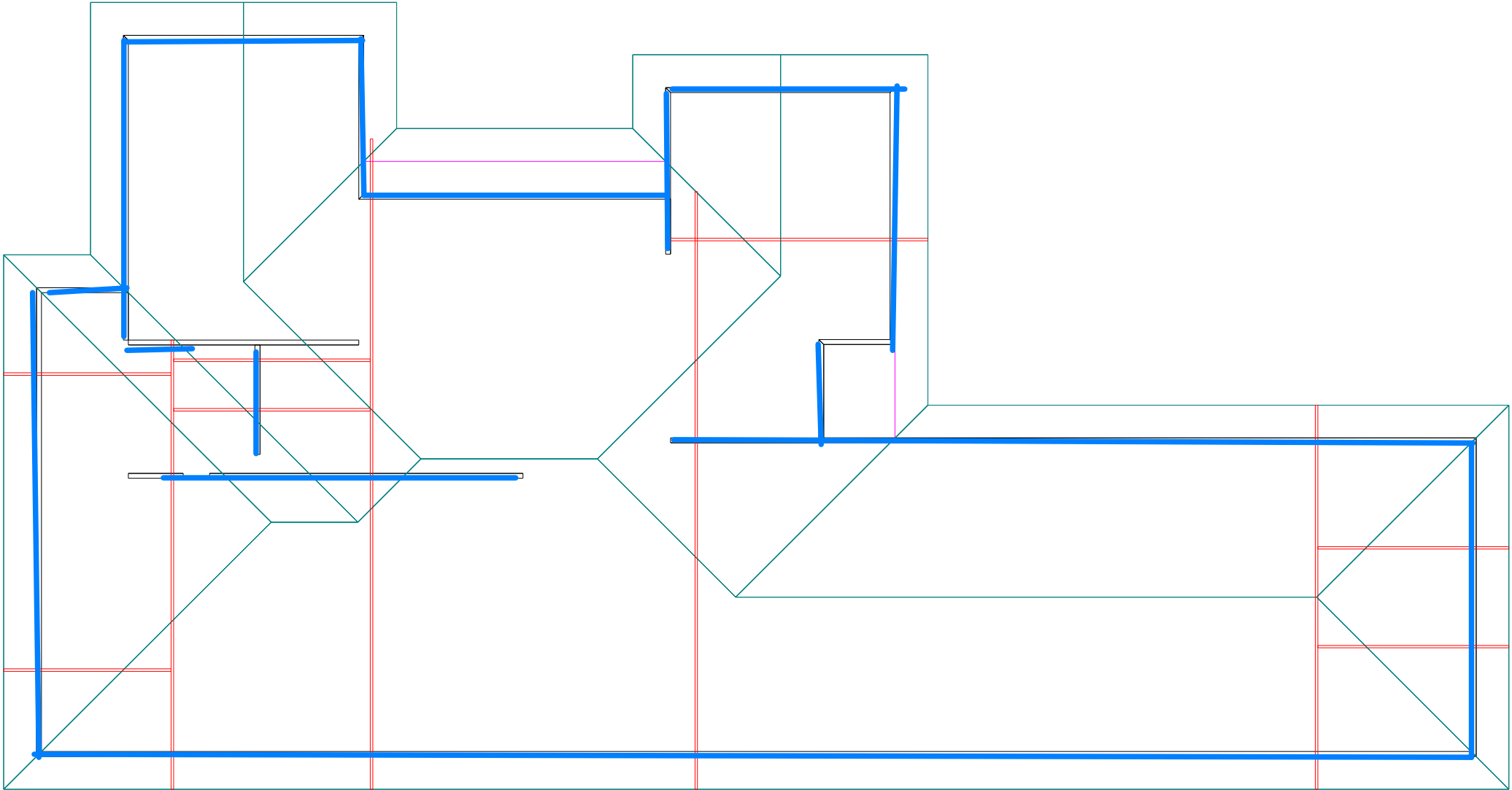
1 x STUD-LOK **SL170**
screwed vertically through
single or double Top Plate
into stud.

Max.Top Plate
Depth = 90mm

2 x 90mm x 3.15 Ø plain
steel wire nails driven
vertically into stud.



STUD-LOK SL170
• Blue Head
• 170mm long



(Alternative to NZS 3604:2011 Section 8)

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17 Frank Coxon Road,
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Christchurch

Site Address :
Grant Property Group Ltd
Lot 870
75 Whitehorn Drive
Lincoln

Sheet Title :
**For Building Consent
Stud To Top Plate Fixing**
Date : 19 Feb,2025
Scale : 1: 150
Drawn : Michael Woodrow
System : MiTek 20/20

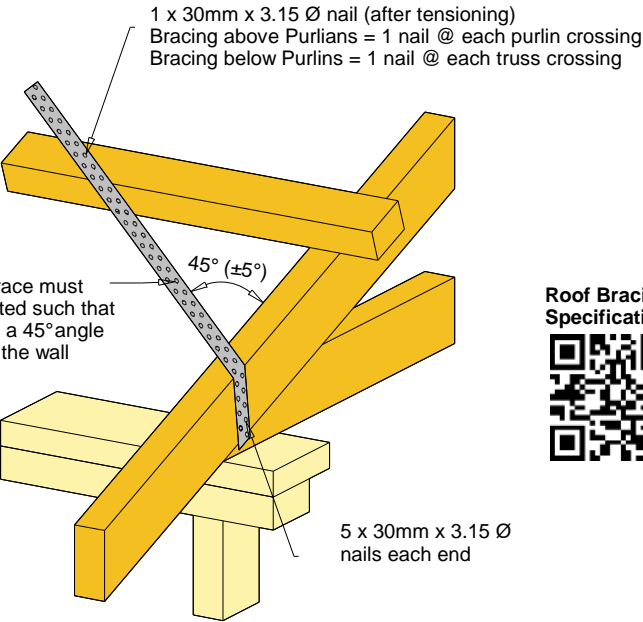
Job Details:
Roof Pitch : 25.00deg
Roof Material : Galv Iron .5mm
Ceiling Material : Standard Plaster Board 13mm
Wind Zone : High
Roof Snow Load : 0.441kPa
Truss Centres : 900mm
Roof Live Load : 0.250kPa
Floor Live Load :
Wind Speed : 44m/s
Overhang : 600mm

MiTek
MiTek[™]

Job Title :
250085
Sheet :
4
Revision Number :

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LUMBERLOK[®] ROOF BRACING



Refer to:
LUMBERLOK Roof Bracing Specifications 10/2011
MiTek Structural Fixings **On-Site Guide** for Building Code Compliance
As per NZS 3604:2011)

LUMBERLOK[®] TRUSS FIXINGS

- Pair of Wire Dogs and 2 x 90mm 3.15mm skew nails
- LUMBERLOK JH47x90 Joist Hanger
- LUMBERLOK JH47x120 Joist Hanger
- LUMBERLOK JH47x190 Joist Hanger
- LUMBERLOK JH95x165 Joist Hanger
- LUMBERLOK CT200 Ceiling Tie
- Pair of LUMBERLOK CT200 Ceiling Ties
- LUMBERLOK CT400 Cyclone Tie
- LUMBERLOK CT600 Cyclone Tie
- LUMBERLOK Multi Grip
- Pair of LUMBERLOK Multi Grips
- LUMBERLOK Nailon Plate
- LUMBERLOK N21 Diagonal Cleat
- LUMBERLOK CPC40 Cleat
- Pair of LUMBERLOK CPC40 Cleats
- LUMBERLOK TTP 16kN Truss to Top Plate set
- LUMBERLOK TTP 9kN Truss to Top Plate set

Joist Hanger
Installation



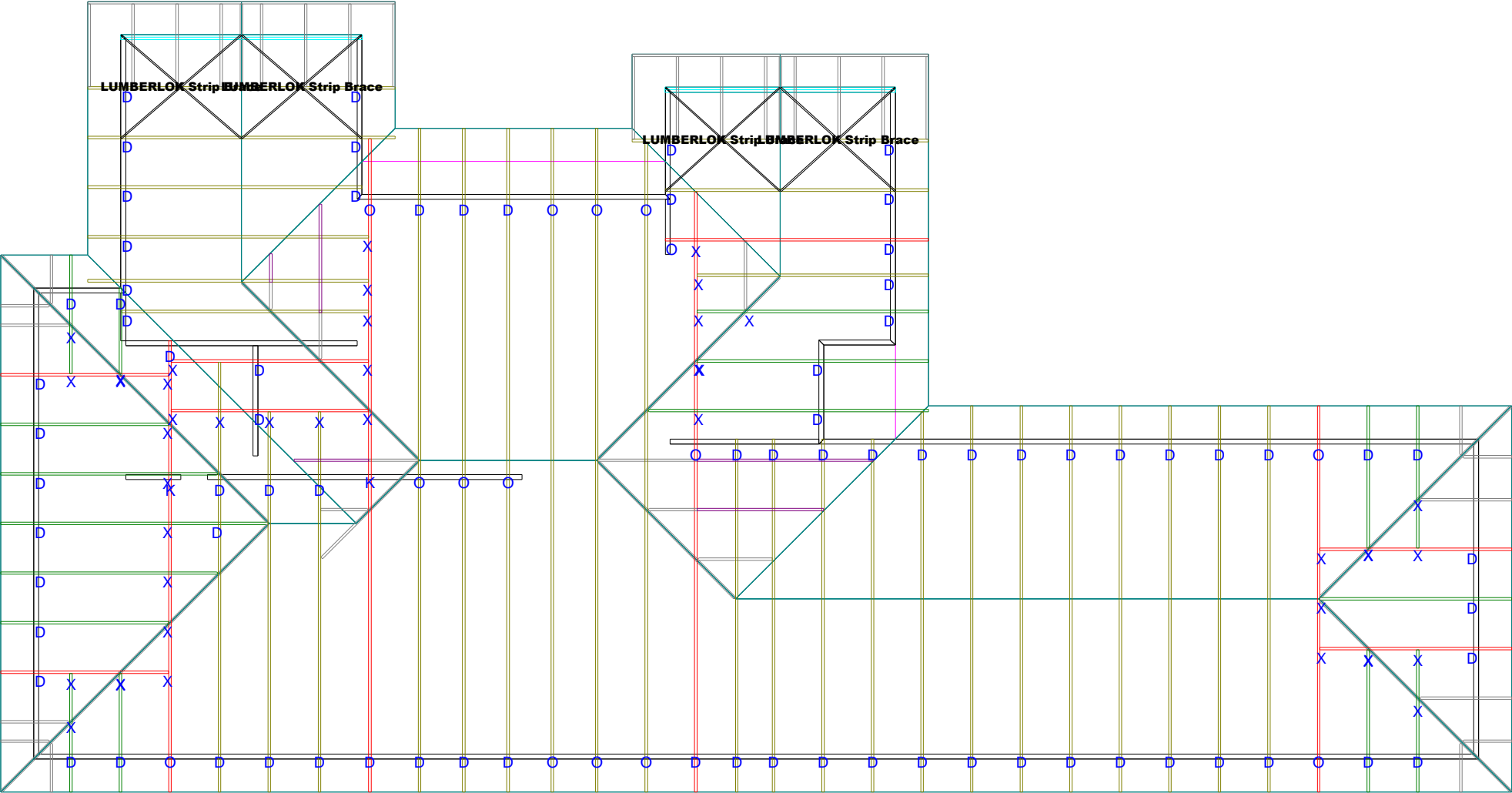
CT200 Truss to
Top Plate Fixing
Installation



16kN & 9kN Truss
to Top Plate Fixing
Installation



Notes:
All other areas must have the minimum 2 x 90mm 3.15mm skew nails and
2 x wire dogs for truss to top plate connections
Refer to:
LUMBERLOK Timber Connectors Characteristic Loadings Data Brochure
08/2014



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Grant Property Group Ltd
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75 Whitehorn Drive
Lincoln

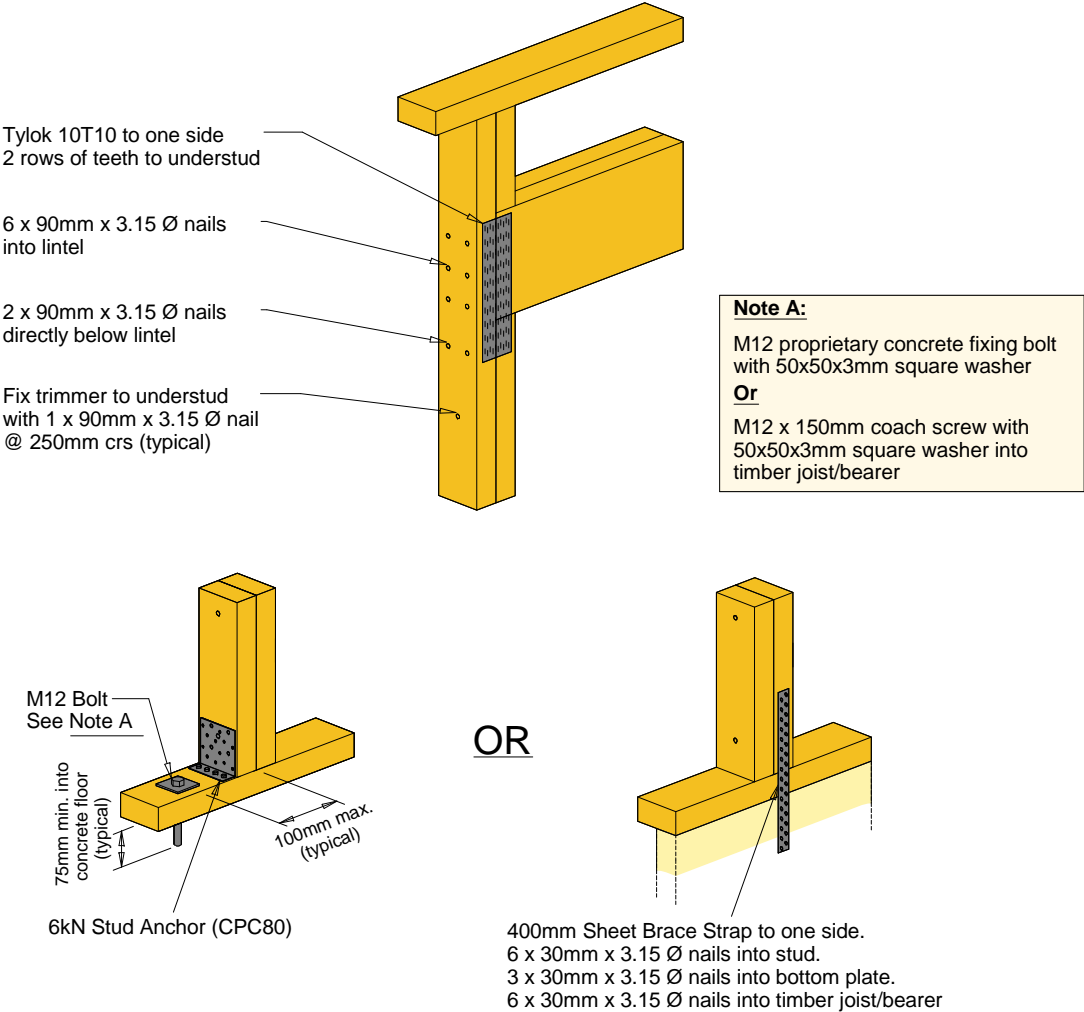
Sheet Title :
**For Building Consent
Truss Fixings & Roof Bracing**
Date : 19 Feb,2025
Scale : 1: 150
Drawn : Michael Woodrow
System : MiTek 20/20

Job Details:
Roof Pitch : 25.00deg
Roof Material : Galv Iron .5mm
Ceiling Material : Standard Plaster Board 13mm
Wind Zone : High
Roof Snow Load : 0.441kPa
Truss Centres : 900mm
Roof Live Load : 0.250kPa
Floor Live Load :
Wind Speed : 44m/s
Overhang : 600mm

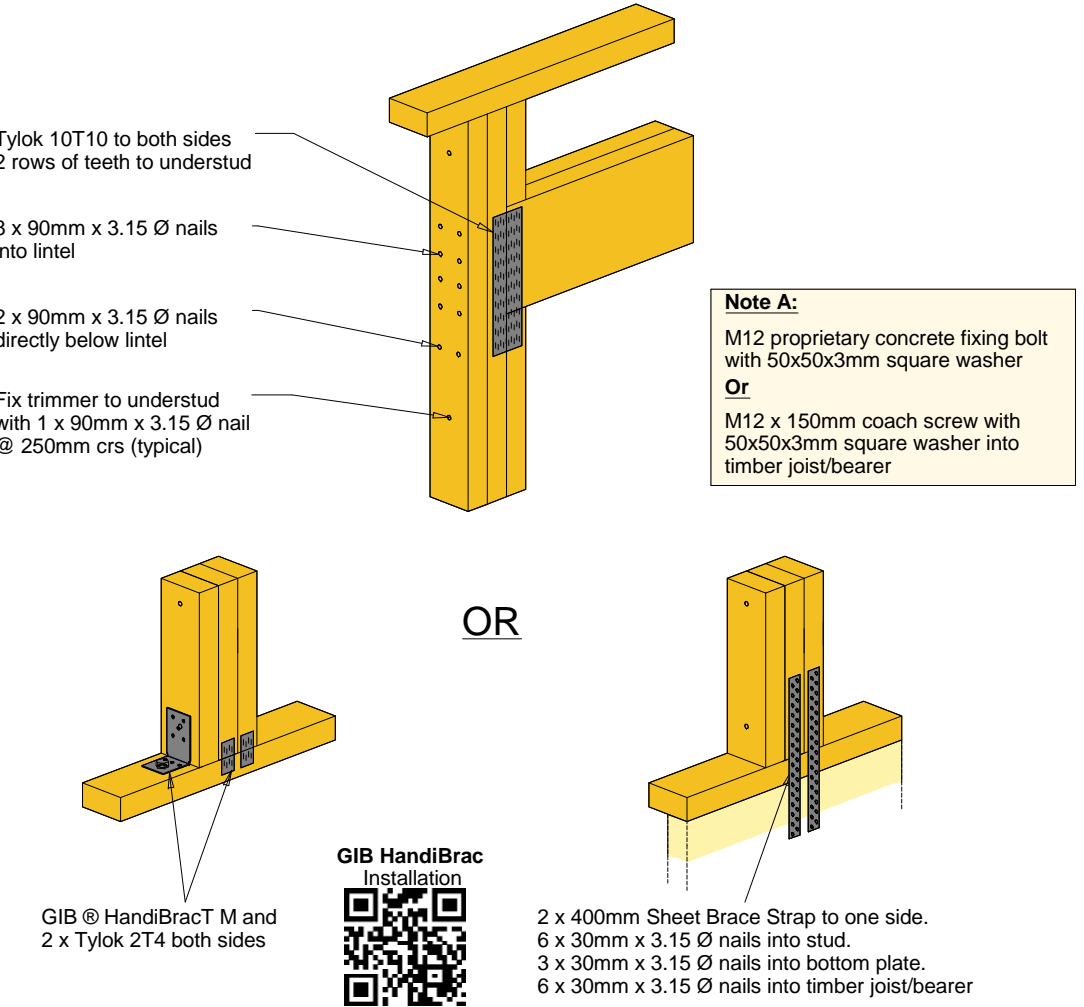
MiTek
MiTek[™]

Job Title :
250085
Sheet :
5
Revision Number :

TYPE G
7.5 kN



TYPE H
13.5 kN



Grant Property Group Limited

NEW HOUSE

Lot 870, 75 Whitehorn Drive, Lincoln
File Number 25000.008



ENGCO
Consulting Engineers
AUCKLAND ■ CHRISTCHURCH ■ NELSON ■ QUEENSTOWN

TC2 RIBRAFT DRAWINGS

Issue Register

Rev	Date	Description
-	05.03.2025	Consent Issue

Sheet List

Sheet No.	Rev	Date Issued	Sheet Title
S1	-	05.03.2025	General Notes
S2	-	05.03.2025	RibRaft Layout Foundation Plan
S3	-	05.03.2025	Typical Foundation Sections
S4	-	05.03.2025	Typical Foundation Sections
S5	-	05.03.2025	Typical Foundation Sections
S6	-	05.03.2025	Typical Services Penetration Details

SDC - Approved Building Consent Document - BC250384 - Pg 23 of 28 - 10/04/2025 - xiangs

GENERAL

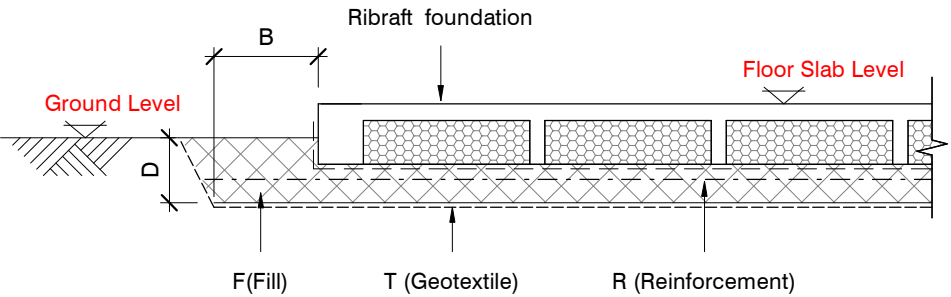
- Do not scale. Refer any discrepancies to the Architect.
- These drawings are to be read in conjunction with the Architects drawings.
- The builder shall be responsible for any damage to works during construction.
- The sand blinding layer shall be 20mm min. & 50mm max. to aid levelling & to prevent rocking of pods.
- Vapour barrier to be 0.25mm (250 micron) polythene complying with NZS 4229 / NZS 3604 .
- Finished ground level adjacent to slab to be protected from wind, water erosion and undermining.

FOUNDATIONS

- For assumed allowable bearing capacity refer to calculations/installer guide. Unless otherwise noted in documentation.
- If there is any doubt about the integrity of the material on which the slab is to be founded - Supervising Engineer must be notified immediately.

GEOTECHNICAL REFERENCE:

Refer: ENGCO Consulting Engineers
Geotechnical Report
75 Whitehorn Drive, Rosemerry, Lincoln
Ref. No: 25000.008
Dated: 30 January 2025
Bearing: 200kPa



BUILDING PLATFORM

CONCRETE

- All workmanship & materials to conform to NZS 3109, NZS 4210 & local authority regulations.
- Minimum covers to reinforcement:
 - Exposed to earth - 75mm.
 - Protected by vapour barrier - 50mm.
 - Not exposed to weather except for a brief period during construction - 25mm.
- No holes or chases other than those specified are to be made in the slab without the approval of Engco.
- All concrete shall have 20mm nominal maximum aggregate size & 120mm slump & shall comply with NZS 3109.
- All concrete to be mechanically vibrated & carefully worked around the reinforcement & into the corners of the formwork.
- Ribraft make-up to be

100mm Floor Slab - 220mm pods
(25MPa 5TC2 Dramix 4D 80/60 Fibre Mix)
G500E SE62 Ductile mesh on 50mm chairs

The design Fibre mix shall be supplied so that the residual flexural tensile stresses $f_{R,1}$ & $f_{R,4,K}$ shall be 1.5 MPa & 1.0 MPa respectively.

INSPECTIONS

Inform ENGCO Consulting 48 hours in advance of any inspections required for code compliance certification.
Contact ENGCO - Ph. 03 366 7955 & quote ENGCO Ref. No.

INSPECTIONS REQUIRED

- Confirm bearing at excavation - by ENGCO.
- Contractor to supply (4) N.D. tests at finished compacted surface - if depth of fill is greater than 400mm.
- Pre-pour of slab - by ENGCO.

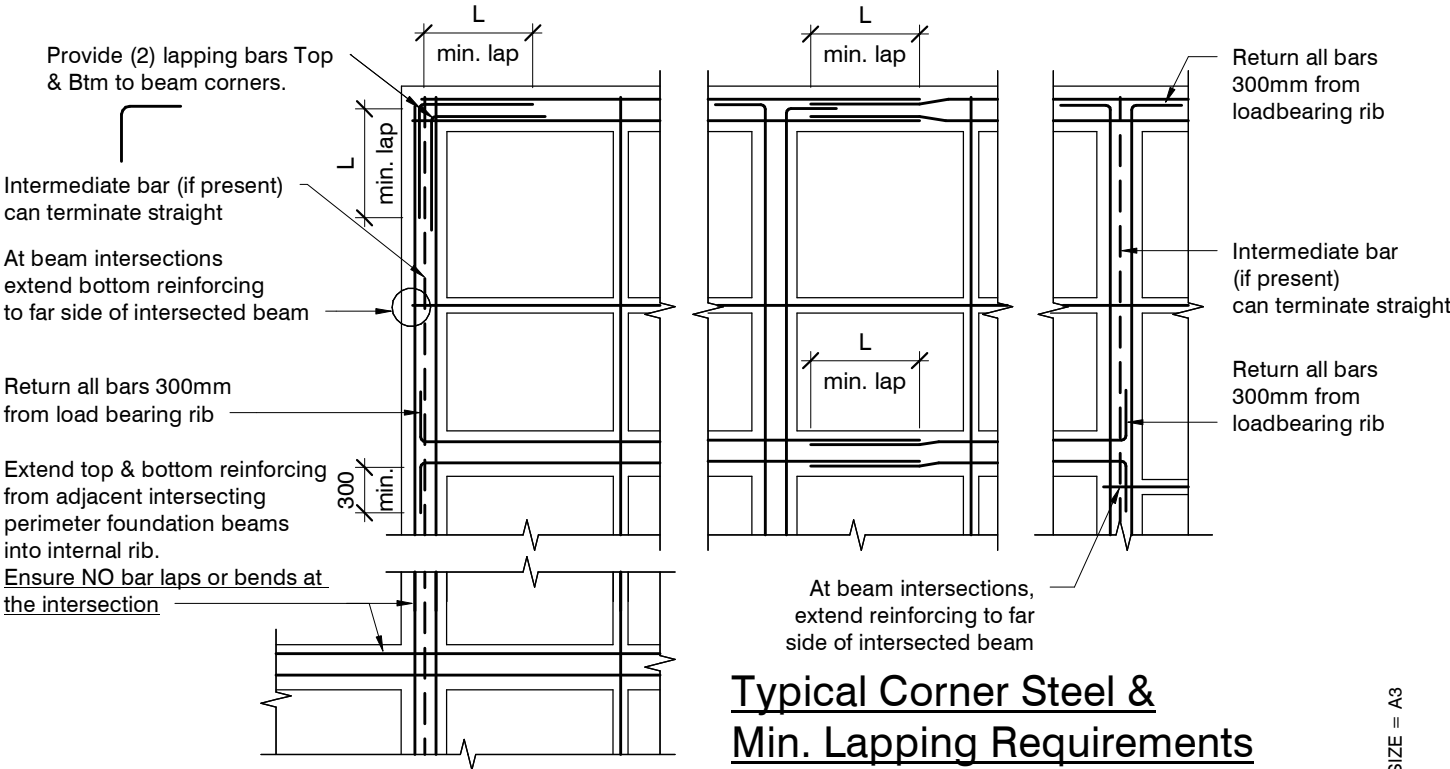
BUILDING PLATFORM TABLE:	
B	500mm
D	400mm below ground level (approximately). Remove organic topsoil.
T	N/A
R	N/A
F	AP40 or AP65 - 95% Dry Density. Compact in 150mm layers max.

Refer Architectural drawings for Finished Floor Level

REINFORCEMENT

- All reinforcing shall be New Zealand sourced and conform to AS/NZS 4671 :2001 in grade 300E or grade 500E.
- All bends to be made cold without fracture.
- All reinforcing shall be deformed type unless otherwise stated.
- Grade 500E deformed bars shall be designated 'H', Grade 300E deformed bars shall be designated 'D' and Grade 300E round bars shall be designated 'R'.
- Minimum bar lap.

	H12 bars	H16 bars
L	720mm	900mm
- All reinforcement to be fixed & tied where necessary in its specified position.
- Welding of steel is not permitted.
- Spacers:
 - Edge at 1200mm ctrs (one on edge & two on corners, typically).
 - Internal one on each side of pod (typically).
- All mesh shall comply with AS/NZS 4671 & shall conform with elongation requirements exceeding 10%.
- All mesh shall lap a minimum of 250mm (end extensions not included in lap length).



Typical Corner Steel & Min. Lapping Requirements

N.T.S.

revisions	-	05.03.2025	Consent Issue

03 366 7955
office@engco.nz
www.engco.nz

NEW HOUSE
Lot 870, 75 Whitehorn Drive, Lincoln

General Notes

design T. Scott
drawn C. de Mesa
appvd M. Cusiel
date March 2025

file 25000.008
dwg S1
rev. -

SLAB PLAN SETOUT:
Slab drawn to Architectural framing and DOES NOT ACCOUNT FOR ANY OVERHANG.
Use Architectural drawings for any framing overhang information which may affect slab dimensions.

contractor shall verify all dimensions before commencing work

GENERAL NOTES:

Locations shown of internal floor beam thickenings are indicative only. It shall be the responsibility of the Contractor to ensure that they are located centrally under the load bearing walls to which they pertain.

Under no circumstance should pipework for services be run longitudinally in 100mm ribs. Similarly they should not be run along perimeter foundations nor internal floor beam thickenings

Vertical or horizontal penetrations through the foundation edge beam or floor beam thickenings must be made through the middle third of the member. Vertical penetrations should not be made through 100 mm ribs.

Refer to Architects drawings for floor slab, set downs, steps, rebates, holding down bolts, cast-in componentry and the like.

KEY:

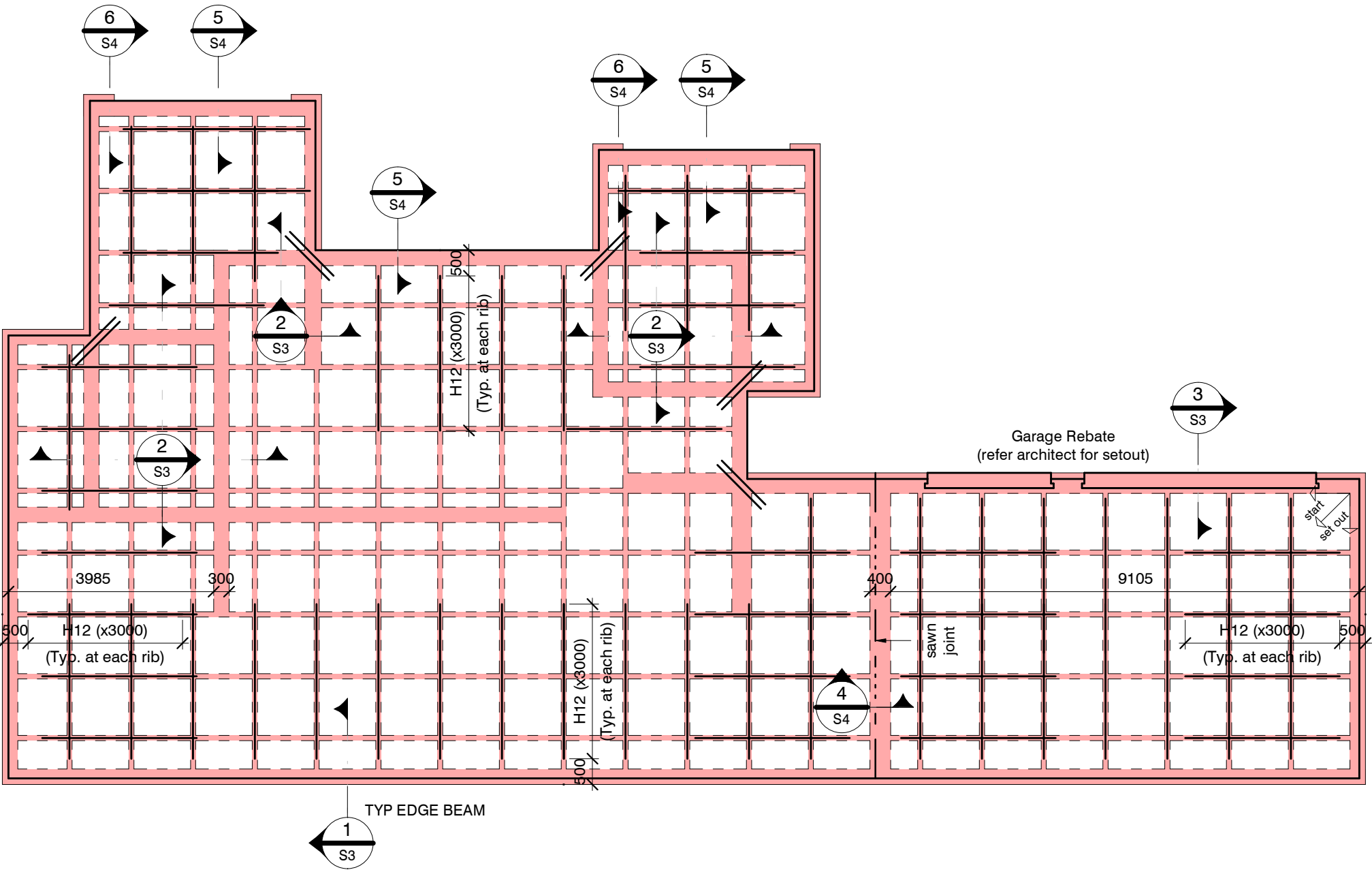
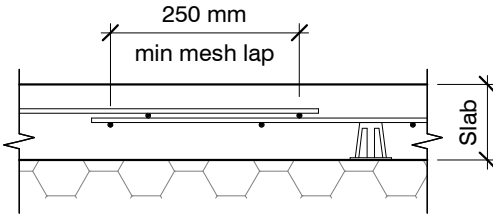
(2) H12 (x1200)
at 200 crs.

1100 x 1100 pod
(typ.)

100mm Floor Slab - 220mm pods
(25MPa 5TC2 Dramix 4D 80/60 Fibre Mix)
G500E SE62 Ductile mesh on 50mm chairs

The design Fibre mix shall be supplied so that the residual flexural tensile stresses $f_{R,1}$ & $f_{R,4,K}$ shall be 1.5 MPa & 1.0 MPa respectively.

All Mesh shall lap a minimum of 250mm (end of extensions not included).



RIBRAFT FOUNDATION LAYOUT PLAN

1 : 100

Refer Architects drawings for slab dimensions

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ORIGINAL SIZE = A3



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CHRISTCHURCH | NELSON | QUEENSTOWN

NEW HOUSE

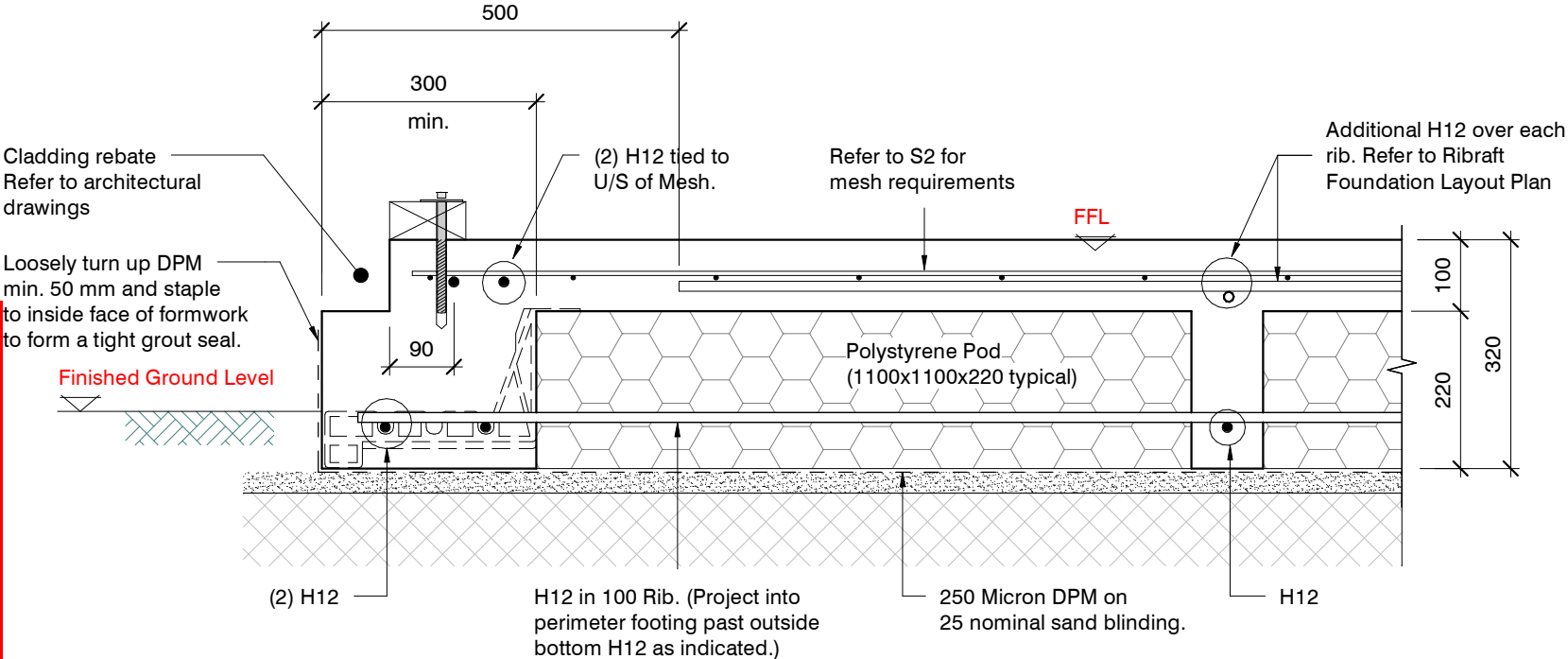
Lot 870, 75 Whitehorn Drive, Lincoln

RibRaft Layout
Foundation Plan

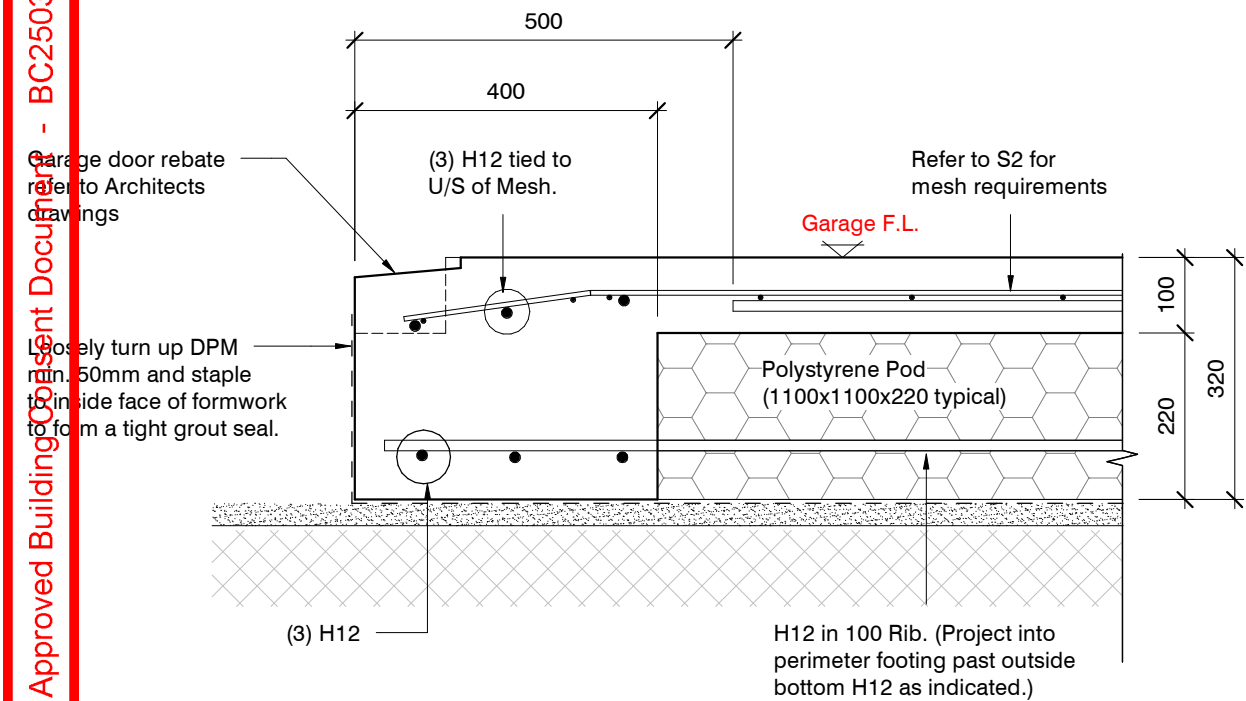
design T. Scott
drawn C. de Mesa
appvd M. Cusiell
date March 2025

file 25000.008
dwg S2
rev. -

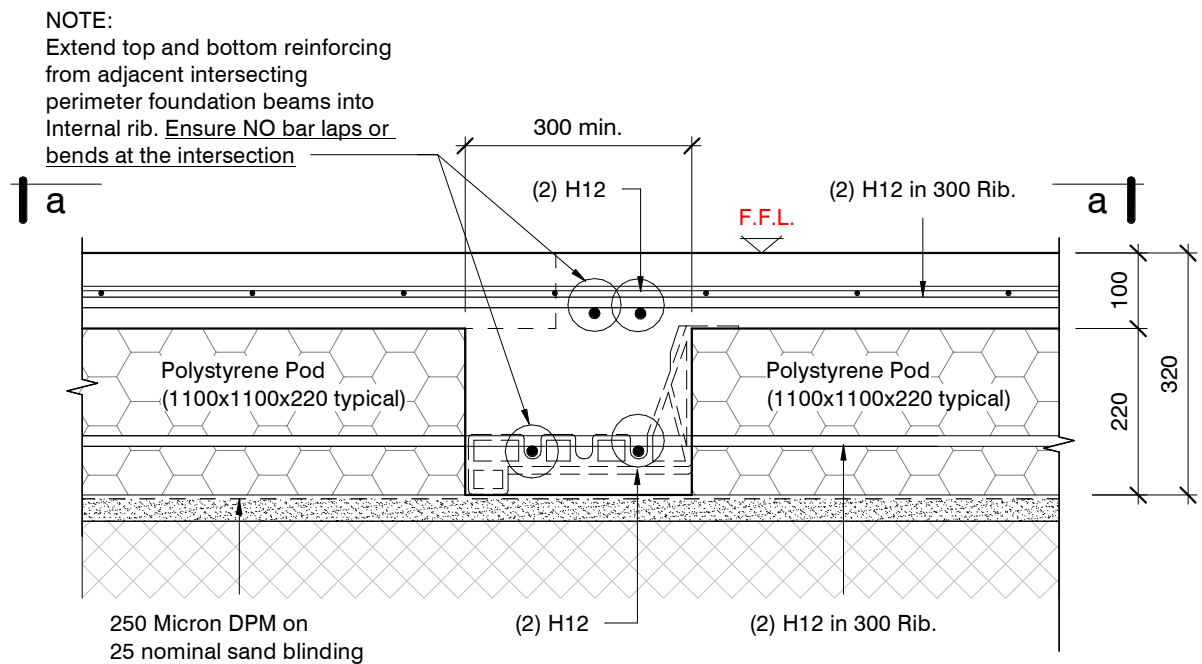
SDC - Approved Building Consent Document - BC250384 - Pg 25 of 28 - 10/04/2025 - xiangs



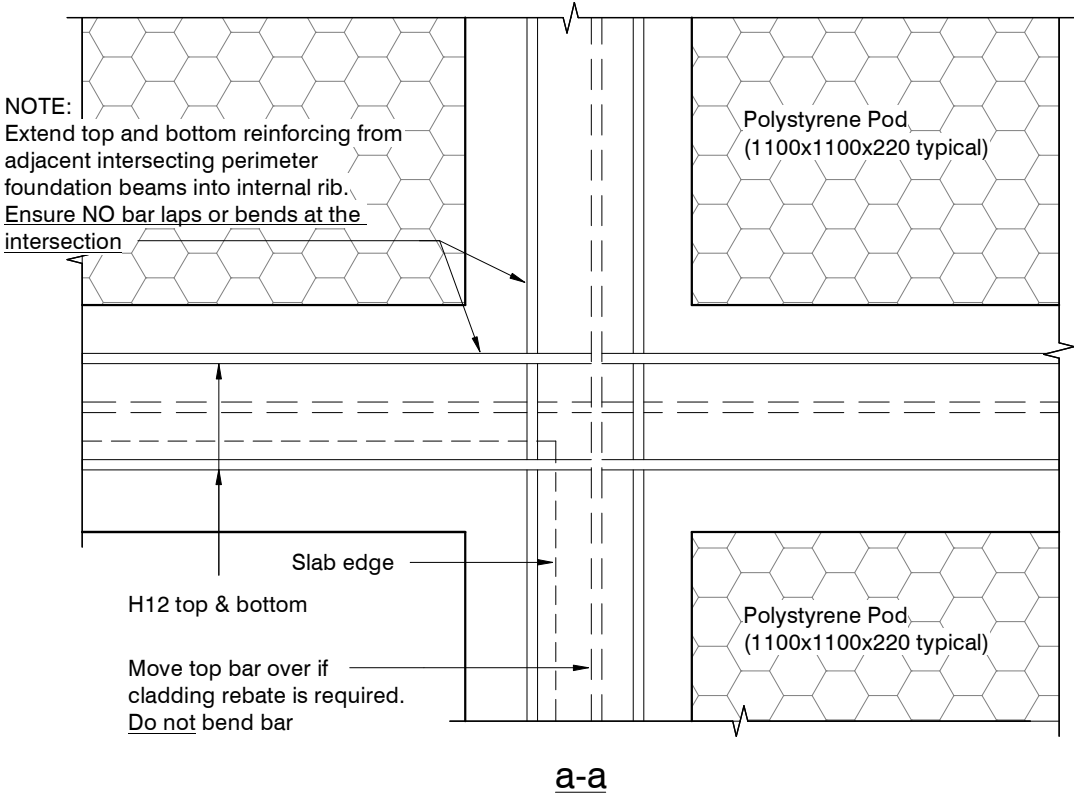
SECTION 1 TYPICAL REBATED 300 WIDE EDGE BEAM
1 : 10 S2 1 : 10



SECTION 3 GARAGE DOOR REBATE
1 : 10 S2 1 : 10



SECTION 2 TYPICAL 300 WIDE CORNER BEAM
1 : 10 S2 1 : 10



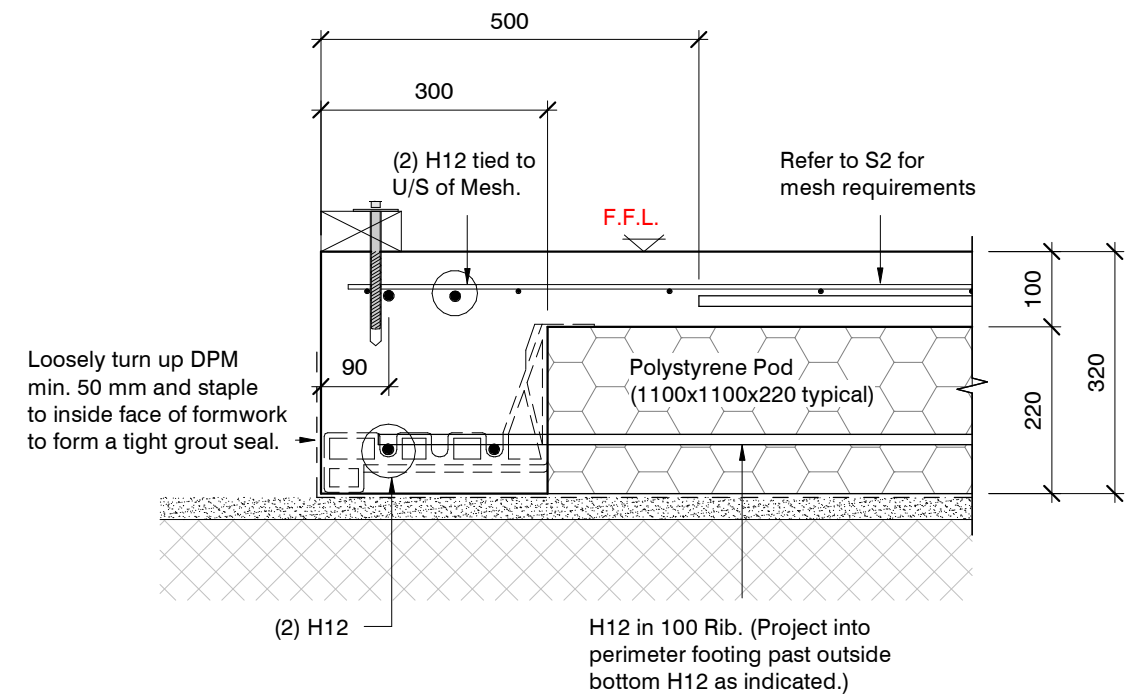
NOTE:
Extend top and bottom reinforcing from adjacent intersecting perimeter foundation beams into internal rib. Ensure NO bar laps or bends at the intersection

Slab edge

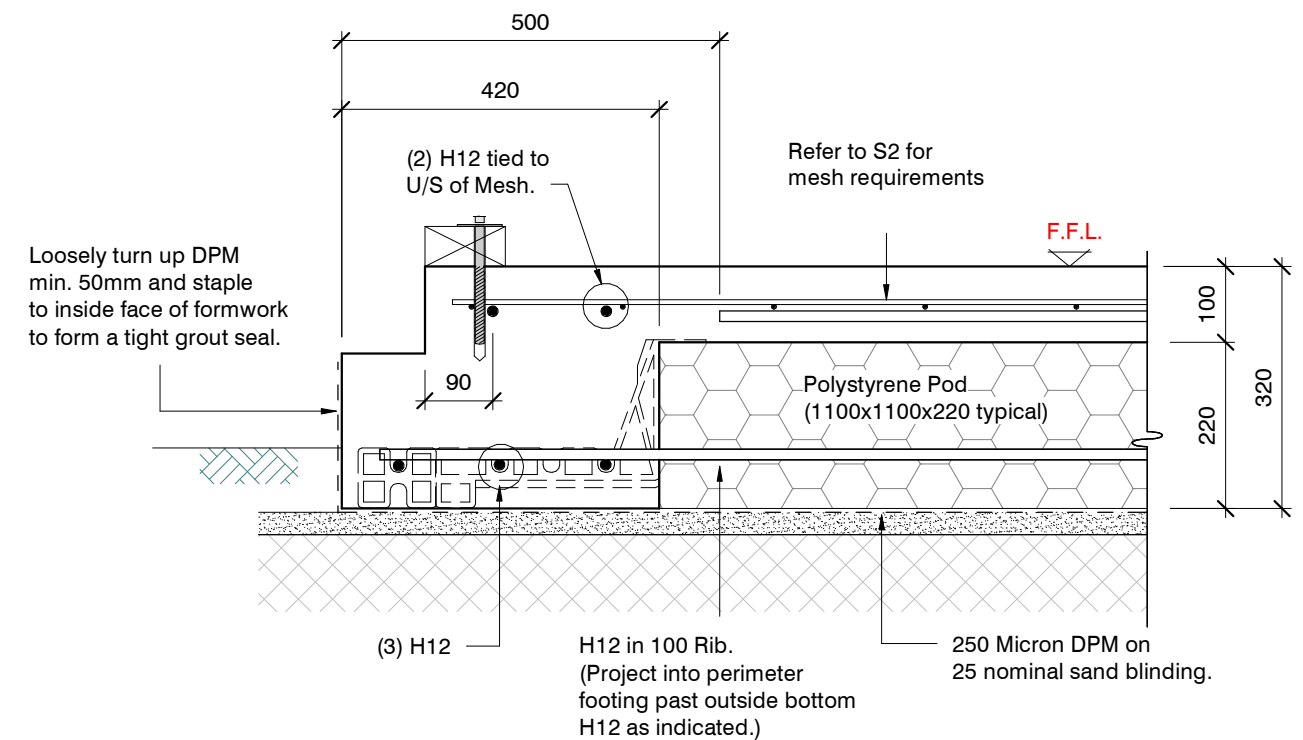
H12 top & bottom

Move top bar over if cladding rebate is required. Do not bend bar

revisions	-	05.03.2025	Consent Issue



5 TYPICAL 300 WIDE EDGE BEAM
S2 1 : 10



6 TYPICAL 420 WIDE REBATED EDGE BEAM
S2 1 : 10

design	T. Scott	file	25000.008
drawn	C. de Mesa	dwg	S4
appvd	M. Cusiell	rev.	-
date	March 2025		

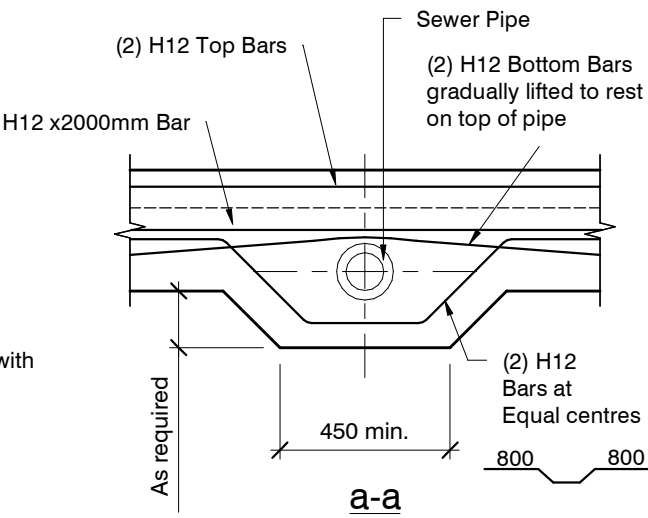
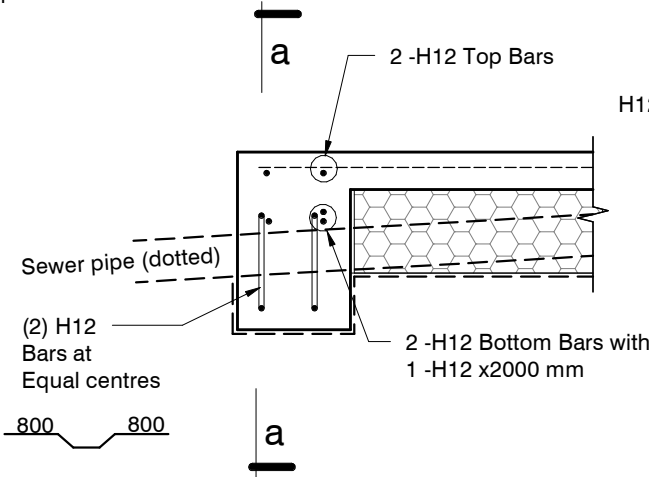
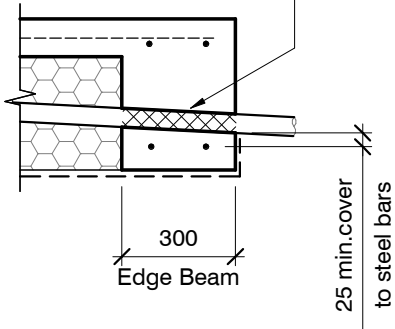
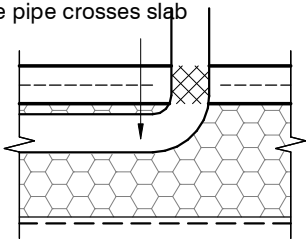
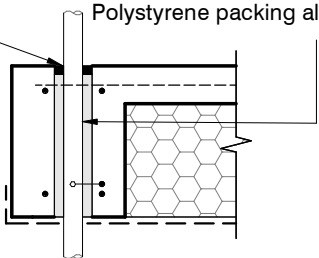


Flexible Sealant as required
all round pipe perimeter

Sleeve 50 mm larger dia. than service pipe
Maximum sleeve dia. 150 mm
located in central part of beam.
Polystyrene packing all around pipe.

Pipes can be run in Pods under
slab panels. (Sleeve not required.)
Wrap in "Lagging" tape
where pipe crosses slab

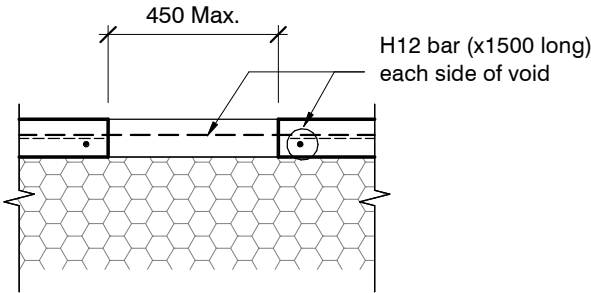
Pass pipe through edge beam
Avoid all reinforcing bars
(Sleeve not required)
Wrap in "Lagging" tape



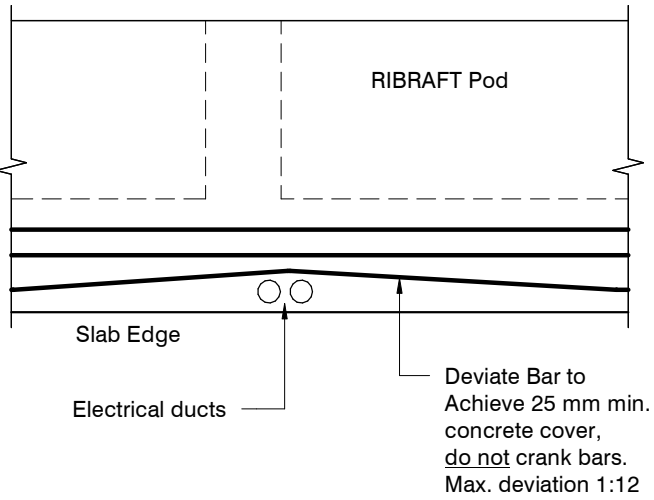
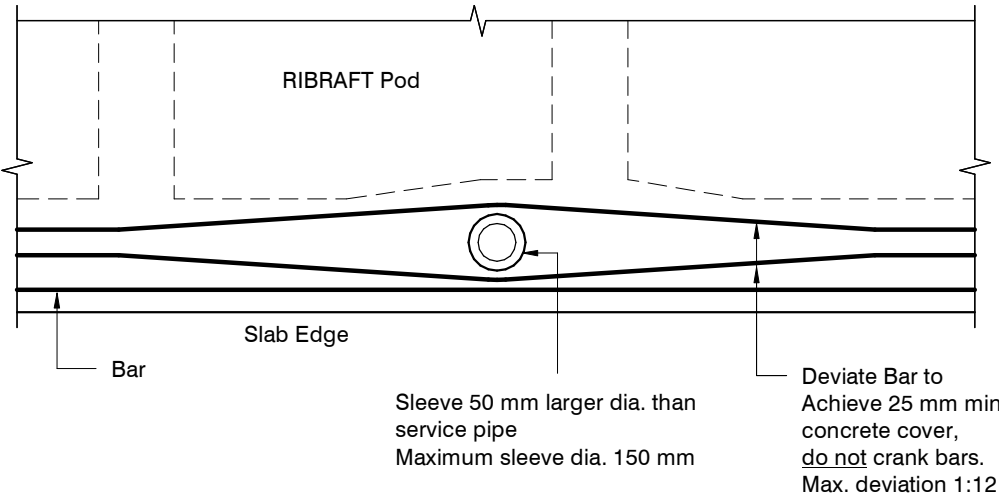
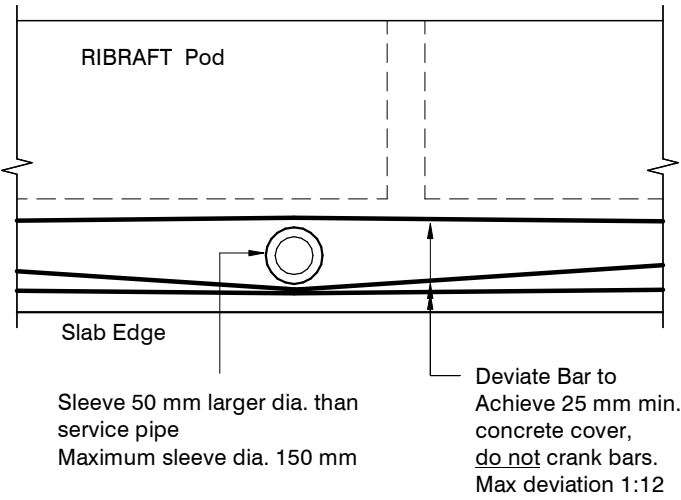
SLAB SERVICES PENETRATION DETAIL

PIPE NOTE:
No separation required where
pipes are fully contained within slab.
Sleeve all drains that pass through the
base of the slab.

PENETRATIONS NOTE:
Where penetrations through
Floor Slab exceed 450 mm Square,
Crack Control Bars will be required.



LARGE SLAB PENETRATION DETAIL



Do not cut longitudinal reinforcement bars.

FOUNDATION SERVICES PENETRATION DETAILING.

Services shall not run along ribs or edge beams.



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CHRISTCHURCH | NELSON | QUEENSTOWN

NEW HOUSE
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**Typical Services
Penetration Details**

design T. Scott
drawn C. de Mesa
appvd M. Cusiel
date March 2025

file **25000.008**
dwg **S6**
rev. **-**

revisions	-	05.03.2025	Consent Issue