

Lot 5 Fantail Lane, Whareora

Proposed Home for Gary & Julie Pyle



Kyle Kake

027 567 8808

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www.masonstreet.co.nz

BC2201042

APPROVED

30/08/2022

WHANGAREI DISTRICT COUNCIL BCA

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PROJECT NOTES

GENERAL NOTES

General Notes

All construction shall be carried out in accordance with NZBC, and NZS 3604:2011 + Amendments. Aswell to comply with any local authority bylaws. Corrosion Zone 1,2,3,4: Durability of fixings to comply with NZS 3604:2011 Section 4 and NZBC B2/AS1 ALL FIXINGS SUBJECT TO WEATHERING TO BE STAINLESS STEEL. ALL FIXINGS WITHIN 600mm OF THE GROUND TO BE STAINLESS STEEL.

Slip Resistance

Provide Slip Resistant broomed concrete finish to entry.

SITE

Sediment Control

Control sediment run-off with:

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

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

Retaining walls

Timber SED HD pole retaining was with 100mm dia Nova coil drain (fall to sump) wrapped in geotextile cloth, in free draining metal.

Balustrade

Metal balustrade 1m high to comply with NZBC B1

STRUCTURE

Timber Wall Framing

Very High Wind Zone
Studs all H1.2 SG8.

EXTERNAL LOADBEARING WALLS.

up to 2.4m 90 x 45 @ 400 crs
up to 2.7m 90 x 90 @ 600 crs
up to 3.0m 90 x 90 @ 600 crs
up to 3.6m 140 x 45 @400 crs

INTERNAL NON-LOADBEARING WALLS.

up to 2.4m 90 x 45mm @ 600 crs

NOGS.

Provide 2 rows of noggs for James Hardie Linea
Provide noggs @ 480crs for Vertical Shiplap

RibRaft Concrete Floor

95mm 30mPa specific mix for RibRaft polished concrete floor, 3/HD12 bottom bars and 2/HD12 top bars to the edge beams plus SE72 slab mesh on damp- proof membrane, over 25mm deep sand blinding on 150mm compacted hardfill extending

1m beyond building footprint

Concrete Slab

100mm Thick 25 MPa Concrete slab, with SE72 reinforcing mesh on damp-proof membrane, over 25mm deep sand blinding on compacted hardfill min. 150mm to NZS 3604. SED for Hardfill over 600mm deep. Ensure 100mm slab thickness maintained at rebates.

Shrinkage Control Cuts

Control cuts on the concrete slab are required as per 3604 7.5.8.6.4

Control cuts on the rib raft slab are not required.

Pre-fab Roof Trusses @ 900 crs

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

Rafters

240x45 H1.2 SG8 Rafters @600crs. Fixing Type E: 2 / 90 x 3.15 skew nails + 2 wire dogs OR Alternative 4.7kN fixing

Bottom Plate to Concrete Slab Fixing

External.
90x45mm H1.2 bottom plate + DPC fixed to floor with M12 Trubolts @ 900 crs min 50mm inset from slab edge
Internal.
3/90x3.15mm powder acuated driven nails @ 600mm crs on internal walls.

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

Bottom Plate to Masonry Slab Fixing

External.
90x45mm H1.2 bottom plate + DPC fixed to floor with M12 Trubolts @ 600 crs min 50mm inset from slab edge
Internal.
3/90x3.15mm powder acuated driven nails @ 600mm crs on internal walls.

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

Stud to Top plate Fixing

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

Purlins - Very High

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

Timber Deck Framing

DECK JOISTS
90x45 H3.2 SG8 Floor Joists @ 400crs. Max span

1.6m

DECK BEARERS

2/140x45 H3.2 SG8 Bearers. Max span 1.2m

PILE

125x125 SG8 H5 Post

PILE FIXING

1 wire dog each side + 2/100 x 3.75mm skew nails

Engineered Veranda Beam W14

W14 Beam/Lintel 300PFC

Engineered Lintel W13

Lintel 2/240x45 SG8

Engineered Outriggers

Steel Outriggers 75x75x6 equal angle @ 900crs

Timber Outriggers

90x45 H1.2 SG8 on edge outriggers @ 600crs max. for membrane gutter substrate.

Timber Post

180x180 PL8 H5 Post

Entry Beam

300x90 hyONE Entry Roof Beam

EXTERNAL WALL CLADDINGS

James Hardie Linea Weatherboards

James Hardie Linea weatherboards on 20mm cavity batten over Thermakraft Watergate Plus 295 Breathable wall underlay

Hempac Western Red Cedar vertical shiplap weatherboards.

Hempac Western Red Cedar vertical shiplap weatherboards on 20mm castellated cavity batten over Thermakraft Watergate Plus 295 Breathable wall underlay.

INTERNAL FINISHES

13mm Gib Board ceiling lining

13mm Gib Board Ultraline ceiling lining on H1.2 70x35 ceiling battens @ 600 max crs.

10mm Gib Board wall lining

10mm Gib Board wall lining. Provide Gib Aqualine to Wet areas and Gib Braceline as per Bracing plan

ROOF CLADDING

Trapezoidal roof cladding

0.40mm thick trapezoidal Colorsteel ENDURA roofing system (refer heights and pitch on sections), on 70x45 H1.2 pulins on flat @900crs, with COVERTEK 407 Roof Underlay over H1.2 Rafters/ Trusses. Fixing pattern: Hit one Miss One

4.5mm Hardieflex soffit lining

4.5mm Hardieflex soffit lining. Selected colour paint finish.

membrane internal gutter

Butynol waterproof membrane over 17.5mm CD grade H3 treated plywood (CCA) laid to fall (1.5 deg) over ex 75x50 H3.2 timber gutter framing / sump framing at 600 crs

0.55 prefinished flashing

0.55mm bmt prefinished flashing to match roof cladding

0.55 prefinished ridge flashing

0.55mm bmt prefinished apex flashing purpose made to match roofing pitch. Finish to match roofing. Flashing edge notched to fit over roofing profile.

Marley Pvc Spouting & Downpipes

Marley Pvc Spouting on 140x20 H3.1 preprimed Fascia

Bargeboard

190x20 H3.1 preprimed Bargeboard

Lumberlok strip bracing

A diagonally opposing pair of continuous Lumberlok strip brace with tensioners running continously from ridge, fixed to each top chord or rafter that is intersected, and to the top plate.

EXTERNAL FLOOR FINISHES

Finished Floor to Ground levels:

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

SERVICES

General Drainage and Services notes

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

Plumbing and Drainage Notes.

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

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

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

Mechanical Ventilation

Provide Mechanical ventilation to exterior wall with

weatherproof cowl in all bathrooms.
Mechanical ventilation via range hood through roof penetration for Laundry, Scullery & Rangehood.

Hotwater Cylinder

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

JOINERY

Double Glazed powdercoated Aluminium Joinery to comply with NZS4223.3

Double Glazed powdercoated Aluminium Joinery to comply with NZS4223.3

Internal Doors

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

NZBC H1 Insulation Requirements

Building thermal envelope component	R-values Required	R-values Achieved
Glazing: Double Glazing.	R 0.26	R 0.26
Floor: Ribraft Floor.	R 1.3	R 1.68
Walls: Timber Frame.	R2.4 Batts	R 1.9
Roof: Truss 900 c/c.	R3.6 Batts	R 2.9
Roof: Rafters 900 c/c.	R3.6 Batts	R 2.9

Notes.

- See specifications for H1 calculations.
- Exclude internal garage from H1 calculations
- Mason Street Architectural Drafting advises to upgrade insulation where possible to ensure a better thermal performance throughout the building



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Sheet Title

Project Notes

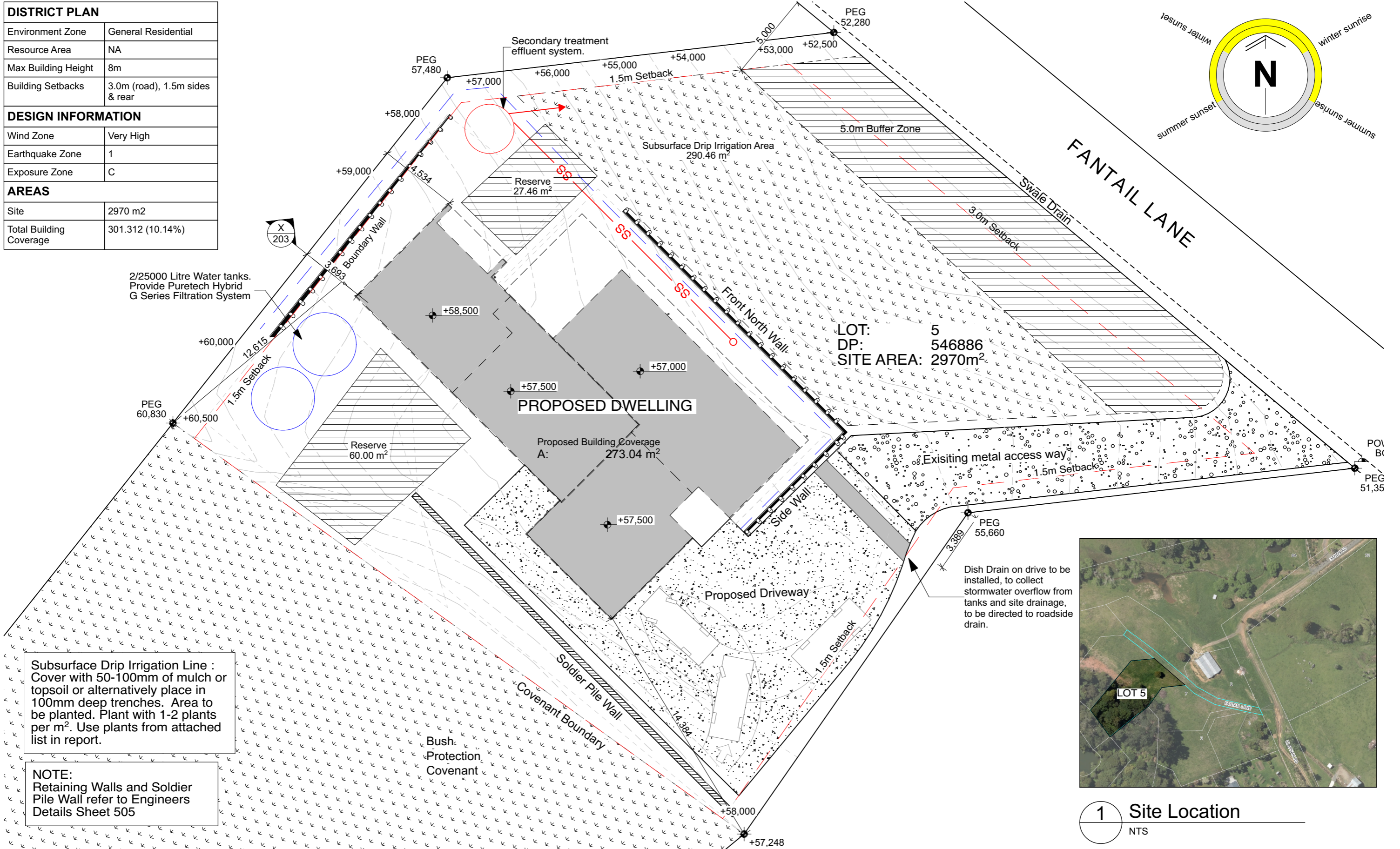
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DISTRICT PLAN	
Environment Zone	General Residential
Resource Area	NA
Max Building Height	8m
Building Setbacks	3.0m (road), 1.5m sides & rear
DESIGN INFORMATION	
Wind Zone	Very High
Earthquake Zone	1
Exposure Zone	C
AREAS	
Site	2970 m2
Total Building Coverage	301.312 (10.14%)



Subsurface Drip Irrigation Line :
Cover with 50-100mm of mulch or
topsoil or alternatively place in
100mm deep trenches. Area to
be planted. Plant with 1-2 plants
per m². Use plants from attached
list in report.

NOTE:
Retaining Walls and Soldier
Pile Wall refer to Engineers
Details Sheet 505



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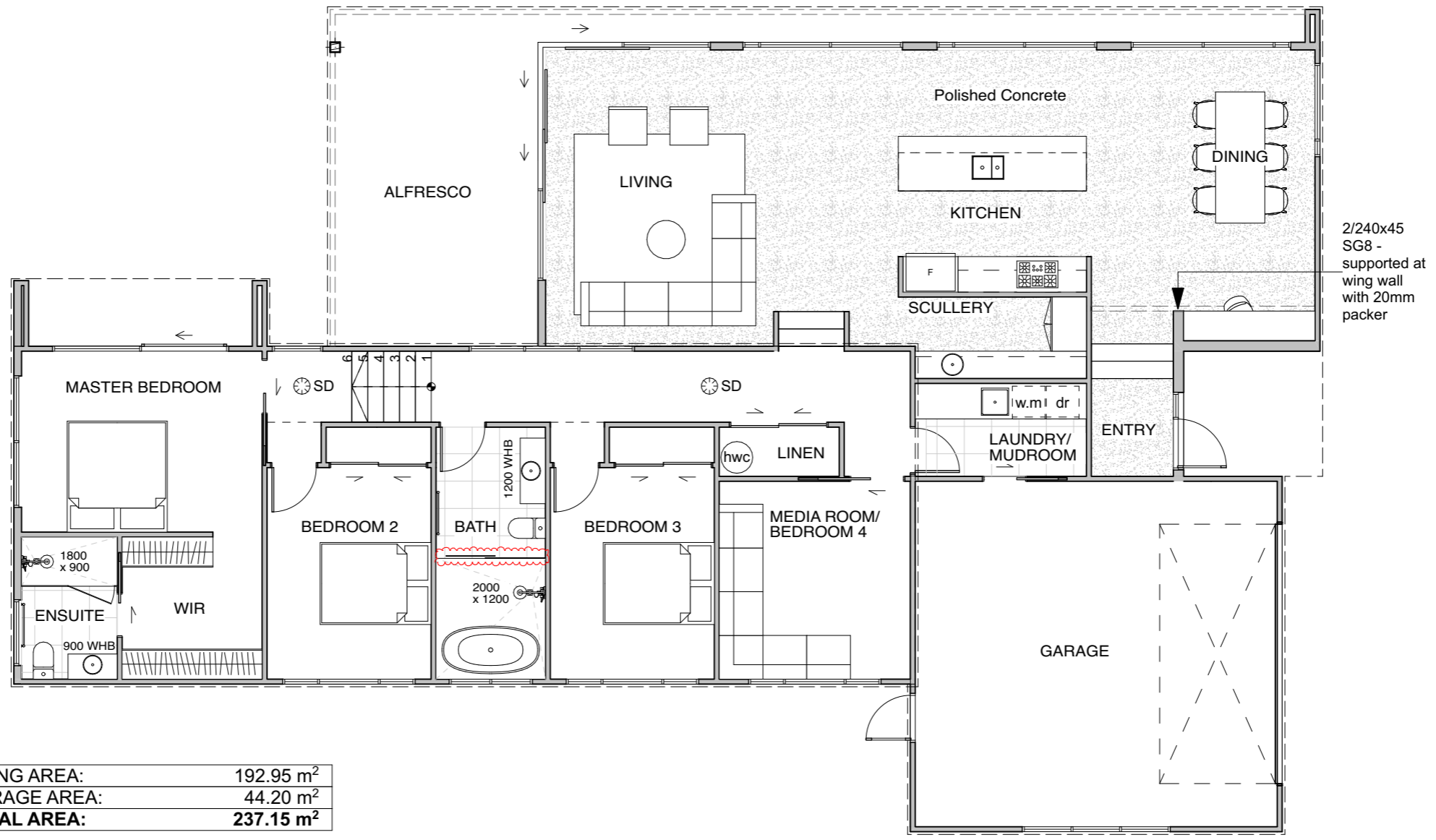
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Scale @ A3	1:200, 1:1

Sheet Title
Site Plan

Sheet No.

101

1 Site Location
NTS



LIVING AREA:	192.95 m ²
GARAGE AREA:	44.20 m ²
TOTAL AREA:	237.15 m²

General Notes

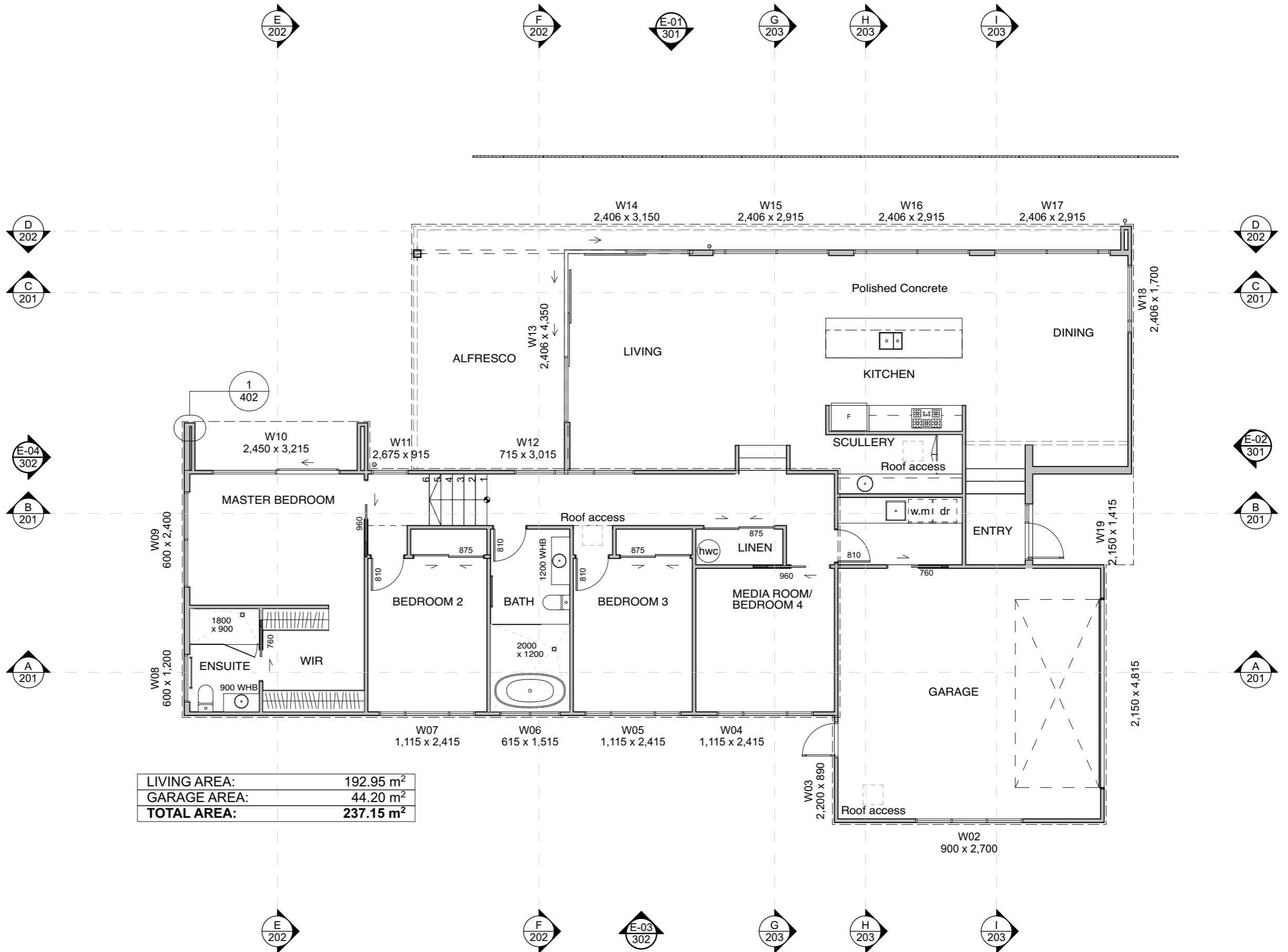
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 Corrosion Zone 1,2,3,4:
 Durability of fixings to comply with NZS 3604:2011 Section 4 and NZBC B2/AS1
 ALL FIXINGS SUBJECT TO WEATHERING TO BE STAINLESS STEEL.
 ALL FIXINGS WITHIN 600mm OF THE GROUND TO BE STAINLESS STEEL.

Slip Resistance

Provide Slip Resistant broomed concrete finish to entry.

Internal Doors

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



LIVING AREA:	192.95 m ²
GARAGE AREA:	44.20 m ²
TOTAL AREA:	237.15 m²



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Sheet Title
Floor Plan

Sheet No.

103

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Timber Wall Framing

Very High Wind Zone
Studs all H1.2 SG8.

EXTERNAL LOADBEARING WALLS.

up to 2.4m 90 x 45 @ 400 crs
up to 2.7m 90 x 90 @ 600 crs
up to 3.0m 90 x 90 @ 600 crs
up to 3.6m 140 x 45 @ 400 crs

INTERNAL NON-LOADBEARING WALLS.

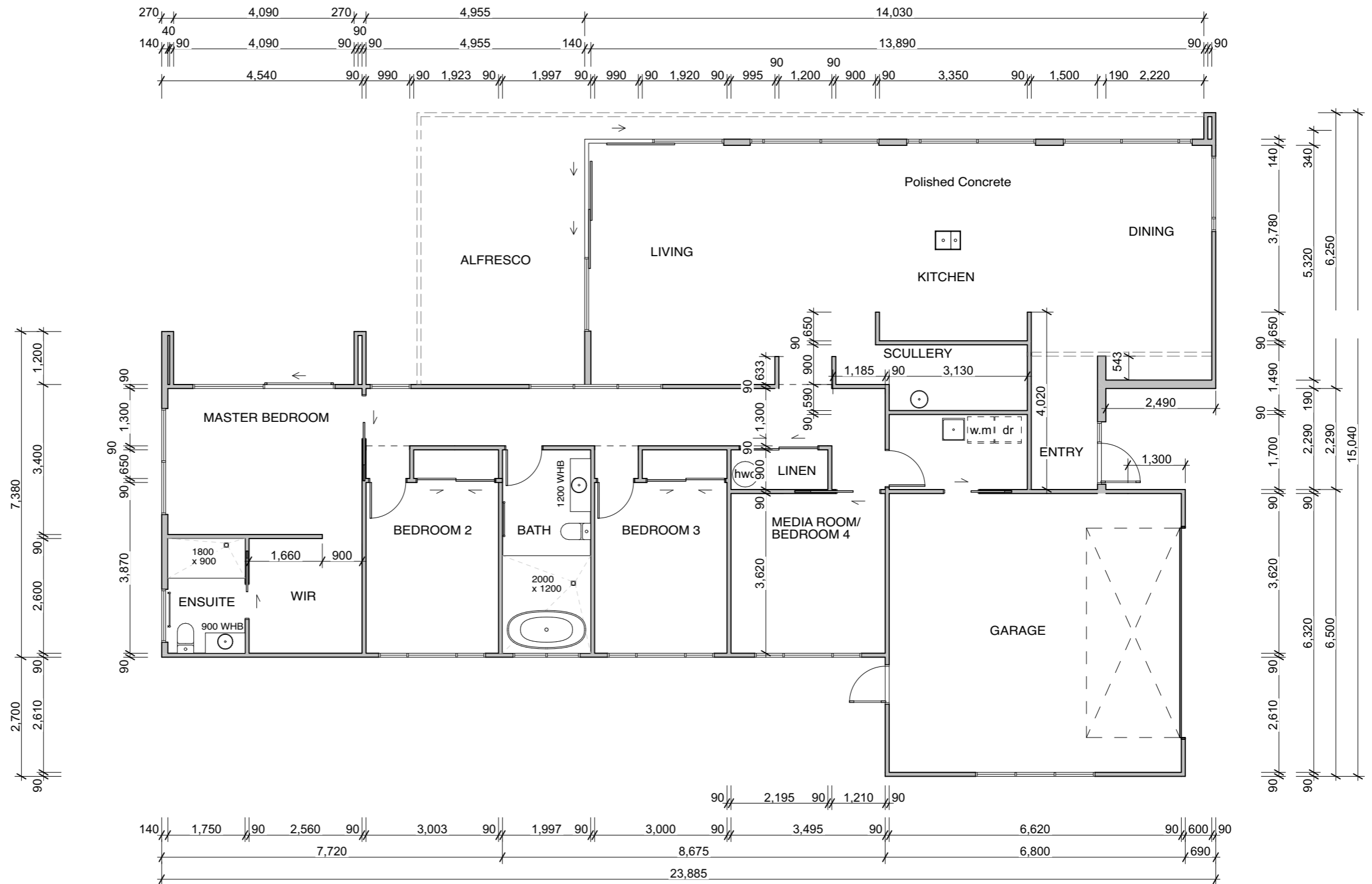
up to 2.4m 90 x 45mm @ 600 crs

NOGS.

Provide 2 rows of noggs for James Hardie Linea
Provide noggs @ 480crs for Vertical Shiplap

Stud to Top plate Fixing

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



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Sheet Title
Wall Dimension Plan

Sheet No.

104

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

Bottom Plate to Concrete Slab Fixing

External.
 90x45mm H1.2 bottom plate + DPC fixed to floor with M12 Trubolts @ 900 crs min 50mm inset from slab edge
Internal.
 3/90x3.15mm powder acuated driven nails @ 600mm crs on internal walls.

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

Bottom Plate to Masonry Slab Fixing

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 90x45mm H1.2 bottom plate + DPC fixed to floor with M12 Trubolts @ 600 crs min 50mm inset from slab edge
Internal.
 3/90x3.15mm powder acuated driven nails @ 600mm crs on internal walls.

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

RibRaft Concrete Floor

95mm 30mPa specific mix for RibRaft polished concrete floor, 3/HD12 bottom bars and 2/HD12 top bars to the edge beams plus SE82 slab mesh on damp- proof membrane, over 25mm deep sand blinding on 150mm compacted hardfill extending 1m beyond building footprint

Concrete Slab

100mm Thick 25 MPa Concrete slab, with SE72 reinforcing mesh on damp-proof membrane, over 25mm deep sand blinding on compacted hardfill min. 150mm to NZS 3604. SED for Hardfill over 600mm deep. Ensure 100mm slab thickness maintained at rebates.

Shrinkage Control Cuts

Control cuts on the concrete slab are required as per 3604 7.5.8.6.4

Control cuts on the rib raft slab are not permitted.

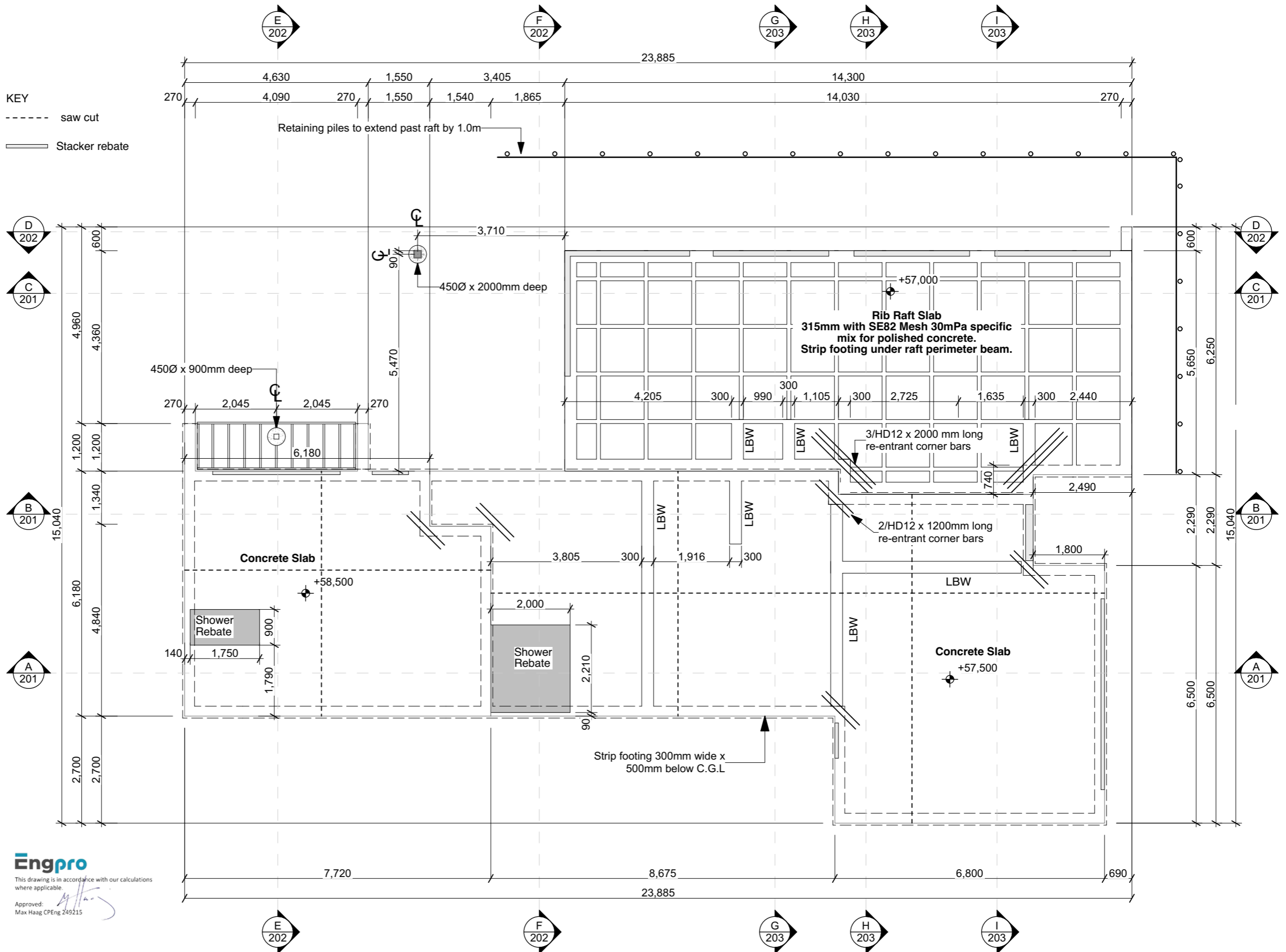
Timber Deck Framing

DECK JOISTS
 90x45 H3.2 SG8 Floor Joists @ 400crs. Max span 1.6m

DECK BEARERS
 2/140x45 H3.2 SG8 Bearers. Max span 1.2m

PILE
 125x125 SG8 H5 Post

PILE FIXING
 1 wire dog each side + 2/100 x 3.75mm skew nails



Engpro
 This drawing is in accordance with our calculations where applicable.
 Approved: [Signature]
 Max Haag CPEng 249215



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Sheet Title
Foundation Plan

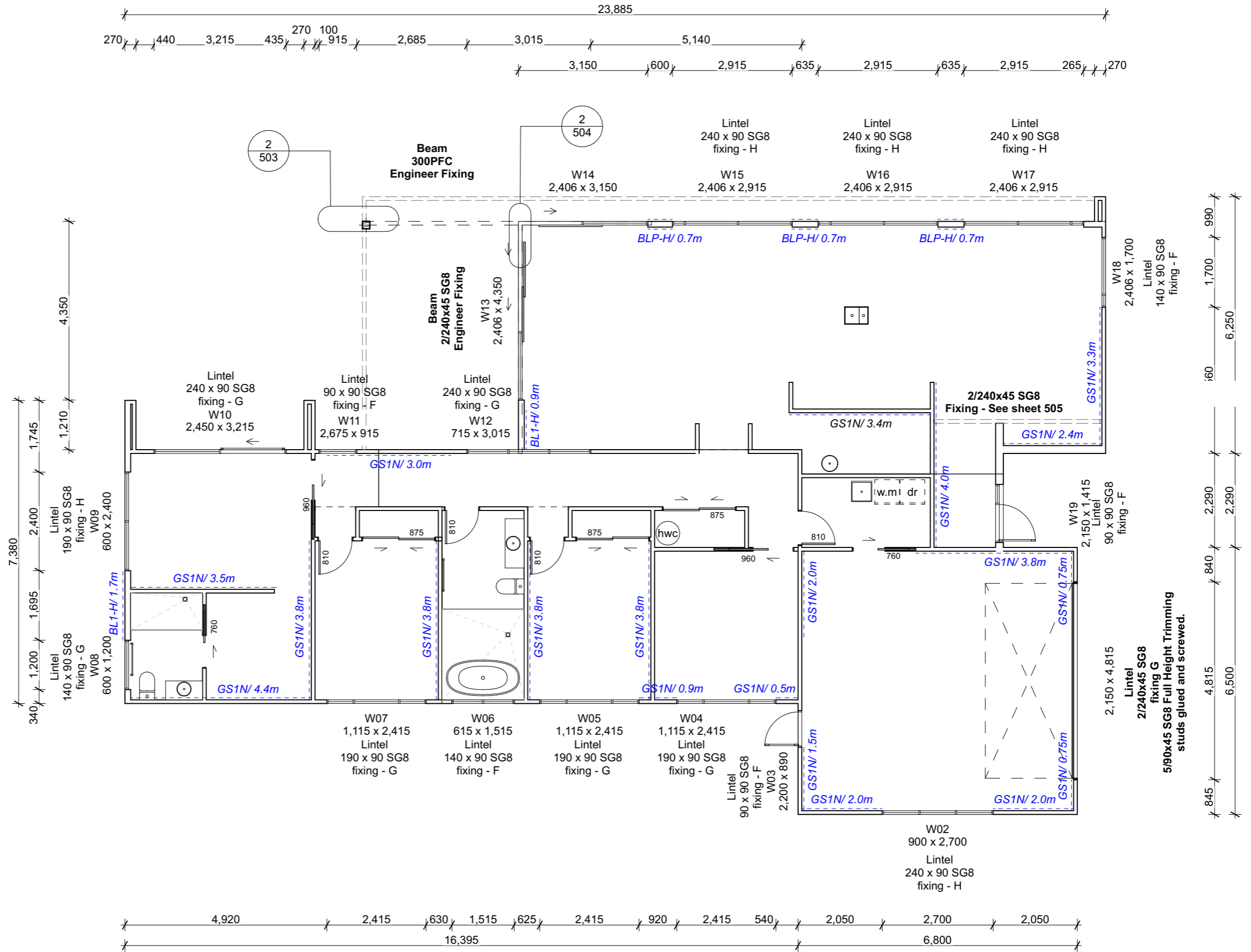
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 This drawing is in accordance with our calculations where applicable.
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MASON STREET
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Sheet Title
Bracing Plan

Sheet No.

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General Drainage and Services notes

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

Plumbing and Drainage Notes.

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

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

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

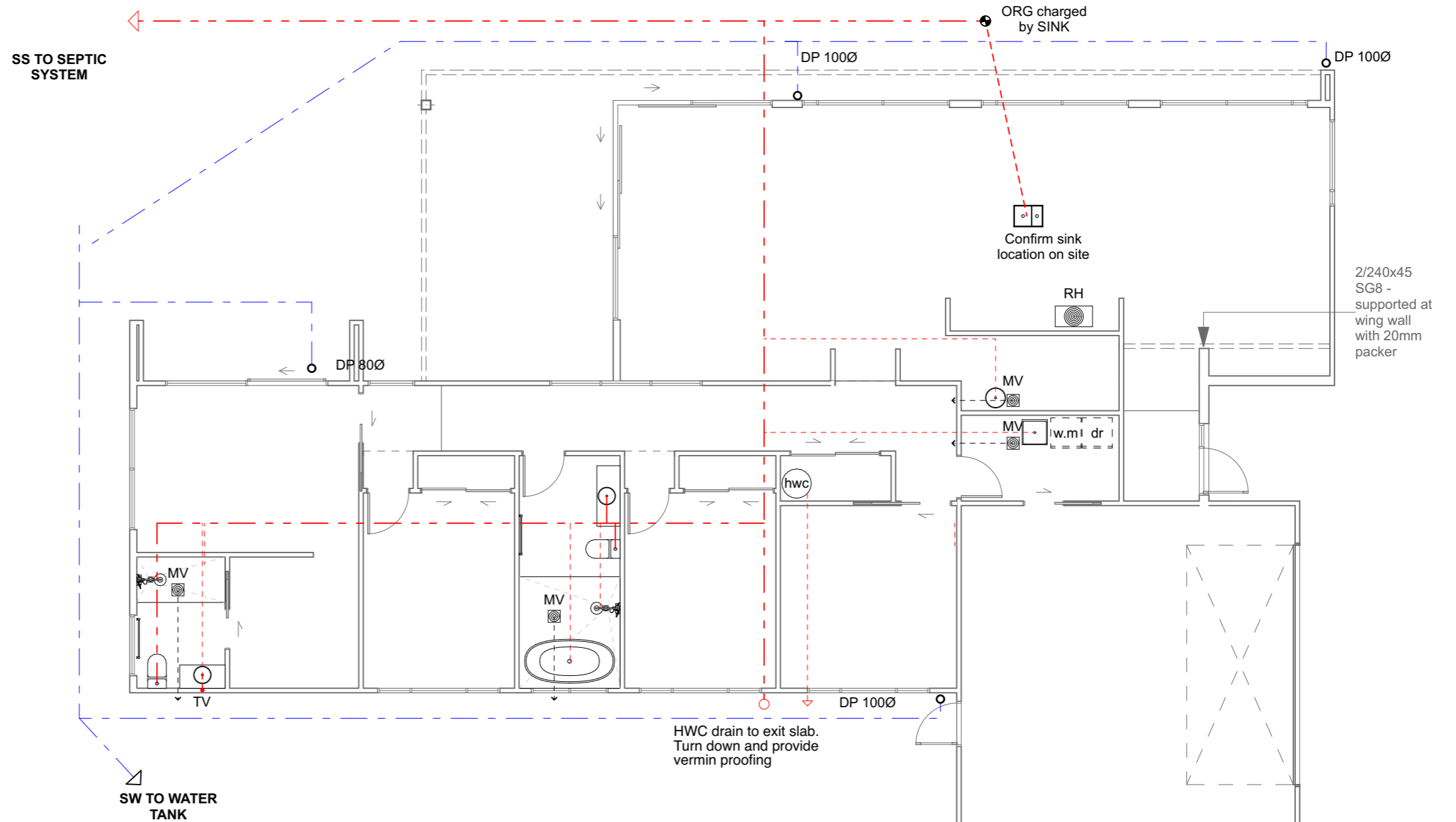
Mechanical Ventilation

Provide Mechanical ventilation to exterior wall with weatherproof cowl in all bathrooms. Mechanical ventilation via range hood through roof penetration for Laundry, Scullery & Rangehood.

Flowrates not less than a) 25L/s for showers and baths, and b) 50L/s for cooktops.

Hotwater Cylinder

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



PRINT THIS PLAN IN COLOUR

KEY

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



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Sheet Title
Plumbing Plan

Sheet No.

107

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Pre-fab Roof Trusses @ 900 crs

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

Rafters

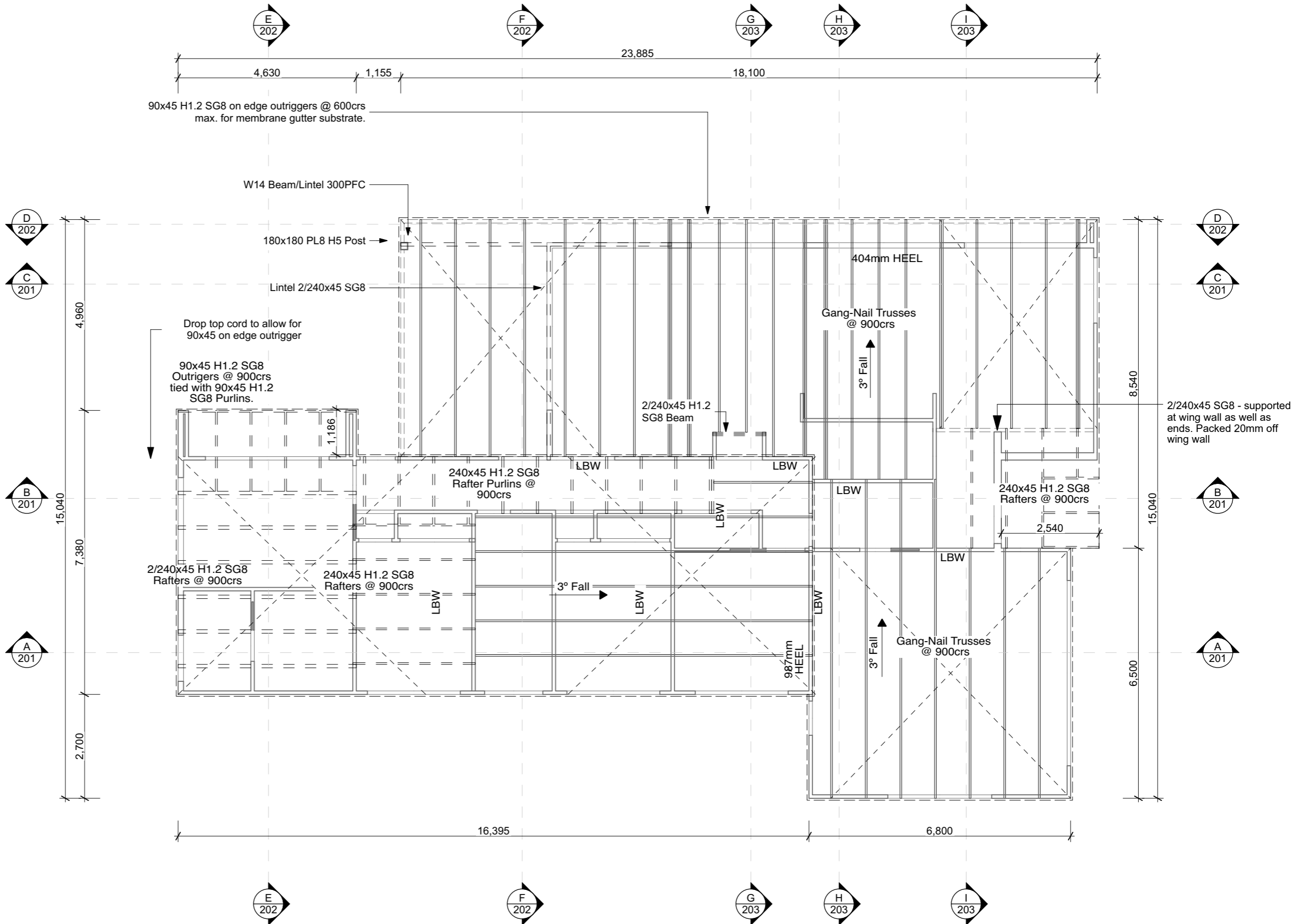
240x45 H1.2 SG8 Rafters @600crs. Fixing Type E: 2 / 90 x 3.15 skew nails + 2 wire dogs OR Alternative 4.7kN fixing

Purlins - Very High

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

Lumberlok strip bracing

A diagonally opposing pair of continuous Lumberlok strip brace with tensioners running continuously from ridge, fixed to each top chord or rafter that is intersected, and to the top plate.



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Roof Framing Plan

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Trapezoidal roof cladding

0.40mm thick trapezoidal Colorsteel ENDURA roofing system (refer heights and pitch on sections), on 70x45 H1.2 pulins on flat @900crs, with COVERTEK 407 Roof Underlay over H1.2 Rafters/Trusses. Fixing pattern: Hit one Miss One

4.5mm Hardieflex soffit lining

4.5mm Hardieflex soffit lining. Selected colour paint finish.

Metalcraft Gutter & Marley Downpipes

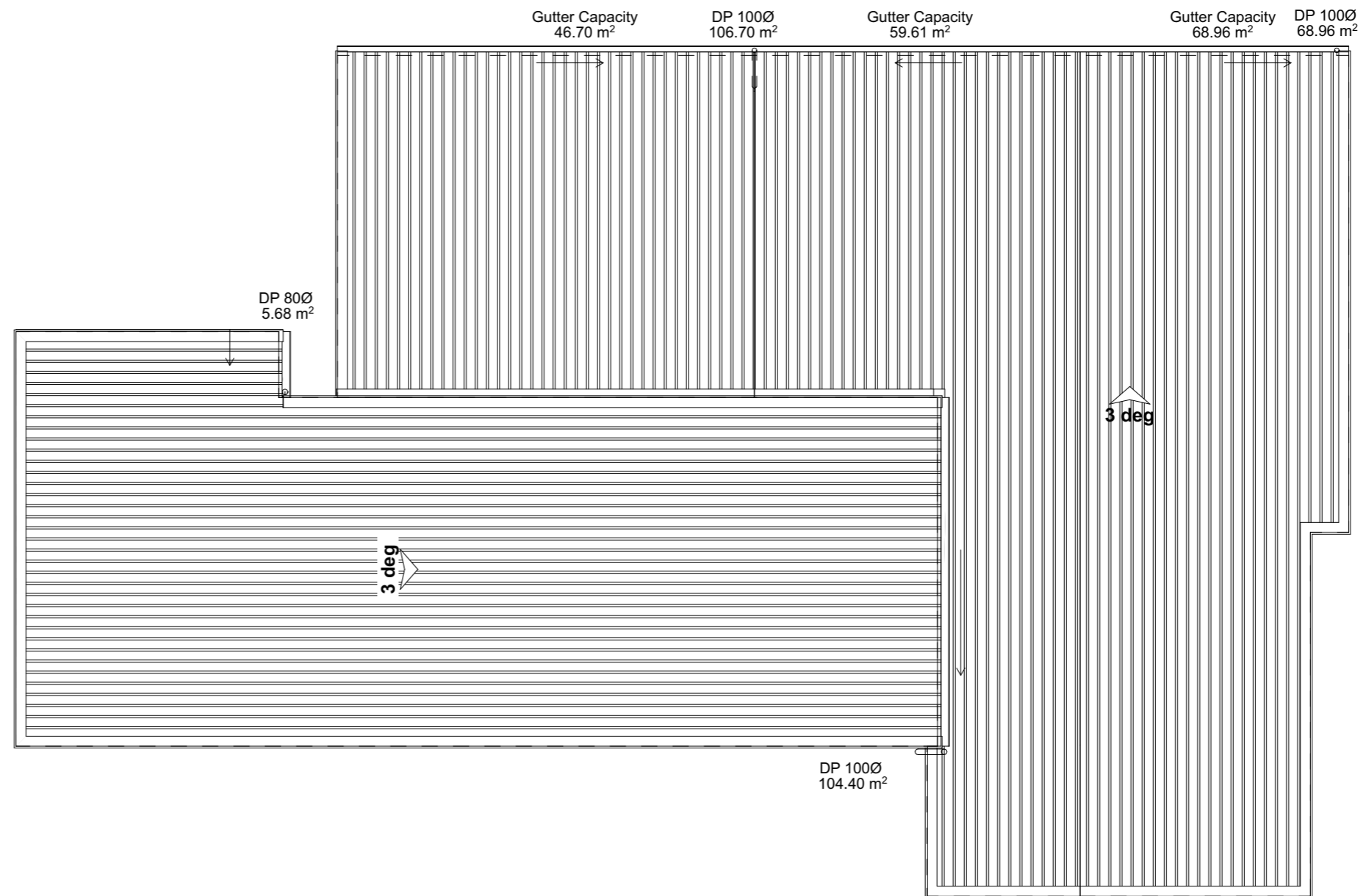
Metalcraft 125 Box Gutter with PVC Marley downpipes.

Bargeboard

190x20 H3.1 preprimed Bargeboard

Gutter Cross Sectional Area

Based on 100mm/Hr
 Max serviced roof area = 68.96m²
 Flow capacity = 65 x 1.67 = 115.1632
Min Gutter Cross Sectional Area = (115.1632/0.0016)0.8 = 7686.97mm²
Metalcraft 125 Box Gutter = 8435mm²
DP sizes - 74Ø DPs can serve 85m² of roof plane area.
 - 100Ø DPs can serve 155m² of roof plane area.



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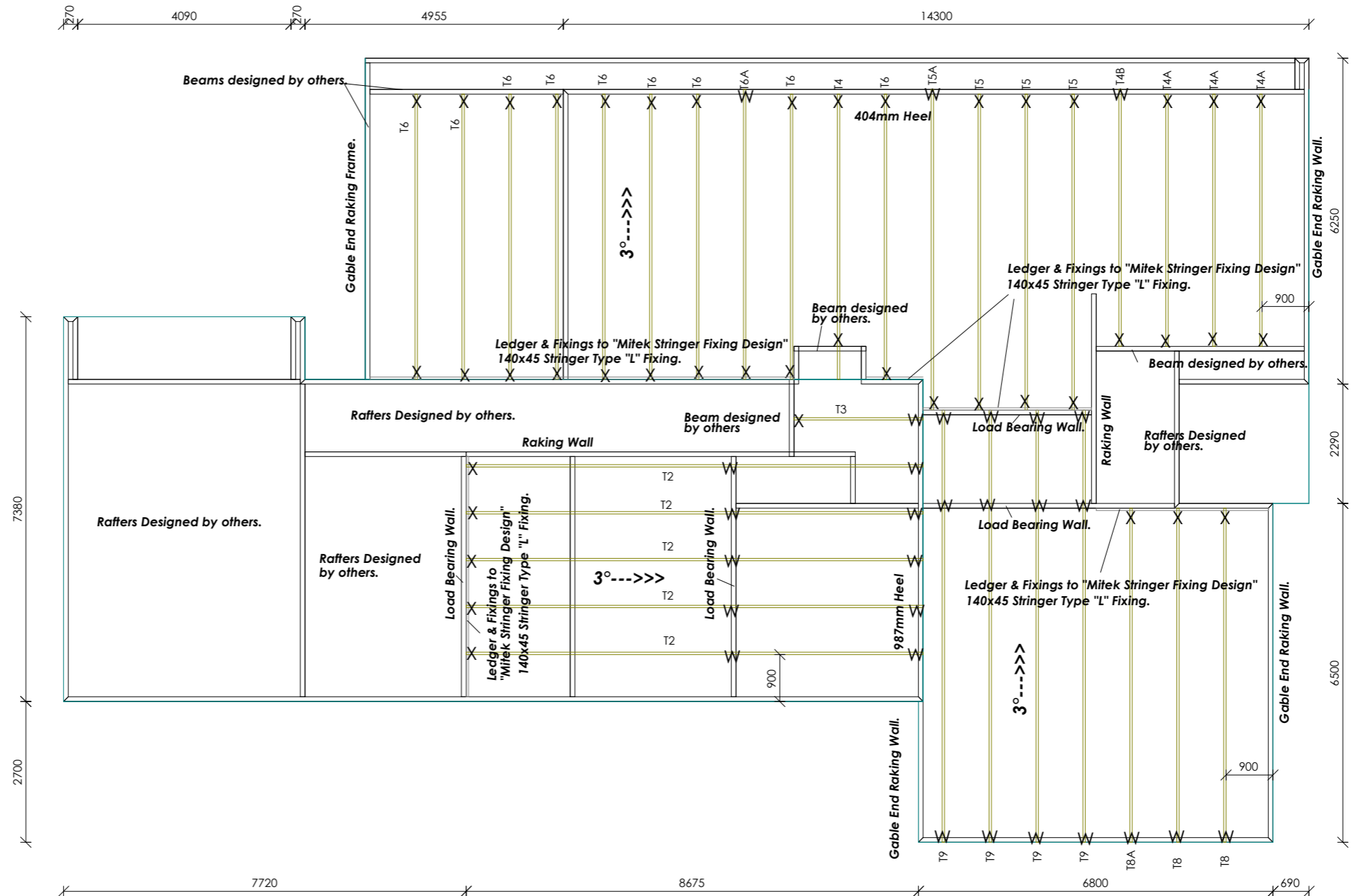
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Truss Fixings

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

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



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

	Site Address : Stewart & Huband Lot 5 Fantail Lane Whareora, Whangarei DP 546886	Sheet Title : For Building Consent Truss Layout and Fixings	Job Details: Roof Pitch : 3.000 Deg Roof Material : Longrun Iron .5mm Ceiling Material : Gib Board 13mm Wind Zone : Very High Roof Snow Load : 0.000 kPa	Truss Centres : 900 mm Roof Live Load : 0.250kPa Floor Live Load : kPa Wind Speed : 50.0 m/s	PrimeCad v4.7.346 Job Title : 499888 Sheet : 1 Revision Number :
	Date : 27 Jun,2022 Scale : NTS	Drawn : Mike Ayers System : MiTek 20/20			



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

Job Title
Proposed Home - Gary & Julie Pyle

BC2201042
 APPROVED
 30/08/2022

Project Location
 Lot 5 Fantail Lane, Whareora,
 Whangarei

Drawn	AP - BP138465
Checked	Kyle Kake_ BP130188
Print Date	1/07/22
Scale @ A3	1:1

Sheet Title
Truss Design

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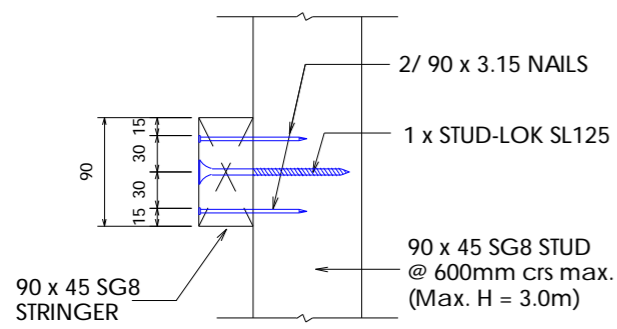
WHANGAREI DISTRICT COUNCIL BCA

Sheet No.

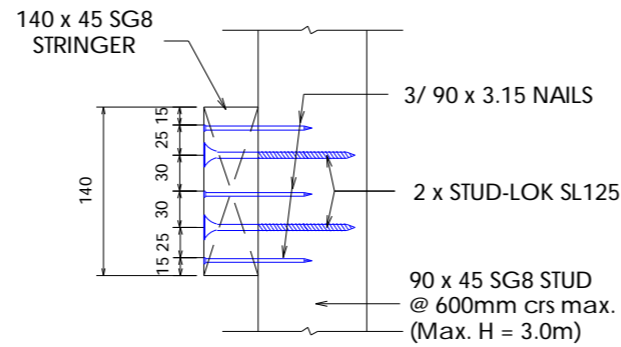
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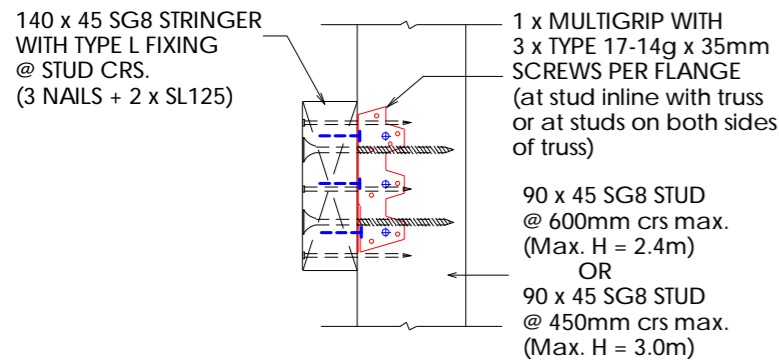
- 1) Assume supported trusses are at 900 mm crs
- 2) Refer to Truss Fixing Report for maximum Truss Characteristic Reactions (Up or Down)
- 3) Select Stringer Fixing Type Characteristic Strength > or = max. Truss Characteristic Reaction
- 4) H = Height of stringer from base of stud
- 5) Stud size and spacing indicated are min. requirements



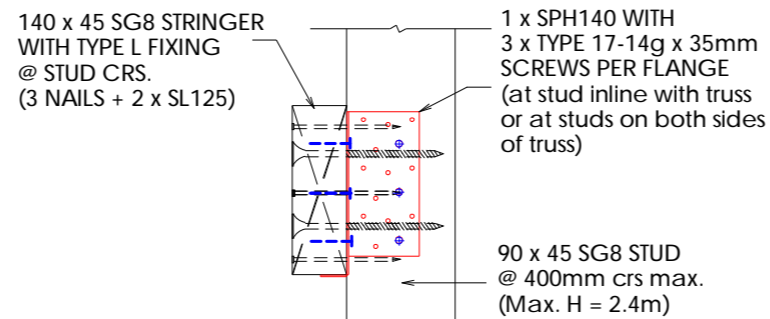
TYPE K @ STUD CRS.
(3.9kN CHARACTERISTIC)



TYPE L @ STUD CRS.
(7.2kN CHARACTERISTIC)



TYPE M (L + MULTIGRIP)
(12.7kN CHARACTERISTIC)



TYPE N (L + SPH140)
(17.7kN CHARACTERISTIC)

MiTek New Zealand Limited
 AUCKLAND: PO Box 58-014, Botany 2163, Phone: 09-274 7109, Fax: 09-274 7100, www.mitek.nz
 CHRISTCHURCH: PO Box 8387, Riccarton 8440, Phone: 03-348 9591, Fax: 03-348 0314

Job Title: **STRINGER TO STUD FIXING WITH STUD-LOK SL125**

Sheet Title: **STRINGER FIXING DETAILS**
 Drawing Number: **25804**

Date: 18/1/2019, Scale: 1:5, Designed: ILN, Drawn: DXU, Checked: , Sheet: 1

STRINGER TO STUD FIXINGS

18/01/2019

Truss Span (m)	Loaded Dimension	Light Roof (No Snow)					Heavy Roof (No Snow)				
		Wind Zone					Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
2.0	1.0	K	K	K	K	K	K	K	K	K	K
3.0	1.5	K	K	K	K	K	K	K	K	K	K
4.0	2.0	K	K	K	K	K	L	L	L	L	L
5.0	2.5	K	K	K	L	L	L	L	L	L	L
6.0	3.0	K	K	L	L	L	L	L	L	L	L
7.0	3.5	L	L	L	L	L	M	M	M	M	M
8.0	4.0	L	L	L	L	M	M	M	M	M	M
9.0	4.5	L	L	L	M	M	M	M	M	M	M
10.0	5.0	L	L	L	M	M	M	M	M	M	M
11.0	5.5	L	L	M	M	M	M	M	M	M	N
12.0	6.0	M	M	M	M	M	N	N	N	N	N

Truss Span (m)	Loaded Dimension	Light Roof + Snow (Sg = 0.9 kPa)					Heavy Roof + Snow (Sg = 0.9 kPa)				
		Wind Zone					Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
2.0	1.0	K	K	K	K	K	K	K	K	K	K
3.0	1.5	K	K	K	K	K	K	K	K	K	K
4.0	2.0	K	K	K	K	K	L	L	L	L	L
5.0	2.5	L	L	L	L	L	L	L	L	L	L
6.0	3.0	L	L	L	L	L	L	L	L	L	L
7.0	3.5	L	L	L	L	L	M	M	M	M	M
8.0	4.0	L	L	L	L	M	M	M	M	M	M
9.0	4.5	M	M	M	M	M	M	M	M	M	M
10.0	5.0	M	M	M	M	M	M	M	M	M	M
11.0	5.5	M	M	M	M	M	N	N	N	N	N
12.0	6.0	M	M	M	M	M	N	N	N	N	N

Truss Span (m)	Loaded Dimension	Light Roof + Snow (Sg = 1.5 kPa)					Heavy Roof + Snow (Sg = 1.5 kPa)				
		Wind Zone					Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
2.0	1.0	K	K	K	K	K	K	K	K	K	K
3.0	1.5	K	K	K	K	K	L	L	L	L	L
4.0	2.0	L	L	L	L	L	L	L	L	L	L
5.0	2.5	L	L	L	L	L	M	M	M	M	M
6.0	3.0	L	L	L	L	L	M	M	M	M	M
7.0	3.5	M	M	M	M	M	M	M	M	M	M
8.0	4.0	M	M	M	M	M	N	N	N	N	N
9.0	4.5	M	M	M	M	M	N	N	N	N	N
10.0	5.0	M	M	M	M	M	N	N	N	N	N
11.0	5.5	M	M	M	M	M	SED	SED	SED	SED	SED
12.0	6.0	N	N	N	N	N	SED	SED	SED	SED	SED

FIXING TYPE	DESCRIPTION	MIN. STUD SIZE	STRINGER SIZE	CHARACTERISTIC
K	2/ 90 x 3.15 Nails + 1 Stud-Lok SL125 Screw	90x45 SG8 @ 600 crs	90 x 45 SG8	3.93kN
L	3/ 90 x 3.15 Nails + 2 x Stud-Lok SL125 Screws	90x45 SG8 @ 600 crs	140 x 45 SG8	7.22kN
M	L + 1 x Multigrip - 3 /14g x 35mm screws each flange	90x45 SG8 @ 600 crs	140 x 45 SG8	12.67kN
N	L + 1 x SPH140 - 3 /14g x 35mm screws each flange	90x45 SG8 @ 400 crs	140 x 45 SG8	17.72kN

1 Stringer Fixing Details
Scale 1:1.2500

2 Stringer to Stud Fixing
Scale 1:1.2500

MASON STREET
architectural drafting

Kyle Kake
2027 567 8808
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www.masonstreet.co.nz

Job Title: **Proposed Home - Gary & Julie Pyle**

Project Location: **Lot 5 Fantail Lane, Whareora, Whangarei**

BC2201042 APPROVED 30/08/2022

WHANGAREI DISTRICT COUNCIL BCA

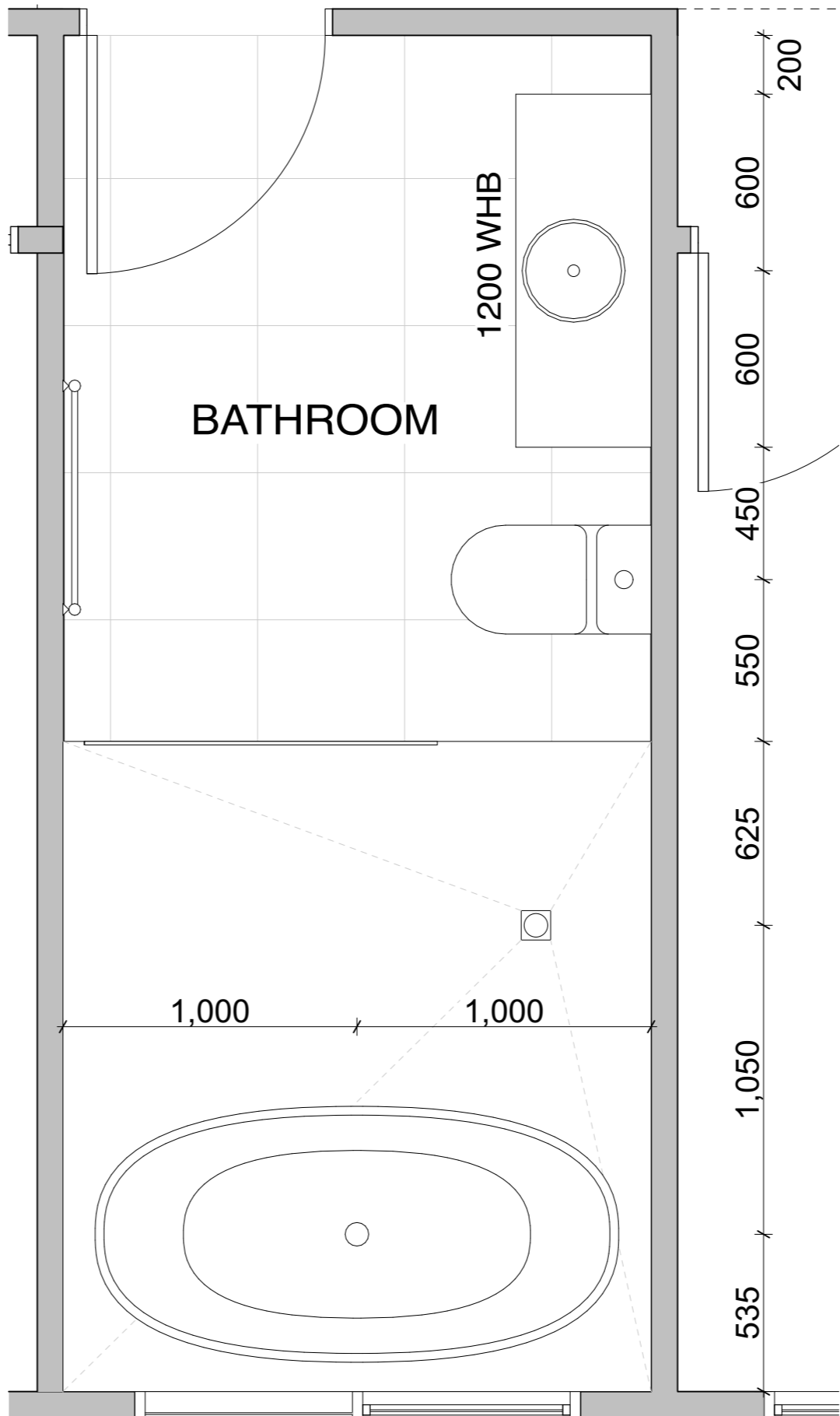
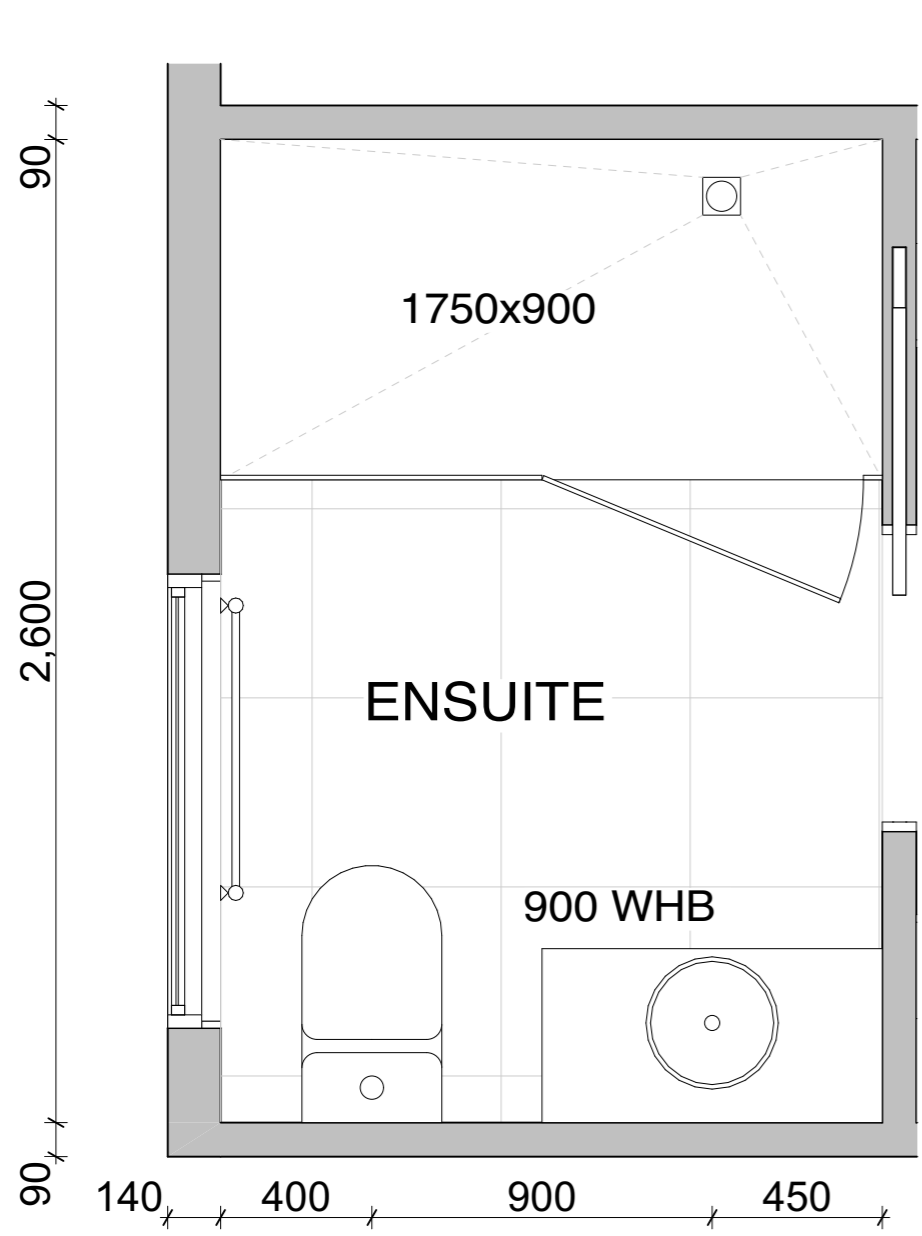
Drawn: AP - BP138465
Checked: Kyle Kake_ BP130188
Print Date: 1/07/22
Scale @ A3: 1:1

Sheet Title: **Truss Fixing**

Sheet No.

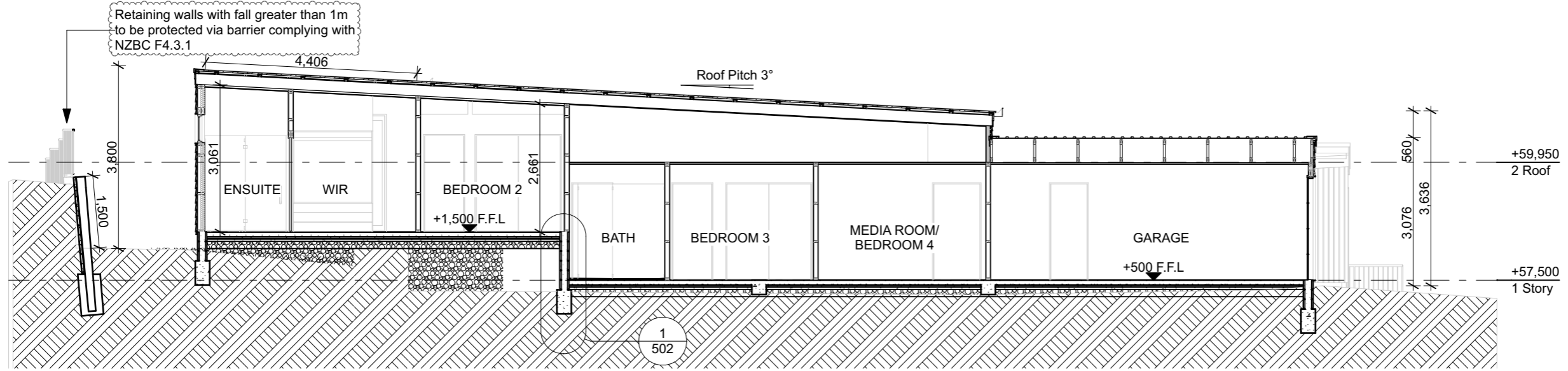
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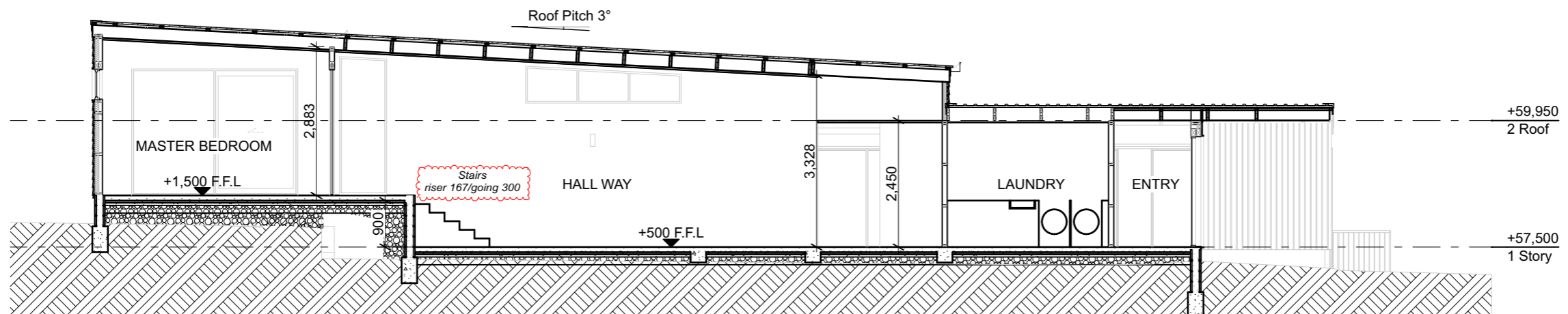


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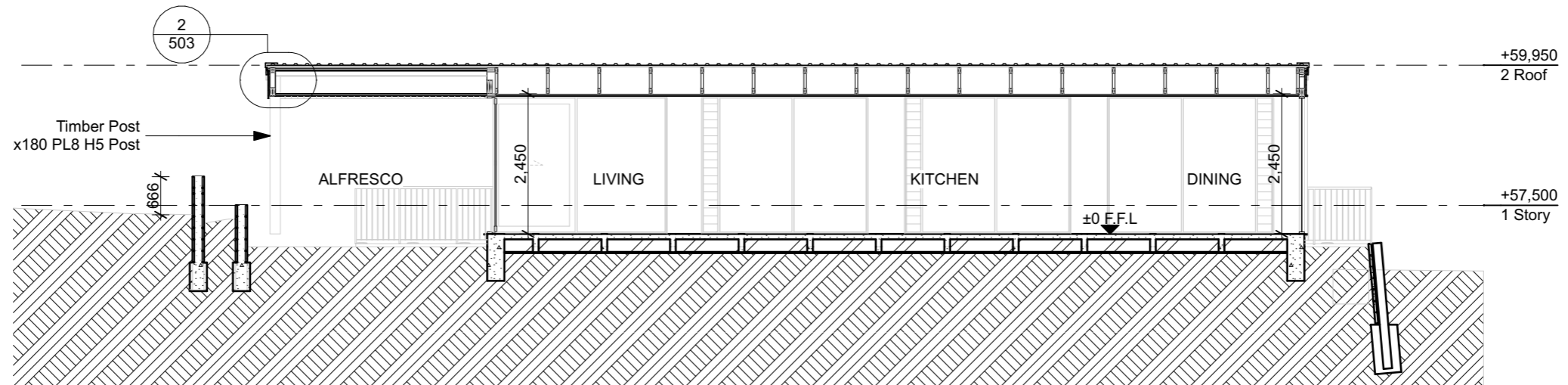
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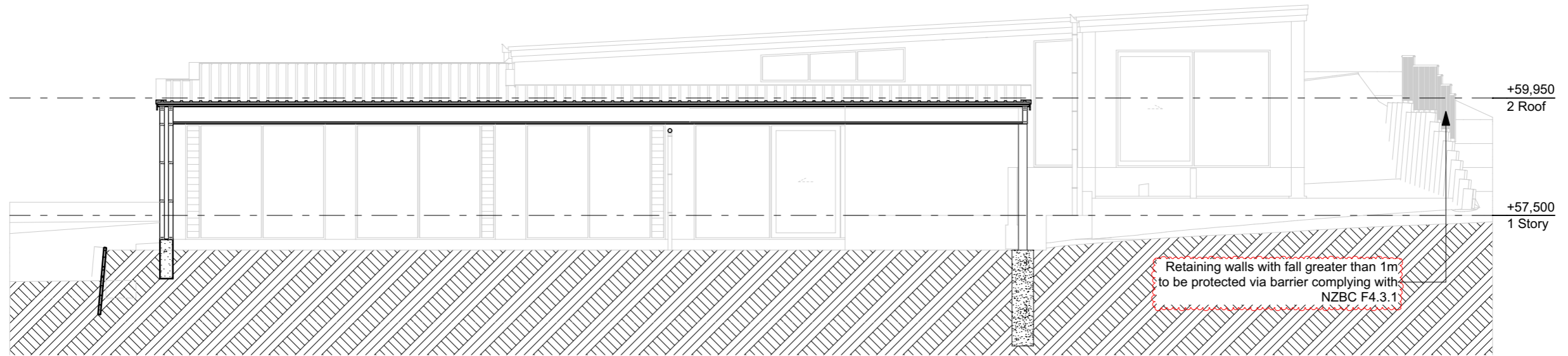
A Section
103 Scale 1:100



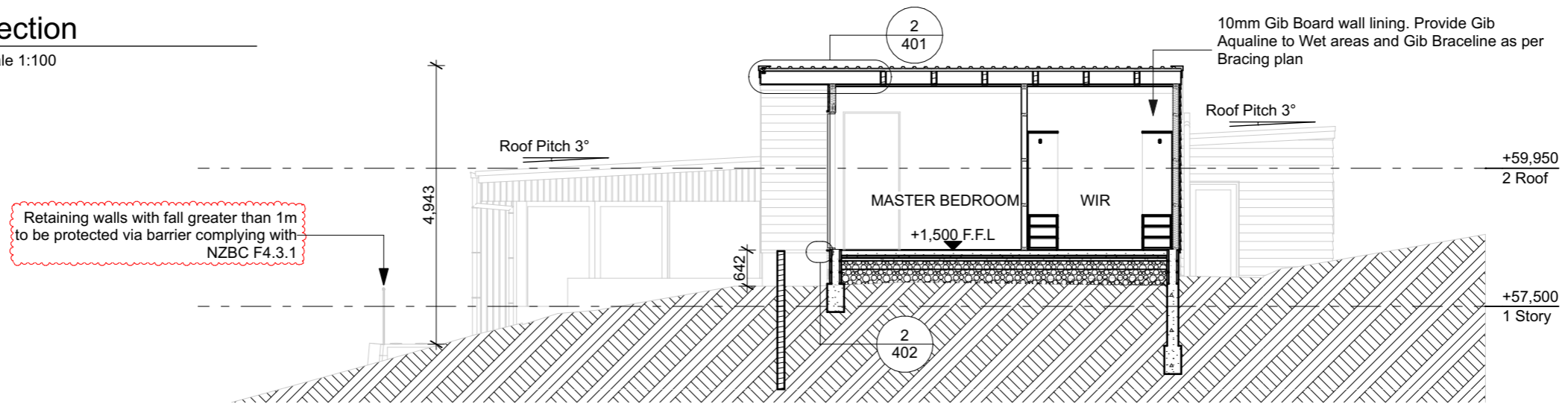
B Section
103 Scale 1:100



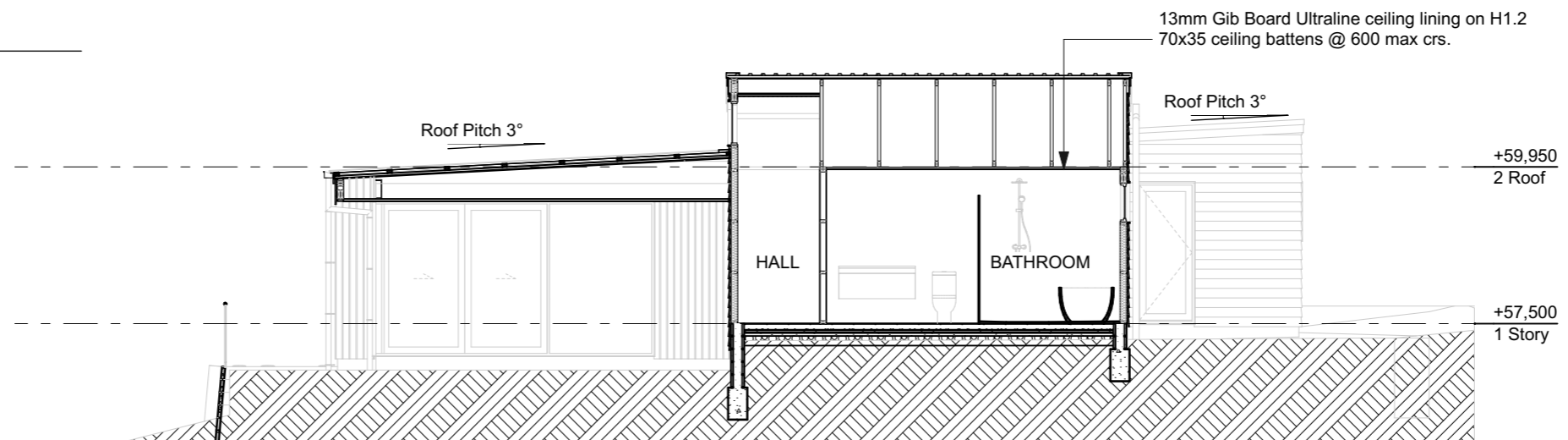
C Section
103 Scale 1:100



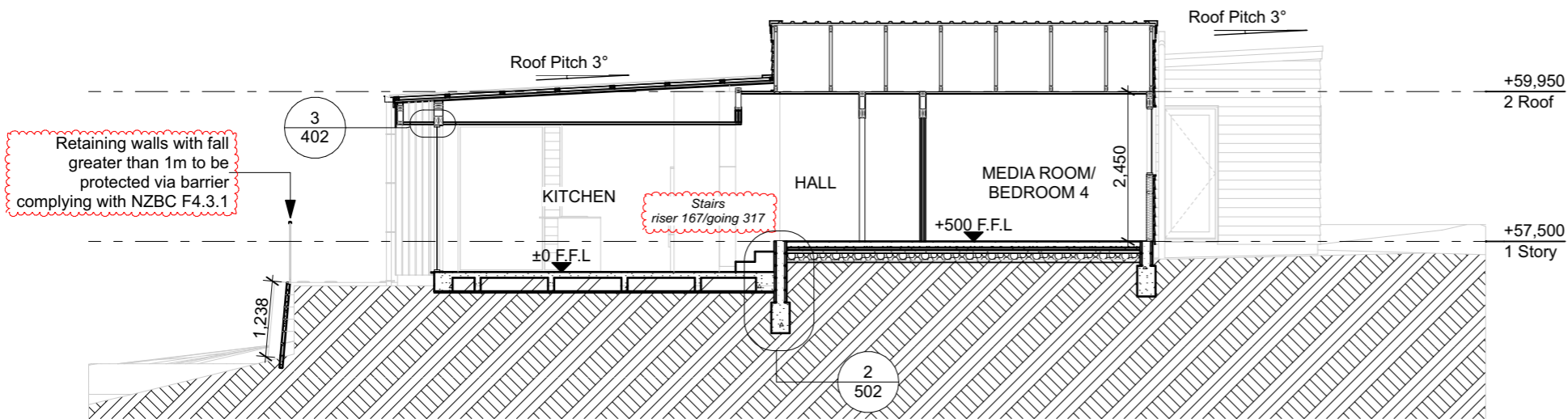
D Section
103 Scale 1:100



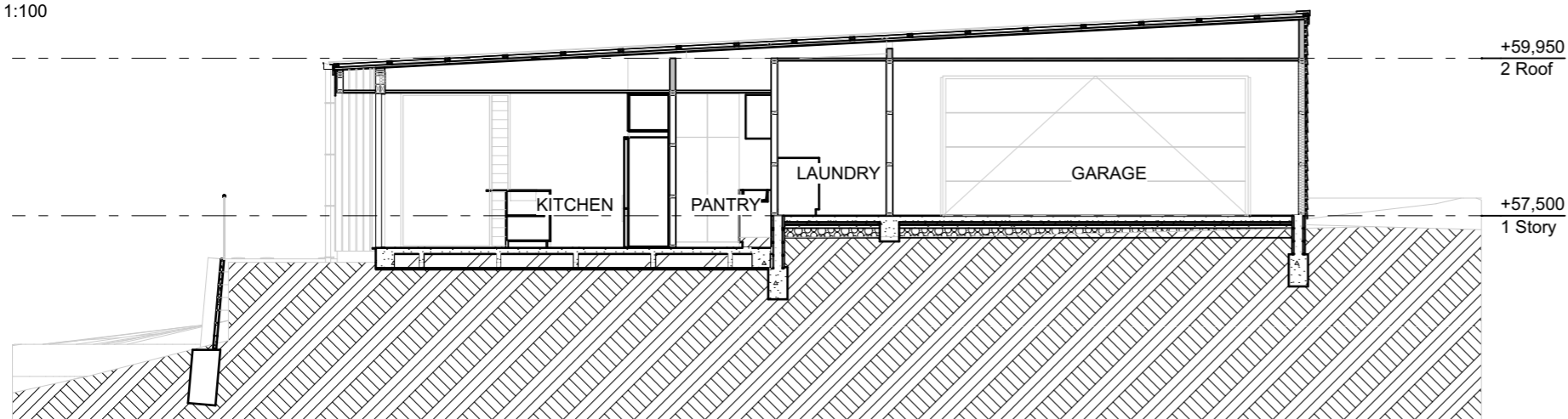
E Section
103 Scale 1:100



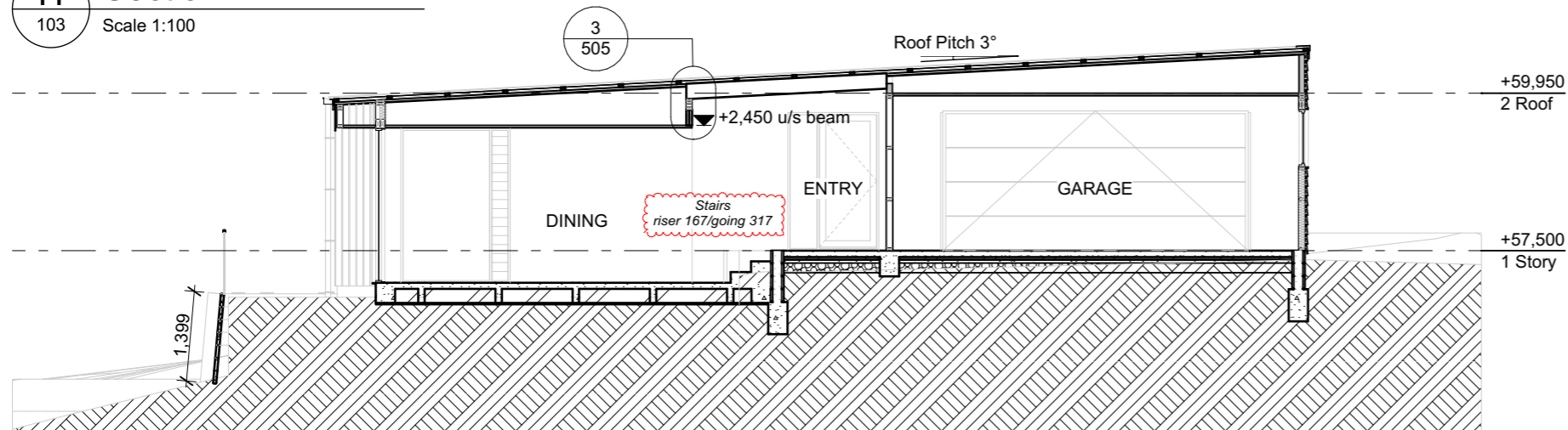
F Section
103 Scale 1:100



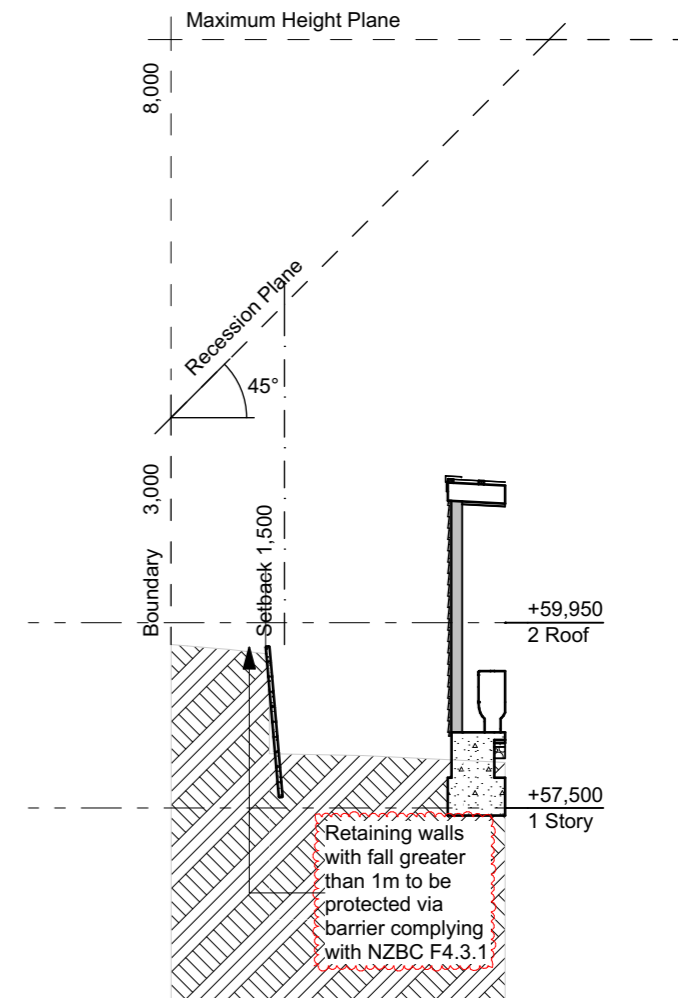
G Section
103 Scale 1:100



H Section
103 Scale 1:100



I Section
103 Scale 1:100



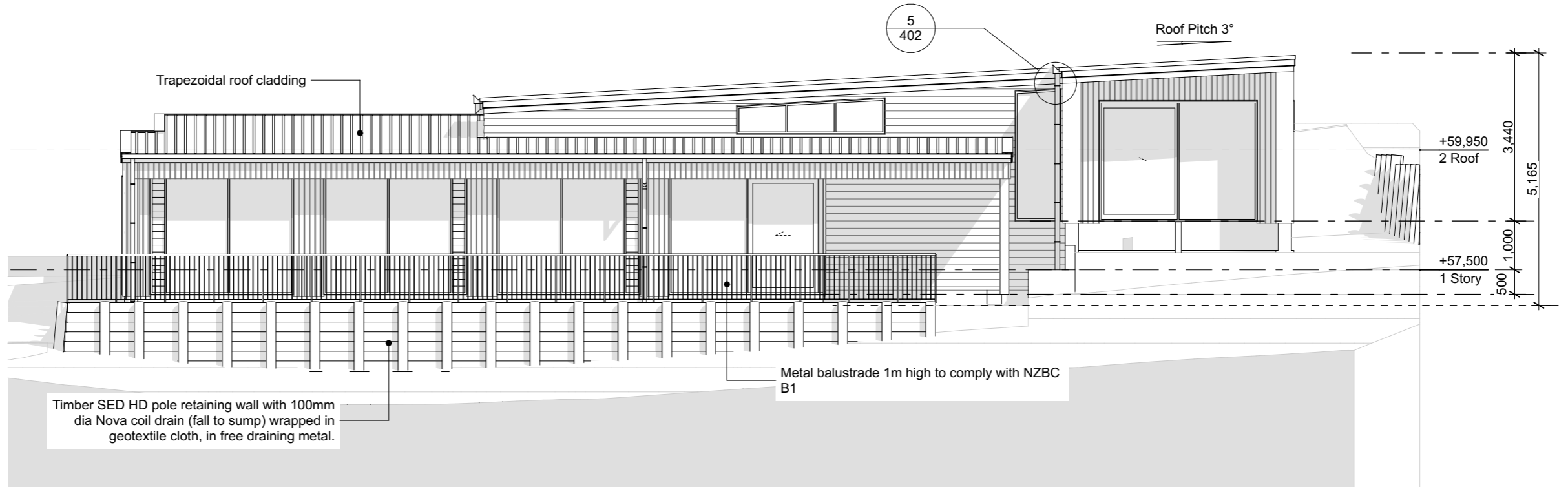
X Height to Boundary
101 Scale 1:100

General Notes

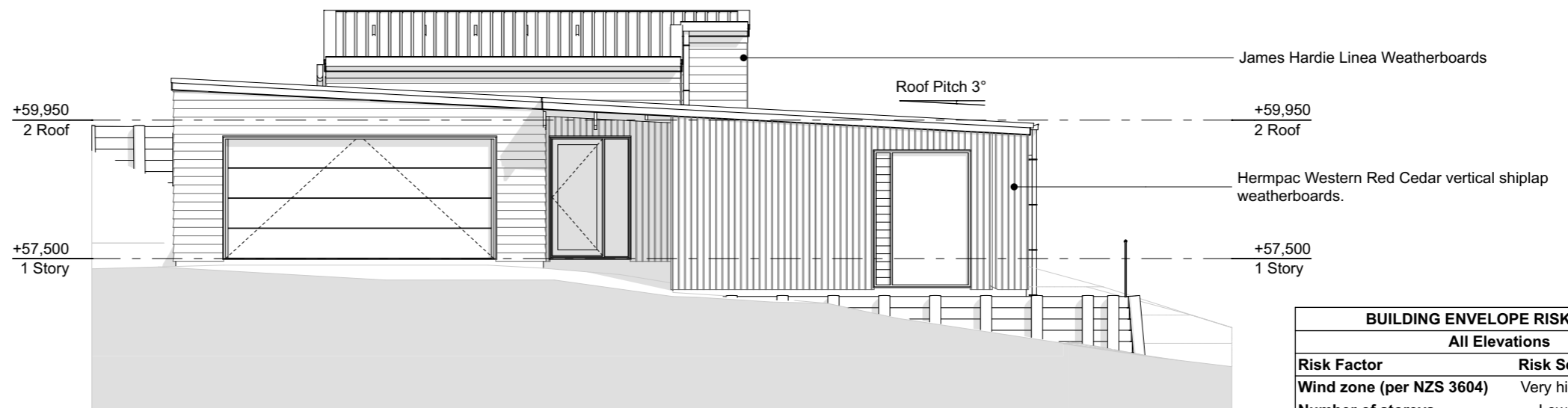
All construction shall be carried out in accordance with NZBC, and NZS 3604:2011 + Amendments. Aswell to comply with any local authority bylaws.
 Corrosion Zone 1,2,3,4:
 Durability of fixings to comply with NZS 3604:2011 Section 4 and NZBC B2/AS1
ALL FIXINGS SUBJECT TO WEATHERING TO BE STAINLESS STEEL.
ALL FIXINGS WITHIN 600mm OF THE GROUND TO BE STAINLESS STEEL.

Finished Floor to Ground levels:

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



1 North Elevation
 Scale 1:100



2 East Elevation
 Scale 1:100

BUILDING ENVELOPE RISK MATRIX		
All Elevations		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	Very high risk	2
Number of storeys	Low risk	0
Roof/wall intersection design	High risk	3
Eaves width	Very high risk	5
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		11

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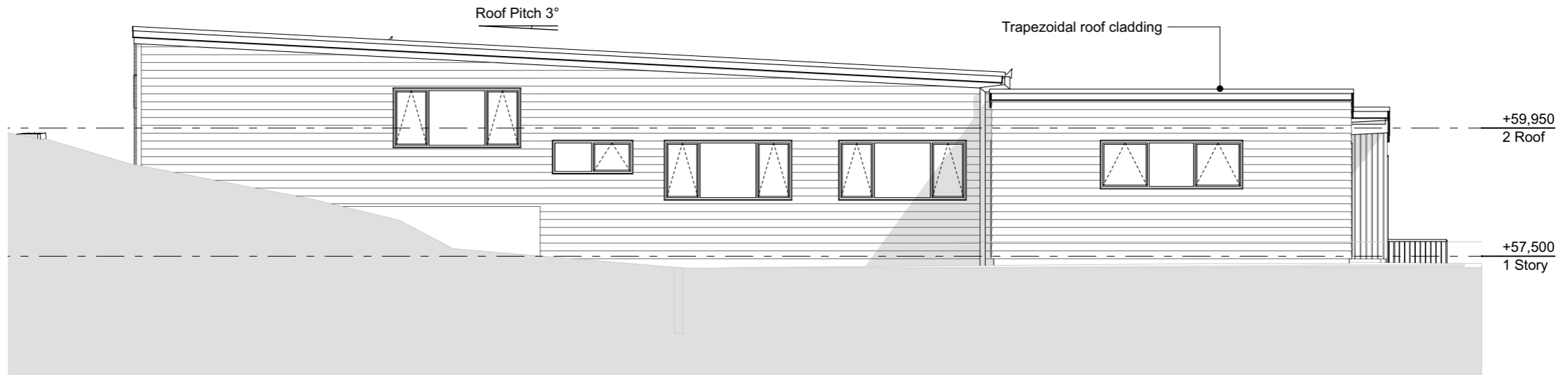
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General Notes

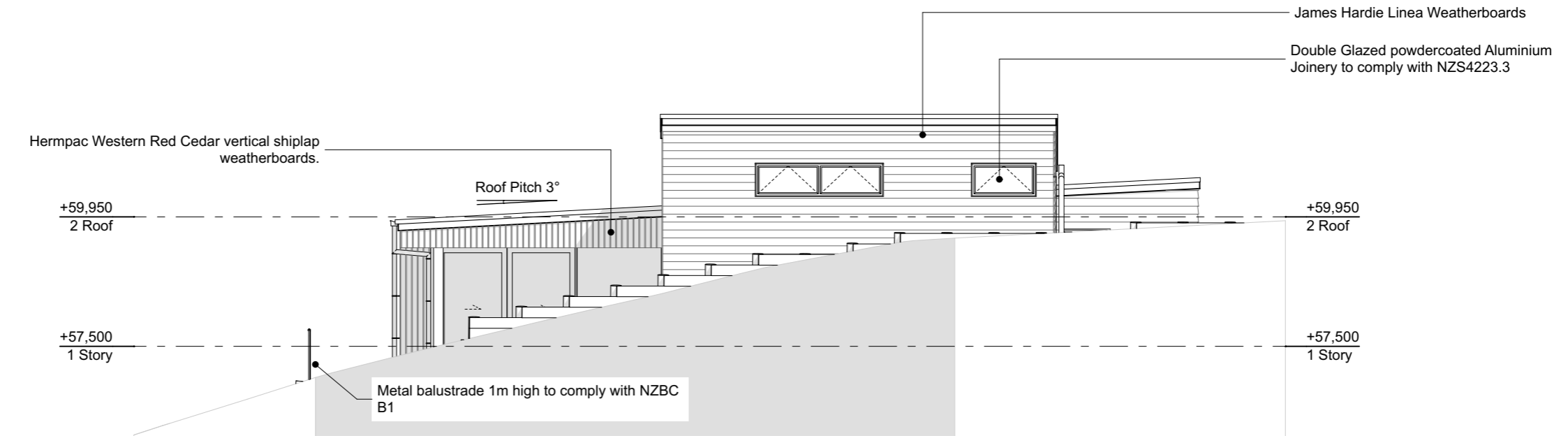
All construction shall be carried out in accordance with NZBC, and NZS 3604:2011 + Amendments. Aswell to comply with any local authority bylaws.
 Corrosion Zone 1,2,3,4:
 Durability of fixings to comply with NZS 3604:2011 Section 4 and NZBC B2/AS1
 ALL FIXINGS SUBJECT TO WEATHERING TO BE STAINLESS STEEL.
 ALL FIXINGS WITHIN 600mm OF THE GROUND TO BE STAINLESS STEEL.

Finished Floor to Ground levels:

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



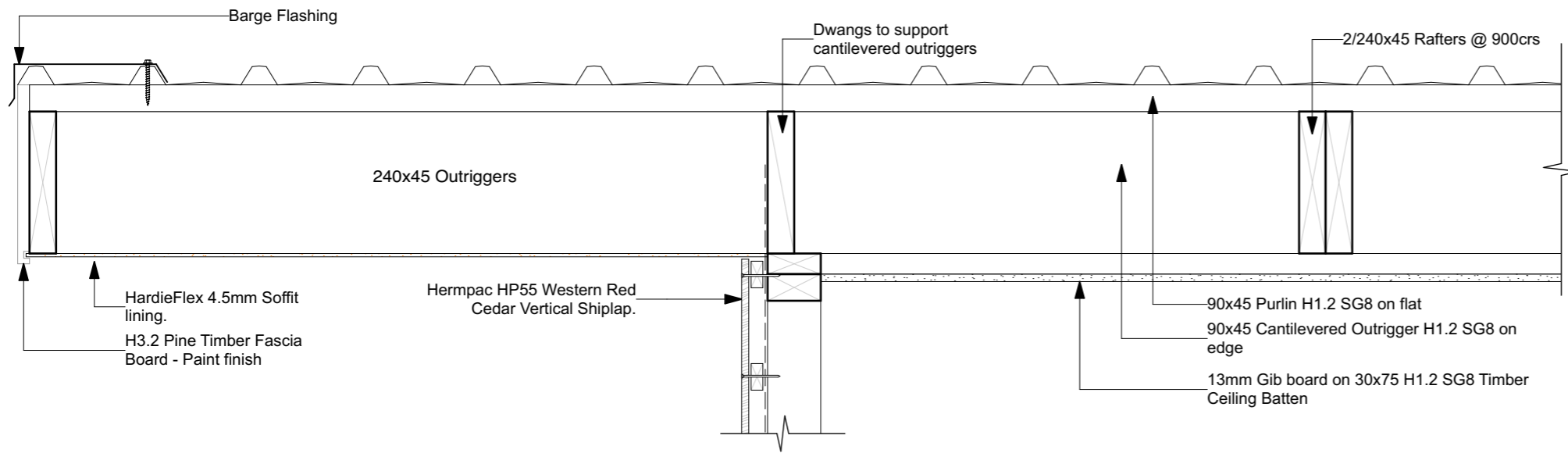
1 South Elevation
 Scale 1:100



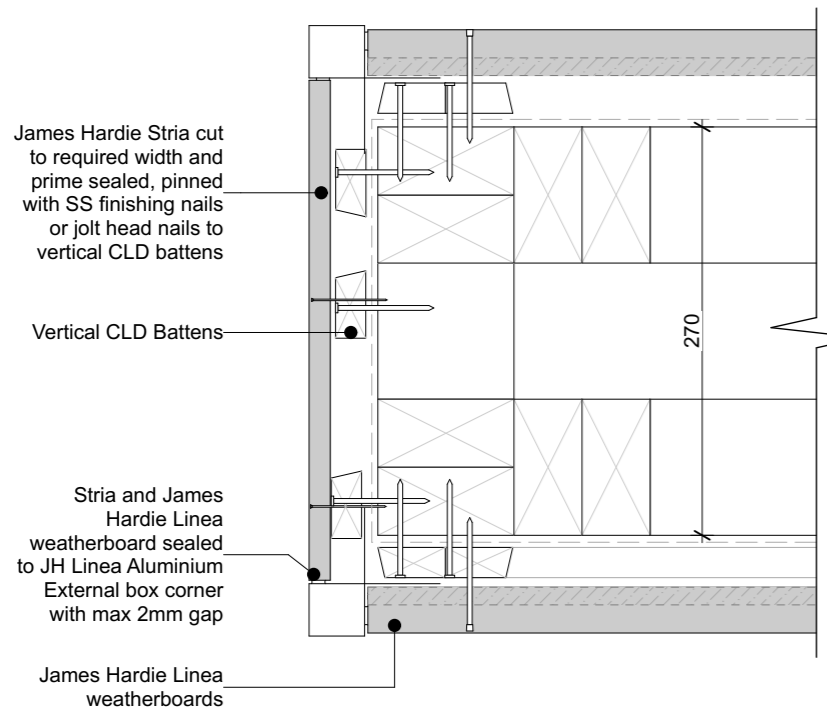
2 West Elevation
 Scale 1:100

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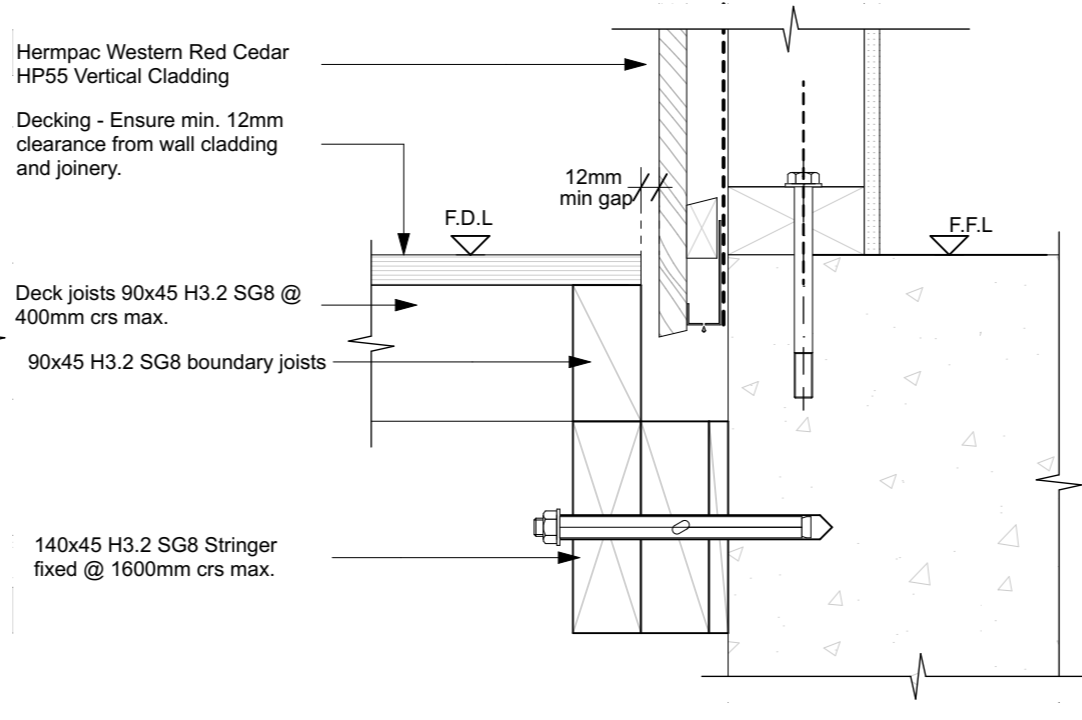
WHANGAREI DISTRICT COUNCIL BCA



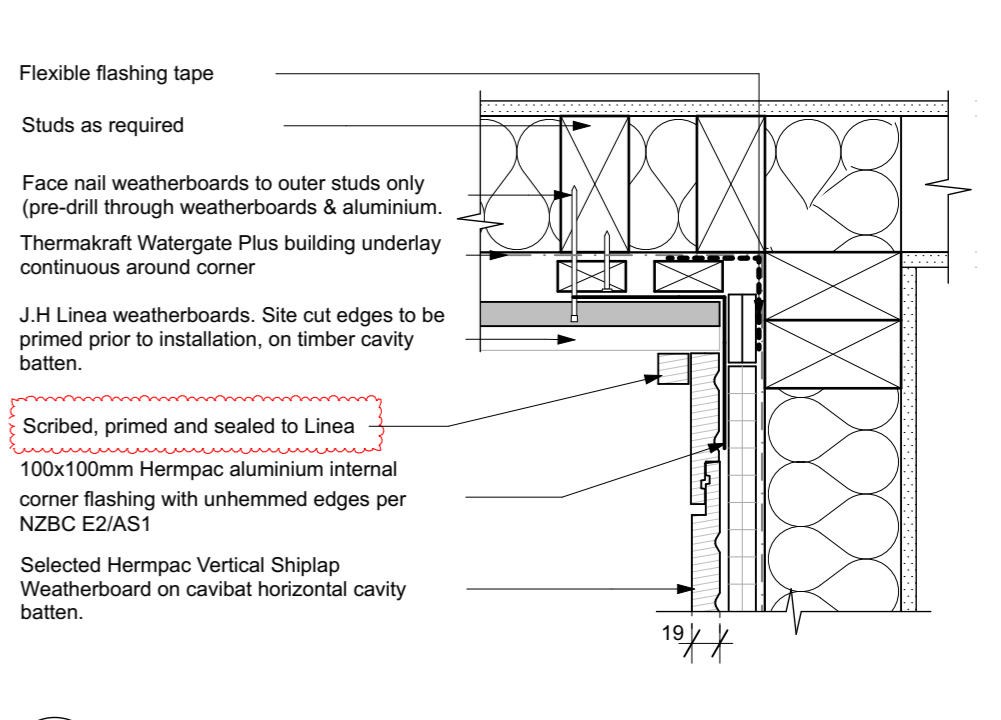
2 Bedroom Outrigger Detail
 202 Scale 1:10



1 Wing Wall Detail
103 Scale 1:5



2 Deck to Wall Detail
202 Scale 1:5



4 Hempac to Linea Internal Corner Detail
Scale 1:5

NOTE: Wall underlays and flashing Tapes omitted for clarity. Details as per typical window head detail

NOTE: Accurate slot to be cut in cladding to enable fit around head flashing. Prevent moisture ingress at end of slot by sealing gap.

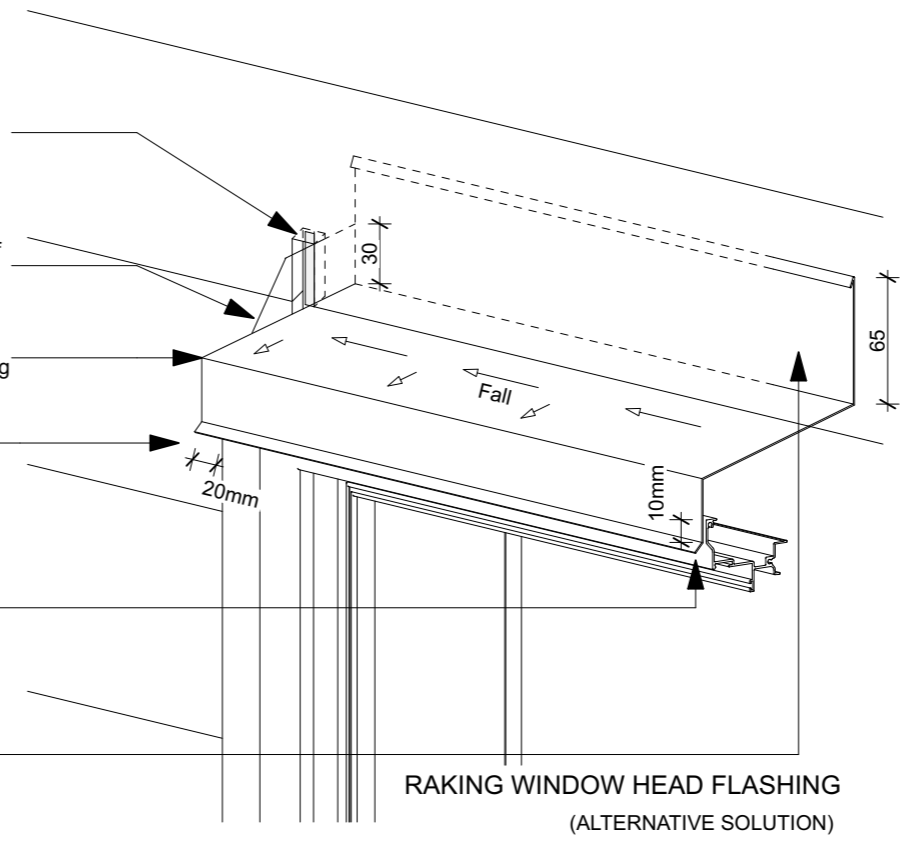
Angled stop-end kick-out to low end of Head flashing. Extend upstand out to exterior face of cladding Seal any cuts well with Silicone. min 30mm upstand.

15 degree Raking Aluminium custom made Head flashing to 5mm min gap below cladding

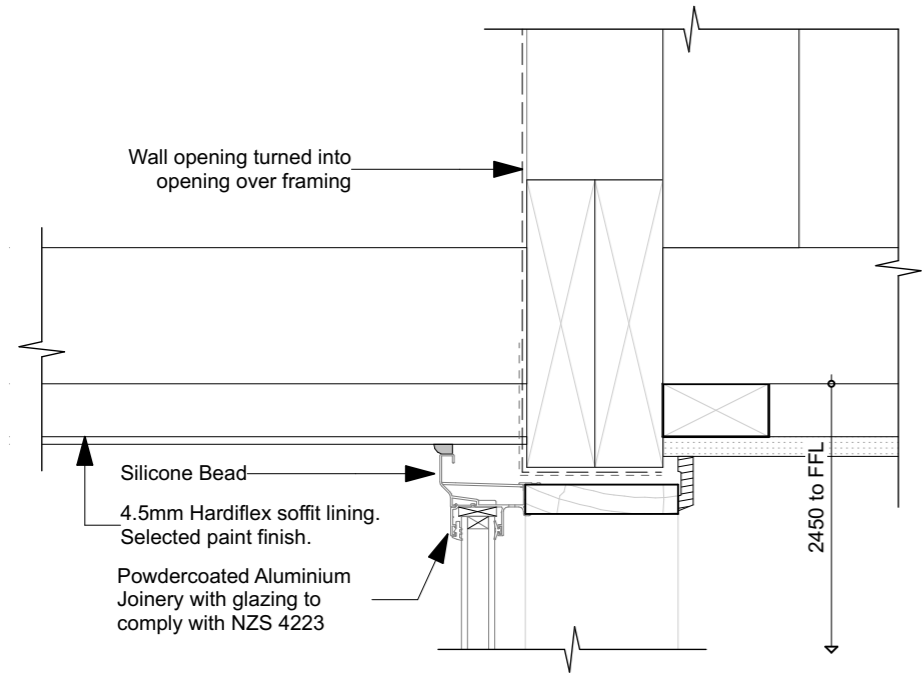
Flashing to extend 20mm beyond the face of the window frame

Provide 10mm cover to face of window flange

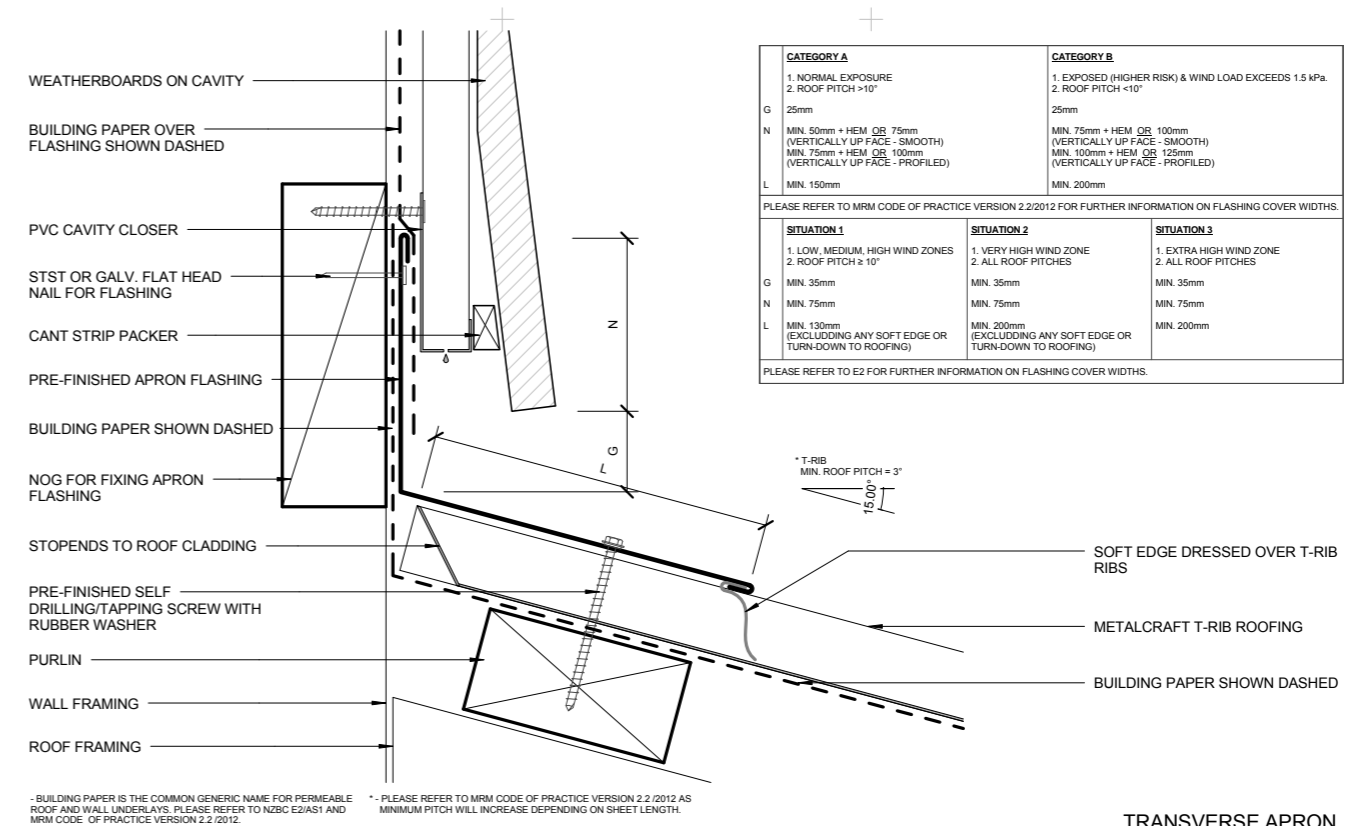
65mm min up stand to head flashing. (60mm cladding cover plus 5 mm gap for drainage and ventilation)



5 Raking Head Flashing Detail
301 Scale 1:5



3 Full Height Joinery to Soffit Detail
203 Scale 1:5



CATEGORY A		CATEGORY B	
1. NORMAL EXPOSURE 2. ROOF PITCH >10°		1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH <10°	
G	25mm	25mm	
N	MIN. 50mm + HEM OR 75mm (VERTICALLY UP FACE - SMOOTH) MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - PROFILED)	MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - SMOOTH) MIN. 100mm + HEM OR 125mm (VERTICALLY UP FACE - PROFILED)	
L	MIN. 150mm	MIN. 200mm	

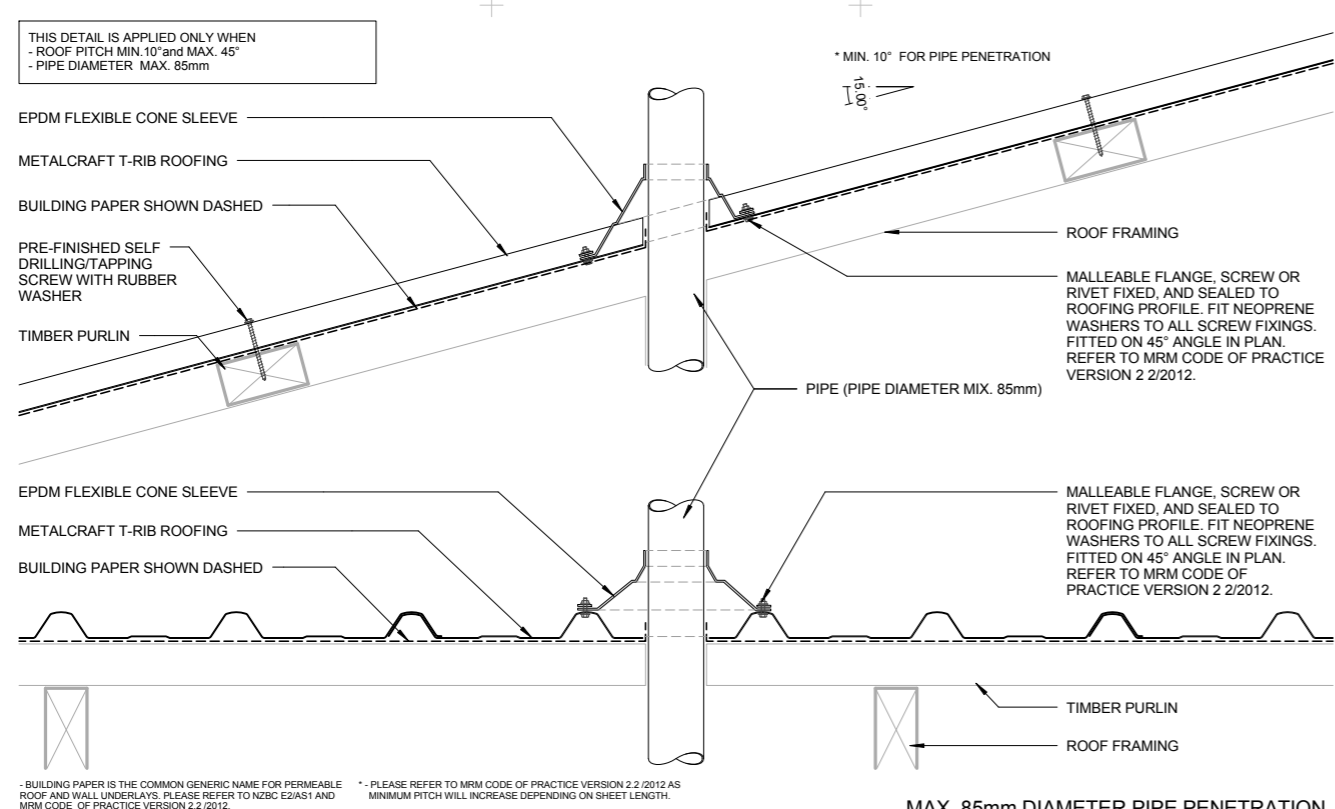
PLEASE REFER TO MRM CODE OF PRACTICE VERSION 2.2/2012 FOR FURTHER INFORMATION ON FLASHING COVER WIDTHS.

SITUATION 1	SITUATION 2	SITUATION 3
1. LOW, MEDIUM, HIGH WIND ZONES 2. ROOF PITCH ≥ 10°	1. VERY HIGH WIND ZONE 2. ALL ROOF PITCHES	1. EXTRA HIGH WIND ZONE 2. ALL ROOF PITCHES
G MIN. 35mm	MIN. 35mm	MIN. 35mm
N MIN. 75mm	MIN. 75mm	MIN. 75mm
L MIN. 150mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm (EXCLUDING ANY SOFT EDGE OR TURN-DOWN TO ROOFING)	MIN. 200mm

PLEASE REFER TO E2 FOR FURTHER INFORMATION ON FLASHING COVER WIDTHS.

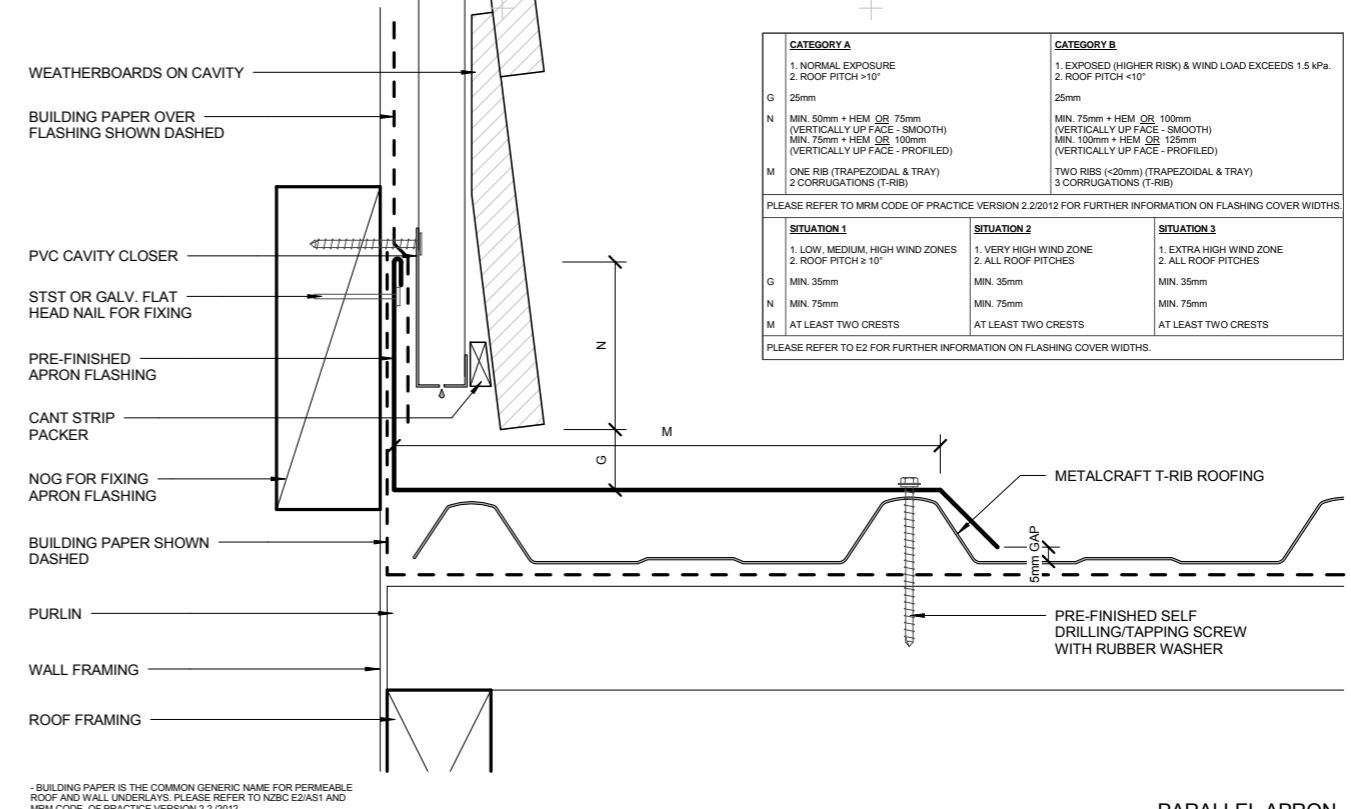
DISCLAIMER: All details are to be used for indicative purposes only and the designer should consult both the MRM code of practice version 2.2/2012, E2 and all other relevant building codes. Details of the supporting mechanisms are indicative only. Compliance of the supporting mechanisms is the responsibility of the designer. Construction detail can vary for wall cladding. The underlay is detailed as a single line for simplicity and is indicative only. Building paper type and method of installation should comply with underlay manufacturers recommendations and NZBC regulations.

T-Rib
RESIDENTIAL ROOFING
Reference RRTRI Date 2014 Scale 1 : 2 Sheet **14 / 24**



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T-Rib
RESIDENTIAL ROOFING
Reference RRTRI Date 2014 Scale 1 : 5 Sheet **16 / 24**



CATEGORY A		CATEGORY B	
1. NORMAL EXPOSURE 2. ROOF PITCH >10°		1. EXPOSED (HIGHER RISK) & WIND LOAD EXCEEDS 1.5 kPa. 2. ROOF PITCH <10°	
G	25mm	25mm	
N	MIN. 50mm + HEM OR 75mm (VERTICALLY UP FACE - SMOOTH) MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - PROFILED)	MIN. 75mm + HEM OR 100mm (VERTICALLY UP FACE - SMOOTH) MIN. 100mm + HEM OR 125mm (VERTICALLY UP FACE - PROFILED)	
M	ONE RIB (TRAPEZOIDAL & TRAY) 2 CORRUGATIONS (T-RIB)	TWO RIBS (TRAPEZOIDAL & TRAY) 3 CORRUGATIONS (T-RIB)	

PLEASE REFER TO MRM CODE OF PRACTICE VERSION 2.2/2012 FOR FURTHER INFORMATION ON FLASHING COVER WIDTHS.

SITUATION 1	SITUATION 2	SITUATION 3
1. LOW, MEDIUM, HIGH WIND ZONES 2. ROOF PITCH ≥ 10°	1. VERY HIGH WIND ZONE 2. ALL ROOF PITCHES	1. EXTRA HIGH WIND ZONE 2. ALL ROOF PITCHES
G MIN. 35mm	MIN. 35mm	MIN. 35mm
N MIN. 75mm	MIN. 75mm	MIN. 75mm
M AT LEAST TWO CRESTS	AT LEAST TWO CRESTS	AT LEAST TWO CRESTS

PLEASE REFER TO E2 FOR FURTHER INFORMATION ON FLASHING COVER WIDTHS.

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T-Rib
RESIDENTIAL ROOFING
Reference RRTRI Date 2014 Scale 1 : 2 Sheet **15 / 24**



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Job Title
Proposed Home - Gary & Julie Pyle

**BC2201042
APPROVED
30/08/2022**

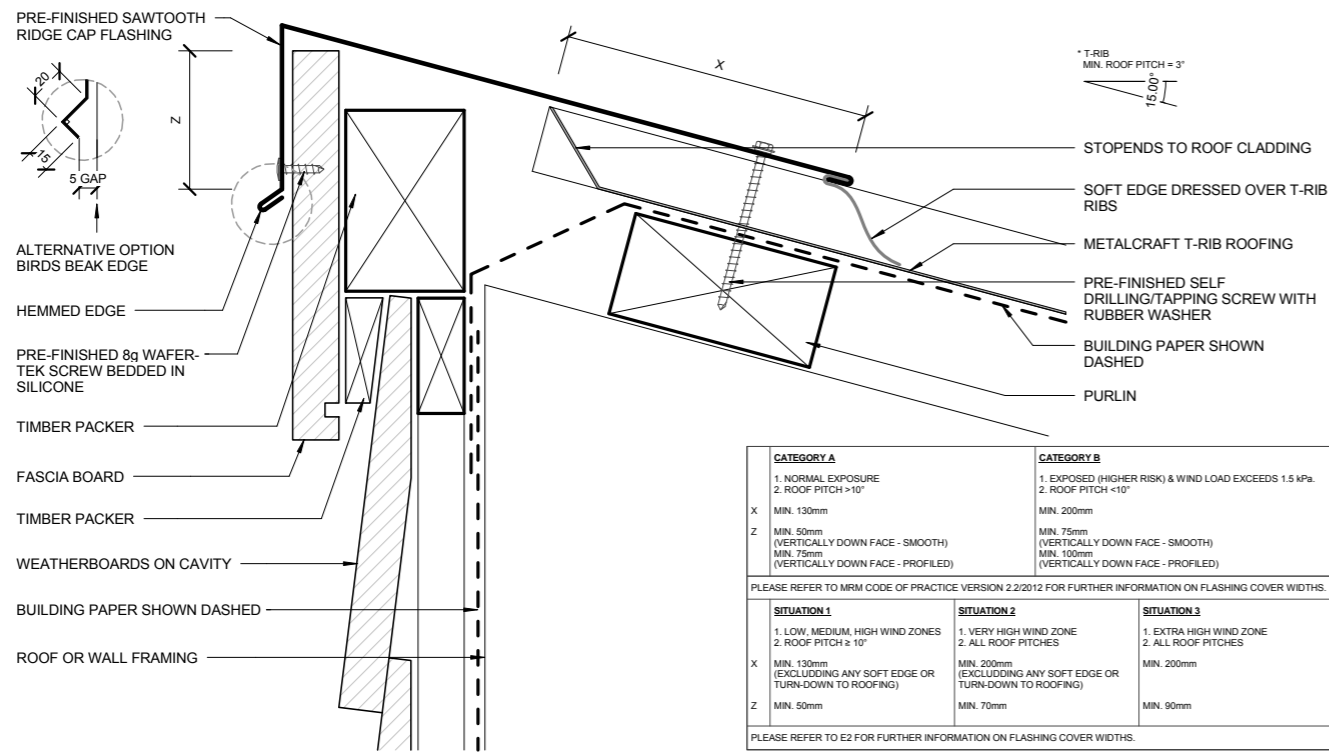
Project Location
Lot 5 Fantail Lane, Whareora,
Whangarei

Drawn AP - BP138465
Checked Kyle Kake_ BP130188
Print Date 1/07/22
Scale @ A3 1:1, 1:5

Sheet Title
Roofing Details

Sheet No.
403

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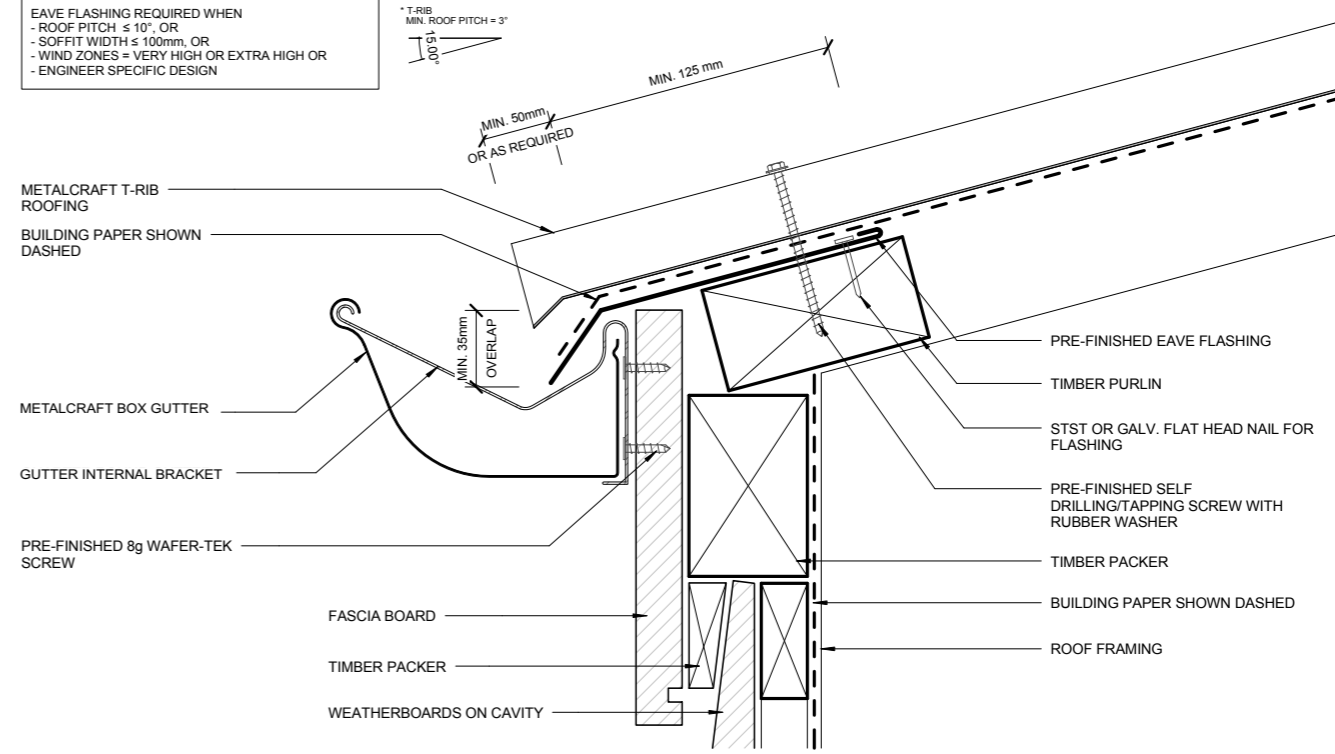


- BUILDING PAPER IS THE COMMON GENERIC NAME FOR PERMEABLE ROOF AND WALL UNDERLAYS. PLEASE REFER TO NZBC E2/A1 AND MRM CODE OF PRACTICE VERSION 2.2/2012.
* PLEASE REFER TO MRM CODE OF PRACTICE VERSION 2.2/2012 AS MINIMUM PITCH WILL INCREASE DEPENDING ON SHEET LENGTH.



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T-Rib
SAWTOOTH RIDGE
RESIDENTIAL ROOFING
Reference RRTRI Date 2014 Scale 1:2 Sheet **02 / 24**

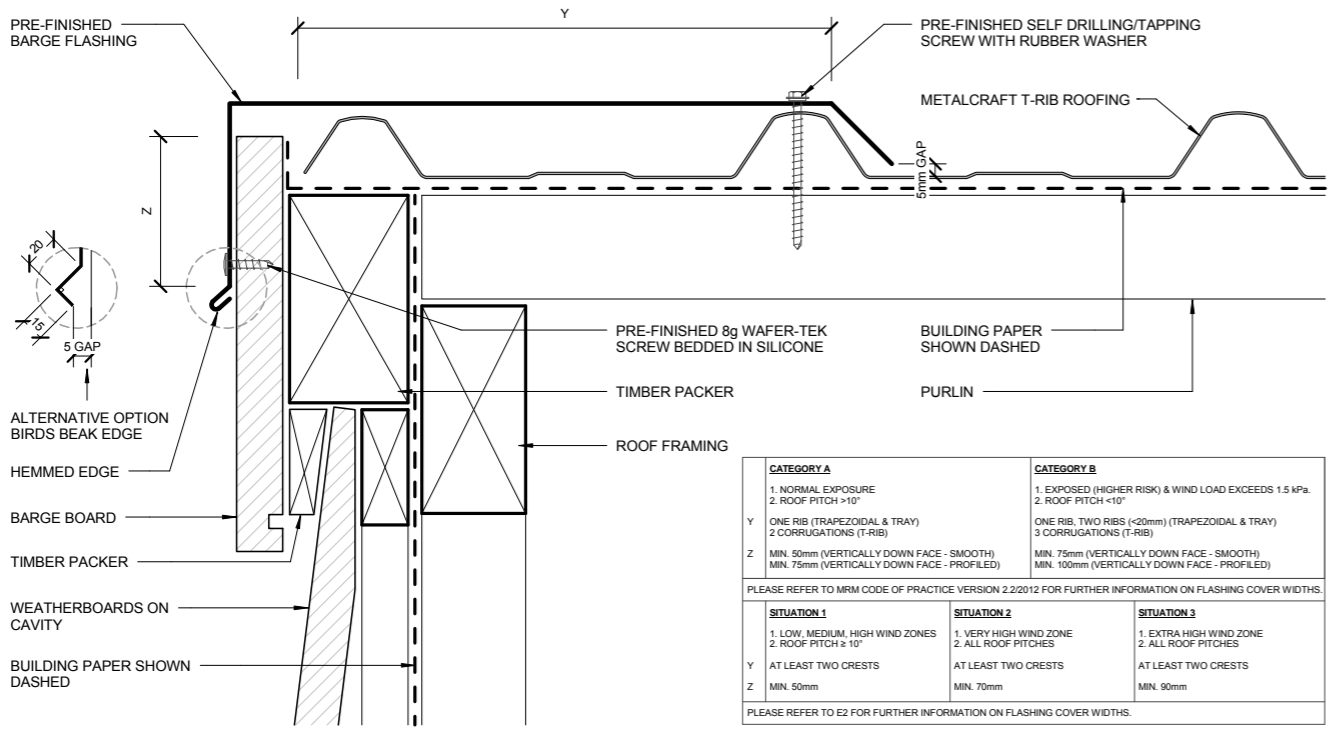


- BUILDING PAPER IS THE COMMON GENERIC NAME FOR PERMEABLE ROOF AND WALL UNDERLAYS. PLEASE REFER TO NZBC E2/A1 AND MRM CODE OF PRACTICE VERSION 2.2/2012.
* PLEASE REFER TO MRM CODE OF PRACTICE VERSION 2.2/2012 AS MINIMUM PITCH WILL INCREASE DEPENDING ON SHEET LENGTH.



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T-Rib
FLUSH EAVE WITH INTERNAL GUTTER BRACKET
RESIDENTIAL ROOFING
Reference RRTRI Date 2014 Scale 1:2 Sheet **09 / 24**

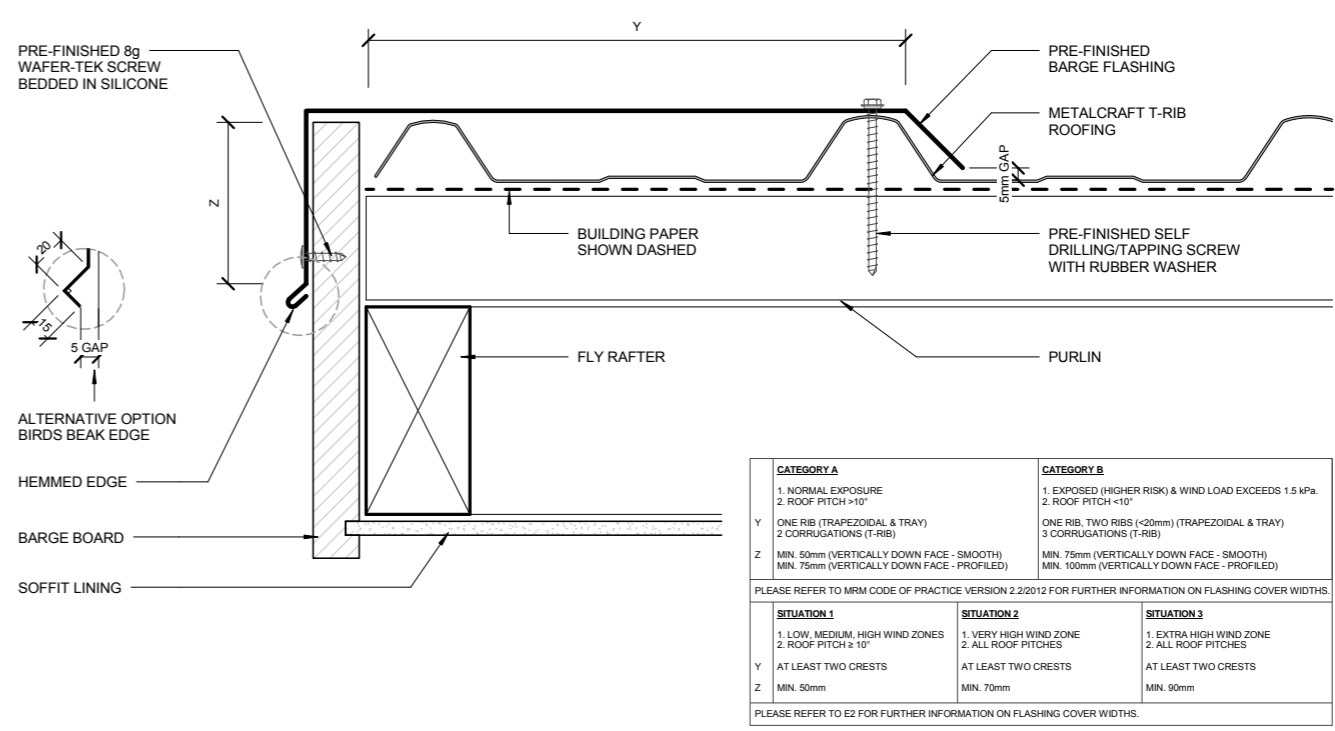


- BUILDING PAPER IS THE COMMON GENERIC NAME FOR PERMEABLE ROOF AND WALL UNDERLAYS. PLEASE REFER TO NZBC E2/A1 AND MRM CODE OF PRACTICE VERSION 2.2/2012.



DISCLAIMER: All details are to be used for indicative purposes only and the designer should consult both the MRM code of practice version 2.2/2012, E2 and all other relevant building codes. Details of the supporting mechanisms are indicative only. Compliance of the supporting mechanisms is the responsibility of the designer. Construction detail can vary for wall cladding. The underlay is detailed as a single line for simplicity and is indicative only. Building paper type and method of installation should comply with underlay manufacturers recommendations and NZBC regulations.

T-Rib
BARGE WITH PROFILED CLADDING
RESIDENTIAL ROOFING
Reference RRTRI Date 2014 Scale 1:2 Sheet **11 / 24**



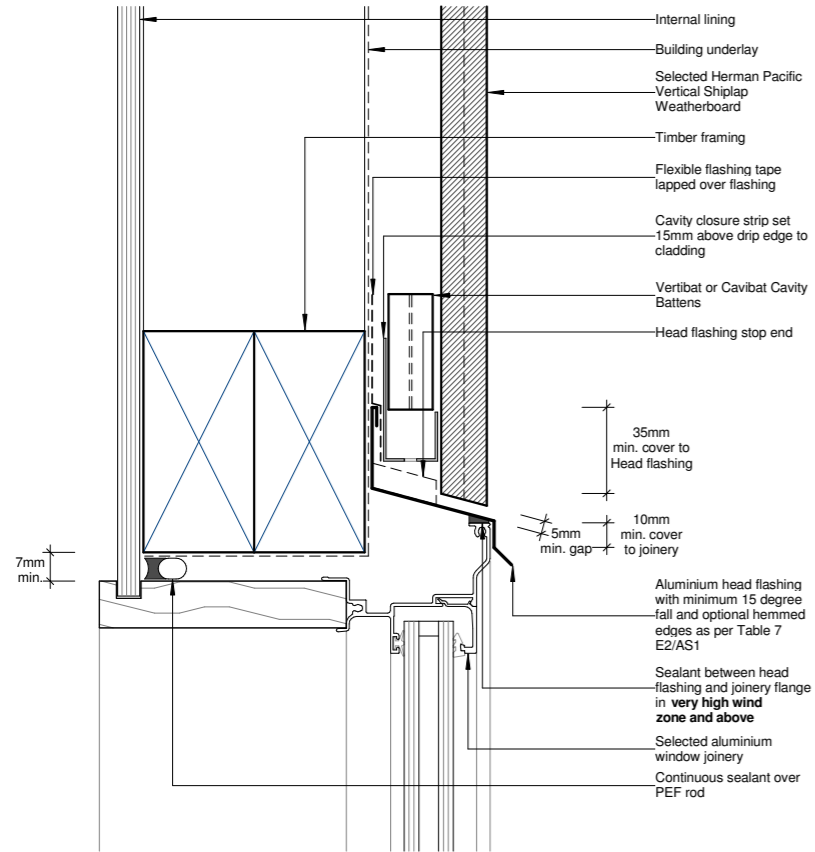
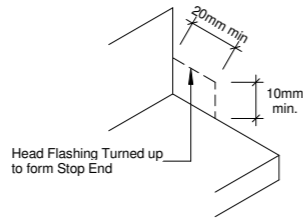
- BUILDING PAPER IS THE COMMON GENERIC NAME FOR PERMEABLE ROOF AND WALL UNDERLAYS. PLEASE REFER TO NZBC E2/A1 AND MRM CODE OF PRACTICE VERSION 2.2/2012.



DISCLAIMER: All details are to be used for indicative purposes only and the designer should consult both the MRM code of practice version 2.2/2012, E2 and all other relevant building codes. Details of the supporting mechanisms are indicative only. Compliance of the supporting mechanisms is the responsibility of the designer. Construction detail can vary for wall cladding. The underlay is detailed as a single line for simplicity and is indicative only. Building paper type and method of installation should comply with underlay manufacturers recommendations and NZBC regulations.

T-Rib
BARGE OVERHANG
RESIDENTIAL ROOFING
Reference RRTRI Date 2014 Scale 1:2 Sheet **12 / 24**

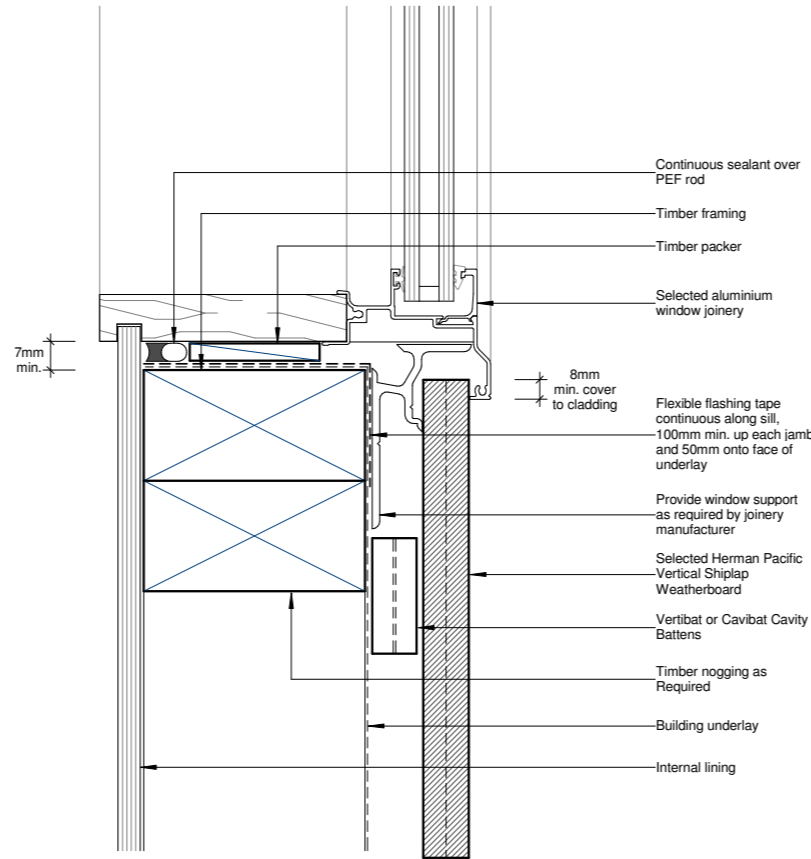
Notes:
 - All nail fixings pre-drilled minimum 1mm diameter smaller than the nail gauge.
 - All HermanPacific timber products to be pre-coated & cut ends and edges and all fresh cut surfaces double coated and sealed before fixing.
 - All materials and fixtures are to comply with E2/AS1 Clause 2.2
 - For non-hemmed corner flashings, ensure a minimum 75mm cover to Weatherboards beyond the point where BRANZ bulletin 411 compliant Weatherboard lap or rebate combinations terminate at the corner junction. In Extra High Wind Zone and above, the 75mm cover requirement remains and hemmed edges must also be used.
 - Refer to NZBC Acceptable Solution E2/AS1 Table 21 for the separation requirements between CCA treated battens and metal flashings.



Cavity Fix Vertical Shiplap Weatherboard System Window Head Detail, Aluminium Joinery

HermanPacific **HC-SHIP-200** DRAWING

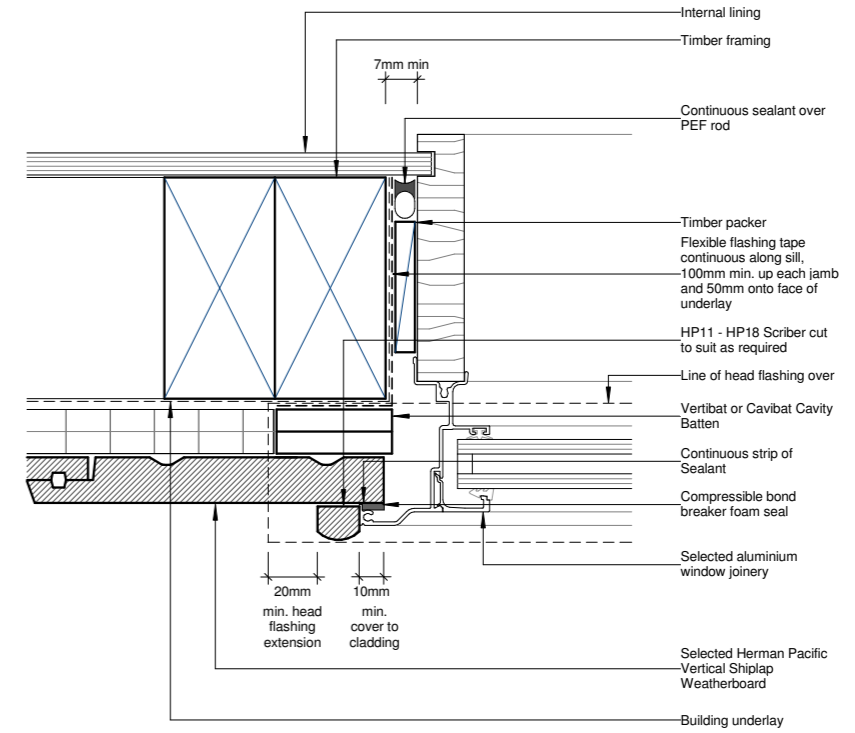
www.herpac.co.nz 1 : 2 @ A4 SCALE 04/06/2015 ISSUED DATE



Cavity Fix Vertical Shiplap Weatherboard System Window Sill Detail, Aluminium Joinery

HermanPacific **HC-SHIP-201** DRAWING

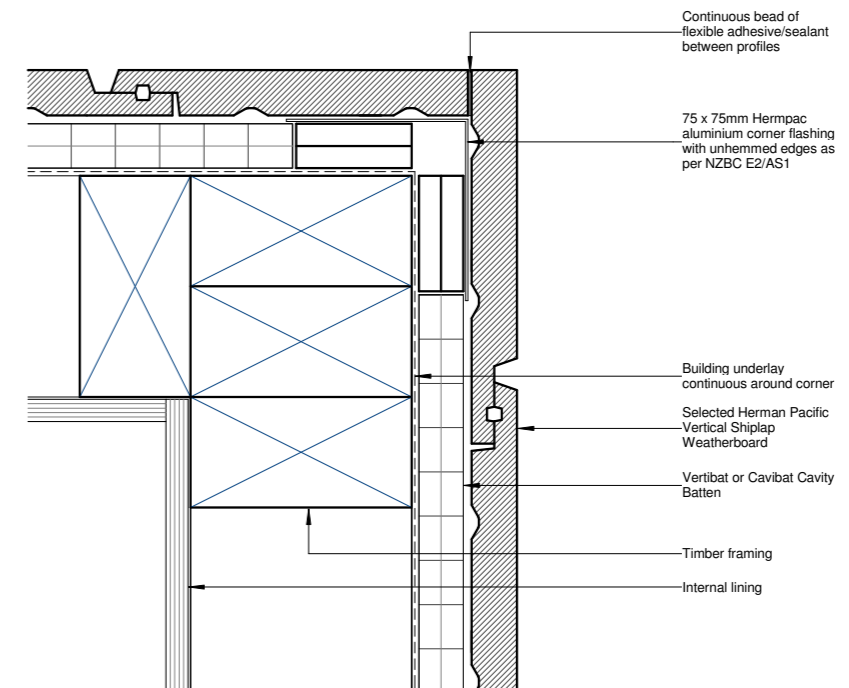
www.herpac.co.nz 1 : 2 @ A4 SCALE 04/06/2015 ISSUED DATE



Cavity Fix Vertical Shiplap Weatherboard System Window Jamb Detail, Aluminium Joinery

HermanPacific **HC-SHIP-202** DRAWING

www.herpac.co.nz 1 : 2 @ A4 SCALE 04/06/2015 ISSUED DATE

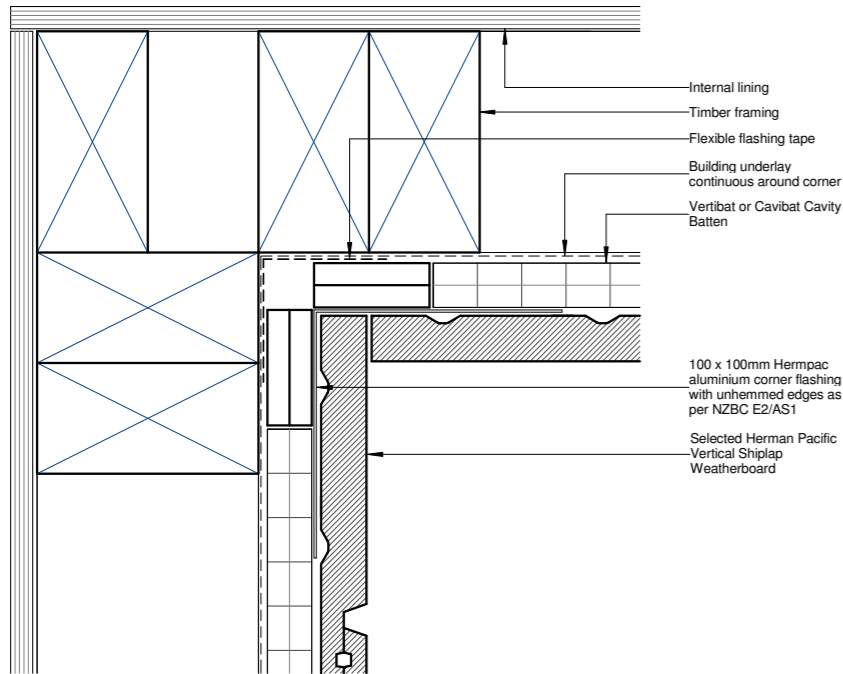


Cavity Fix Vertical Shiplap Weatherboard System External Corner

HermanPacific **HC-SHIP-403** DRAWING

www.herpac.co.nz 1 : 2 @ A4 SCALE 04/06/2015 ISSUED DATE

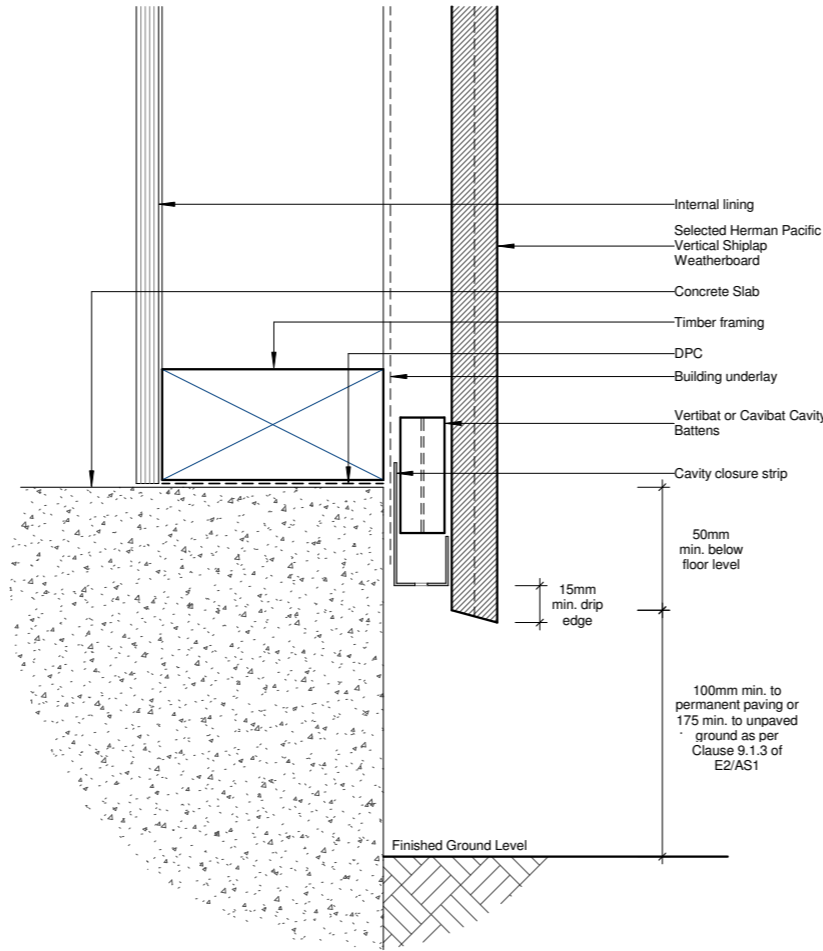
- Notes:
- All nail fixings pre-drilled minimum 1mm diameter smaller than the nail gauge.
 - All HermanPacific timber products to be pre-coated & cut ends and edges and all fresh cut surfaces double coated and sealed before fixing.
 - All materials and fixtures are to comply with E2/AS1 Clause 2.2
 - For non-hemmed corner flashings, ensure a minimum 75mm cover to Weatherboards beyond the point where BRANZ bulletin 411 compliant Weatherboard lap or rebate combinations terminate at the corner junction. In Extra High Wind Zone and above, the 75mm cover requirement remains and hemmed edges must also be used.
 - Refer to NZBC Acceptable Solution E2/AS1 Table 21 for the separation requirements between CCA treated battens and metal flashings.



Cavity Fix Vertical Shiplap Weatherboard System
Internal Corner Edge to Edge

HermanPacific **www.herpac.co.nz**
 SUBJECT TO CHANGE WITHOUT NOTICE

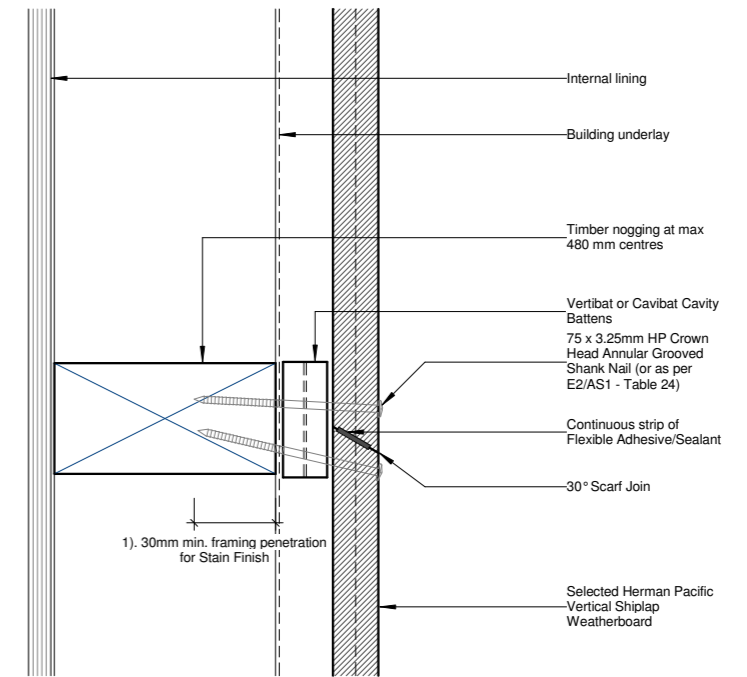
HC-SHIP-301
 DRAWING
 1 : 2 @ A4 SCALE 04/06/2015 ISSUED DATE



Cavity Fix Vertical Shiplap Weatherboard System
Base of Wall, Concrete

HermanPacific **www.herpac.co.nz**
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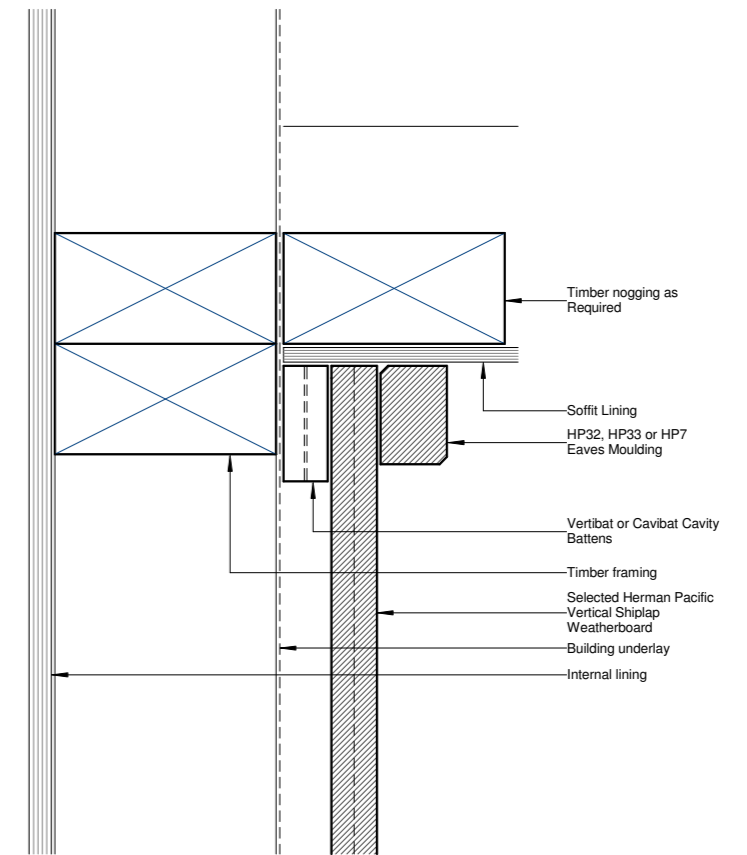
HC-SHIP-500
 DRAWING
 1 : 2 @ A4 SCALE 04/06/2015 ISSUED DATE



Cavity Fix Vertical Shiplap Weatherboard System
Scarf Joint Stain Finish

HermanPacific **www.herpac.co.nz**
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HC-SHIP-413
 DRAWING
 1 : 2 @ A4 SCALE 04/06/2015 ISSUED DATE



Cavity Fix Vertical Shiplap Weatherboard System
Soffit Detail, Overhang

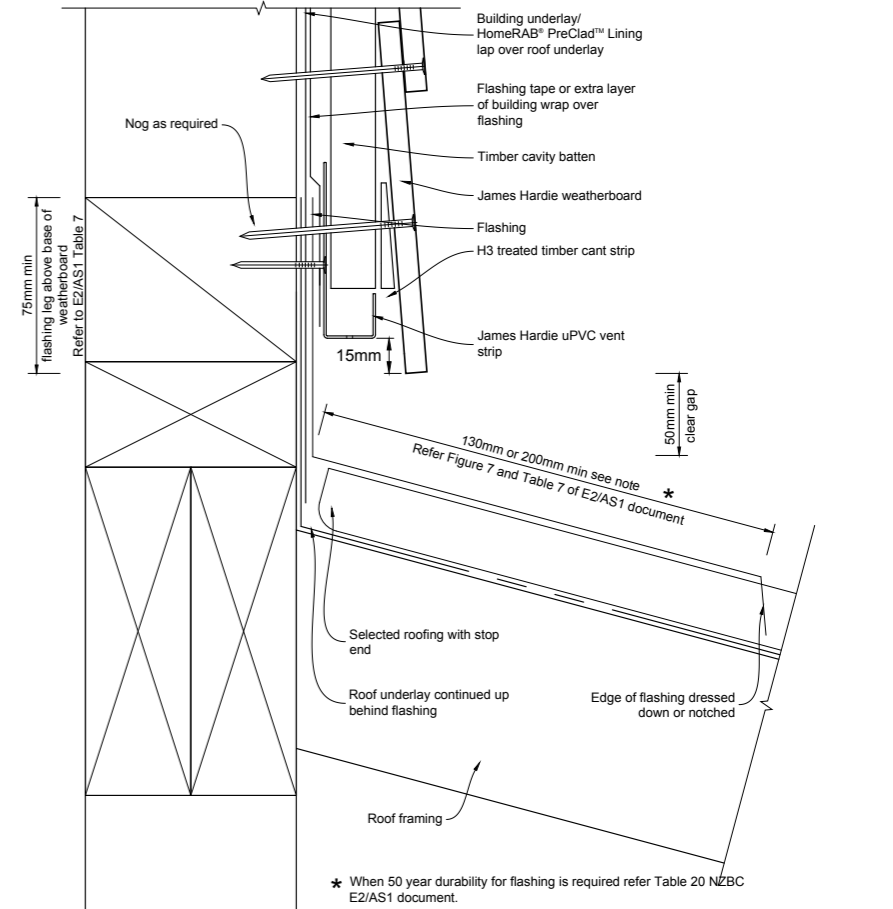
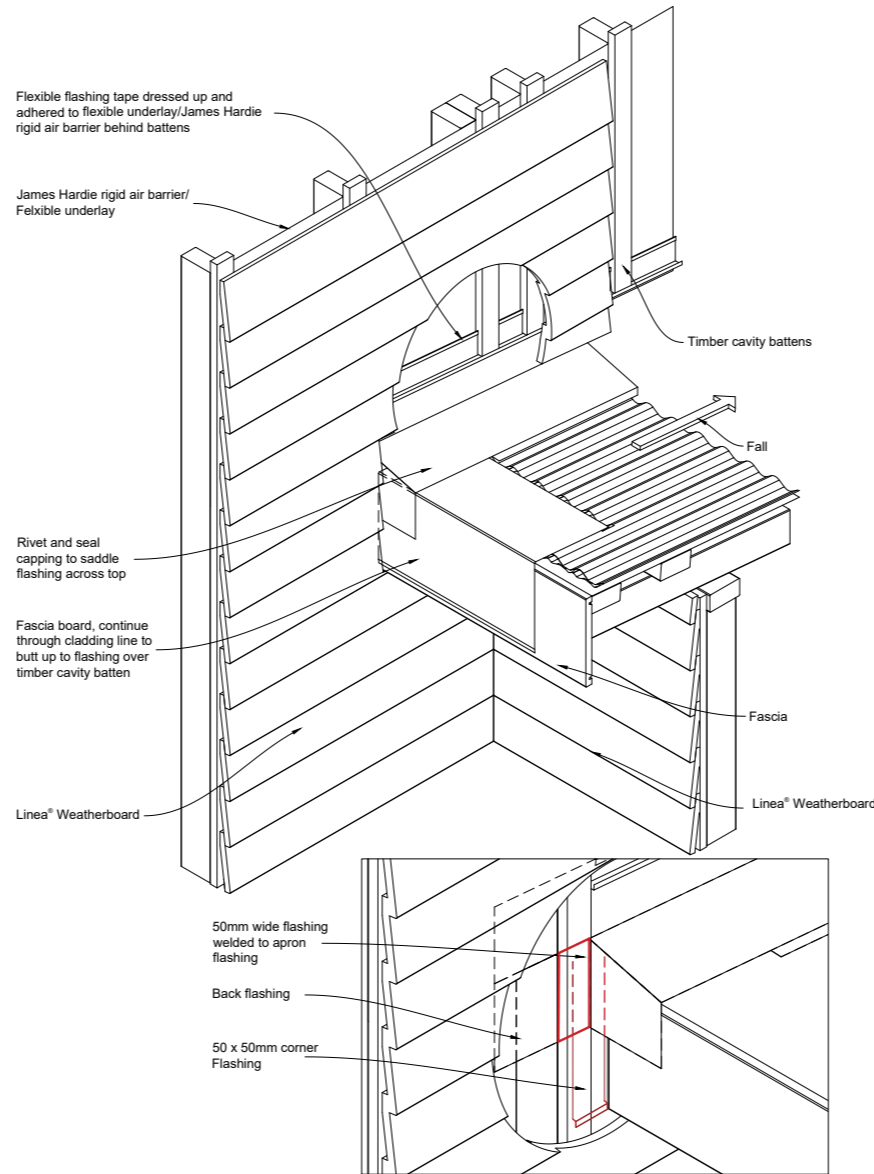
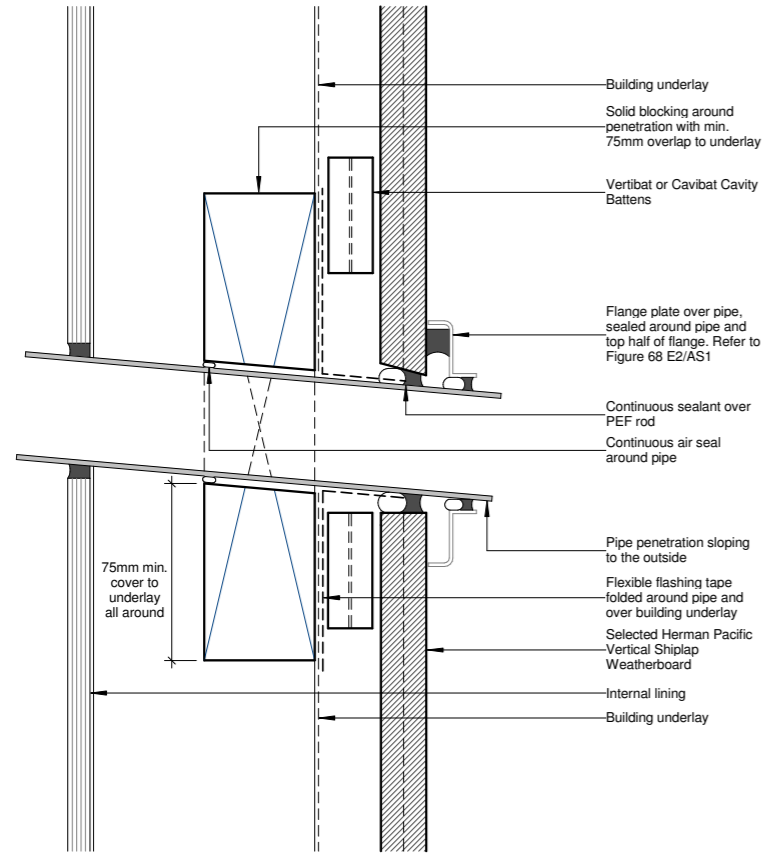
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HC-SHIP-601
 DRAWING
 1 : 2 @ A4 SCALE 04/06/2015 ISSUED DATE

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APPROVED
30/08/2022

WHANGAREI DISTRICT COUNCIL BCA

Notes:
 - All nail fixings pre-drilled minimum 1mm diameter smaller than the nail gauge.
 - All HermanPacific timber products to be pre-coated & cut ends and edges and all fresh cut surfaces double coated and sealed before fixing.
 - All materials and fixtures are to comply with E2/AS1 Clause 2.2
 - For non-hemmed corner flashings, ensure a minimum 75mm cover to Weatherboards beyond the point where BRANZ bulletin 411 compliant Weatherboard lap or rebate combinations terminate at the corner junction. In Extra High Wind Zone and above, the 75mm cover requirement remains and hemmed edges must also be used.
 - Refer to NZBC Acceptable Solution E2/AS1 Table 21 for the separation requirements between CCA treated battens and metal flashings.



n_zr-jhw-tec-fig34.dwg



James Hardie
a smarter way™

James Hardie Weatherboard
CAVITY ONE PIECE APRON FLASHING
FIGURE 34

February 2013
www.jameshardie.co.nz
Scale 1:2

jhl_linea_c_wall_nts-encl.dwg



Linea® Weatherboard
ENCLOSED ROOF TO WALL INTERSECTION

April 2016
www.jameshardie.co.nz
CAD Scale 1:10

FIGURE: 65

Cavity Fix Vertical Shiplap Weatherboard System
Pipe Penetration Detail



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HC-SHIP-801
DRAWING

1 : 2 @ A4
SCALE 04/06/2015
ISSUED DATE



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Job Title
Proposed Home - Gary & Julie Pyle

Project Location
Lot 5 Fantail Lane, Whareora,
Whangarei

Drawn	AP - BP138465
Checked	Kyle Kake_ BP130188
Print Date	1/07/22
Scale @ A3	1:1

Sheet Title
Herpac & James Hardie Details

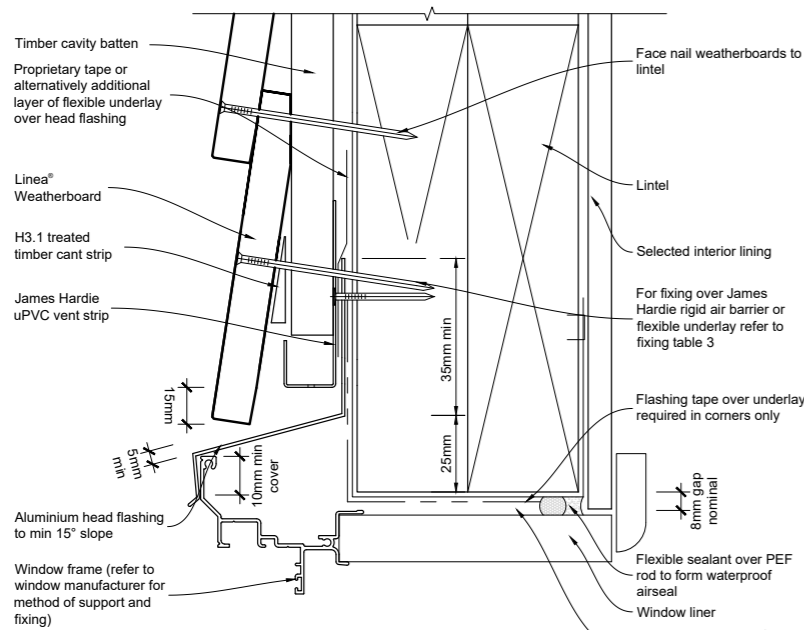
Sheet No.

407

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APPROVED
30/08/2022

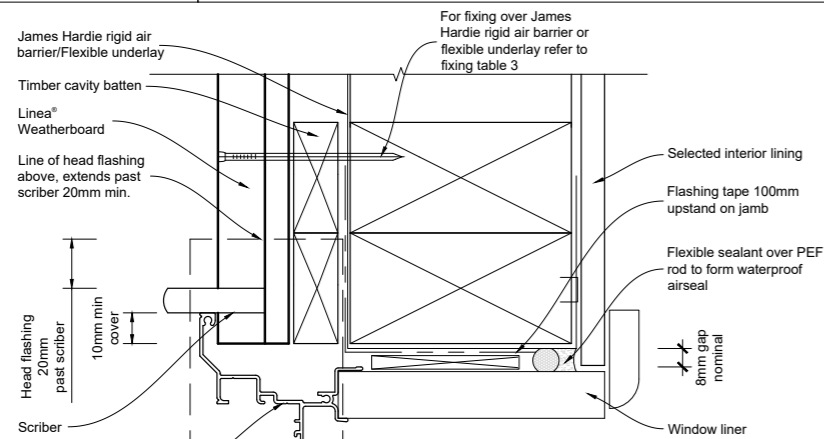
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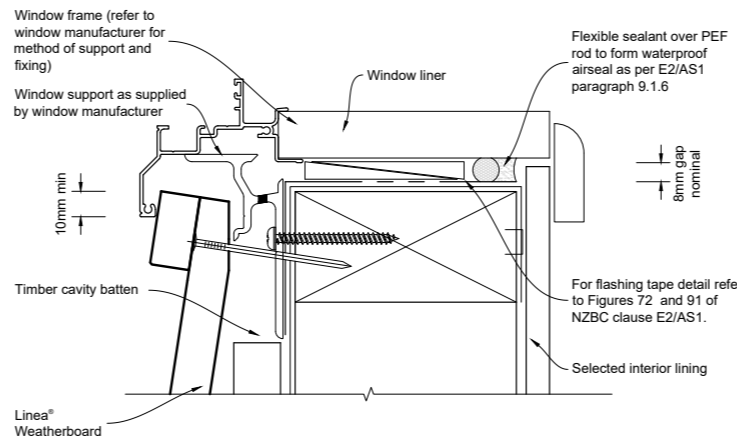
- Note:
- When James Hardie rigid air barrier is used flashing tape to be applied to the entire window opening.
 - Sealant must be installed between head flashing and flashing and trim in VH and EH wind zones and SED projects.
 - Alternatively, the head flashings can be formed with stop ends as per E2/AS1

jhl_linea_c_wind_head-timb.dwg April 2016
James Hardie Linea® Weatherboard
 a smarter way™ TIMBER CAVITY WINDOW AND DOOR HEAD WITHOUT FACINGS
 www.jameshardie.co.nz CAD Scale 1:2
 FIGURE: 43



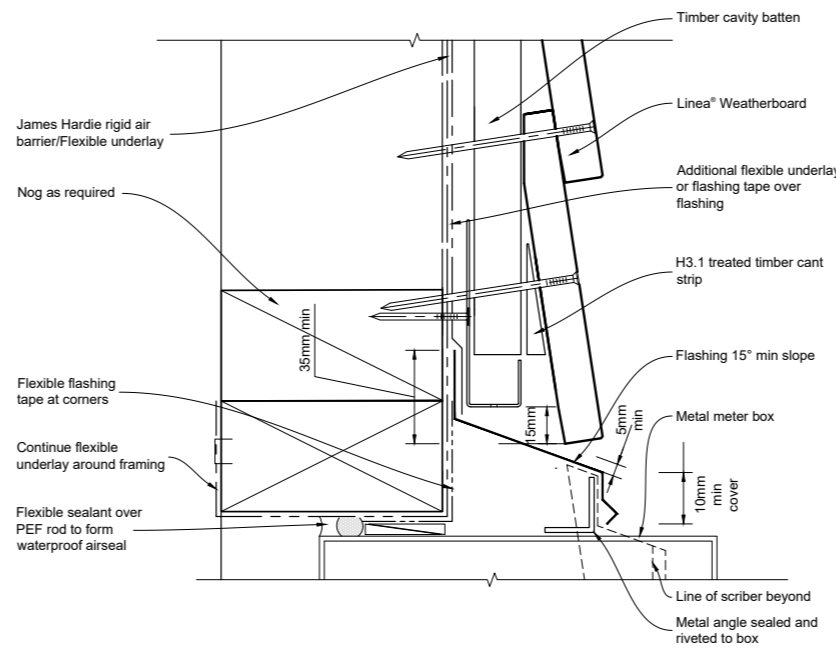
Note: When James Hardie rigid air barrier is used flashing tape to be applied to the entire window opening.

jhl_linea_c_wind_jamb-timb.dwg April 2016
James Hardie Linea® Weatherboard
 a smarter way™ TIMBER CAVITY WINDOW AND DOOR JAMB WITHOUT FACINGS
 www.jameshardie.co.nz CAD Scale 1:2
 FIGURE: 44



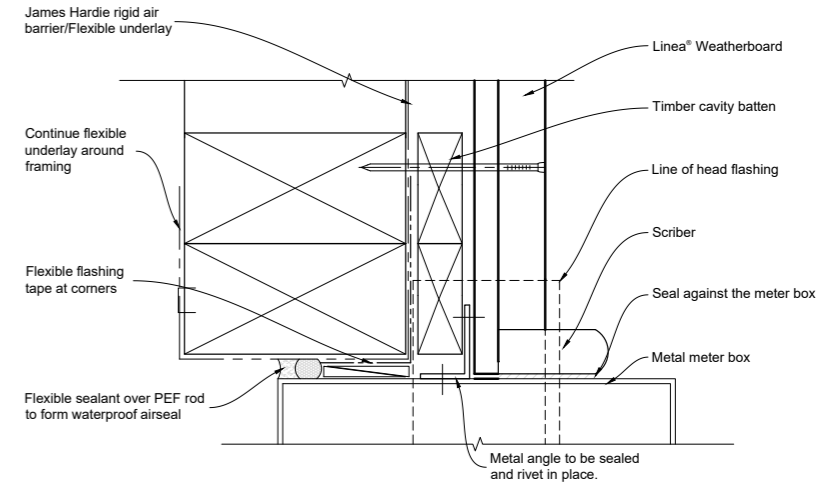
- General notes for materials selection**
1. Flashing materials must be selected based on environmental exposure, refer to NZS 3604 and Table 20 of NZBC clause E2/AS1.
 2. Flexible underlay must comply with acceptable solution E2/AS1.
 3. Flashing tape must have proven compatibility with the selected flexible underlay / James Hardies rigid air barrier and other materials with which it comes into contact.
 4. Sill support bars must comply with EM6, E2/VM1 and B2/AS1
- Refer to the manufacturer or supplier for technical information for these materials.

jhl_linea_c_wind_sill-timb.dwg April 2016
James Hardie Linea® Weatherboard
 a smarter way™ TIMBER CAVITY WINDOW AND DOOR SILL WITHOUT FACINGS
 www.jameshardie.co.nz CAD Scale 1:2
 FIGURE: 42



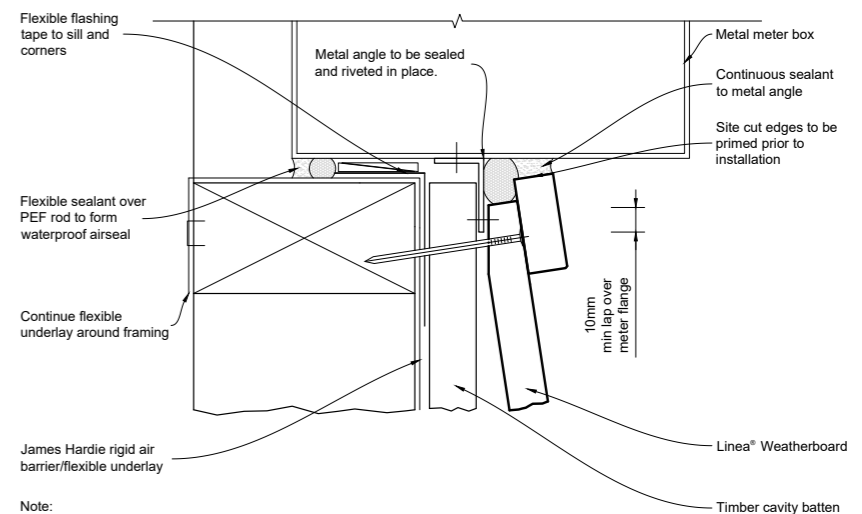
Note: When James Hardie rigid air barrier is used flashing tape to be applied to the entire opening.

jhl_linea_c_pntr_mtrb-timb.dwg April 2016
James Hardie Linea® Weatherboard
 a smarter way™ TIMBER CAVITY METER BOX AT HEAD
 www.jameshardie.co.nz CAD Scale 1:2
 FIGURE: 49



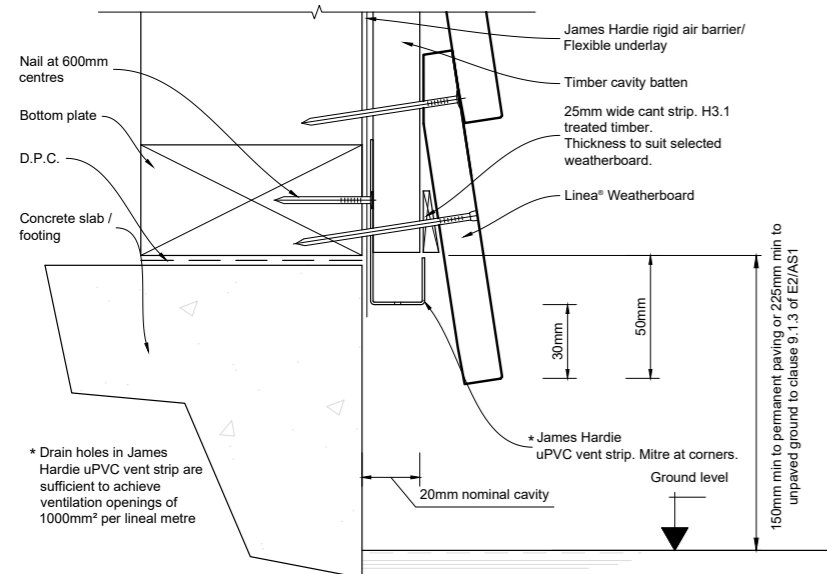
Note: When James Hardie rigid air barrier is used flashing tape to be applied to the entire opening.

jhl_linea_c_junc_flash-mtrb.dwg
James Hardie Linea® Weatherboard
 a smarter way™ TIMBER CAVITY METER BOX HEAD FLASHING AT JAMB
 www.jameshardie.co.nz CAD Scale 1:2
 FIGURE: 42



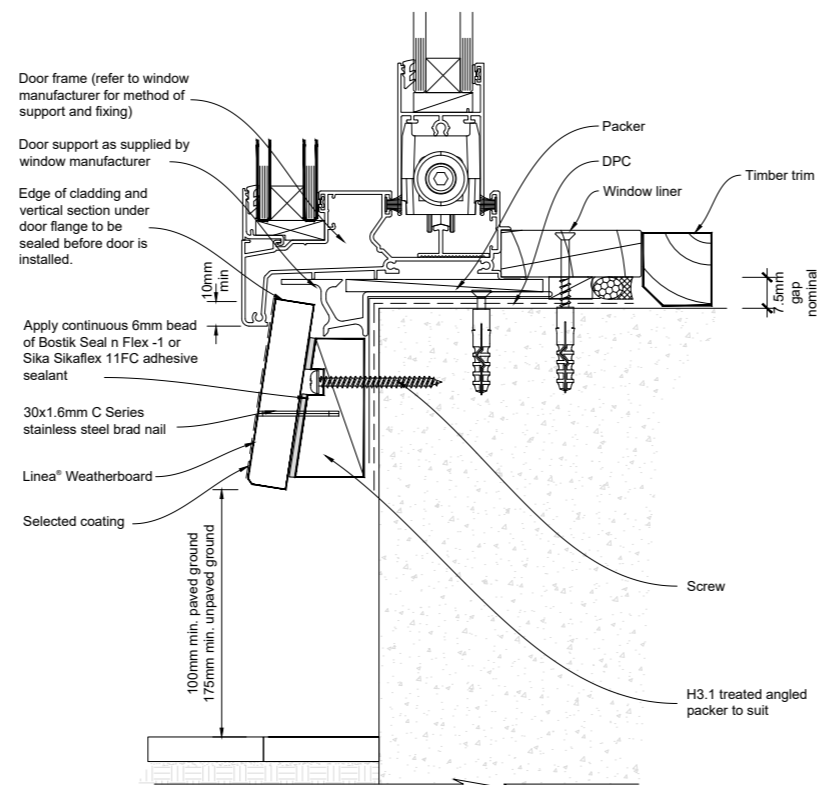
Note: When James Hardie rigid air barrier is used flashing tape to be applied to the entire opening.

jhl_linea_c_wind_sill-mtrb.dwg
James Hardie Linea® Weatherboard
 a smarter way™ TIMBER CAVITY METER BOX AT SILL
 www.jameshardie.co.nz CAD Scale 1:2
 FIGURE: 49



jhl_linea_c_strc_four-timb.dwg

James Hardie a smarter way™
Linea® Weatherboard
 TIMBER CAVITY FOUNDATION



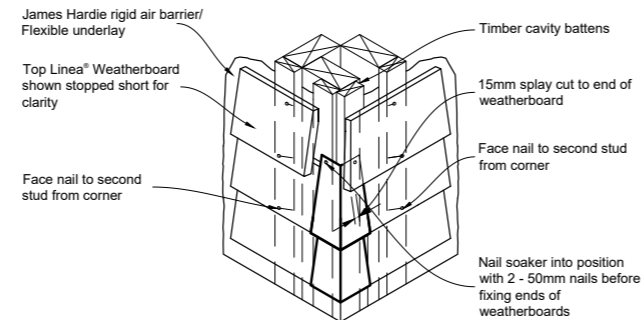
Refer to the manufacturer or supplier for technical information for these materials.

General notes for materials selection

1. Flashing materials must be selected based on environmental exposure, refer to NZS 3604 and Table 20 of the NZBC E2/AS1.
2. Building underlay must comply with acceptable solution E2/AS1.
3. Flashing tape must have proven compatibility with the selected flexible underlay and other materials with which it comes into contact.
4. Linea® Weatherboard to have sealed butt joint over batten at each corner of opening.

jhl_linea_c_door_sill-supp.dwg

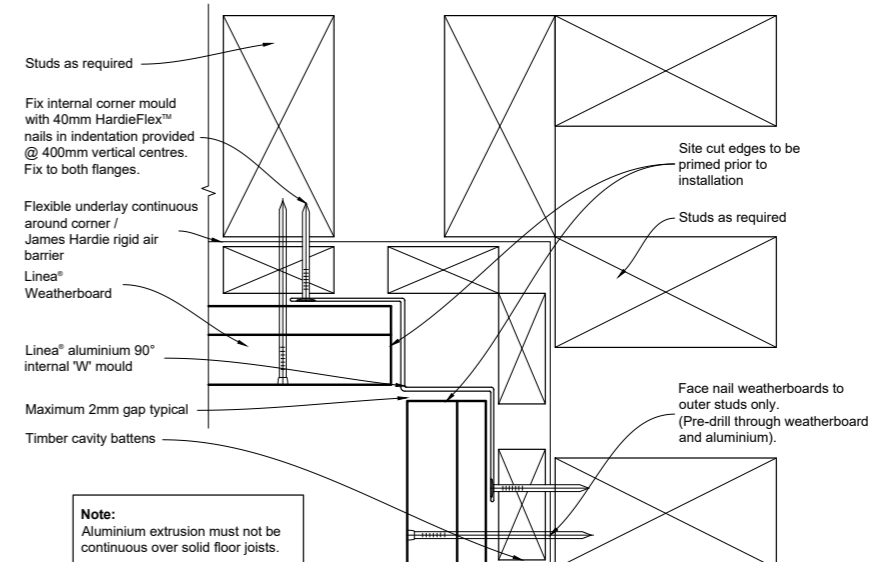
James Hardie a smarter way™
Linea® Weatherboard
 DOOR SILL SUPPORT DETAIL



Soaker material	Nail material
Copper	Copper or phosphor bronze
Aluminium	Hot dip galvanised
Stainless steel	Stainless steel

jhl_linea_c_junc_corn-sokr.dwg

James Hardie a smarter way™
Linea® Weatherboard
 TIMBER CAVITY EXTERNAL CORNER SOAKER

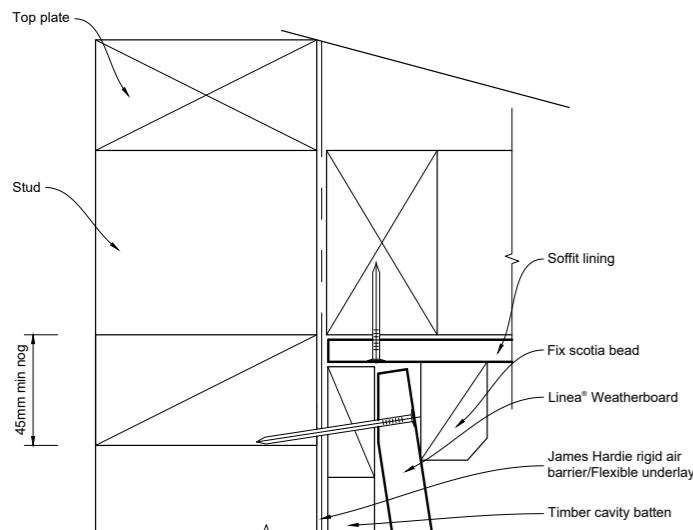


jhl_linea_c_mold_corn-90.dwg

James Hardie a smarter way™
Linea® Weatherboard
 TIMBER CAVITY INTERNAL 90° ALUMINIUM 'W' MOULD CORNER

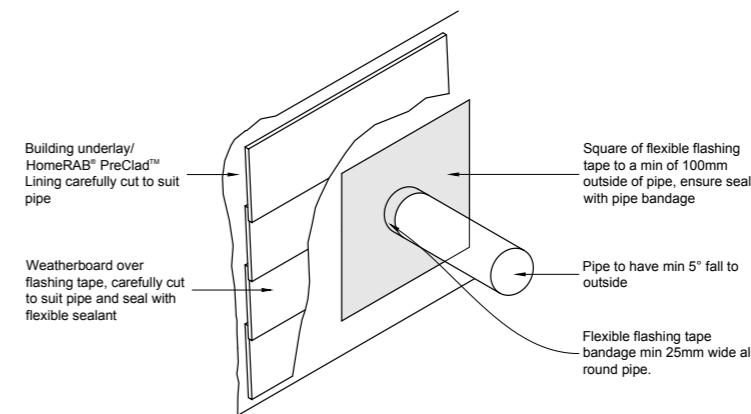
April 2016
 www.jameshardie.co.nz
 CAD Scale 1:2

FIGURE: 36



jhl_linea_c_junc_sffit-timb.dwg

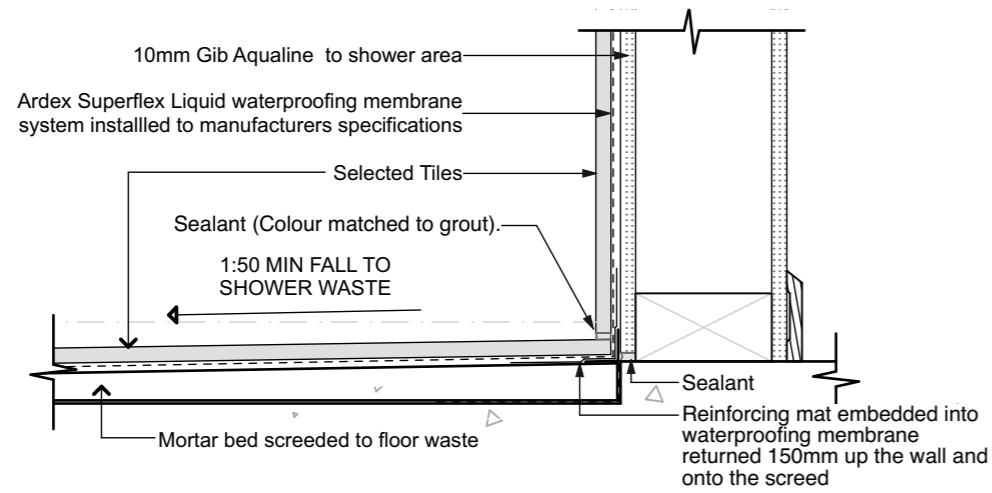
James Hardie a smarter way™
Linea® Weatherboard
 TIMBER CAVITY SOFFIT JUNCTION



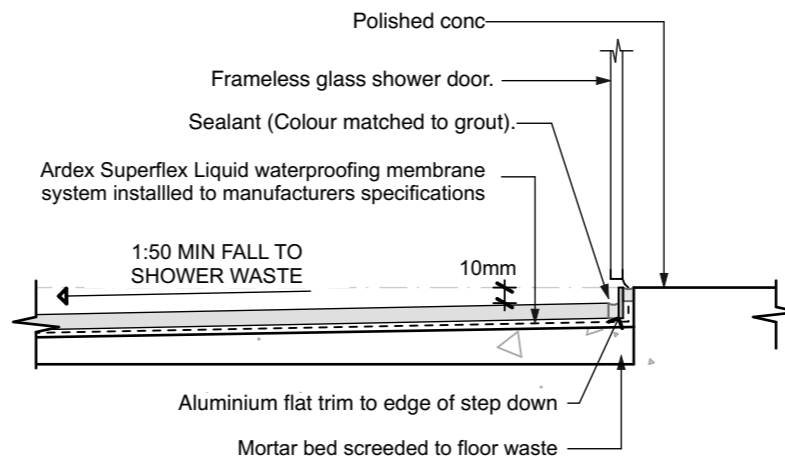
n_zr-jhw-tec-fig33.dwg

James Hardie a smarter way™
James Hardie Weatherboard
 CAVITY PIPE PENETRATION
 FIGURE 33

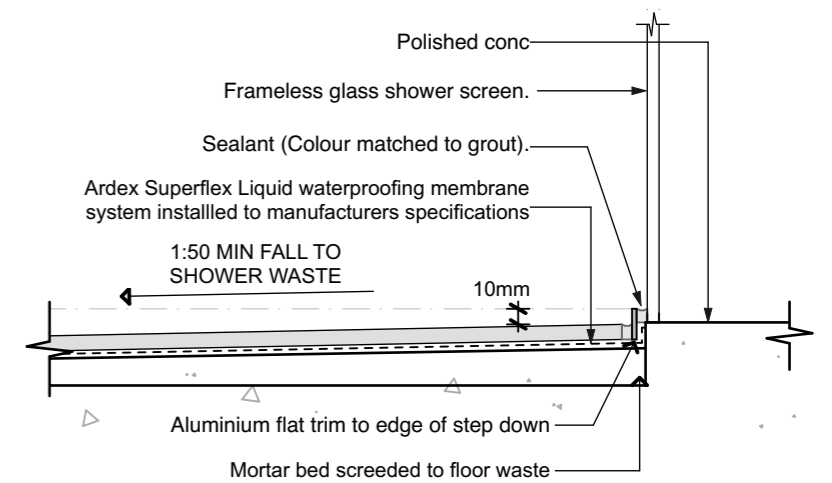
February 2013
 www.jameshardie.co.nz
 Scale 1:10



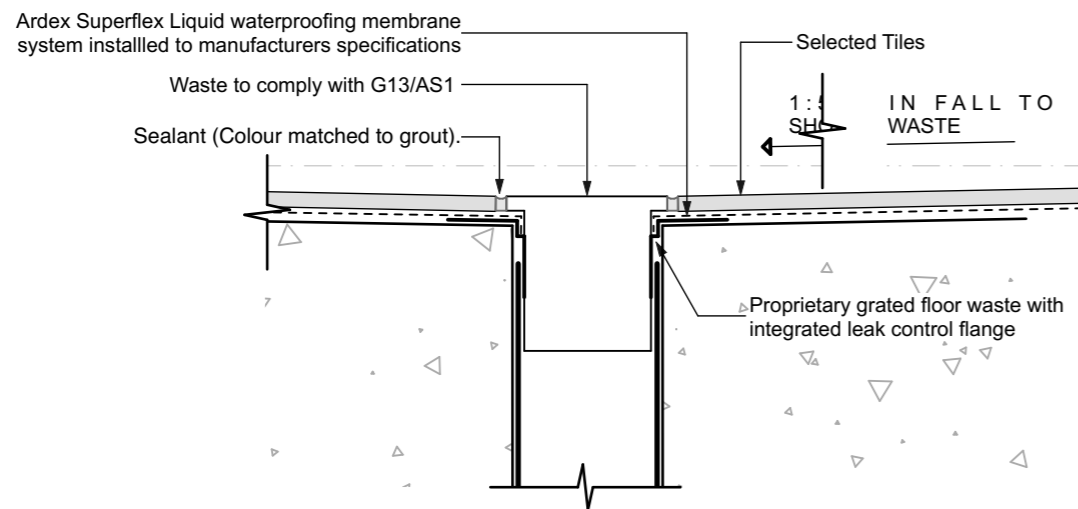
TYPICAL WATERPROOFING JUNCTION AT SHOWER WALL/FLOOR



TYPICAL WATERPROOFING JUNCTION AT SHOWER DOOR THRESHOLD



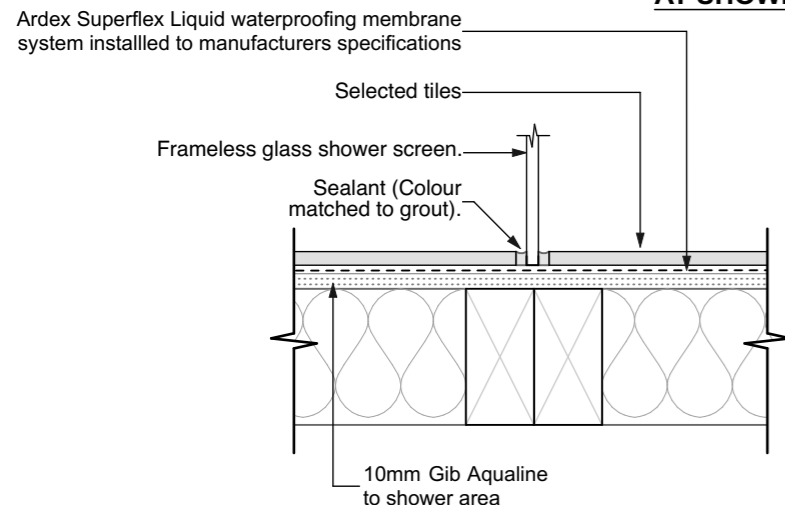
TYPICAL WATERPROOFING JUNCTION AT SHOWER SCREEN THRESHOLD



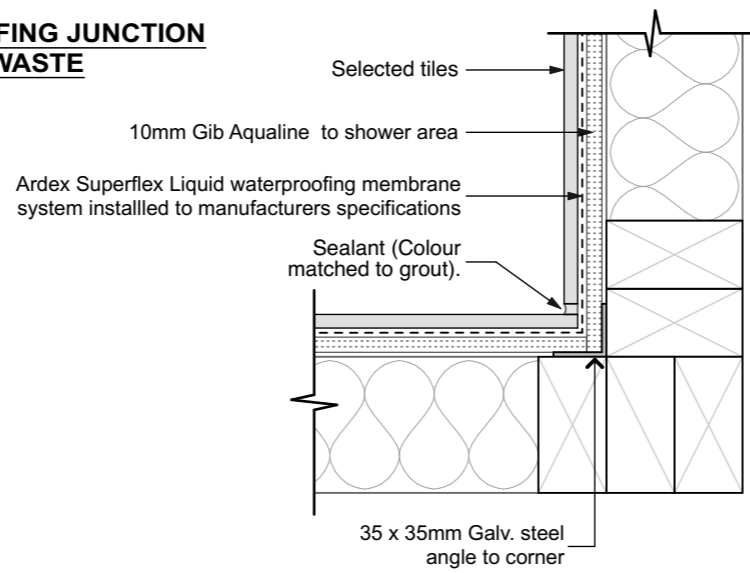
TYPICAL WATERPROOFING JUNCTION AT SHOWER WASTE

NOTES:

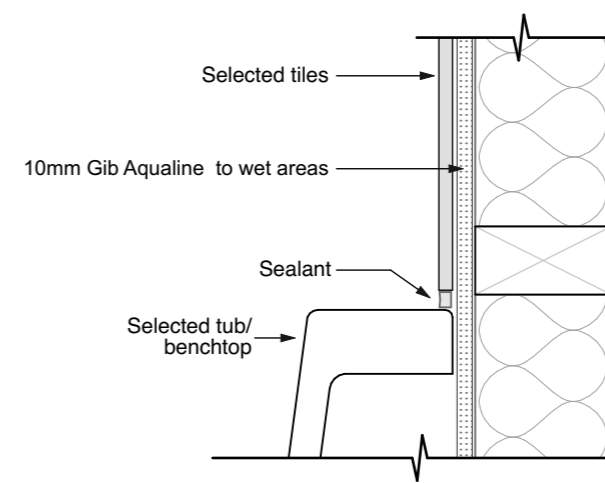
- WATERPROOFING MEMBRANE TO EXTEND 1.5M MIN RADIUS FROM SHOWER HEAD
- When enclosures, such as walls, screens, doors or curtains are used they shall be continuous from floor level or top of upstand to 1800 mm minimum above floor level and not less than 300 mm above the shower rose
- Where the shower floor has no upstand or where a wall, screen, door or curtain is omitted, the floor shall have a fall of no less than 1:50 towards the floor waste. The fall shall apply to the floor area within a radius of 1500 mm taken from a point vertically below the shower rose, or from any wall within that radius



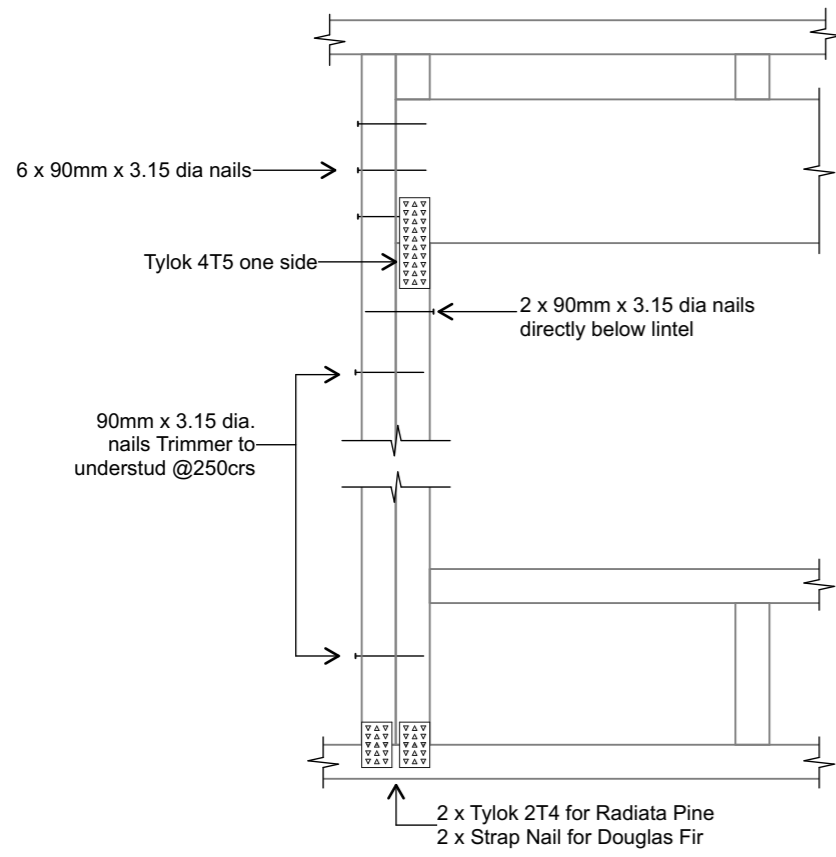
TYPICAL WATERPROOFING JUNCTION AT SHOWER SCREEN WALL JUNCTION



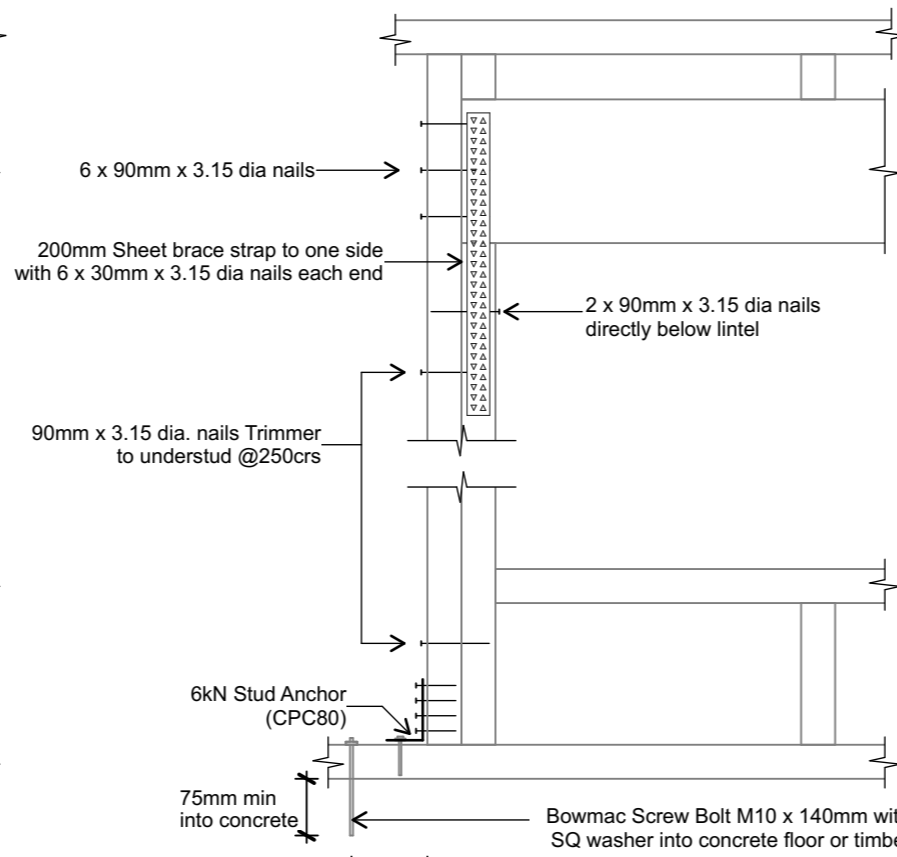
TYPICAL WATERPROOFING JUNCTION AT SHOWER WALL CORNER



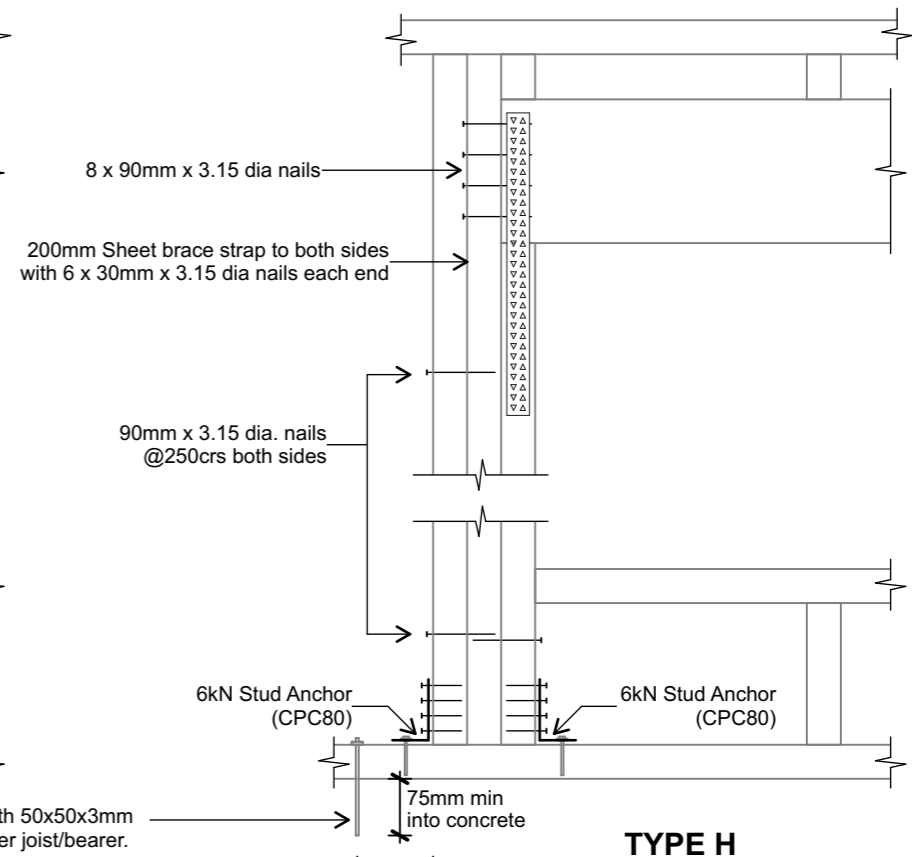
TYPICAL SPLASHBACK WATERPROOFING



TYPE F
4.0 kN

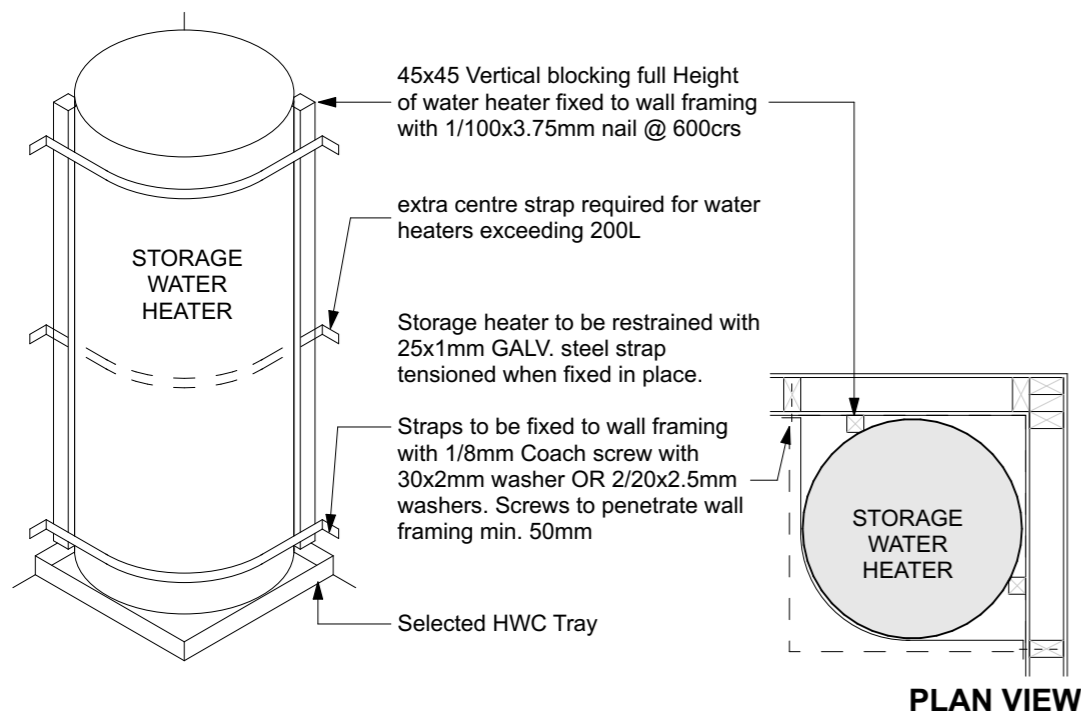


TYPE G
7.5 kN



TYPE H
13.5 kN

NOTE: Refer also 'Mitek Structural Fixings On-site Guide for BC Compliance' for alternative fixing options.



PLAN VIEW

D02 HWC Detail
Scale 1:20



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

Job Title
Proposed Home - Gary & Julie Pyle

Project Location
Lot 5 Fantail Lane, Whareora,
Whangarei

Drawn	AP - BP138465
Checked	Kyle Kake_ BP130188
Print Date	1/07/22
Scale @ A3	1:10, 1:20

Sheet Title
Lintel Fixings

Sheet No.

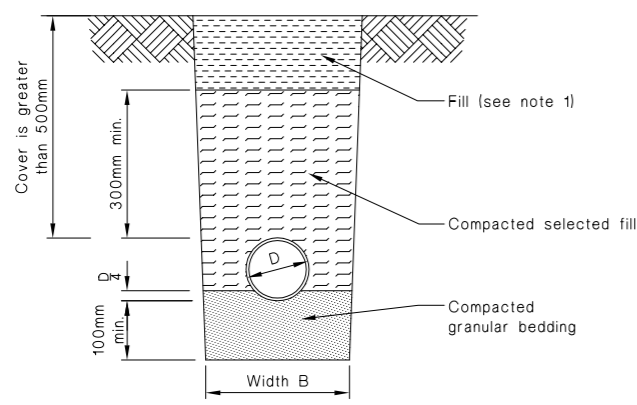
411

BC2201042
APPROVED
30/08/2022

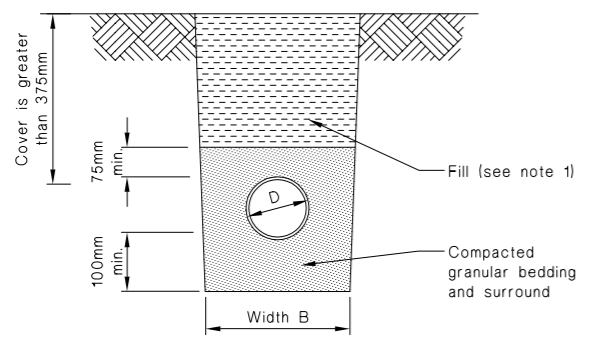
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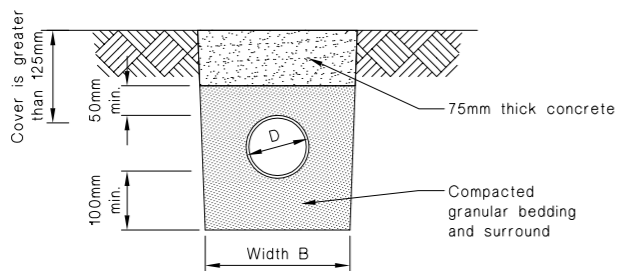
Figure 13: Bedding and Backfilling
Paragraphs 3.9.2, 3.9.4 and 3.9.5



(a) Cover greater than 500 mm
Bedding type 'B' of NZS 4452



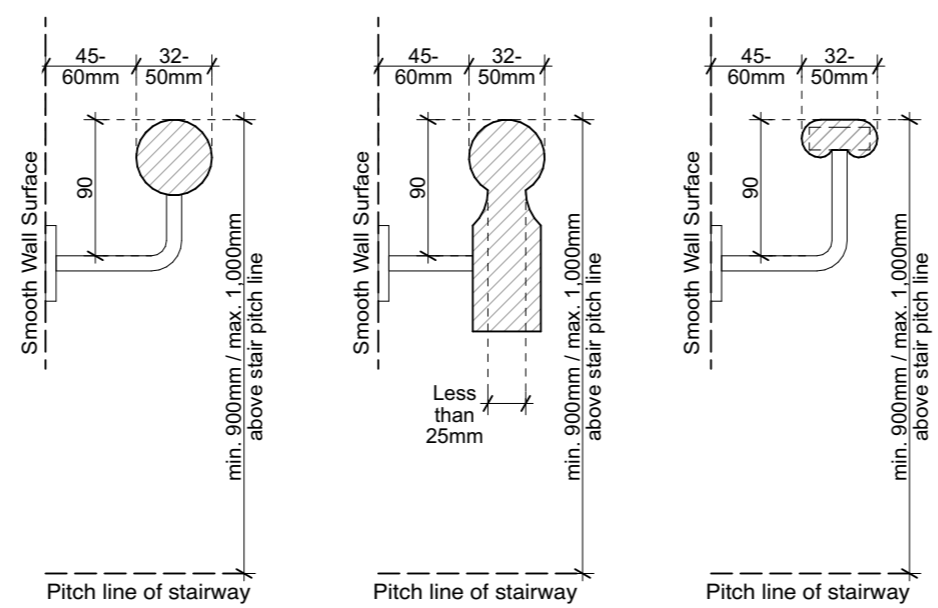
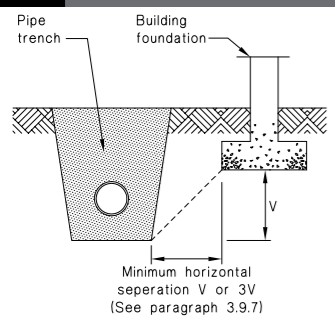
(b) Cover greater than 375 mm
Bedding type 'D' of NZS 4452



(c) Cover greater than 125 mm

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

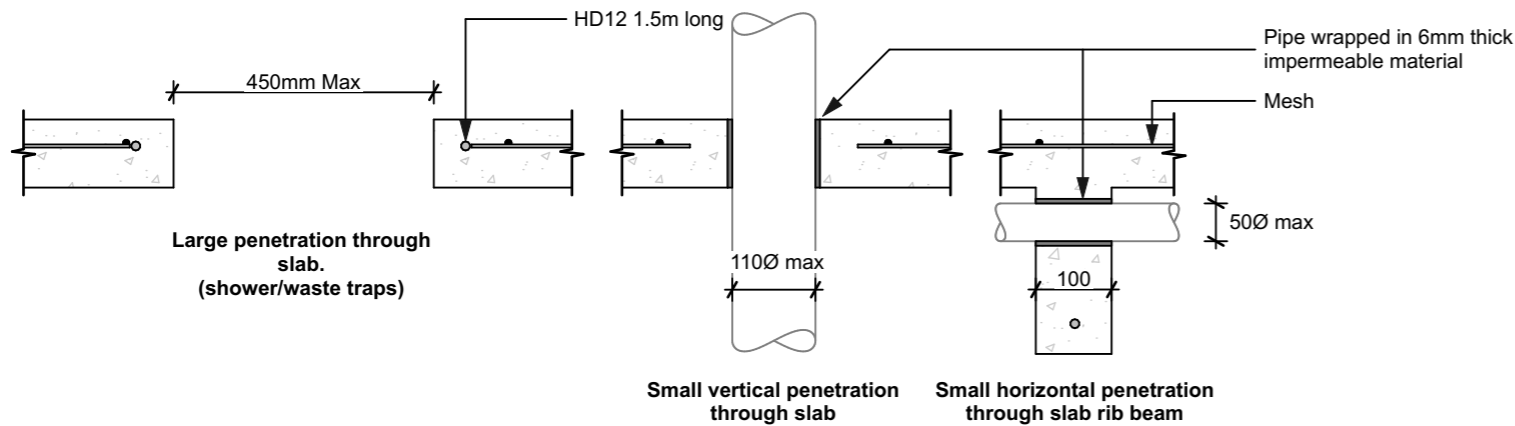
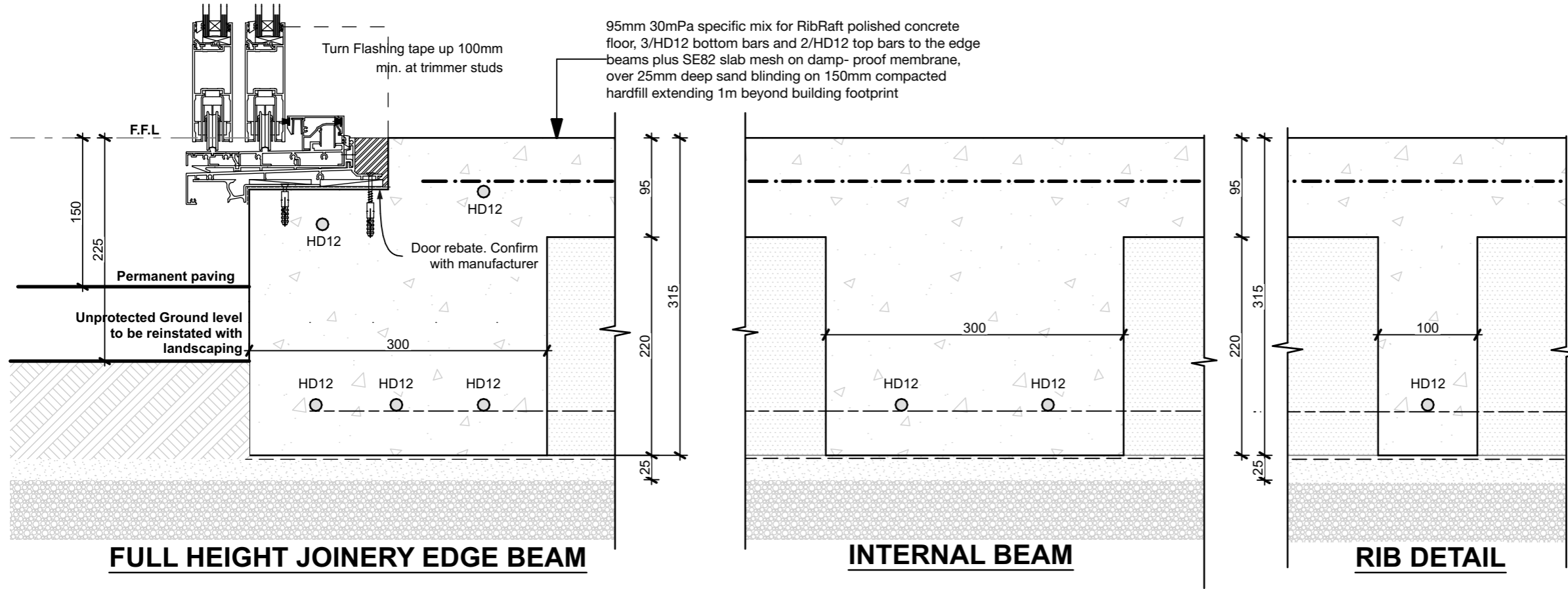
Figure 14: Relationship of Pipe Trench to Building Foundation
Paragraph 3.9.7



Private/Common stairways handrail required on one side only

1 Stairway Handrail Details
Scale 1:5

BC2201042
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30/08/2022
WHANGAREI DISTRICT COUNCIL BCA



Engpro

This drawing is in accordance with our calculations where applicable

Approved: *[Signature]*
Max Haag CPEng 249215


MASON STREET
architectural drafting

Kyle Kake

027 567 8808

kyle@masonstreet.co.nz

www.masonstreet.co.nz

Job Title

Proposed Home - Gary & Julie Pyle

Project Location

Lot 5 Fantail Lane, Whareora, Whangarei

Drawn

AP - BP138465

Checked

Kyle Kake_ BP130188

Print Date

1/07/22

Scale @ A3

1:5, 1:10

Sheet Title

Ribraft Details

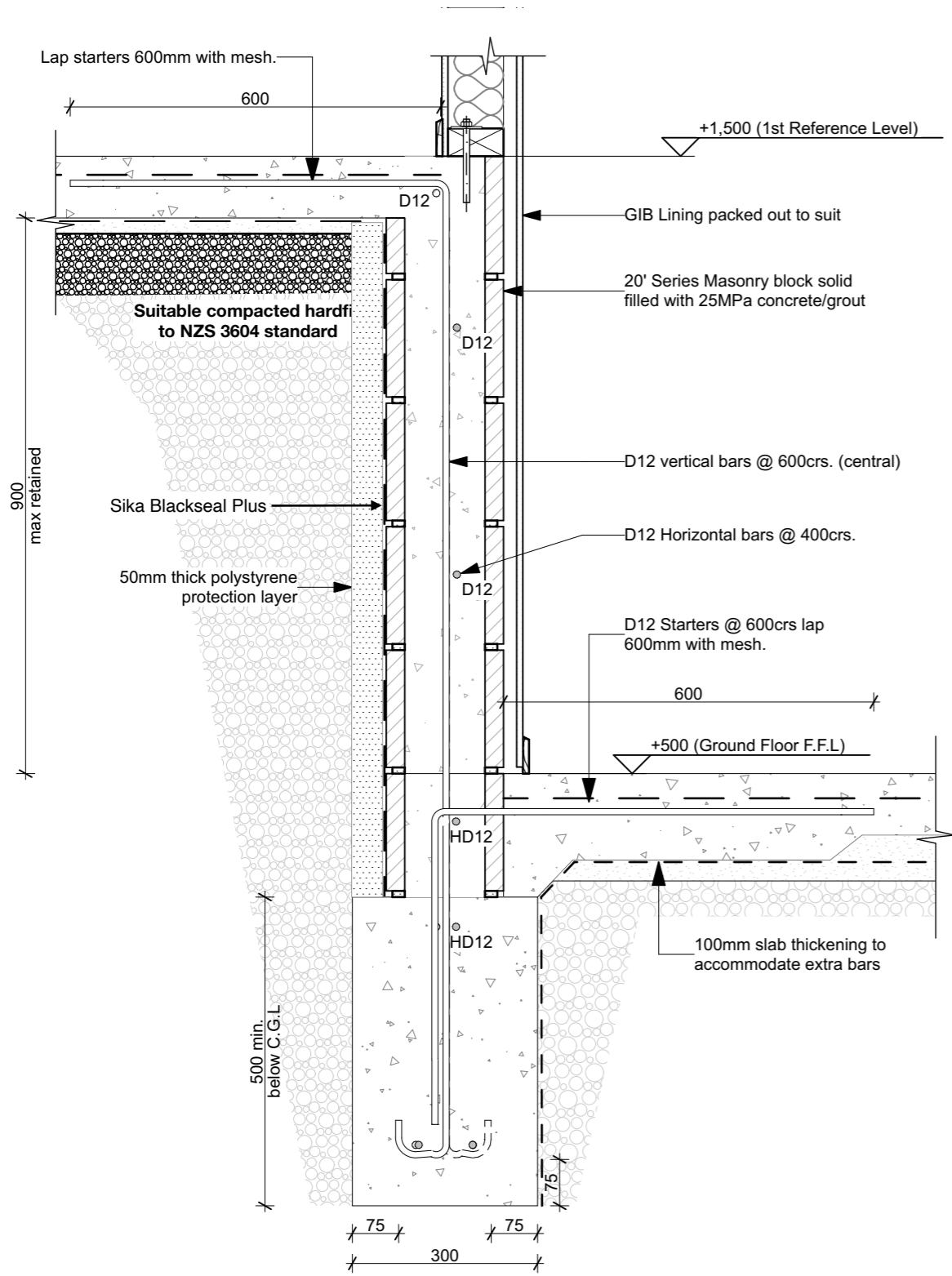
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501

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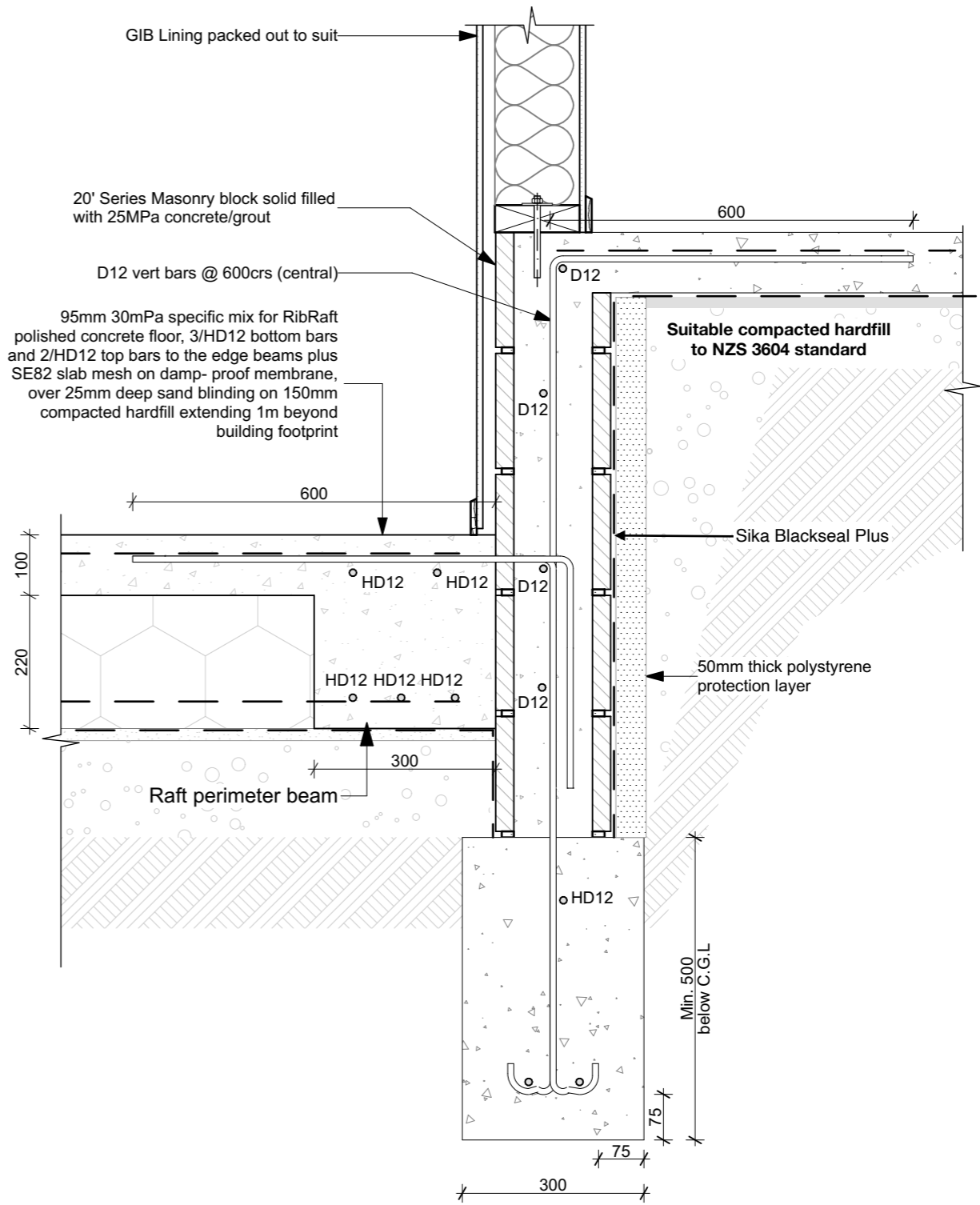
BC2201042
APPROVED
30/08/2022

WHANGAREI DISTRICT COUNCIL BCA

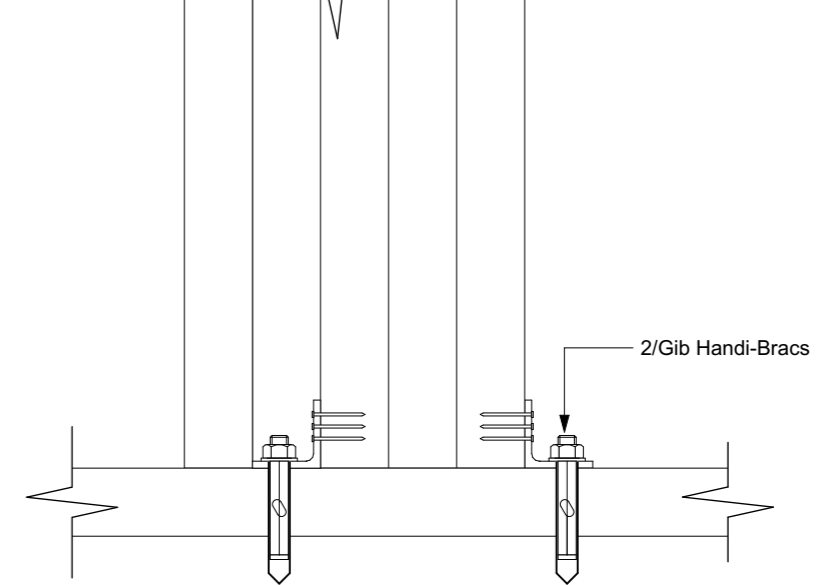
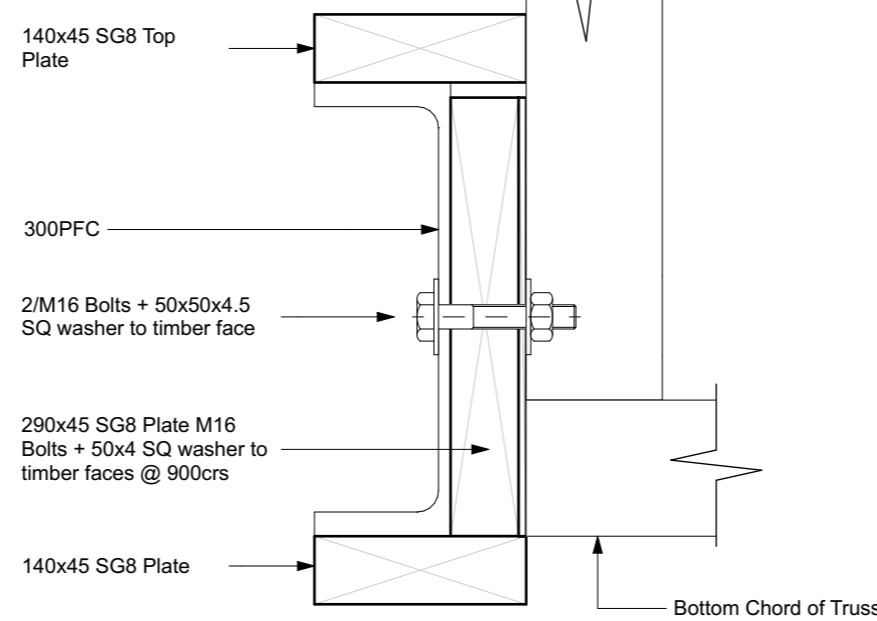
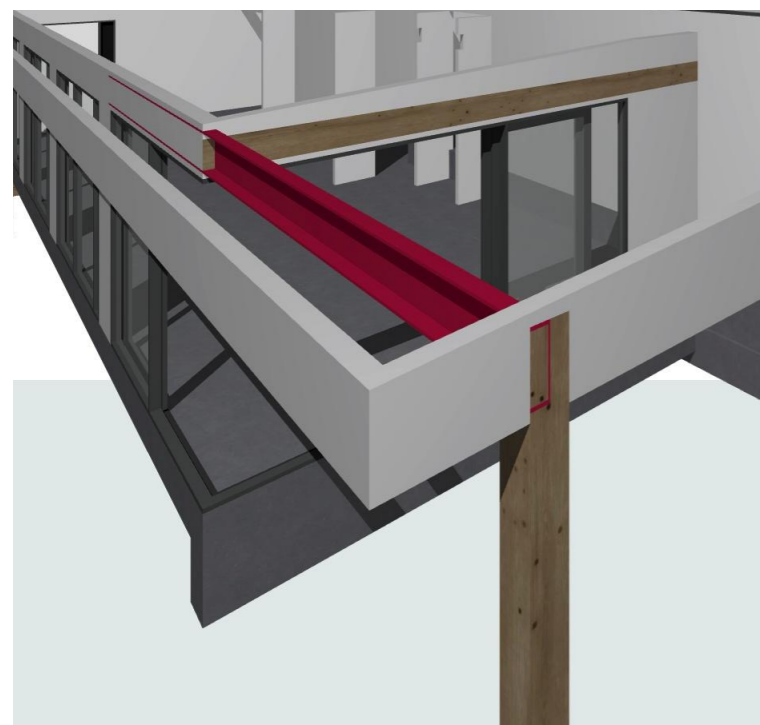
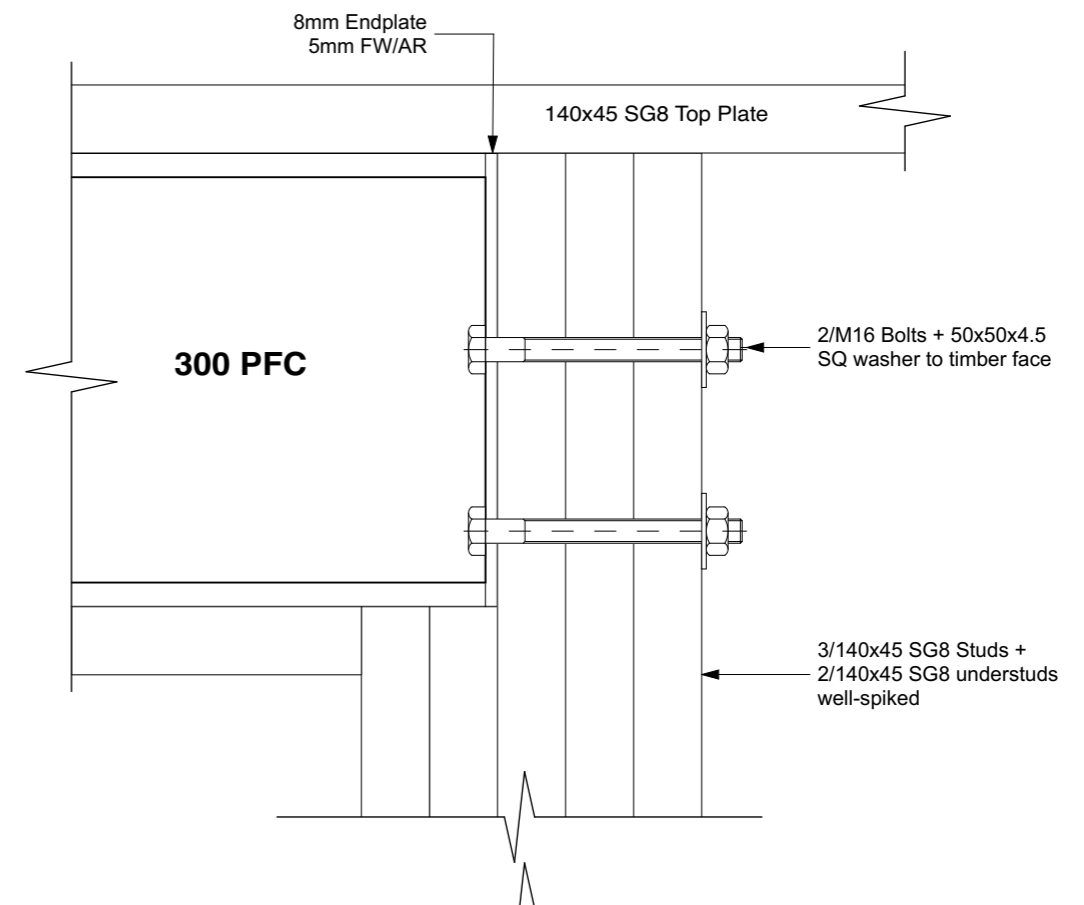
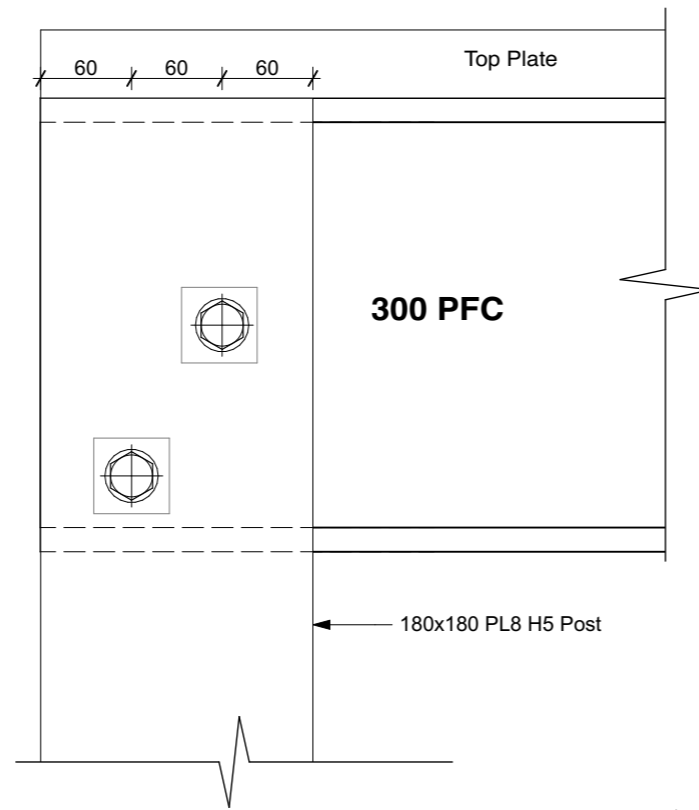
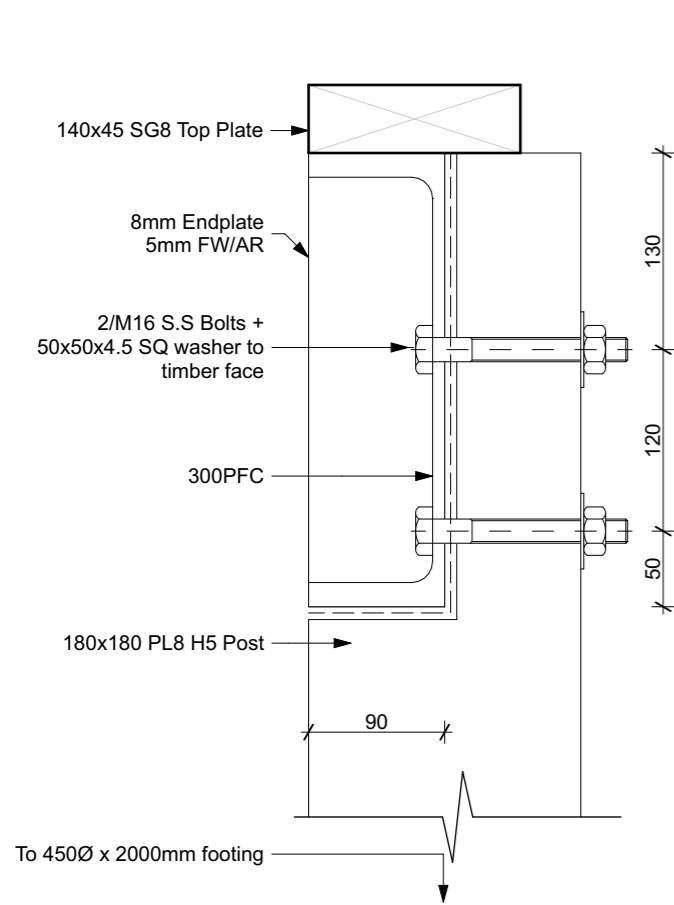


1 Foundation Step Detail
201 Scale 1:10

Engpro
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Max Haag CPEng 249215



2 RibRaft to Slab Footing Detail
203 Scale 1:10



1 3D Structure
NTS

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Approved: *[Signature]*
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2 Alfresco Beam/Lintel over W14
201 Scale 1:5

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Drawn	AP - BP138465
Checked	Kyle Kake_ BP130188
Print Date	1/07/22
Scale @ A3	1:100, 1:5

Sheet Title
Beam to Post

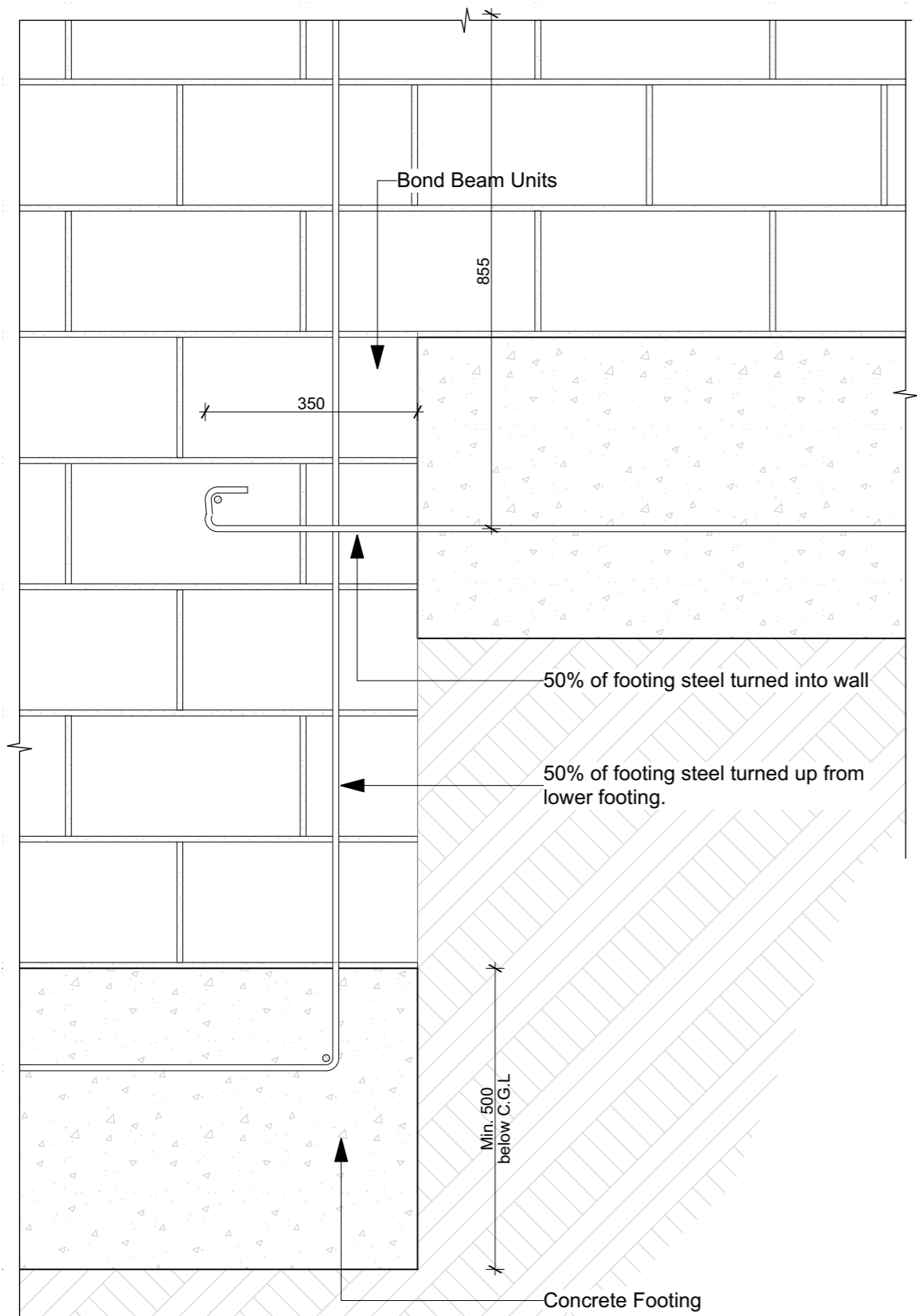
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503

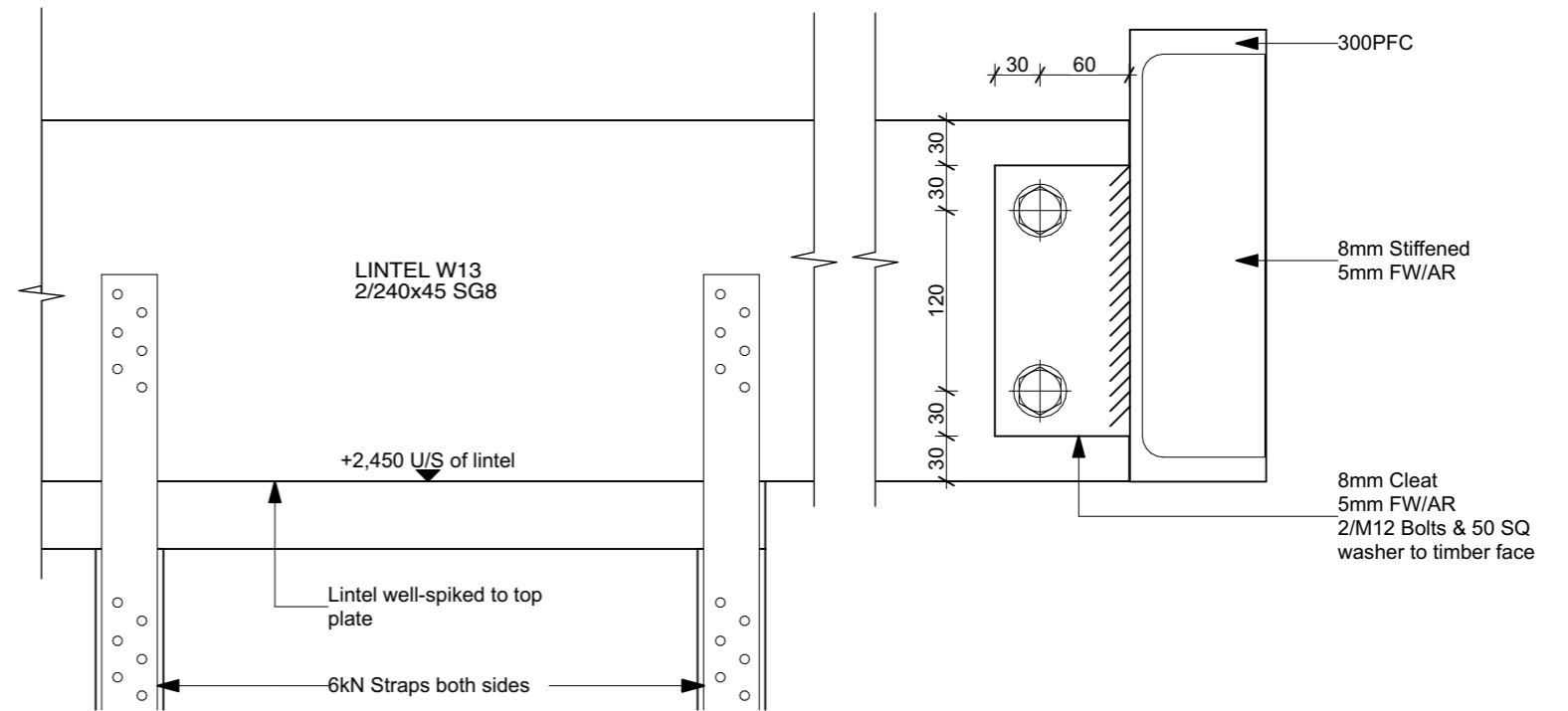
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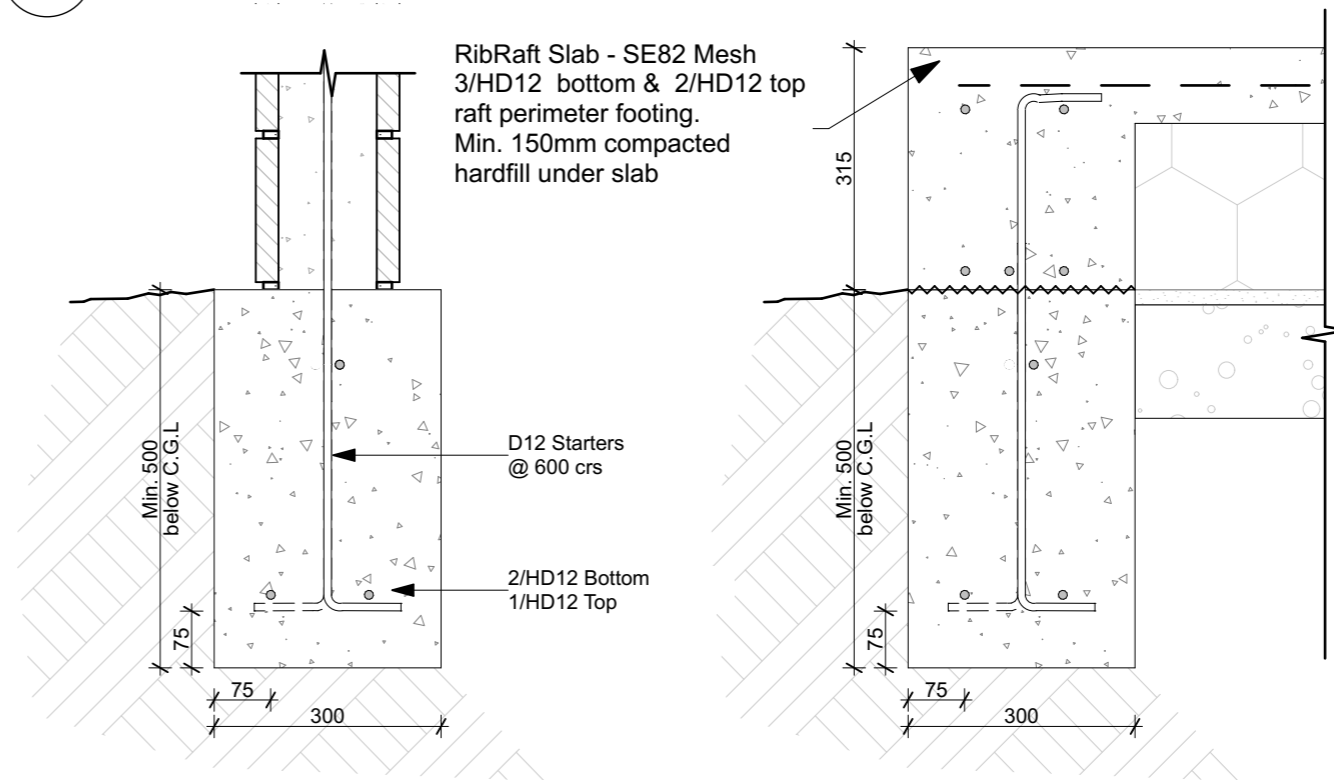
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1 Stepped Footing Detail
Scale 1:10

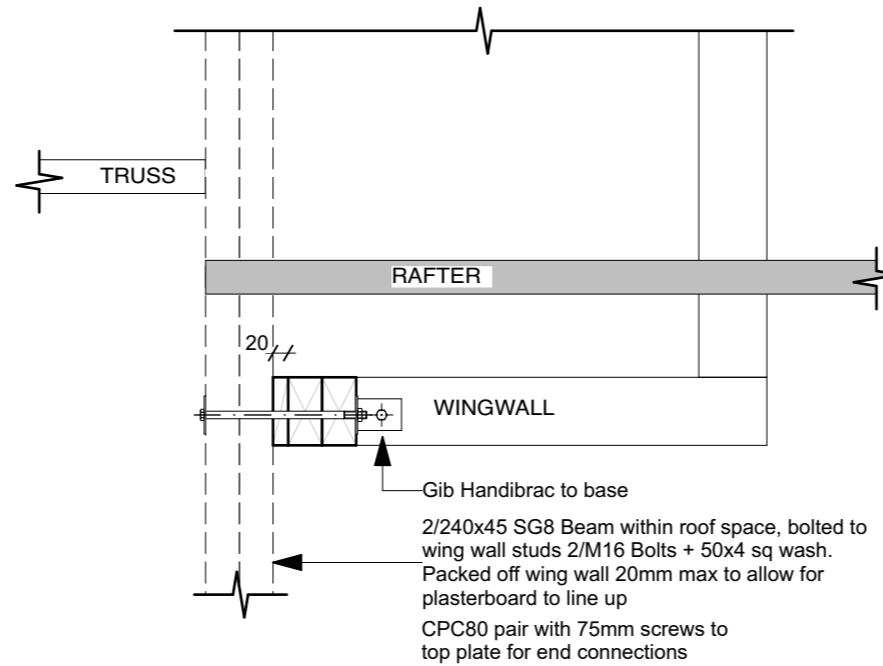
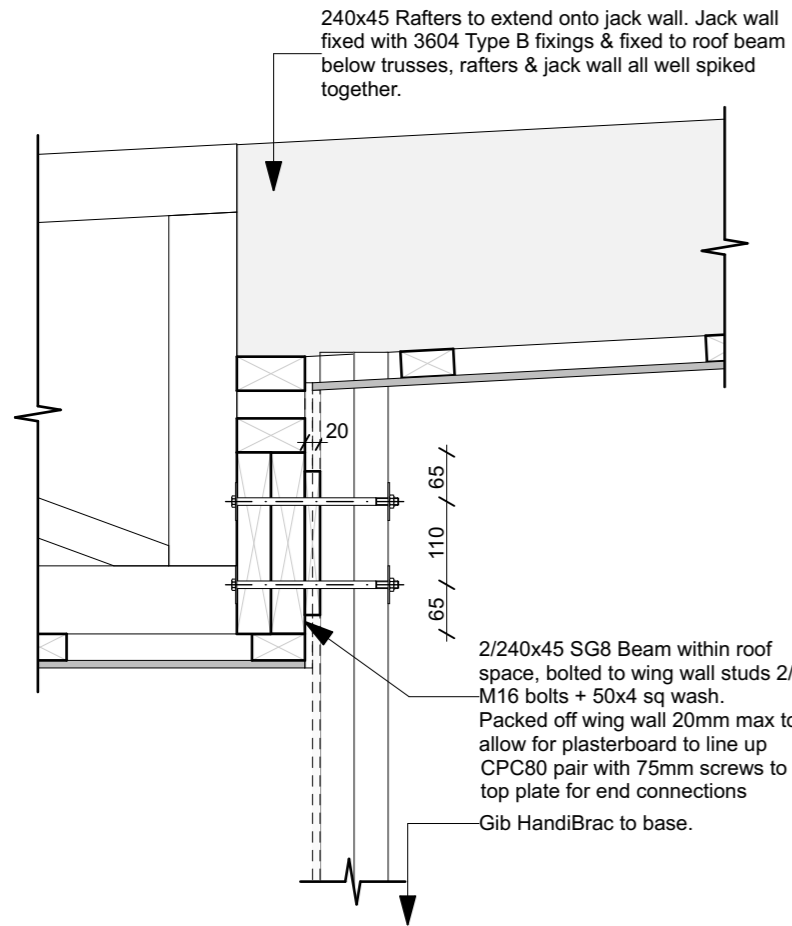


2 Lintel Over W13
106 Scale 1:5



3 Strip Footing Detail
Scale 1:10

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Max Haag CPEng 249215



PLAN VIEW

3 Entry Beam
Scale 1:10

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Approved: *[Signature]*
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Print Date	1/07/22
Scale @ A3	1:5, 1:10

Sheet Title
Entry Beam Detail

Sheet No.

505

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Timber Retaining Poles

Front North Wall

Height	Pole (HD)	Footing	Depth	Spacing	Rake
1.3m	275 SED H5	600Ø	3.6m	1.2m	5°
1.0m	225 SED H5	450Ø	3.6m	1.2m	5°
0.6m	175 SED H5	450Ø	3.2m	1.2m	5°

Side Wall Above Driveway & Wall at North-West Boundary

Height	Pole (HD)	Footing	Depth	Spacing	Rake
1.5m	200 SED H5	450Ø	2.3m	1.2m	5°
1.0m	150 SED H5	300Ø	1.5m	1.2m	5°

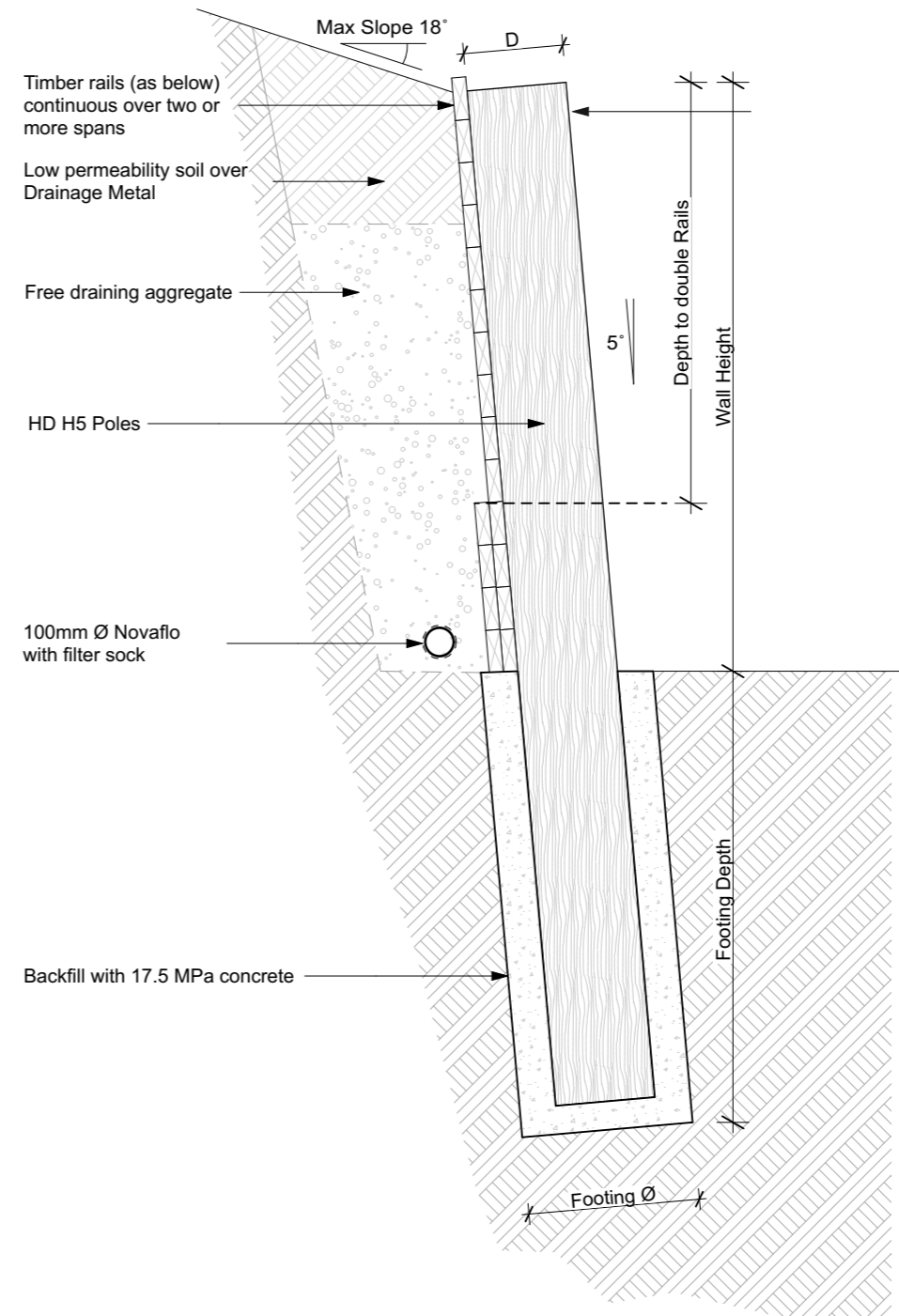
All Rails min. 50mm thick H4 No.1 framing. SG8 also suitable.
Double rails from 0.8m below top of wall or 1.2m for SG8 rails.

Soldier Pile Wall

Adopt 250SED HD H5 Poles in 450Ø x 4000mm Footing @ 1200crs
OR
Adopt 300SED HD H5 Poles in 600Ø x 4600mm Footing @ 1700crs

Refer to Engineers report for extent of wall.
Confirm with ENG prior to construction

All retaining greater than 1.0m to be protected via a barrier complying with NZBC F4.3.1



1 Retaining Wall Detail
Scale 1:25

Engpro
This drawing is in accordance with our calculations where applicable.
Approved: *[Signature]*
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Drawn	AP - BP138465
Checked	Kyle Kake_ BP130188
Print Date	1/07/22
Scale @ A3	1:25

Sheet Title
Retaining & Soldier Pile Wall Details

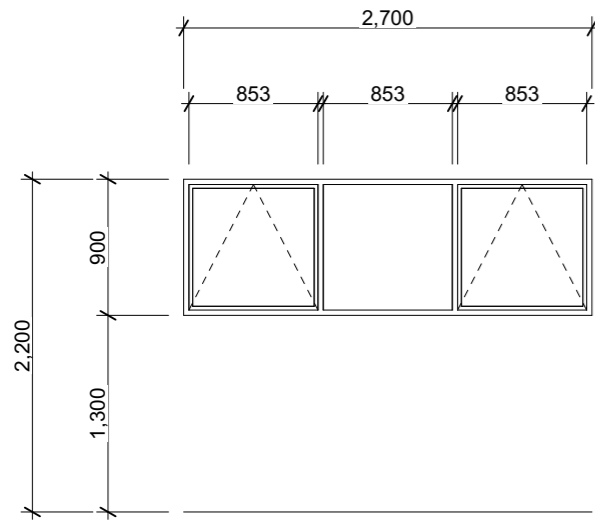
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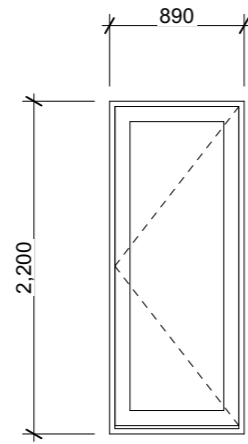
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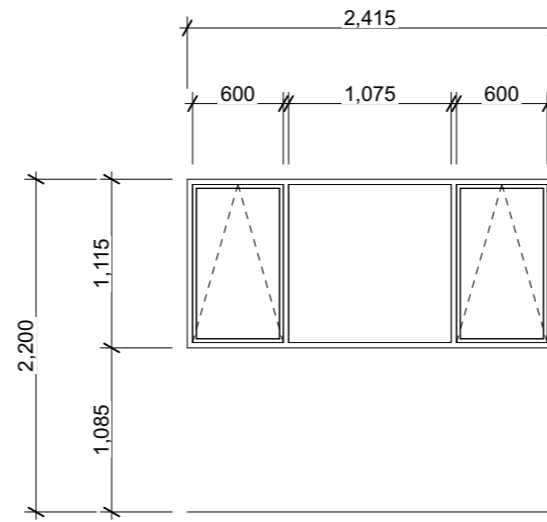
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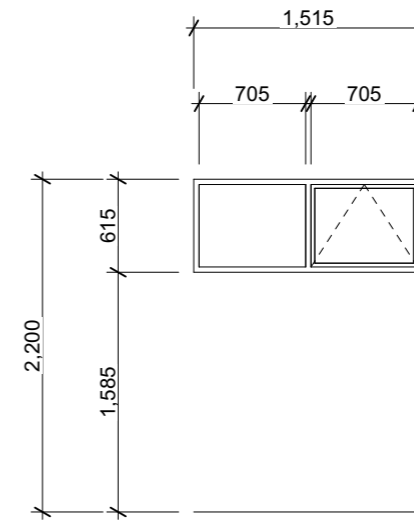
W02



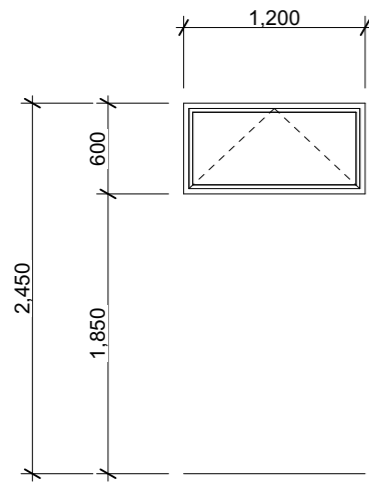
W03
Safety



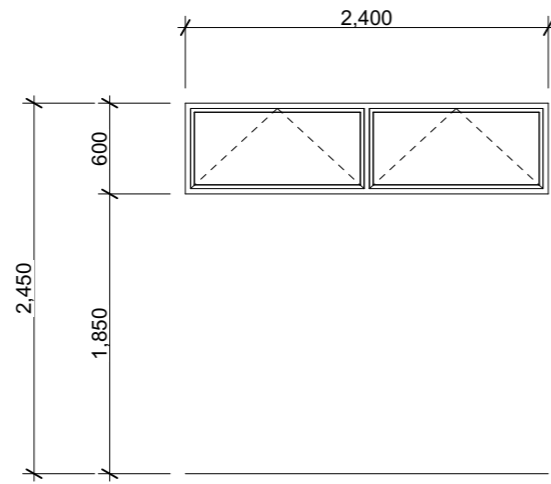
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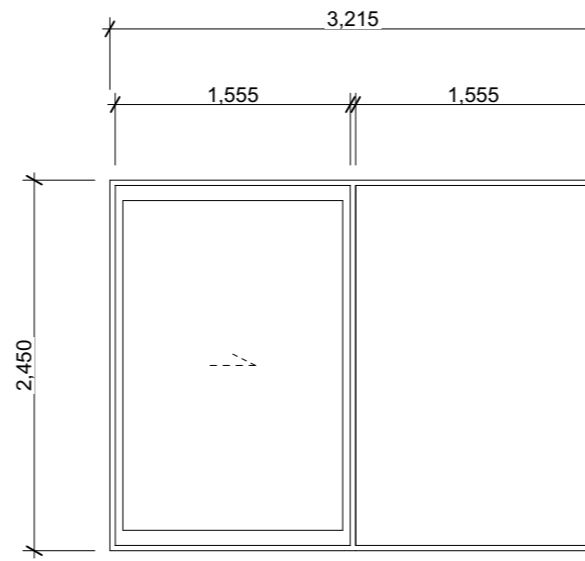
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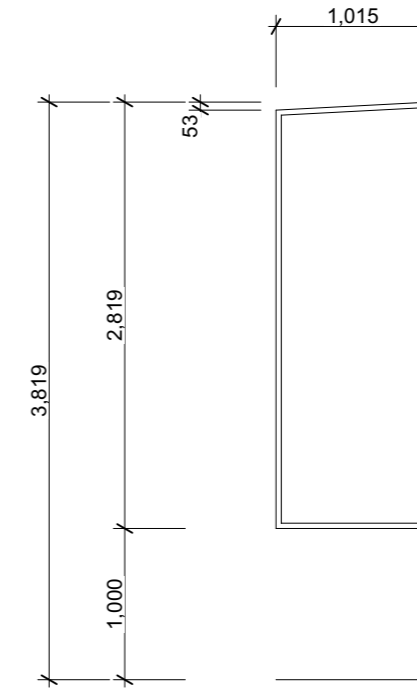
W08
Safety



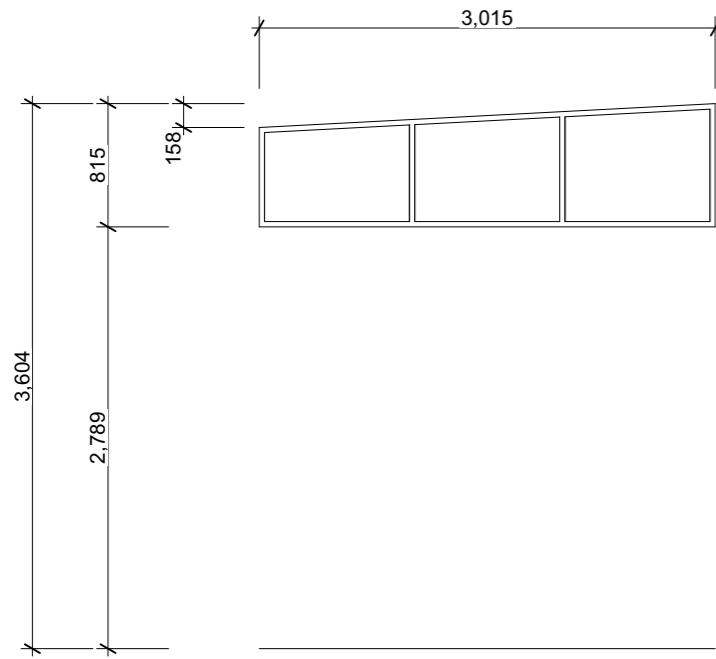
W09



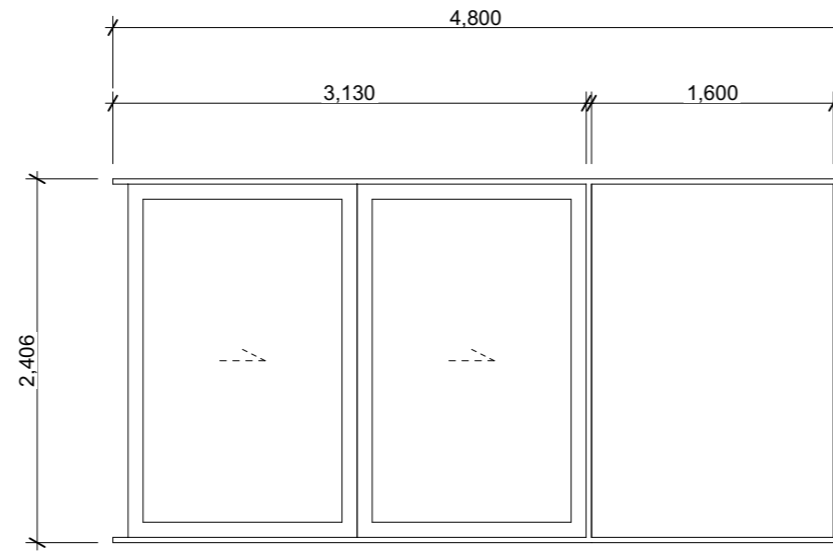
W10
Safety



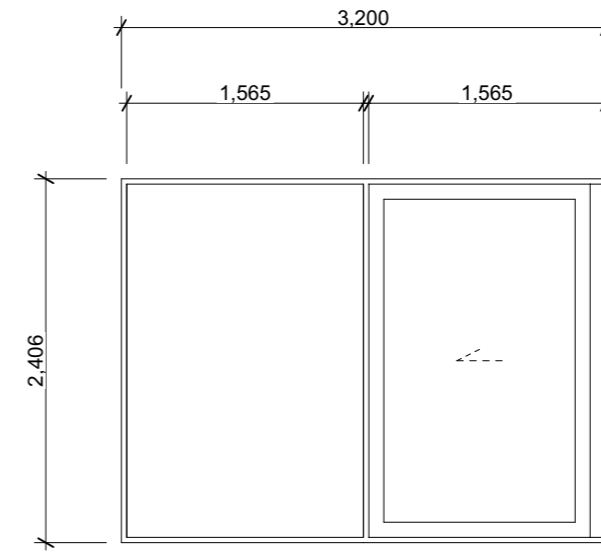
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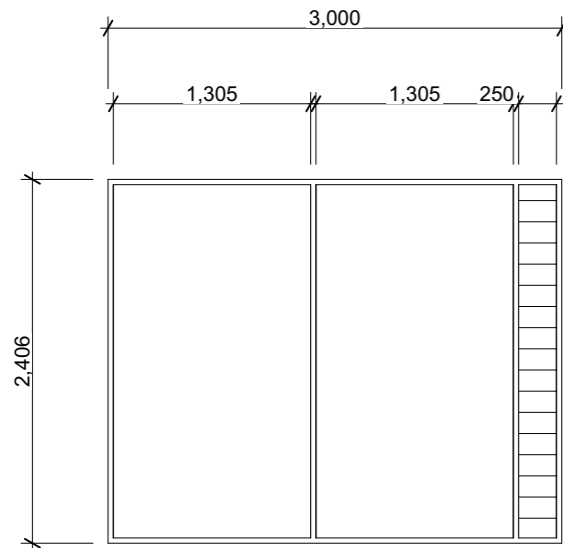
W12



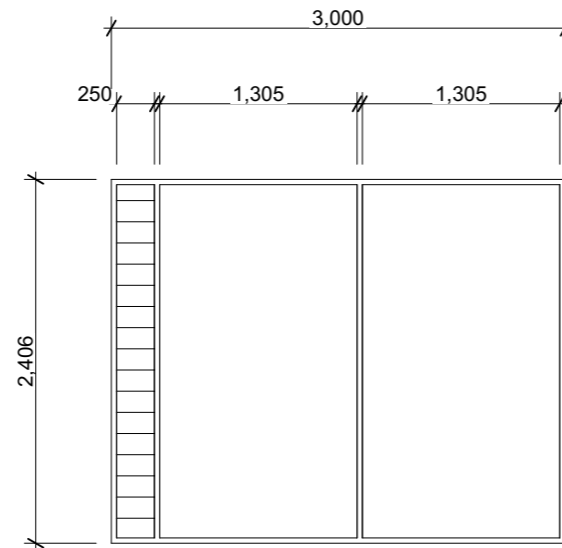
W13
Safety



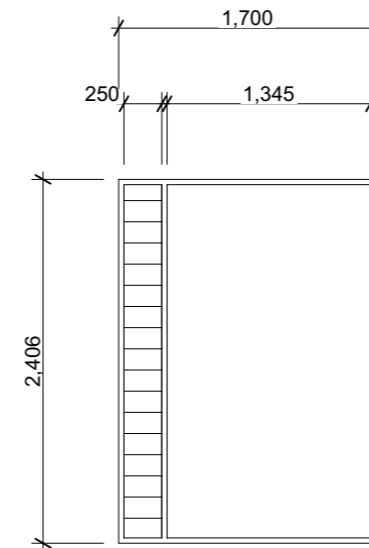
W14
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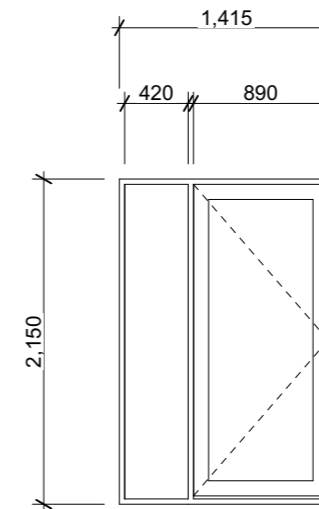
W15, W16
Safety



W17
Safety



W18
Safety



W19
Safety

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

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

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

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