

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.**

PROPOSED NEW RESIDENCE

FOR

Mike Greer Homes NZ Ltd

SPEC

Lot: 17 DP: 596463

Lot 17 DUNDEEL LANE,
FLEMINGTON, STAGE 12,
LINCOLN

JOB #SL1019 -5127

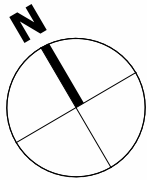


Sheet List

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A1.03	Foundation Layout Plan
A1.04	Pod Layout Plan
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A6.03	Lumberlok Lintel Fixing Schedule
A6.04	Gamma Bracing Portal

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 © Mike Greer Homes NZ Ltd (03) 354 0166 0800 mikegreer Tower 2, 7 Deans Avenue, Addington, Christchurch 8011 info@mikegreerhomes.co.nz www.mikegreerhomes.co.nz	DRAWING TITLE:	LEGAL DESCRIPTION:	LEGAL NOTES:	Revisions:		Date of Issue:	DESIGNER:		SCALE:	SHEET:
	Cover Sheet	LOT: 17DP: 596463 Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	V5	Changes for RFI's	27/10/2023	GQ		A3 page size	
						Amendment Date:	JD		CT6439	
							10/06/2024	V5	CODE: 1	



GENERAL NOTES

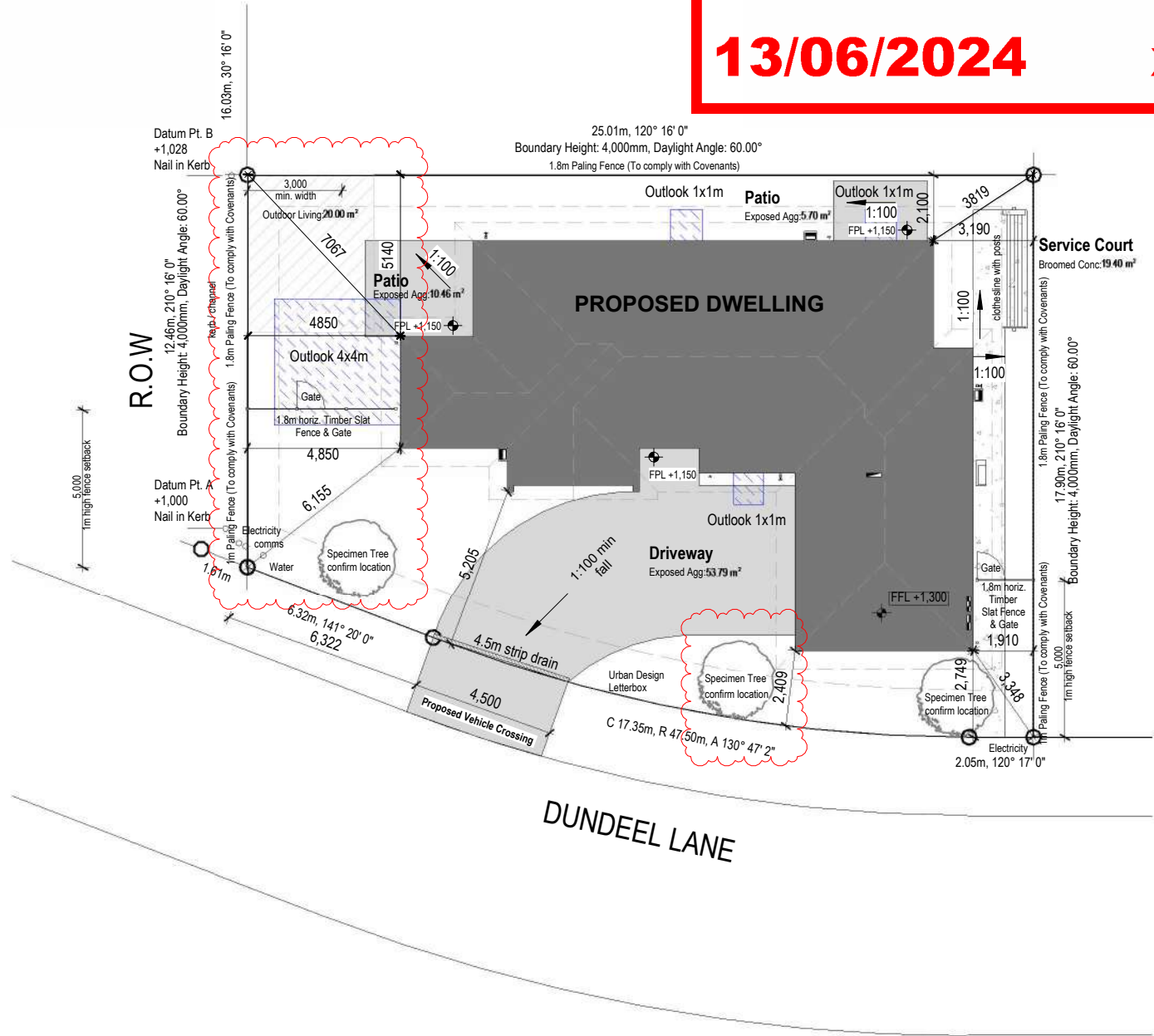
Site Area	404m²
Site Coverage Area (over cladding incl. Covered Areas)	201.94m²
Site Coverage	49.99% (50% Allowable)
Intervious Surface Area	89.35m² (22.11% Excluding Dwelling & Garage)
Exposure Zone	C
Wind Zone	High
Lee Zone	N/A
Earthquake Zone	2
Snow Zone	N4 - 1kPa
Climate Zone	5
Rainfall Intensity	40 - 50mm (from BRANZ Map)
Acoustic Zone	N/A
Regulatory Authority	SELWYN DISTRICT COUNCIL
Planning Zone	MEDIUM DENSITY RESIDENTIAL ZONE
General:	Concept subject to TA rules and regulations. All dimensions to be confirmed on site Concept may be subject to subdivision developer's approval
Foundation Type:	TC2 Waffle slab by Engineer (Confirmed with Geotechnical Report)
Site Information:	Position of road crossing, services locations, street trees, lamp posts, parking bays, pedestrian islands etc. is unknown - to be confirmed when information becomes available.
Landscaping:	This plan is indicative only. Landscaping to be confirmed by the client. All Fencing to comply with the relevant Covenants.
Boundary Information:	Confirmed with Certificate of Title.
Site Levels:	Levels obtained.
Earthworks:	No Earthworks proposed.
Site Services:	Stormwater: Council Connection at Boundary Sewer Connection: Council Connection at Boundary Gas: N/A
Historical Interest:	N/A
Existing Use Rights:	N/A
Flood Management Area:	N/A
On-site Manoeuvring Assessment:	Completed
Non-Compliances Requiring RC:	N/A
Covenant Non-Compliances:	N/A
Extras:	Driveway Sump

- Hard Landscaping Falls
- Driveway falls @ 1:100 min
 - Paving falls @ 1:100
 - Service court Area Falls @ 1:100

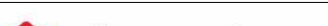
- Steps and Paths
- A step/s or appropriate landscaping to be provided if drop from external doors is greater than 190mm from FFL to FGL (180min at main entry)
 - All site paving is to have a 1:100 minimum fall away from dwelling.
 - all access routes must provide a non-slip surface in accordance with NZBC D1/AS1 Table 2
 - Convey surface water from sealed drive to an appropriate approved outfall.

Resource
Consent
Required

13/06/2024 xiangs



Site Plan
1 : 200

 © Mike Greer Homes NZ Ltd (03) 354 0166 0800 mikegreer Tower 2, 7 Deans Avenue, Addington, Christchurch 8011 info@mikegreerhomes.co.nz www.mikegreerhomes.co.nz	DRAWING TITLE:	LEGAL DESCRIPTION:	LEGAL NOTES:	Revisions:		Date of Issue:	DESIGNER:		SCALE:	SHEET:
	Site Plan	LOT: 17DP: 596463 Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	V5	Changes for RFI's	27/10/2023	GQ		As indicated A3 page size	
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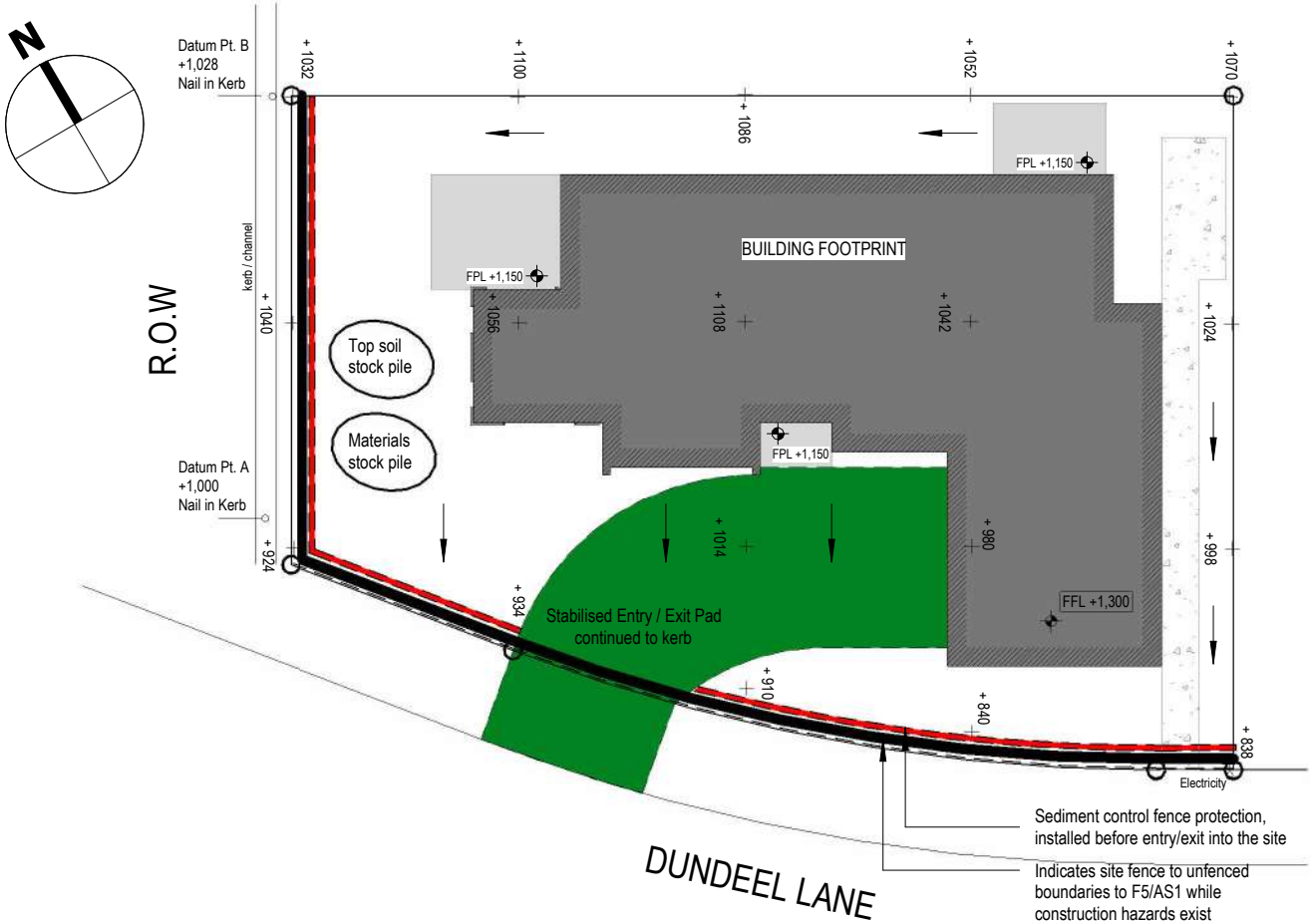
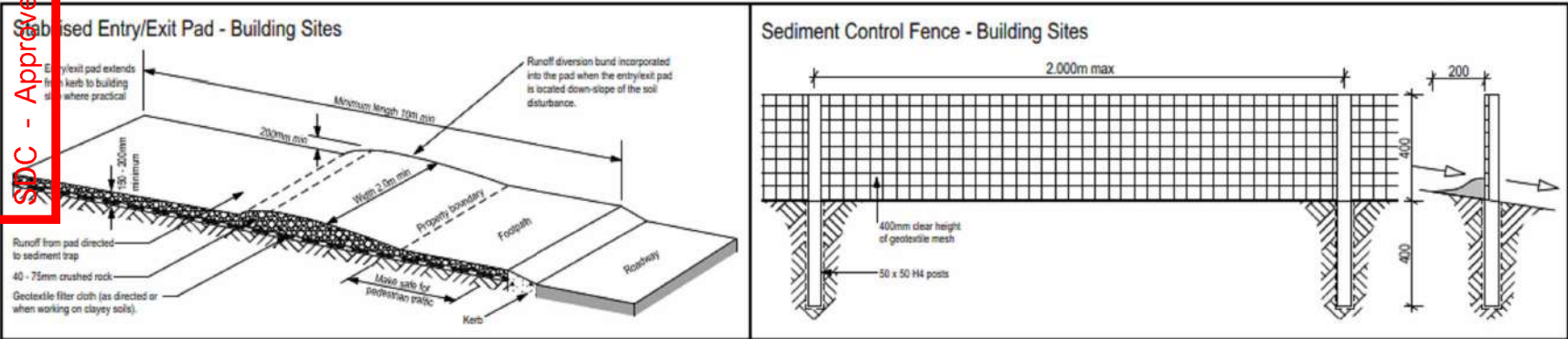
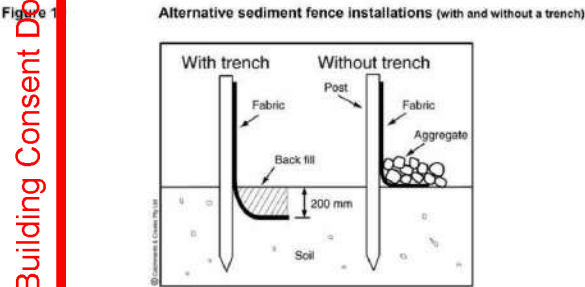
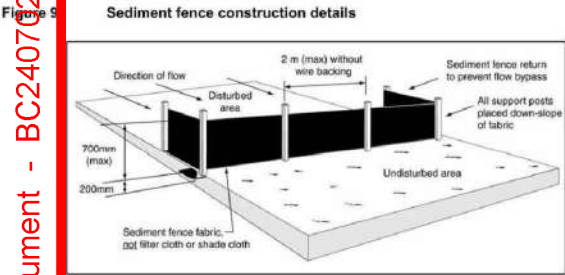
Usable Site Area:	404m2
Landscaping:	Landscaping to be confirmed by the client. All fencing to comply with the relevant covenants.
General:	All dimensions to be confirmed on site, including Boundary Dimensions and bearings subject to confirmation by the Main Contractor. - At time of consent application, FFL determined (at road) and E2 (225mm above finished ground level). - Main contractor to provide 2m min. high chain link fencing to the site. All fencing to comply with F5 including Main Contractor to provide site specific Health & Safety signs for persons entering the site. - Main Contractor to ensure sediment control measures in place during construction of building works as per the sediment control plan.

- Runoff pad to be created at point of entry & exit on site (Removed on completion of formed driveway)
- Runoff pad to be created in accordance to guidelines provided by the local Council and maintained in good condition throughout its period of use.
- All ground cover / vegetation outside of immediate build area to be maintained throughout period of house build. This includes grass verges on the street frontage.
- Any stockpiles of soil or excavated material are to be kept to the rear of the site & covered with impervious sheets
- Roof downpipes are to be connected to the installed stormwater drainage as soon as practical once roof cladding has been installed. Until this point ensure water run-off from downpipes is directed away from build area but not on to neighbouring properties

No building work will be started on this project until the construction of an approved stormwater outfall has been completed for this proposed lot.

Please note : An on-site inspection will be completed prior to construction stage and appropriate controls measures to protect stormwaters will be installed where relevant

Suitable vegetation or bio sock to be used for sediment control purposes. Use biosock if vegetation is removed during construction.



Datum Pt A is a survey nail in the kerb on the R.O.W opposite the front LHS set out peg, it represents a datum level of 1,000;

Datum Pt B is a survey nail in the kerb on the R.O.W in line with the rear LHS set out peg, it represents a datum level of 1,028;

All the levels heights shown are in mm's.

	Drainage control flow, control surface water on site towards street prevent runoff during construction
	Entry/Exit pad install before and after site boundary
	Stockpile area provide waterproof covers as required
	Sediment control fence

1 : 200

FOUNDATION NOTES - Engineered concrete slab

- All foundation footing sizes, reinforcing and backfill will be as per the Structural Engineers design.
- Mesh in floor slab must be earthed, earth with 16mm REO rod brought up into garage wall below meterbox and wired to the mesh. At prewire, connect a clamp and piece of wire to rod and earth it to the meterbox.
- Minimum heights of concrete slab on ground above surrounding ground levels to be:
 - JH Stria/Integra Panel - 150mm to sealed surface, 225mm to unsealed ground as per NZBC E2.
- Finished floor level to be 150mm minimum above crown of road as per NZBC E1 AS1.
- Expol 50mm SLABX200 underslab insulation throughout entire foundation as per the Structural Engineers Design.

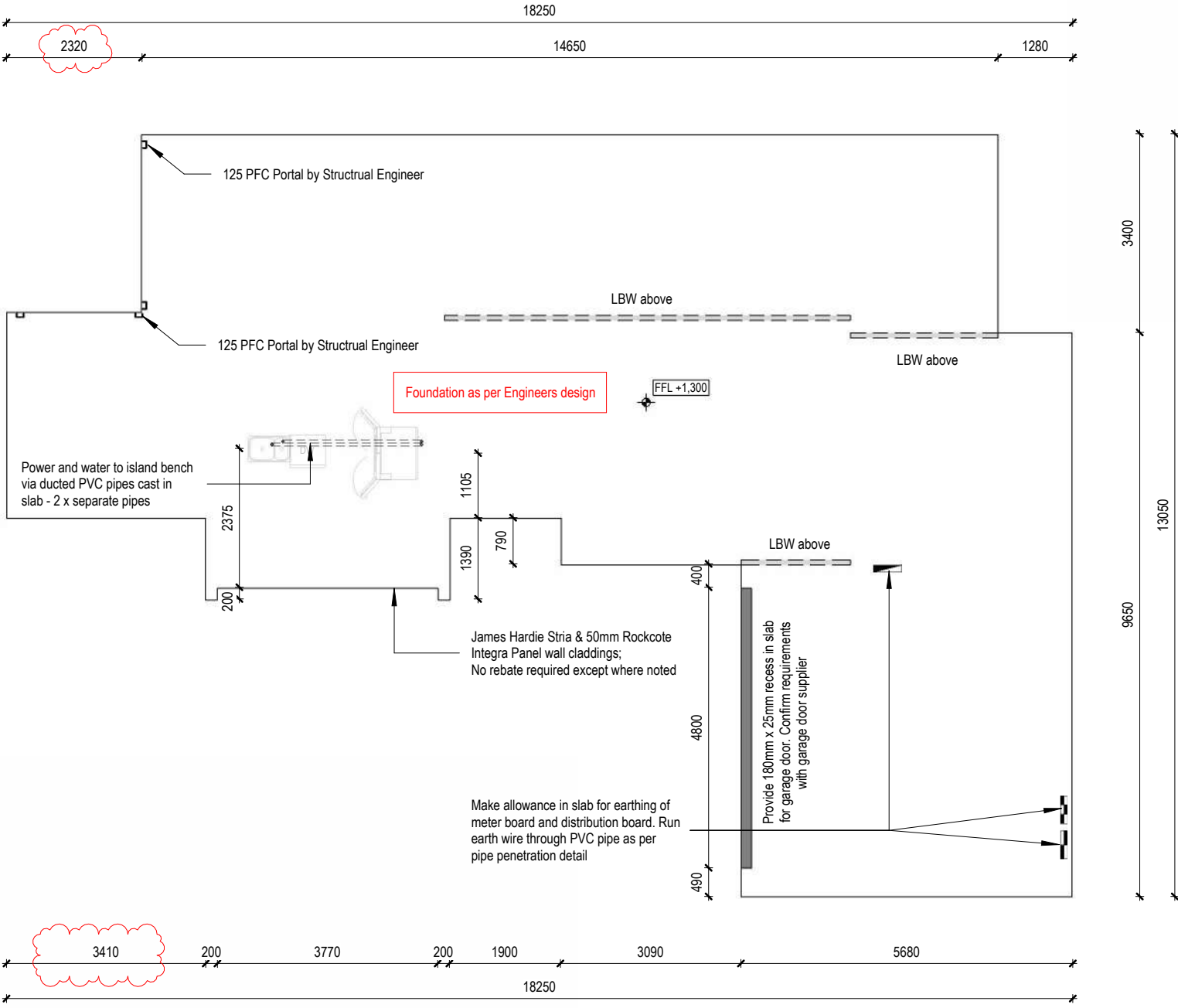
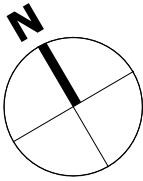
- Steel Portals
- Steel portals to be in accordance with Sturctural Engineers Design - Refer Drawing S2.1 and S2.2

- Min 20 mm offset from slab edges

FOUNDATIONS TO BE AS PER ENGINEERED FOUNDATION POD DESIGN.

- NOTE:
- 240168 KIRK ROBERTS POLYRAFT FLOOR SYSTEM
 - 8 mm CONCRETE SLAB
 - CONCRETE MIX 25MPa WITY STEEL FIBRES
 - S62 MESH ON 1100 x 1100 x 220 THICK POLYSTYRENE PODS

- NOTE:
- GROUND PREPARATION TO BE UNDERTAKEN IN ACCORDANCE WITH THE SITE SPECIFIC GEOTECHNICAL REPORT RECOMMENDATIONS



Foundation Layout
1 : 100

KEY	
Meter Board	
Distribution Board	
Comms Panel	
Gully Trap	
Hose Tap	
Downpipe	
External Heat Pump	

 © Mike Greer Homes NZ Ltd (03) 354 0166 0800 mikegreer Tower 2, 7 Deans Avenue, Addington, Christchurch 8011 info@mikegreerhomes.co.nz www.mikegreerhomes.co.nz	DRAWING TITLE:	LEGAL DESCRIPTION:	LEGAL NOTES:	Revisions:		Date of Issue:	DESIGNER:	SCALE: 1 : 100 A3 page size	SHEET: A1.03
	Foundation Layout Plan	LOT: 17DP: 596463 Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	V5	Changes for RFI's	27/10/2023	TECHNICIAN:	BASE PLAN	
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FOUNDATION NOTES - Engineered concrete slab

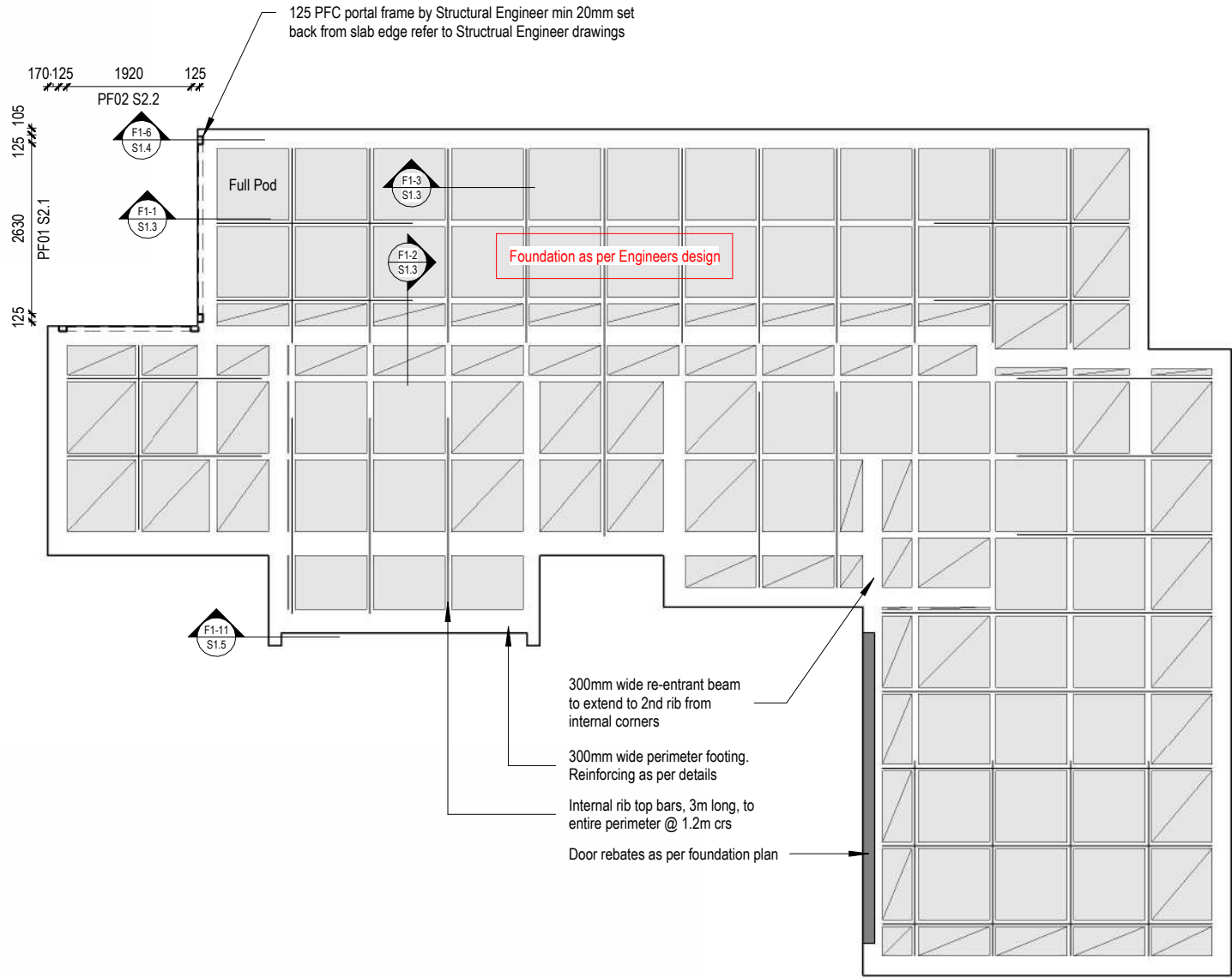
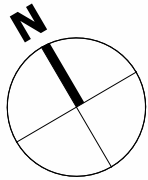
- All foundation footing sizes, reinforcing and backfill will be as per the Structural Engineers design.
- Mesh in floor slab must be earthed, earth with 16mm REO rod brought up into garage wall below meterbox and wired to the mesh. At prewire, connect a clamp and piece of wire to rod and earth it to the meterbox.
- Minimum heights of concrete slab on ground above surrounding ground levels to be:
1. JH Stria/Integra Panel - 150mm to sealed surface, 225mm to unsealed ground as per NZBC E2.
- Finished floor level to be 150mm minimum above crown of road as per NZBC E1 AS1.
- Expol 50mm SLABX200 underslab insulation throughout entire foundation as per the Structural Engineers Design.

Steel Portals

- Steel portals to be in accordance with Sturctural Engineers Design - Refer Drawing S2.1 and S2.2
- Min 20mm offset from slab edges

ALL FOUNDATIONS TO BE AS PER ENGINEERED FOUNDATION POD DESIGN.

- NOTE
- 2441168 KIRK ROBERTS POLYRAFT FLOOR SYSTEM
 - 150mm CONCRETE SLAB
 - CONCRETE MIX 25MPa WITY STEEL FIBRES
 - SEE MESH ON 1100 x 1100 x 220 THICK POLYSTYRENE PODS
- NOTE
- GROUND PREPARATION TO BE UNDERTAKEN IN ACCORDANCE WITH THE SITE SPECIFIC GEOTECHNICAL REPORT RECOMMENDATIONS



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LEGEND

Ref	Fixture	Waste Size	Gradient
GT	Gully Trap	100DN	1.65%
ORG	Overflow Relief Gully Trap	100DN	1.65%
RP	Rodding/Inspection Point	100DN	N/A
TV	Terminal Vent	80DN	N/A
FWG	Floor Waste Gully	65DN	1:40
DP	Down Pipe	75x50	N/A
IP	Inspection Point	100DN	N/A
AAV	Air Admittance Valve	40DN	N/A
HT	Hose Tap	N/A	N/A
HP	Heat Pump	N/A	N/A
WC	Water Closet	80DN	1:60
B	Bath	65DN	1:40
SH	Shower	65DN	1:40
KS	Kitchen Sink + DW	65DN	1:40
VU	Vanity Unit	65DN	1:40
LW	Laundry Tub + WM	65DN	1:40
HWC	Hot Water Cylinder	40mm/25mm	1:40
WM	Washing Machine	discharge to TUB	
DW	Dish Washing Machine	discharge to S	
F	Fridge	discharge to S	

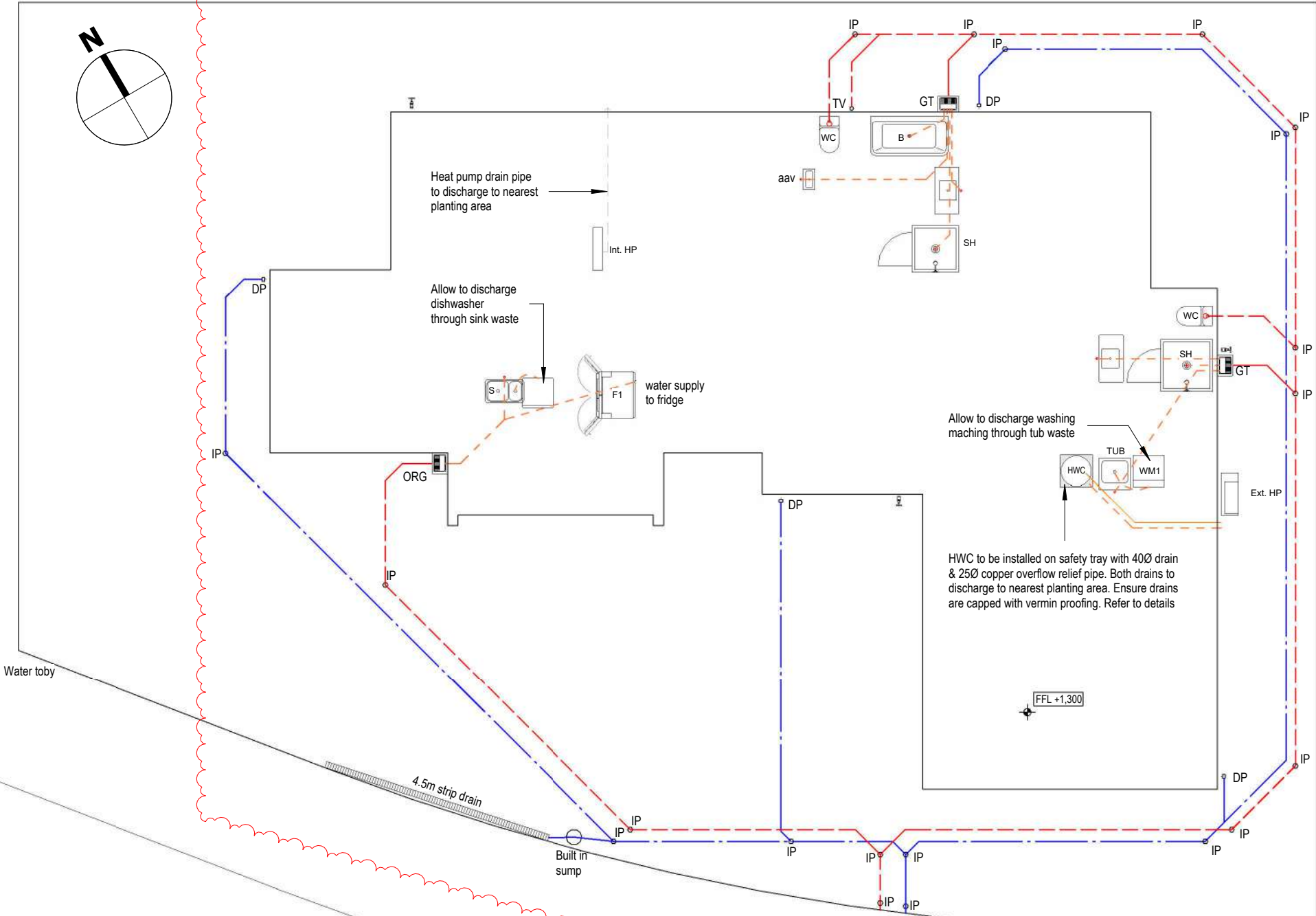
NOTE:
1. Relief Gully Trap is to be positioned so that the top of the gully dish is no less than 150mm below the overflow level of the lowest sanitary fixture served by the drainage system.
2. Position of drain connections at street laterals to be confirmed on site.
3. Allow to thermally insulate all Exterior pipework and valves exposed to external weather conditions.
4. Ensure 1.0m min clearance for SW & FW drain pipes to foundations.

Drain pipes discharging to GT:
5mm min air gap between all pipes and GT

100DN uPVC foul water drain at 1.65% gradient to existing laterals at boundary. (FW)

100DN uPVC surface water drain at 1.65% gradient to existing laterals at boundary. (SW)

R.O.W



Plumbing and Drainage Plan
1 : 100

DUNDEEL LANE

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	Plumbing and Drainage Plan	LOT: 17DP: 596463	Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	V5	Changes for RFI's	27/10/2023	GQ			A3 page size
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- PLUMBING:
- WC riser locations have a Typical offset of 140mm from internal framing to center of waste. (manufacturer's technical specs should be consulted to confirm offset)
 - Vanity, Laundry Tub, Heat Pump drains/wastes to have a typical 45mm offset from the fixture (center of the wall framing behind it)
 - Waste positions are approx only and are to be confirmed prior to commencement of construction. No allowance for trap position has been made. Confirm layout of fittings for kitchen and bathrooms prior to foundation setout.
 - 50mm rebate in floor slab for shower. Refer to shower details.

Waste pipe slab penetration offsets...

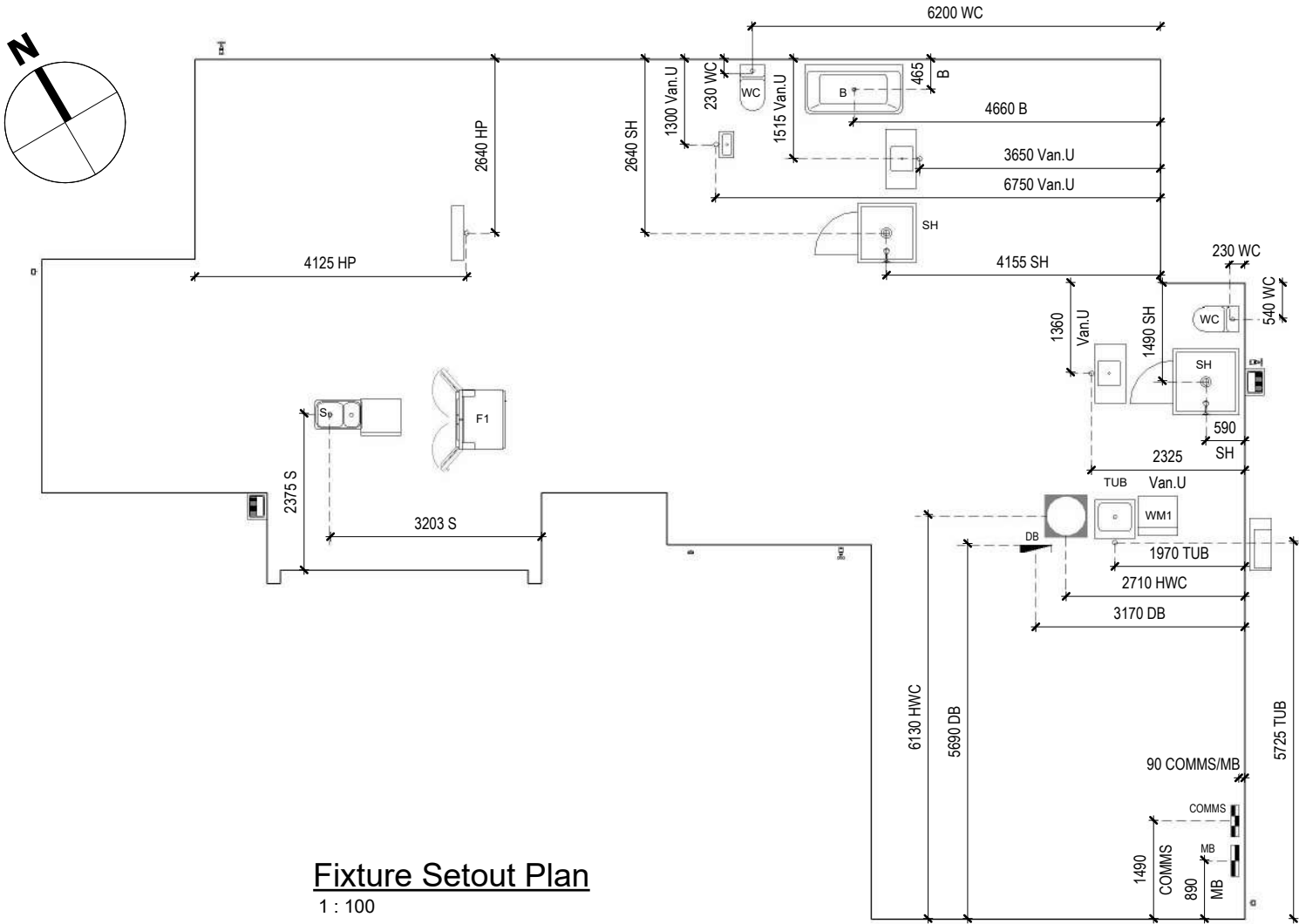
Vanity & Tub 45mm offset to center of framing.

Wc 140mm off line of framing.

Bath Dimensions are to bath fixture center, confirm waste position with bath manufacturer.

HWS Dimensions are to cylinder center, confirm waste position with safe tray manufacturer.

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Fixture Setout Plan
1 : 100

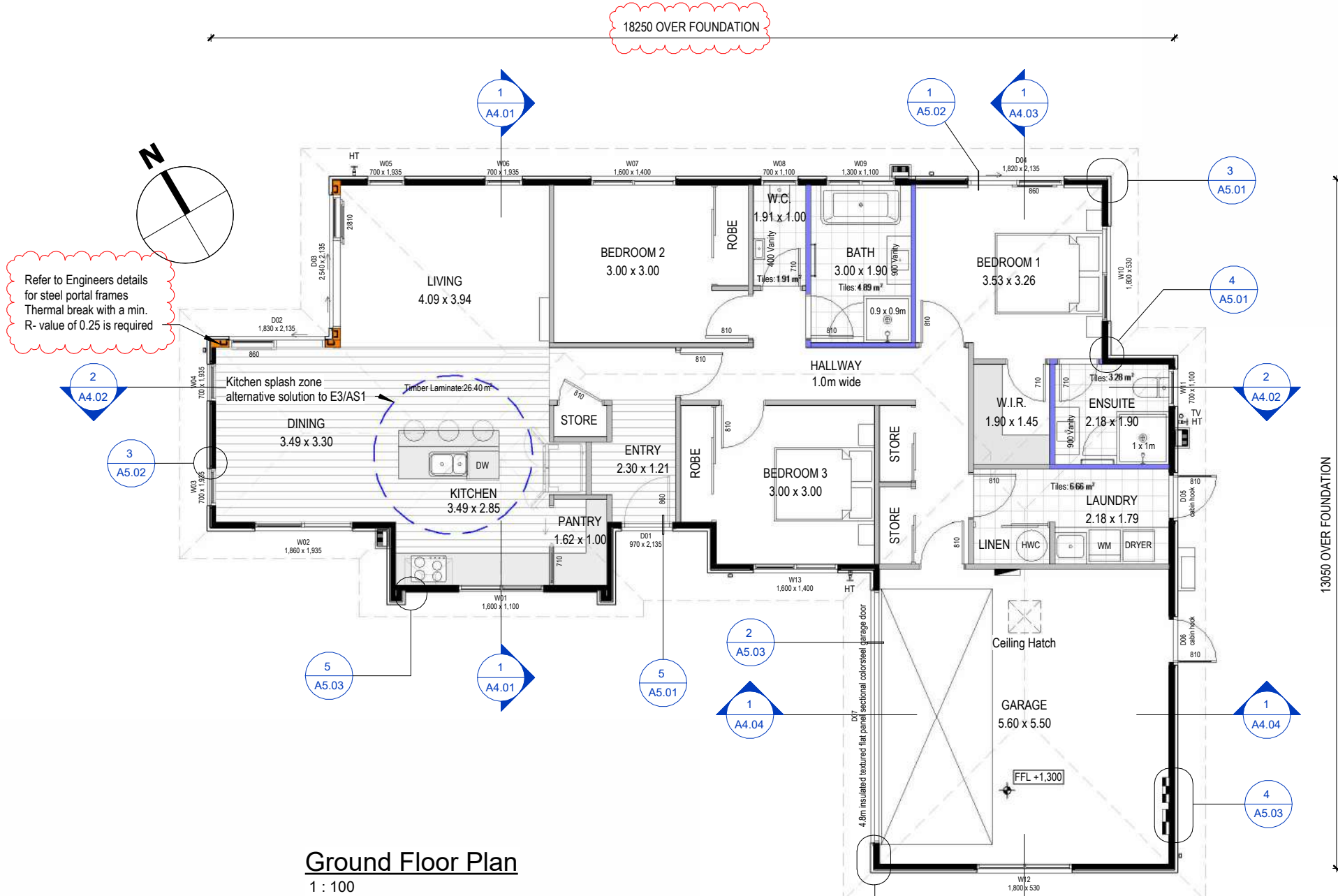
 © Mike Greer Homes NZ Ltd (03) 354 0166 0800 mikegreer Tower 2, 7 Deans Avenue, Addington, Christchurch 8011 info@mikegreerhomes.co.nz www.mikegreerhomes.co.nz	DRAWING TITLE:	LEGAL DESCRIPTION:	LEGAL NOTES:	Revisions:		Date of Issue:	DESIGNER:		SCALE: 1 : 100 A3 page size	SHEET:
	Fixture Setout Plan	LOT: 17DP: 596463 Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	V5	Changes for RFI's	27/10/2023	TECHNICIAN:		BASE PLAN	
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GENERAL NOTES:

HOUSE	
Ground Floor Perimeter :	65.78 m (Over Foundation)
Ground Floor Area over Framing: 152.79 m²	
Ground Floor Area over Foundation:	152.79 m²
Ground Floor Area over Cladding:	157.60 m² (excl. covered areas)
Ground Floor Area over Framing:	118.67 m² (excl. Garage)
Foundation Type:	Engineered concrete slab
Insulation:	R2.6 exterior walls (+ exterior garage walls) 2/layers of R3.6 ceiling (including garage)
Cladding Materials:	Rockcote 50mm Integra Panel on 20mm cavity James Hardie Vertical Stria 405 mm on 20mm cavity
Roof Cladding:	Colorsteel Longrun Trapezoidal
Roof Pitch:	25°
Roof Gable Width:	600mm
Roof Gable Height:	500mm
Internal Linings:	GIB 10mm plasterboard wall linings GIB 10mm plasterboard ceiling linings
Ceiling Battens:	Metal ceiling battens, direct fixed @ 400mm crs
Typical Stud Height:	2455mm to u/s of truss, 90x45 @ 600crs in H Wind Zone 140x45 @ 600 crs
Internal Height:	2135mm
Offset Height:	2140mm
Offset Type:	Flat & Raking
Internal Door or Leaf Height:	Standard
Internal Door or Leaf Width:	Typically 710 & 810mm
Heating:	Heat pump to be fixed in position shown on the drawings. Refer to specifications for more information
Indoor Heating to Areas:	N/A
Ceiling Vents:	Ensuite to exit through Soffit. Bathroom to exit through Soffit. Dryer to exit through Soffit. Range Hood to vent through Soffit. Bathroom & Ensuite extraction systems to be automated and placed to adequately deal with steam.
Smoke Alarms:	Required within 3m of all sleeping areas, change in level and entry/exits as per NZS 4514 & BRANZ Bulletin No 606
Water Pressure:	High
General:	All exterior window and door lintels by truss designer or NZS 3604. Internal non-loadbearing walls to be SG8 graded. Concept subject to TA rules and regulations Concept subject to subdivision developer's approval All dimensions to be confirmed on site All steel fixings are to be protected as per NZS 3604:2011, Table 4.1
Engineering:	Foundation design
Extras:	Bracing

FLOOR PLAN NOTES

- Glazing to comply NZS 4223
- All hard floor finishes to comply with NZBC D1/AS Table 2. Floor tiles to be non-slip and have a slip coefficient value of 0.35 - 0.65 for grit finished ceramic tiles
- Hot water pipes to be sized according to NZBC G12 & NZS 4305:1996. Mains Pressure: 15mmØ allows 12m max pipe length. Pipe length beyond this must be lagged.
- Satin enamel wall finish to bathroom, ensuite and those walls adjacent to Sinks etc in Kitchen and Laundry. One row of tiles to be used above basins, vanities and benches. Bottom edge to be filled with fungus/mold resistant sealant.
- Selected waterproofing membrane required to tiled bathrooms.



Ground Floor Plan
1 : 100

KEY	
Meter Board	
Distribution Board	
Comms Panel	
Gully Trap	
Hose Tap	
Downpipe	
External Heat Pump	

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						10/06/2024	VERSION:	CODE:	JOB #	
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Ground Floor Area over Framing:	152.79m²
Insulation:	refer to Sheet A6.02
Stud Height:	In High Wind Zone 2455mm to u/s of truss, 90x45 @ 600crs and 140x45 @ 600crs
Dwangs:	dwangs @800mm crs toRCS Integra panel dwangs @600mm crs toJames Hardie Vertical Stria

General: All exterior window & door lintels by truss manufacturer
Internal non-loadbearing walls to be SG8 graded
All dimensions to be confirmed on site

Top Plate:	45mm thick, width to match stud. SG8, H1.2, Pinus Radiata
Bottom Plate:	45mm thick, width to match stud. Additional top plate 35mm thick, 90mm wide if 90mm wall, 140mm wide if 140mm wall SG8, H1.2, Pinus Radiata

FIXING SCHEDULE:

Inter or Bottom Plate to Concrete Floor: 75 x 3.8mm shot-fired fastenings with 16mm washers @ 600mm crs, within 150mm each end of plate.
Refer to bracing plan for additional hold down fixings.

Hand Driven 2/100 x 3.75mm end nails
Power Driven 2/90 x 3.15mm end nails

Fish Plate to Straightened Stud:	Hand Driven 4/60 x 2.8mm nails each side Power Driven 4/60 x 2.8mm nails each side
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Standard Soffit Stringer to Stud: Hand Driven 2/100 x 3.75mm nails
Power Driven 3/90 x 3.15mm nails

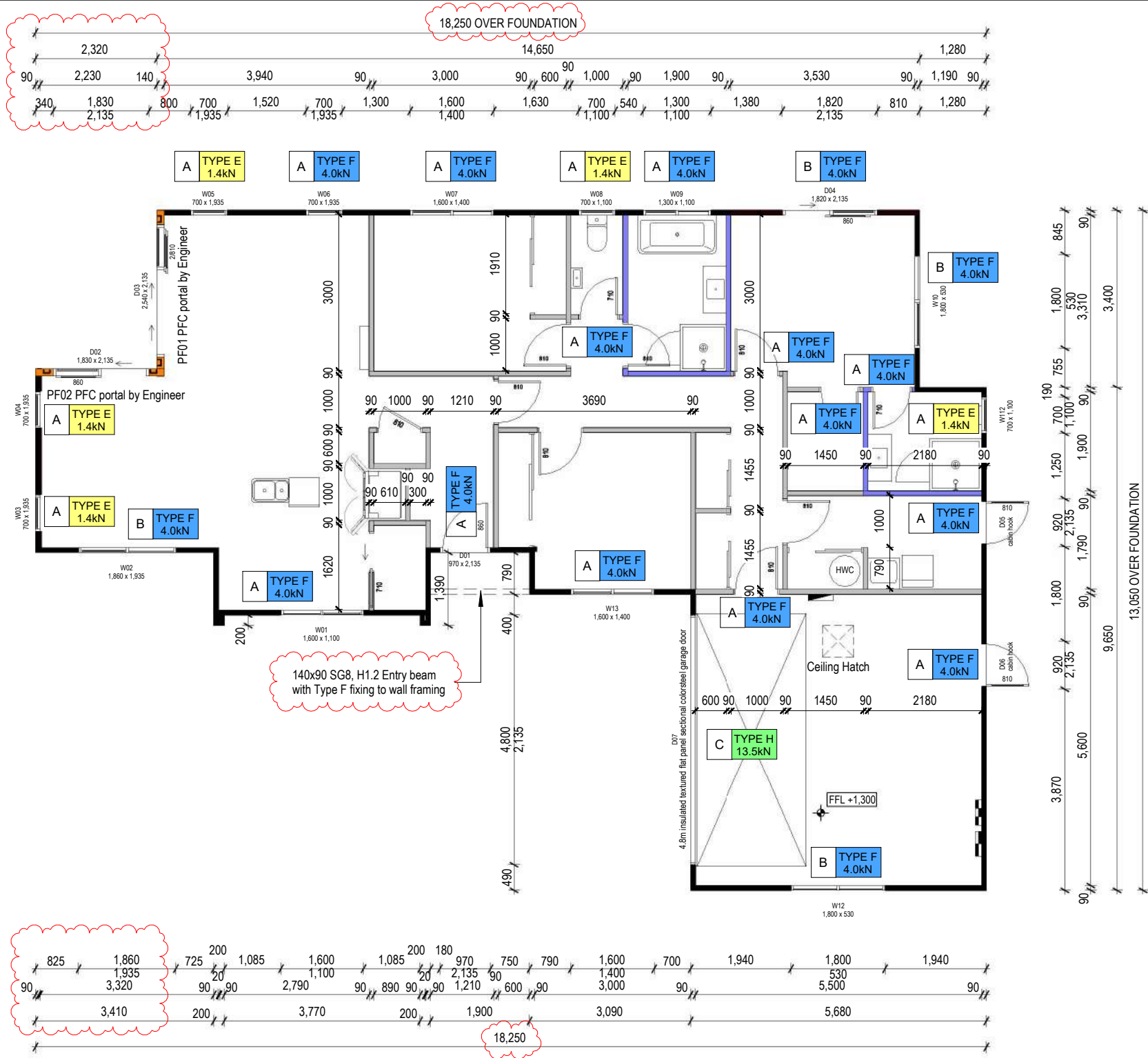
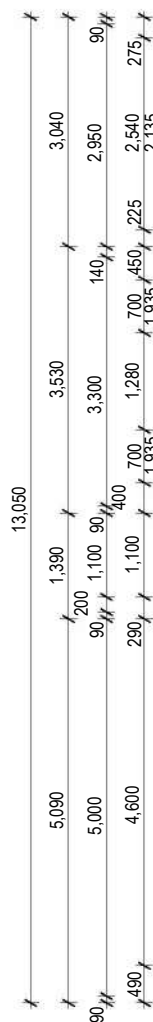
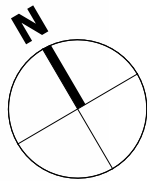
As Per Lumberlok Lintel Fixing Schedule (See Schedule at Rear of Drawing Set)

Sill Trimmer to Trimming Stud for:
As Per Lumberlok Lintel Fixing Schedule (See Schedule at Rear of Drawing Set)

Trimming studs together at openings, studs & blocking at wall intersections:
As Per Lumberlok Lintel Fixing Schedule (See Schedule at Rear of Drawing Set)

Trimming Stud to Doubling Stud immediately under lintels:
As Per Lumberlok Lintel Fixing Schedule (See Schedule at Rear of Drawing Set)

Wall Framing	Exterior walls & lintels	SG8, H1.2, Pinus Radiata	Roof Framing	Roof trusses - typical	SG8, H1.2, Pinus Radiata
	Interior walls (loadbearing)	SG8, H1.2, Pinus Radiata		Gable end truss	SG8, H1.2, Pinus Radiata
	Interior walls (non-loadbearing)	SG8, H1.2, Pinus Radiata		Coved or attic trusses	SG8, H1.2, Pinus Radiata
				Purlins	SG8, H1.2, Pinus Radiata
				Valley boards	SG8, H3.2, Pinus Radiata
Cavity Battens:					
	RCS Integra Panel	Proprietary Styrene Battens			
	JH Stria	Proprietary H3.1 Castellated battens			
Windows					
	Framing & reveals	Dressed, H3.1, Pinus Radiata			



1 : 100

Wall Type A	90x45 framed External walls (+R2.6 insulation)
	GIB standard wall lining to one side (Omit lining where applicable)
Wall Type B	90x45 framed internal walls
	GIB standard wall lining to both sides (Omit lining one side where applicable)
Wall Type C	90x45 framed Internal walls
	GIB water resistant lining to one side (standard gib to non wet area side if applicable)
Wall Type F	140x45 framed External Wall (+R2.6 insulation)
	GIB standard wall lining inside

LINTEL	SIZE	TREATMENT
A	140x90	GL8
B	190x90	GL8
C	300x90	Hy90 LVLs Lintel (refer to Gamma Bracing System GBPF/2.4)

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							VERSION: V5	CODE: 1	JOB # SL1019 -5127		

ROOFING NOTES

Area Over Roof (on flat) to edge of roofing: 198.82 m²

600mm eaves, 600mm gables unless noted otherwise.

Roof Pitch to be 25°

Soffit Type: Flat & Raking

Raised Ceiling / Raking Ceiling: N/A

0.40mm Colorsteel Longrun Trapezoidal roofing on self supporting roofing underlay.

All flashings to be 0.55mm BMT Colorsteel fixed in accordance with NZS 3602:2011 & meeting the durability requirements of NZBC E2/AS1, Table 20.21.22.

Generally roofing underlay shall be Thermakraft 215 unless otherwise stated.

70x45mm H1.2 treated SG8 purlins at 900mm crs max fixed to trusses with 1/10g x 80mm self-drilling screw. Top and bottom purlins shall be @ 600crs.

90x45 SG8, H1.2 treated Outriggers @ 750crs to gable verge to allow for maximum of 750mm overhang / eave width. To span back to next truss.

Outriggers to be fixed as per NZS 3604, table 10.18: (+ BRANZ adaptation, Build 142)

1/10 x 80mm self-drilling screw to wall framing.

2/90 x 3.15 skewed nails + 2/wiredogs to trusses/rafters.

2/90 x 3.15 skewed nails to blocking.

Selected nail plate trusses at 900mm crs fixed to top plate with 2/100x3.15mm skewed nails & 2/wiredogs (1/each side).

Roof bracing to be 8.0kN diagonally opposed intersecting steel straps fixed to top chord and top plate, as per NZS 3604:2011, or refer to Truss manufacturer's design for positions.

Proprietary Colorsteel spouting with concealed brackets at 600mm crs max, fixed to colorsteel fascia.

6550mm² Quad gutter cross sectional area).

Selected 75x50mm Colorsteel Downpipes with 61m² max catchment area for roof pitch 25+degs

All roof penetrations shall be flashed as per NZBC E2/AS1 external moisture section 8.4

Typically, Drain vent penetrations are to be flashed with a Deklite Boot flashing, installed as per manufacturer's latest instructions.

All trusses to be designed and approved by a qualified truss manufacturer able to issue a

producer statement prior to building consent approval, which shall guarantee satisfactory performance within the parameters of this design. The truss system design shall include roof

space bracing in accordance with NZS3604 (2011)

Roof Bracing Options

i) ROOF PLANE BRACE

MiTek LUMBERLOK

Each roof plane brace can be:

- A pair of valley rafter running continuously from ridge to the top plate in accordance with clauses 10.2.1.3.2 or 10.2.1.3.3 NZS 3604:2011.

OR

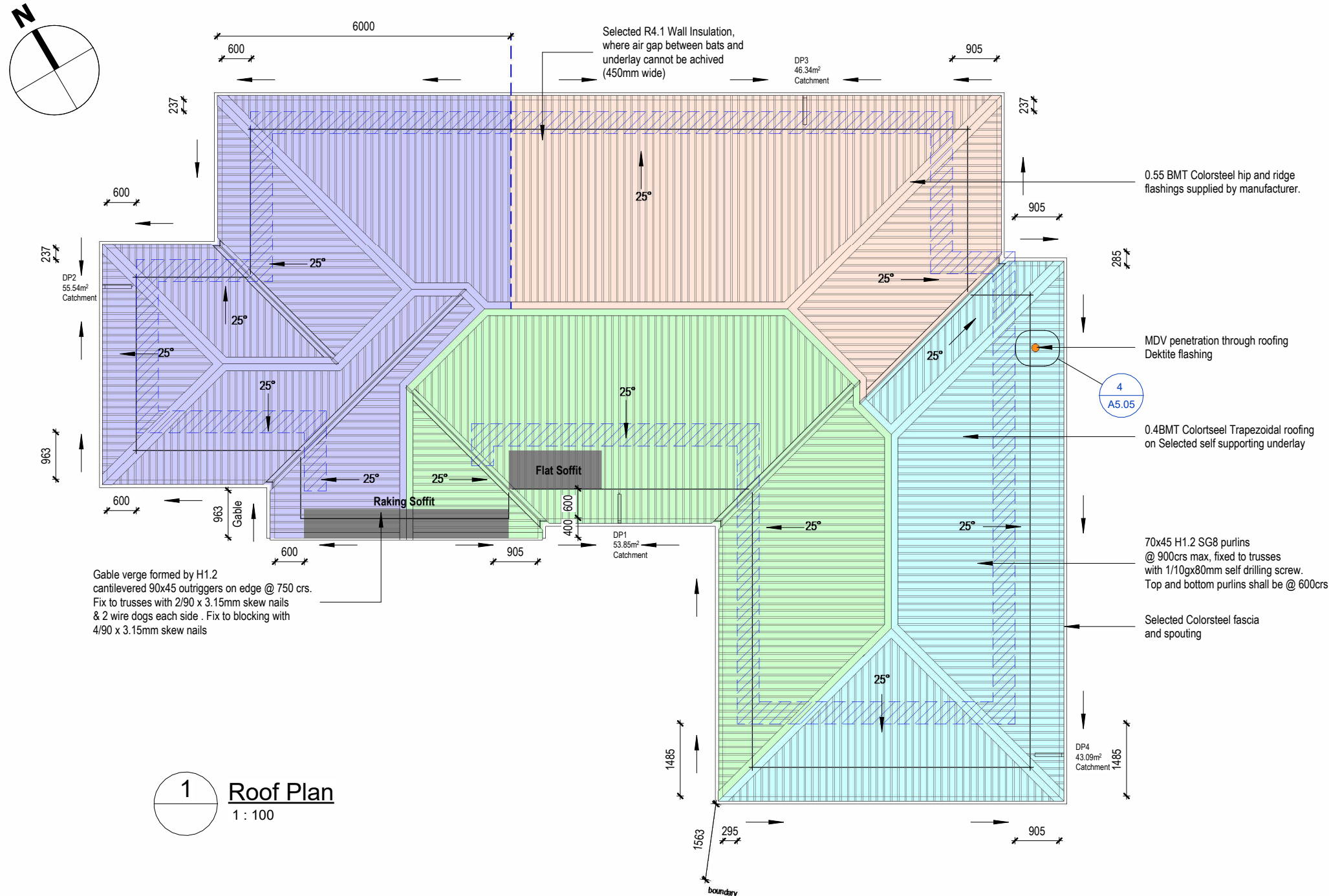
- A pair of tensioned and crossed LUMBERLOK Strip Brace running continuously from ridge to eave frame installed as detailed below.

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

A pair of tensioned and crossed LUMBERLOK Strip Brace over Top Chords/Rafters installed @ 45° x 5° to the Rafter or Purlin line.



1 Roof Plan
1 : 100

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				V4	Working Drawings	21/03/2024	TECHNICIAN: JD	BASE PLAN CT6439	
						Amendment Date: 19/03/2024	VERSION: V4	CODE: 1	

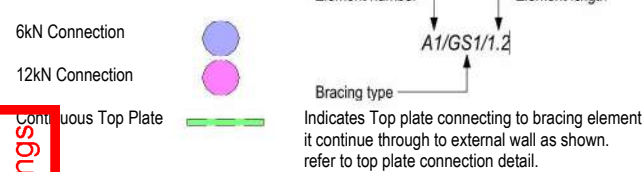
BRACING NOTES:

Reading the Bracing Plan:

GS1-N - 0.4m min. length. Any 10mm or 13mm GIB Standard Plasterboard fixed to one side only
BL1-H - 0.4m min. length. Any 10mm or 13mm GIB Braceline fixed to one side only, hold downs required
GBPF/2.4 - 0.4m min. length. Refer to Sheet A6.04 for the details, hold downs required

BRACING KEY

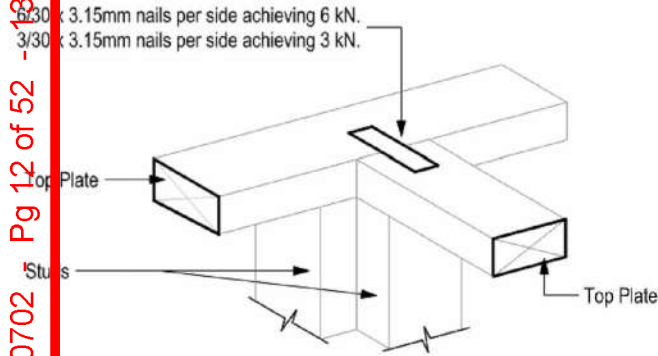
Timber blocking shall be continuous to exterior walls to allow for perimeter fixing for bracing element.
(As per NZS3604: 2011 Section 8.7.3.4)



Openings in Bracing Elements:
(as per GIB EzyBrace System)

Small openings
Small openings (e.g. power outlets) of 90 x 90mm or less may be placed no closer than 90mm to the edge of the braced element. A block may need to be provided alongside the perimeter stud.

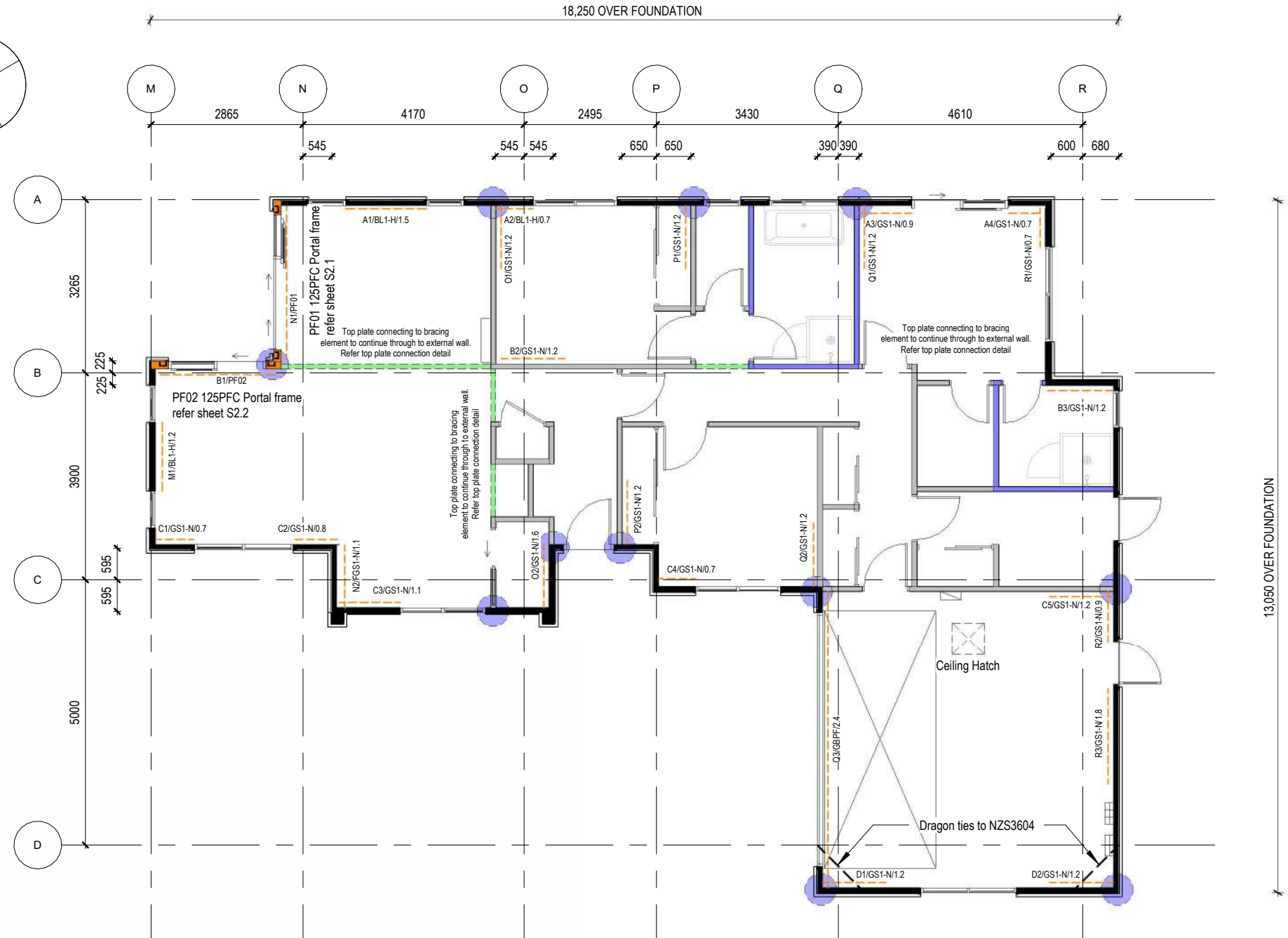
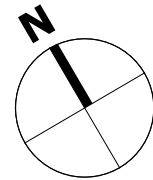
Large openings
Openings above 90 x 90mm such as switch boards, recessed cabinets and TV's etc. should be placed outside of the bracing element or locate bracing on the other side of the wall framing.



CONNECTING TOP PLATES TO EXTERNAL WALLS - WALLS CONTAINING BRACING

Note "Each wall that contains one or more wall bracing elements shall be connected at the top plate level, either directly, or through a framing member in the line of the wall, to external walls at right angles to it. Top plate fixing(s) of the capacity in tension or compression along the line of the wall bracing element are given as follows:

- (a) For each wall containing wall bracing elements with a total bracing capacity of not more than 25 bracing units: to at least one such external wall by a fixing as shown in figure 8.16 of 6 kN capacity;
- (b) For each wall containing wall bracing elements with a total bracing capacity of not more than 50 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each of 6 kN capacity;
- (c) For each wall containing wall bracing elements with a total bracing capacity of more than 50 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each having a rating of not less than 2.4 kN per 100 bracing units."



Bracing Plan
1 : 100

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						Amendment Date: 10/06/2024	VERSION: V5	CODE: 1	

GIB EzyBrace® Bracing Software

Demand Calculation Sheet

Job Details

Name:	MGH SPEC
Street and Number:	Lot 17 Dundee Lane, Flemington Stage 12, Lincoln
Plot and DP Number:	Lot 17 DP 596463
City/Town/District:	Selwyn District
Designer:	JD
Company:	Mike Greer Homes
Date:	Thursday, 6 June 2024

Building Specification

Number of Storeys	1
Floor Loading	2 kPa
Foundation Type	Slab
Single	
Claadding Weight	Medium
Roof Weight	Light
Room in Roof Space	No
Roof Pitch (degrees)	25
Roof Height above Eaves (m)	2.1
Building Height to Apex (m)	4.5
Ground to Lower Floor (m)	0.2
Average Stud Height (m)	2.455
Building Length (m)	18.25
Building Width (m)	13.05
Building Plan Area (m²)	152.79

Building Location

Wind Zone = High	Earthquake Zone 2 Soil Type D & F (Deep to Very Soft) Annual Prob. of Exceedance: 1 in 500 (Default)
------------------	---

Bracing Units required for Wind

	Along	Across
Single Level	626	807

Bracing Units required for Earthquake

	Along & Across
Single Level	679

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GIB EzyBrace® Bracing Software



Single Level Along Resistance Sheet

Job Name: MGH SPEC

									Wind	EQ
									Demand	
									626	679
									Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	893 143%	813 120%
A	1	1.50	0	2.455	GS1-N	GIB®	101	88		
	2	0.70		2.455	GS1-N	GIB®	40	40		
	3	0.90	0	2.455	GS1-N	GIB®	55	52		
	4	0.70	0	2.455	GS1-N	GIB®	40	40		
	External Length = 14.65								237 OK	221 OK
B	1	1.00		2.455	PF02	SED	50	50		
	2	1.20	0	2.455	GS1-N	GIB®	81	70		
	3	1.20	0	2.455	GS1-N	GIB®	81	70		
C	External Length = 3.60								212 OK	191 OK
	1	0.70	0	2.455	GS1-N	GIB®	40	40		
	2	0.80	0	2.455	GS1-N	GIB®	48	46		
	3	1.10	0	2.455	GS1-N	GIB®	72	64		
	4	0.70	0	2.455	GS1-N	GIB®	40	40		
	5	1.20	0	2.455	GS1-N	GIB®	81	70		
D	External Length = 12.57								281 OK	261 OK
	1	1.20	0	2.455	GS1-N	GIB®	81	70		
	2	1.20	0	2.455	GS1-N	GIB®	81	70		
	External Length = 5.68								162 OK	141 OK

GIB EzyBrace® Version 12/16

GIB EzyBrace® Bracing Software



Single Level Across Resistance Sheet

Job Name: MGH SPEC

									Wind	EQ
									Demand	
									807	679
									Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	1099 136%	993 146%
M	1	1.20	0	2.455	BL1-H	GIB®	150	122		
	External Length = 3.53								150 OK	122 OK
N	1	1.00	0	2.455	PF01	SED	50	50		
	2	1.10	0	2.455	GS1-N	GIB®	72	64		
External Length = 4.43									122 OK	114 OK
O	1	1.20	0	2.455	GS1-N	GIB®	81	70		
	2	1.20	0	2.455	GS1-N	GIB®	81	70		
External Length = 1.19									162 OK	141 OK
P	1	1.20	0	2.455	GS1-N	GIB®	81	70		
	2	1.20	0	2.455	GS1-N	GIB®	81	70		
External Length = 0.79									162 OK	141 OK
Q	1	1.20	0	2.455	GS1-N	GIB®	81	70		
	2	1.20	0	2.455	GS1-N	GIB®	81	70		
	3	1.00	0	2.455	GBPF/2.4 Gamma Bracing Portal		124	137		
External Length = 5.69									286 OK	278 OK
R	1	0.70	0	2.455	GS1-N	GIB®	40	40		
	2	0.90	0	2.455	GS1-N	GIB®	55	52		
	3	1.80	0	2.455	GS1-N	GIB®	121	106		
External Length = 13.05									217 OK	198 OK

GIB EzyBrace® Version 12/19

Electrical Notes

- Allow for single switched power point for standard appliances: Fridge, Dishwasher, Waste Disposal, Rangehood, Hob, Oven, Refer to kitchen design for layout and positions of kitchen area sockets etc. All power points are indicative only and must be positioned and confirmed on site by architect and/or owner.

- All electrical installations to be in accordance with G9/AS1.

- Mesh in floor slab must be earthed, earth with 16mm REO rod brought up into garage wall below meterbox and wired to the mesh. At prewire, connect a clamp and piece of wire to rod and earth it to the meterbox.

- Total of 20 lux of illuminance for the total wattage required per m2 of floor area as shown in NZBC G8 / AS1 Table 1.

- Lighting and electrical by others, all positions and types to be selected and confirmed by client with contractor unless noted otherwise.

Mechanical ventilation in housing removing moisture shall be vented outside includes wet areas & cooker hoods).Refer to NZBC G4/AS1 1.3.3 (a&b), Mechanical Ventilation to be 150 dia. 230 Cu M/H inline fan ducted to soffit. Auto extractor fans shall terminate through soffit with an extraction rate as set out in NZEC G4.

Downlights shall be LED check the insulation manufacturers instructions to ensure their product is safe when installed along side proposed downlights

House to be wired for alarm with key pad at entrance (pre-wire only)

MOKE / ALARMS

All smoke alarms are to comply with NZBC F7 and be manufactured to at least one of: AS 3786, ISO 12239 or BS EN 14604, Required within all bedrooms, living spaces, hallways, and landings as per NZS 4514:2021

Where a kitchen is separated from the living spaces and hallways by doors that can be closed, an alarm specified by its manufacturer as suitable for a kitchen shall be located in the kitchen. This may be a heat alarm to avoid nuisance activation.

Where more than 1 smoke alarm is needed to meet the requirements of NZS 4514:2021, these smoke alarms shall all be interconnected so that when 1 activates all smoke alarm devices in the household unit will sound

Smoke alarms shall be within 10m of each other in any direction

Smoke alarms shall be no more than 5m from any wall in the space they are in

GENERAL PLACEMENT NOTES

Power points typically 300mm from nearest corner & 300mm from FFL unless otherwise noted.

Power points in wet areas to be 1,200mm high from FFL and vertically fixed unless otherwise noted.

Power point for heater to be located 300mm below finished ceiling level

Power points in kitchen to be 1000mm high from FFL

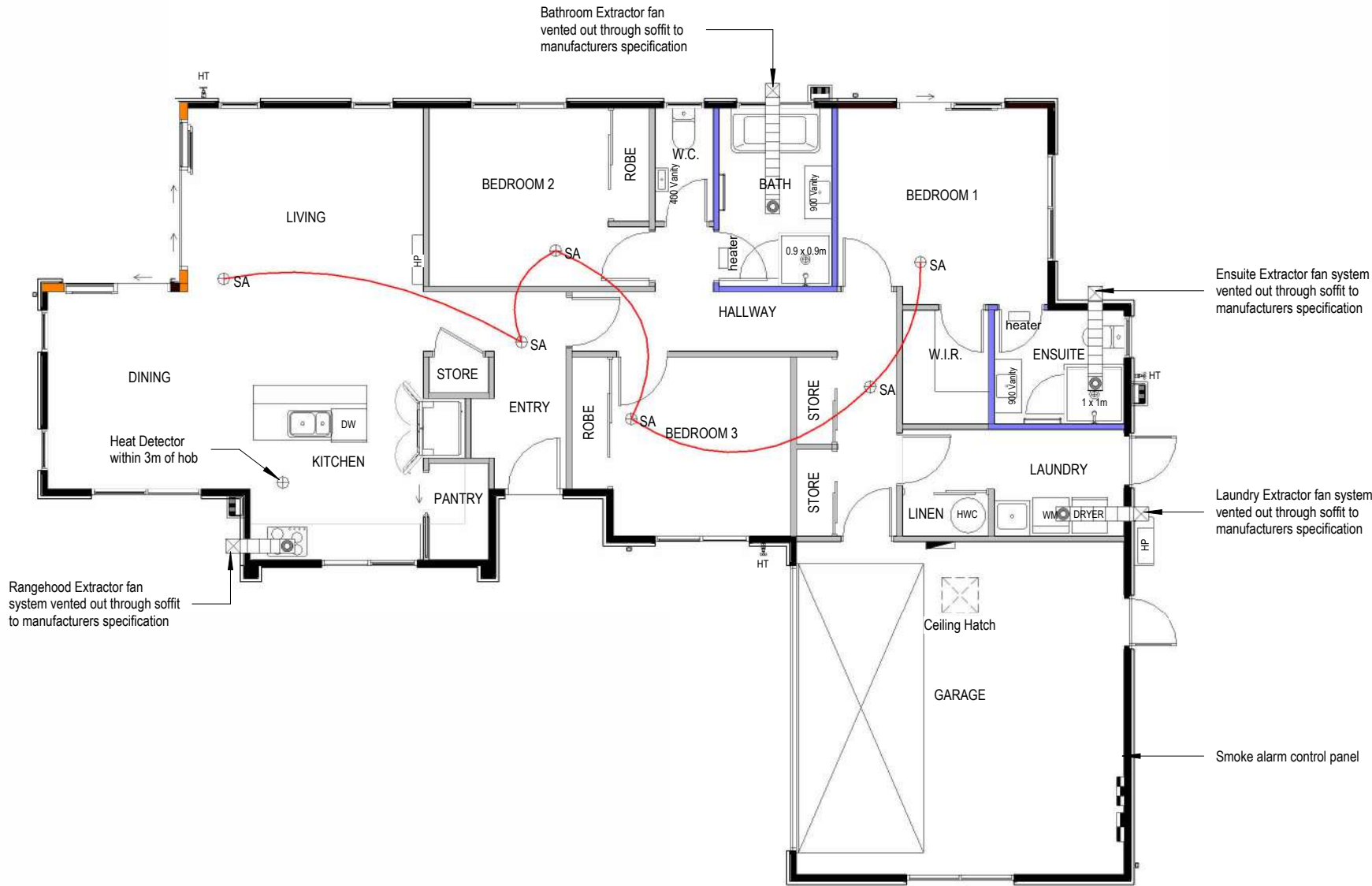
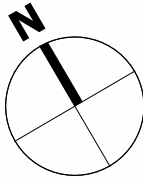
Light switches typically 150mm from nearest corner or door frame & 1,200mm om FFL unless otherwise noted.

HWC switch 300mm above FFL

Laundry power Point 1000mm above FFL

Electrical Legend

- Meter Board/Earth
- Distribution Board
- Comms Panel
- Interconnected Smoke Detector
- Hot Water Cylinder
- Extract Fan
- Mechanical Ventilation
- Outlet Grille
- Heated Towel Rail
- Bathroom Heater
- Internal Heatpump unit
- External Heatpump Unit

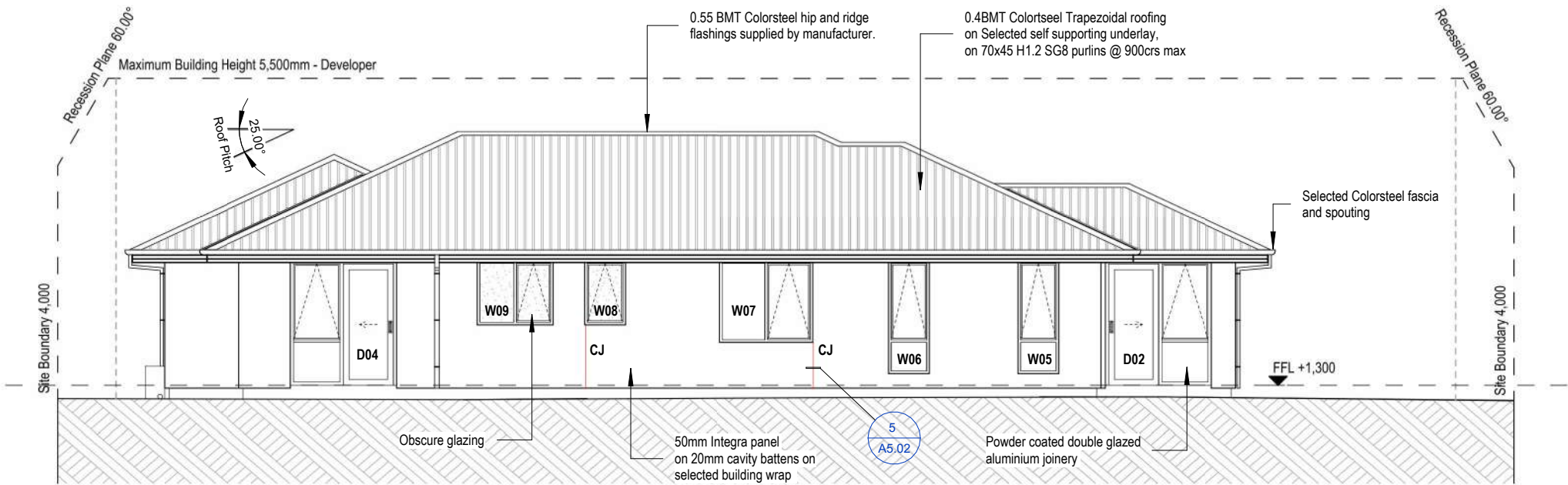


Electrical Plan
1 : 100

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				V5	Changes for RFI's	27/10/2023	TECHNICIAN: JD		BASE PLAN CT6439	
						Amendment Date:	VERSION: V5	CODE: 1	JOB # SL1019 -5127	
						10/06/2024				

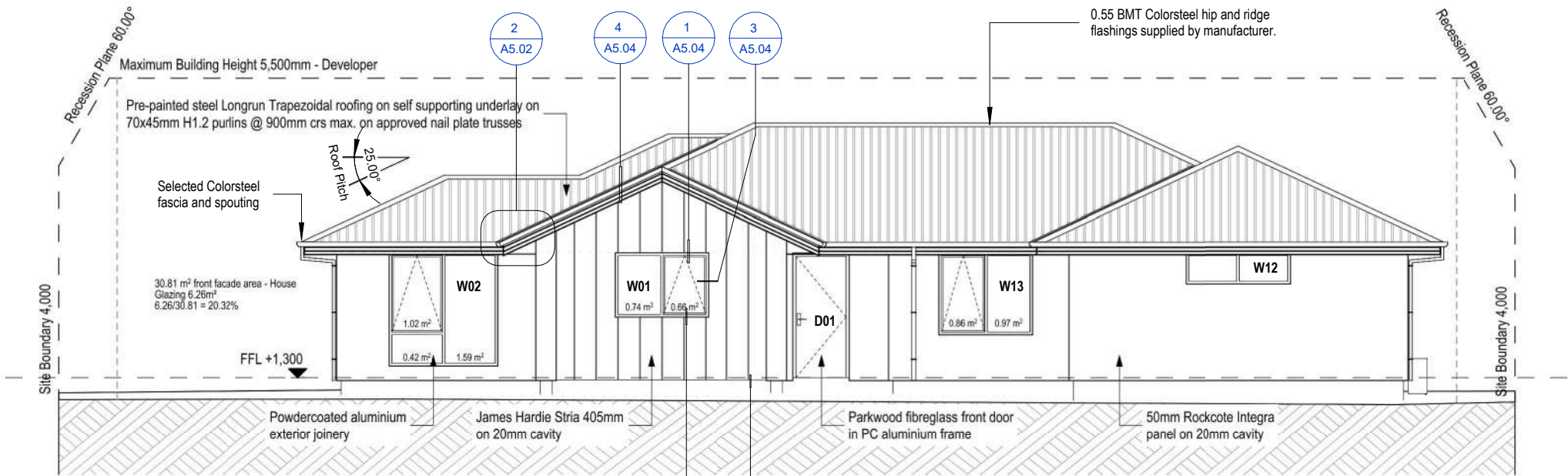
Risk Matrix Calculation: North Elevation		
Wind Zone:	High	1
# of Storeys	Low	0
Roof/Wall Design	Low	0
Eaves Width	Low	0
Envelope	Low	0
Deck	Low	0
Total =		1

Risk Matrix Calculation: South Elevation		
Wind Zone:	High	1
# of Storeys	Low	0
Roof/Wall Design	High	3
Eaves Width	Medium	1
Envelope	Medium	1
Deck	Low	0
Total =		6



North Elevation

SCALE 1:100 @A3

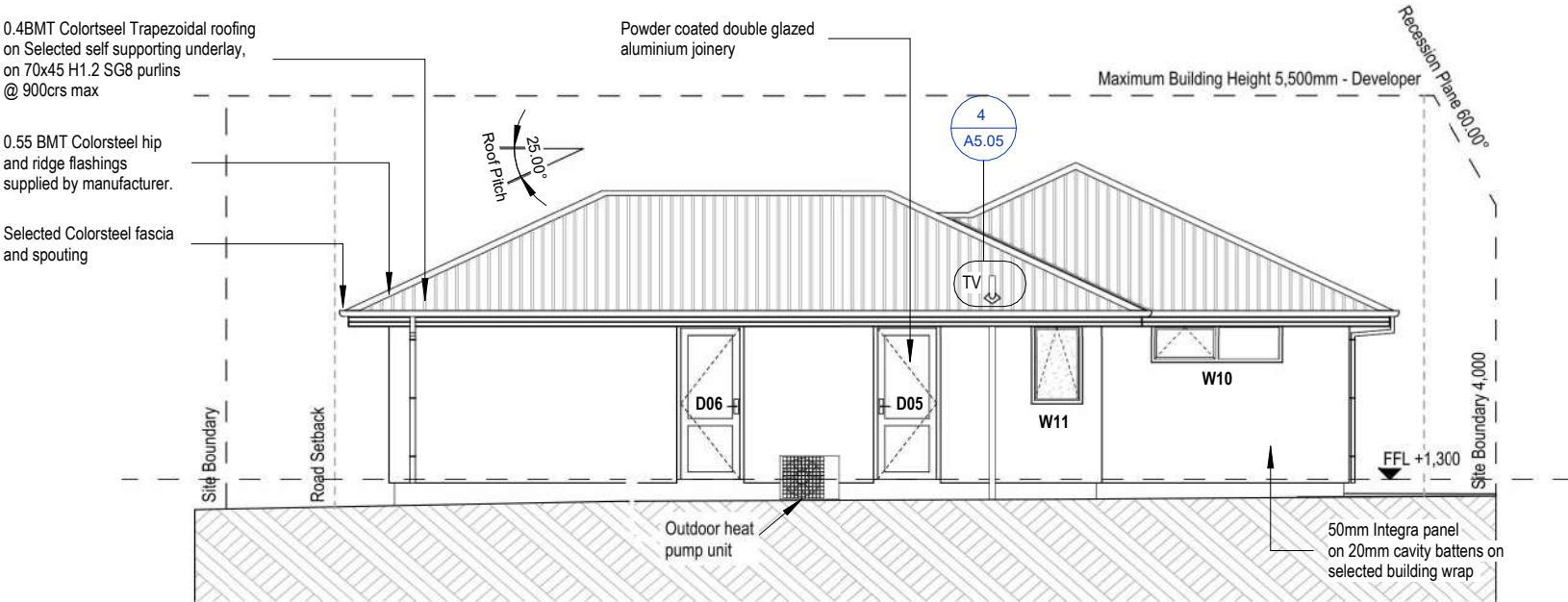


South Elevation

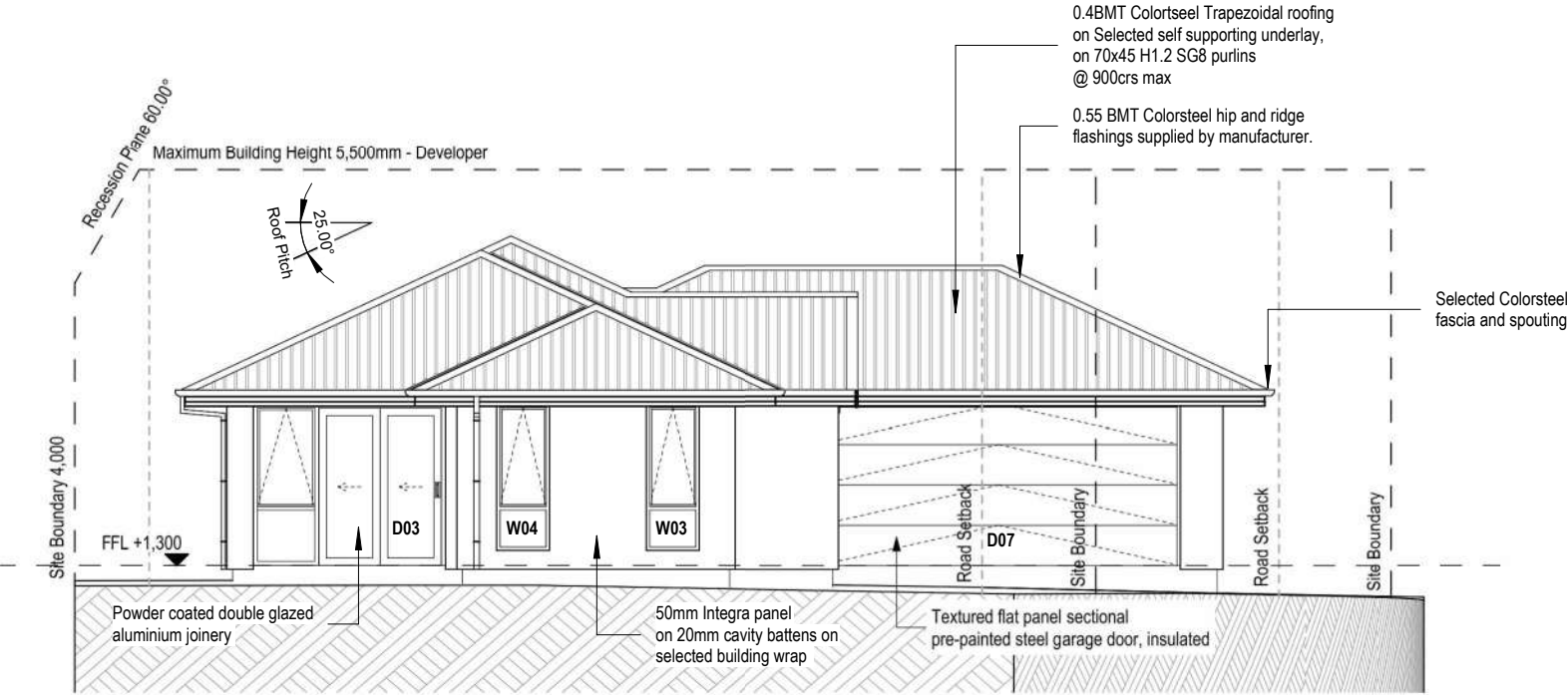
SCALE 1:100 @A3

Risk Matrix Calculation: East Elevation		
Wind Zone:	High	1
# of Storeys	Low	0
Roof/Wall Design	Low	0
Eaves Width	Medium	1
Envelope	Low	0
Deck	Low	0
Total =		2

Risk Matrix Calculation: West Elevation		
Wind Zone:	High	1
# of Storeys	Low	0
Roof/Wall Design	Low	0
Eaves Width	High	2
Envelope	Low	0
Deck	Low	0
Total =		3

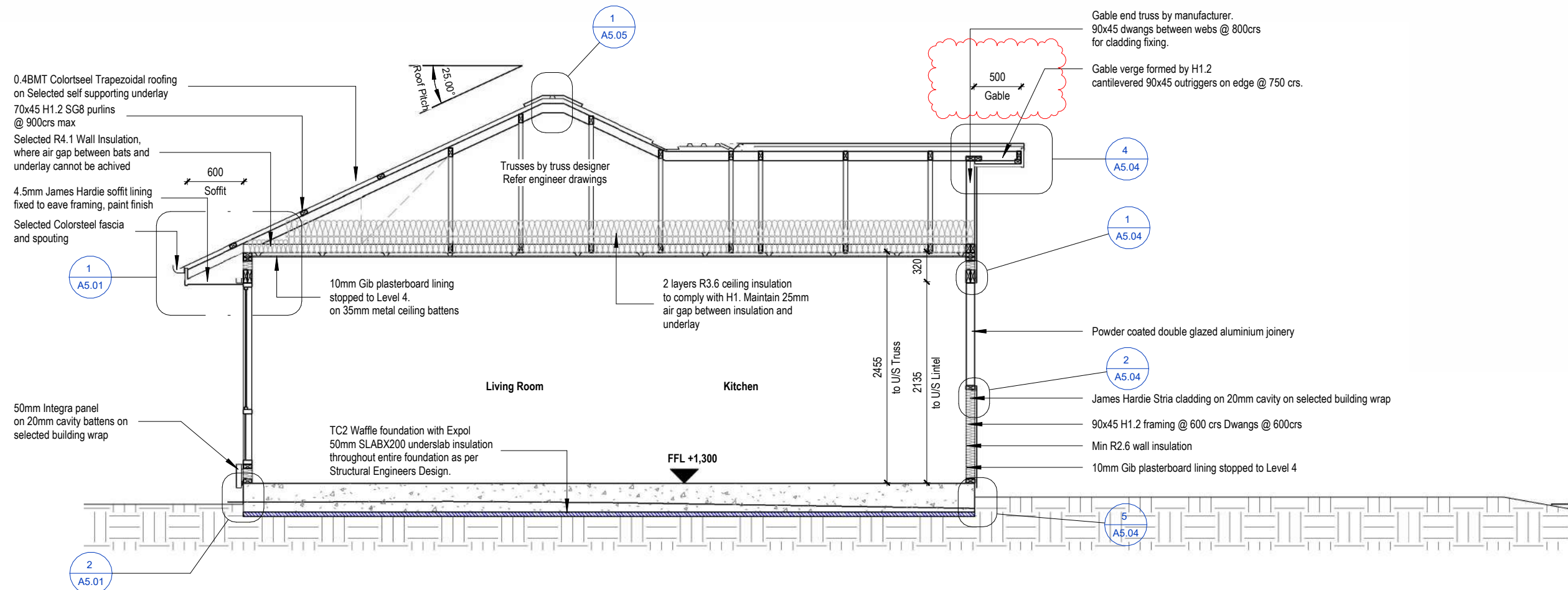


East Elevation
SCALE 1:100 @A3



West Elevation
SCALE 1:100 @A3

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				V5	Changes for RFI's		TECHNICIAN: JD			
				VERSION: V5	CODE: 1					

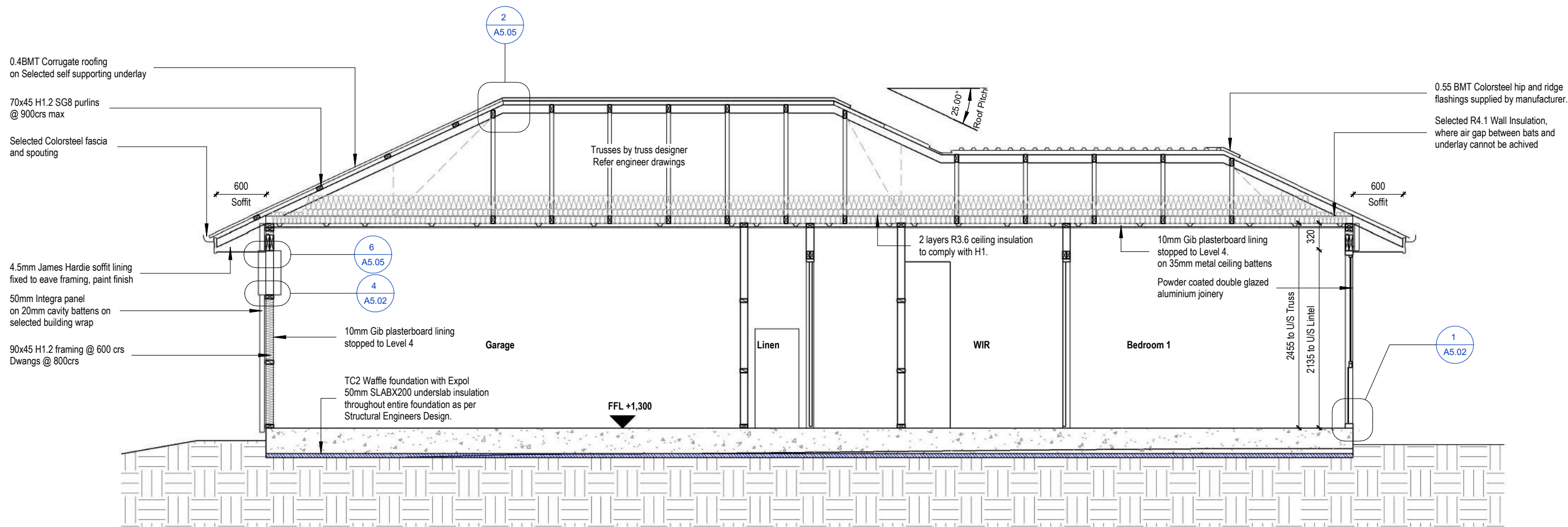


Section A
1 : 50

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						Amendment Date:	TECHNICIAN:	BASE PLAN	
						10/06/2024	JD	CT6439	
							VERSION:	CODE:	JOB #
							V5	1	SL1019 -5127

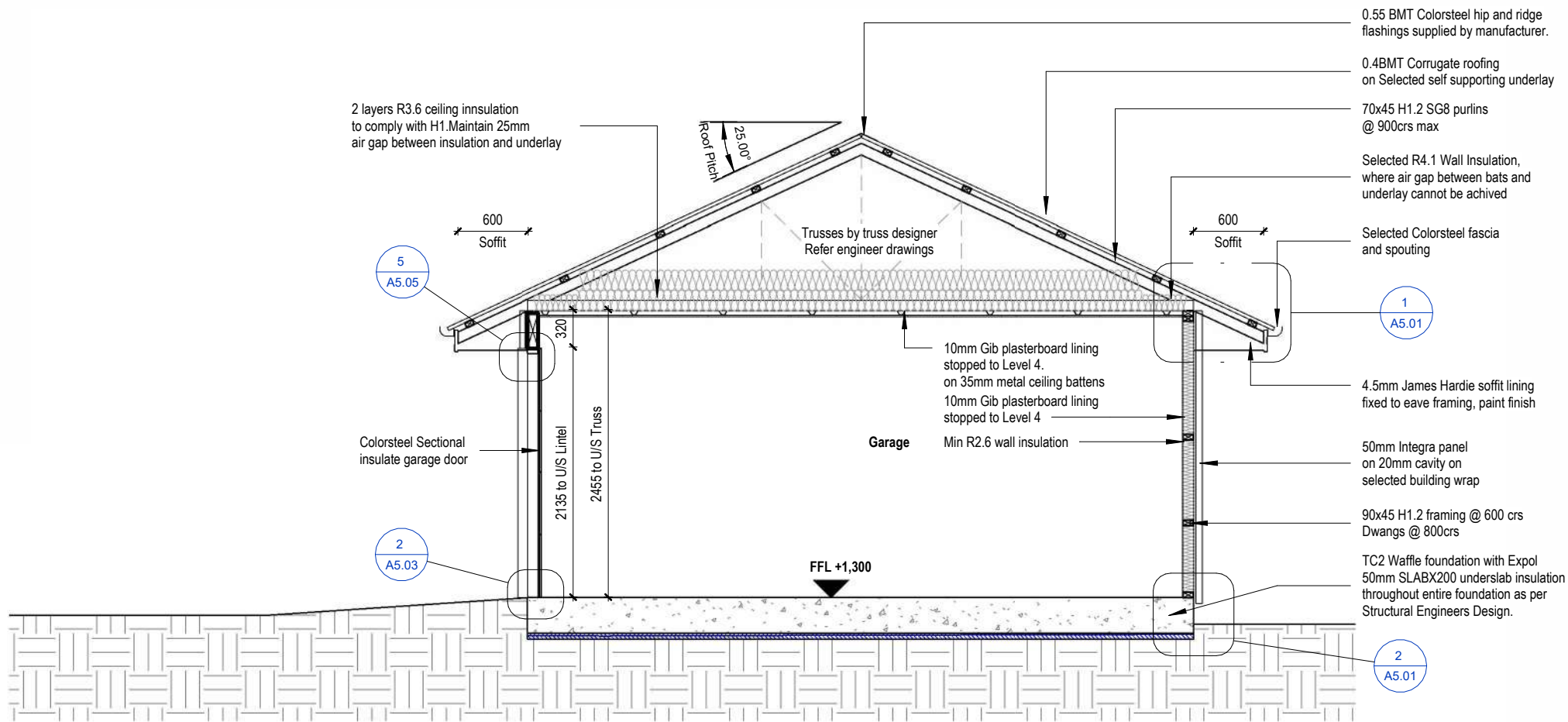


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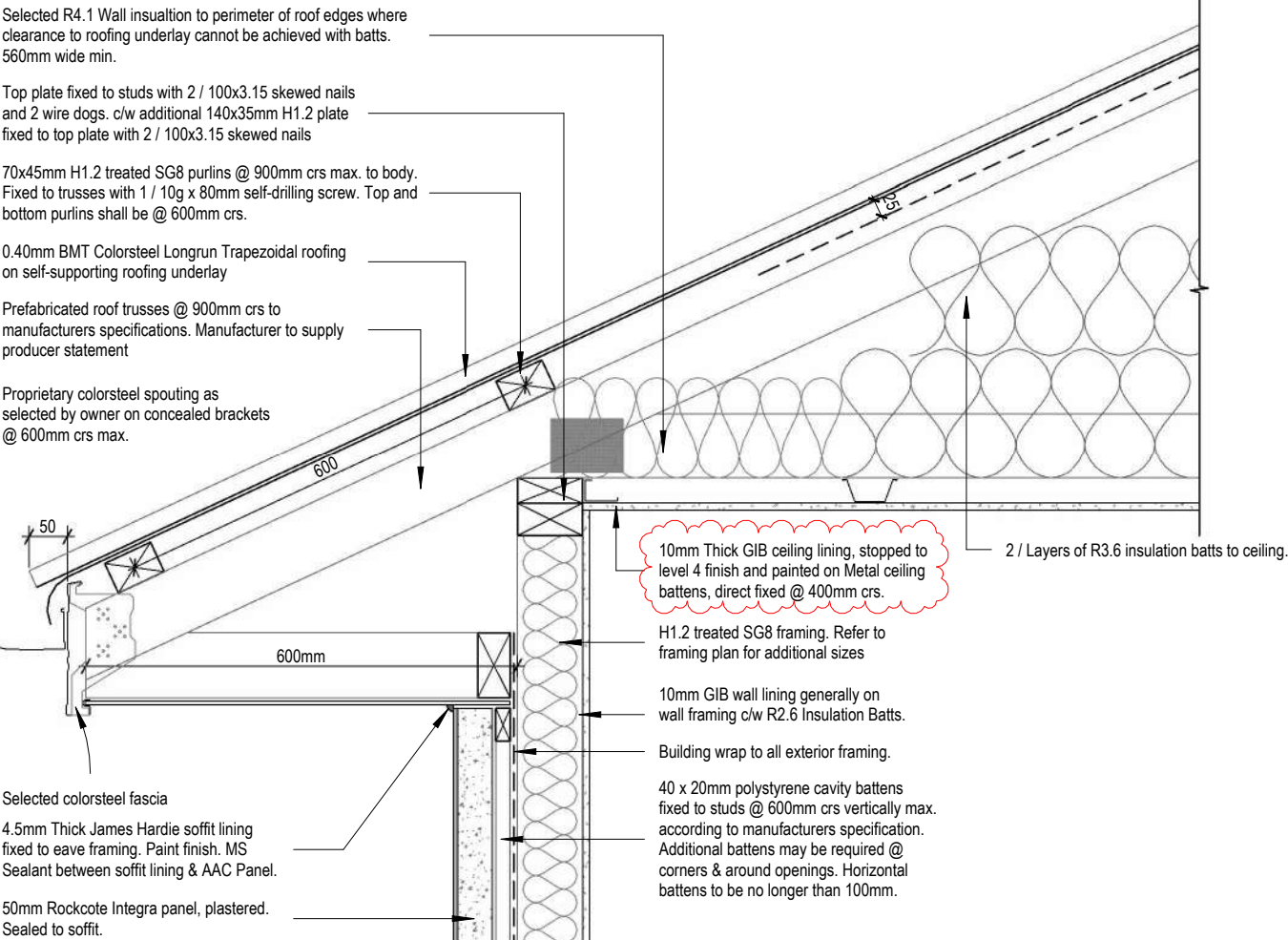
Section C
1 : 50

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					Amendment Date: 10/06/2024	TECHNICIAN: JD	BASE PLAN CT6439	
						VERSION: V5	CODE: 1 JOB # SL1019 -5127	

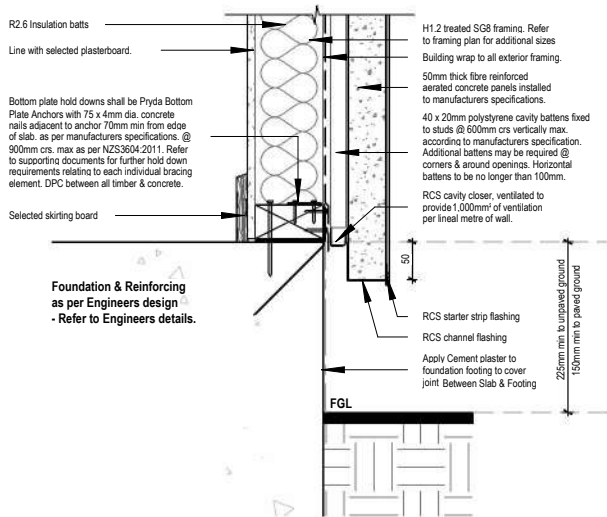


Section D
1 : 50

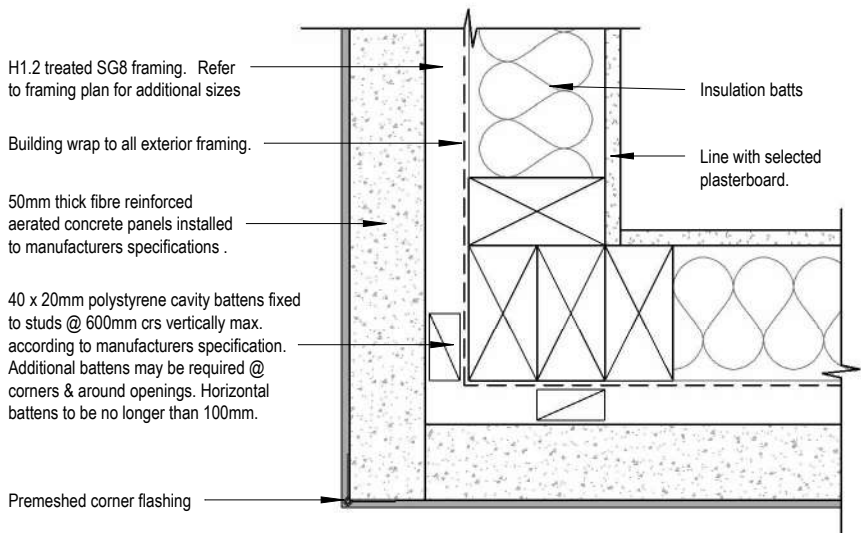
 © Mike Greer Homes NZ Ltd (03) 354 0166 0800 mikegreer Tower 2, 7 Deans Avenue, Addington, Christchurch 8011 info@mikegreerhomes.co.nz www.mikegreerhomes.co.nz	DRAWING TITLE:	LEGAL DESCRIPTION:	LEGAL NOTES:	Revisions:		Date of Issue:	DESIGNER:		SCALE: 1 : 50 A3 page size	SHEET:
	Section D	LOT: 17DP: 596463 Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	V5	Changes for RFI's	27/10/2023	TECHNICIAN:		BASE PLAN	
						Amendment Date:	JD	CT6439		
									VERSION:	
	V5	1	SL1019 -5127							



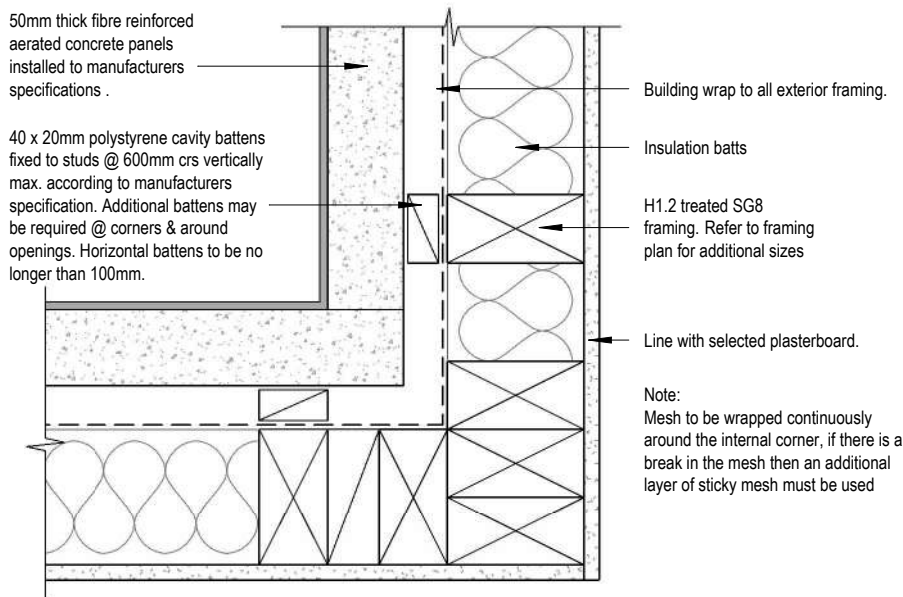
1 Eave Detail - RCS Integra
A4.01 1 : 10



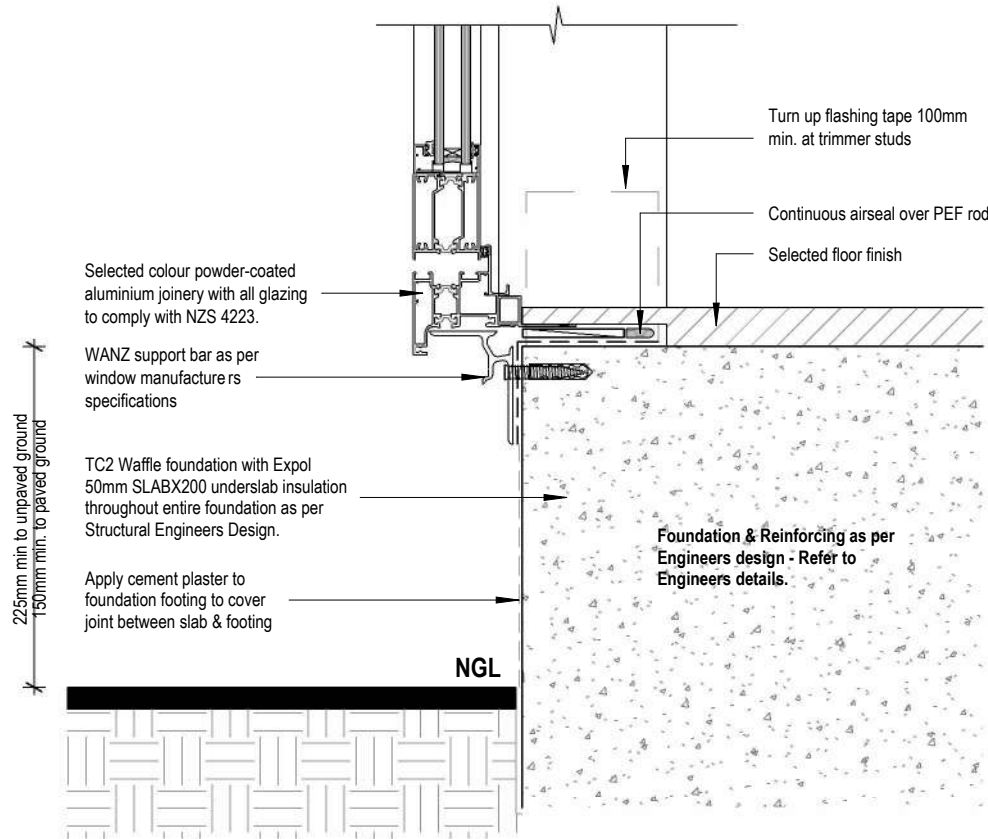
2 Foundation - RCS Integra
A4.01 1 : 10



3 External Corner - RCS Integra
A2.01 1 : 5

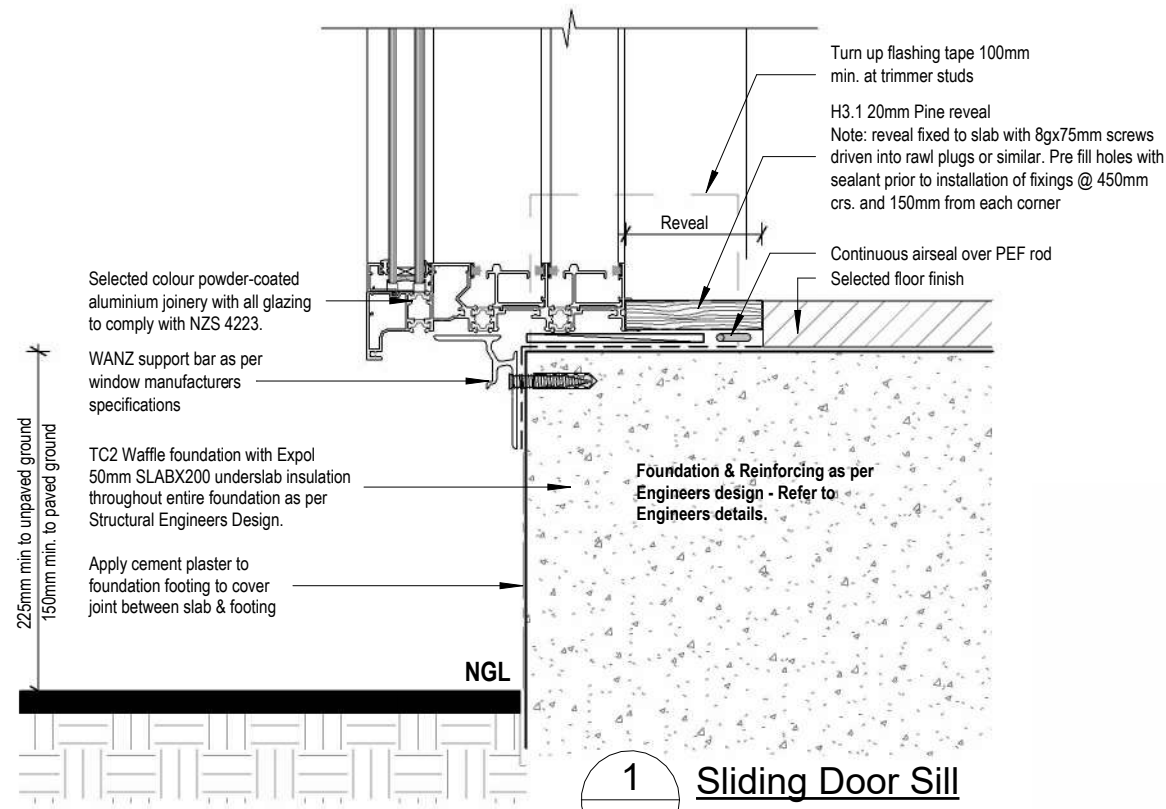


4 Internal Corner - RCS Integra
A2.01 1 : 5



5 Hinged Door Sill
A2.01 1 : 5

 © Mike Greer Homes NZ Ltd (03) 354 0166 0800 mikegreer Tower 2, 7 Deans Avenue, Addington, Christchurch 8011 info@mikegreerhomes.co.nz www.mikegreerhomes.co.nz	DRAWING TITLE: Details - RCS Integra	LEGAL DESCRIPTION: LOT: 17 DP: 596463 Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	LEGAL NOTES: 1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	Revisions: V5 Changes for RFI's	Date of Issue: 27/10/2023	DESIGNER: GQ	SCALE: As indicated A3 page size	SHEET: A5.01
					Amendment Date: 10/06/2024	TECHNICIAN: JD	BASE PLAN CT6439	
						VERSION: V5	CODE: 1	JOB # SL1019 -5127



1
A2.01
Sliding Door Sill
1 : 5

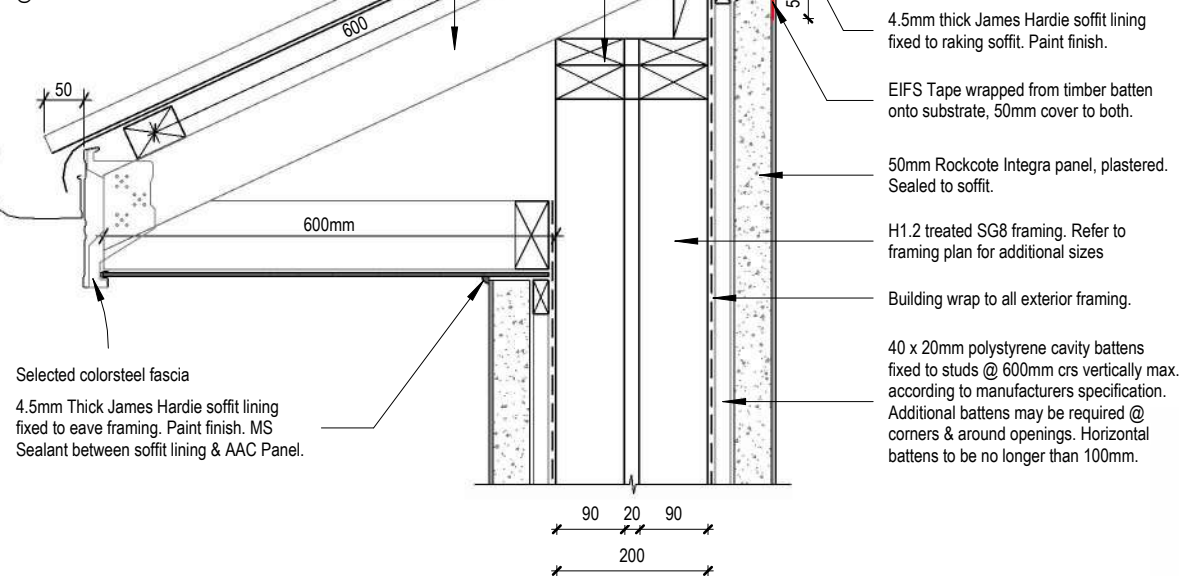
Top plate fixed to studs with 2 / 100x3.15 skewed nails and 2 wire dogs. c/w additional 140x35mm H1.2 plate fixed to top plate with 2 / 100x3.15 skewed nails

70x45mm H1.2 treated SG8 purlins @ 900mm crs max. to body. Fixed to trusses with 1 / 10g x 80mm self-drilling screw. Top and bottom purlins shall be @ 600mm crs.

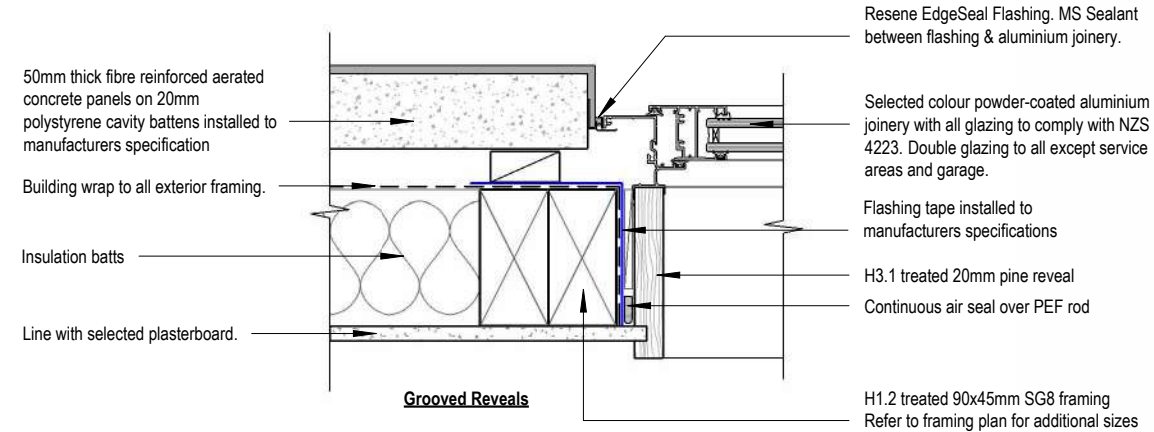
0.40mm BMT Colorsteel Longrun Trapezoidal roofing on self-supporting roofing underlay

Prefabricated roof trusses @ 900mm crs to manufacturers specifications. Manufacturer to supply producer statement

Proprietary colorsteel spouting as selected by owner on concealed brackets @ 600mm crs max.



2
A3.01
Integra Raking Soffit & Wing Wall Detail
1 : 10



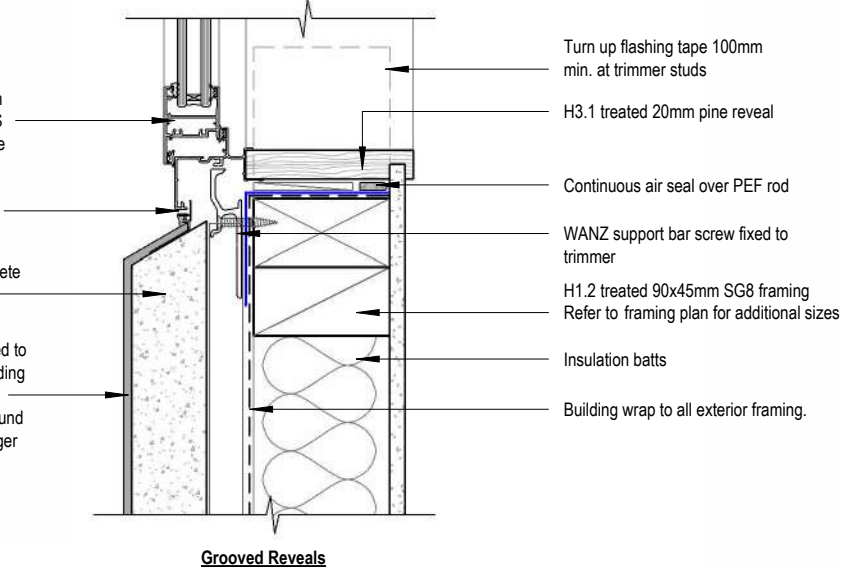
3
A2.01
Integra Window Jamb Detail
1 : 5

Selected colour powder-coated aluminium joinery with all glazing to comply with NZS 4223. Double glazing to all except service areas and garage.

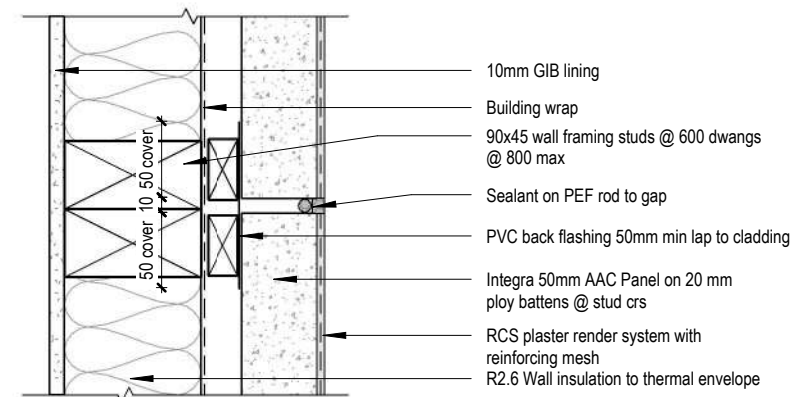
Resene EdgeSeal Flashing. MS Sealant between flashing & aluminium joinery.

50mm thick fibre reinforced aerated concrete panels installed to manufacturers specifications.

40 x 20mm polystyrene cavity battens fixed to studs @ 600mm crs vertically max. according to manufacturers specification. Additional battens may be required @ corners & around openings. Horizontal battens to be no longer than 100mm.



4
A4.02
Integra Window Sill Detail
1 : 5

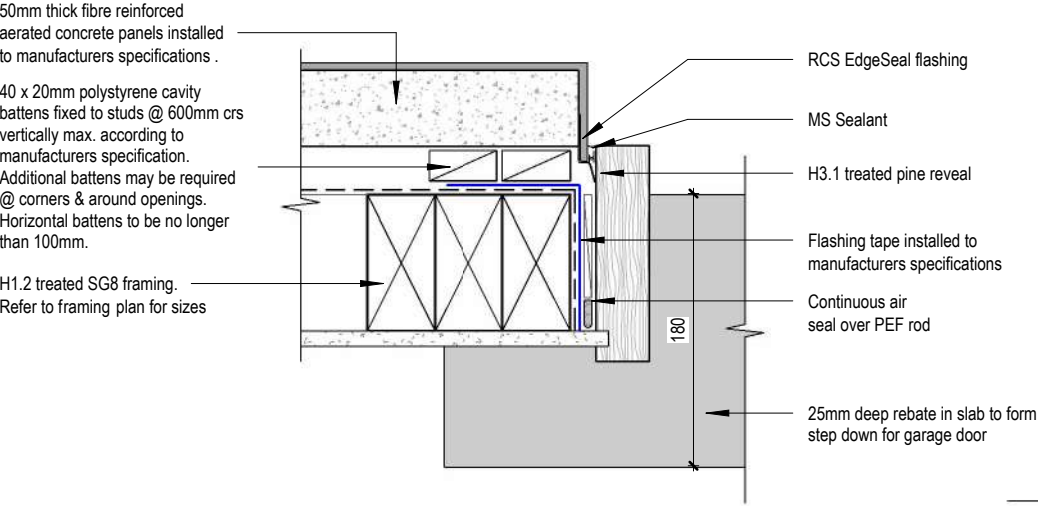


Control/Expansion Joint Set outs

- Where columns intersect beamwork control joints should be formed so that they are running vertically and horizontally of the intersection
- Large doors & windows ie Ranch Sliders, & Bi-Fold type where the window area is greater than 8.0m2
- Junctions between dissimilar materials, ie Masonry to Resene Construction Systems EPS/XPS System
- Where there are small widths of plaster (ie. less than a trowel width)
- Where the wall length is greater than 8 metres in length a vertical control joint will need to be installed

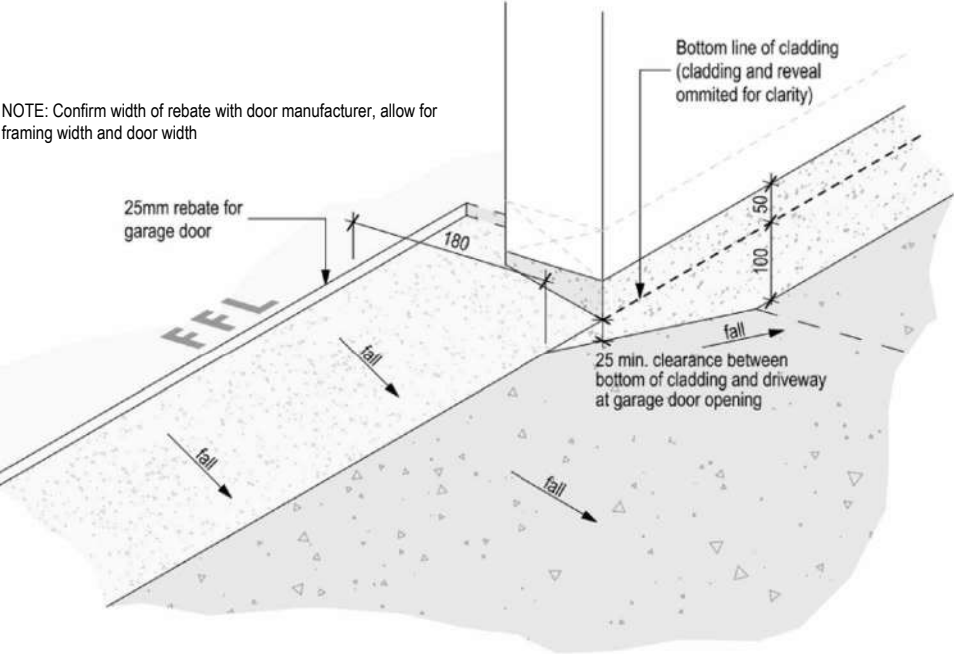
5
A3.01
Vertical Control Joint - RCS
1 : 5

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	Details - RCS Integra	LOT: 17DP: 596463 Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	V5	Changes for RFI's	27/10/2023	GD	As indicated A3 page size		
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						10/06/2024	VERSION: V5	CODE: 1	JOB # SL1019 -5127	
										A5.02

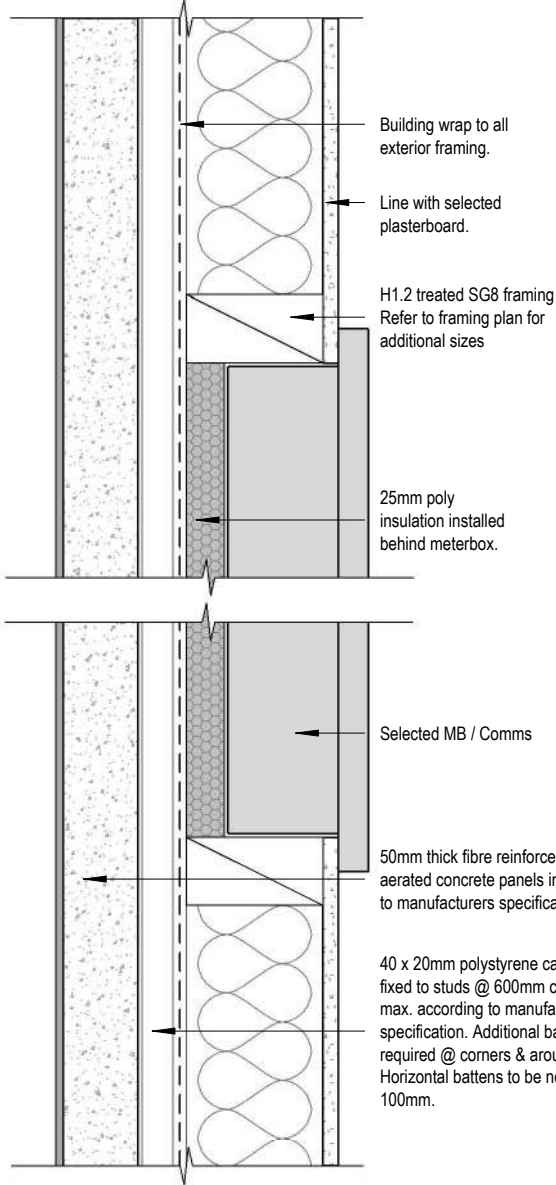


Grooved Reveals

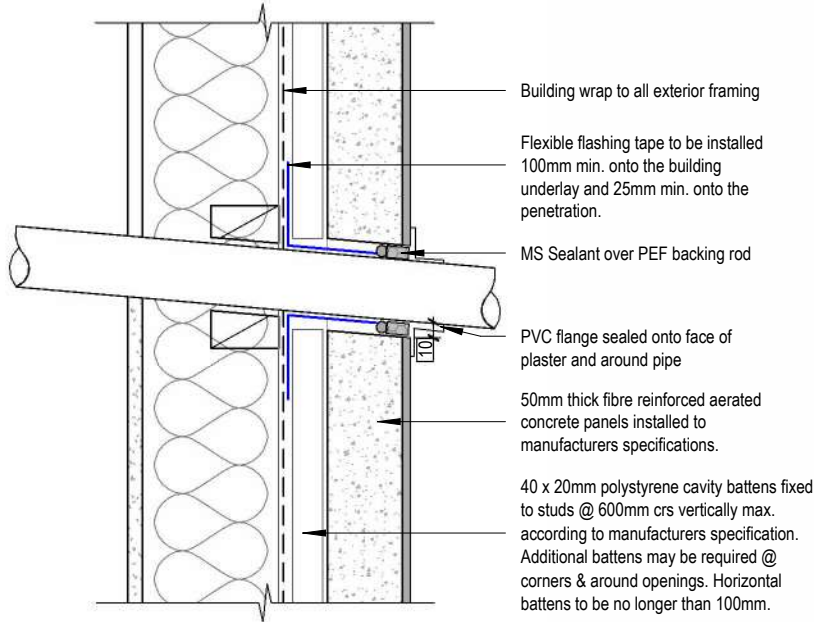
1 Garage Door Jamb - RCS Integra
A2.01 1 : 5



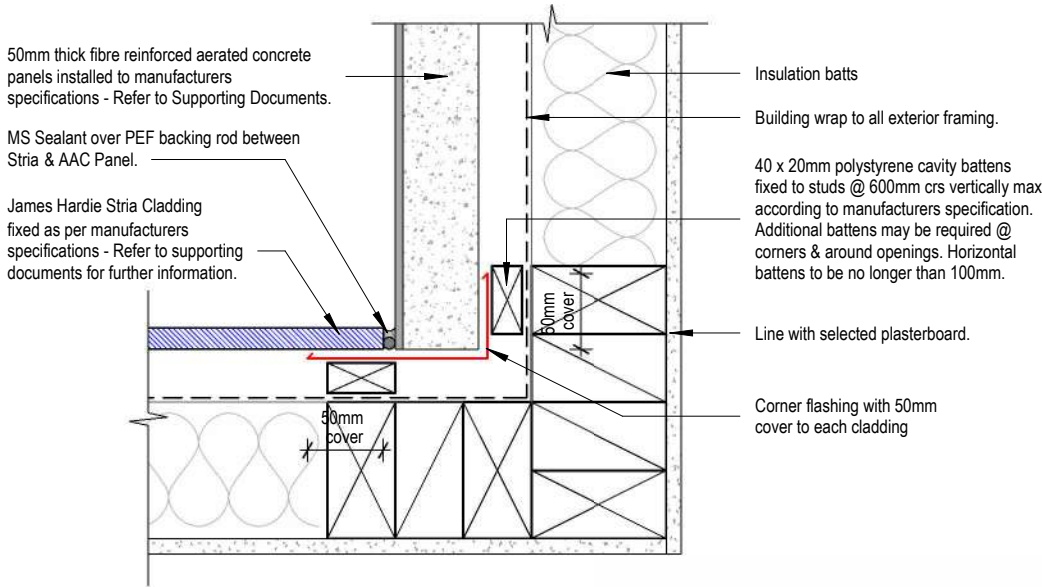
2 Garage Door Sill
A2.01 1 : 10



4 Integra Internal Meterbox Detail
A2.01 1 : 5



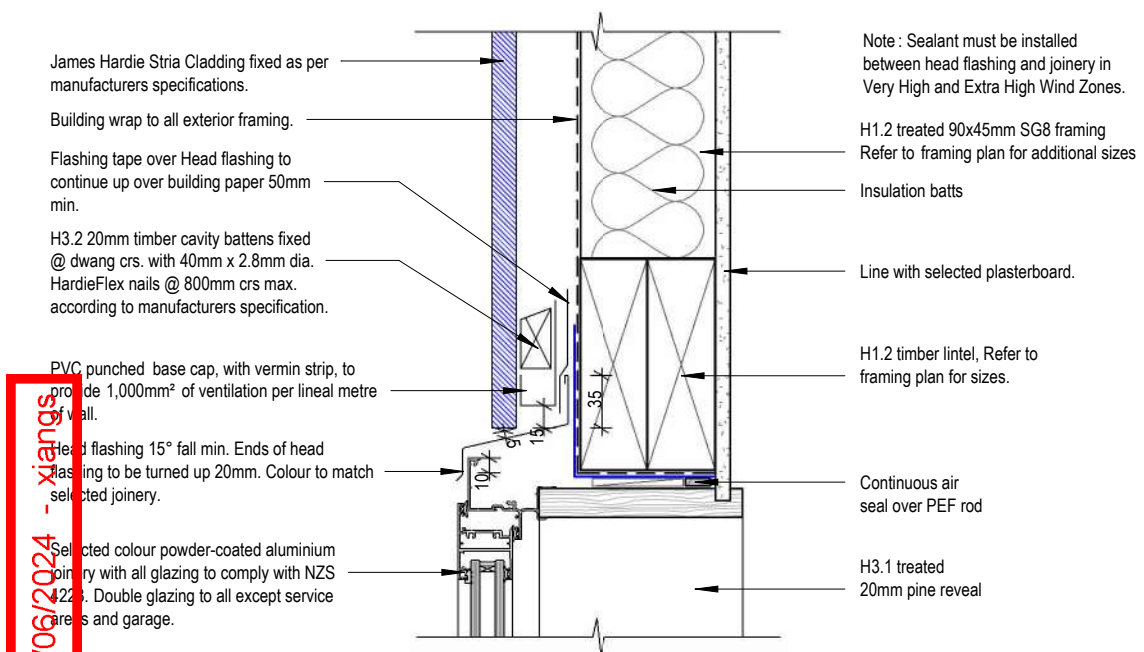
3 Integra Pipe Penetration Detail
1 : 5



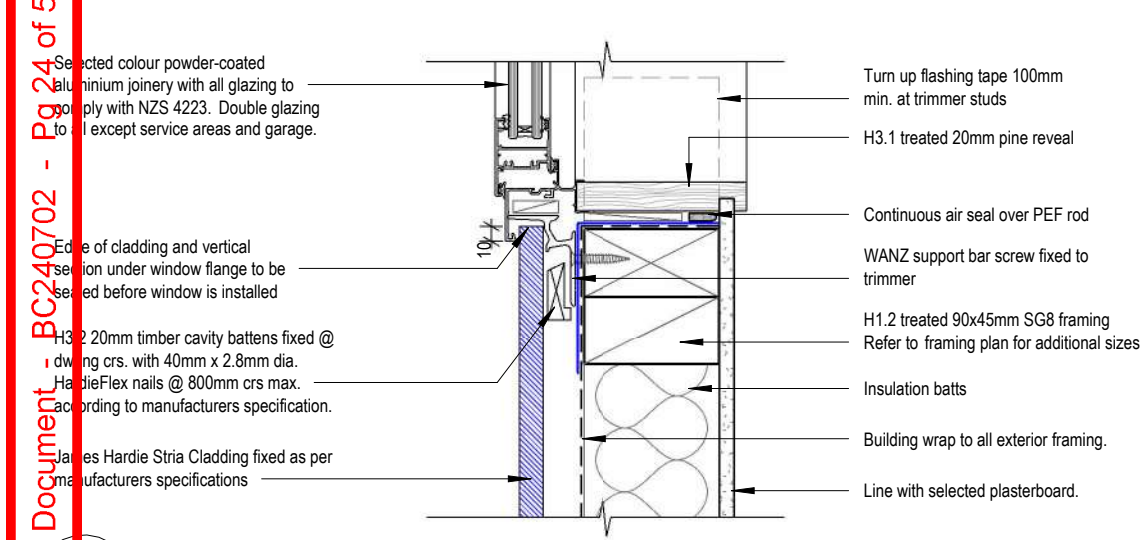
5 Cladding Junction - Internal Corner Between RCS Integra To Stria
A2.01 1 : 5

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	Details - RCS Integra	LOT: 17DP: 596463	Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	V5	Changes for RFI's	27/10/2023	GQ			As indicated A3 page size
							Amendment Date:		TECHNICIAN:		BASE PLAN
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								V5	1	SL1019 -5127	

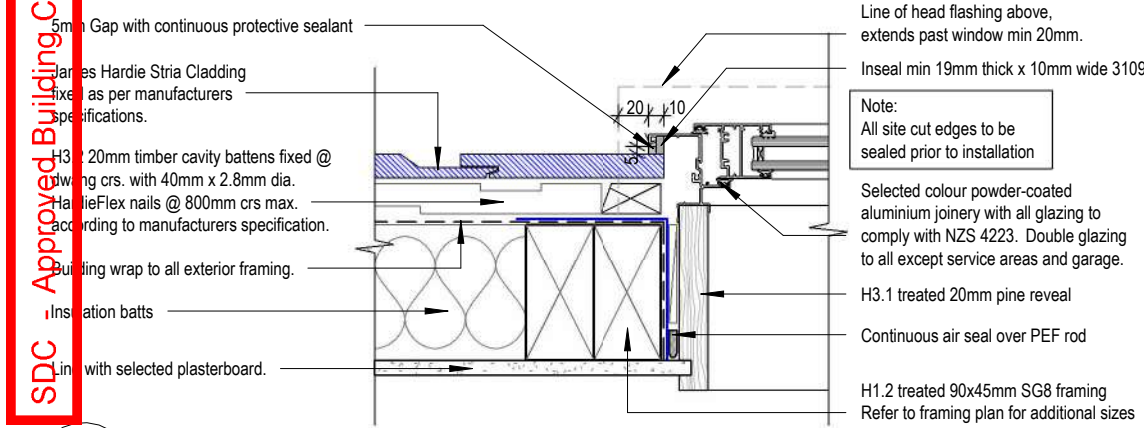
SDC Approved Building Consent Document BC240702 - Pg 24 of 52 - 13/06/2024 - xiangs



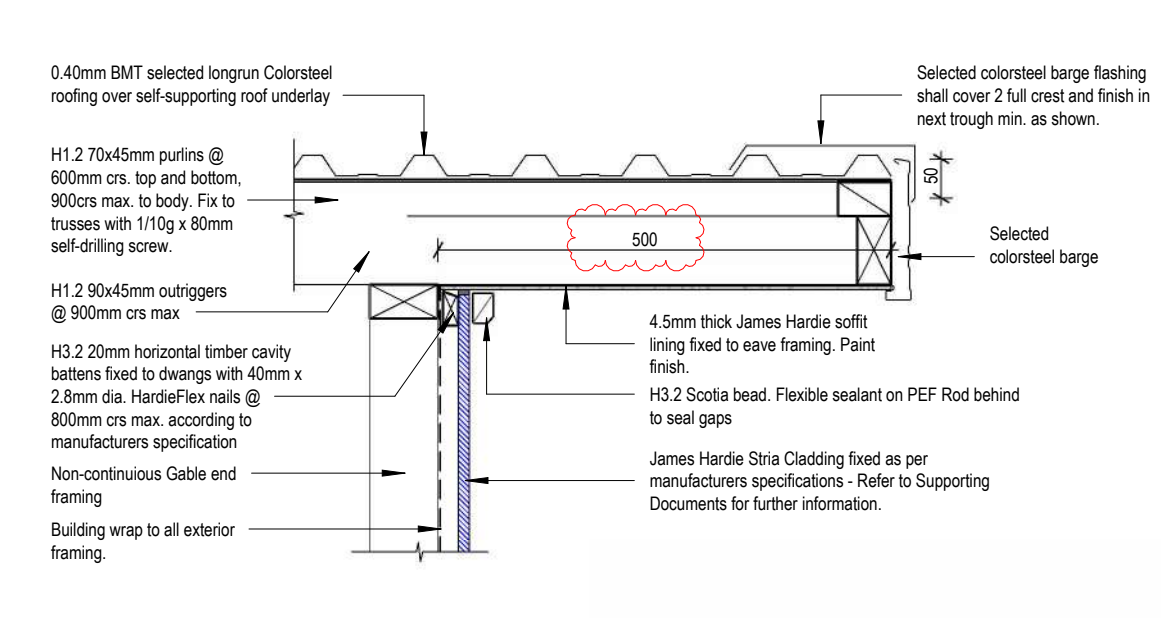
1 Vertical Stria Window Head Detail
A3.01 1 : 5



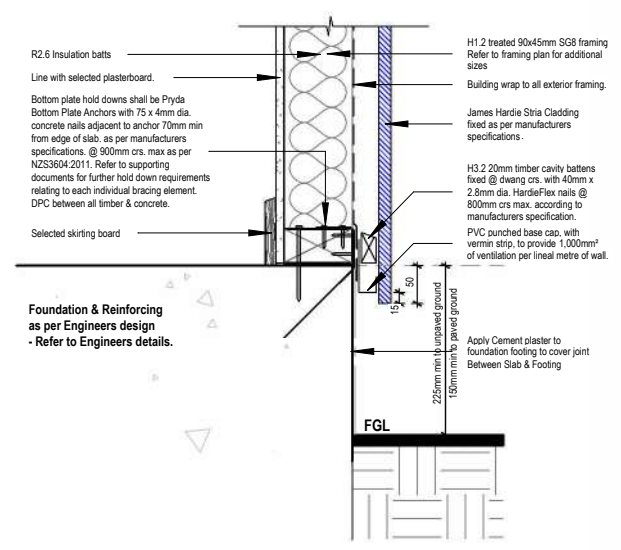
2 Vertical Stria Window Sill Detail
A3.01 1 : 5



3 Vertical Stria Window Jamb Detail
A3.01 1 : 5



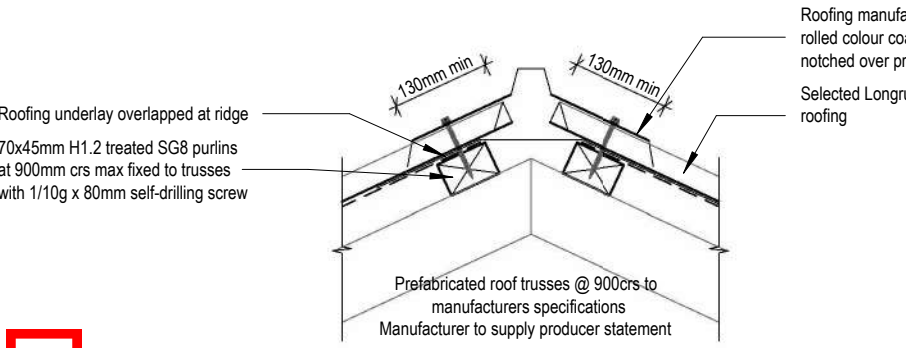
4 Vertical Stria Barge Detail
A3.01 1 : 10



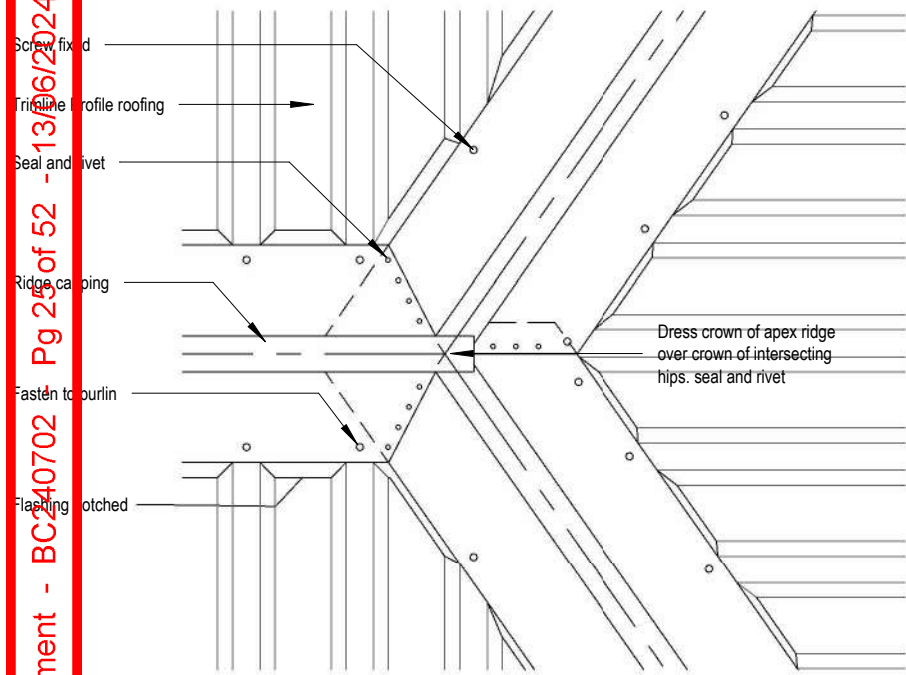
5 Foundation - Vertical Stria
A3.01 1 : 10

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					Amendment Date: 10/06/2024	TECHNICIAN: JD	BASE PLAN CT6439	
						VERSION: V5	CODE: 1	JOB # SL1019 -5127

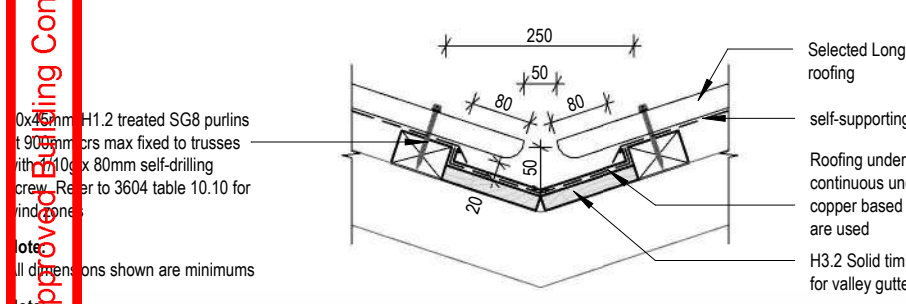
Site Approved Building Consent Document - BC240702 - Pg 25 of 52 - 13/06/2024 - xiangs



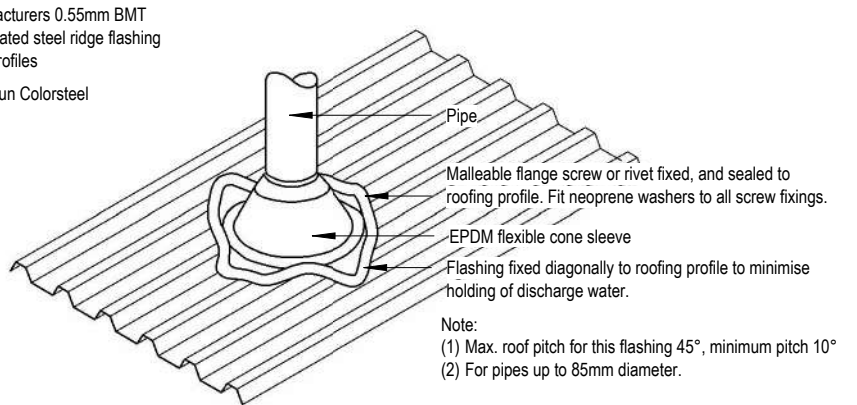
1 Ridge Detail
A4.01 1 : 10



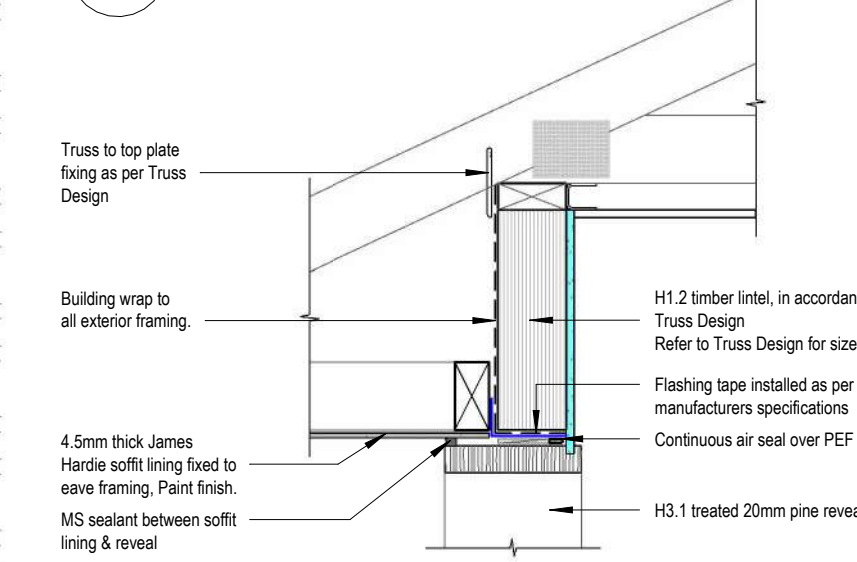
2 Hip Detail
A4.03 1 : 10



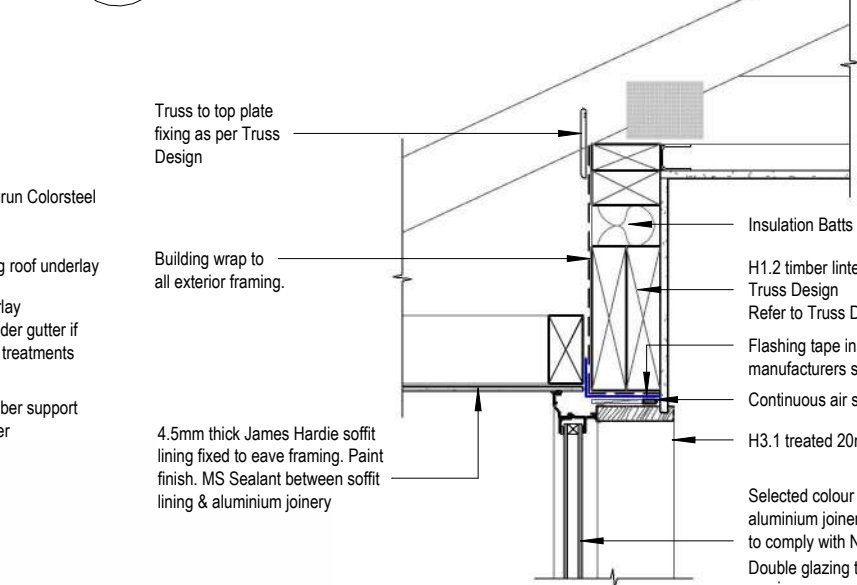
3 Valley Detail
A4.02 1 : 10



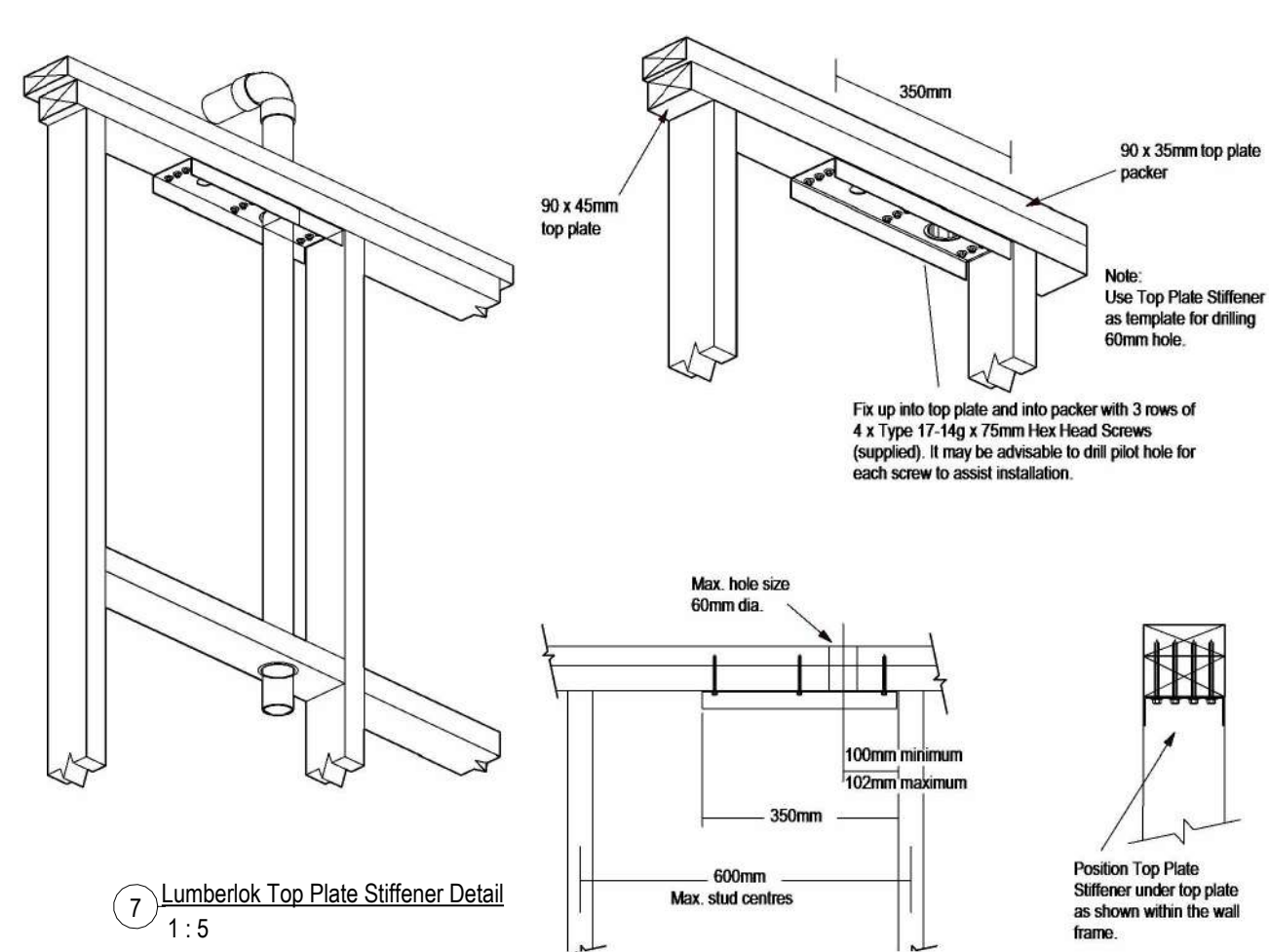
4 Small Pipe Roof Penetration
A2.03 1 : 10



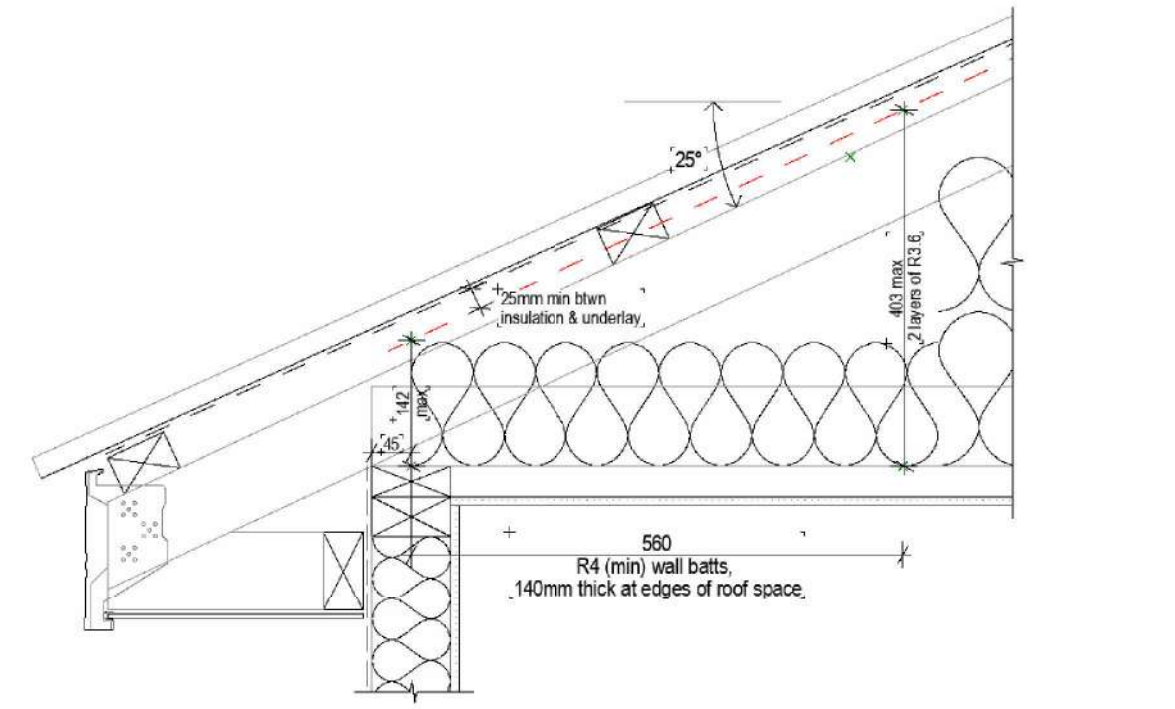
5 Garage Door Head To Soffit Detail
A4.04 1 : 10



6 Joinery To Soffit Detail
A4.02 1 : 10

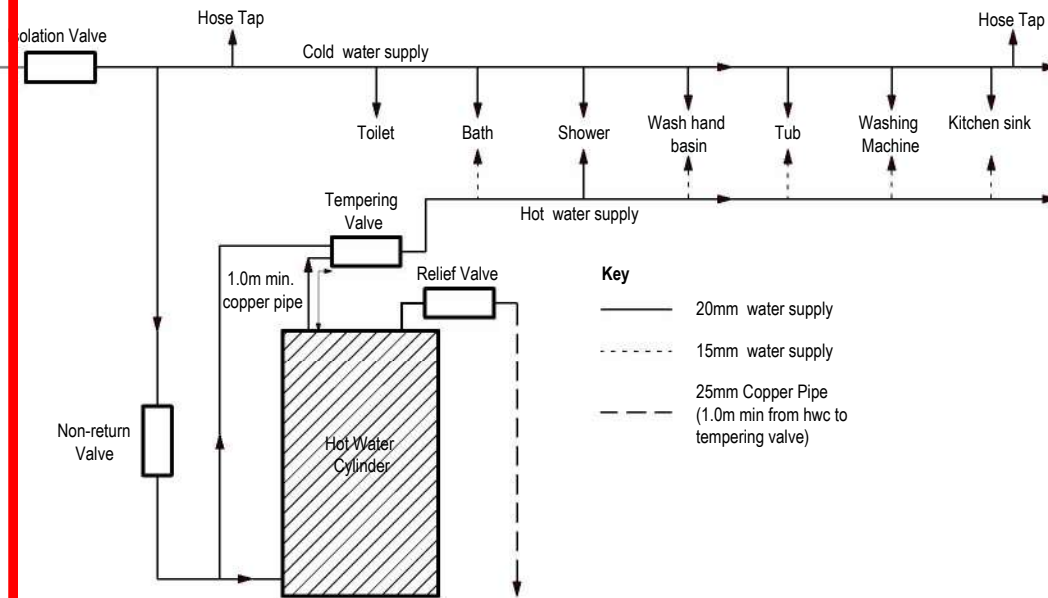
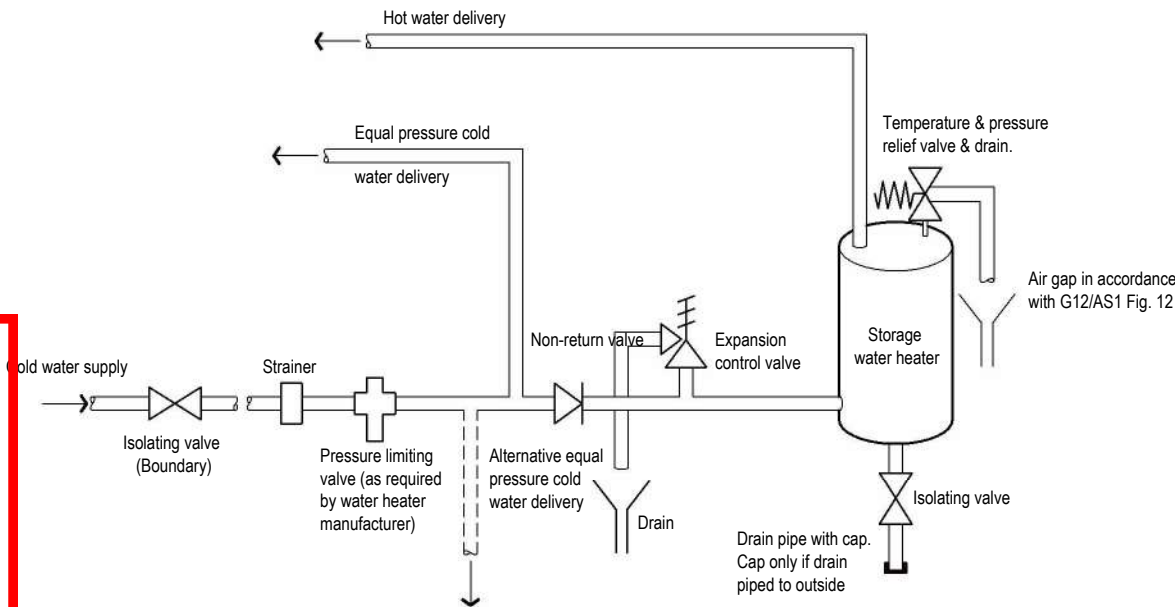


7 Lumberlok Top Plate Stiffener Detail
1 : 5

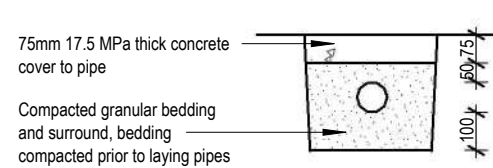


8 Roof Edge Insulation Setout Detail
NTS

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				V5	Changes for RFI's	27/10/2023	TECHNICIAN: JD		BASE PLAN CT6439		
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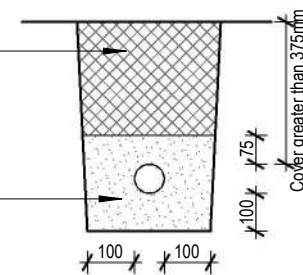


1 HWC Schematic
NTS



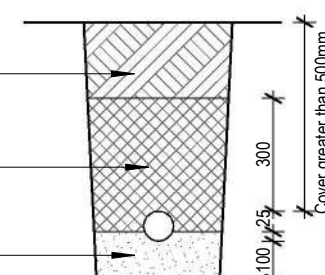
Bedding & Back Filling 125mm - 375mm cover

Fill shall be:
Ordinary fill where drains are located below gardens and open country
Compacted selected fill where drains are located below residential driveways and similar areas subject to light traffic.
Compacted granular bedding and surround, bedding compacted prior to laying pipes

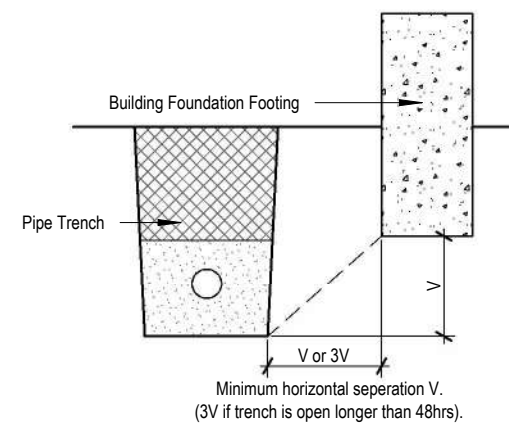


Bedding & Back Filling 375mm - 500mm cover

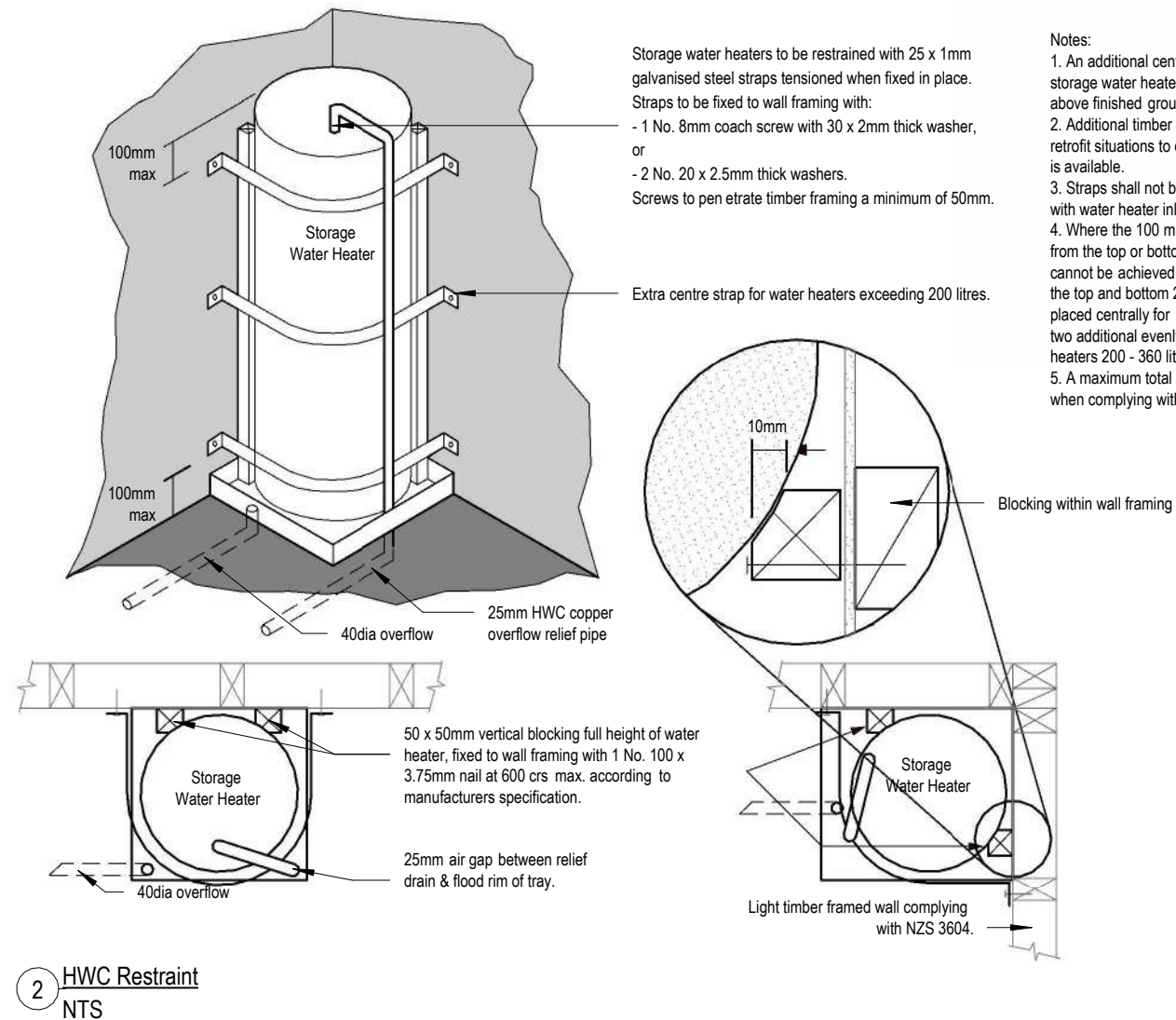
Fill shall be:
Ordinary fill where drains are located below gardens and open country
Compacted selected fill where drains are located below residential driveways and similar areas subject to light traffic.
Compacted selected fill.
Compacted granular bedding and surround, bedding compacted prior to laying pipes



Bedding & Back Filling 500mm or more cover



Relationship of pipe trench to building foundation



2 HWC Restraint
NTS

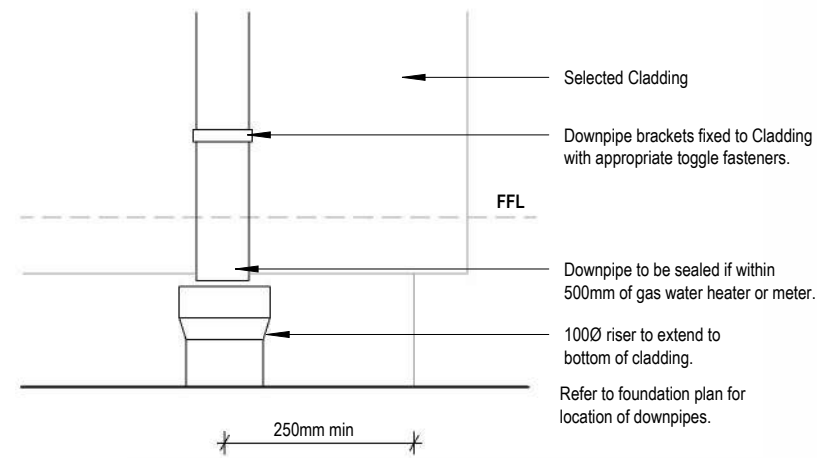
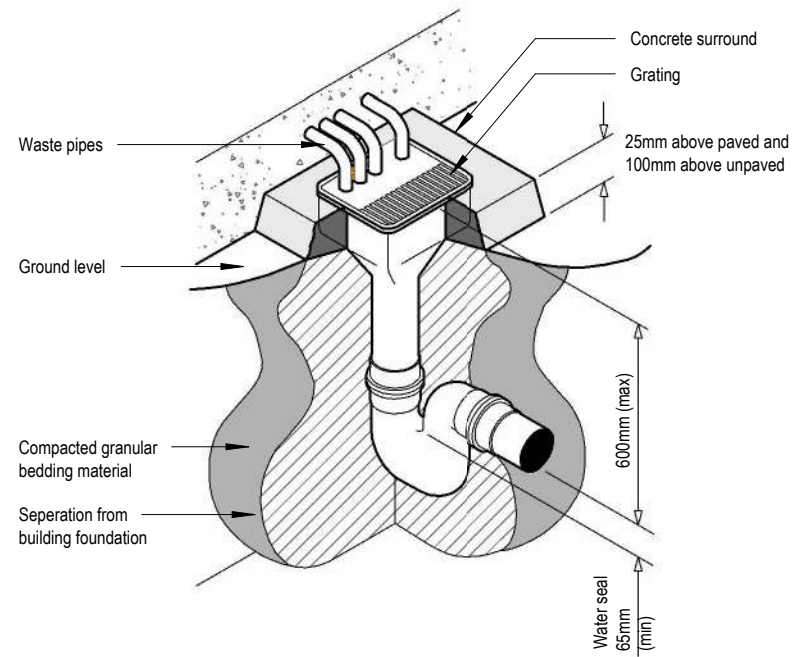
Storage water heaters to be restrained with 25 x 1mm galvanised steel straps tensioned when fixed in place. Straps to be fixed to wall framing with:
- 1 No. 8mm coach screw with 30 x 2mm thick washer, or
- 2 No. 20 x 2.5mm thick washers.
Screws to penetrate timber framing a minimum of 50mm.

Extra centre strap for water heaters exceeding 200 litres.

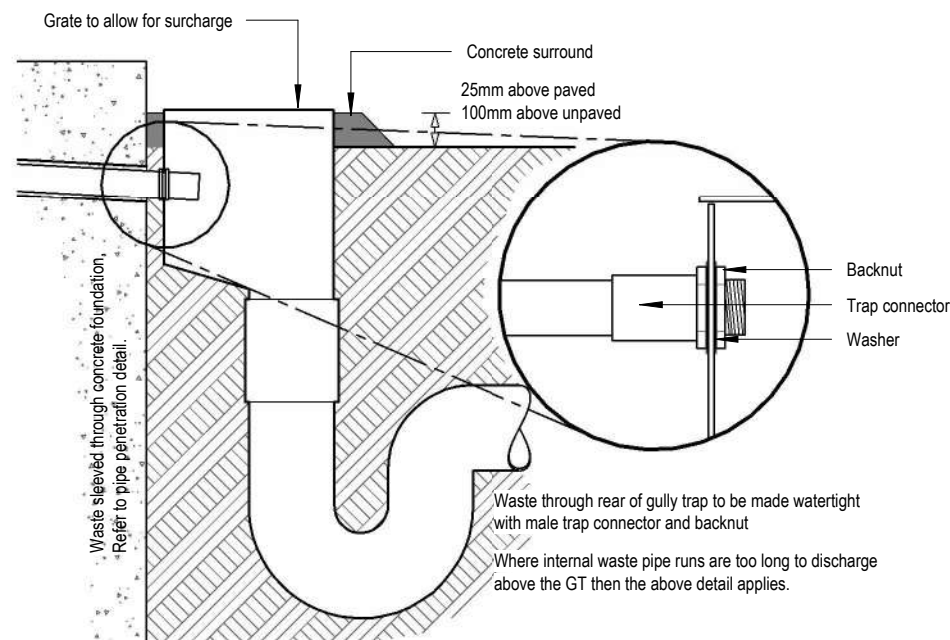
- Notes:
1. An additional centre strap is required where a storage water heater is located more than 12 m above finished ground level.
 2. Additional timber framing may be required in retrofit situations to ensure adequate strap fixing is available.
 3. Straps shall not be installed where they clash with water heater inlets, outlets or controls.
 4. Where the 100 mm maximum strap distance from the top or bottom of the storage water heater cannot be achieved, straps may be placed within the top and bottom 25% with one additional strap placed centrally for water heaters < 200 litres, and two additional evenly spaced straps for water heaters 200 - 360 litres.
 5. A maximum total of four straps are required when complying with both Note 1 and Note 4.

3 Bedding & Backfilling
NTS

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				V5	Changes for RFI's	Amendment Date: 10/06/2024		TECHNICIAN: JD		BASE PLAN CT6439		
						VERSION: V5	CODE: 1	JOB # SL1019 -5127				

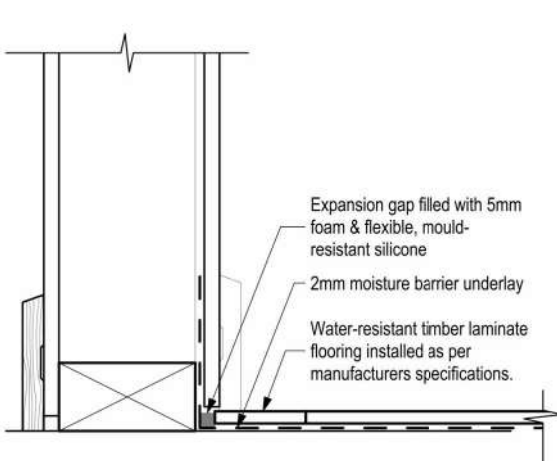


2 Downpipe Corner Offset
NTS

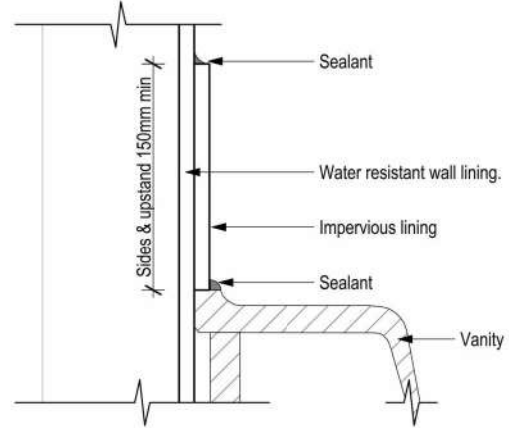


1 Gully Trap
NTS

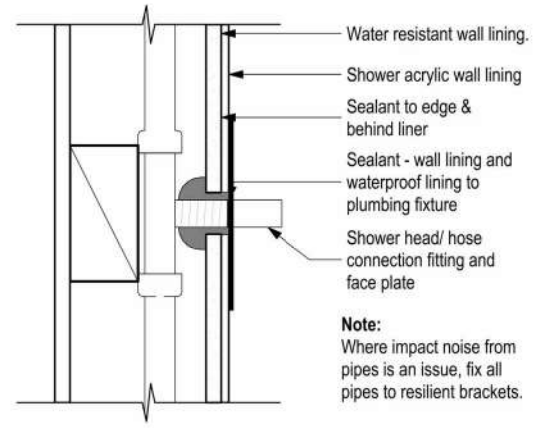
 © Mike Greer Homes NZ Ltd (03) 354 0166 0800 mikegreer Tower 2, 7 Deans Avenue, Addington, Christchurch 8011 info@mikegreerhomes.co.nz www.mikegreerhomes.co.nz	DRAWING TITLE: Details - Services	LEGAL DESCRIPTION: LOT: 17DP: 596463 Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	LEGAL NOTES: 1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	Revisions:		Date of Issue:	DESIGNER: GQ		SCALE: As indicated A3 page size	SHEET: A5.07
				V5	Changes for RFI's	27/10/2023	TECHNICIAN: JD		BASE PLAN CT6439	
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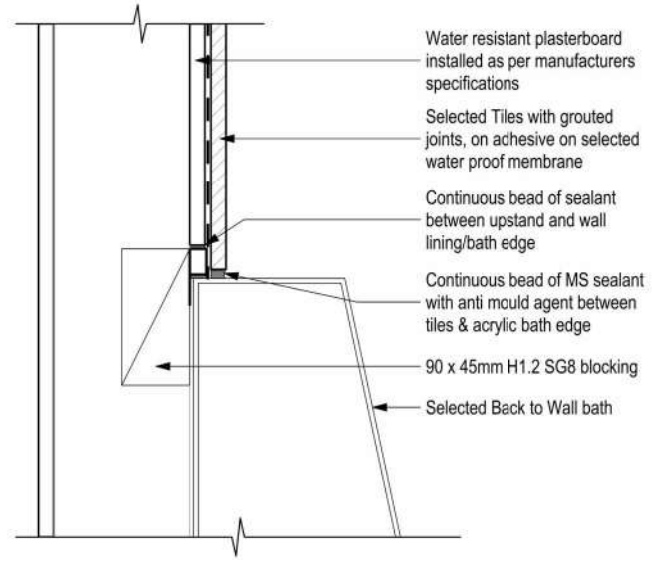
Timber Laminate Floor to Wall Junction
SCALE 1:5 @A3



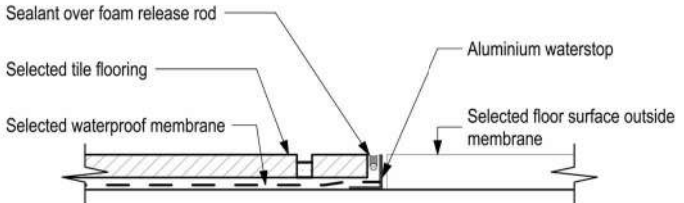
Vanity to Wall Junction
SCALE 1:5 @A3



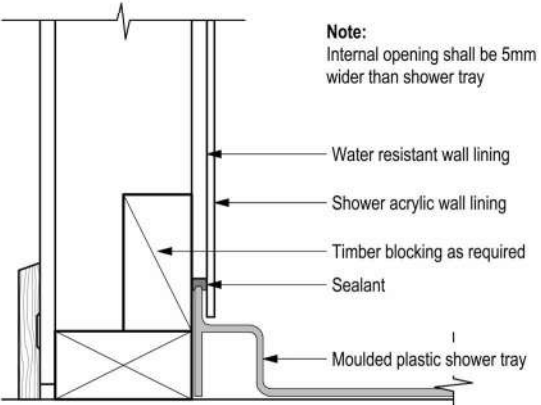
Pipe Penetration (Acrylic Shower)
SCALE 1:5 @A3



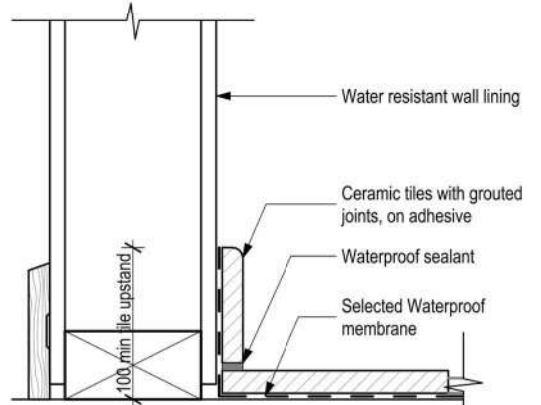
Back to Wall Bath
SCALE 1:5 @A3



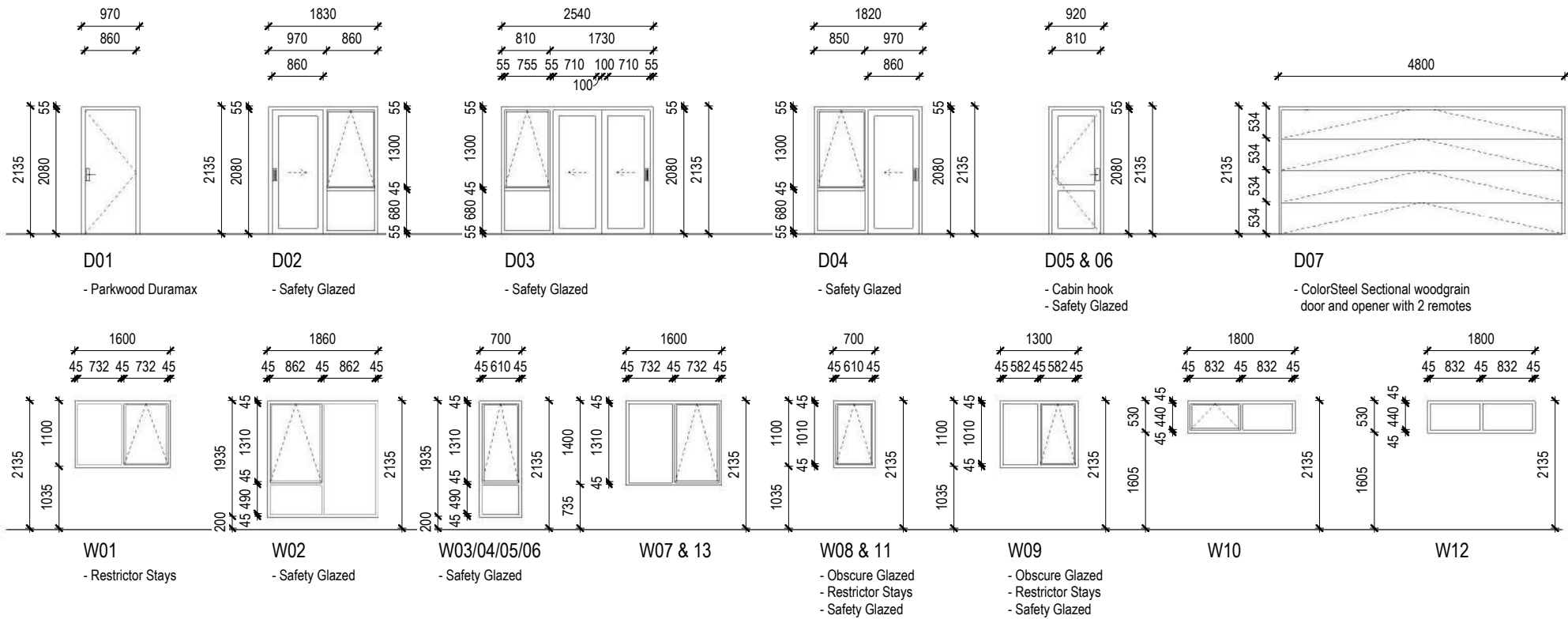
Waterstop at Tile Flooring
SCALE 1:5 @A3



Acrylic Shower Base to Wall Junction
SCALE 1:5 @A3



Tile Floor to Wall Junction
SCALE 1:5 @A3



NOTES:

- Sizes shown are rough opening sizes and leaf sizes.
 - Client to confirm window & door style & finishes.
 - Confirm all opening sizes onsite prior to installation
 - Refer to ground floor plan for accurate opening location.
 -
- Joinery: All exterior window and doors to be colorsteel powdercoated aluminium framed, thermally broken with double glazing and dressed timber reveals unless noted otherwise.Refer to specification for full details. (Excl. garage door)
- Internal Door Leaf Height: Standard
- Internal Door Leaf Width: Typically 710 & 810mm (unless noted on plan). Typically 710mm (wet areas).
- Garage Door: Colorsteel sectional, Insulated
- Lintels: Refer to the Wall Framing Plan for lintel sizes.
- Safety Glazing (SG): In locations shown as per NZS 4223.3:2016
- Obscure Glazing (OBS): To Bathroom, Wc and Ensuite
- Restrictor Strays (RS): To all opening windows when lower edge of opening sash is less than 760mm above FFL and fall to FGL is over 1.0m
- To all opening windows on first floor when lower edge of opening is less than 760mm above FFL.

All doors & sliders are taken from**External Elevation**.
All windows are taken from**External Elevation**.
Wall Framing Plan takes precedence over Window Schedule - Refer to Plan & Elevations for opening direction.

Glazing and glazed openings to comply with NZS 4223.3:2016 Glazing in Buildings - Part 3: Human impact safety requirements, NZS 4211:2008 Specification for performance of windows and New Zealand Building Code Clauses: F2 Hazardous Building Materials & F4: Safety from Falling.

NATURAL LIGHT CALCULATIONS - NZBC G7

Natural Light: Rooms	Window Area/Room Area Window Area (Glazed) Room Area		Total 10%minimum
LIVING/DINING	18.35	27.63	66%
BED 1	4.84	11.5	42%
BED 2	2.24	9.0	25%
BED 3	2.24	9.0	25%
KITCHEN/LIVING	1.76	9.95	18%

NATURAL VENTILATION CALCULATIONS - NZBC G4

Ventilation: Rooms	Vented Area/Room Area Window Area (Vented) Room Area		Total 5% minimum
LIVING/DINING	6.36	27.63	23%
BED 1	1.4	11.5	12%
BED 2	0.96	9.0	11%
BED 3	0.96	9.0	11%
KITCHEN/LIVING	0.74	9.95	7%

 © Mike Greer Homes NZ Ltd (03) 354 0166 0800 mikegreer Tower 2, 7 Deans Avenue, Addington, Christchurch 8011 info@mikegreerhomes.co.nz www.mikegreerhomes.co.nz	DRAWING TITLE:	LEGAL DESCRIPTION:	LEGAL NOTES:	Revisions:		Date of Issue:	DESIGNER:	SCALE:	SHEET:	
	Door and Window Schedule	LOT: 17DP: 596463 Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	V5	Changes for RFI's	27/10/2023	GQ	1 : 100 A3 page size		
						Amendment Date:	TECHNICIAN:	BASE PLAN		
						10/06/2024	JD	CT6439		
							VERSION: V5	CODE: 1	JOB # SL1019 -5127	

Main Roof Insulation

7.25 m²C/W

Type: Roof: Timber framed truss Roof, direct fixed or battened flat Ceiling

view detail

external surface 0.03

Roofing: generic - Metal corrugate Iron with building paper

R-value: 0.01

Insulation: 3.6

Timber Frame & Cavity: 90mm rafters or joists @ 900mm, battens covered with insulation

view detail

Roof Frame Area: 5.0%

Cavity Area: 95.0%

Roof space (still air) 0.11

Roof space (still air) 0.11

Framing: R-value: 0.75

Insulation: 3.6

notched to cover bottom chord

Roof Lining: generic - gypsum Plasterboard 10mm

R-value: 0.04

internal surface 0.09

Non-IC-rated recessed downlights

Ceiling Area [m²]:

Number of downlights:

Clearance from lamp holder side [m]:

1.1

Roof Perimeter insulation

3.69 m²C/W

Type: Roof: Timber framed truss Roof, direct fixed or battened flat Ceiling

view detail

external surface 0.03

Roofing: generic - Metal corrugate Iron with building paper

R-value: 0.01

Insulation:

Timber Frame & Cavity: 90mm rafters or joists @ 900mm, battens covered with insulation

view detail

Roof Frame Area: 5.0%

Cavity Area: 95.0%

Roof space (still air) 0.11

Roof space (still air) 0.11

Framing: R-value: 0.75

Element Wall R4.1 4.1

notched to cover bottom chord

Roof Lining: generic - gypsum Plasterboard 10mm

R-value: 0.04

internal surface 0.09

Non-IC-rated recessed downlights

Ceiling Area [m²]:

Number of downlights:

Clearance from lamp holder side [m]:

1.1

Integra Panel

1.81 m²C/W

Type: Wall: Timber Frame with vented Cavity

view detail

external surface 0.03

Cladding: Resene Construction Systems Integra 50mm

R-value: 0.29

Air Barrier: generic - Building paper

R-value: 0.01

Timber Frame & Cavity: 90mm, 35% framing

view detail

Wall Frame Area: 35.0%

Cavity Area: 65.0%

15-90mm vented cavity (all R-values on ext. side of cavity will be halved), R: 0.08

15-90mm vented cavity (all R-values on ext. side of cavity will be halved), R: 0.08

Framing: R-value: 0.75

Insulation: 2.6

still Airgap: none

R-value: 0.00

Wall Lining: generic - gypsum Plasterboard 10mm

R-value: 0.04

internal surface 0.09

JH Stria

1.71 m²C/W

Type: Wall: Timber Frame with vented Cavity

view detail

external surface 0.03

Cladding: James Hardie Stria Cladding 14mm

R-value: 0.10

Air Barrier: generic - Building paper

R-value: 0.01

Timber Frame & Cavity: 90mm, 35% framing

view detail

Wall Frame Area: 35.0%

Cavity Area: 65.0%

15-90mm vented cavity (all R-values on ext. side of cavity will be halved), R: 0.08

15-90mm vented cavity (all R-values on ext. side of cavity will be halved), R: 0.08

Framing: R-value: 0.75

Insulation: 2.6

still Airgap: none

R-value: 0.00

Wall Lining: generic - gypsum Plasterboard 10mm

R-value: 0.04

internal surface 0.09

NZBC H1/AS1 5th edition - Calculation Method
Proposed Building: Construction R Values

Roof Type 1 R7.25
Profiled Colorsteel roofing on underlay, 45mm timber purlins on timber trusses at 900mm crs. 35mm ceiling battens with 2 layers of R3.6 insulation (one layer between bottom chords and second layer to cover bottom chords), and 10mm plasterboard ceiling lining

Roof Type 2 R3.69
Profiled Colorsteel roofing on underlay, 45mm timber purlins on timber trusses at 900mm crs. 35mm ceiling battens with 1 layer R4.1wall insulation between bottom chords (560 mm max), and 10mm plasterboard ceiling lining

Wall Type 1 R1.81
Rockcote Integra 50mm panel on 20mm cavity over building wrap. 90x45mm timber framing comprising 35% of wall area with R2.6 insulation and 10mm plasterboard internal lining

Wall Type 2 R1.71
James Hardie Stria cladding on 20mm cavity over building wrap. 90x45mm timber framing comprising 35% of wall area with R2.6 insulation and 10mm plasterboard internal lining

Floor Type 1 R2.08
Perimeter ratio 2.32
Engineered waffle slab, 90mm external wall framing, 50mm SLABX200 underslab insulation

Door Type 1 R0.4
Tasman Aluminium Entry door

Door Type 2 R1.34
Insulated garage door

Glazing R0.37
Double pane, U: 1.10, thermally improved spacer, aluminium frame.
Glass: Low E4/Clear, Gas: Argon

Note:

According to E3/AS1, para 1.1.4 (d), Where steel framing is used, a thermal break with a minimum R-value of 0.25 m²C/W shall be provided at the outside face of each steel framing member. Expanded polystyrene (EPS) strips, 10 mm thick provide an R-value of 0.25 m²C/W. Other materials or methods may be used to provide the minimum R-value of 0.25 m²C/W

Insulated Garage as an upgrade, included in the H1 report

BRANZ

Version: 4 May 2023

Client

Project name

Address

Designer

Date

SPEC

SL1019

Lot 17 Flemington

JD

10/06/2024

Territorial Authority

Climate Zone

Selwyn District

5

When submitted

Application

After 2 November 2023

Housing

Proposed Building

Area (m²)

Proposed Building Heat Loss (W/K)

Element

Slab-on-ground_Floors

Other_Floors

Roof

Skylights

Walls

Glazing (in walls & doors)

Doors (opaque)

Total

152.8

0.0

151.7

0.0

159.8

29.0

12.3

278.7

Reference Building

Area (m²)

Reference Building Heat Loss (W/K)

Element

Slab-on-ground_Floors

Other_Floors

Total Roof (includes skylight area)

Walls (70% of total wall area)

Glazing allowance (30% of total wall area)

Total

152.8

0.0

151.7

140.8

60.3

309.6

Comparison of proposed building against the reference building

HIG 6th Ed

PASS

Element type

Description

Embed ID

heating?

Area (m²)

Construction R-value (m².K/W)

Heat Loss (W/K)

Errors

1

Slab-on-ground_Floors

Waffle slab

Yes

152.8

2.1

73.5

2

Roof

Truss Roof

Yes

118.6

7.3

16.4

3

Roof

Roof edge

Yes

33.1

3.7

9.0

4

Walls

Integra Panel

Yes

150.5

1.8

83.1

5

Walls

JH Stria

Yes

9.3

1.7

5.4

6

Doors (opaque)

Entry door

Yes

2.1

0.40

5.2

7

Doors (opaque)

Insulated garage door

Yes

10.2

1.34

7.6

8

Glazing (in walls & doors)

Double glazing

Yes

29.0

0.37

78.5

Waffle Slab with Expol 50mm SLABX200

2.08 m²C/W

Type: Floor: Expol Floors - H1/AS1 Edition 5 and H1/AS2 Edition 1

Expol Floors - H1/AS1 Edition 5 and H1/AS2 Edition 1

Expol Slab Insulation (H1 Edition 5) - Expol Thermal Performance

Slab floor area [m²]: 152.7

Area Perimeter Ratio: 2.32

Perimeter:

Edge Detail

Length [m]*

Insulation*

Insulated edge, non-veneer wall

uninsulated edge

65.78

220/300mm Tuff Pods, 50mm SLABX200 Underslab

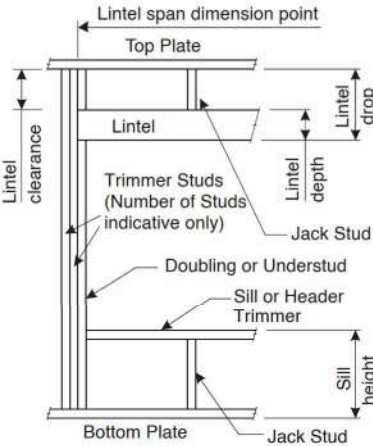
* required data. If empty the perimeter type will be ignored.

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	H1 Enegy Efficiency	LOT: 17DP: 596463 Lot 17 DUNDEEL LANE, FLEMINGTON, STAGE 12, LINCOLN	1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2024 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited	V5	Changes for RFI's	27/10/2023	GQ		A3 page size	
						Amendment Date:	TECHNICIAN:		BASE PLAN	
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					10/06/2024	VERSION:	CODE:	JOB #		
						V5	1	SL1019 -5127		

LINTEL FIXING SCHEDULE
ALTERNATIVE TO TABLE 8.14 & FIGURE 8.12
NZS 3604:2011

- NOTE:
- All fixings are designed for vertical loads only. Dead loads include the roof weight and standard ceiling weight of 0.20kPa
 - Refer to Table 8.19 NZS 3604:2011 for nailing schedule to resist horizontal loads
 - These fixings assume the correct choice of rafter/truss to top plate connections have been made
 - All fixings assume bottom plate thickness of 45mm maximum
 - Note: TYLOK options on timber species
 - Wall framing arrangements under girder trusses are not covered in this schedule
 - All timber selections are as per NZS 3604:2011

DEFINITIONS



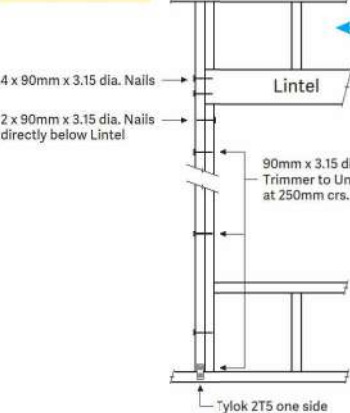
Roof Tributary Area	Light Roof			Heavy Roof		
	Wind Zone			Wind Zone		
	L, M, H	VH	EH	L, M, H	VH	EH
8.6m²	G	G	H	G	G	H
11.6m²	G	H	H	G	G	H
12.1m²	G	H	H	G	H	H
15.3m²	H	H	-	G	H	H
19.1m²	H	-	-	G	H	-
20.9m²	H	-	-	H	H	-
21.8m²	H	-	-	H	-	-
34.3m²	-	-	-	H	-	-

- NOTES:
1. Roof Tributary Area = approx. 1/2 x (Total roof area on girder and rafter trusses supported by lintel)
 2. Assumed girder truss is at mid-span or middle third span of lintel
 3. Use similar fixings for both ends of lintel
 4. All other cases require specific engineering design

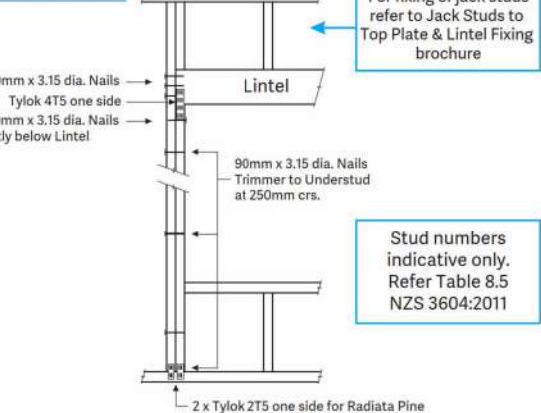
Selection Chart for Lintel Fixing											
Lintel Span (m)	Loaded Dimension (m) (See Fig. 1.3 NZS 3604:2011)	Light Roof Wind Zone					Heavy Roof Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
1.0	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	E	F	F	E	E	E	F	F
	4.0	E	F	F	F	G	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
1.2	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	F	F	G	G	H	E	E	F	G	G
1.5	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	F	F	F	G	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	F	F	G	G	H	E	E	F	G	G
	6.0	F	F	G	H	H	E	E	F	G	H
2.0	2.0	E	F	F	F	G	E	E	F	F	F
	3.0	E	F	F	F	G	E	E	F	F	G
	4.0	F	F	G	G	H	E	E	F	G	G
	5.0	F	F	G	H	H	E	E	F	G	H
	6.0	F	G	G	H	H	E	F	G	H	H
2.4	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	G	H	E	E	F	G	G
	4.0	F	F	G	H	H	E	E	F	G	H
	5.0	F	G	G	H	H	E	F	G	H	H
	6.0	F	G	H	H	-	E	F	G	H	H
3.0	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	G	H	H	E	F	G	H	H
	5.0	F	G	H	H	-	E	F	G	H	H
	6.0	F	G	H	-	-	E	F	G	H	-
3.6	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	F	G	H	H	E	F	G	G	H
	4.0	F	G	H	H	-	E	F	G	H	H
	5.0	F	G	H	-	-	E	F	G	H	-
	6.0	G	H	H	-	-	E	F	H	-	-
4.2	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	H	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
4.5	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.4	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
4.8	2.0	F	G	H	-	-	E	F	H	-	-
	3.0	F	F	G	H	H	E	E	F	G	H
	3.2	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
5.1	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.5	F	G	H	-	-	E	F	G	H	-
	4.0	G	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
5.4	2.0	F	F	G	H	H	E	E	F	G	H
	2.8	F	G	H	H	-	E	F	G	H	H
	3.0	F	G	H	-	-	E	F	G	H	-
	4.0	G	H	H	-	-	E	F	H	-	-
	5.0	G	H	-	-	-	E	F	H	-	-
6.0	2.0	G	H	-	-	-	E	G	H	-	-
	6.0	G	H	-	-	-	E	G	H	-	-

LINTEL FIXING OPTIONS
(Characteristic Uplift)

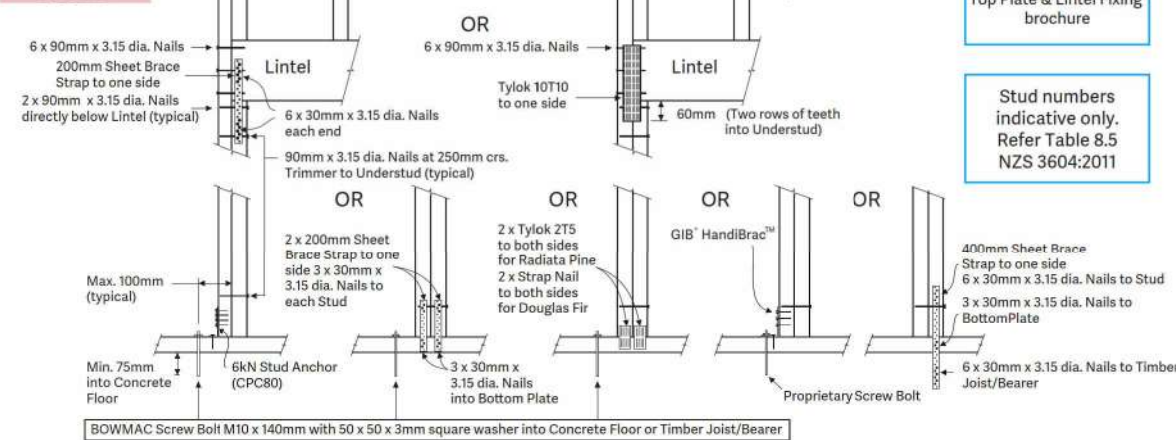
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1.4kN



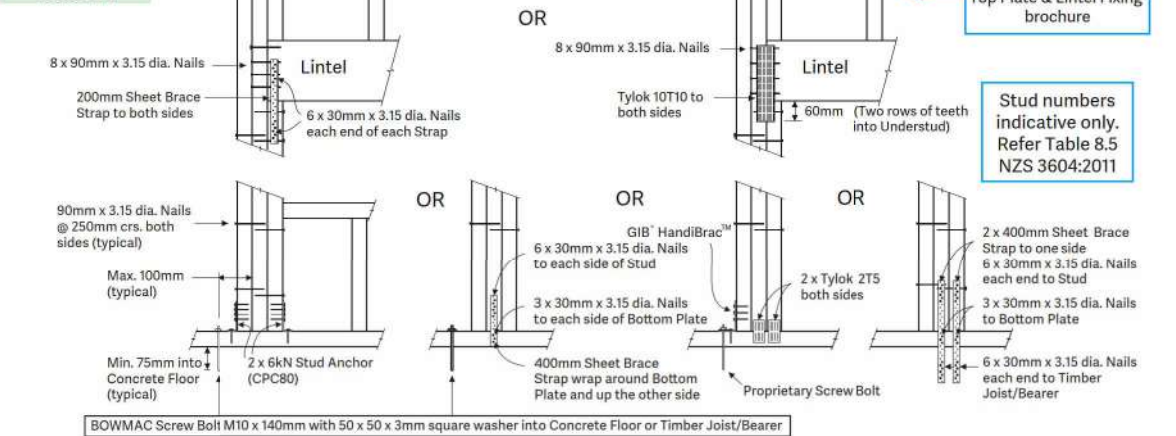
TYPE F
4.0kN



TYPE G
7.5kN



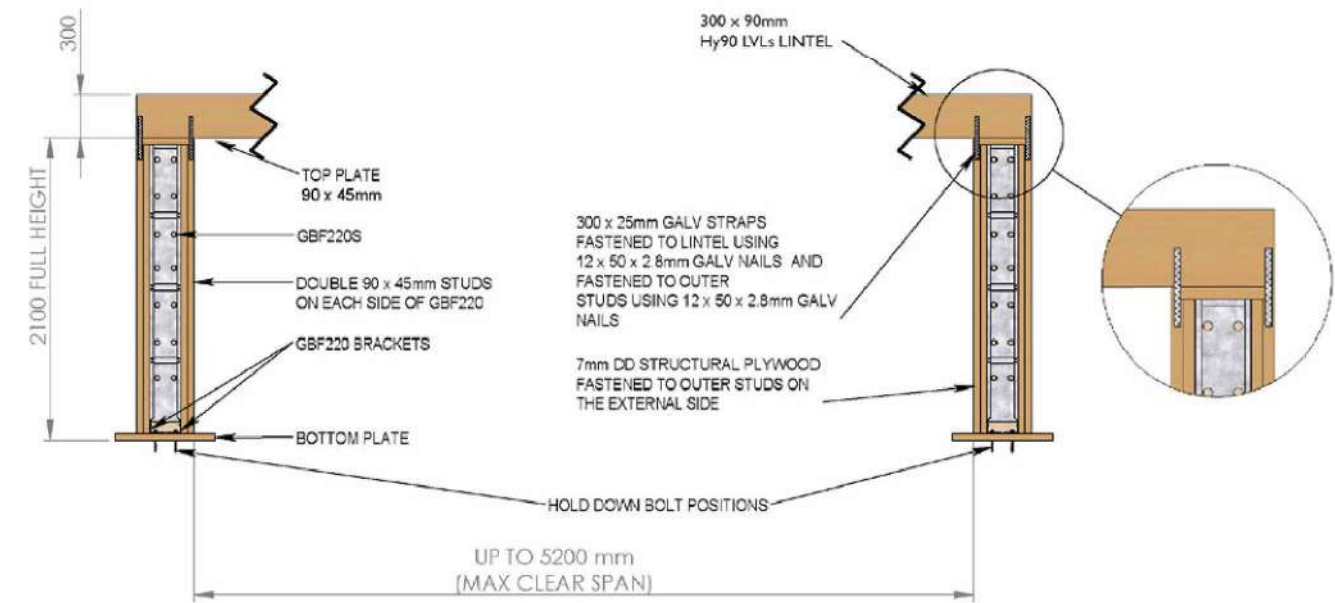
TYPE H
13.5kN



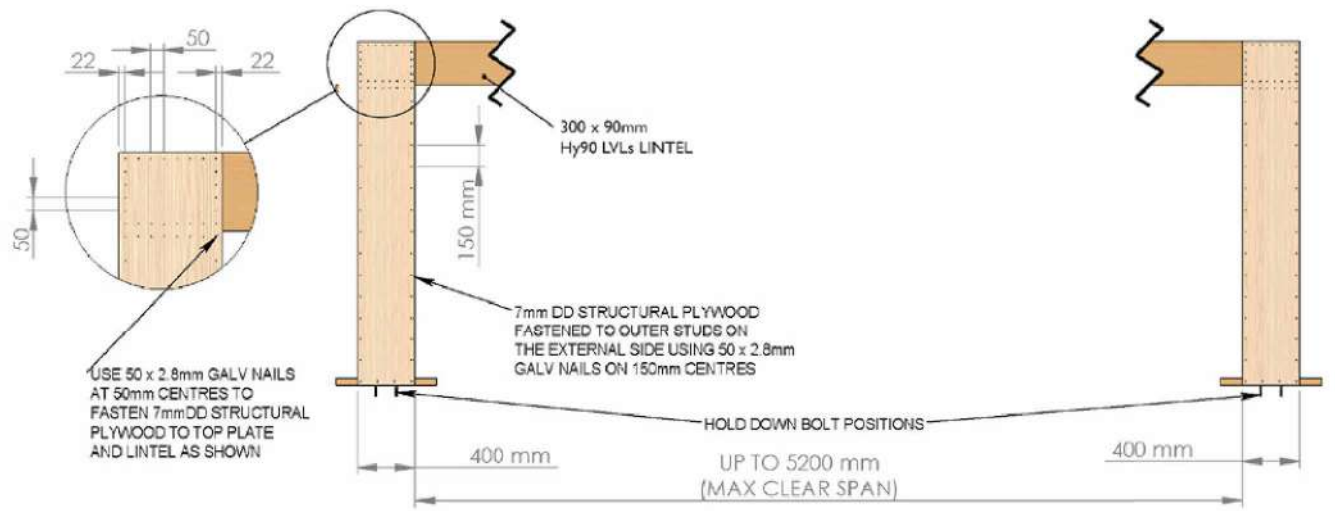
13.0 Gamma Bracing System GBPF/2.4



GAMMA PORTAL (6.0 X 2.4m) INTERNAL SIDE SHOWN
PERFORMANCE: WIND =124 BU's / EARTHQUAKE = 137 BU's



GAMMA PORTAL (6.0 X 2.4m) EXTERNAL SIDE SHOWN
PERFORMANCE: WIND =124 BU's / EARTHQUAKE = 137 BU's



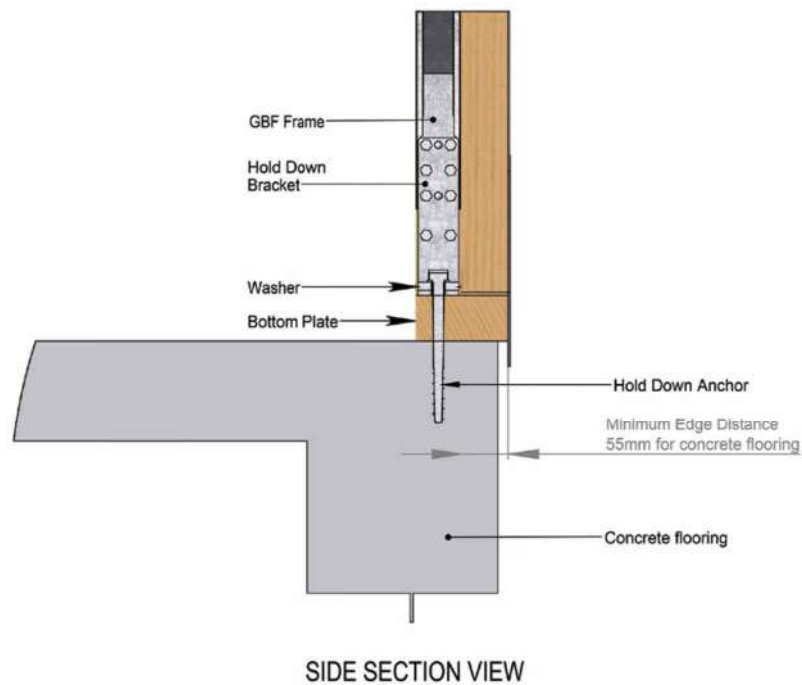
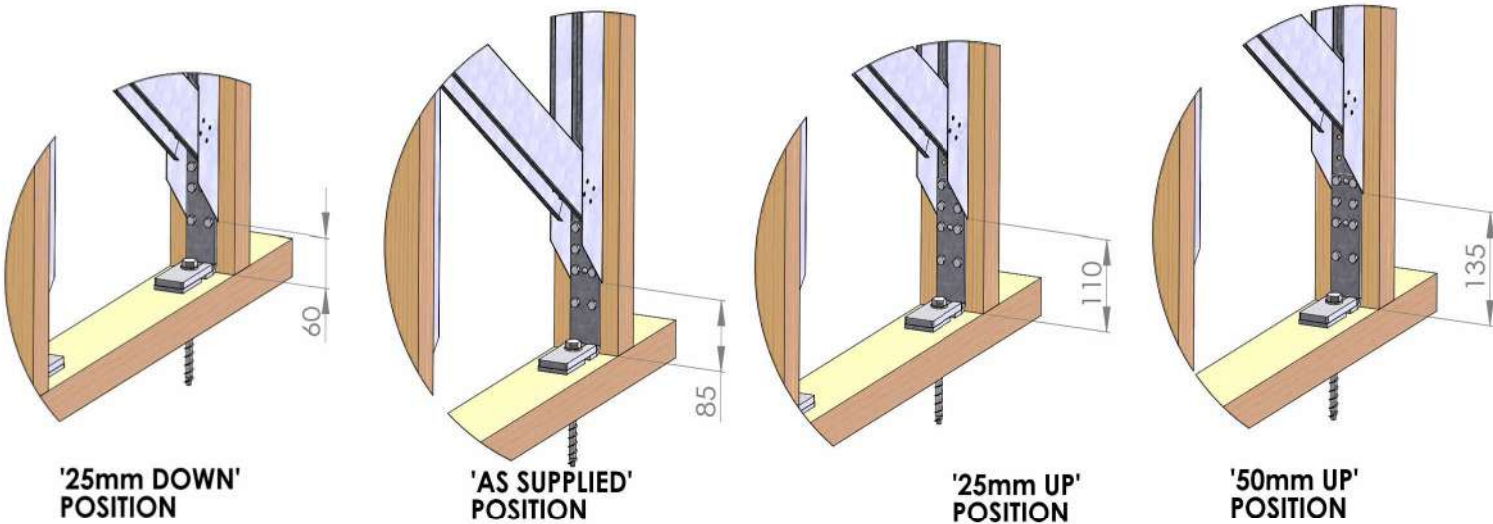
14.8 Height Adjustment



14.8 Construction Details - GBF Height Adjustment

The height of the Gamma Bracing frame can be adjusted to suit variations in the wall framing height or the alignment of the wall framing.
The height of the Gamma Bracing Frame can be increased by no greater than 50mm and decreased by no greater than 39mm to allow for any small deviation in wall framing height.

To adjust the height of the GBF it is permitted to remove the temporary rivet that hold each of the hold down brackets in place which allows the brackets to be adjusted up or down.
To increase the height of the GBF each of the hold down brackets will require adjusting downwards from the side channels of the GBF by a maximum of 50mm.
To decrease the height of the GBF each of the hold down brackets will require adjusting upwards into the side channels by a maximum of 39mm.
All 12g x 40mm Tek Screws MUST be installed to each of the hold down brackets and the GBF frame. (Qty of 8 Screws per Hold down bracket - supplied).



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				V5	Changes for RFI's	27/10/2023	GQ	A3 page size	
						Amendment Date:	TECHNICIAN:	BASE PLAN	
						10/06/2024	JD	CT6439	
							VERSION:	CODE:	JOB #
							V5	1	SL1019 -5127

STRUCTURAL DOCUMENTATION

SL1019 - LOT 17 FLEMINGTON

JOB#: 2440168

ISSUE: Revision 0

GENERATED: 24 Apr 2024 4:38:37 PM

Confirm Project Details and Document Versions here



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2440168-F1-5: Extent of Foundation Improvement to Post / Point Load with Improvement Width	S 1.4
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-------------------------	------

Drawing/Page Number



Scan QR Code to verify that these are the latest issued drawings

NOTES:

- Specifi drawings are NOT to be used as Shop Drawings
- All Structural Drawings are to be read in conjunction with Architectural and all other Project Documentation, any discrepancies shall be notified prior to any construction or fabrication

CONTRACTOR TO VERIFY:

- All structural drawings are the latest construction issue by scanning the QR Code above, or clicking on the QR Code on the Title Page of this document
- All dimensions on site prior to commencing any work



PROJECT

SL1019 - Lot 17 Flemington
Lot 17 DP 596463
23 Dundee Lane
Lincoln

CLIENT

Mike Greer Homes Canterbury Ltd

DESIGNED BY

Helen Thomas

TITLE

Contents / 2440168-Contents

SCALE 1 : 0 JOB NO. 2440168

DRAWING NO. Contents REV. 0

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GENERAL:
GENERAL:

- THE STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS & SPECIFICATIONS AND WITH SUCH OTHER INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
- MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE NEW ZEALAND BUILDING CODE AND THE CURRENT EDITION OF THE RELEVANT NEW ZEALAND STANDARDS.
- ALL WORK SHALL COMPLY WITH THE HEALTH AND SAFETY AT WORK ACT 2015 AND HEALTH AND SAFETY AT WORK (GENERAL RISK AND WORKPLACE MANAGEMENT) REGULATIONS 2016.
- THESE ENGINEERING DRAWINGS SHOW THE DESIGN INTENT AND ARE NOT SHOP DRAWINGS. IF REQUIRED, ALLOW TO COMPLETE SHOP DRAWINGS FOR FABRICATION. SHOP DRAWINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL SETTING OUT, NIBS, REBATES, SET-DOWNS & THE LIKE.
- ALL DISCREPANCIES SHALL BE REFERRED TO THE DESIGNER BEFORE PROCEEDING WITH WORK.
- ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED. THE DRAWINGS SHALL NOT BE SCALED.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION & ENSURE NO PART SHALL BE OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES. THIS INCLUDES ALL EXISTING STRUCTURES FORMING PART OF, OR AFFECTED BY, THE WORKS.
- IF DURING CONSTRUCTION, ANY PART OF THE WORKS SHOW SIGNS OF DISTRESS, EXCESSIVE DEFLECTION, CONFLICT OF COMPONENTS OR OTHER PROBLEMS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGNER, WHO SHALL INVESTIGATE & ISSUE SUCH INSTRUCTIONS AS ARE CONSIDERED NECESSARY.
- REFER TO THE SCHEDULE OF INSPECTIONS REQUIRED BY THE LOCAL TERRITORIAL AUTHORITY (COUNCIL) FOR THE REQUIRED INSPECTIONS (BY THE COUNCIL AND/OR ENGINEER). PROVIDE AT LEAST 4 WORKING DAYS NOTICE OF ANY INSPECTION REQUIRED BY THE ENGINEER. A CONSTRUCTION OBSERVATION CERTIFICATE, PS4, WILL NOT BE ISSUED FOR ANY WORK NOT INSPECTED DURING CONSTRUCTION.

SITE AND EARTHWORKS:

- REFER TO THE GEOTECHNICAL REPORT BY Davis Ogilvie.
- ALL VEGETATION, TURF AND ORGANIC TOP SOIL SHALL BE STRIPPED FROM THE BUILDING PLATFORM AREA AND EXTEND A MINIMUM OF 0.6M IN PLAN BEYOND THE EDGE OF THE FOUNDATIONS AND COMPLY WITH FIGURE 3.1 OF NZS3604:2011 WITH REGARD TO RELATIONSHIP OF SLOPING GROUND SURFACE. THE DEPTH OF TOPSOIL STRIPPING SHALL BE SUFFICIENT TO REMOVE ALL ORGANIC MATERIAL, TURF AND PLANT ROOTS GREATER THAN 20MM DIAMETER.
- EARTH FILL SHALL MEET THE REQUIREMENTS OF NZS4431:1989 - Code of practice for earth fill for residential development.
- FILL PLACEMENT:
 - THE AREA ON WHICH FILL IS TO BE PLACED SHALL BE STRIPPED OF ALL VEGETATION, TOPSOIL AND MATERIAL DEEMED UNSUITABLE.
 - THE EXPOSED SUBGRADE SHALL BE PROOF ROLLED, WHERE POSSIBLE, TO PROVIDE A LEVEL AND FIRM PLATFORM ON WHICH TO PLACE THE FILL.
 - REFER TO GEOTECHNICAL ENGINEERS REPORT FOR THE SPECIFICATION OF GEOTEXTILE FABRICS, IF ANY, AS WELL AS SPECIFICATIONS FOR LAP LENGTHS, TERMINATION AT ENDS AND THE LIKE.
 - SUITABLE FILL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 200MM THICK (PRIOR TO COMPACTION).
 - APPROPRIATE COMPACTION EQUIPMENT SHALL BE USED TO ACHIEVE THE SPECIFIED COMPACTION CRITERIA. (AN ULTIMATE GEOTECHNICAL BEARING CAPACITY OF 300 KPA IN ACCORDANCE WITH NZS3604:2011 UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL ENGINEER. IN THE CASE OF ANY DISCREPANCIES THE GEOTECHNICAL ENGINEERS SPECIFICATIONS SHALL TAKE PRECEDENCE.)
 - FILL MATERIAL SHALL BE COMPACTED TO ACHIEVE 95% OF THE MATERIALS MAXIMUM DRY DENSITY IN ACCORDANCE WITH NZS 4431:1989.
 - FILL OVER 600MM DEPTH SHALL BE TESTED AND APPROVED BY A SUITABLY QUALIFIED CHARTERED PROFESSIONAL ENGINEER (UNLESS NOTED OTHERWISE IN THE GEOTECHNICAL REPORT). CONFIRM WITH ENGINEER FOR SOIL TESTING / CERTIFICATION REQUIREMENTS TO ORIGINAL GROUND AND COMPACTED FILL PRIOR TO COMMENCING EXCAVATION.

STEELWORK:

- MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITH GOOD TRADE PRACTICE AND THE RELEVANT STANDARDS & CODE OF PRACTICES.
- STRUCTURAL STEELWORK SHALL BE THE FOLLOWING GRADES/STRENGTHS, UNLESS NOTED OTHERWISE.

- FLATS, PLATES & ANGLES:	300MPa
- OPEN HOLLOW SECTIONS (UB, PFC, UC, etc):	300MPa
- HOLLOW SECTION (SHS, RHS, CHS):	350/450 MPa (DUAL GRADE)
- BOLTS SHALL BE HIGH STRENGTH, SNUG TIGHT (8.8/S) UNLESS NOTED OTHERWISE. TIMBER COACH BOLTS & SCREWS SHALL BE GRADE 4.6. BOLTS, COACH BOLTS & SCREWS, NUTS & WASHERS SHALL BE HOT-DIPPED GALVANISED.
- WELDS TO BE CONTINUOUS SINGLE BEVEL, BUTT OR 5mm CONTINUOUS FILLET WELDS (6mm FOR MANUAL WELDS) AS APPROPRIATE, UNLESS NOTED OTHERWISE.
- HOLDING DOWN BOLTS & CAST-IN ITEMS SHALL BE SET ACCURATELY BY TEMPLATE FOR POSITION, PLUMB & LEVEL BEFORE CONCRETING.
- BASEPLATES SHALL BEAR DIRECTLY ON CONCRETE OR MAXIMUM 20mm NOMINAL THICKNESS DRYPACK MORTAR OR 10mm HIGH STRENGTH GROUT (60MPa) UNLESS NOTED OTHERWISE.
- WASHERS, TAPERED WHERE NECESSARY, ARE TO BE USED UNDER BOLT HEADS & NUTS.
- HOLLOW SECTION MEMBERS SHALL BE CAPPED & ALL JOINTS SEALED.
- FOR HOT DIP GALVANISED ITEMS, ALLOW FOR TOLERANCE, VENT HOLES ETC. VENT HOLES SHALL BE SEALED AFTER GALVANISING.
- DURABILITY:

STEELWORK (INTERNAL):	BEFORE ERECTION, ALL STEELWORK IS TO BE PRIMED WITH TWO COATS OF ZINC CHROMATE PRIMER, TO A TOTAL MIN. DRY FILM THICKNESS OF 75 MICRONS. THE PRIMER USED SHALL BE APPROVED BY THE ENGINEER BEFORE APPLICATION. REFER TO THE ARCHITECT'S SPECIFICATION FOR ANY PAINT SYSTEMS SPECIFIED IN ADDITION TO THIS CLAUSE.
STEELWORK (EXTERNAL):	ALL EXTERNAL STEELWORK EXPOSED TO THE EXTERNAL ENVIRONMENT IS TO BE HOT-DIPPED GALVANIZED. REFER TO THE ARCHITECT'S SPECIFICATION FOR ANY PAINT SYSTEMS SPECIFIED IN ADDITION TO THIS CLAUSE. THIS CLAUSE IS A MINIMUM REQUIREMENT & NO STEELWORK IS TO BE ERECTED WITHOUT BEING HOT - DIPPED GALVANIZED, UNLESS APPROVED IN WRITING BY THE ENGINEER. STEELWORK PREPARATION & PAINT APPLICATION ARE TO BE STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR THE PAINT SYSTEM SELECTED.
STEELWORK (ZONE D):	ALL STEELWORK TO ZONE D TO BE A MIN. OF 600G/m² HOT-DIPPED GALVANIZED + DUPLEX COATING TO AS / NZS 2699.3. REFER TO THE ARCHITECT'S SPECIFICATION FOR ANY PAINT SYSTEMS SPECIFIED IN ADDITION TO THIS CLAUSE.
- ALL STIFFENERS SHALL BE AT LEAST AS WIDE AS THE MEMBER, UNLESS OTHERWISE NOTED.
- WELDING SHALL COMPLY WITH AS1554, IN CONJUNCTION WITH NZS3404 APPENDIX D. WELDS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:

- FILLET WELDS:	GENERAL PURPOSE (GP), CONTINUOUS
- BUTT WELDS:	SPECIAL PURPOSE (SP), FULL PENETRATION



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PROJECT

SL1019 - Lot 17 Flemington
Lot 17 DP 596463
23 Dundeel Lane
Lincoln

CLIENT

Mike Greer Homes Canterbury Ltd

DESIGNED BY

Helen Thomas

TITLE

General Specifications / 2440168-Specifications

SCALE 1 : 20

JOB NO. 2440168

DRAWING NO. S 0.1

REV. 0

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CONCRETE AND MASONRY:

- SDC - Approved Building Consent Document - BC240702 - Pg 36 of 52 - 13/06/2024 - xiangs
- MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH GOOD TRADE PRACTICE AND THE RELEVANT STANDARDS & CODE OF PRACTICES.
 - MASONRY SHALL BE SOLID FILLED WITH 17.5 MPa GROUT (25MPa GROUT TO ZONE 'D'), UNLESS NOTED OTHERWISE.
 - REFER TO DETAILS FOR CONCRETE STRENGTH.
 - REINFORCING COVER SHALL BE AS FOLLOWS:-

- CONCRETE CAST AGAINST NATURAL GROUND	75mm
- CONCRETE CAST AGAINST DPM OR BOXING IN GROUND	50mm
- INTERNAL COVER FOR BARS & MESH	30mm
 - REINFORCING AND MESH SHALL BE SUPPORTED ON PLASTIC 'CHAIRS' OR 'SPACERS' TO MAINTAIN THE ABOVE COVER. METAL SUPPORTS OR WIRE - WIRE SHALL NOT EXTEND INTO THE COVER.
 - SCABBLE THE SURFACE OF THE CONCRETE BETWEEN THE BLOCKWORK AND THE CONCRETE SLAB / FOUNDATION.
 - THE FIRST (BOTTOM) BLOCK SHALL BE LAID UPSIDE DOWN WITH CLEAN-OUT OPENINGS (AS PER NZS 4210) FOR ALL WALLS.
 - REFER OVERLEAF FOR LAP LENGTHS.
 - REFER OVERLEAF FOR MINIMUM BEND DIAMETERS TO REINFORCING STEEL.
 - DO NOT BEND REINFORCING STEEL ON SITE, UNLESS ABSOLUTELY NECESSARY, AND THEN ONLY WITH EQUIPMENT FIT FOR THE PURPOSE.
 - DO NOT RE-BEND REINFORCING STEEL ONSITE.
 - REINFORCING SHALL NOT BE WELDED.
 - PLUMBING & SERVICES SHALL BE CONVEYED UNDERGROUND TO THEIR PLAN LOCATION AND THEN BOUGHT UP THROUGH THE FOUNDATION SYSTEM. REINFORCEMENT SHALL NOT BE RELOCATED OR CUT TO ALLOW FOR SERVICES. REFER TO TYPICAL DETAILS FOR REINFORCING ARRANGEMENTS WHERE PLUMBING AND SERVICES CLASH WITH REINFORCING.
 - ONGOING MAINTENANCE: THE BUILDING OWNER SHALL ENSURE, WHERE APPLICABLE, THAT THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SYSTEM NOT BE ALLOWED TO EXPOSE THE UNDERSIDE OF THE SLAB.
 - LAP LENGTH AS FOLLOWS:-

- H-BARS IS 60 x DIAMETER, i.e. H12 LAP LENGTH IS 720mm
- D-BARS IS 40 x DIAMETER, i.e. D12 LAP LENGTH IS 480mm

TIMBER:

- MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH GOOD TRADE PRACTICE AND THE RELEVANT STANDARDS & CODE OF PRACTICES.
- ALL TIMBER SHALL BE GRADE SG8 (OR VSG8) UNLESS NOTED OTHERWISE.
- TIMBER SHALL BE PROVIDED WITH A MINIMUM SEATING OF 45mm.
- ALL PROPRIETARY FIXINGS (I.E. JOIST HANGERS, STRAPS) SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS.
- M12 BOLTS SHALL HAVE WASHERS NOT LESS THAN 50x50x4 (SQUARE) OR 55x4 (ROUND).
- M16 AND M20 BOLTS SHALL HAVE WASHERS NOT LESS THAN 65x65x5 (SQUARE) OR 75x5 (ROUND).
- ALL FIXINGS (NAILS, NAIL-PLATES, BOLTS AND BRACKETS) WITHIN 600mm OF THE GROUND SHALL BE TYPE 304 STAINLESS STEEL AS PER SECTION 4, NZS 3604:2011.OTHERWISE, ALL FIXINGS SHALL BE A MINIMUM OF HOT DIPPED GALVANISED(BY THE MANUFACTURER).
- ANY STRINGER OR PLATE FIXED TO CONCRETE OR STEEL SHALL BE PROVIDED WITH M12 BOLTS AT 600mm CENTERS, UNLESS NOTED OTHERWISE.
- TIMBER SHALL BE PROTECTED FROM CONCRETE OR STRUCTURAL STEELWORK WITH DPC, OVERHANGING THE EDGES BY AT LEAST 6mm.
- ALL IN-GROUND OR CAST-IN TIMBER SHALL BE TREATED TO HAZARD CLASSIFICATION H5 TO NZS 3640. ALL OTHER TIMBER TO BE TREATED TO A HAZARD CLASSIFICATION TO SUIT IT'S USE AND LOCATION ACCORDING TO THE REQUIREMENTS OF NZS3640:2003 AND NZS3602:2003.
- ALL CUTS AND NOTCHES IN H5 TREATED TIMBER SHALL BE TREATED WITH "ENSEAL" OR "METALLEX" TIMBER PRESERVATIVE.

ABBREVIATIONS:

BL	BEARING LAYER
c/c	CENTRE TO CENTRE
CRS	CENTRES
CVR	COVER
D	GRADE 300 DEFORMED REINFORCING BAR
DIA	DIAMETER
DPM	DAMP PROOF MEMBRANE
EA	EQUAL ANGLE
EQ	EQUAL
EW	EACH WAY
EGL	EXISTING EXCAVATED GROUND LEVEL
FFL	FINISHED FLOOR LEVEL
FSBW	FULL STRENGTH BUTT WELD
FWAR	FILLET WELD ALL ROUND
GR	GRADE
H	GRADE 500 DEFORMED REINFORCING BAR
HORIZ	HORIZONTAL
L	LENGTH OF FOUNDATION IMPROVEMENT AND/OR LENGTH WHERE NO OTHER POINT LOADS / POSTS SHALL LAND WITHIN
NTS	NOT TO SCALE
PFC	PARALLEL FLANGE CHANNEL
PL	PLATE
R	GRADE 300 PLAIN REINFORCING BAR
RHS	RECTANGULAR HOLLOW SECTION
S1	REINFORCING STEEL TO TOP OF FOUNDATION
S2	REINFORCING STEEL TO BOTTOM OF FOUNDATION
st.st.	STAINLESS STEEL
SHS	SQUARE HOLLOW SECTION
SIM	SIMILAR
UA	UNEQUAL ANGLE
UB	UNIVERSAL BEAM
UC	UNIVERSAL COLUMN
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W	ADDITIONAL WIDTH OF FOUNDATION IMPROVEMENT SUPPORTING A POINT LOAD / POST



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PROJECT

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Lot 17 DP 596463
23 Dundee Lane
Lincoln

CLIENT

Mike Greer Homes Canterbury Ltd

DESIGNED BY

Helen Thomas

TITLE

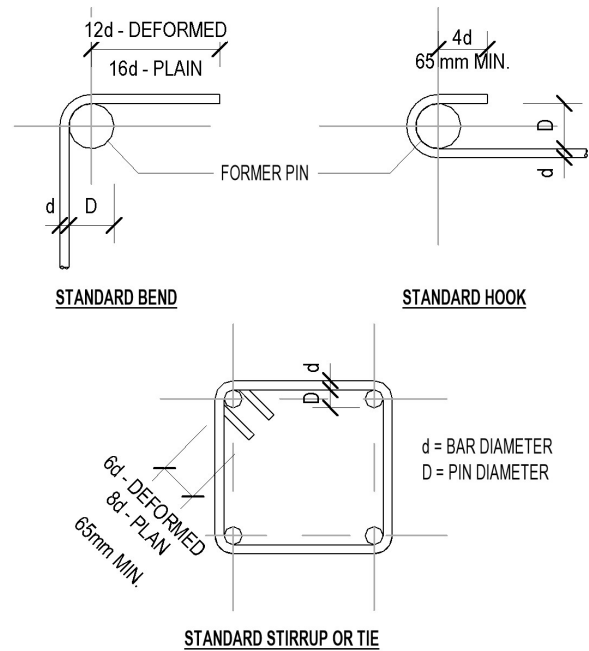
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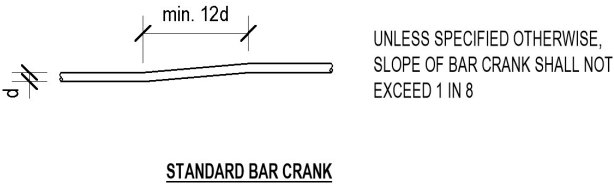


MINIMUM FORM PIN DIAMETER Ø (mm)				
BAR DIAMETER	STIRRUPS & TIE (300 OR 500 GRADE)		ALL OTHER BARS (300 OR 500 GRADE)	
	PLAIN	DEFORMED	PLAIN	DEFORMED
6	12	24	30	30
8	16	32	40	40
10	20	40	50	50
12	24	48	60	60
16	32	64	80	80
20	40	80	100	100
25	75	150	150	150
32	96	192	192	192

NOTE:
WHERE DEFORMED BARS ARE GALVANIZED BEFORE OR AFTER BENDING, THE MINIMUM BEND DIAMETER SHALL BE:
I) 5D FOR BAR DIAMETERS OF 16mm OR LESS
II) 8D FOR BAR DIAMETERS OF 20mm OR GREATER

SPLICE LAP LENGTH FOR DEFORMED REINFORCING STEEL (mm)		
BAR DIAMETER	CONCRETE	BLOCKWORK
H12	600	850
H16	800	1200
H20	1000	1400
H25	1200	—

UNLESS SPECIFIED OTHERWISE, MINIMUM SPLICE LAP LENGTHS FOR REINFORCING BARS SHALL BE AS FOLLOWS:



ABBREVIATIONS USED:	
FF	FAR FACE
NF	NEAR FACE
TT	TOP TOP (REBAR)
TB	TOP BOTTOM (REBAR)
BT	BOTTOM TOP (REBAR)
BB	BOTTOM BOTTOM (REBAR)
R#	ROUND BAR (300MPa); # DENOTES BAR DIAMETER
D#	DEFORMED BAR (300MPa); # DENOTES BAR DIAMETER
H#	DEFORMED BAR (500MPa); # DENOTES BAR DIAMETER
HR#	ROUND BAR (500MPa); # DENOTES BAR DIAMETER
RB#	REID BAR; # DENOTES BAR DIAMETER
EW	EACH-WAY
T&B	TOP AND BOTTOM
N.T.S	NOT TO SCALE
#FWAR	FILLET WELD ALL-ROUND; # DENOTES WELD DEPTH
FPBW	FULL PENETRATION BUTT WELD
GP	GENERAL PURPOSE WELD
SP	STRUCTURAL PURPOSE WELD
WP	WELD-PLATE
PC	PRE-CAST (PANEL)
#RBTIM	REID BAR THREADED INSERT METRIC; # DENOTES DIAMETER
#RBTI	REID BAR THREADED INSERT; # DENOTES BAR DIAMETER



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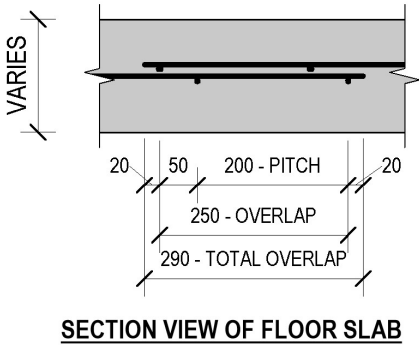
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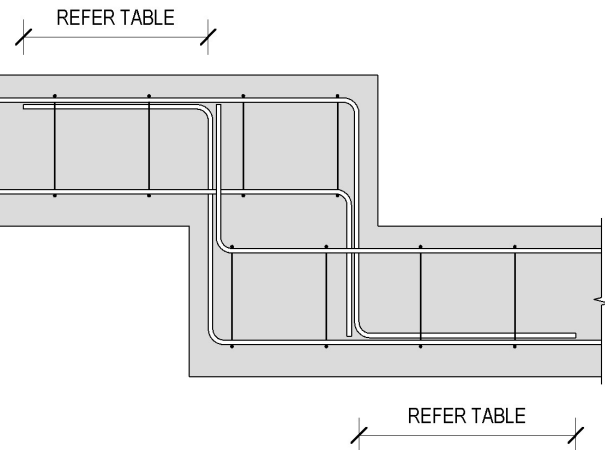


UNLESS SPECIFIED OTHERWISE, MESH OVERLAP MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH MESH SHEET IS NOT LESS THAN THE SPACING OF CROSS WIRES, PLUS 50mm, AND NOT LESS THAN 290mm TOTAL OVERLAP



STEEL MESH LAP DETAIL

SCALE 1 : 10



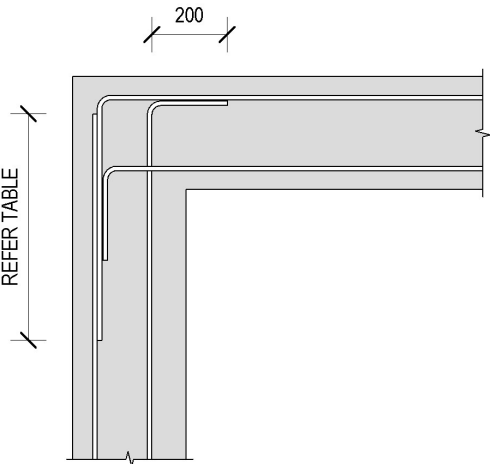
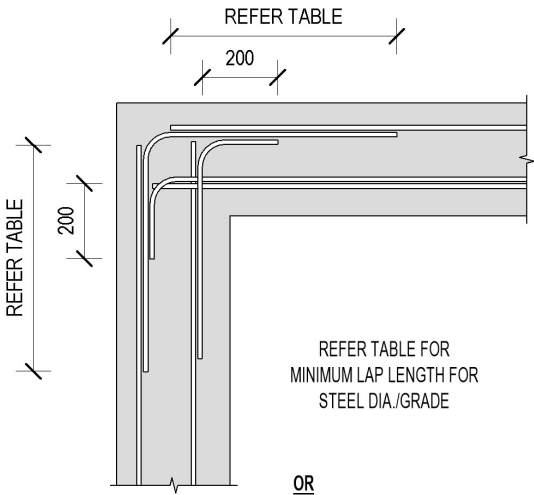
SECTION AT FOUNDATION BEAM STEP

FOUNDATION STEP DETAIL.

SCALE 1 : 20

STANDARD HOOKS, BENDS & SPLICES.

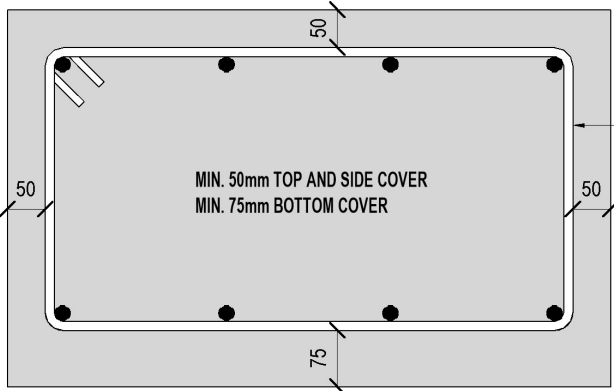
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FOUNDATION CORNER DETAIL.

SCALE 1 : 20

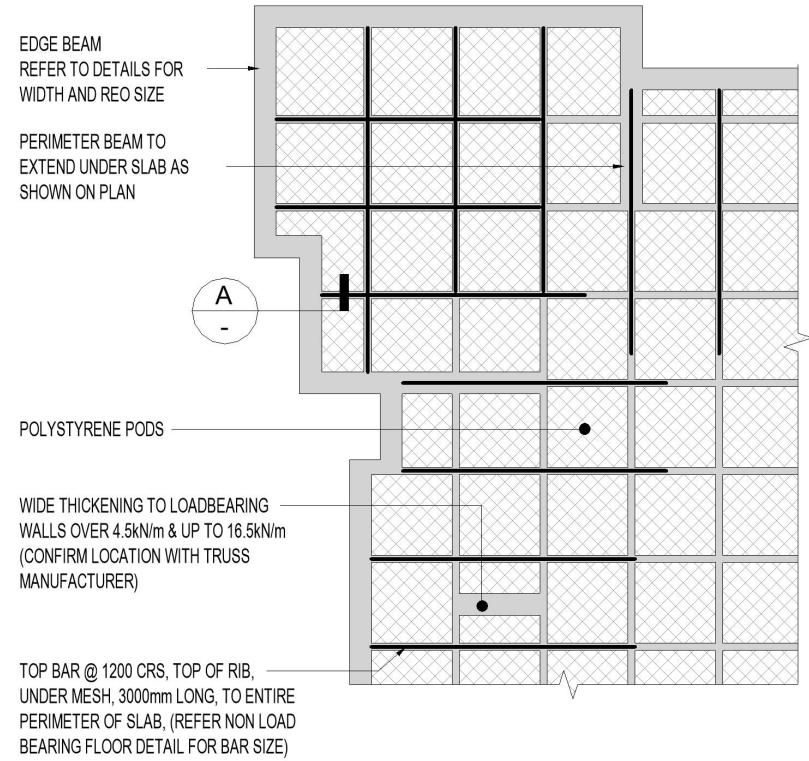
UNLESS SPECIFIED OTHERWISE, MINIMUM COVER REINFORCING BARS SHALL BE AS FOLLOWS:



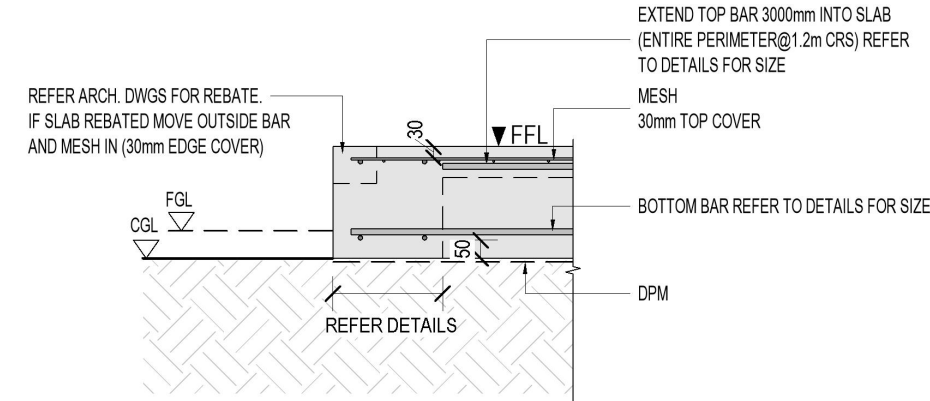
FOUNDATION ON GRADE OR SOIL REBAR COVER REQUIREMENTS

STEEL REBAR COVER REQUIREMENTS

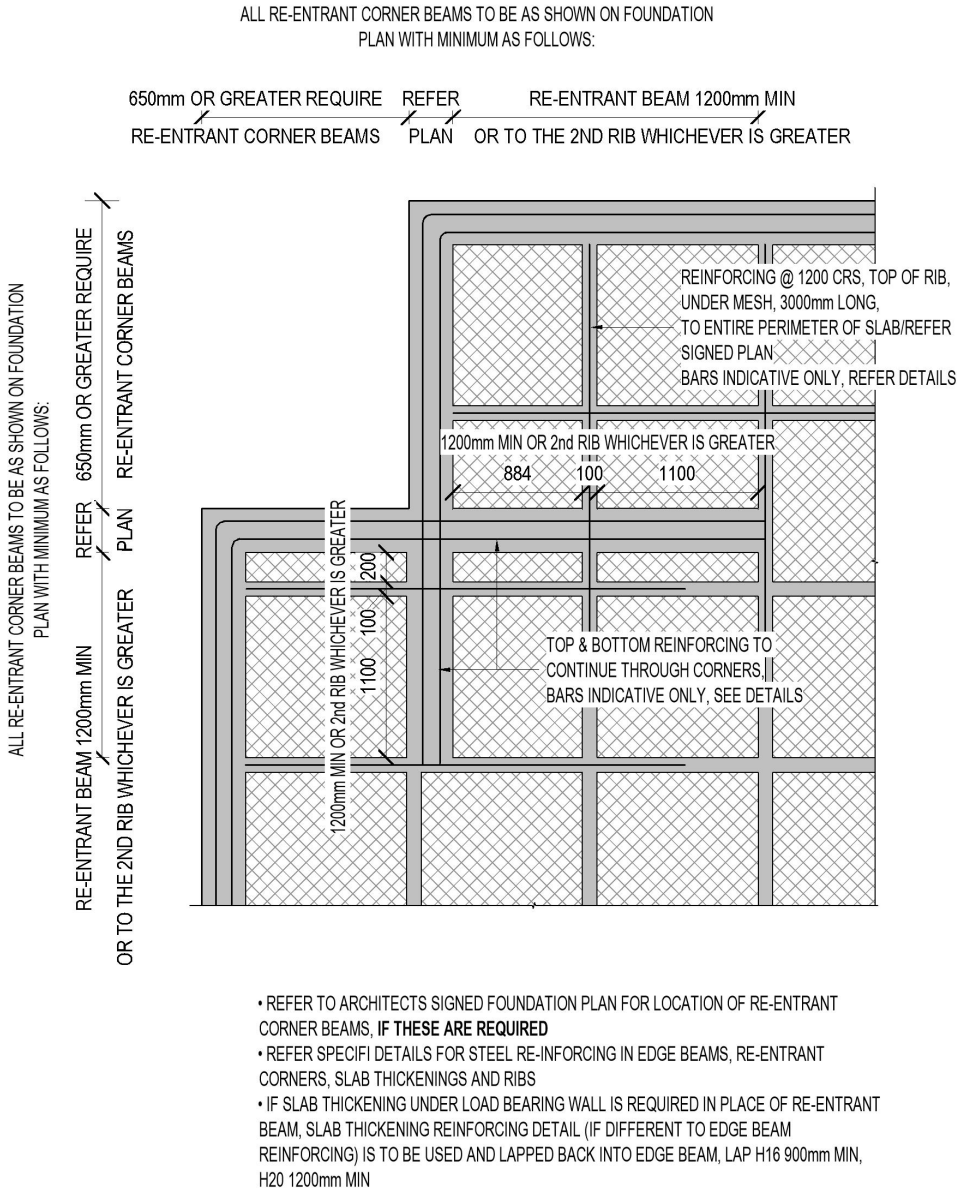
SCALE 1 : 10



TYPICAL TC2 FOUNDATION PLAN
SCALE 1 : 100



A TYPICAL TOP BAR SECTION
1 : 20



TYPICAL TC2 RE-ENTRANT CORNER STEEL LAYOUT
SCALE 1 : 50

TYPICAL REINFORCING STEEL LAPS	
BAR DIAMETER	LAP LENGTH (mm)
H12	600
H16	800
H20	1000



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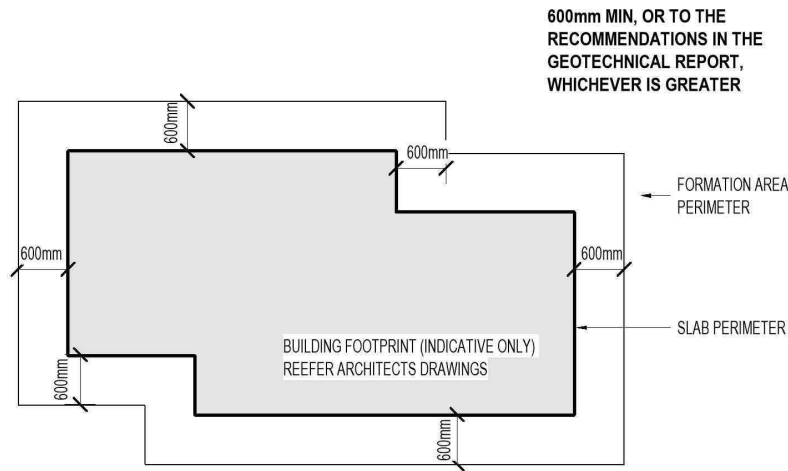
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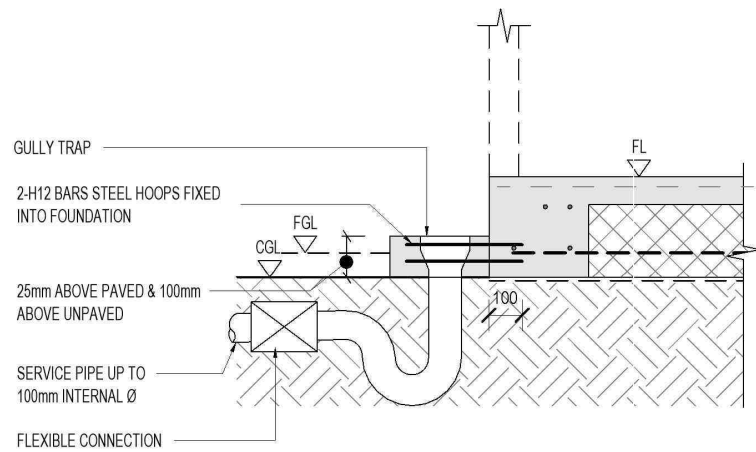
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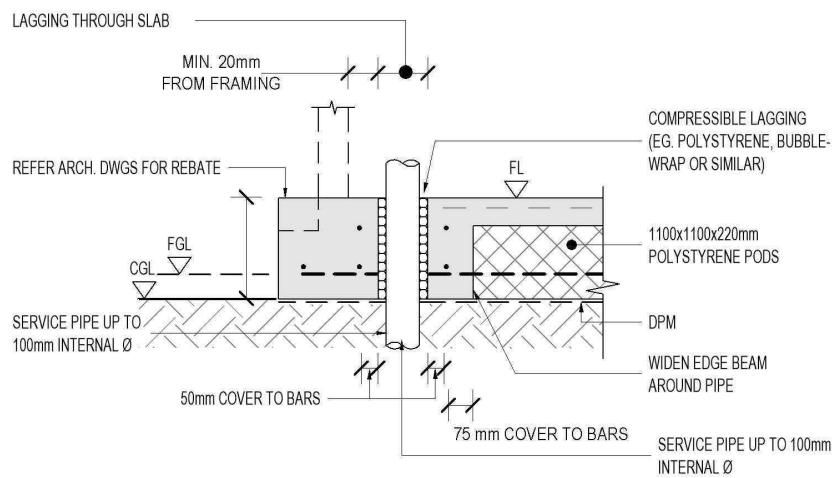
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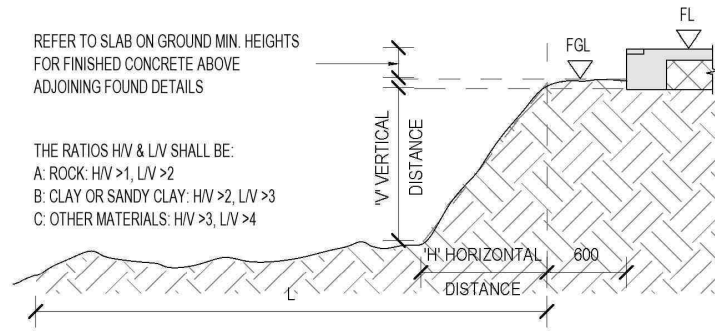
TYPICAL FORMATION PLAN



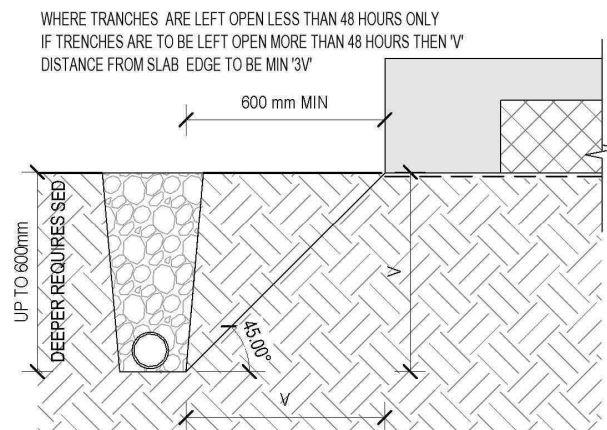
TYPICAL GULLY TRAP TO FOUNDATION CONNECTION



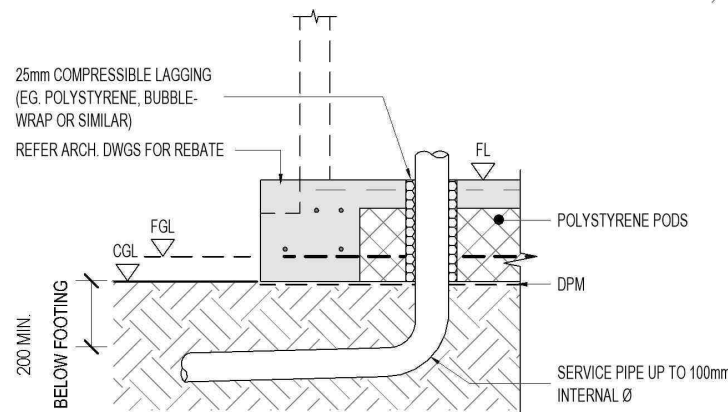
TYPICAL SECTION AT EDGE



TYPICAL SLOPING GROUND SECTION

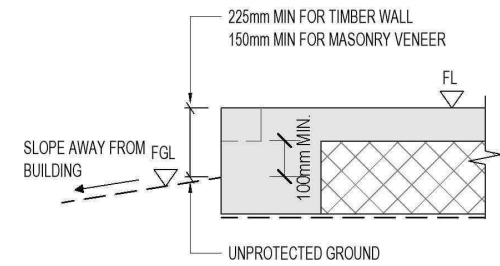


TRENCH SLAB EDGE DISTANCE

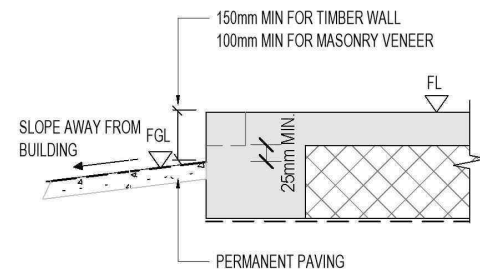


TYPICAL SERVICE PIPE TO FLEXIBLE CONNECTION

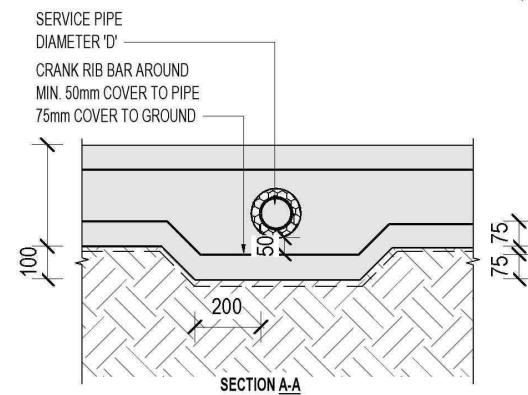
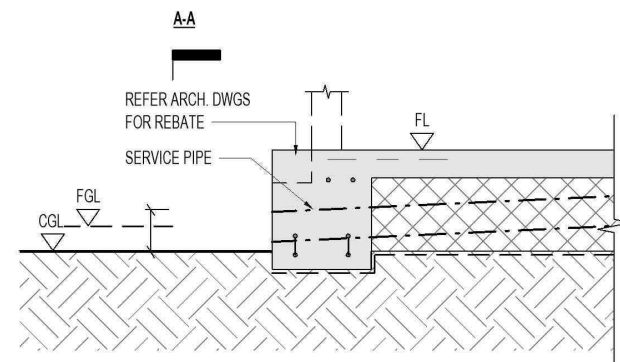
SLAB ON GROUND MINIMUM HEIGHTS OF FINISHED CONCRETE ABOVE ADJOINING GROUND:



TYPICAL NON PAVED AREAS



TYPICAL PAVED AREAS



TYPICAL PIPE PENETRATION AT FOUNDATION EDGE

2440168-F1: Slab Formation Details



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Slab / 2440168-F1

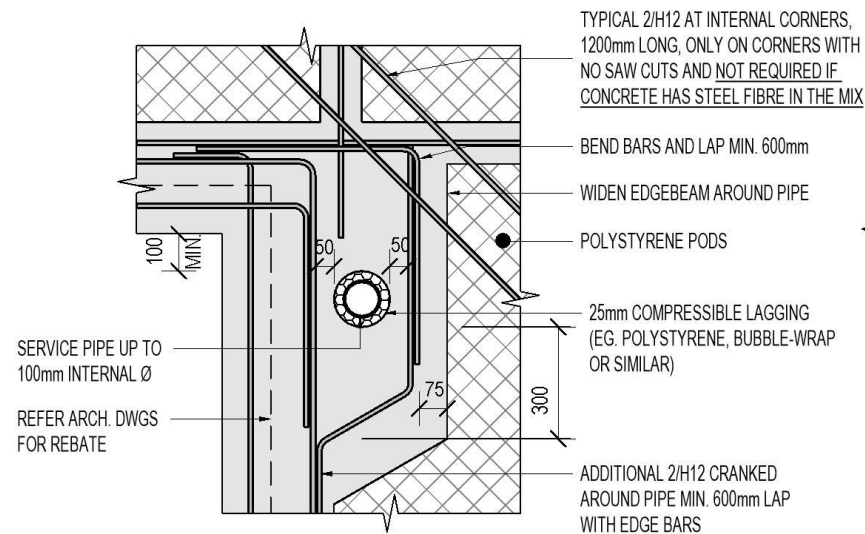
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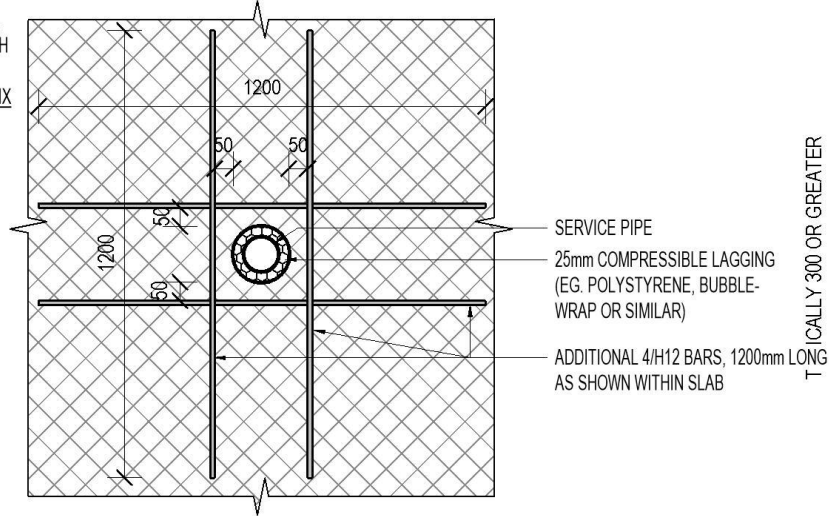
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REV. 0

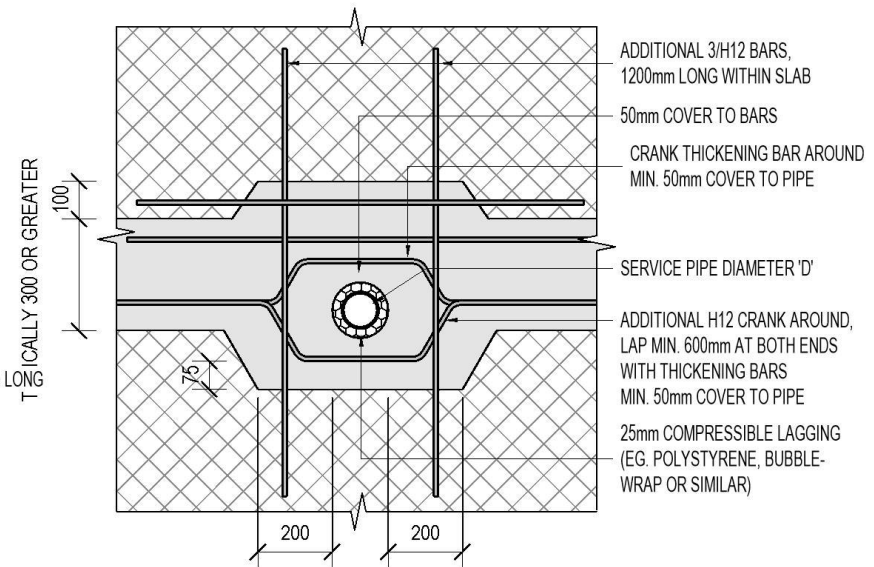
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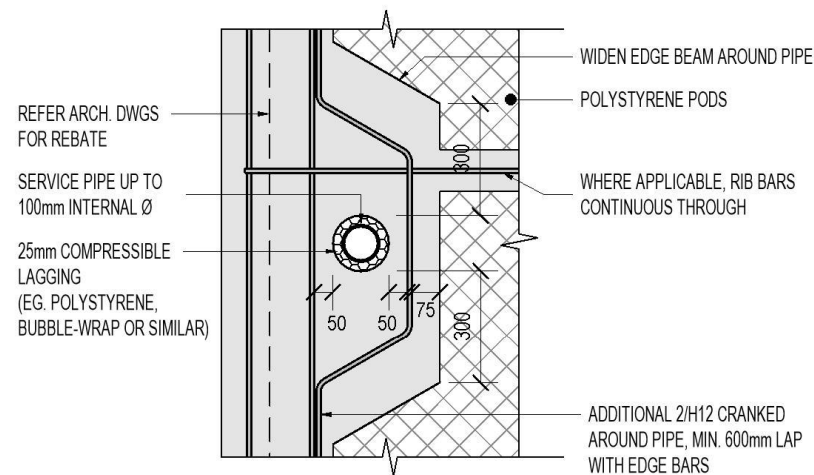
TYPICAL PLAN VIEW: AT CLOSED CORNER



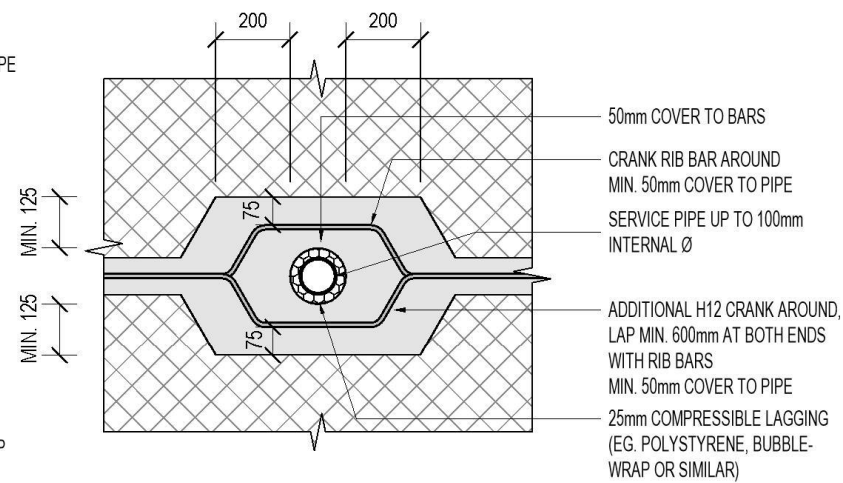
TYPICAL PLAN: IN POD



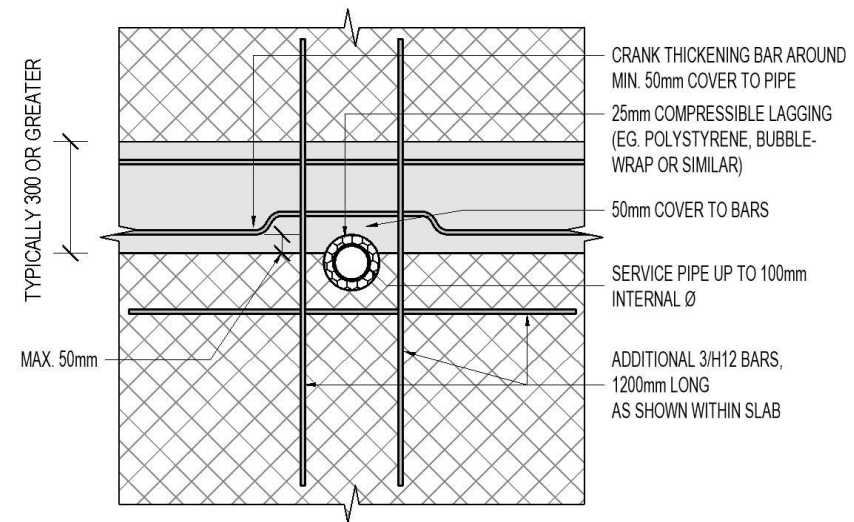
TYPICAL PLAN VIEW : WITHIN THICKENING



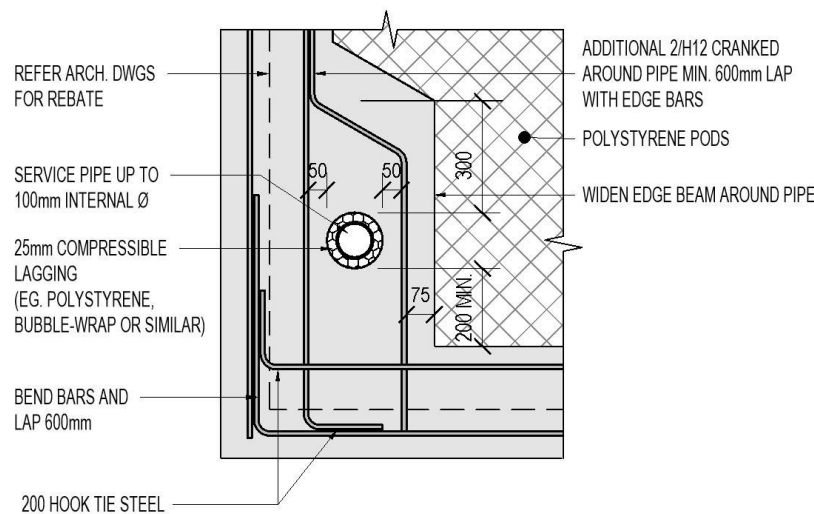
TYPICAL PLAN VIEW: AT EDGE



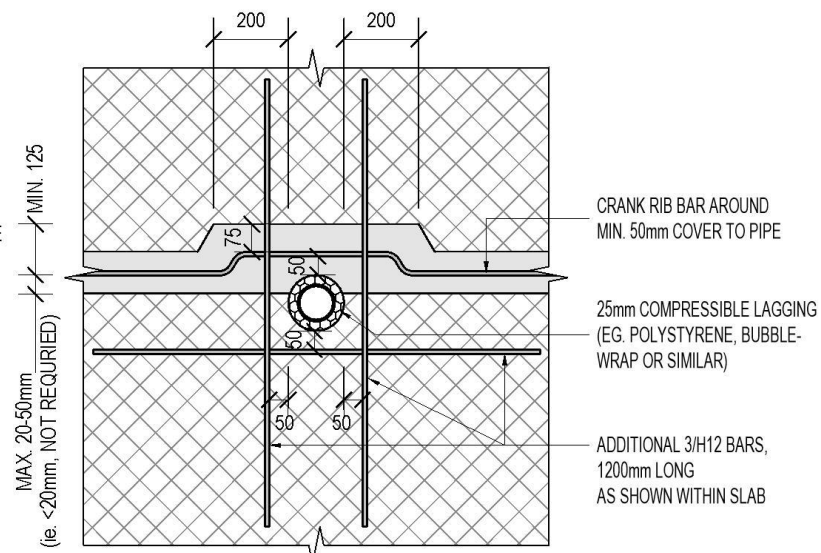
TYPICAL PLAN VIEW: WITHIN RIB



TYPICAL PLAN VIEW: AT THICKENING EDGE



TYPICAL PLAN VIEW: AT OPEN CORNER



TYPICAL PLAN VIEW: AT RIB EDGE

NOTES

- THESE DETAILS ARE APPLICABLE WHERE PLUMBING / SERVICES ARE CONVEYED UNDERGROUND.
- ALL SERVICE TRENCH BACKFILL SHALL BE PROPERLY COMPACTED.
- MEMBER SIZES AND REINFORCING SHOWN ARE INDICATIVE ONLY, DETAILS SHOWN ON THE FOUNDATIONS DETAILS SHALL TAKE PRECEDENCE OVER THE DETAILS SHOWN HERE



Scan QR Code to verify that these are the latest issued drawings

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CONTRACTOR TO VERIFY:

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PROJECT

SL1019 - Lot 17 Flemington
Lot 17 DP 596463
23 Dundee Lane
Lincoln

CLIENT

Mike Greer Homes Canterbury Ltd

DESIGNED BY

Helen Thomas

TITLE

Slab / 2440168-F1

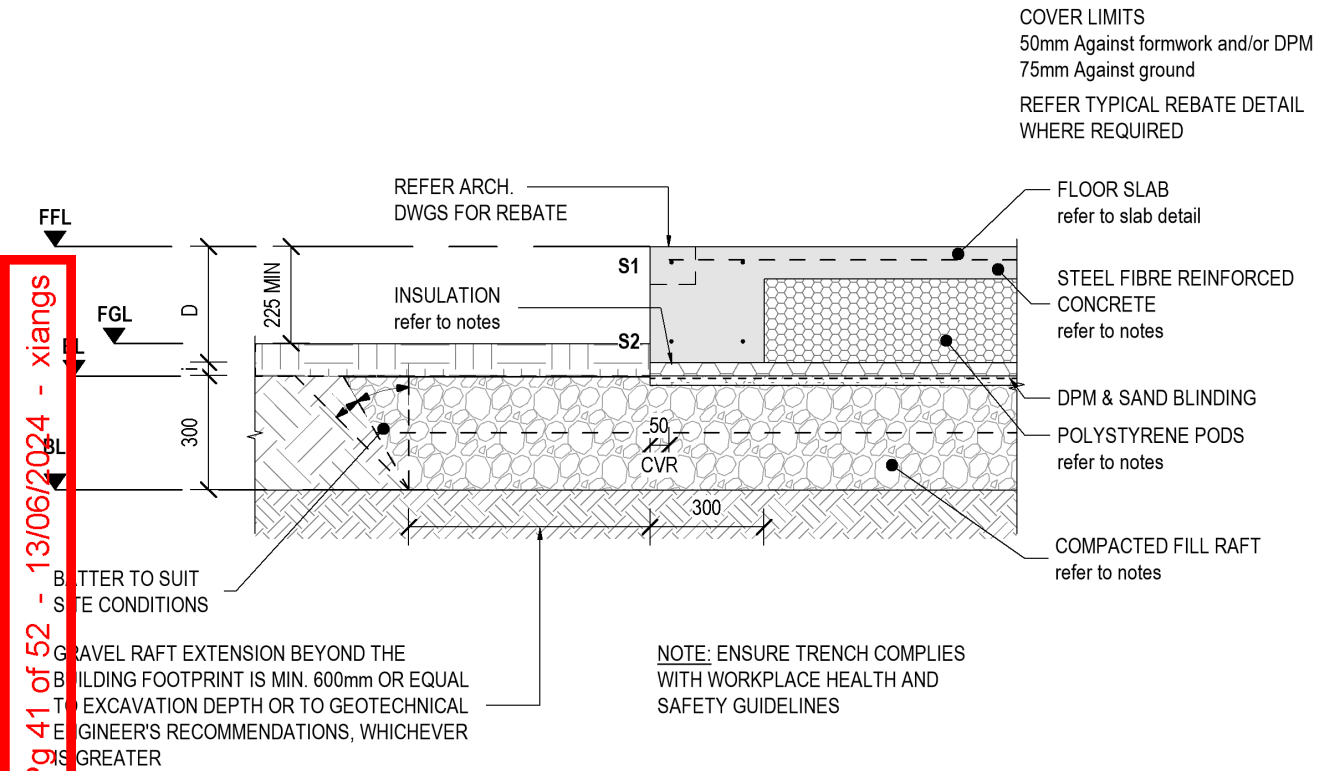
SCALE 1 : 20

JOB NO. 2440168

DRAWING NO. S 1.2

REV. 0

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2440168-F1-1: Rib Supporting External Single Storey

D: 305mm. Slab: 85mm with SE62 mesh. REO: (S1): 2/H12, (S2): 2/H12. 25 MPa Fibre Mix concrete.

Point Loads on 2440168-F1-1: Rib Supporting External Single Storey - Original Width 300mm.

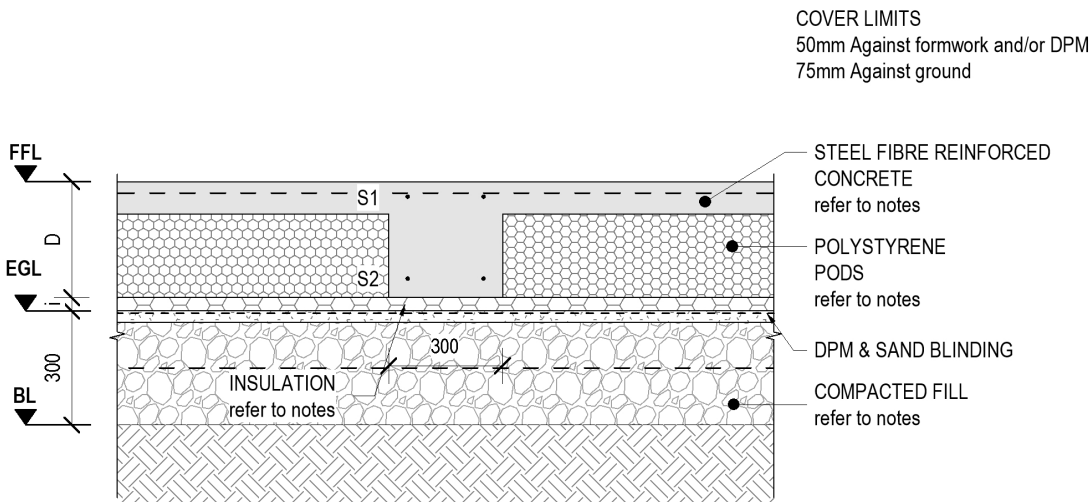
Point Load Description	Improvement Width*	Improvement Length**	Detail	Reinforcing
P/L: from PF01 [D03] - End 1	0mm	4000mm	n/a	REO: (S1): 2/H12, (S2): 2/H12.
P/L: from PF01 [D03] - End 2	0mm	4000mm	n/a	REO: (S1): 2/H12, (S2): 2/H12.
P/L: from PF02 [D02] - End 1	0mm	4000mm	n/a	REO: (S1): 2/H12, (S2): 2/H12.
P/L: from PF02 [D02] - End 2	0mm	4000mm	n/a	REO: (S1): 2/H12, (S2): 2/H12.

*Improvement Width denotes the width the Foundation must be increased by, in addition to the original foundation width.

**Improvement Length denotes the Length of the Foundation where no other Post shall land.

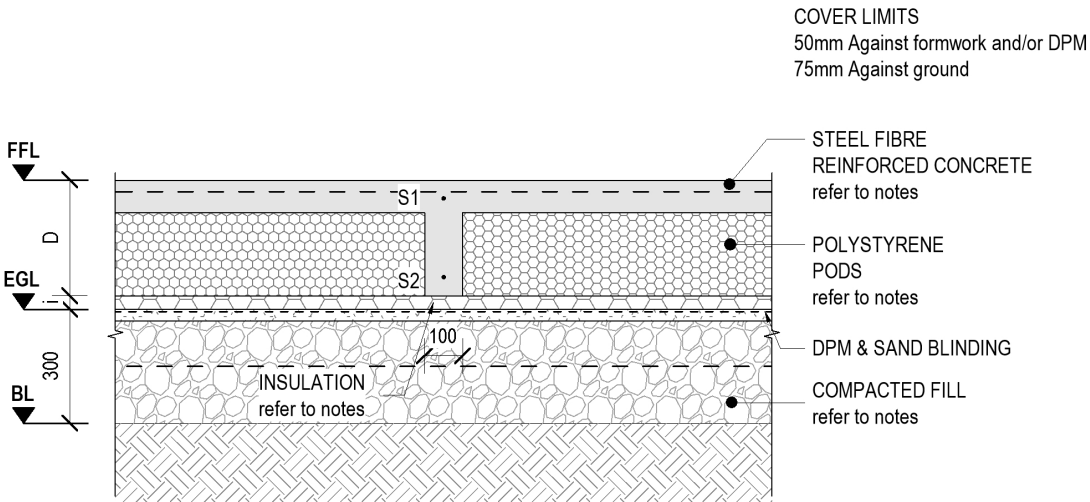
For more information, see 'EXTENT OF FOUNDATION IMPROVEMENT TO POST / POINT LOAD' details below.

Note that EACH 1/H20 may be substituted for an 1/H12 AND 1/H16.



2440168-F1-2: Rib Supporting Internal Single Storey

D: 305mm. Slab: 85mm with SE62 mesh. REO: (S1): 2/H12, (S2): 2/H12. 25 MPa Fibre Mix concrete.



2440168-F1-3: Rib supporting non load bearing Floor

D: 305mm. Slab: 85mm with SE62 mesh. REO: (S1): 1/H12, (S2): 1/H12. 25 MPa Fibre Mix concrete.



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PROJECT

SL1019 - Lot 17 Flemington
Lot 17 DP 596463
23 Dundee Lane
Lincoln

CLIENT

Mike Greer Homes Canterbury Ltd

DESIGNED BY

Helen Thomas

TITLE

Slab / 2440168-F1

SCALE 1 : 20

JOB NO. 2440168

DRAWING NO. S 1.3

REV. 0

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FOR FILL / GROUND IMPROVEMENTS LESS THAN AND EQUAL TO 600mm DEEP:

"CLEAN, SUITABLY COMPACTED FILL, PLACED IN LAYERS NOT EXCEEDING 150mm THICK AND COMPACTED TO ACHIEVE AN ULTIMATE GEOTECHNICAL BEARING CAPACITY OF AT LEAST 300 kPa IN ACCORDANCE WITH NZS3604:2011. REFER TO SPECIFICATIONS FOR ADDITIONAL NOTES REGARDING SUITABLE FILL MATERIAL AND MINIMUM FILL DEPTHS.

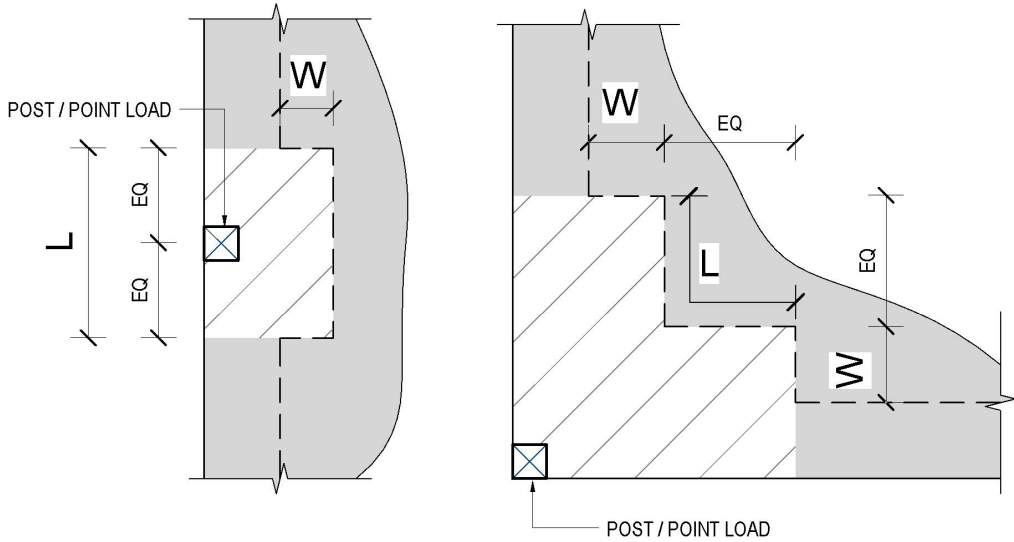
GEOTECHNICAL ENGINEER'S REPORT AND SPECIFICATIONS FOR GROUND IMPROVEMENT WORKS SHALL TAKE PRECEDENCE. CONFIRM WITH TERRITORIAL AUTHORITY AND/OR GEOTECHNICAL ENGINEER FOR SOILTESTING / CERTIFICATION REQUIREMENTS TO ORIGINAL GROUND AND/OR COMPACTED FILL PRIOR TO COMMENCING EXCAVATION"

FOR FILL / GROUND IMPROVEMENT GREATER THAN 600mm DEEP:

"CLEAN, SUITABLY COMPACTED FILL, PLACED UNDER ENGINEERING SUPERVISION IN LAYERS NOT EXCEEDING 150mm THICK AND COMPACTED TO ACHIEVE AN ULTIMATE GEOTECHNICAL BEARING CAPACITY OF AT LEAST 300 kPa IN ACCORDANCE WITH NZS3604:2011. REFER TO SPECIFICATIONS FOR ADDITIONAL NOTES REGARDING SUITABLE FILL MATERIAL AND MINIMUM FILL DEPTHS. GEOTECHNICAL ENGINEER'S REPORT AND SPECIFICATIONS FOR GROUND IMPROVEMENT WORKS SHALL TAKE PRECEDENCE. CONFIRM WITH ENGINEER FOR ANY SOILTESTING / CERTIFICATION REQUIREMENTS TO ORIGINAL GROUND AND COMPACTED FILL PRIOR TO COMMENCING EXCAVATION

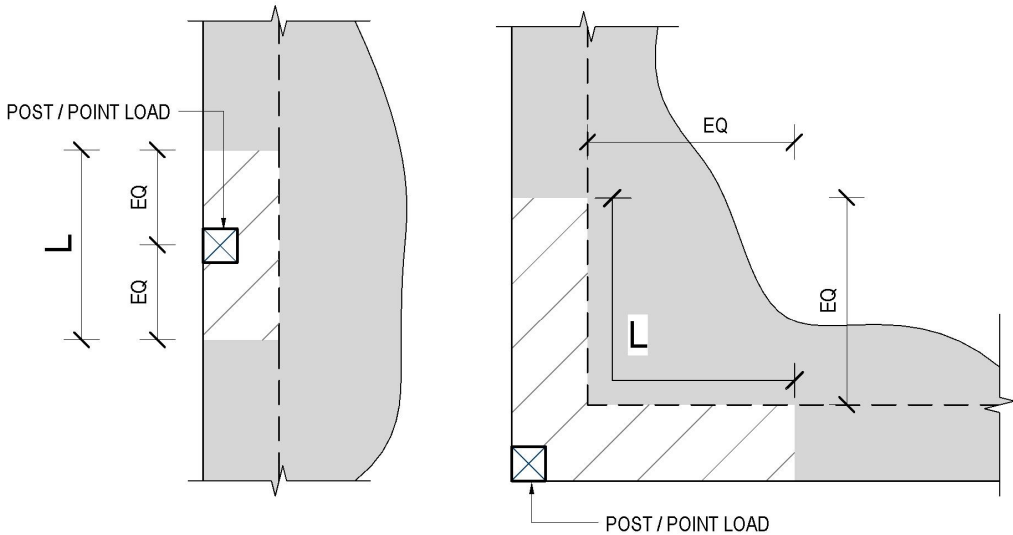
AS FILL DEPTH EXCEEDS 600mm, ORIGINAL GROUND AND FILL SHALL BE TESTED AND CERTIFIED BY A CHARTERED PROFESSIONAL ENGINEER.

2440168-F1-4: Fill Note



HATCHED AREA DENOTES AREA WHERE NO OTHER POSTS / POINT LOADS SHALL LAND WITHIN LENGTH "L"
"W" DENOTES IMPROVED FOUNDATION WIDTH

2440168-F1-5: Extent of Foundation Improvement to Post / Point Load with Improvement Width



HATCHED AREA DENOTES AREA WHERE NO OTHER POSTS / POINT LOADS SHALL LAND WITHIN LENGTH "L"

2440168-F1-6: Extent of Foundation Improvement to Post / Point Load with no Improvement Width

STEEL FIBRE.

STEEL FIBRE SHALL MEET THE REQUIREMENTS OF CL5.A6.1 OF NZS 3101:PART2:2006 "CONCRETE STRUCTURES STANDARD – COMMENTARY".

THE STEEL FIBRE TYPE AND FIBRE DOSAGE SHALL HAVE A CHARACTERISTIC RESIDUAL FLEXURAL TENSILE STRENGTH, FRK4, OF AT LEAST 1.0 MPa. THIS SHALL BE VERIFIED AND CERTIFICATION PROVIDED BY THE MANUFACTURER PRIOR TO THE DELIVERY OF CONCRETE. IF A PRODUCER STATEMENT FOR CONSTRUCTION REVIEW (PS4) IS REQUIRED BY COUNCIL, DELIVERY DOCKETS SHALL BE SUBMITTED PRIOR TO ISSUE OF PS4.

SUITABLE PRODUCTS ARE AS FOLLOWS:

·SHEARCRETE FC2519TC2. PHONE 0274 978 497

NOTE STEEL FIBRE CONCRETE MIX IS NOT SUITABLE FOR POLISHED CONCRETE FLOORS, CONTACT US FOR ALTERNATIVE DESIGN.

2440168-F1-7: Steel Fibre Notes



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PROJECT

SL1019 - Lot 17 Flemington
Lot 17 DP 596463
23 Dundeel Lane
Lincoln

CLIENT

Mike Greer Homes Canterbury Ltd

DESIGNED BY

Helen Thomas

TITLE

Slab / 2440168-F1

SCALE 1 : 20

JOB NO. 2440168

DRAWING NO. S 1.4

REV. 0

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INSULATION NOTES FOR (i).

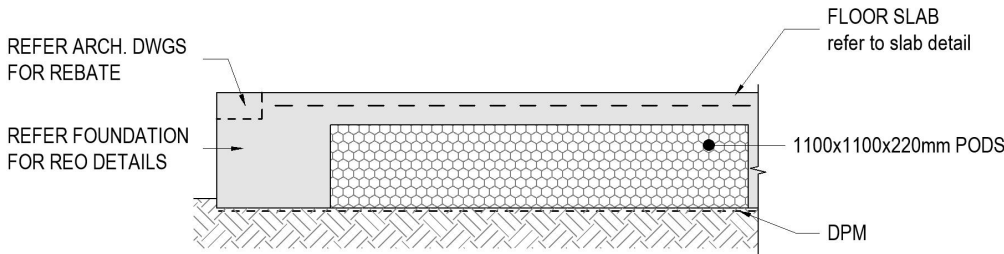
UNDERSLAB INSULATION (i) REFER TO ARCHITECTS INFORMATION FOR SPECIFICATIONS

MAX THICKNESS 50mm.

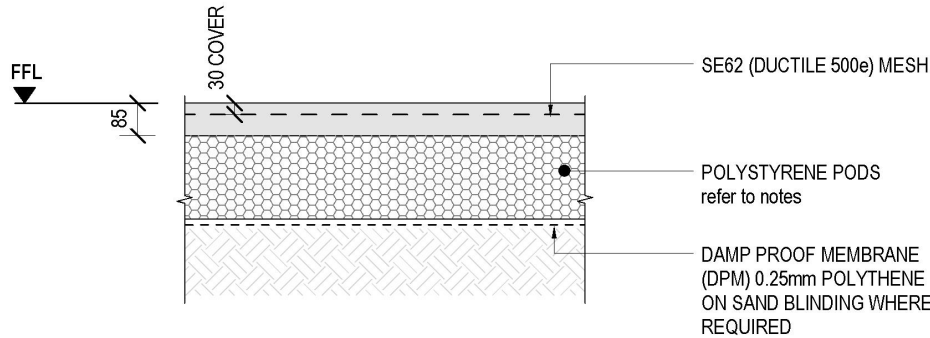
MINIMUM COMPRESSIVE STRENGTH OF INSULATION TO BE 200kPa

(i) - SHOWN ON FOUNDATION DETAILS

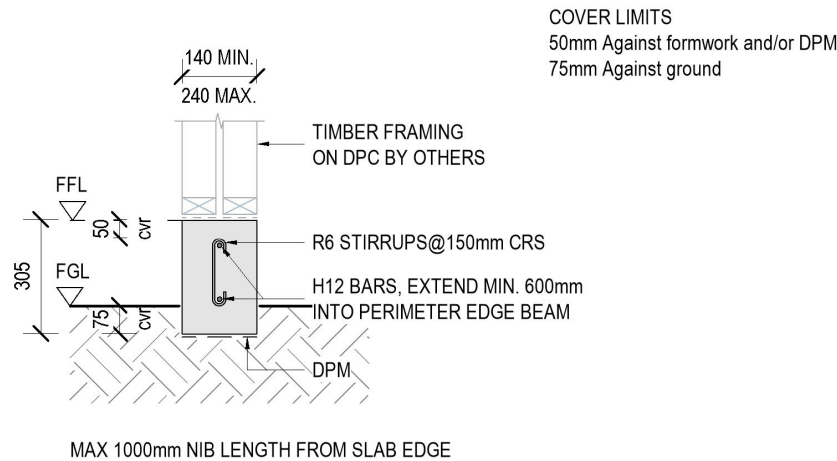
2440168-F1-8: Insulation Note



2440168-F1-10: Detail showing Pod Size



2440168-F1-9: Detail showing Slab Thickness and Mesh



2440168-F1-11: Nib / Wing Wall Detail



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PROJECT

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Lot 17 DP 596463
23 Dundeel Lane
Lincoln

CLIENT

Mike Greer Homes Canterbury Ltd

DESIGNED BY

Helen Thomas

TITLE

Slab / 2440168-F1

SCALE 1 : 20

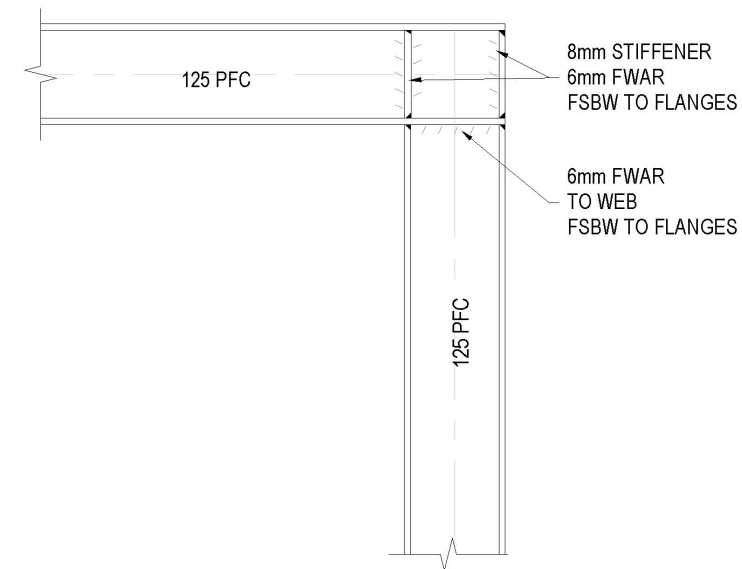
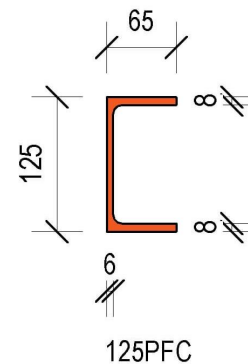
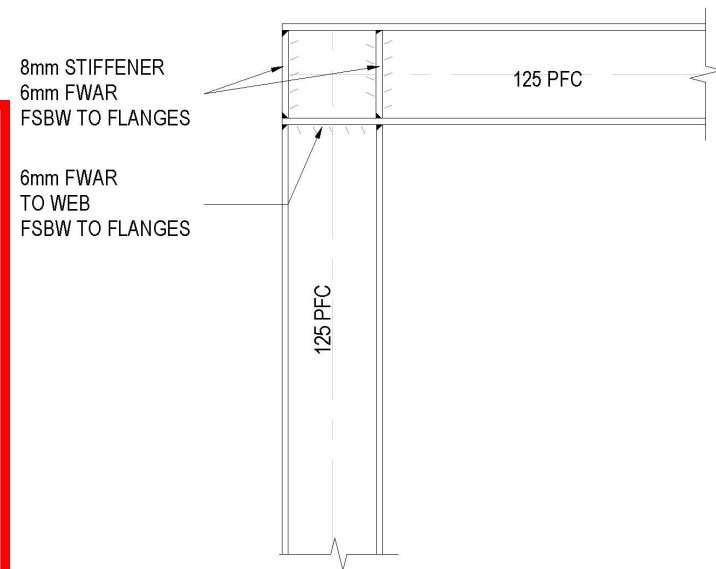
JOB NO. 2440168

DRAWING NO. S 1.5

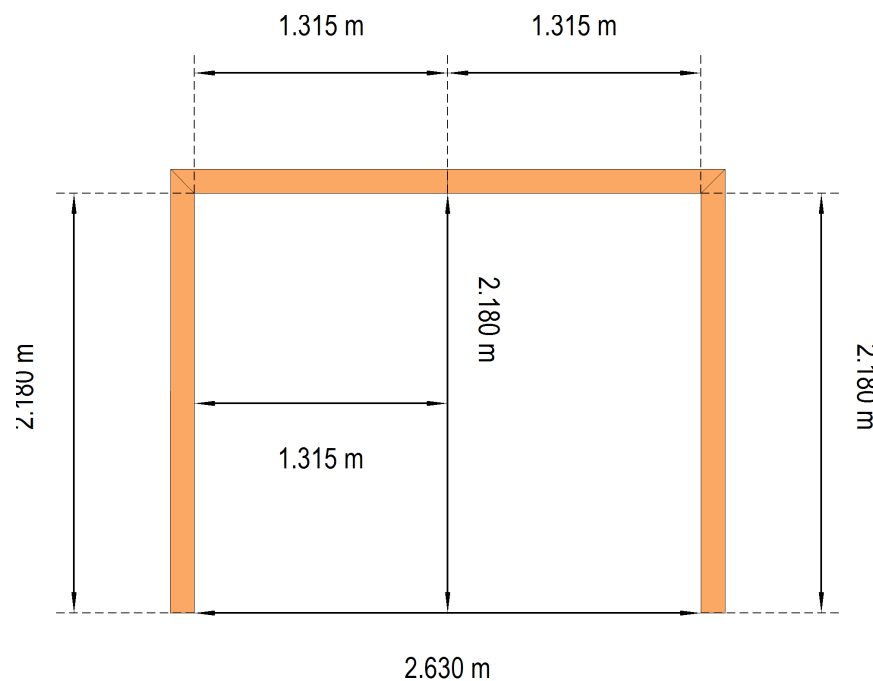
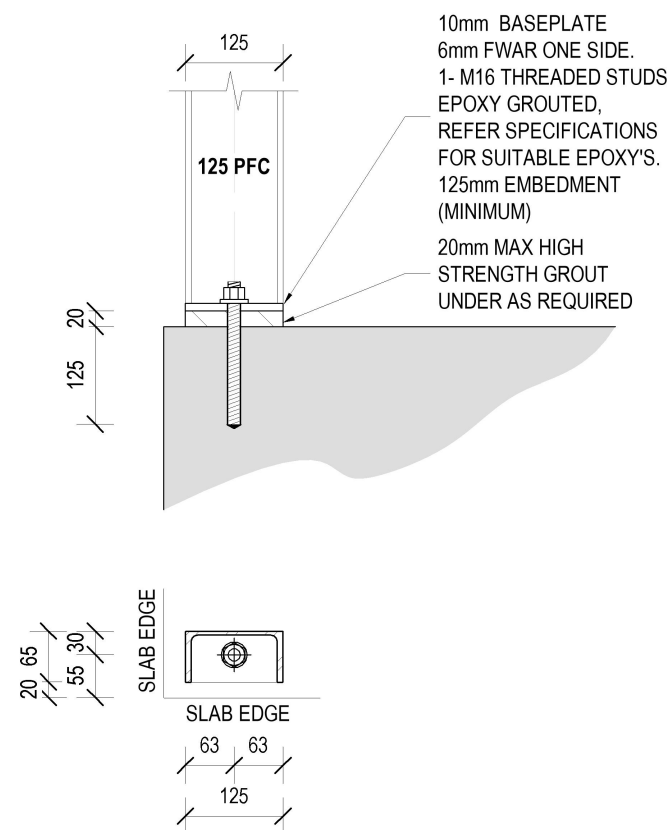
REV. 0

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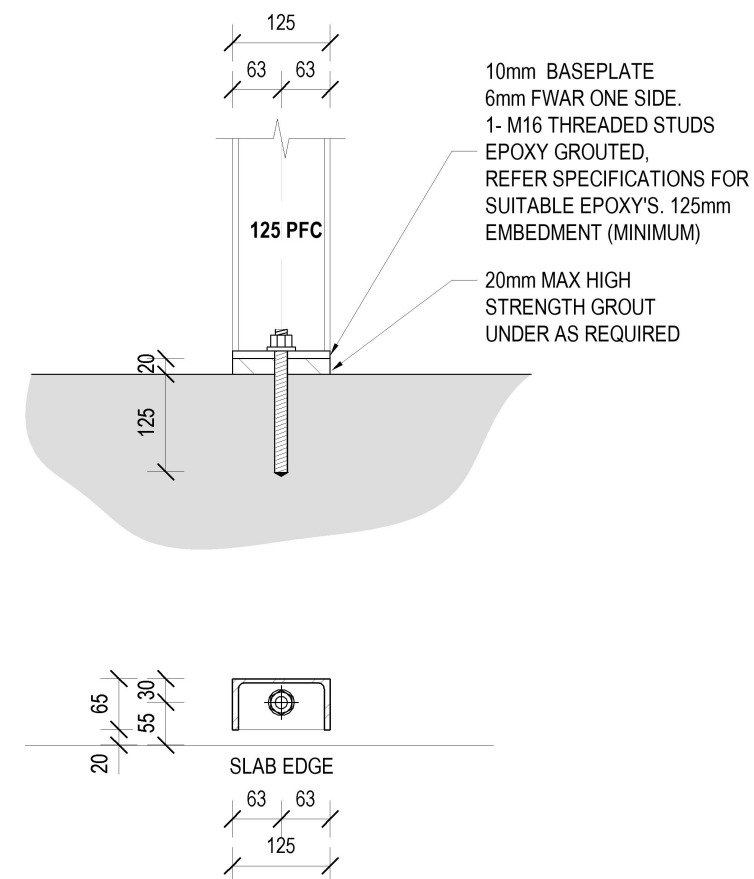


PF01: LHS Knee A = 0.0°



Indicative image only: Not to be used for shop drawings.

PF01: RHS Knee B = 0.0°



PF01 : D03 - End 2

PF01 : D03 - End 1



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Lot 17 DP 596463
23 Dundee Lane
Lincoln

CLIENT

Mike Greer Homes Canterbury Ltd

DESIGNED BY

Helen Thomas

TITLE

D03 / 2440168-PF01

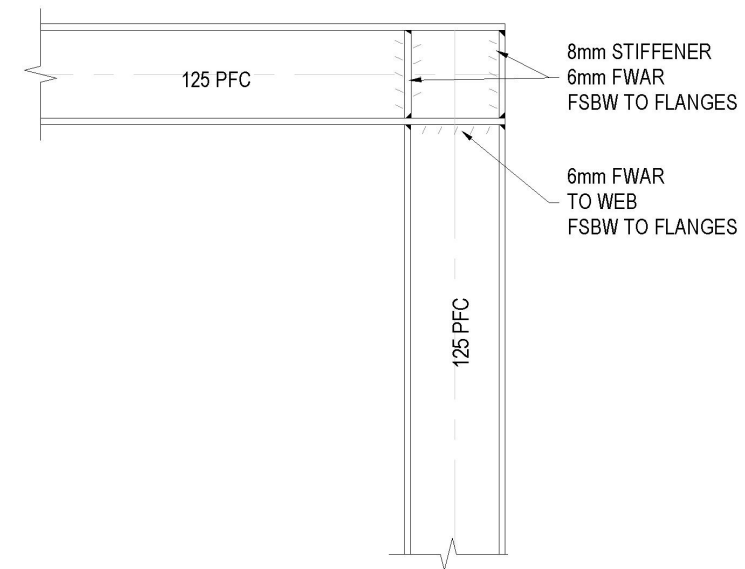
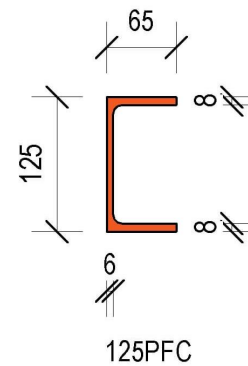
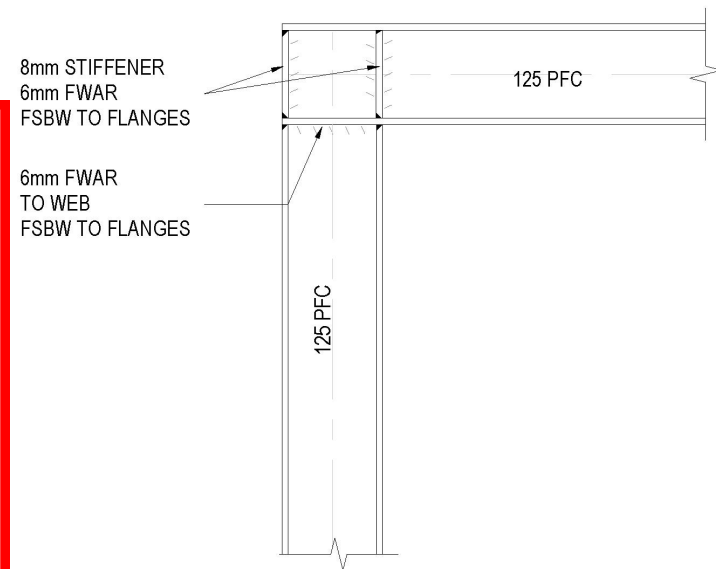
SCALE 1 : 10

JOB NO. 2440168

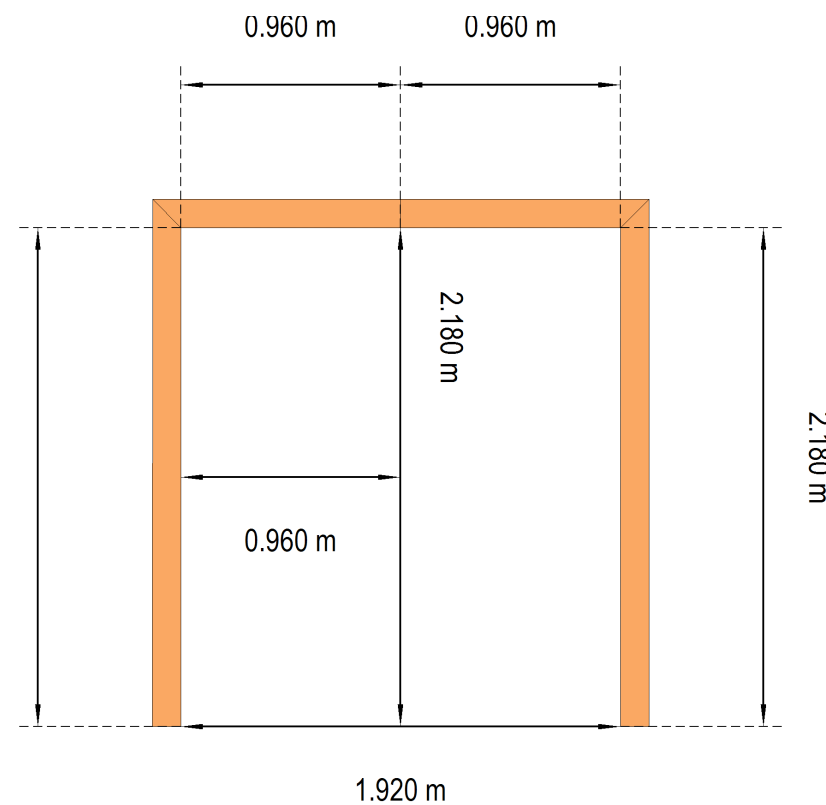
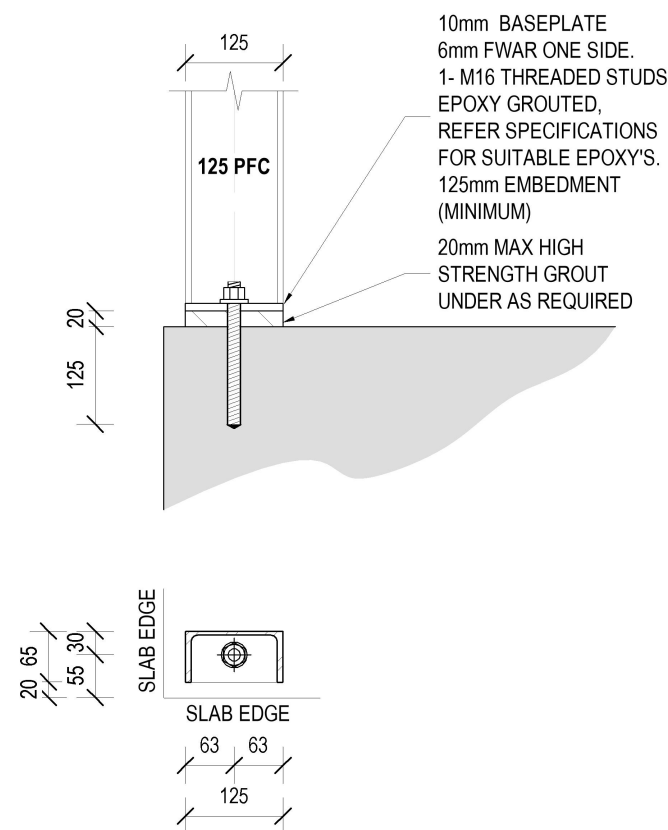
DRAWING NO. S 2.1

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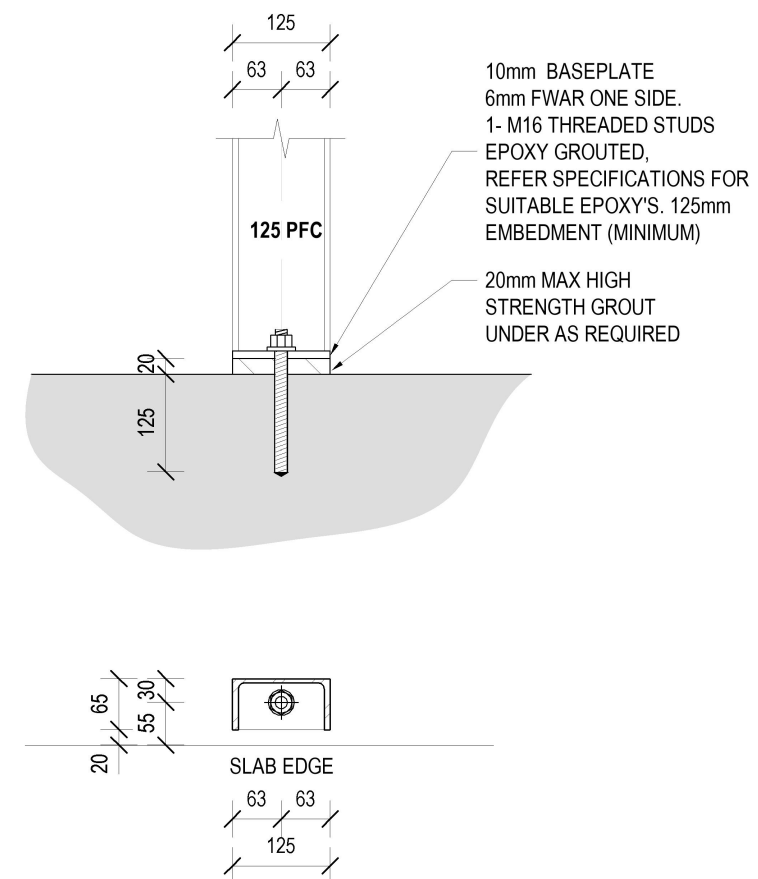


PF02: LHS Knee A = 0.0°



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PF02: RHS Knee B = 0.0°



PF02 : D02 - End 2



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Lot 17 DP 596463
23 Dundee Lane
Lincoln

CLIENT

Mike Greer Homes Canterbury Ltd

DESIGNED BY

Helen Thomas

TITLE

D02 / 2440168-PF02

SCALE 1 : 10

JOB NO. 2440168

DRAWING NO. S 2.2

REV. 0

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BRACING NOTES:

Reading the Bracing Plan:

GS1-N - 0.4m min. length. Any 10mm or 13mm GIB Standard Plasterboard fixed to one side only
BL1-H - 0.4m min. length. Any 10mm or 13mm GIB Braceline fixed to one side only, hold downs required
GBPF/2.4 - 0.4m min. length. Refer to Sheet A6.04 for the details, hold downs required

BRACING KEY

Timber blocking shall be continuous to exterior walls to allow for perimeter fixing for bracing element.
(As per NZS3604: 2011 Section 8.7.3.4)



Openings in Bracing Elements:
(as per GIB EzyBrace System)

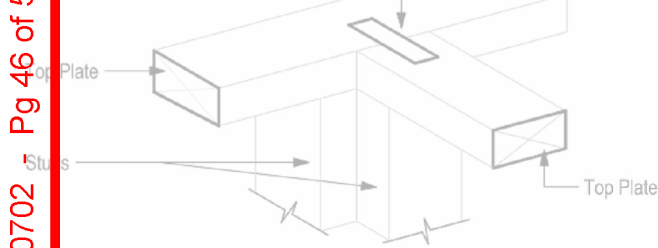
Small openings (e.g. power outlets) of 90 x 90mm or less may be placed no closer than 90mm to the edge of the braced element. A block may need to be provided alongside the perimeter stud.

Large openings (e.g. door or window) of 90 x 90mm or more should be placed no closer than 90mm to the edge of the bracing element or locate bracing on the other side of the wall framing.

For each wall containing wall bracing elements with a total bracing capacity of not more than 25 bracing units: to at least one such external wall by a fixing as shown in figure 8.16 each achieving 6 kN capacity;

For each wall containing wall bracing elements with a total bracing capacity of not more than 50 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each achieving 6 kN capacity;

For each wall containing wall bracing elements with a total bracing capacity of more than 50 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each achieving a rating of not less than 2.4 kN per 100 bracing units."



CONNECTING TOP PLATES TO EXTERNAL WALLS - WALLS CONTAINING BRACING

Note: Each wall that contains one or more wall bracing elements shall be connected at the top plate level, either directly, or through a framing member in the line of the wall, to external walls at right angles to it. Top plate fixing(s) of the capacity in tension or compression along the line of the wall bracing element are given as follows:

For each wall containing wall bracing elements with a total bracing capacity of not more than 25 bracing units: to at least one such external wall by a fixing as shown in figure 8.16 each achieving 6 kN capacity;

For each wall containing wall bracing elements with a total bracing capacity of not more than 50 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each achieving 6 kN capacity;

For each wall containing wall bracing elements with a total bracing capacity of more than 50 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each achieving a rating of not less than 2.4 kN per 100 bracing units."

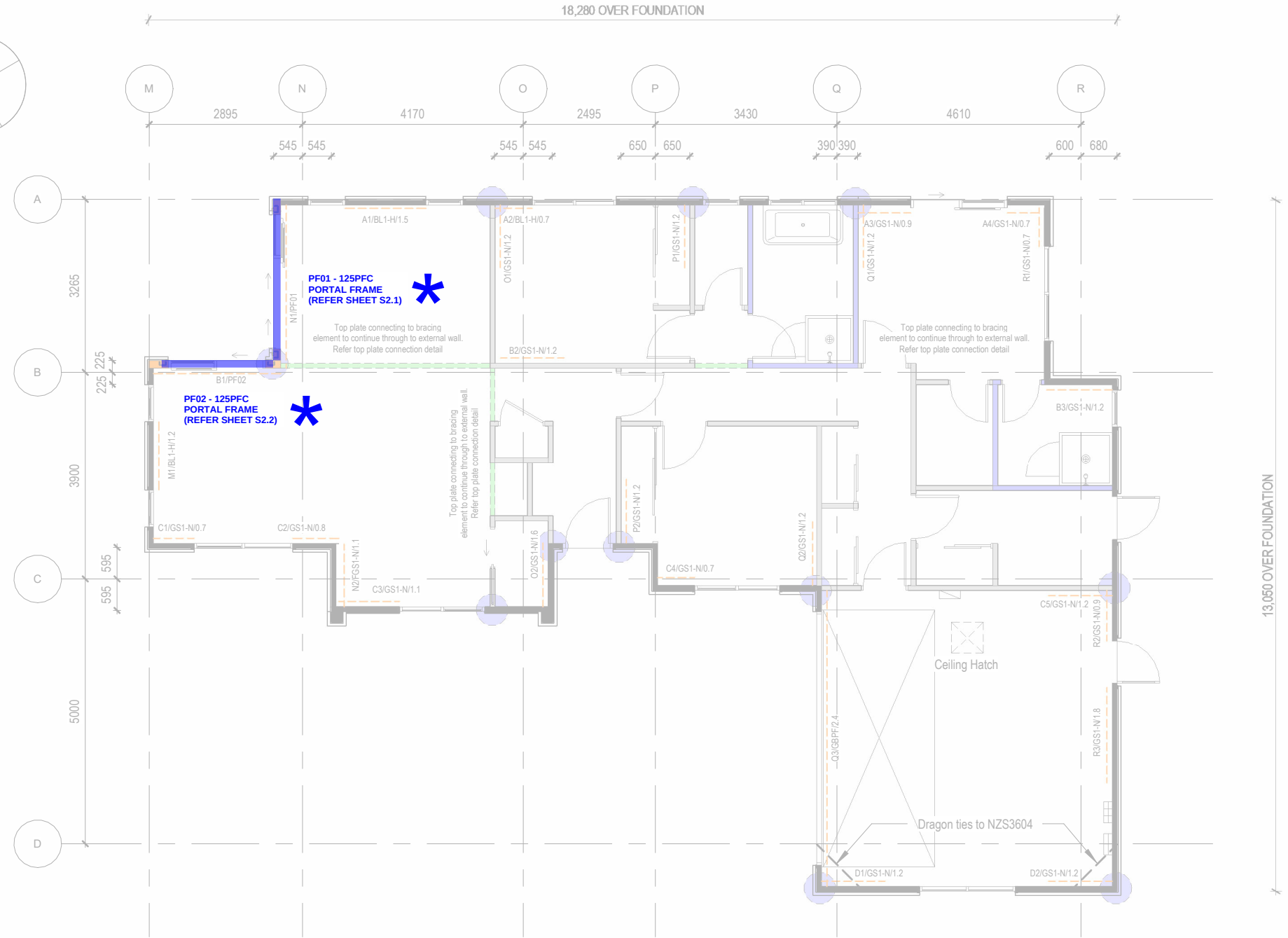
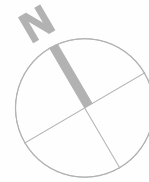
DESIGN ENGINEER

The structural elements designated *
on this drawing have been designed by



Job No. #2440168

Date 24/04/2024 Signed



1 Bracing Plan
1 : 100



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(03) 354 0166 | 0800 mikegreer
Tower 2, 7 Deans Avenue, Addington, Christchurch 8011
info@mikegreerhomes.co.nz | www.mikegreerhomes.co.nz

DRAWING TITLE:

Ground Floor Bracing
Plan

LEGAL DESCRIPTION:

LOT: 17 DP: 596463
Lot 17 DUNDEEL LANE,
FLEMINGTON, STAGE 12,
LINCOLN

LEGAL NOTES:

1. Subject to council approval
2. All measurements to be confirmed on site by the contractor prior to the commencement of work
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Revisions:

V4 Working Drawings

Date of Issue:

21/03/2024

Amendment Date:

19/03/2024

DESIGNER:

GQ

TECHNICIAN:

JD

VERSION:

V4

SCALE: 1 : 100

A3 page size

BASE PLAN

CT6439

CODE:

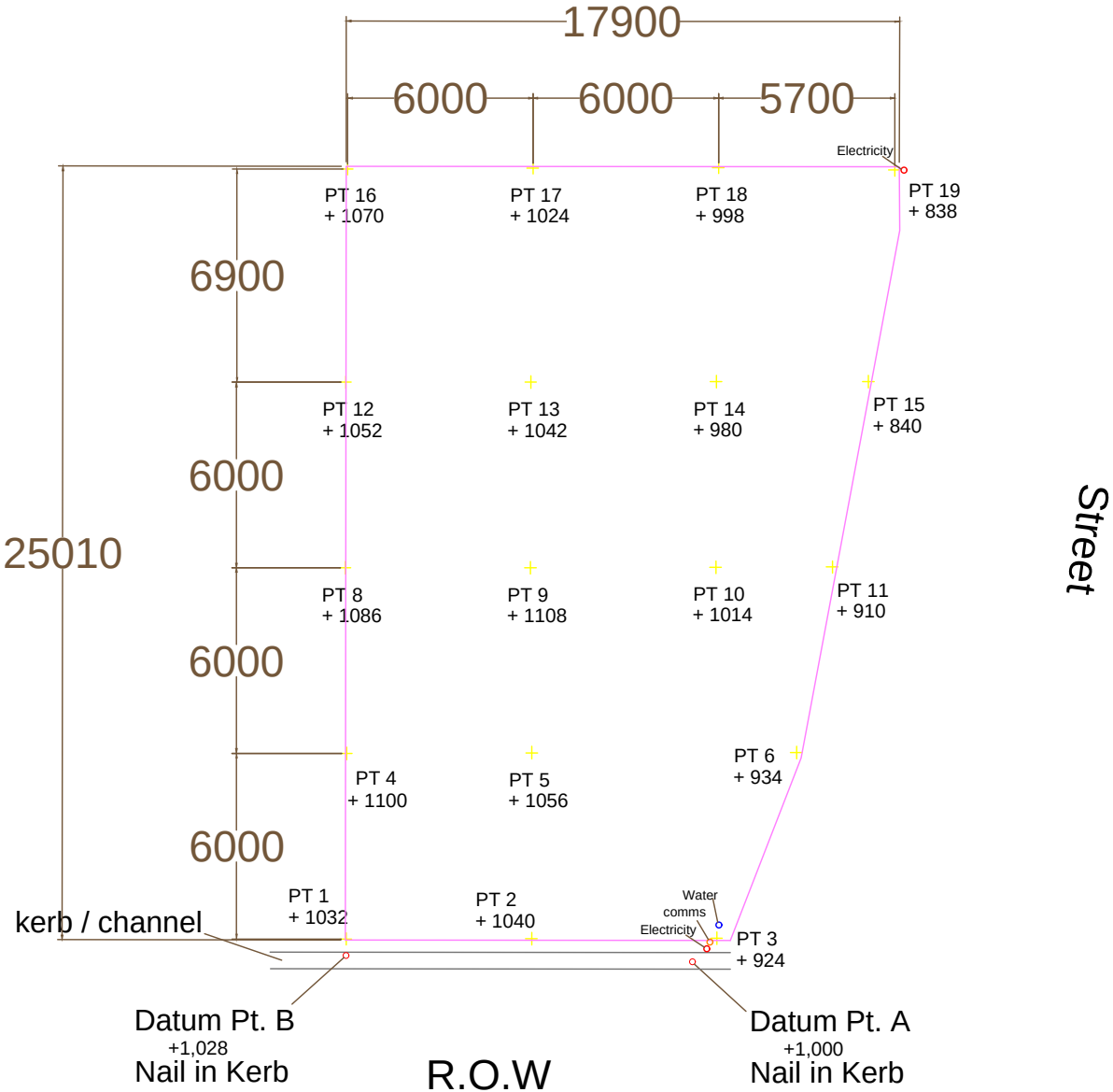
1

JOB #

SL1019 -5137

SHEET:

A2.05



Datum Pt A is a survey nail in the kerb on the R.O.W opposite the front LHS set out peg, It represents a datum level of 1,000, refer to the photo in the attached report.

Datum Pt B is a survey nail in the kerb on the R.O.W in line with the rear LHS set out peg,It represents a datum level of + 1,028, refer to the photo in the attached report.

All the level heights shown are in mm's.

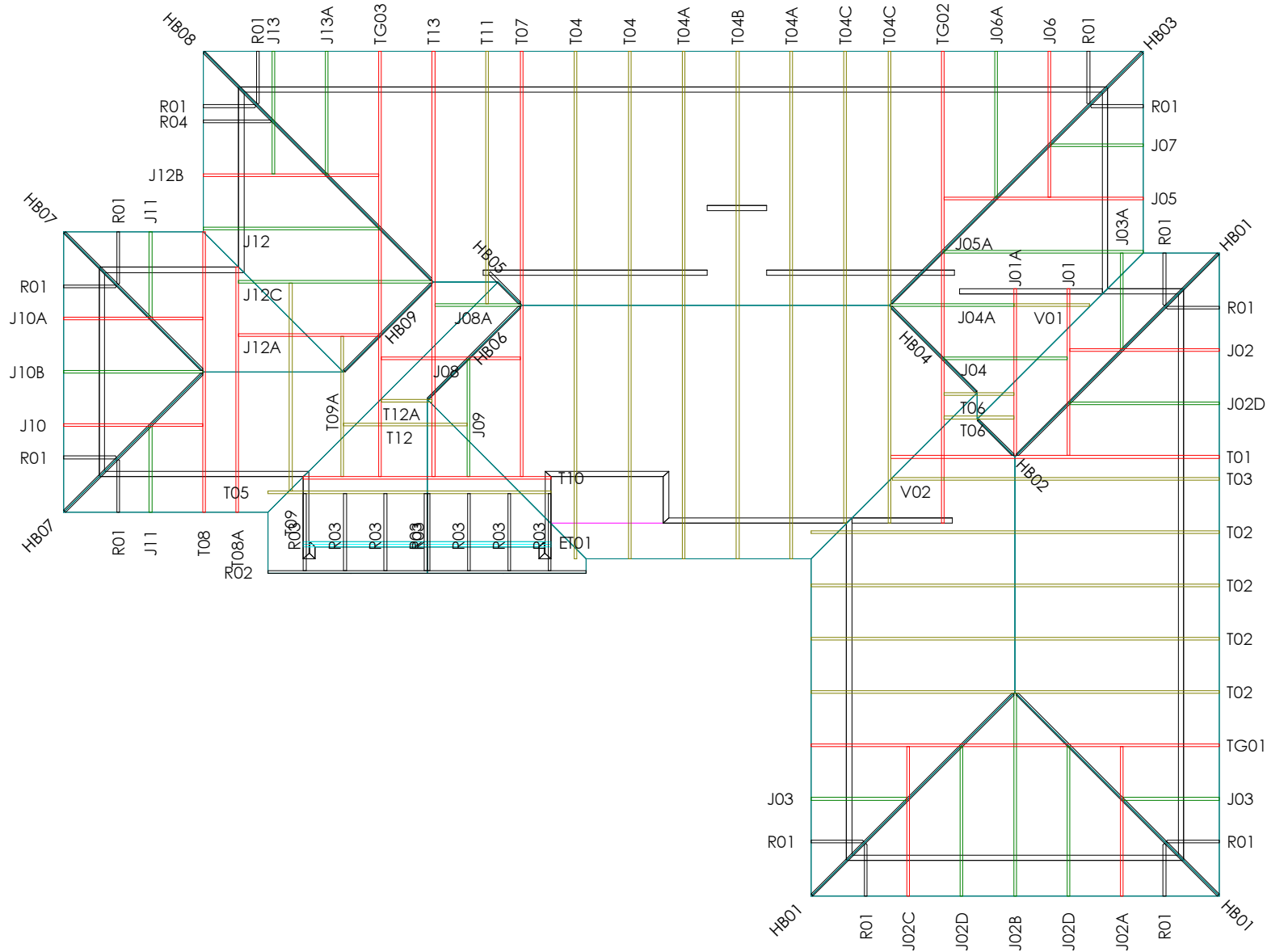
There were no over head power lines above this site but the local council should be contacted for any buried services in the area.

The dimensions on site matched the site plan provided by MGH's.

The builder is to confirm all site measurements before before they commence site. All of the set out pegs were in place.

Scale 1 : 200 on A3

PROJECT: Lot 17 - Flemington, lincoln		
DRAWING TITLE: Ground Level Survey		
Drawn By: Nore Surveys		
Scale: 1 : 200 on A3	Date:	30.11.2023
DRAWING NUMBER: 001		REV. A



WESTIMBER LTD.



Site Address :
Lot 17
Flemington
Stage 12
Lincoln

Sheet Title :
**For Building Consent
Buildable Truss Layout**

Date : 14 Feb, 2024 Drawn : Administrator
Scale : 1: 100 System : MiTek 20/20

Job Details:
Roof Pitch : 25.00deg
Roof Material : Galv Iron .5mm
Ceiling Material : Standard
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

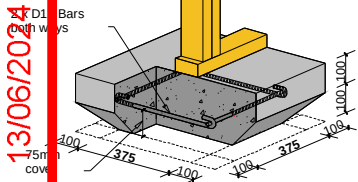


Job Title :
SL1019
Sheet :
1
Revision Number :

SLAB THICKENING & STUD REQUIREMENTS

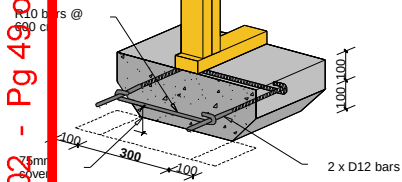
TYPE FP1
375mm² Pad

2 3



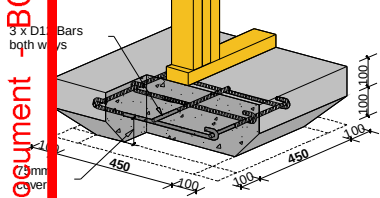
TYPE FS1
100mm Strip

2 3



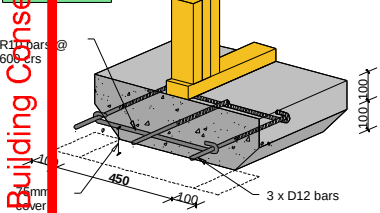
TYPE FP2
450mm² Pad

3 4



TYPE FS2
450mm Strip

3 4

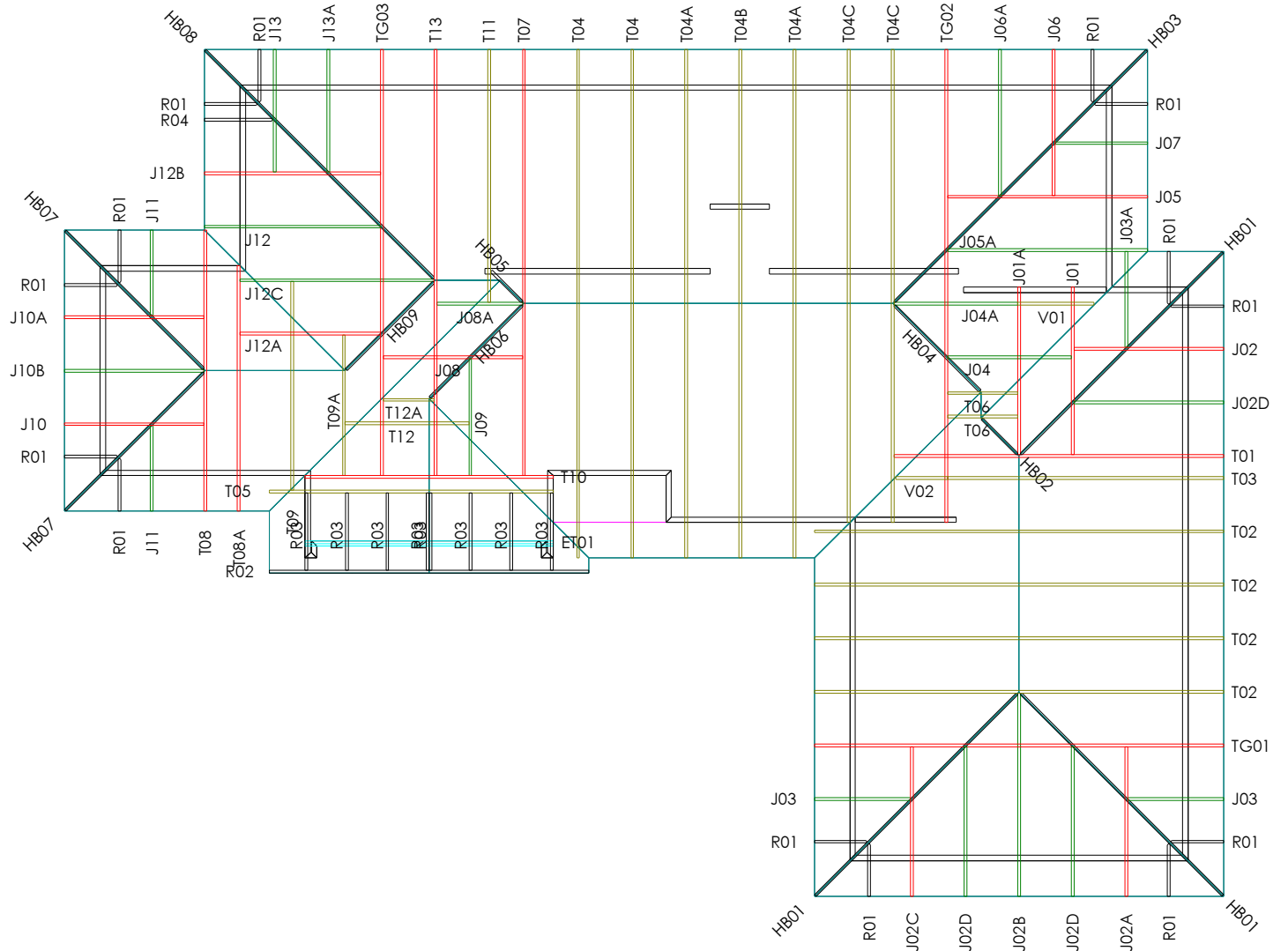


Notes:
The numbers found in the hatched areas are the numbers of studs required below each truss
Standard 100mm reinforcing concrete slab, as per NZS3604:2011
Refer to:
MITek Internal Load Bearing on Concrete Floor Slabs 10/2011
MITek Structural Fixings On-Site Guide for Building Code Compliance

Concrete Slab Thickening Guide



NO SLAB THICKENING REQUIRED



WESTIMBER LTD.



Site Address :
Lot 17
Flemington
Stage 12
Lincoln

Sheet Title :
For Building Consent
Slab Thickening

Date : 14 Feb.2024 Drawn : Administrator
Scale : 1: 100 System : MITek 20/20

Job Details:
Roof Pitch : 25.00deg
Roof Material : Galv Iron .5mm
Ceiling Material : Standard
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 :
SL1019
Sheet :
2
Revision Number :

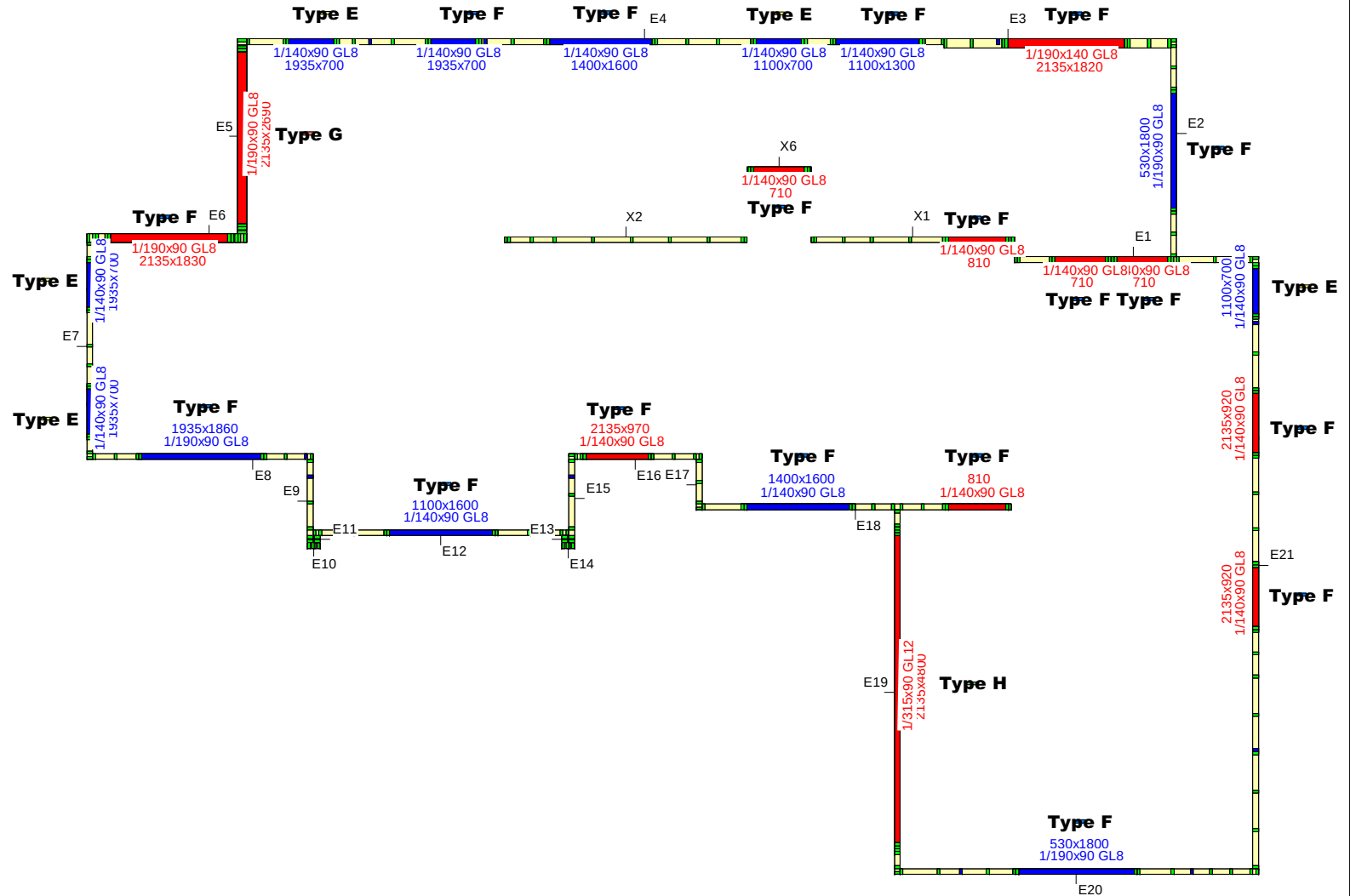
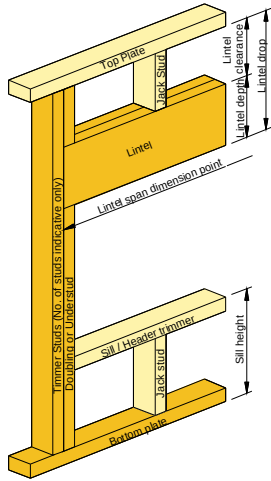
LUMBERLOK® LINTEL FIXING OPTIONS

TYPE E
1.4 kN

TYPE F
4.0 kN

TYPE G
7.5 kN

TYPE H
13.5 kN



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)

WESTIMBER LTD.



Site Address :
Lot 17
Flemington
Stage 12
Lincoln

Sheet Title :
For Building Consent
Lintel Fixing

Date : 14 Feb. 2024 Drawn : Administrator
Scale : 1: 100 System : MiTek 20/20

Job Details:
Roof Pitch : 25.00deg
Roof Material : Galv Iron .5mm
Ceiling Material : Standard
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



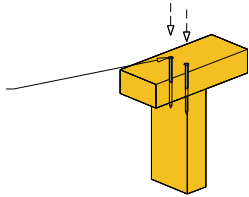
PrimeCad v4.7.346

Job Title :
SL1019
Sheet :
3
Revision Number :

LUMBERLOK® STUD TO TOP PLATE

TYPE A 0.7 kN

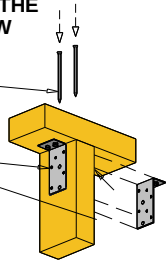
2 x 90mm x 3.15 Ø plain
steel wire nails driven
vertically into stud.



TYPE B 4.7 kN

CHOOSE ANY OF THE 3 OPTIONS BELOW

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

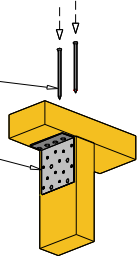


2 x LUMBERLOK
CPC40

Recommended for internal wall
options to avoid lining issues

OR

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

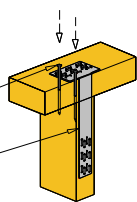


1 x LUMBERLOK 6 kN Stud Anchor
(C80)

Recommended for internal wall
options to avoid lining issues

OR

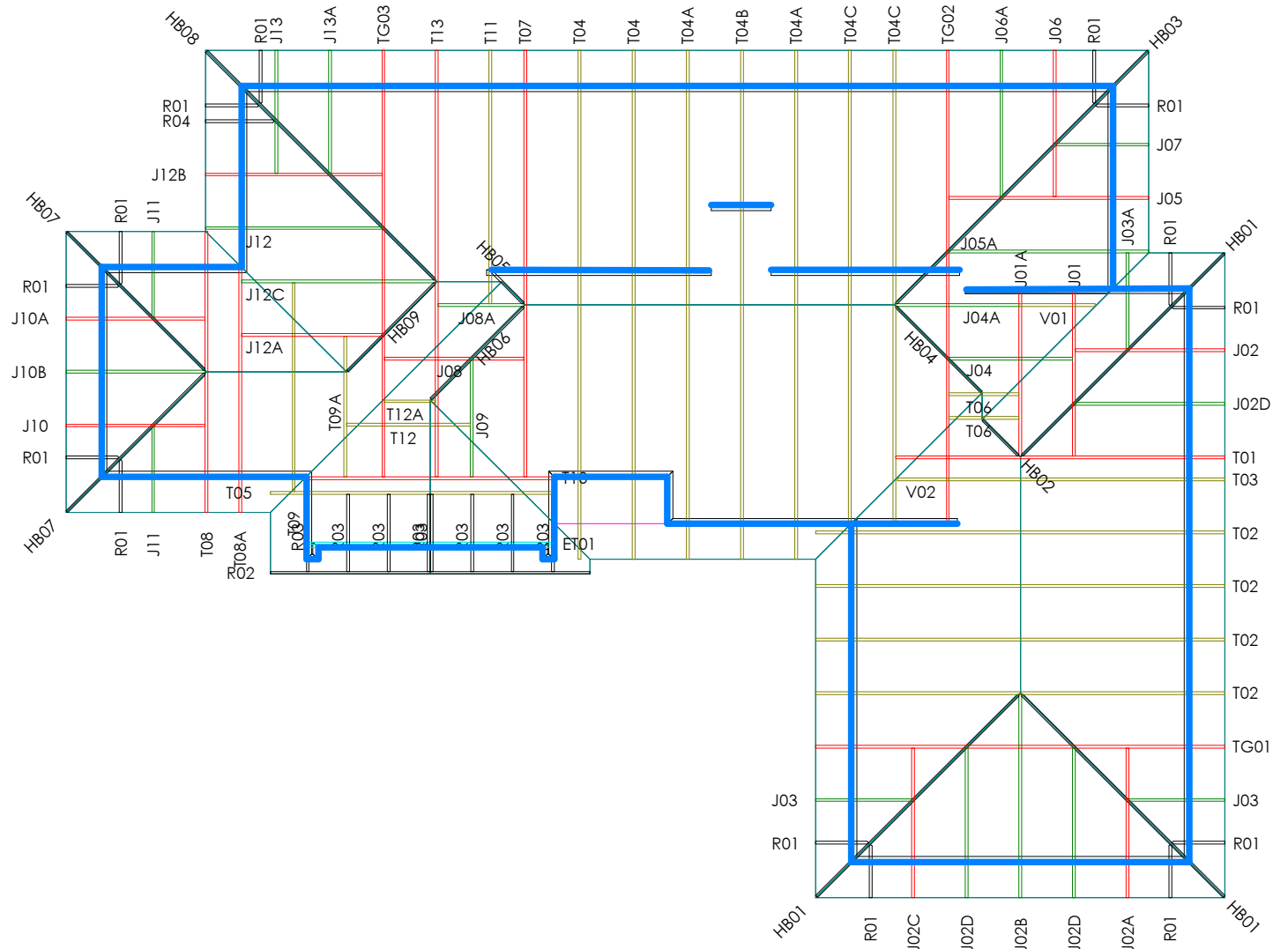
2 x 90mm x 3.15 Ø plain
steel wire nails driven
vertically into stud.



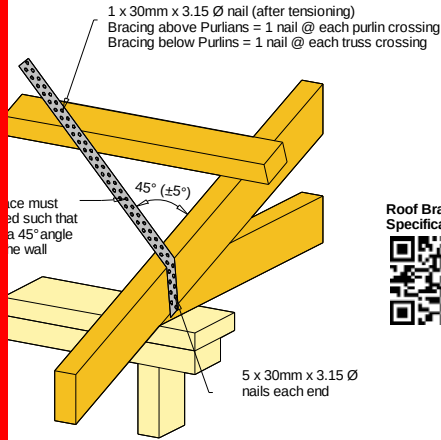
1 x LUMBERLOK
Stud Strap



Refer to:
LUMBERLOK Stud to Top Plate Fixing Selection Chart 09/2011
MiTek Structural Fixings On-Site Guide for Building
Code Compliance
(Alternative to NZS 3604:2011 Table 8.18)



LUMBERLOK[®] ROOF BRACING



Roof Bracing Specifications

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

LUMBERLOK[®] TRUSS FIXINGS

D - Pair of Wire Dogs and 2 x 90mm 3.15mm skew nails
X - LUMBERLOK JH47x90 Joist Hanger
Z - LUMBERLOK JH47x120 Joist Hanger
P - LUMBERLOK JH47x190 Joist Hanger
E - LUMBERLOK JH95x165 Joist Hanger
T - LUMBERLOK CT200 Ceiling Tie
O - Pair of LUMBERLOK CT200 Ceiling Ties
H - LUMBERLOK CT400 Cyclone Tie
B - LUMBERLOK CT600 Cyclone Tie
4 - LUMBERLOK Multi Grip
M - Pair of LUMBERLOK Multi Grips
N - LUMBERLOK Nailon Plate
NL - LUMBERLOK N21 Diagonal Cleat
V - LUMBERLOK CPC40 Cleat
VS - Pair of LUMBERLOK CPC40 Cleats
K - LUMBERLOK TTP 16kN Truss to Top Plate set
G - LUMBERLOK TTP 9kN Truss to Top Plate set

Joist Hanger Installation



CT200 Truss to Top Plate Fixing Installation

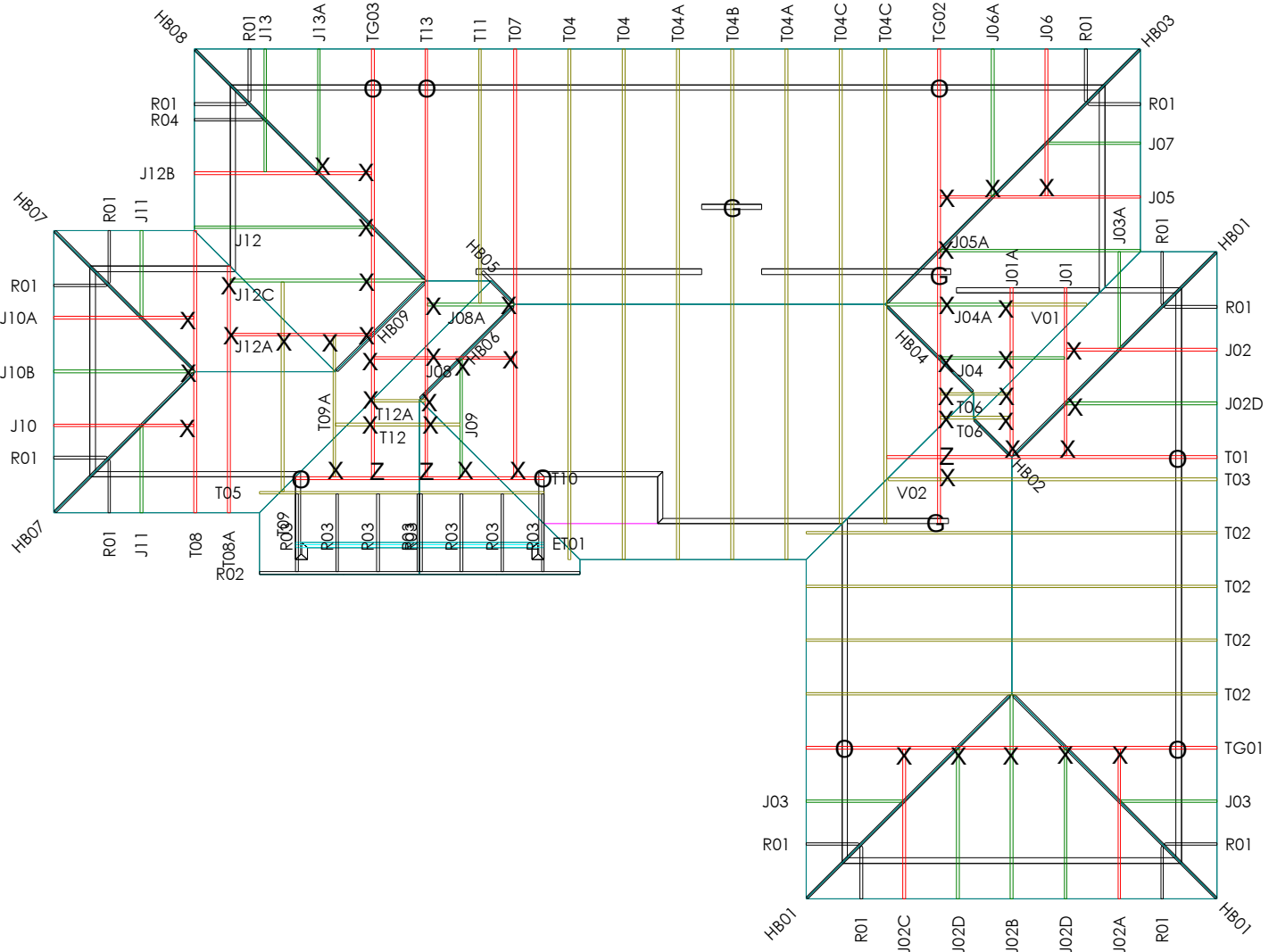


16kN & 9kN Truss to Top Plate Fixing Installation



Notes:
All other areas must have the minimum 2 x 90mm 3.15mm skew nails and dogs for truss to top plate connections

Refer to:
LUMBERLOK Timber Connectors Characteristic Loadings Data Brochure 08/2024



PrimeCad v4.7.346

WESTIMBER LTD.



Site Address :
Lot 17
Flemington
Stage 12
Lincoln

Sheet Title :
**For Building Consent
Truss Fixings & Roof Bracing**

Date : 14 Feb, 2024
Scale : 1: 100

Drawn : Administrator
System : MiTek 20/20

Job Details:
Roof Pitch : 25.00deg
Roof Material : Galv Iron .5mm
Ceiling Material : Standard
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 :
SL1019
Sheet :
5
Revision Number :