PRIME DESIGNS

CREATIVE | FUNCTIONAL | ARCHITECTURE

Project	Proposed Dwelling
Address	2 Onyx Street, Hikuwai Wanaka
Client	M Ch'Ng & R Chan
Job Number	880279
Drawing Set	Working Drawings
Drawn By	E Lin
Date Published	23/07/2025
Description Of Work	New single storey 4 bedroom dwelling with vertical cedar shiplap, Axon panel and trapazoidal Coloursteel cladding to the roof and walls. SED foundations, trusses by truss manufacturer. Services to be connected include foul water, stormwater, water supply, power, phone and gas

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LICENSED BUILDING PRACTITIONER BUILDING CONFIDENCE

ADNZ Architectural Designers New Zealand Professional Member

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PLANNING & ZONING

Lot / DP Number	LOT 89 DP 587915
Address	2 Onyx Street, Hikuwai Wanaka
Territorial Authority	QLDC
District Plan Zone	Northlake Special Zone Area B5
Easements	N/A
Relevant Consent Notices	12761365.2
Resource Consent #	Yes
Wind Zone	High
Corrosion Zone	B
Earthquake Zone	Zone 3
Liquefaction Zone	Low rish as per geotech report
Snow Zone	2 KPa

CONSTRUCTION

Foundation Type	Engineered MAXSlab 300
Stud Height	2.4m
Typical Joinery Height	2.15m
Typical Internal Door Height	2.2m
Rebated Joinery	Yes
Wall Underlay	Masons Uni plus wrap
Roof Underlay	Drispace
Wall Insulation	R3.6 / R2.8 Pink Batts
Ceiling Insulation	R5.0 Pink Batts
Floor Insulation	MAXSlab Foundation
Wet Area Membrane	Ardex System 155 Rapid

CLADDING

Wall Cladding Type 1	Vertical Cedar HP52 Shiplap stained
Wall Cladding Type 2	Axon Panel Painted 133mm Smooth
Wall Cladding Type 3	Vertical 5-Rib Colorsteel cladding
Roof Cladding	5-Rib Colorsteel roofing
Fascia Type	Metal

CONSULTANTS

Topographical Survey	Southern Land Development Consultants
Structural Engineer	Wilton Joubert
Geotechnical Engineer	CGW Consulting Engineers
Truss Manufacturer	PlaceMakers

FITOUT

Flooring Types	Carpet / Tile / Laminate planking
Balustrade Type	N/A
Shower Type	Tiled Shower
Water Heating	Gas
Space Heating	Mitsubishi Ducted Heat Pump system 14kW

SITE/BUILDING INFORMATION

Site Area	514m²
Site Coverage	205.27m²/39.93%
Floor Area	186.99m²
Minimum Floor Level (to u/s floor)	As per NZBC E1/AS1

Proposed Dwelling
2 Onyx Street, Hikuwai
Wanaka

Client: M Ch'Ng & R Chan
Job No: 880279
Date: 23/07/2025

Print In Color

wanaka.enquiries@gjgardner.co.nz 03 443 2196 33 Reece Crescent, Wanaka

G.J. Gardner. HOMES

Drawing Set: Working Drawings
Drawn By: E Lin
Scale:
Drawing Sheet: Project Specifications
Drawing No: 102

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QUEENSTOWN LAKES DISTRICT COUNCIL

QLDC Property Map

PRINT DATE: 4/04/2025



Scale: 1:4,924

0 0.1 0.2 0.4 km

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Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Site Location Plan**

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Drawing No: **103**

B40118_T1
Meridional Circuit: Lindis Peak 2000
Level in terms of NZVD16
ORIGIN: BP 17 LT 538860 (F4XA), RL = 321.57
Sheet 1 of 1

NOTES:
- Boundary data sourced from DP 587915
- Abuttal data sourced from DP 587915
- Absolute positional accuracy = +/- 0.03m
- The within Lot is subject to existing Land Covenant 12761365.5 & Consent Notice 12761365.2. These need to be checked as to how they affect proposed designs
- Levels in terms of NZVD16 (not mean sea level or DVD 1958). Height covenants should be checked and data translated if data is required in another datum
- Underground Services including pipe sizes have not been surveyed and have been sourced from QLDC GIS (03/02/25)
- Aerial Imagery is indicative only and has not been orthorectified.

Contour Interval: Major 1.0m
Minor 0.2m

Onyx Street (Legal, Sealed)

Pounamu Avenue (Legal, Sealed)

Mountable kerb & channel

Concrete footpath

Mountable kerb & channel

Concrete footpath

90°00'
15.99

Peg RL =327.39m

45°00'
7.07

Lot 89
DP 587915
514m²
RT 1133329

Lot 90
DP 587915

Metal post and wooden paling fence

90°00'
25.09

0°00'
20.09

90°00'
20.99

Metal post and wooden paling fence

Lot 88
DP 587915

327.6
327.4

LEGEND
- Old Peg
- Water Toby
- Power
- Chorus Cable
- Valve
- Giveway Sign
- Light Pole
- Fence
- Dashed Painted Line
- Wastewater Pipe (GIS)
- Wastewater Lateral Marker
- Stormwater Pipe (GIS)
- Stormwater Lateral Marker
- Water Line (GIS)
- SV Marker Post
- Road Centreline
- Road Boundary
- Site Boundary
- Adjoining Boundary
- Street Tree

0 1 2 3 4 5m
Scale 1:150

REVISION	DESCRIPTION	DATE
A	ORIGINAL ISSUE	10/02/25

SOUTHERN LAND
DEVELOPMENT CONSULTANTS

Topographical Survey of Lot 89 DP 587915
2 Onyx Street, Albert Town

PREPARED FOR
Beacon Point
Building Ltd (GJ Gardner)

SCALE
1:150 @ A3

EQUIPMENT USED
GNSS

Level 2 Brownston House, 21 Brownston St., Wanaka, Ph: (03) 443 5577, Email: contact@southernland.co.nz, www.southernland.co.nz

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CSNZ THE CONSULTING SURVEYORS OF NEW ZEALAND
A DIVISION OF THE NEW ZEALAND INSTITUTE OF SURVEYORS

SURVEYED	K.R.	DATE	04/02/25	CHECKED	JVB	DATE	10/02/25
DRAWN	K.R.	DATE	05/02/25	APPROVED	DM	DATE	10/02/25

DRAWING REFERENCE: B40118_T1
REVISION: A

Site Notes

Permanent paving
Permanent paving including driveway, entry paths & patios to be 100mm thick 20MPa concrete, ensure all concrete is laid to fall @ 1:25 away from house for a distance of at least 1 metre.
Where site conditions do not readily allow such a 1m wide strip to be formed, then permanent paving shall be laid to the falls and dimensions shown in NZS3604:2011 figure 7.12

Paved access & accessible routes subject to wetting to have a crossfall between 1:50 & 1:100.

Minimum slip resistance co-efficient for level surface between 0.25 and 0.50 acceptable in accordance with NZBC: D1/AS1 Access.

Site levels
Site levels and datum have been taken from the Topographical Survey Plan provided. If there are any inaccuracies or inconsistencies, please contact designer for clarification prior to commencing work

Boundary information
Boundary information has been taken from the Certificate of Title. If there are any inaccuracies or the building position in relation to district plan constraints is critical, please consult designer prior to commencing work.

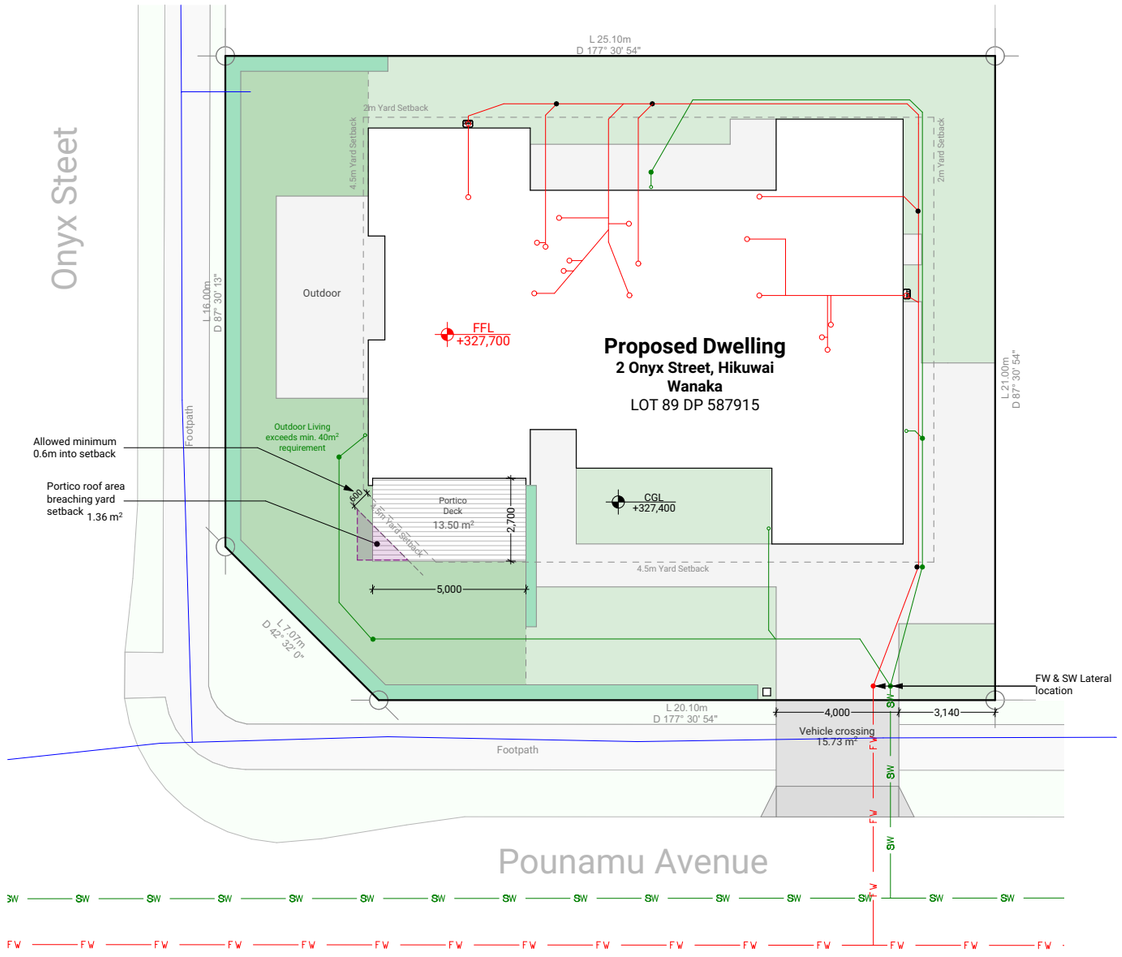
Site safety
All precautions are to be undertaken to prevent unauthorised access to the site, including access outside working hours. Any site fencing shall comply with NZBC F5/AS1 Construction and demolition hazard.

Where a construction site contains any hazard which might be expected to attract the unauthorised entry of children, the hazard shall be enclosed to restrict access by children.

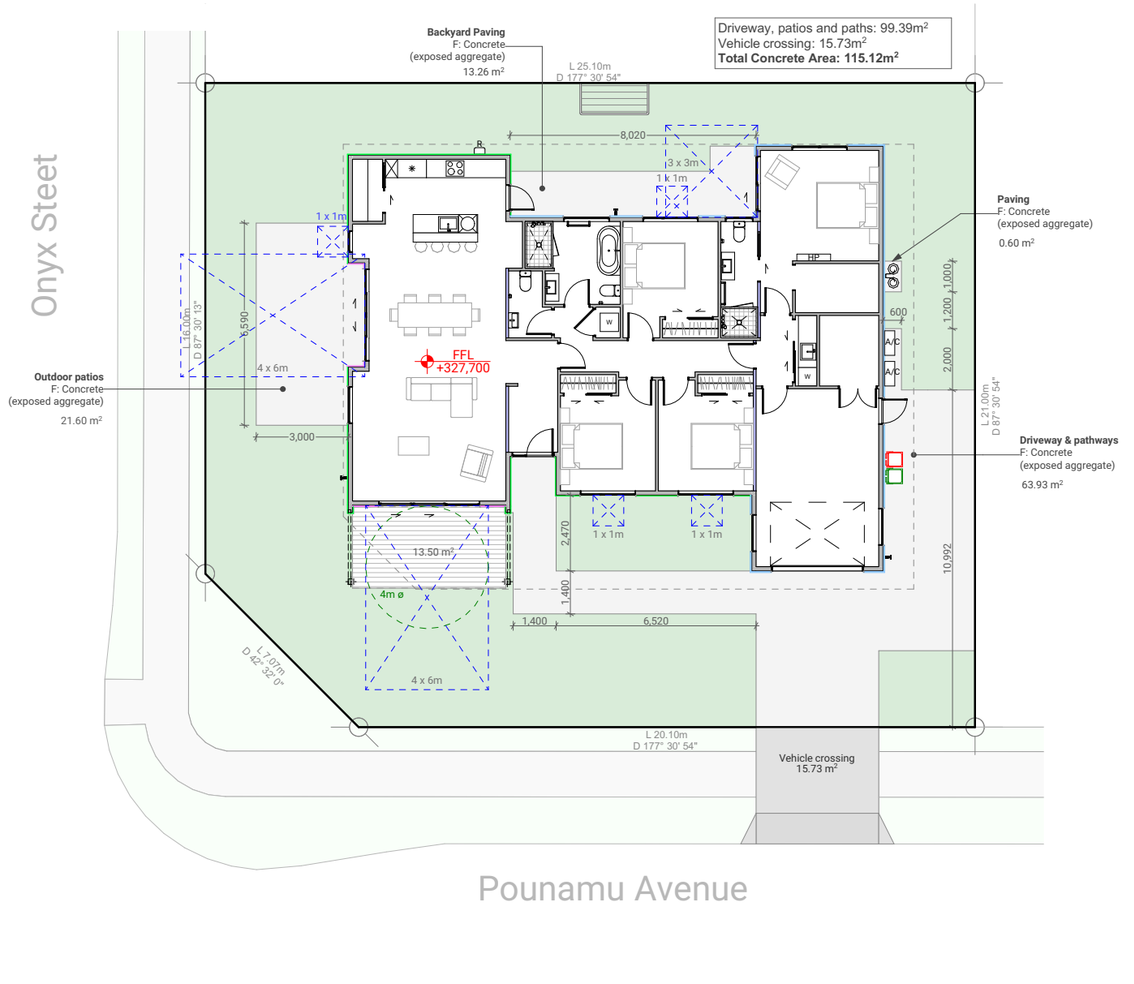
Dust Control
To minimise the amount of dust created, the following measures will be undertaken:
All permanent cut slopes should be vegetated as soon as possible.
Ensure adequate application of water is applied to control dust nuisance over the site during dry conditions, in particular at the entry to the site from the street.
The potential for dust formation should be monitored visually on a daily basis by the project manager during working hours.
Heavy earth moving machinery required to carry out works should not leave site carrying material on public roads unless they are vehicles specifically for transporting material off site.
Access to site should be continually monitored to ensure that dust nuisance is minimised.

Sediment control
Site runoff to be contained by sediment control fence at low point of site. Fence to be min. of 400mm high with H4 posts @ 200mm crs. max. set 400mm min. onto ground.

Site Information	
Site Area	514m²
Site Coverage Area	205.27m²
Site Coverage Percent	39.93%
Outdoor Spaces	Compliant
Outlook Spaces	Compliant
Earthworks	Site levelling only



1 Site Plan 1:200



2 Site / Floor Plan 1:200

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:200**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**		**Drawing Sheet:**	**Site Plan**

G.J. Gardner. HOMES

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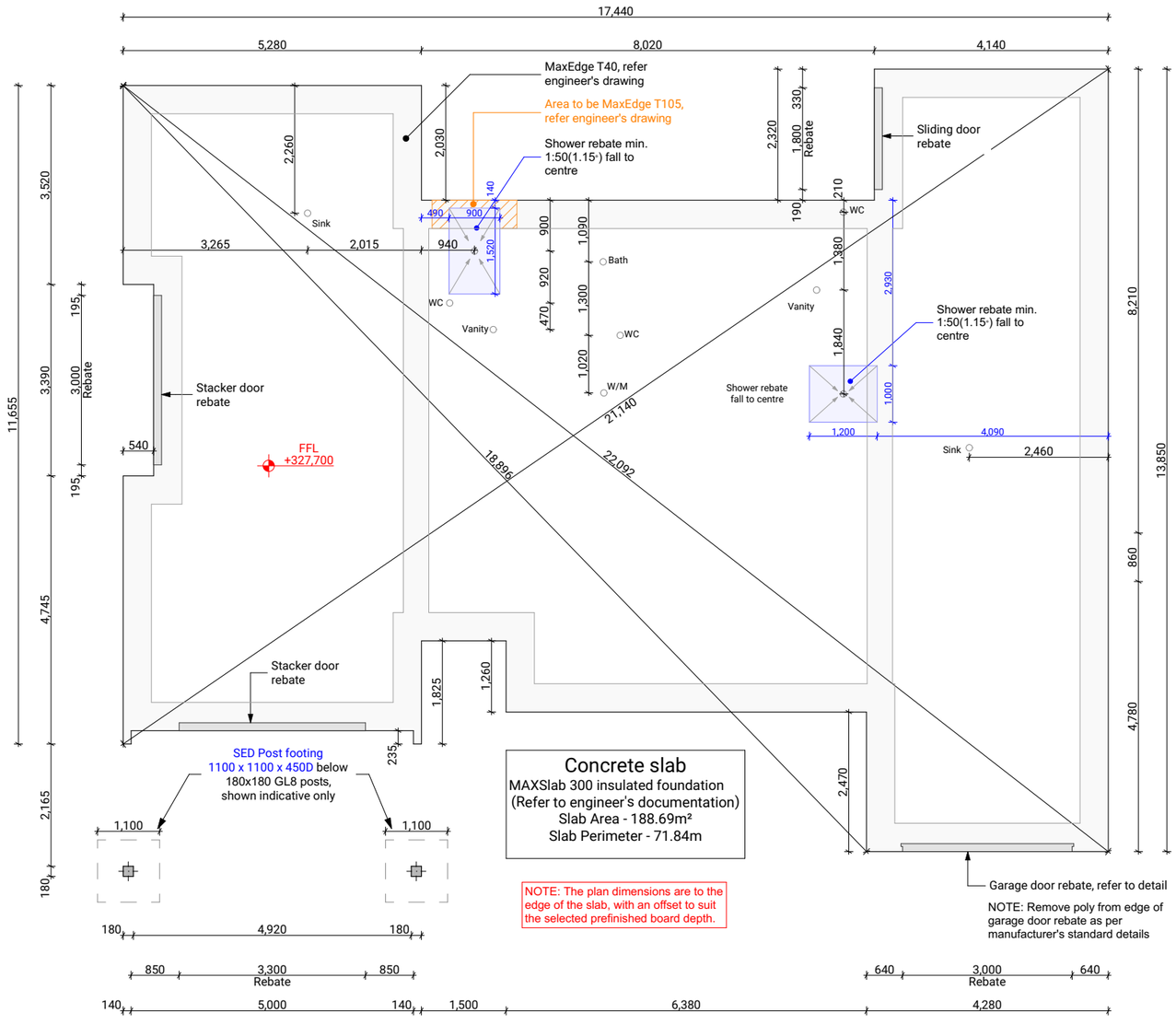
Drawing No: 105

N

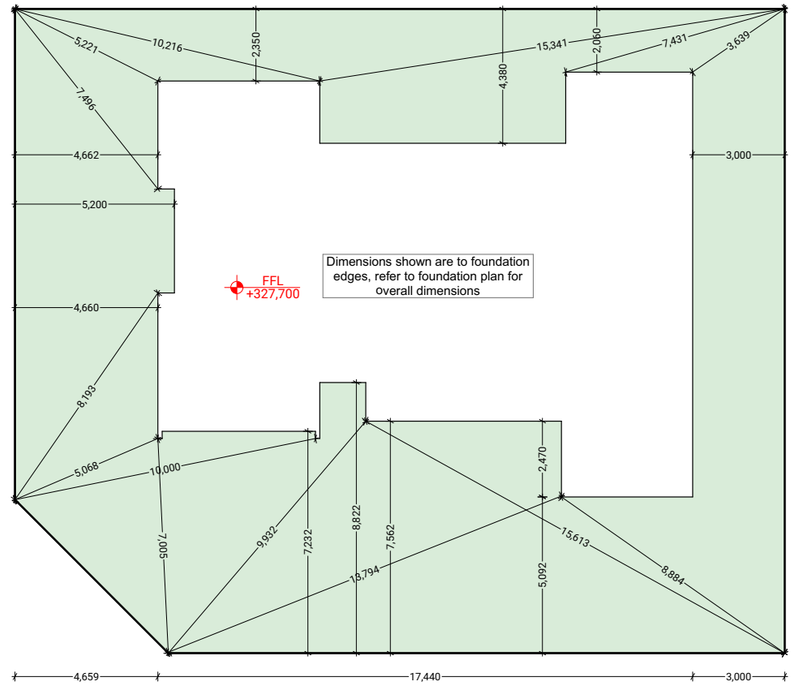
NOTE:Ground preparation to be undertaken in accordance with the site specific Geotechnical Report Recommendations

PLUMBING FIXTURE DRAINS

Confirm all dimensions on site. Fixture selections are subject to change. Location and dimensions of fixtures and pipework are indicative only.



1 Foundation Plan 1:100



2 Site Set Out Plan 1:200

Site Notes

Site set out

All dimensions noted on plan are to foundation slab edge, please check all dimensions prior to commencing building work on site. Refer to foundation plan for overall dimensions.

Foundation Notes

SED Concrete foundations - general

Refer to engineer's drawings for foundation and slab design and details.

Concrete slab over Thermakraft Black damp-proof membrane (250 micron), over sand blinding and compacted granular fill

Bowmac Screw Bolts to be 150mm max of each end of plate spaced @ 900mm crs max to comply with NZS3604:2011 clause 7.5.12.2.

Thermakraft Supercourse 500 DPC under all external & internal bottom plates.

All bracing element bottom plate fixings shall be installed to comply with GIB Ezybrace System 2016 Refer to bracing plan for bracing element requirements.

Finished floor level to be 150mm min above permanent paving or 225mm min above unpaved ground to comply with NZBC E2/AS1 clause 9.1.3

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Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:100, 1:200**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**		**Drawing Sheet:**	**Foundation Plan**

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Drawing No: 106

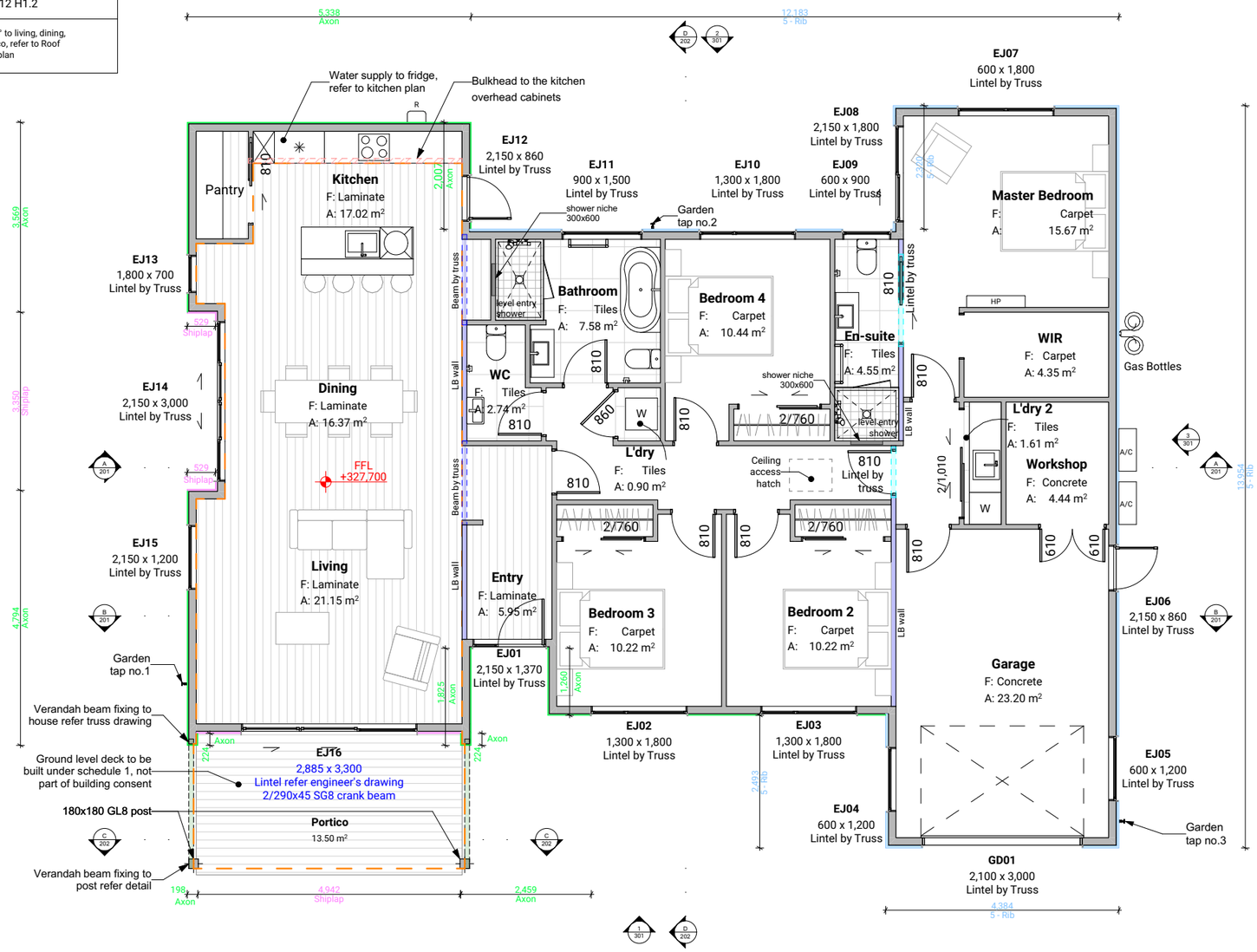
Floor Plan Legend	
R	Rinnai A26
	3x external garden taps
	2/45kg Gas Bottles
A/C	Ducted Heatpump system
HP	Heatpump
	Verandah beam refer truss drawings 1/190 x 90 GL12 H1.2
	Raked ceilings 20° to living, dining, kitchen and Portico, refer to Roof plan and Section plan

Cladding Legend

- Vertical Cedar HP52 Shiplap stained | Colour - WoodX Damper
- Axon Panel Painted 133mm Smooth | Colour - Dulux Blackball (LRV 16)
- Vertical 5-Rib Coloursteel cladding | Colour - Ironsand (LRV 8) to 5-Rib Wall Cladding and 5-Rib Roof Gutter, Downpipes, Windows, Doors, Garage Door

Wall Legend

- Internal Load Bearing Wall



1 Floor Plan 1:100

Floor Area	
Total Floor Area	186.99m²

Floor Plan Notes

Walls

Wall framing general
2/140x45mm top plates to all external walls and 2/90x45 to all internal walls. Nog for all fittings, fixtures, linings, bracing panels & trims
Wall framing height to be 2465mm finished

DPC between bottom plate and concrete slab, Bowmac bottom plate crew bolt (M10x140) to be within 150mm of each end of the plate and be spaced @ 900mm crs max to comply with NZS3604:2011 clause 7.5.12.2.

All trimming studs to comply with NZS3604:2011 clause 8.5.2.1 unless specified otherwise by pre-nailer

All window and door sizes shown on the plans refer to 'Box' size only and do not allow for packers. Pre-nailer to increase opening width accordingly

Lintels
Refer to truss manufacturers documentation for lintel sizes and fixings.

Non-load bearing wall framing
90x45mm H1.2 SG8 framing, studs @ 600mm crs & 90x45 dwangs spaced at 800mm crs. to NZS3604:2011 (Check cladding requirements for dwang spacing).

External Load bearing wall framing
140x45mm H1.2 SG8 framing, studs @ 600mm crs to NZS3604:2011 & 90x45 dwangs spaced at 800mm crs (Check cladding requirements for dwang spacing).

Internal Load bearing wall framing
90x45mm H1.2 SG8 framing, studs @ 600mm crs to NZS3604:2011 & 90x45 dwangs spaced at 800mm crs (Check cladding requirements for dwang spacing).

Fixings

Zone B & C fixings and fastenings
Structural fixings except fabricated brackets in a Sheltered environment to be - Hot-dipped galvanized steel
Structural fixings except fabricated brackets in an Exposed environment to be - Type 304 stainless steel
Structural fixing within 600mm of the ground to be - Type 304 stainless steel
All fixings to be suitable for exposure zone C as outlined in NZS3604:2011 section 4.4 "steel fixings and fastenings"

Fixings and fastenings all Zones
Nail plates, wire dogs & bolts in roof spaces and closed environments to be Continuously coated galvanized steel or Hot-dipped galvanized steel

Underlays

Masons Uni Plus Wall Underlay
Masons Uni Plus wall underlay installed to wall framing using UNI fasteners, for timber frames use a 32mm Nail/washer. 75mm min overlap at horizontal joins, all vertical laps, min 150mm must be made over studs. Extend 50mm below bottom plate or bearer. Installed to manufacturers specification.

Thermakraft Aluband
Thermakraft Aluband flashing tape to be installed at openings as per manufacturer's installation requirements, unless noted on joinery details otherwise.

Insulation

Wall insulation
140mm thick R3.6 Pink Batts Ultra wall insulation to all external walls including external garage walls. 90mm R2.8 Pink Batts Ultra to garage internal walls.

Ceiling insulation
225mm thick R5.0 Pink Superbatts ceiling insulation, ensure a 25mm gap min. between insulation and roof underlay.

Wall Claddings

James Hardie Axon Panel over 20mm cavity
James Hardie Axon Panel 133 Smooth - Grooves 10mm wide x 2.25mm deep @ 133mm crs. Axon Panel over 45x18mm H3.1 timber cavity battens spaced @ 600crs. Ensure double studs & cavity battens are installed over vertical joins of cladding.

Refer to manufacturer's information & details for fixing and waterproofing requirements. Dwangs @ 800ctrs.

Hermpac Vertical Shiplap HP52 over 20mm cavity
Client selected Hermpac Vertical Shiplap HP52 fixed over cavity battens over wall underlay, Refer to details and manufacturer's information for fixing and waterproofing requirements. Dwangs @ 480ctrs.

Colorsteel longrun cladding 5-Rib trapezoidal vertical on VB20 cavity battens
5-Rib trapezoidal vertical cladding fixed over VB20 cavity battens in between metal cladding and timber, over wall underlay. Refer to details and manufacturer's information for fixing and waterproofing requirements.

Linings

10mm GIB plasterboard wall lining
Generally, line with 10mm GIB Standard plasterboard (Aqualine to wet areas, installed as per GIB Wet Area Systems specifications and installation manual 2021) stopped for level 4 paint finish (unless otherwise indicated). Refer also specific fitout dwgs & bracing schedule for specific wall linings & requirements.

13mm GIB board ceiling lining (Rondo batten)
Generally, line with 13mm Gib board ceiling with Rondo 310 ceiling battens and 311 clips at 600 crs fixed to trusses and/or joists. Gib Aqualine to wet areas. Stopped for level 4 finish.

Wall linings adjacent to appliances
CL1.6 G3, Wall linings adjacent to appliances and facilities shall have surfaces that can be easily maintained in a hygienic condition and comply with. Stainless steel, decorative high-pressure laminate, tiles, wallboards with painted or applied impervious coatings or films, are all suitable materials for these surfaces.

Floor Coverings

Tiles
Client selected tiles to be installed over grout in areas noted on floor plan. Wet areas to be tiled over selected waterproofing membrane installed to manufacturers specification. All waterproofing methods to comply with E3/AS1 Internal moisture & GIB Wet Area Systems specifications and installation manual 2021.

Slip resistance
Minimum slip resistance co-efficient for level surface between 0.25 and 0.50 acceptable in accordance with NZBC:D1/AS1 Access.

Vinyl Plank Flooring
Vinyl plank to be installed over vinyl adhesive in areas noted on floor plan. Where installed in a wet area (including kitchen), install as per attached manufacturer's documentation and E3/AS1 alternative solution documentation.

Interior Fit-out

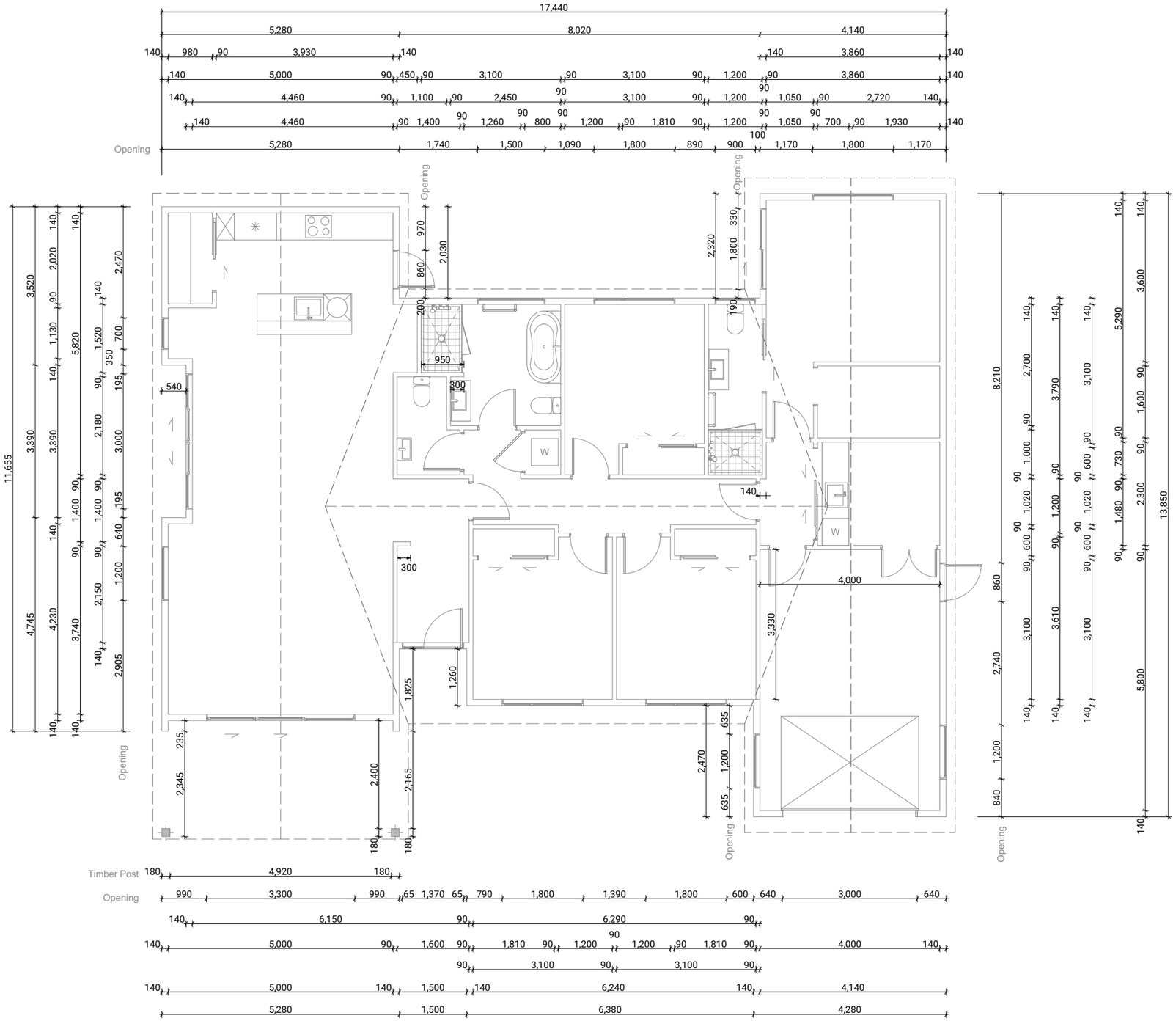
Internal doors
All internal door leaf widths as noted on floor plan, all heights 2200mm unless otherwise noted

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G.J. Gardner. HOMES

Drawing Set:	**Working Drawings**
Drawn By:	**E Lin**
Scale:	**1:100**
Drawing Sheet:	**Floor Plan**
Drawing No:	**107**

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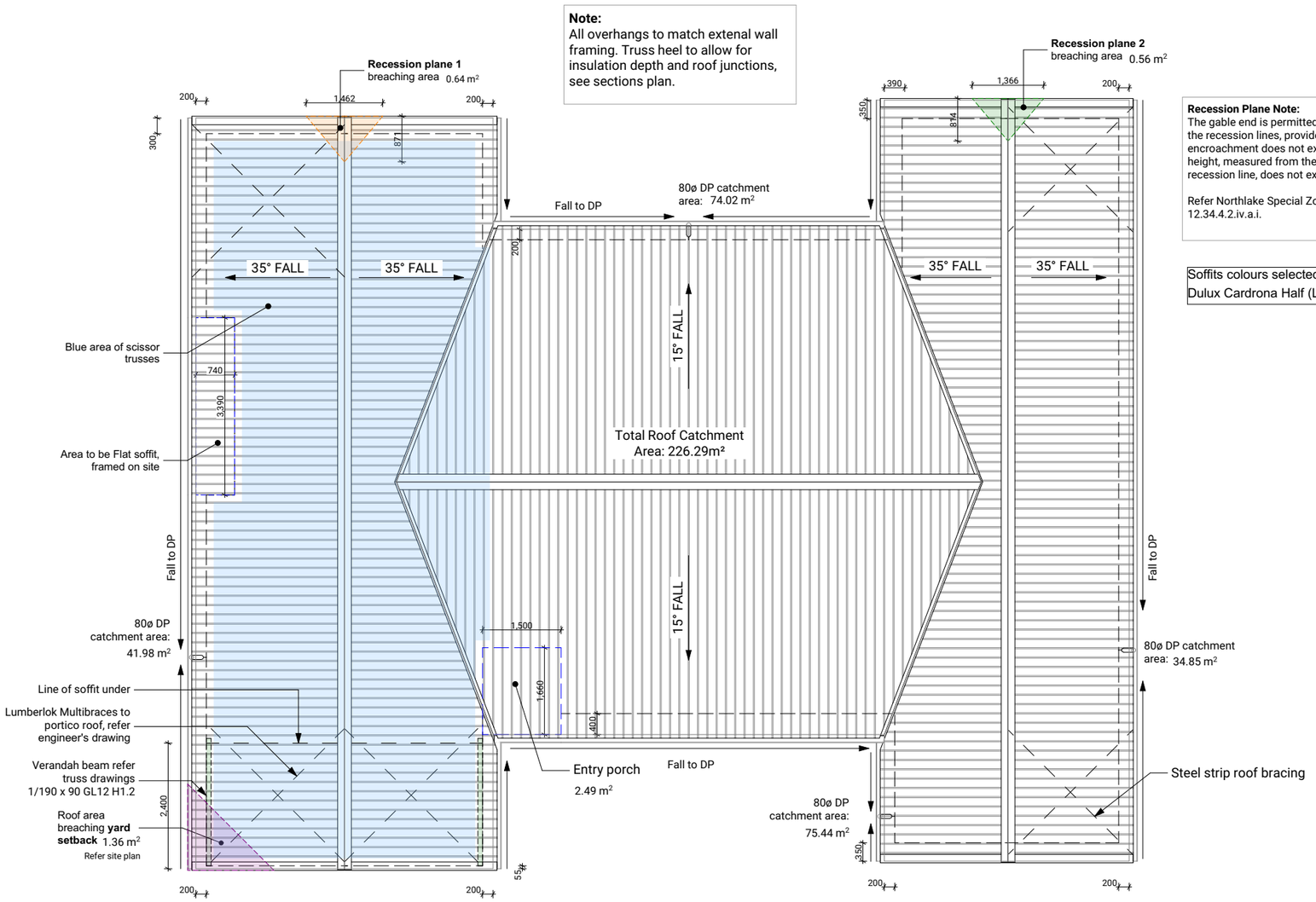


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wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Dimension Plan**

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Drawing No: 108

N



1 Roof Plan 1:100

Roof Plan Notes

General Notes

Roof framing general
Trusses designed by truss manufacturer, refer to manufacturer's documentation.

All enclosed framing to be H1.2 SG8 unless otherwise noted. Framing to comply with NZS3604:2011

Client selected metal fascia.

Roof bracing to comply with NZS3604:2011 section 10.4

Zone B & C fixings and fastenings
Structural fixings except fabricated brackets in a Sheltered environment to be - Hot-dipped galvanized steel
Structural fixings except fabricated brackets in an Exposed environment to be - Type 304 stainless steel
All fixings be suitable for exposure zone C as outlined in NZS3604:2011 section 4.4 "steel fixings and fastenings"

Fixings and fastenings all Zones
Nail plates, wire dogs & bolts in roof spaces and closed environments to be continuously coated galvanized steel or Hot-dipped galvanized steel

Continuous spouting rainwater system
Continuous spouting rainwater system, spouting to have 4880mm² cross sectional area, DN80 downpipes unless otherwise noted.

Roof Bracing

Steel strip roof bracing
Diagonally opposing pair of continuous steel strips at a 45° each having a capacity of 4.0kN in tension, fixed to each top chord or rafter that is intersected and to the top plate

Bottom Cord Restraints for GIB Rondo clip system
When GIB Rondo clip system is installed additional 90x35 SG8 battens @ 1800ctrs max as bottom cord restraints required.

Underlay

DriStud RU24 Roof underlay
DriStud RU24 self-supporting roof underlay run vertically over purlins & horizontally on roof pitches less than 10 degrees. Fix using stainless steel 6-8mm staples or 20mm flat head clouts at 300mm crs. 150mm min cover over vertical and horizontal joins. Refer to manufacturer's information.

Roof Cladding

Trapezoidal roof cladding on purlins
0.55mm BMT trapezoidal profile Colorsteel Maxam roof cladding on purlins over roof underlay. Roofing profile to to have a minimum crest height of 19mm and a maximum of 210mm between crests.

Purlins

70x45 Purlins (up to VH)
70x45mm H1.2 SG8 purlins @ 900mm crs regular spacing & 600mm crs end spacing, fixed to trusses with 1/10g 80mm long self-drilling screw or alternative 2.4kN fixing.

Soffit Lining

4.5mm HardieFlex soffit lining
4.5mm James Hardie HardieFlex soffit lining fixed to 90x45mm H1.2 soffit framing using 40 x 2.8mm HardieFlex nails at 200mm crs. Soffits jointed with proprietary uPVC jointers.

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
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Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:100**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Roof Plan**

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Drawing No: 109

N

Bracing Legend

Plasterboard Element

Plasterboard+Ply Element

Bracing Notes

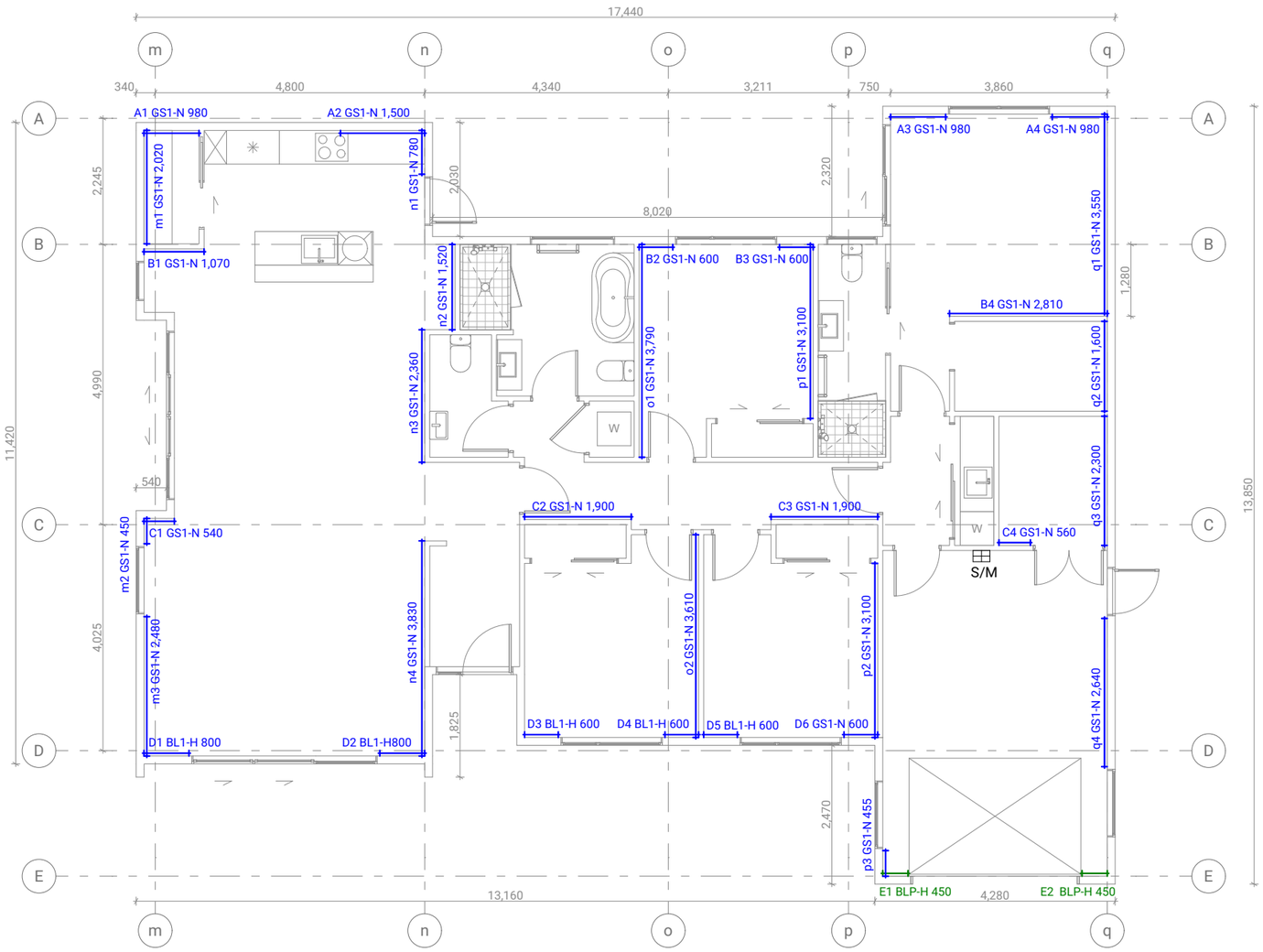
General GIB bracing notes

Bracing has been designed with GIB Ezybrace calculator, refer to attached calculation sheets for more info. If there are any conflicts, please contact the designer.

All bracing elements to comply with NZS3604:2011, NZBC B1/AS1, GIB Ezybrace Systems 2016. Install all bracing elements in accordance with GIB product specification.

Ply Bracing Elements

Where external ply bracing elements are not installed as a rigid wall underlay, ply sheets to be installed to entire wall face with selected flexible wall underlay installed over.



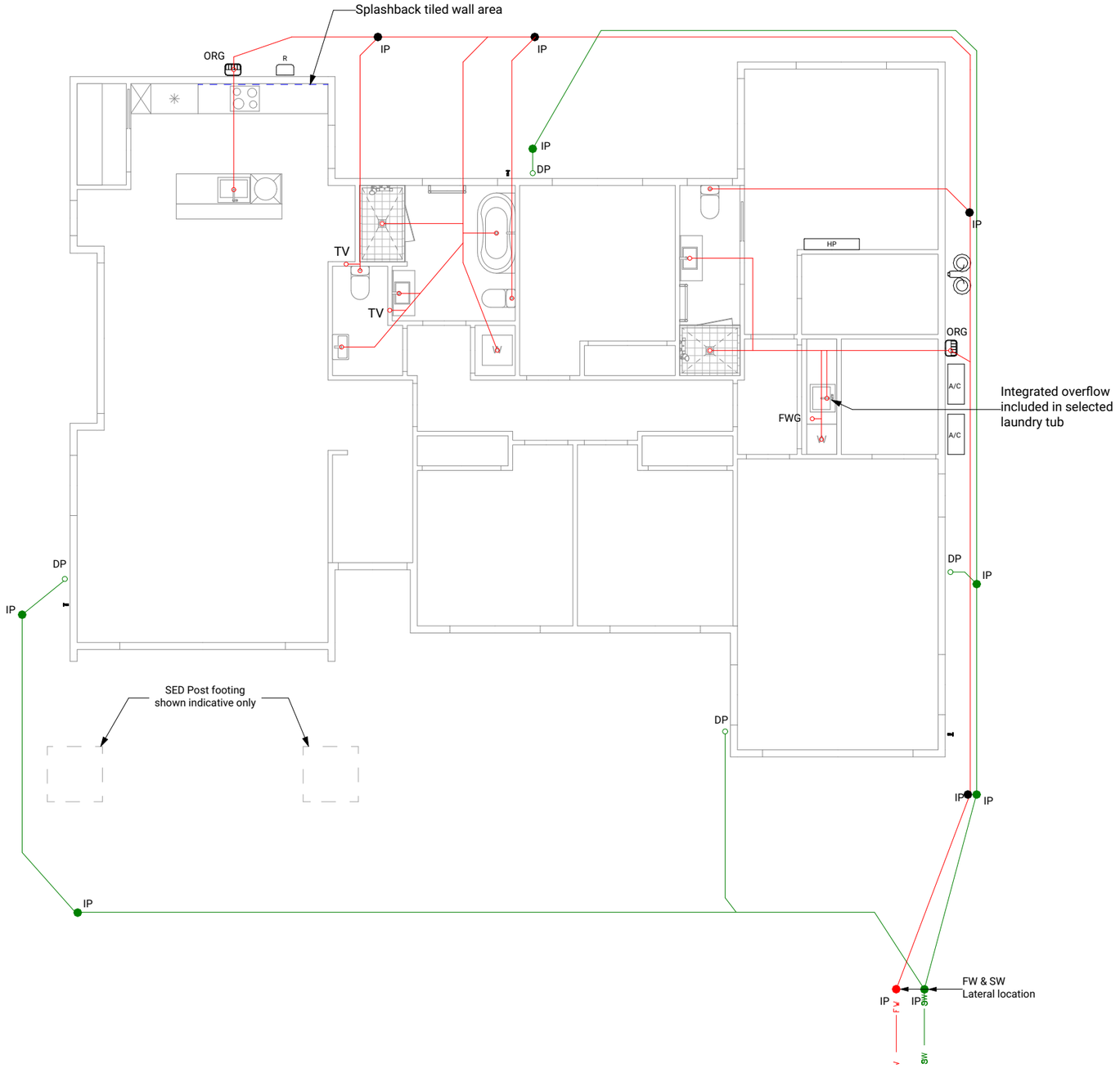
1 Bracing Plan 1:100

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:100**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Bracing Plan**

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Drawing No: 110

N



1 Plumbing & Drainage Plan 1:100

Plumbing & Drainage Notes

General plumbing notes
Contractor to ensure all work complies with the NZ Building Code and relevant standards, along with local territorial authorities' bylaws prior to work commencing.
All Foul Water plumbing work to comply with AS/NZS3500.2
All Storm Water plumbing work to comply with E1/AS1 & AS/NZS3500.3
All bends and junctions under slab must not be less than 45° (in plan).
Contractor/Plumber to submit as laid drainage plan to council upon completion of all plumbing/drainage works

Drain sizes
Foul Water Drain: DN100 @ 1:60
Storm Water Drain: DN100 @ 1:120

WC Waste: DN100 @ 1:60
Bath Waste: DN65 @ 1:40
Vanity Waste: DN65 @ 1:40
Shower Waste: DN65 @ 1:40
Sink Waste: DN65 @ 1:40

Branch drain to be combined waste DN100 @ 1:60 where two or more fixtures connect into branch.
Unvented branch drain to be 10m max from connection to main vented drain to weir of last fixture.

Water supply
Water supply pipe materials to comply with G12/AS1 table 1:
Hot & Cold: copper, galvanised steel or polybutylene
Cold only: uPVC or polyethylene
All hot and cold water pipework through slab shall be in DN65 uPVC conduit.

Hot water piping shall be thermally insulated to comply with NZS 4305 Section 3 & ASNZS3500.4 Section 8.2 with 12mm closed cell foam polymer insulation.

All water supply pipe sizes installed to comply with G12/AS1 table 4
Sink, laundry, bath, basin 15mmØ
Shower 20mmØ
Pipes based on a maximum pipe length of 20 metres

Ensure hot water temperature at any sanitary fixture used for personal hygiene does not exceed 50°

Fixture trap and waste sizes
Fixture traps for hand basins to be DN40 trap, DN65 drain pipe
Fixture traps from sinks, bath, showers and tubs to be DN65 trap, DN65 drain.
Fixture traps from WC to be DN100 trap and DN100 drain.

Continuous spouting rainwater system
Continuous spouting rainwater system, prefinished Colorcote spouting and downpipes, DN80 downpipes unless otherwise noted.

Overflow Relief Gully
Top of ORG to be min. 150mm below the overflow level of the lowest sanitary fixture served by the drainage system.
The overflow level of ORG to be a min. 75mm above paved ground & 100m above unpaved ground
ORG to have a grating to allow for surcharge
Waste pipes discharging into ORG are arranged to permit easy cleaning of gully

Gas water heater
External Rinnai Infinity A26 water heater to be installed to manufacturers specification, refer to installation guide.
Rinnai to have minimum clearances as follows:
Ground clearance: 300mm
External doors: 300mm
Opening windows (side): 300mm
Opening windows above: 1500mm
Internal & external corners: 300mm

Tiled Shower
Tiled Showers to be installed in accordance with E3/AS1 Internal moisture & GIB Wet Area Systems specifications and installation manual 2021.

Tiles over selected water proofing memebrane up to ceiling height or 300mm above shower rose, installed to manufacturer's specification.
Wet area junctions and penetrations to be constructed in accordance with E3/AS1 & GIB Wet Area manual details.

Bathroom & Ensuite Glazing
All shower enclosure glazing and glazing within 2000mm of floor to be grade A or toughened safety glazing, except where a vanity unit bench etc of a height of 750mm and a minimum width of 300mm is located in front of glazing.

Plumbing Legend

DP	DN80 downpipe		Outdoor tap
ORG	Overflow relief gully		2/45kg Gas Bottles
TV	DN50 terminal vent	A/C	Outdoor Heatpump Unit
FWG	Floor waste gully		
IP	Inspection point	R	Rinnai A26

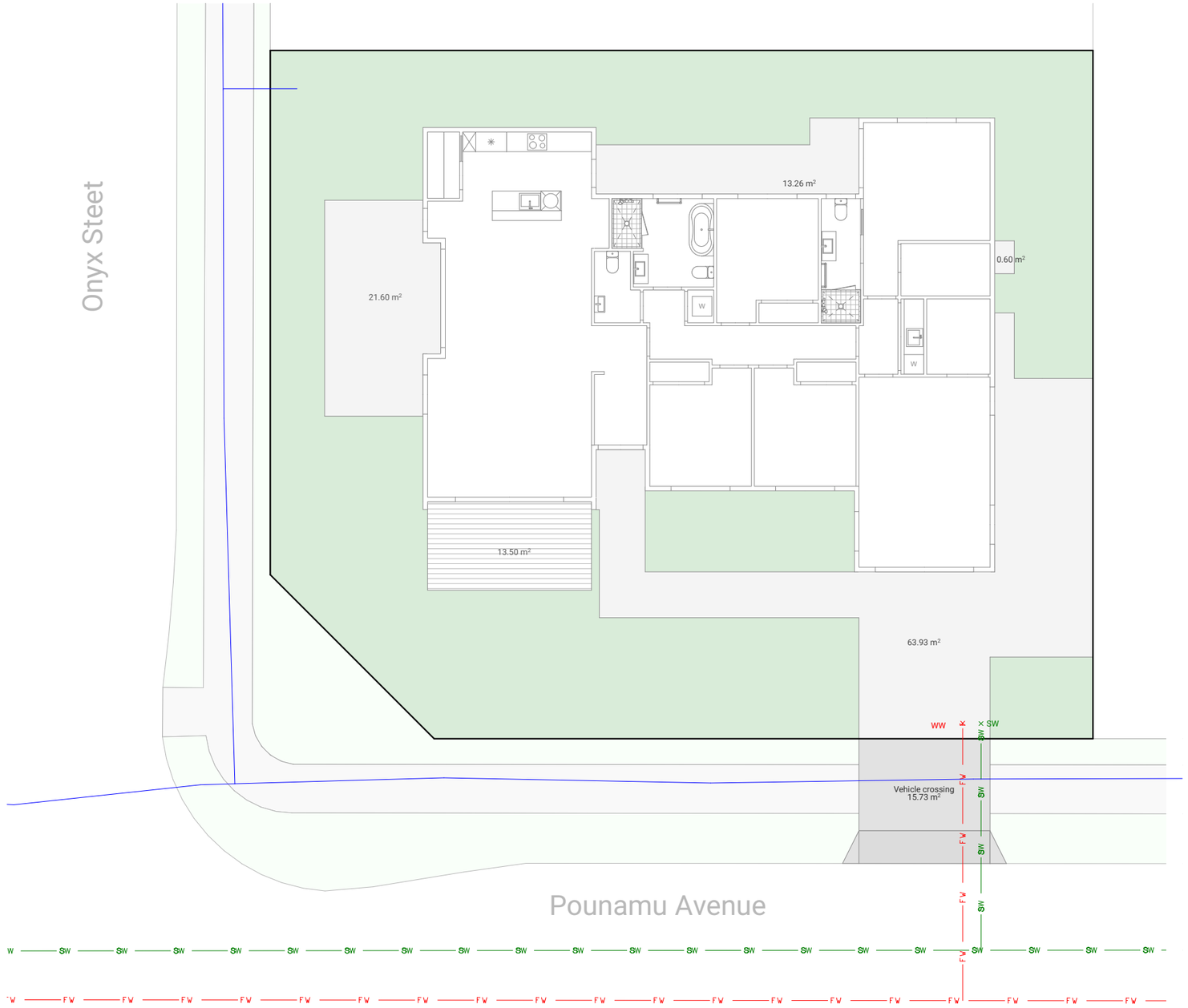
Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color
2 Onyx Street, Hikuwai	**Job No:**	**880279**	
Wanaka	**Date:**	**23/07/2025**	
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	

G.J. Gardner. HOMES

Drawing Set:	**Working Drawings**
Drawn By:	**E Lin**
Scale:	**1:100**
Drawing Sheet:	**Plumbing Plan**
Drawing No:	**111**

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N



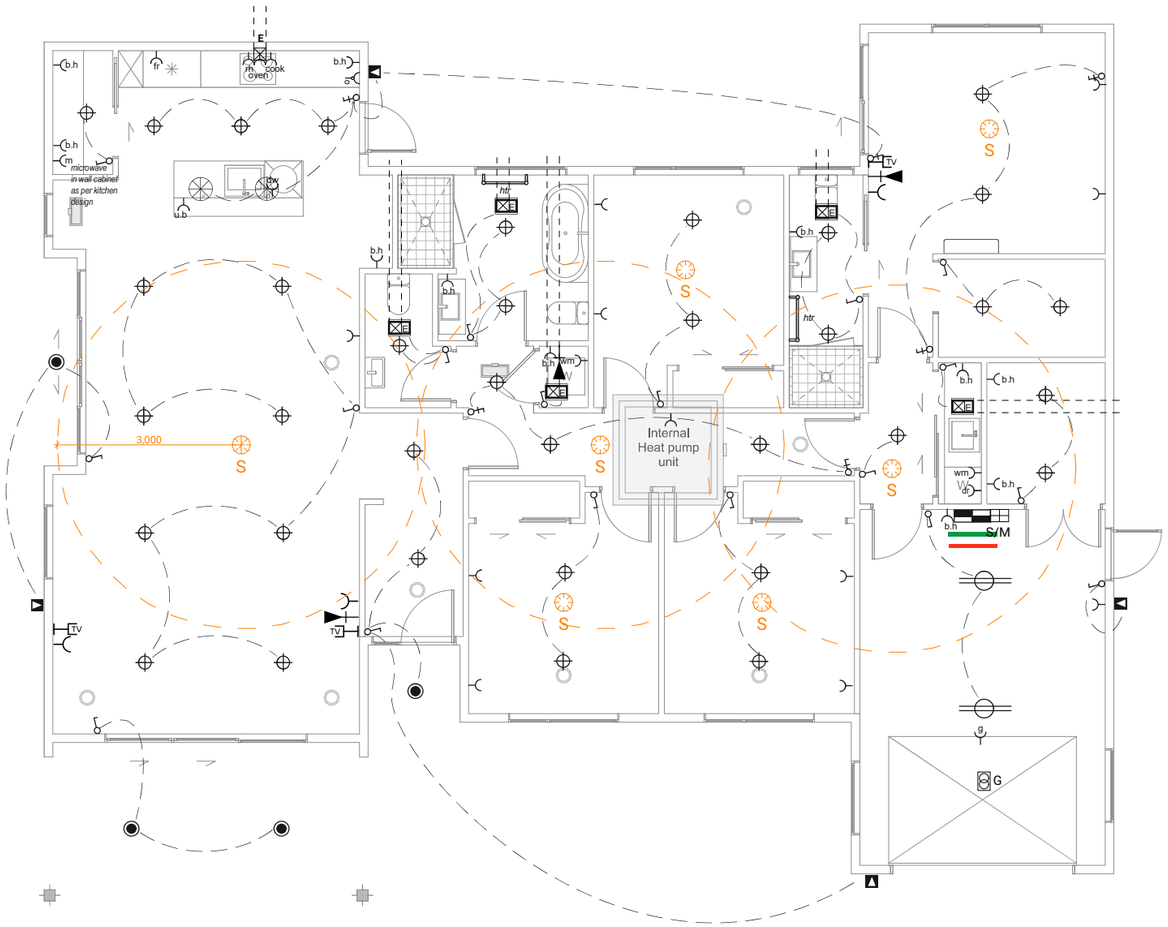
1 As-Laid Drainage Plan 1:150

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:150**
wanaka.enquiries@gjgardner.co.nz	03 443 2196	33 Reece Crescent, Wānaka	G.J. Gardner. HOMES	**Drawing Sheet:**	**As-Laid Drainage Plan**

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Drawing No: 112

N



1 Electrical Plan 1:100

Note: Fridge, dishwasher, oven power/ power points to be installed according to the Kitchen plans.

Garage Door Opener and Water Heater Power connection to be included & installed by Electrician.

Note: Refer to Floor Plan for Smoke Alarm Locations.

Lighting & Electrical Legend

EXPRESS STANDARD INCLUSIONS

Quantity	Symbol	Description
1x	fr	Power to Fridge (as per kitchen plan)
1x	dw	Power to Dishwasher (as per kitchen plan)
1x	rh	Power to Rangehood (as per kitchen plan)
1x	oven	Power to Oven (as per kitchen plan)
1x	cook	Power to Cooktop (as per kitchen plan)
1x		Oven/Cooktop Isolator Switch
1x	m	Power to Microwave (as per kitchen plan)
1x	g	Power to Garage Door
2x	wm	Power to Washing Machine
1x	dr	Power to Dryer
3x	TV	TV Point
3x		Data Point
26x		Double Power Point Bench Height Power Point Under Bench Power Point
		Live Wire
39x		Standard Interior Downlight - White Frame Tilt if applicable (to raked ceiling areas) Exterior Recessed Downlight - Frame colour to suit soffit - Tilt if applicable
2x		Standard Garage Light - Slimline LED
4x		Exterior wall downlight - black
		Light Switch
3x		2-Way Light Switch
1x		Data Box
1x		Smart Box & Distribution Board
5x	E	Extractor Fan (Laundry, Second Laundry, Bathroom, Ensuite, WC)
2x	htr	Heated Towel Rail as per Colour Selection
		Smoke Detectors (as per building code)
2x		GJ's to install owner-supplied pendant

Electrical Notes

General electrical notes

Ensure all habitable rooms are fitted with a minimum of one light fixture. All habitable internal spaces are to have a minimum illuminance of 20 lux or a minimal total wattage required per m2 of floor area as shown in G8/AS1, Table 1. Lights in the stairwell to provide 100lux at tread level or a total wattage per m2 of floor plan area as shown in D1/AS1 table8,

All electrical works to be installed to comply with NZBC G9/AS1, AS/NZS 3000:2018, AS/NZS 3008.1.2:2017, AS/NZS 5000.2:2006

Recessed downlights

Downlights to be CA135, CA180, IC, or IC-F to comply with AS/NZS 60598.2.2 Amendment A

Smoke detectors

Smoke detectors to be installed to comply with NZBC F7/AS1, C/AS1, NZS 4514:2021 and be located on or near the ceiling, in all bedrooms, living spaces, hallways and landings within the building. Where the kitchen is separated from the living space and hallways by doors that can be closed a heat alarm shall be located in the kitchen. There shall be at least one smoke level on each level. Where more than one smoke alarm is needed to meet the requirements, these alarms shall be interconnected as per NZS 4514:2021 clause 2.5. Smoke detectors to meet at least one of the following standards: UL 217, CAN/ULC S531, BS EN 14604, ISO 12239 or AS 3786

Mechanical ventilation

Extractor fans to be Manrose XF150 or similar, vent through soffit or wall as per manufacturer's installation instructions.
Rangehood to be ducted and vented through soffit or wall.
Dryer to be vented seperately as per NZBC G4.

Electrical Legend

S/M	Smart Meter
G	Garage door motor
S	Smoke detector
E	Extractor fan
	Returns
	Air flow diffusers
	Internal Heat pump unit 1800 x 1800 x 600mm

03/07/2025

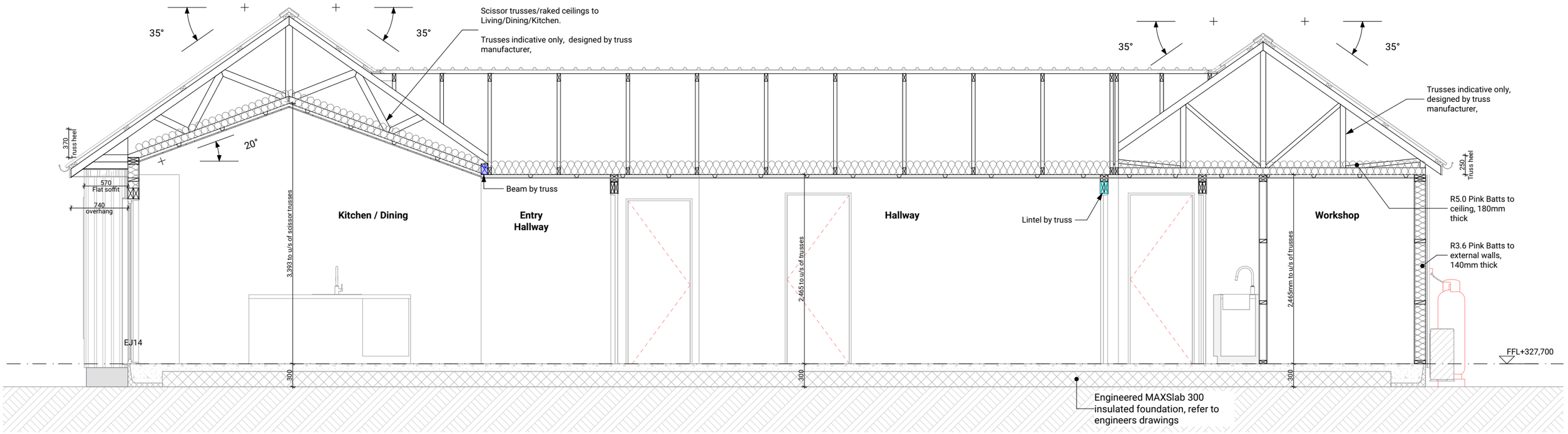
Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:100**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**		**Drawing Sheet:**	**Electrical Plan**

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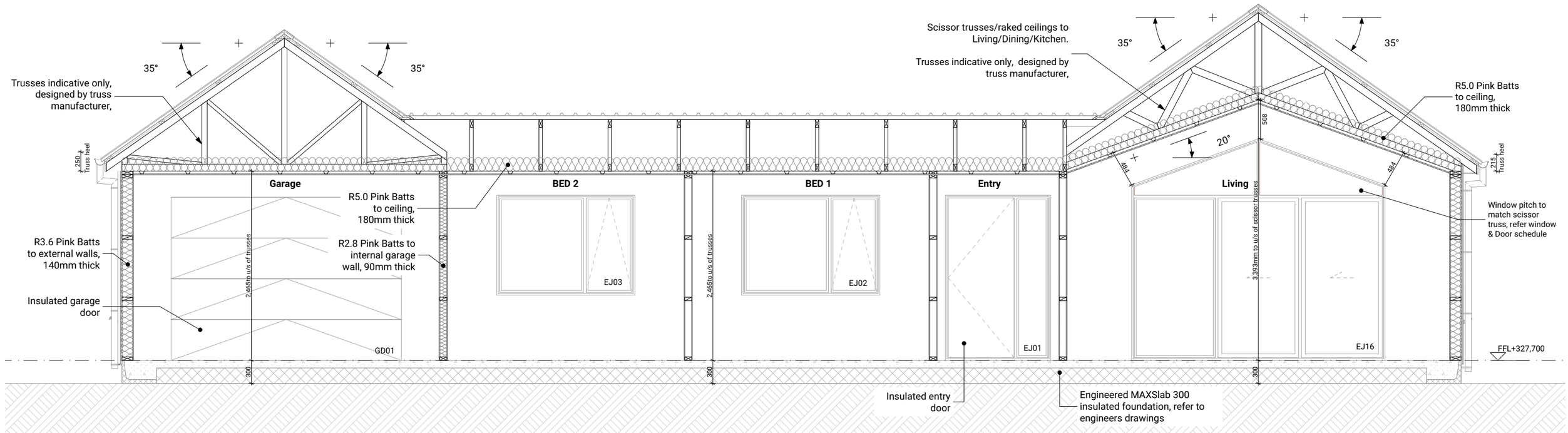
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Drawing No: 113

N



1 Section A 1:50

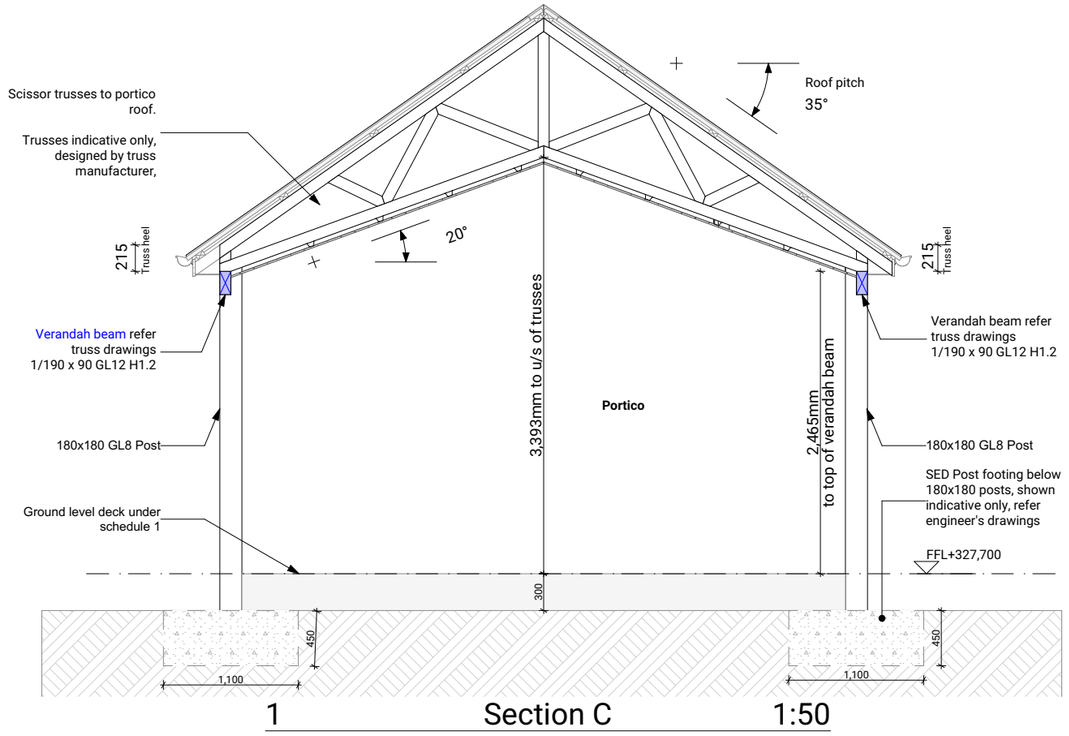


2 Section B 1:50

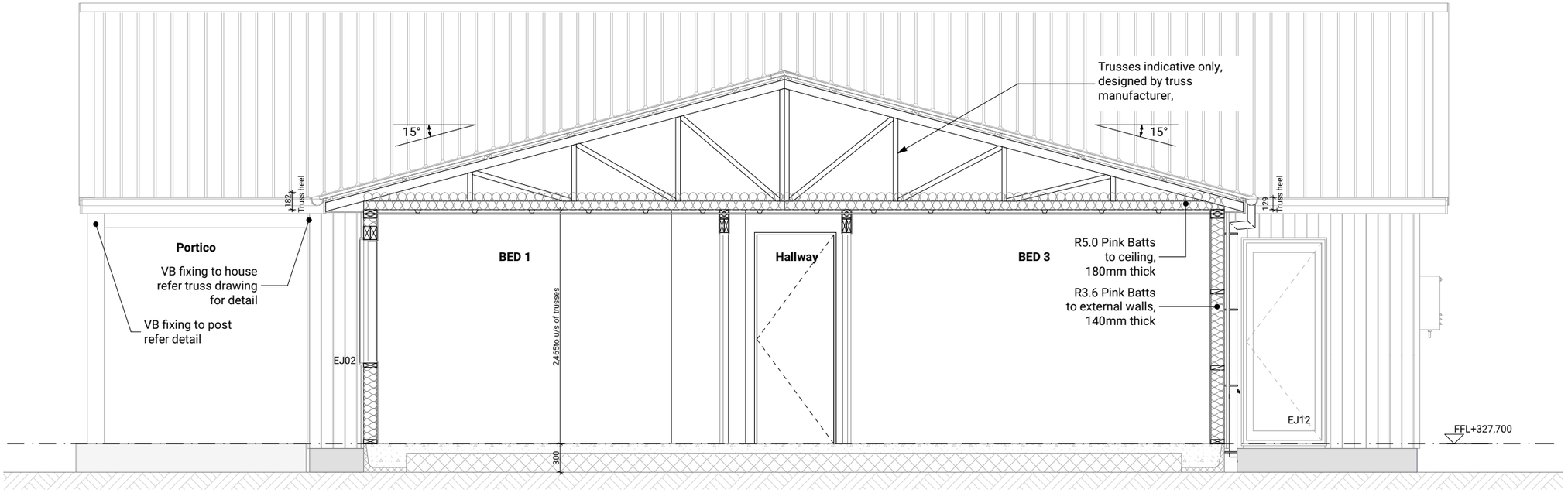
Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:50**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Section A, B**

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Drawing No: 201



1 Section C 1:50

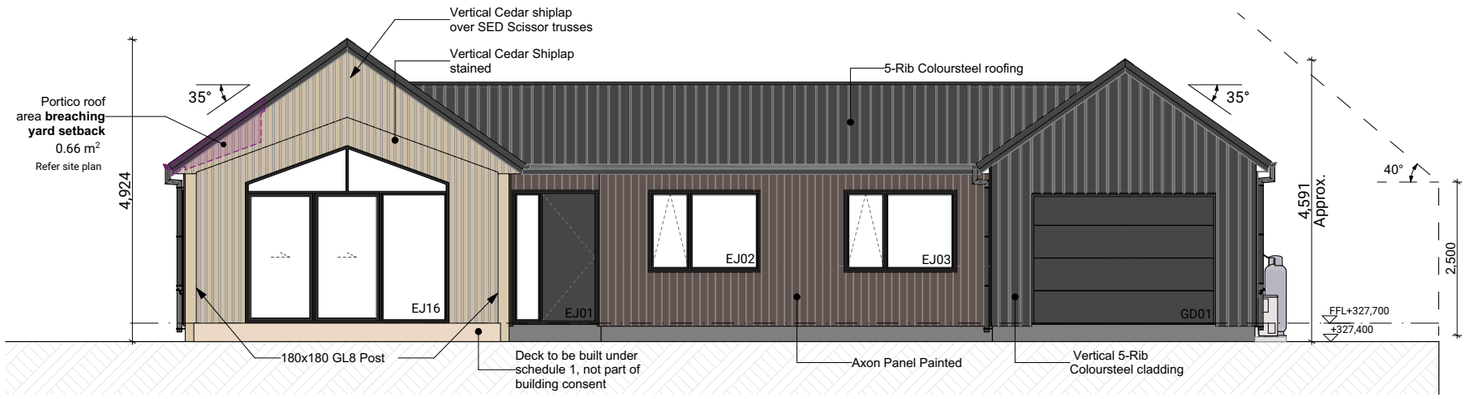


2 Section D 1:50

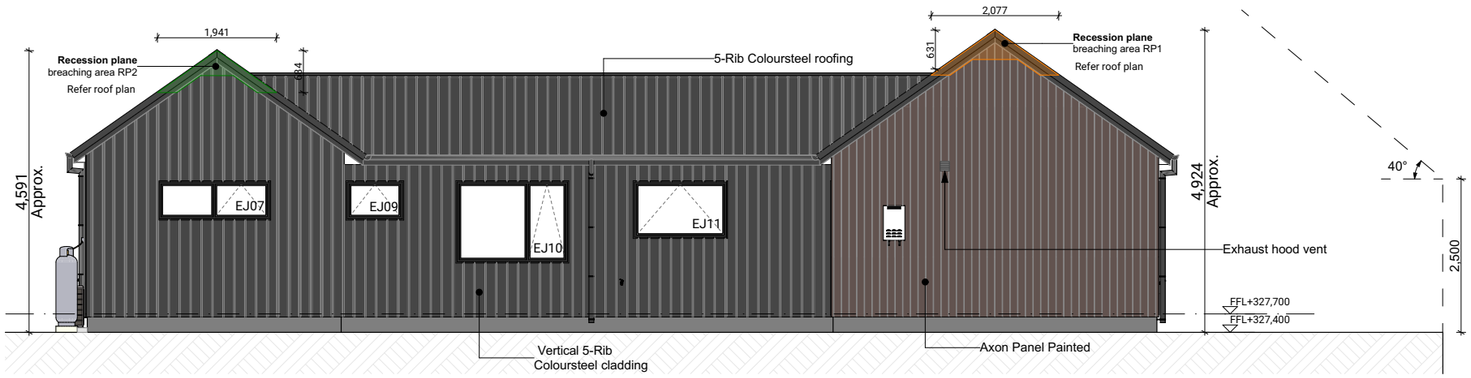
Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:50**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Section C, D**

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Drawing No: 202



1 West Elevation 1:100



2 East Elevation 1:100

Colours selected refer G.J. Gardner.HOMES



Wood-X Damper

Hermpac HP52
Vertical cedar shiplap



COLORSTEEL - Ironsand LRV8

5-Rib Wall Cladding and Roof,
Gutter, Downpipes, Windows, Doors,
Garage Door



Dulux - Blackball LRV16

Axon Panel

Dulux - Cardrona Half LRV 88

Soffits

Cladding Key:

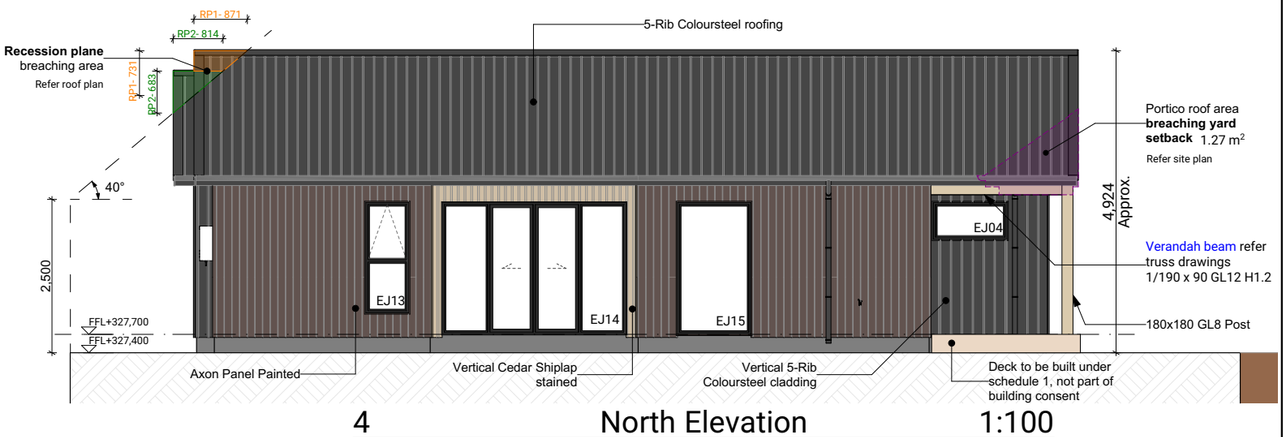
Total wall cladding area
(excluding joinery) = 151.32m²

Vertical Cedar HP52 Shiplap stained: 14.15m² - 9.35%
Axon Panel Painted 133mm Smooth: 60.36m² - 39.89%
Vertical 5-Rib Coloursteel cladding: 76.81m² - 50.76%

BUILDING ENVELOPE RISK MATRIX		
All Elevations		
Risk Factor	**Risk Severity**	**Risk Score**
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	High risk	3
Eaves width	High risk	2
Envelope complexity	High risk	3
Deck design	Low risk	0
Total Risk Score:		**9**



3 South Elevation 1:100

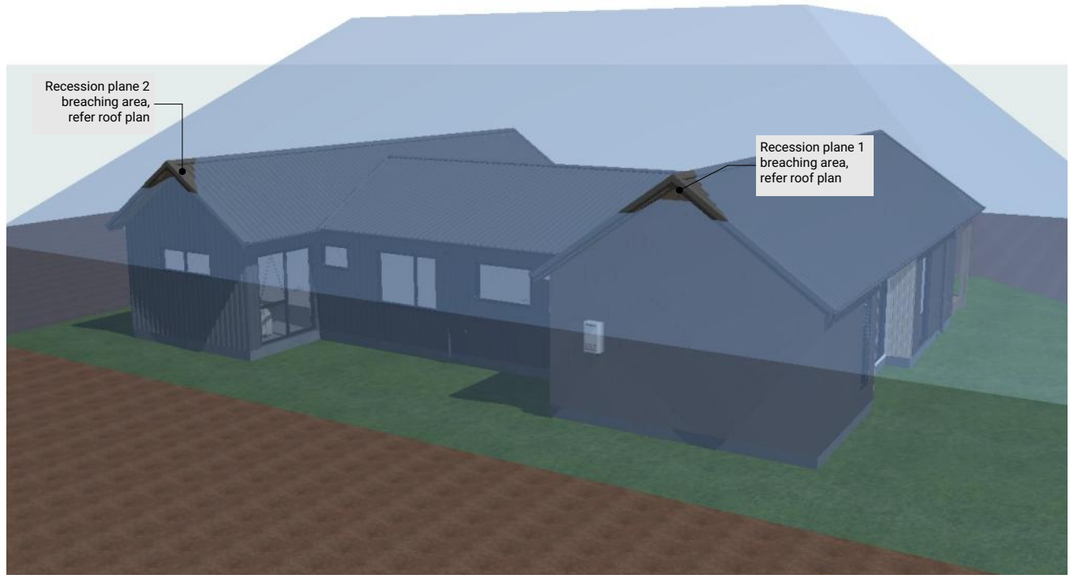


4 North Elevation 1:100

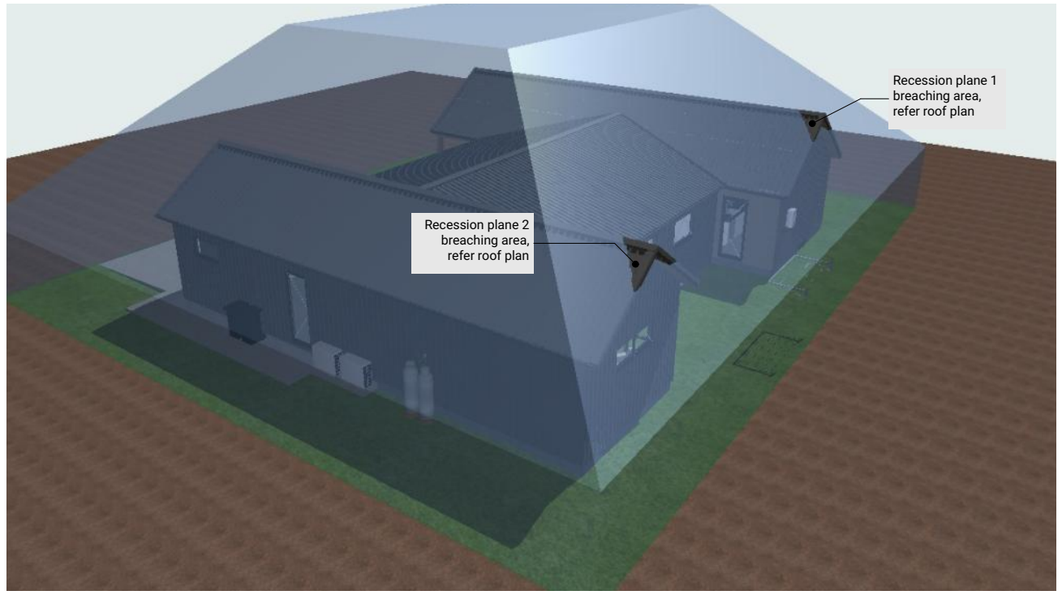
Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:100**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Elevations**

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Drawing No: **301**



1 Recession Plane 2.5m/40 Degrees - North



2 Recession Plane 2.5m/40 Degrees - South

Recession Plane Note:
The recession plane breaches at the rear are compliant. Refer to the roof/elevation plans on the drawing sheet.

Refer Northlake Special Zone - Rules 12.34.4.2.iv.a.i.



3 Front house view



4 Back yard view

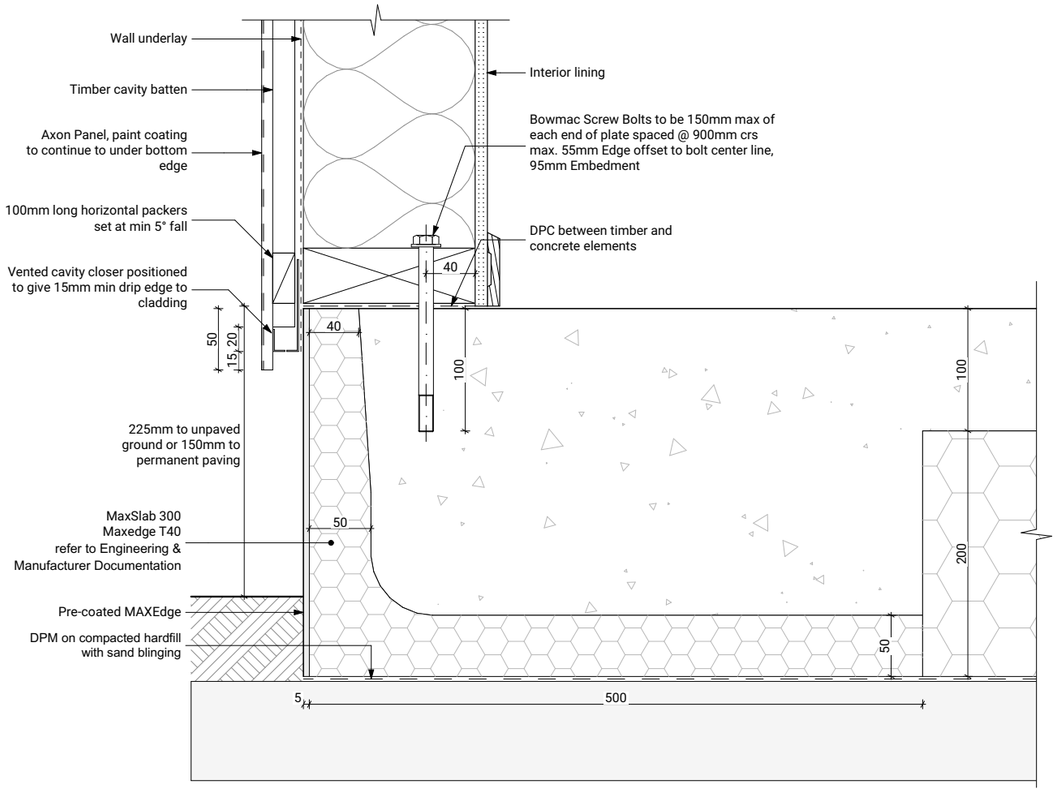
Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**		**Drawing Sheet:**	**Perspectives**

G.J. Gardner. HOMES

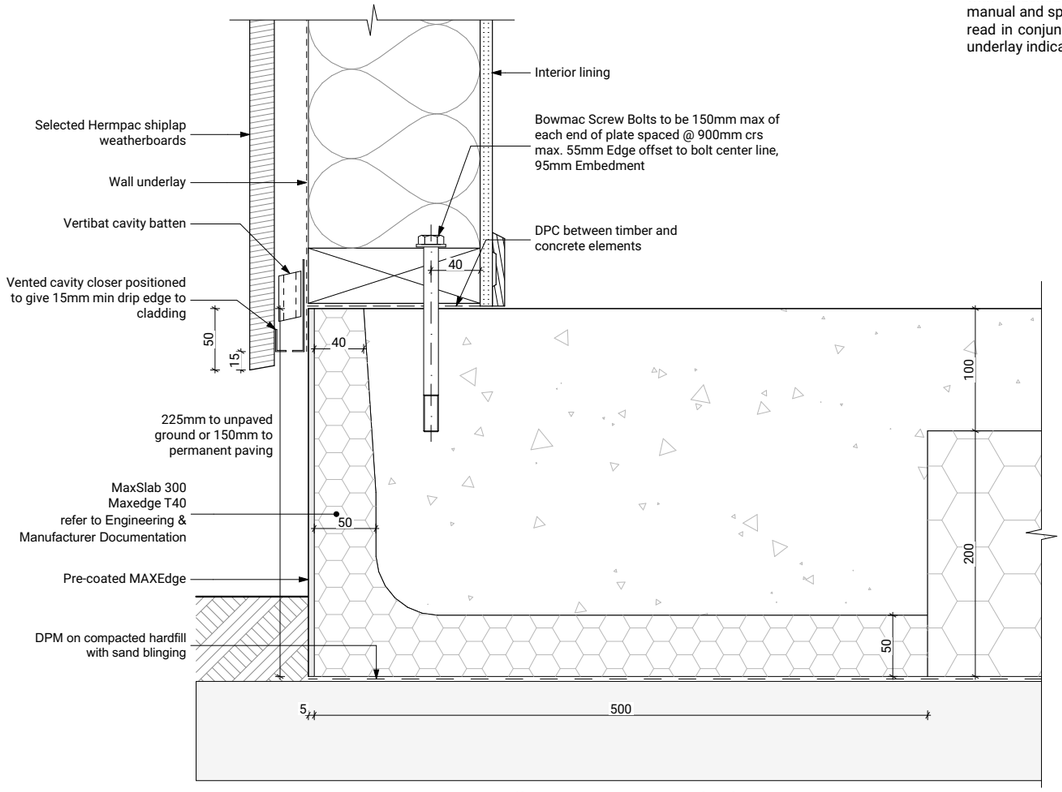
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Drawing No: **302**

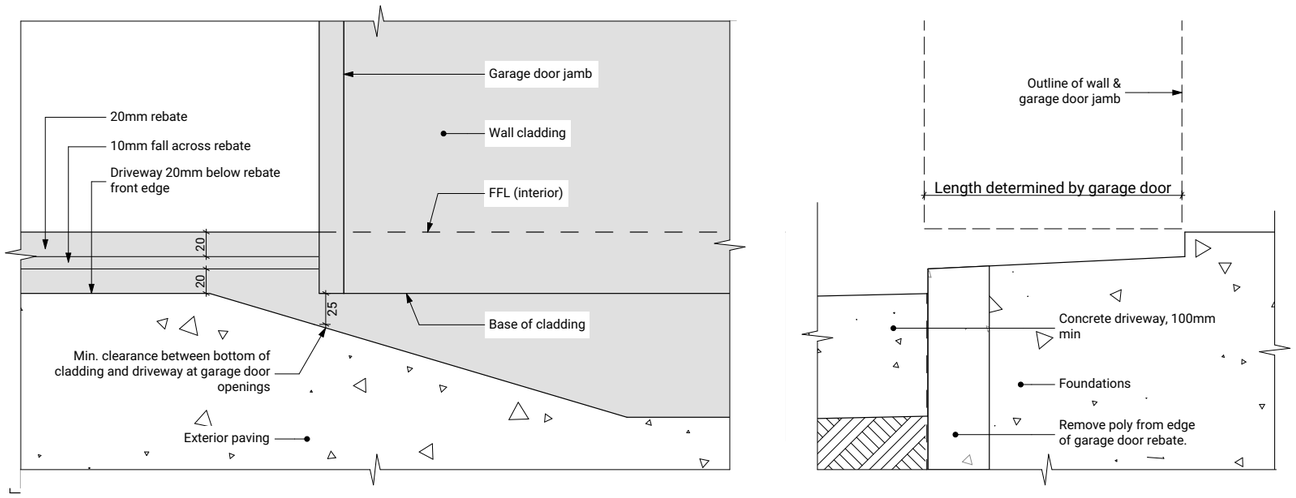
Note:All details to be read in conjunction with attached manufacturer's installation manual and specifications. All Details to be read in conjunction with bracing plan, wall underlay indicative only.



Wall Base - Axon



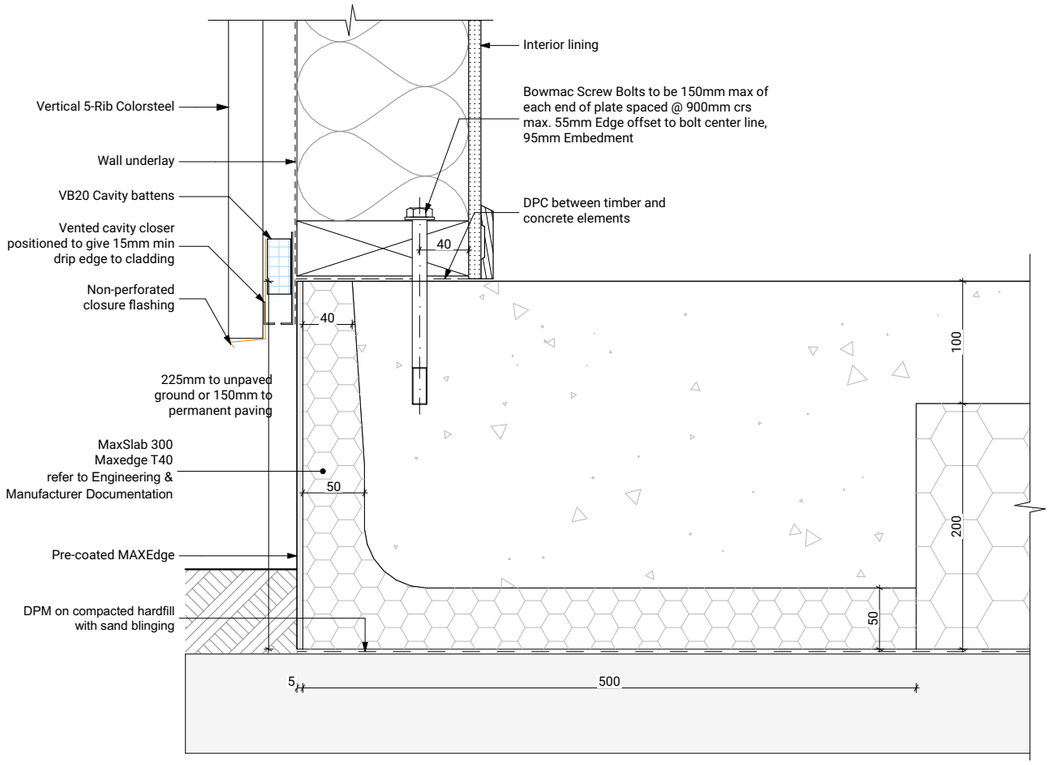
Wall Base - Hermpac Shiplap



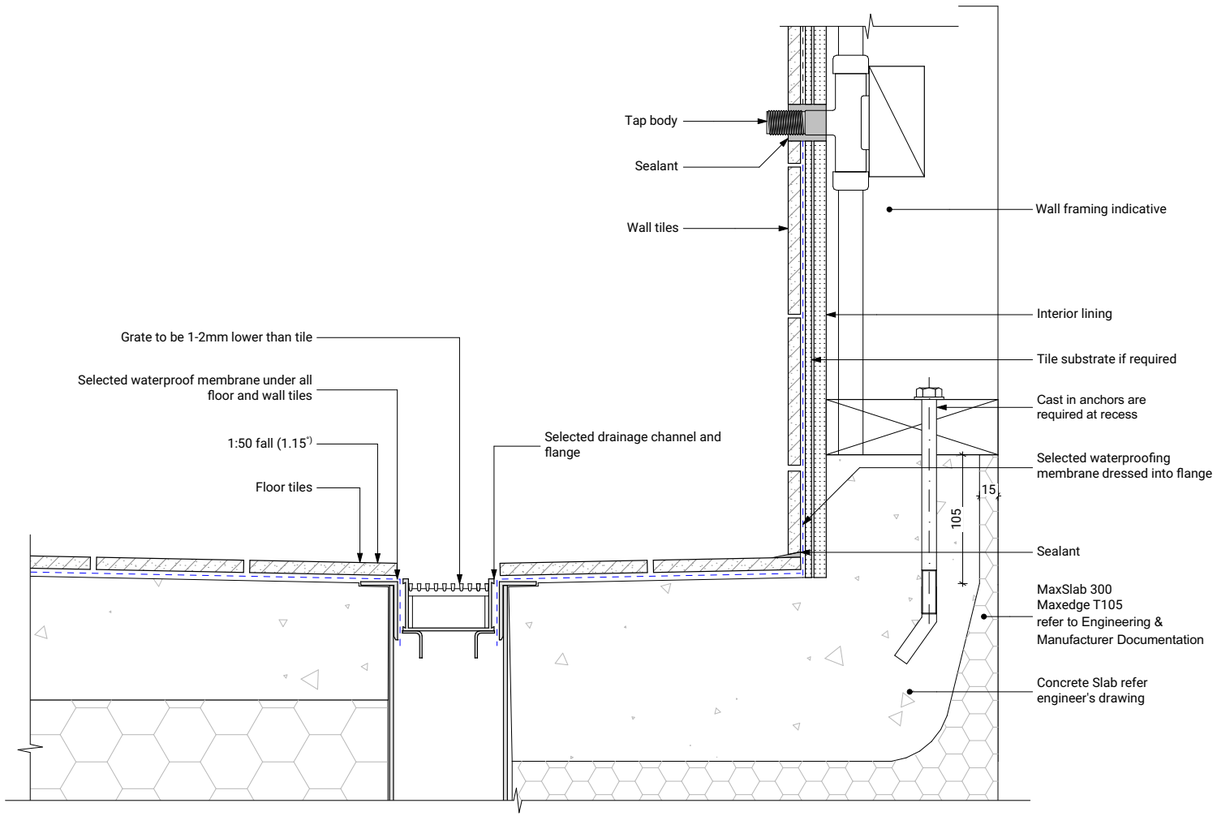
Garage Door Threshold

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:5**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Foundation**
				Drawing No:	**401**

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Wall Base - 5 - Rib Cladding



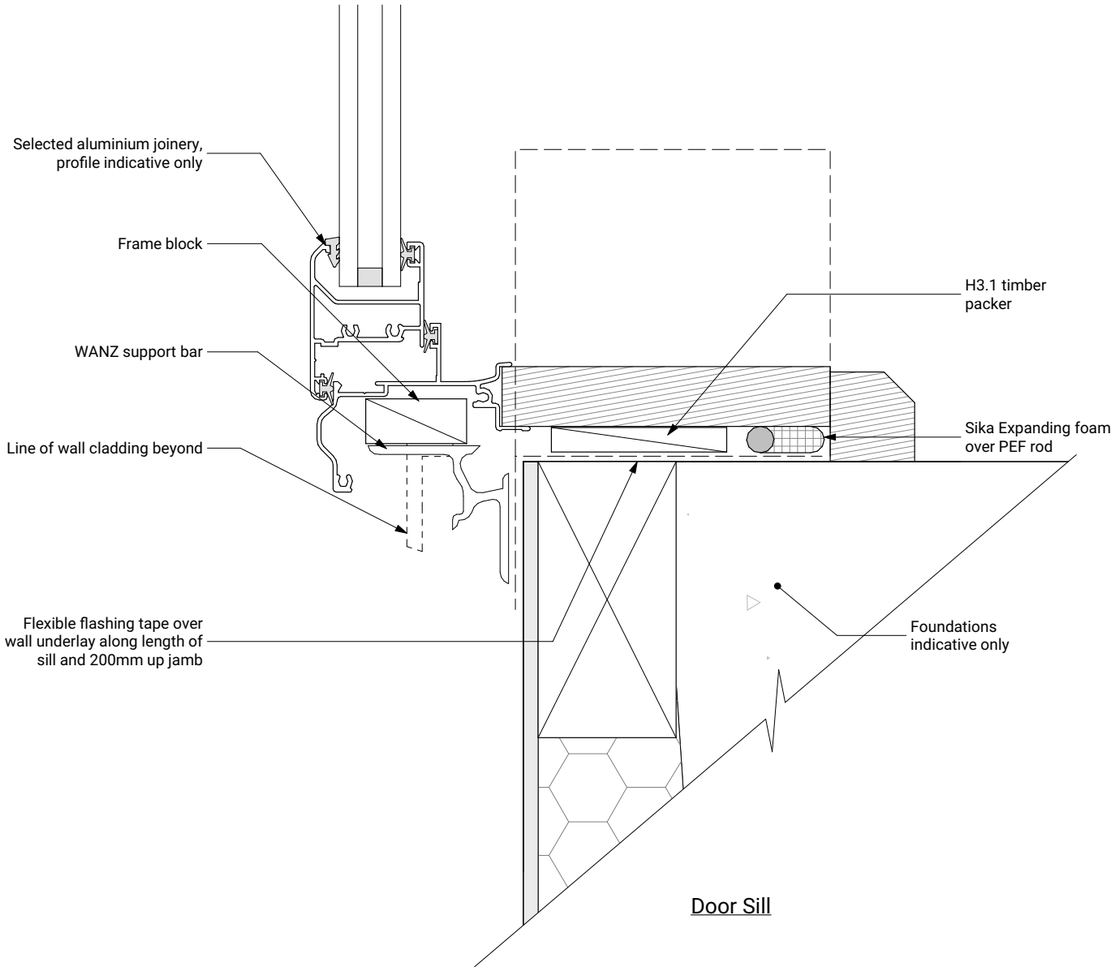
Tiled Shower - on Concrete Slab

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:5**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Foundation Cont.**

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Drawing No: 402

Note:All details to be read in conjunction with attached manufacturer's installation manual and specifications. All Details to be read in conjunction with bracing plan, wall underlay indicative only.



Door Sill

Stacker Rebate Width

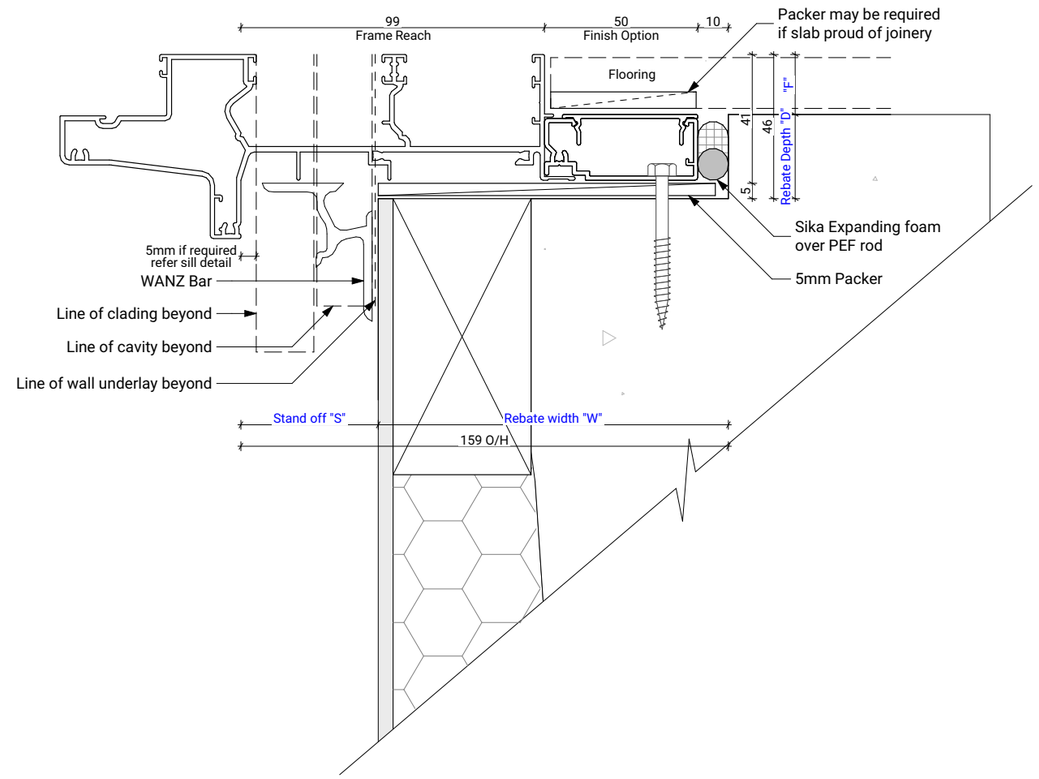
Stand off
"S": Cladding depth + Cavity depth + Underlay depth + 5mm min. gap (if required) = mm

Rebate Width
"W": 159 O/A - "S" = mm

Stacker Rebate Depth

Flooring
"F": Carpet = 19mm
Vinly = 2mm

Rebate Depth
"D": 46mm - "F" = mm

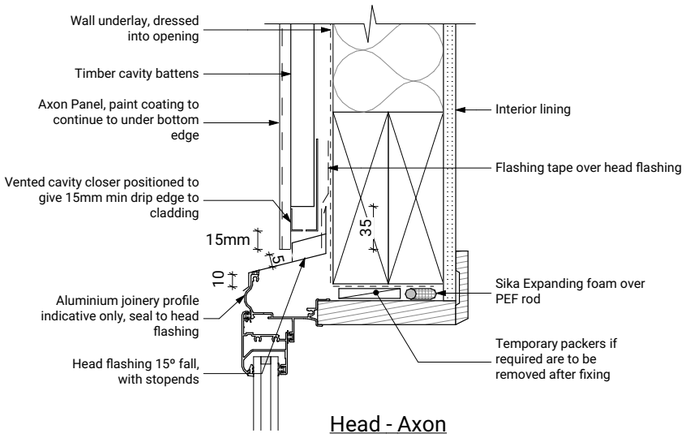


Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:2**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Joinery Foundation**

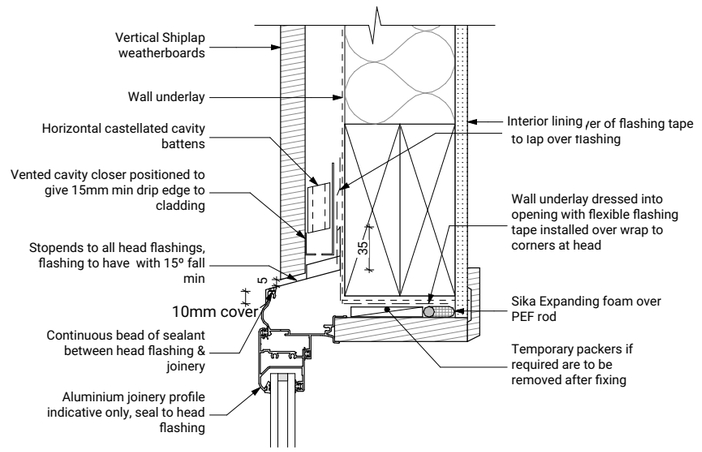
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Drawing No: **403**

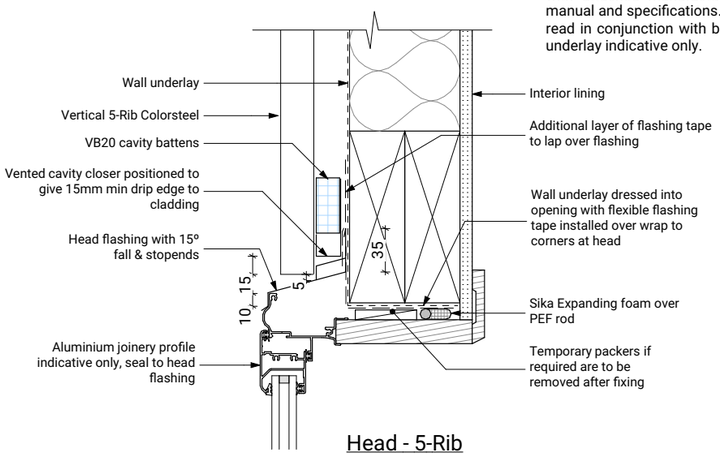
Note:All details to be read in conjunction with attached manufacturer's installation manual and specifications. All Details to be read in conjunction with bracing plan, wall underlay indicative only.



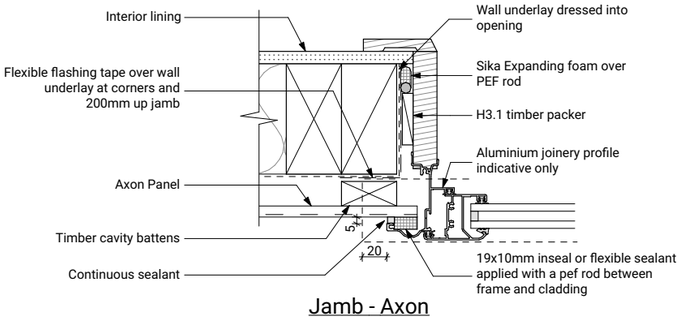
Head - Axon



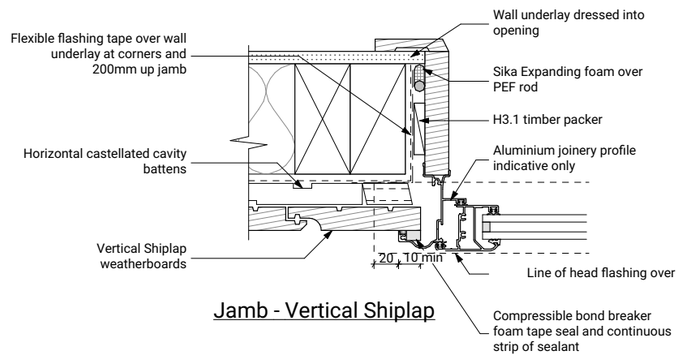
Head - Vertical Shiplap



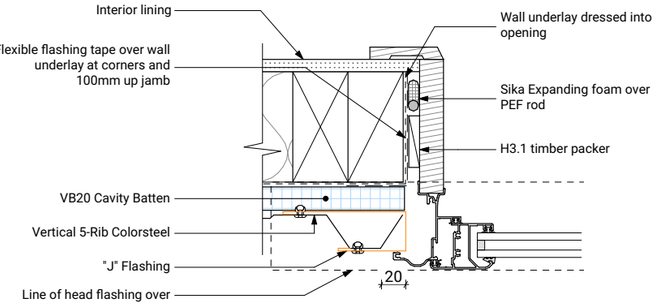
Head - 5-Rib



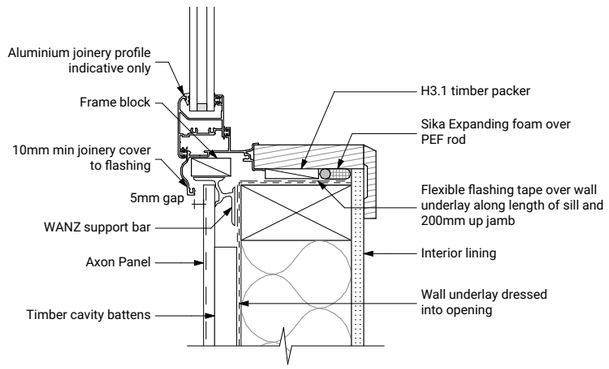
Jamb - Axon



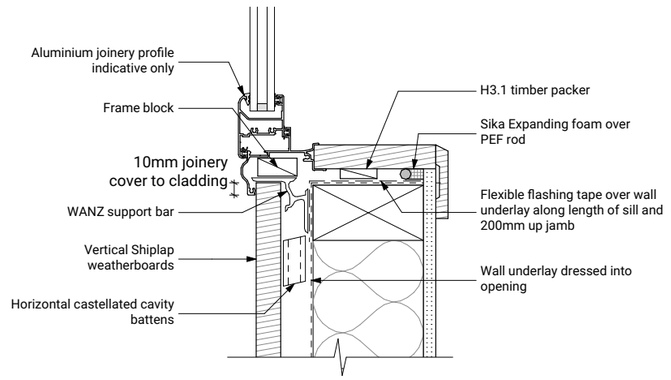
Jamb - Vertical Shiplap



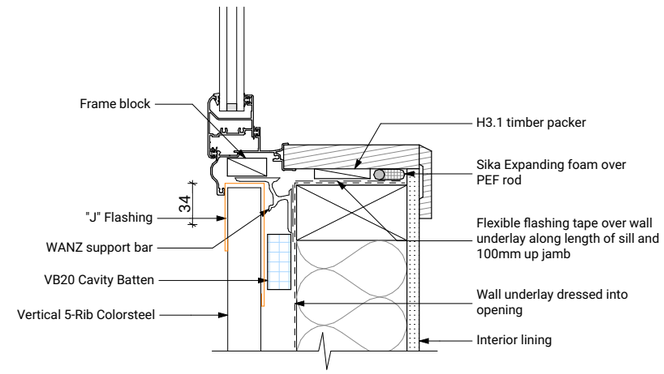
Jamb - 5-Rib



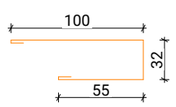
Sill - Axon



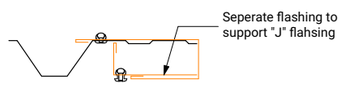
Sill - Vertical Shiplap



Sill - 5-Rib



"J" Flashing

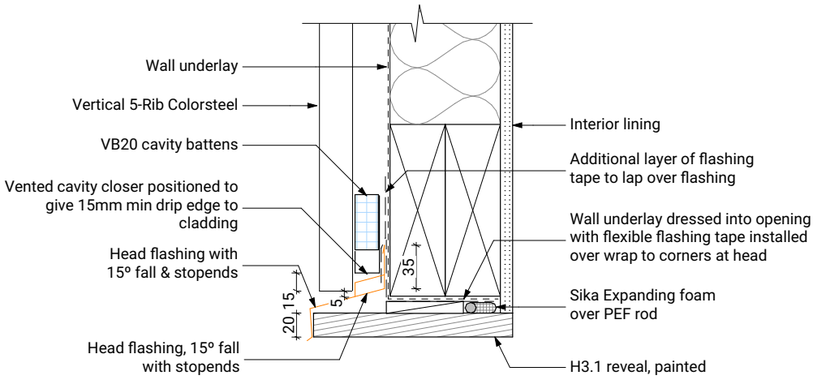


Alternative Jamb Flashing

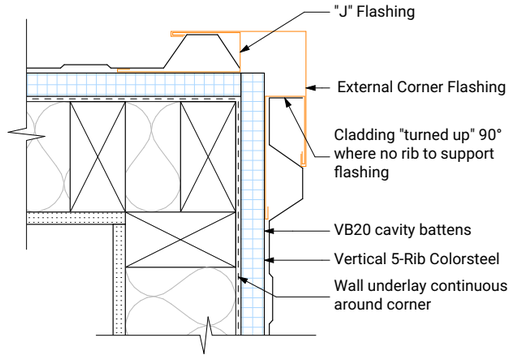
Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:5**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Joinery**

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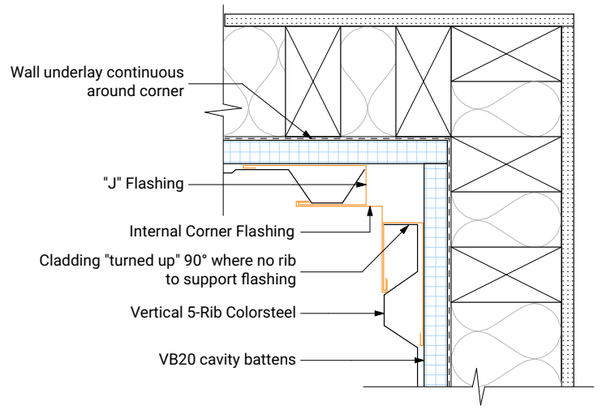
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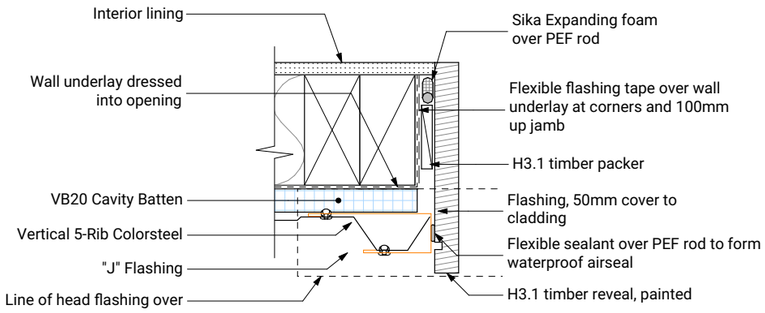
Garage Door Head - 5-Rib



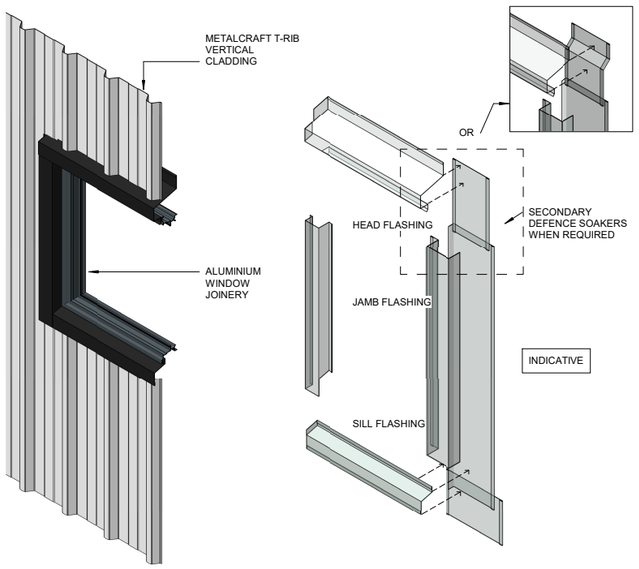
External Corner - 5-Rib

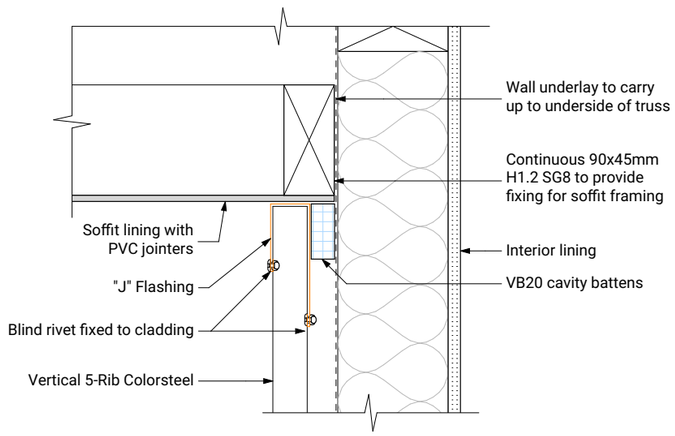


Internal Corner - 5-Rib

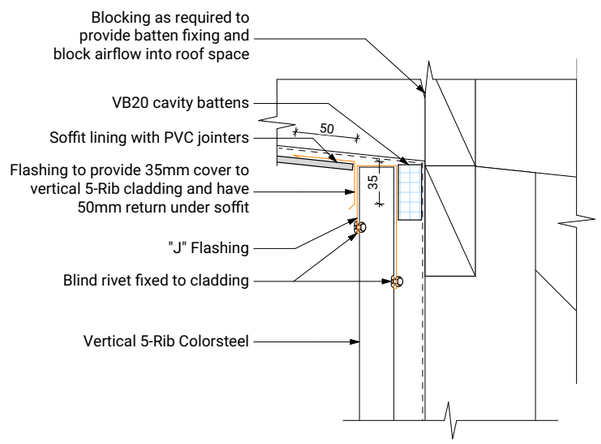


Garage Door Jamb - 5-Rib

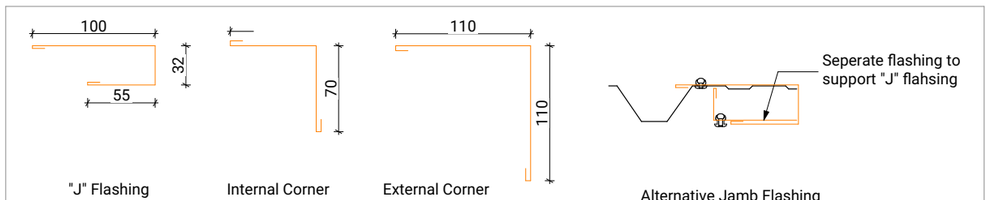




Soffit - 5-Rib



Incline Soffit - 5-Rib

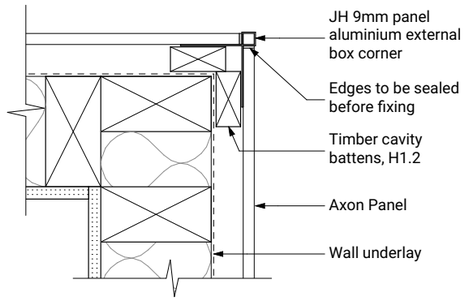


Flashing Details

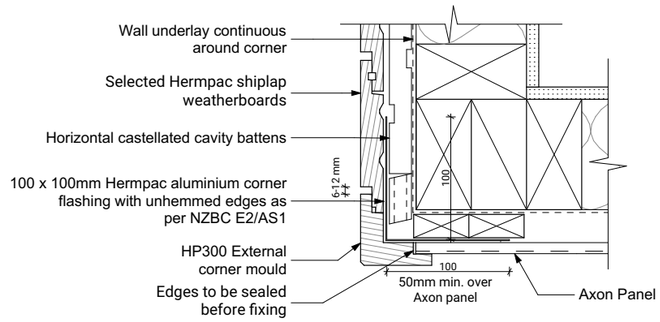
Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:5**
wanaka.enquiries@gjgardner.co.nz	03 443 2196	33 Reece Crescent, Wānaka	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Joinery & Cladding**

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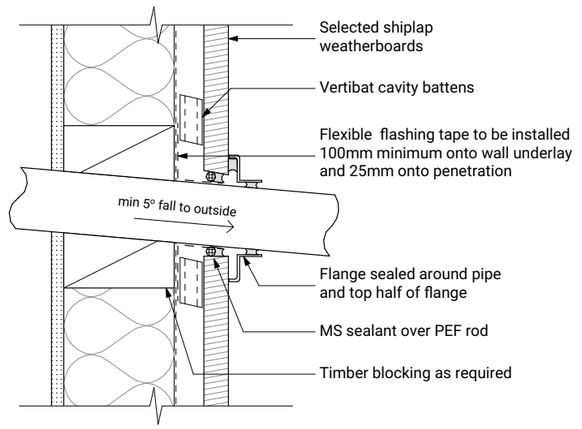
Drawing No: 405



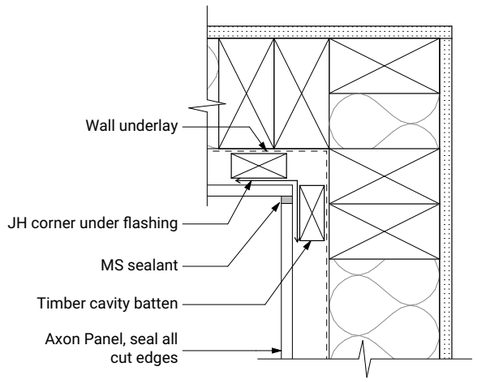
External Corner - Axon



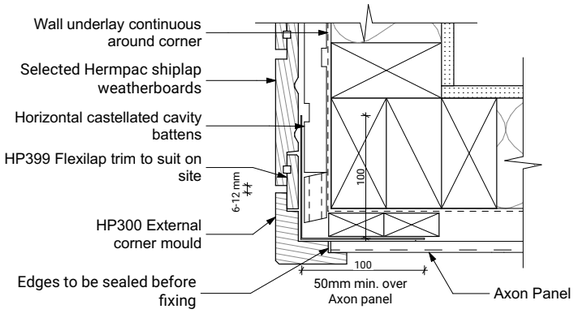
EC Junction - Shiplap to Axon Panel



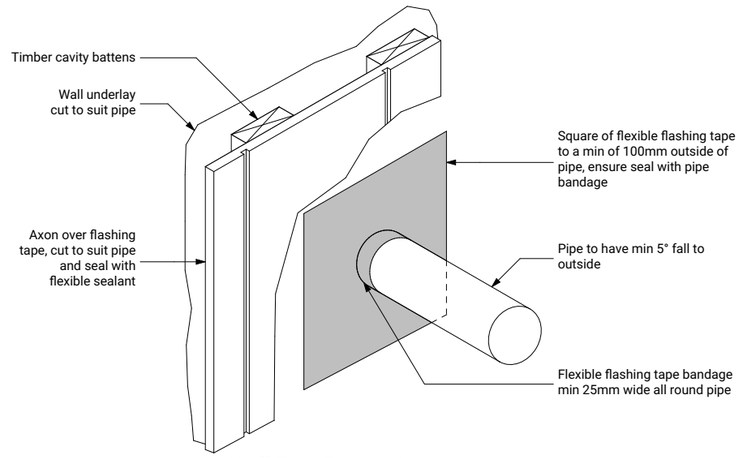
Wall Pipe Penetration - Shiplap WB



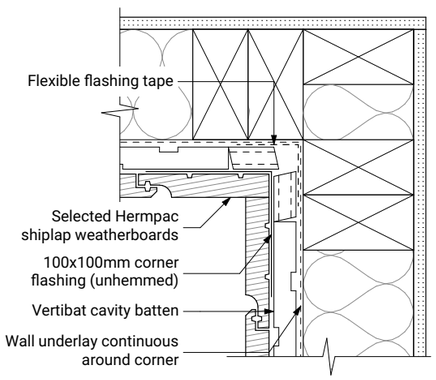
Internal Corner - Axon



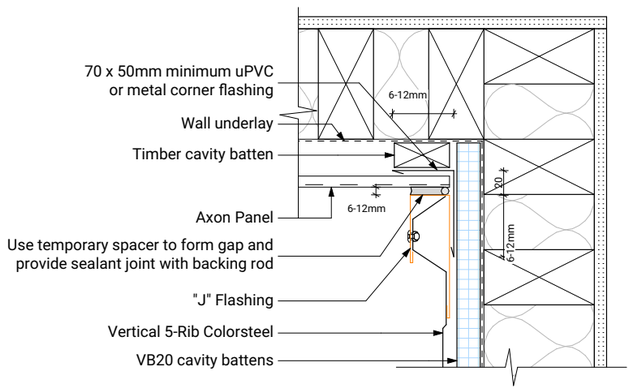
EC Junction - Shiplap to Axon Panel with Flexilap trim



Wall Pipe Penetration - Axon



Internal Corner - Hermpac



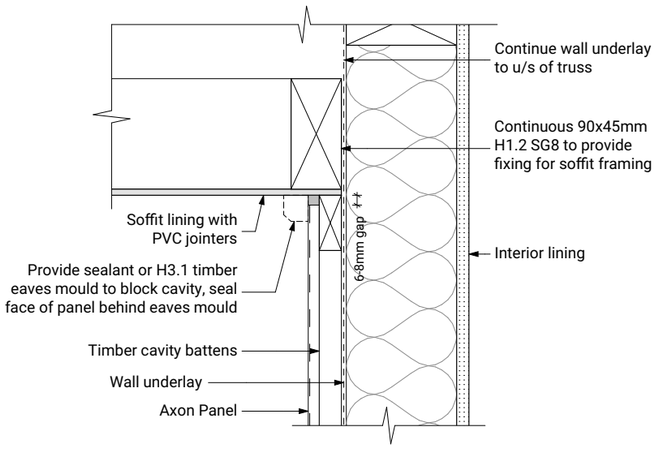
Internal Corner Junction - 5-Rib/Axon

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:5**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Cladding Cont.**

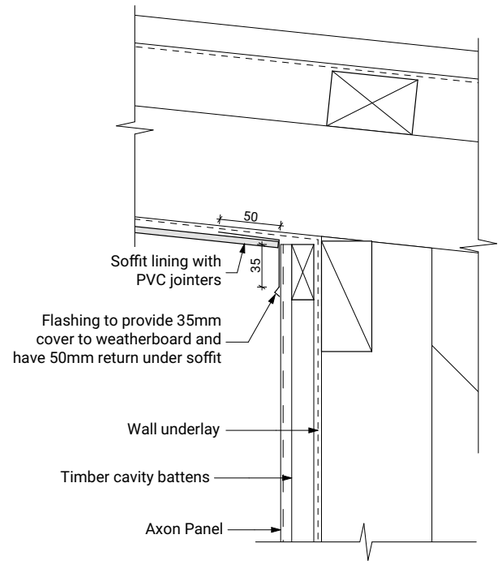
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Drawing No: **406**

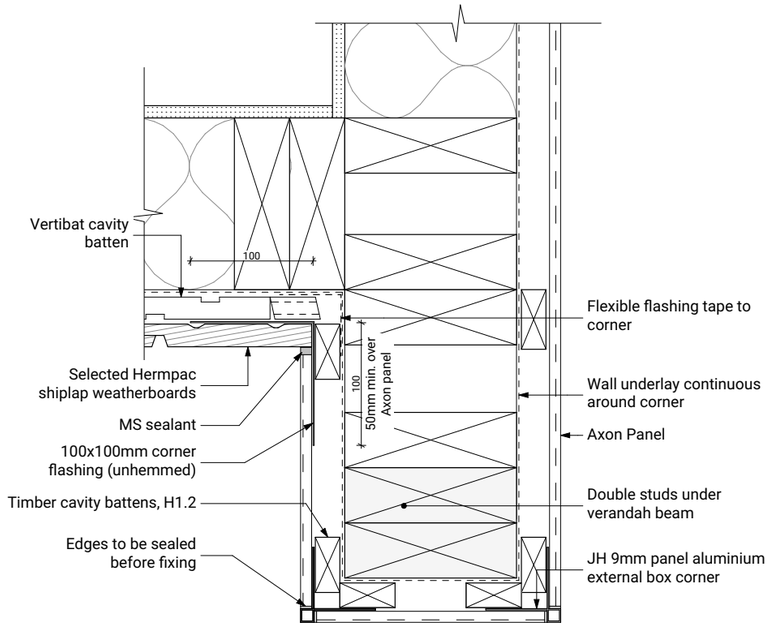
Note:All details to be read in conjunction with attached manufacturer's installation manual and specifications. All Details to be read in conjunction with bracing plan, wall underlay indicative only.



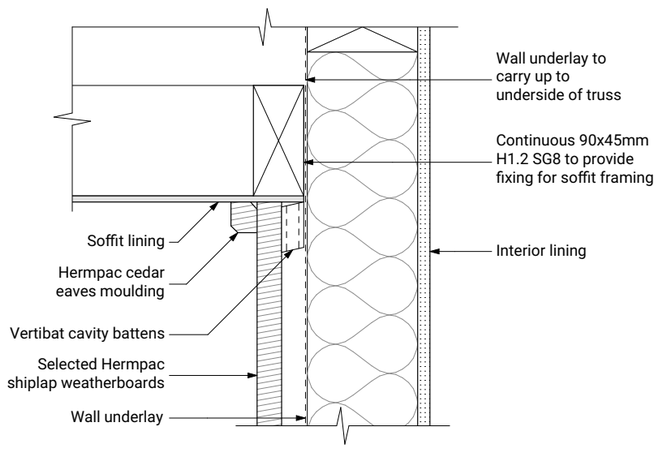
Soffit - Axon



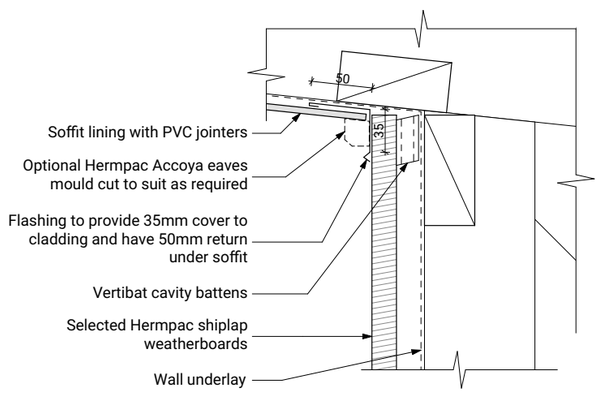
Incline Soffit - Axon



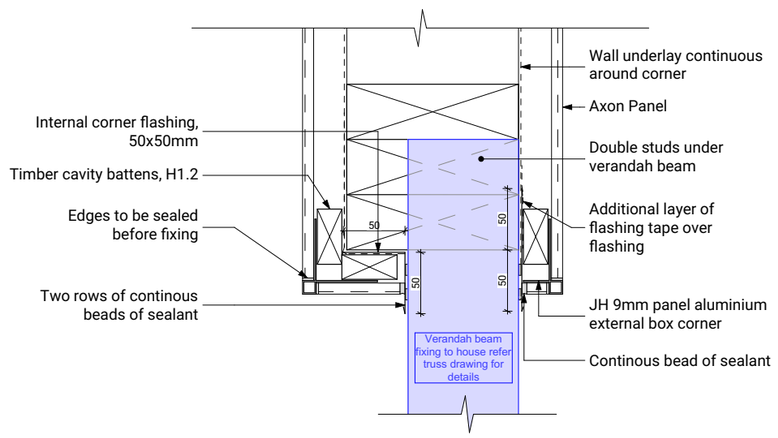
Internal Corner - Shiplap to Axon Panel



Soffit - Hermpac



Incline Soffit - Hermpac



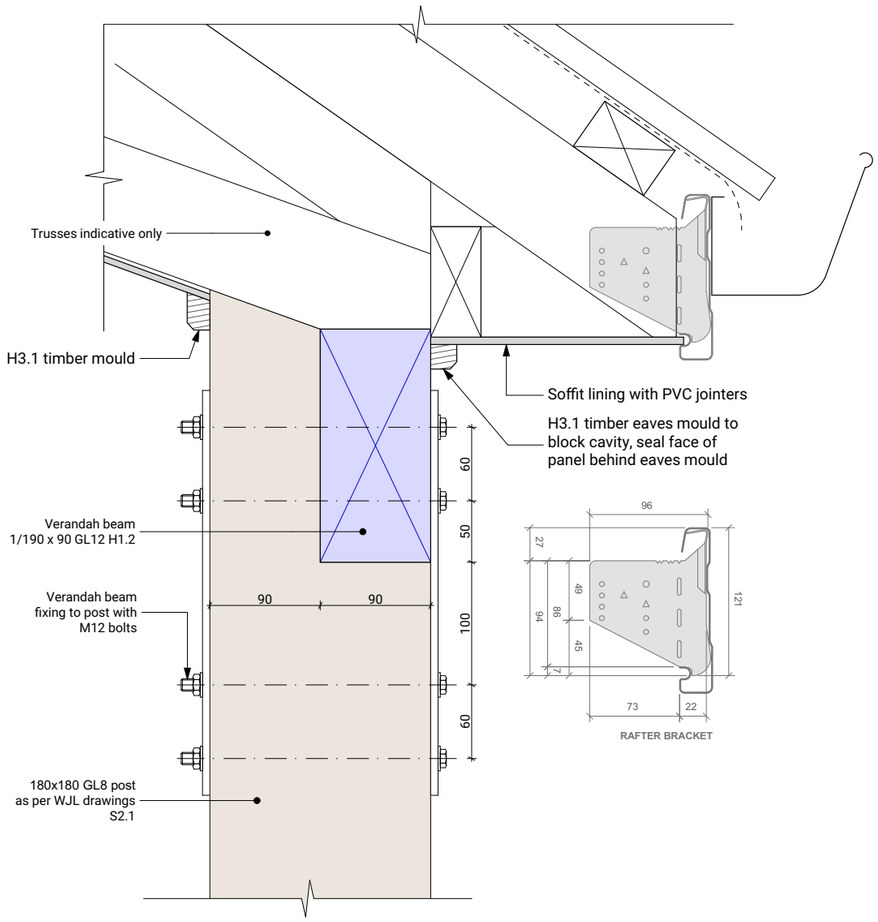
VB Penetration Axon Plan view

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:5**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Cladding Cont.2**

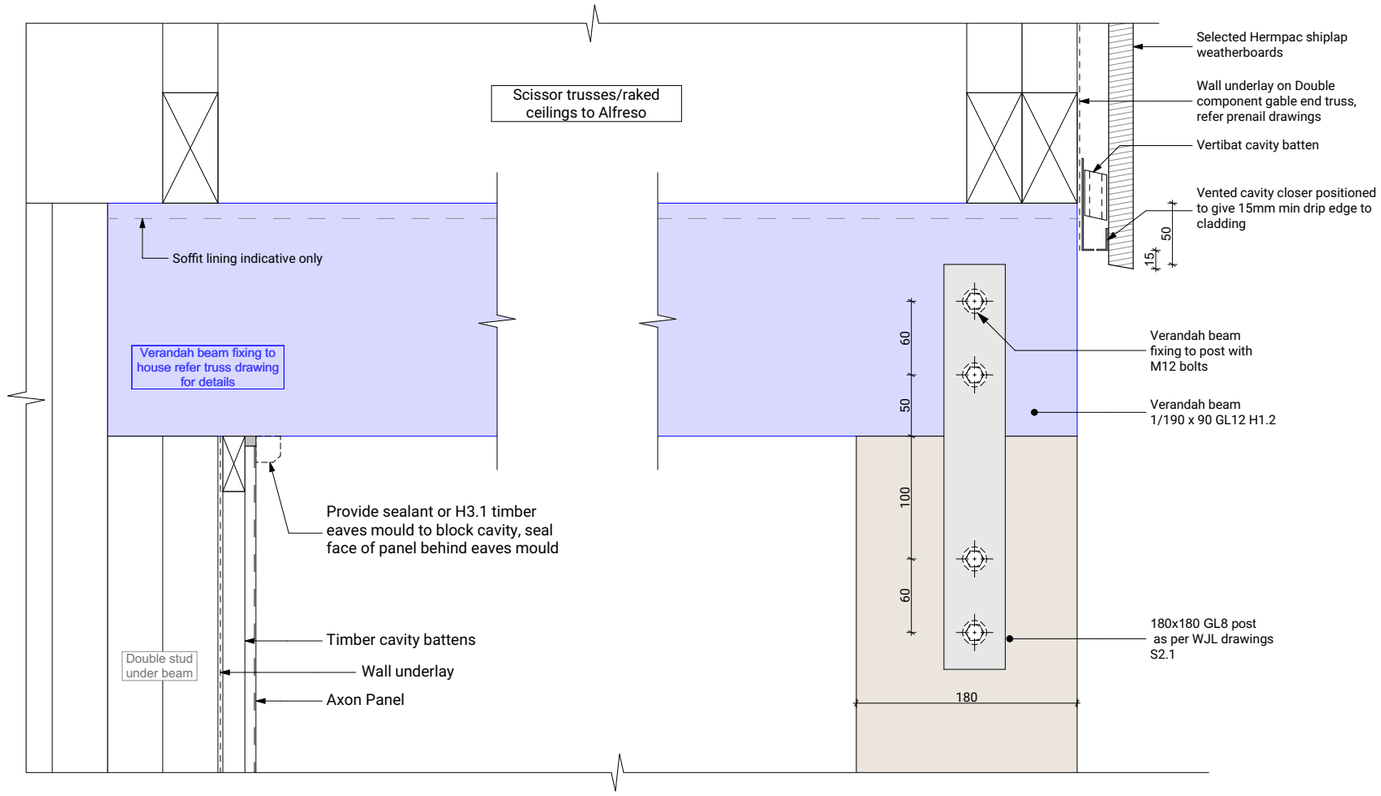
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Drawing No: **407**

Note:All details to be read in conjunction with attached manufacturer's installation manual and specifications. All Details to be read in conjunction with bracing plan, wall underlay indicative only.



VB fixing to post



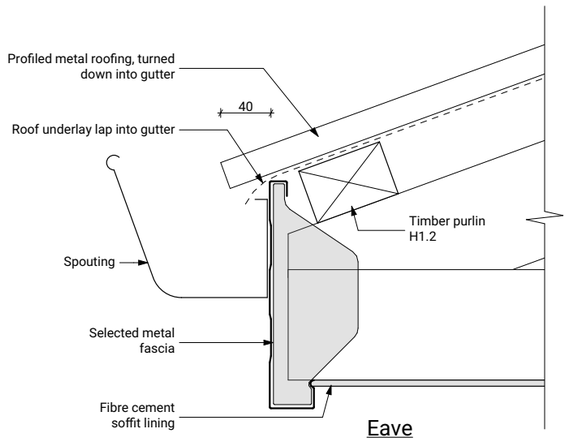
VB Penetration Shiplap Section view

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:5**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Verandah beam**

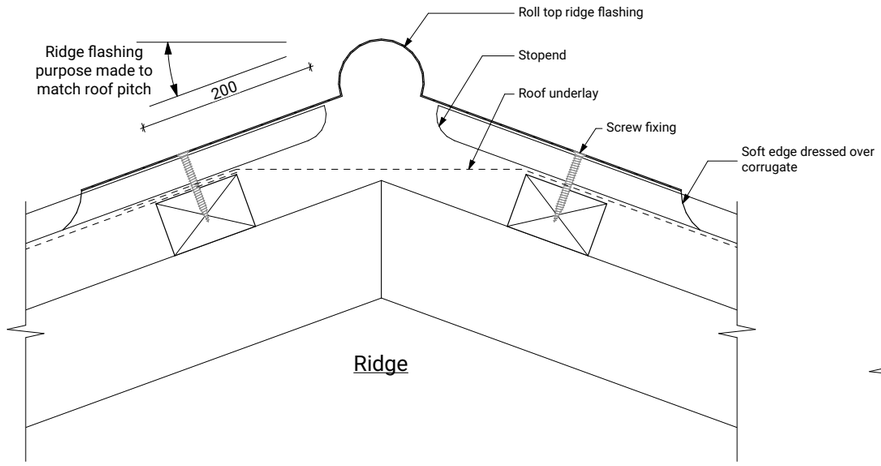
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Drawing No: **408**

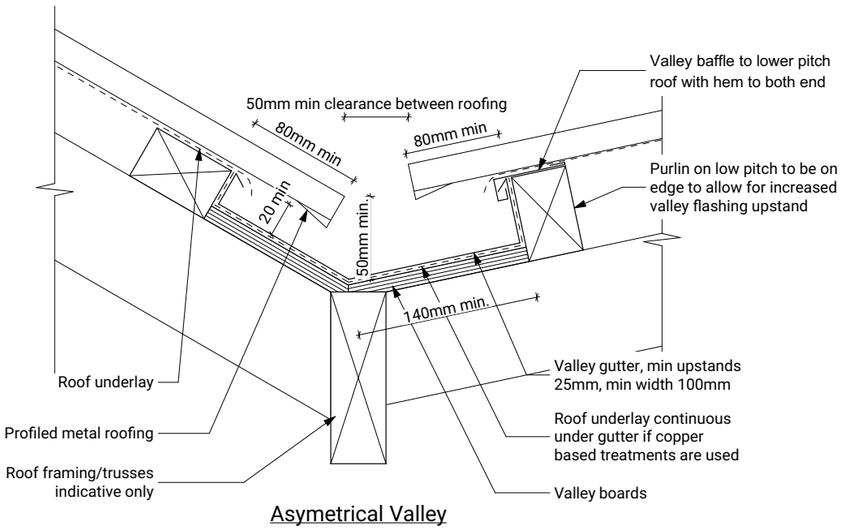
Note:All details to be read in conjunction with attached manufacturer's installation manual and specifications. All Details to be read in conjunction with bracing plan, wall underlay indicative only.



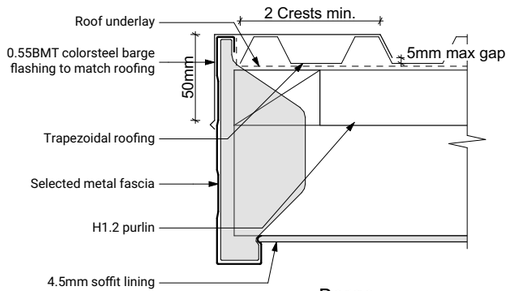
Eave



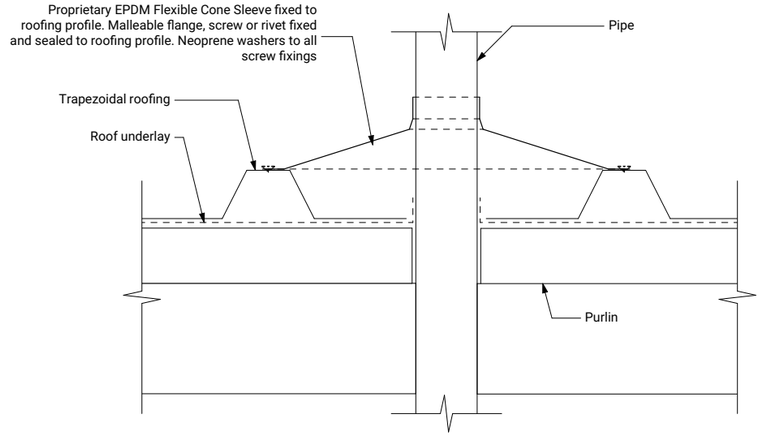
Ridge



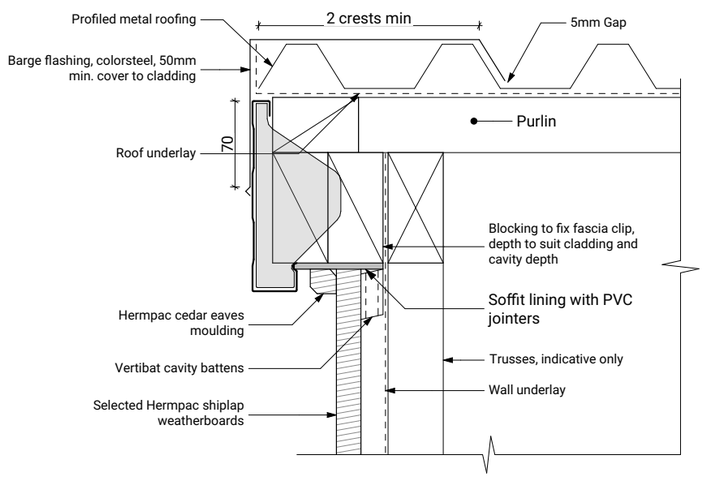
Asymetrical Valley



Barge



Roof Pipe Penetration

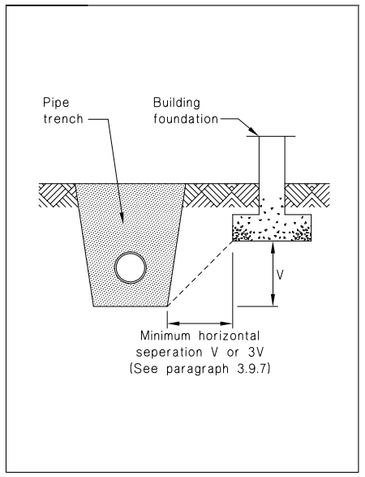


Barge no O/H - Hermpac

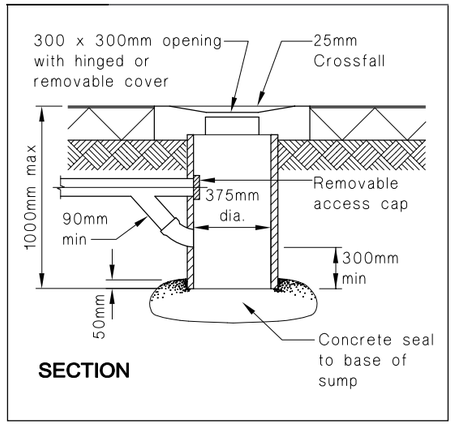
Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:5**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Roof**

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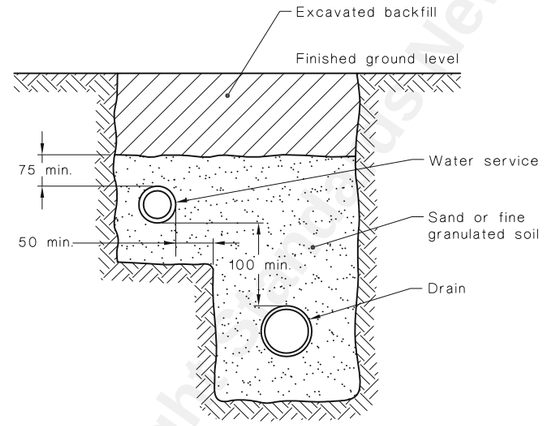
Drawing No: **409**



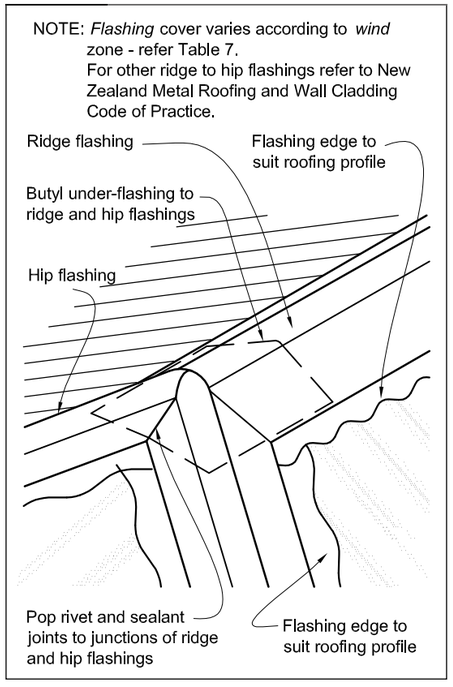
NZBC E1 Figure 14 - Trench to Foundation Cover



NZBC E1 Figure 8 - Type-one Sump



AS/NZS 3500.2 Figure 3.6.6 Shared Trench



NZBC E2 Figure 43 - Ridge to hip flashings

Figure 54: **Soaker flashing for pipe penetrations**
Paragraph 8.4.17

NZBC Figure 54 - Soaker Flashing for Pipe Penetration

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:1.6667, 1:1, 1:1.2500**
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - NZBC & NZ/AUS Standards**

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Drawing No: **410**

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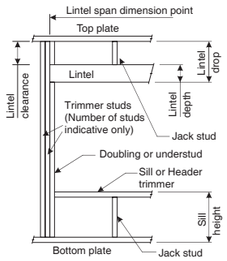
LINTEL FIXING SCHEDULE

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



Lintel Supporting Girder Trusses						
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

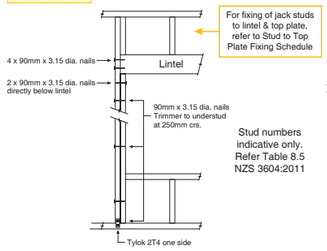
Lintel Span (m)	Loaded Dimension (m) (See Fig. 1.3 NZS 3604:2011)	Light Roof Wind Zone					Heavy Roof Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
1.0	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	F	F	F	G	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
1.2	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	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	G	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	E	F	G	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	G	G
	3.0	F	F	G	G	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	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
4.8	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	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	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
5.1	2.0	F	F	G	H	H	E	F	G	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	-	-
	6.0	G	H	-	-	-	E	G	H	-	-
5.4	2.0	F	F	G	H	H	E	F	G	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	G	H	-	-	-	E	G	H	-	-

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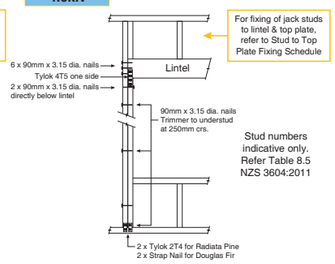
LINTEL FIXING OPTIONS

LUMBERLOK®

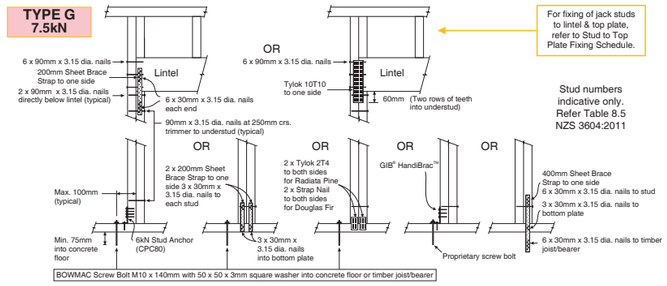
TYPE E 1.4kN



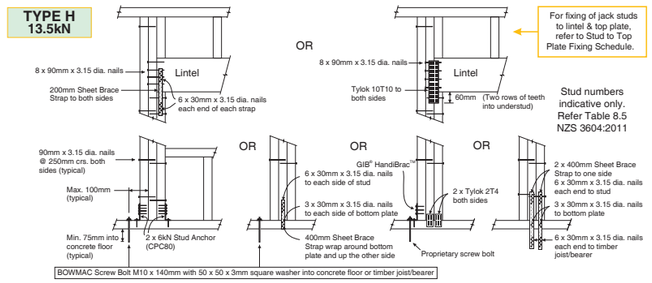
TYPE F 4.0kN



TYPE G 7.5kN



TYPE H 13.5kN



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LUMBERLOK®

09/2011

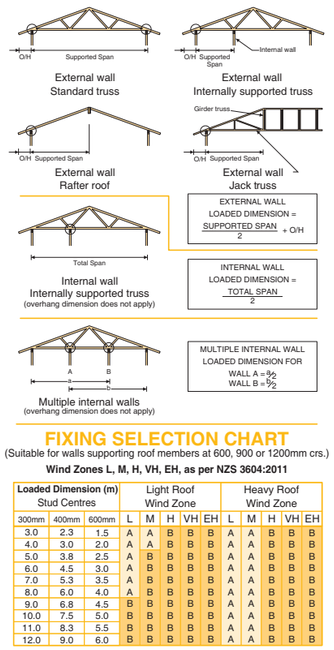
STUD TO TOP PLATE FIXING SCHEDULE

ALTERNATIVE TO TABLE 8.18 NZS 3604:2011

NOTE:

- ★ All fixings are designed to resist vertical loads only. Dead loads include the roof weight and standard ceiling weight of 0.20 kPa.
- ★ Refer to Table 8.19 NZS 3604:2011 for nailing schedule to resist lateral loads.
- ★ These fixings assume the correct choice of rafter/truss to top plate connections have been made.
- ★ Gable end wall top plate/stud connections where the adjacent rafter/truss is located within 1200mm of gable end wall with a maximum verge overhang of 750mm, requires fixing type A as shown below.
- ★ All fixings assume top plate thickness of 45mm maximum.
- ★ Wall framing arrangements under girder trusses are not covered in this schedule.
- ★ All timber selections are as per NZS 3604:2011.

LOADED DIMENSION DEFINITION



EXTERNAL WALL LOADED DIMENSION = SUPPORTED SPAN / 2 + O/H

INTERNAL WALL LOADED DIMENSION = TOTAL SPAN / 2

MULTIPLE INTERNAL WALL LOADED DIMENSION FOR WALL A = A/2 + B/2, WALL B = A/2 + B/2

FIXING SELECTION CHART

(Suitable for walls supporting roof members at 600, 900 or 1200mm crs.)

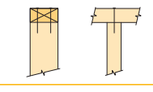
Wind Zones L, M, H, VH, EH, as per NZS 3604:2011

Loaded Dimension (m) Stud Centres			Light Roof Wind Zone				Heavy Roof Wind Zone				
300mm	400mm	600mm	L	M	H	VH	EH	L	M	H	VH	EH
3.0	2.3	1.5	A	A	B	B	B	A	A	B	B	B
4.0	3.0	2.0	A	A	B	B	B	A	A	B	B	B
5.0	3.8	2.5	A	B	B	B	B	A	A	B	B	B
6.0	4.5	3.0	A	B	B	B	B	A	A	B	B	B
7.0	5.3	3.5	A	B	B	B	B	A	A	B	B	B
8.0	6.0	4.0	A	B	B	B	B	A	A	B	B	B
9.0	6.8	4.5	B	B	B	B	B	A	A	B	B	B
10.0	7.5	5.0	B	B	B	B	B	A	A	B	B	B
11.0	8.3	5.5	B	B	B	B	B	A	A	B	B	B
12.0	9.0	6.0	B	B	B	B	B	A	A	B	B	B

FIXING OPTIONS

FIXING TYPE A 0.7 kN

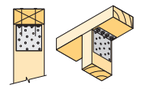
2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



FIXING TYPE B 4.7 kN

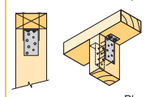
CHOOSE ANY OF THE 3 OPTIONS BELOW

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



Plus LUMBERLOK 6kN Stud Anchor (CPC80)

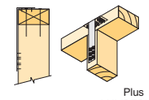
2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus 2 x LUMBERLOK CPC40

Recommended for internal wall options to avoid lining issues

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



Plus LUMBERLOK Stud Strap (one face only)

Note:
To calculate the number of B type fixings required, divide the wall length by the stud centres, add 1 to this figure and locate this number of fixings as evenly as possible along the wall length. This figure includes the start and end studs in each wall length.

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Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color
2 Onyx Street, Hikuwai	**Job No:**	**880279**	
Wanaka	**Date:**	**23/07/2025**	

wanaka.enquiries@gjgardner.co.nz **03 443 2196** **33 Reece Crescent, Wānaka**

G.J. Gardner. HOMES

Drawing Set:	**Working Drawings**
Drawn By:	**E Lin**
Scale:	
Drawing Sheet:	**Details - Stud & Lintel Fixings**
Drawing No:	**411**

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GIB® plasterboard linings

When fixing part sheets of GIB® plasterboard, a minimum sheet width of 300mm applies for bracing elements. Horizontal fixing is recommended. If fixing vertically, full height sheets shall be used where possible. Where sheet end butt joints are unavoidable they must be formed over nogs or over the studs and fastened at 200mm centres. Alternatively, and preferably, sheet end butt joints may be back-blocked.

When a GIB® Bracing element has been designated for a section of wall, BU ratings cannot be increased by incorporating additional proprietary bracing elements within that same section of wall.

LIMITATIONS

- GIB® plasterboard must be stacked flat and protected from the weather.
- GIB® plasterboard must be handled as a finishing material.
- GIB® plasterboard in use must not be exposed to liquid water or be installed in situations where extended exposure to humidities above 90% RH can reasonably be expected.
- GIB EzyBrace® Systems must not be used in showers or behind baths.
- It is highly recommended not to install GIB® plasterboard in any situation where external claddings are not in place or the property is not adequately protected from the elements.
- If GIB® plasterboard is installed under these conditions, the risk of surface defects such as joint peaking or cracking is greatly increased.

GIB EzyBrace® Systems in water-splash areas

When GIB® plasterboard is installed in locations likely to be frequently exposed to liquid water it must have an impervious finish. Examples are adhesive fixed acrylic shower linings or ceramic tiles over an approved waterproof membrane over GIB Aqualine®. The NZBC requires 15 years durability in these situations. Bracing elements are required to have a durability of 50 years. Bracing elements are not to be located in shower cubicles or behind baths because of durability requirements, the likelihood of renovation, and practical issues associated with fixing bracing elements to perimeter framing members. Otherwise GIB EzyBrace® Systems can be used in water-splash areas as defined by NZBC Clause E3, provided these are maintained impervious for the life of the building.

For futher design details refer to the current GIB Aqualine® Wet Area Systems literature.

Renovation

When relining walls during the process of renovation, ensure that bracing elements are reinstated (check the building plans).

Openings in bracing elements

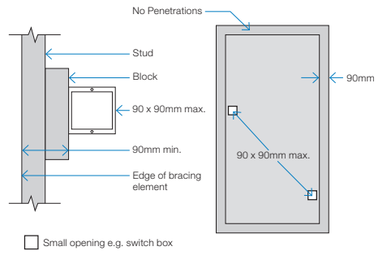
SMALL OPENINGS

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 as shown below.

LARGE OPENINGS

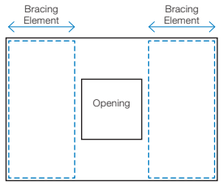
Openings above 90 x 90mm such as switch boards, recessed cabinets and TV's etc. should be placed outside of the bracing element or locate bracing on the other side of the wall framing.

FIGURE 10: SMALL OPENINGS IN BRACING ELEMENTS



GEB001

FIGURE 11: LARGE OPENINGS AND BRACING ELEMENTS



Timber framing

General framing requirements such as grade, spacings and installation shall comply with the provisions of NZS 3604:2011. To achieve the published bracing performance the minimum actual framing dimensions are 90 x 45mm for external walls and 70 x 45mm for internal walls.

As a minimum the use of Kiln Dried Stress Graded timber for all wall, roof and mid-floor framing members is recommended.

GIBFix® Framing System (alternative layout)

Practices recommended as part of the GIBFix® Framing System aim to increase timber framing efficiencies, reduce reliance on unnecessary framing at wall junctions and minimise surface imperfections that commonly arise from constructing plasterboard junctions over multiple timber members. GIBFix® Angles fixed to a single timber framing member are introduced to tie together plasterboard junctions, improving seismic resilience and decrease the risk of future defects due to timber movement. The GIBFix® Framing System can be used in conjunction with the GIB EzyBrace® System.

Note: GIBFix® Angles and 32mm x 7g GIB® Grabber® Dual Thread Screws may also be used in traditional wall framing layouts and in GIB EzyBrace® Systems.

When the GIBFix® Framing System is used a minimum of 2 equally spaced nogs for walls between 2.4m and 3m in height are required at corners and wall junctions.

When used in GIB EzyBrace® systems GIBFix® Angles must run from top to bottom on all applicable studs. If 2 GIBFix® Angles are required on a stud they must be overlapped by a minimum of 300mm with 2/32mm 7g GIB® Grabber® Dual Thread Screws penetrating through both GIBFix® Angles.

For full specification details refer to GIBFix® Framing System literature available at gib.co.nz/gibfix.

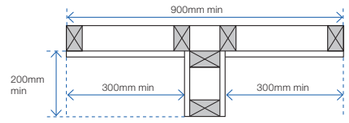
Guidelines for intersection walls

GIB® Bracing Elements may have intersecting walls with a minimum length of 200mm. Fasteners are required around the perimeter of the bracing element. Vertical joints at T-junctions shall be fixed and jointed as specified for intermediate sheet joints. The bracing element length must be no less than 900mm.

Where a Wall Bracing Element is interrupted by a T-junction the element is deemed to be continuous for the whole length (900mm minimum in the example illustrated).

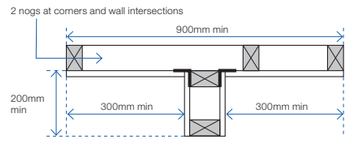
When fixing part sheets of GIB® plasterboard to the side of a T-junction, a minimum width of 300mm applies for bracing elements. See figures 12 and 13.

FIGURE 12: WALL INTERSECTION (TRADITIONAL WALL FRAMING)



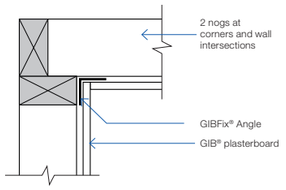
GEB002

FIGURE 13: WALL INTERSECTION (GIBFIX® FRAMING SYSTEM)



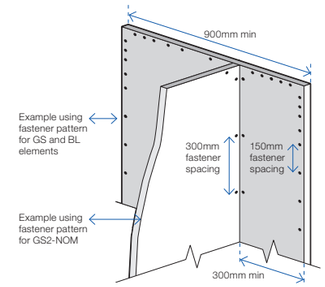
GEB003

FIGURE 14: CORNER INTERSECTION (GIBFIX® FRAMING SYSTEM)



GFS001

FIGURE 15: WALL INTERSECTION FASTENER PLACEMENT



Junction

Min 32mm x 6g GIB® Grabber® High Thread or 32mm x 7g GIB® Grabber® Dual Thread Screws @ 300mm ctrs each side.

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Bracing**

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Drawing No: **412**

Top plate connections

For top plate connections refer to NZS3604:2011 section 8.7.3.

Parapets and gable end walls

Bracing elements must be fixed from top plate to bottom plate. Fixing to a row of nogs is not acceptable unless either:

A continuous member such as an ex 90 x 45mm ribbon plate is fixed across the studs just above a row of nogs at the ceiling line, as shown in figure 16.

or

GIBFix® Angle as shown in figure 17. The angle is fixed to a row of nogs with 30 x 2.5mm galv flat head nails or 32mm x 7g GIB® Grabber® Dual Thread Screws at 300mm centres.

Bottom plate fixing

TIMBER FLOOR

For elements with an 'N' specification use 2/100 x 3.75mm hand or 3/90 x 3.15mm power-driven nails at 600mm centres.

In addition, for elements with an 'H' specification, use GIB HandiBrac® panel hold-down fixings at each end of the bracing element, see p.16.

CONCRETE FLOOR — EXTERNAL WALL BRACING ELEMENTS

For bracing elements with an 'N' specification fix external wall plates in accordance with NZS 3604:2011.

Use GIB HandiBrac® panel hold-down fixings at each end of bracing elements with an 'H' specification and minimum intermediate fixings as required by NZS 3604:2011.

CONCRETE FLOOR — INTERNAL WALL BRACING ELEMENTS

For bracing elements with an 'N' specification fix plates in accordance with NZS 3604:2011 or use 75 x 3.8mm shot-fired fasteners with 16mm discs spaced at 150 and 300mm from end-studs and 600mm centres thereafter.

For bracing elements with an 'H' specification use GIB HandiBrac® panel hold-down fixings at each end of the element and minimum intermediate fixings as required by NZS 3604:2011.

FIGURE 16: PARAPETS AND GABLE ENDS WITH RIBBON PLATE

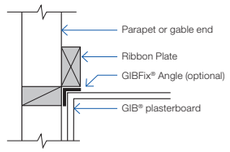
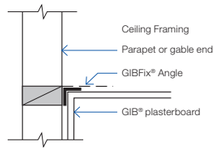


FIGURE 17: PARAPETS AND GABLE ENDS WITH GIBFIX® ANGLE



GFS003

BOTTOM PLATE FIXINGS FOR GIB® BRACING ELEMENTS

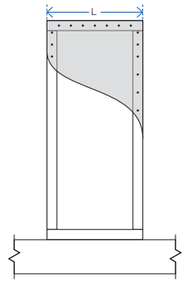
Brace type	Concrete slabs		Timber floors
	External wall	Internal wall	External and Internal walls
GS1-N	As per NZS 3604:2011. No specific additional fastening required.	As per NZS 3604:2011. Alternatively use 75 x 3.8mm shot-fired fasteners with 16mm discs, 150mm and 300mm from each end of the bracing element and at 600mm thereafter.	Pairs of 100 x 3.75mm flat head hand driven nails or 3/90 x 3.15mm power driven nails at 600mm centres in accordance with NZS 3604:2011.
GS2-N GS2-NOM	Not applicable.		
GSP-H BL1-H BLP-H	Intermediate fastenings to comply with NZS 3604:2011 In addition: GIB HandiBrac® fixings or metal wrap-around strap fixings and bolt as illustrated on p.15 and 16.		Pairs of 100 x 3.75mm flat head hand driven nails or 3/90 x 3.15mm power driven nails at 600mm centres in accordance with NZS 3604:2011. In addition: GIB HandiBrac® fixings or metal wrap-around strap fixings and bolt as illustrated on p.15 and 16.
BLG-H	Not applicable	As for GSP-H, BL1-H, BLP-H on concrete slab as illustrated on p.15 and 16.	

Length of GIB EzyBrace® elements ('N' Type)

The length of GIB EzyBrace® elements with an 'N' extension (requiring standard NZS3604:2011 plate connections) can be taken as the full frame length measured from the outside of the end-stud to the opening face as illustrated in figures 29-32.

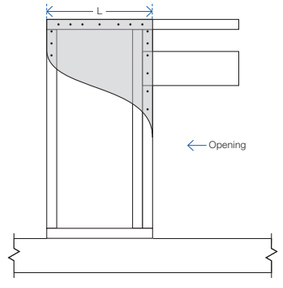
'N' type GIB EzyBrace® elements are identified by GIB® specification numbers GS1-N, GS2-N and GS2-NOM

FIGURE 29: GS BRACING ELEMENTS (OPTION A)



GS1-N, GS2-N elements
'L' indicates the length of the bracing element

FIGURE 31: GS BRACING ELEMENTS (OPTION C)



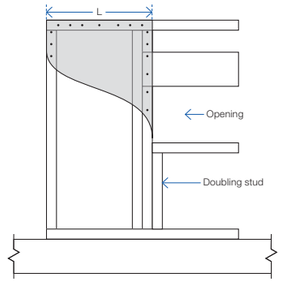
GS1-N, GS2-N elements
'L' indicates the length of the bracing element

The dimension 'L' shall not be less than 400mm.

Perimeter bracing fixing for linings of both 'H' and 'N' type elements is along the top and bottom plates, end stud, and doubling stud immediately adjacent to the opening.

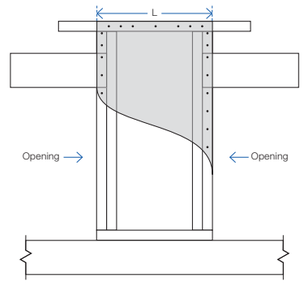
Fastener spacings and diagram scales shown in Figures 29–32 are indicative only. Refer to p.23–30 for construction details.

FIGURE 30: GS BRACING ELEMENTS (OPTION B)



GS1-N, GS2-N elements
'L' indicates the length of the bracing element

FIGURE 32: GS BRACING ELEMENTS (OPTION D)



GS1-N, GS2-N elements
'L' indicates the length of the bracing element

Length of GIB EzyBrace® elements ('H' Type)

GIB EzyBrace® elements with an 'H' extension (requiring special panel hold-down fixings) can be used when the dimension 'L' as illustrated in figures 33–36 is 400mm or more.

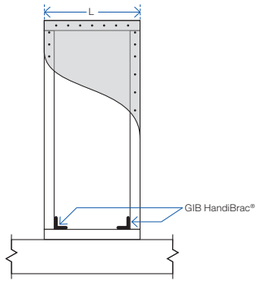
'H' type GIB EzyBrace® elements are identified by GIB® specification numbers GSP-H, BL1-H, BLG-H and BLP-H.

The length of an 'H' type element is not only determined by the sheet material, but also by the placement of the hold-down fixings.

Hold-down fixings cannot be placed closer together than what is shown for the standard panel in figure 33.

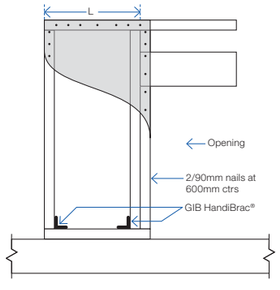
Hold-down fixings can be placed under windows provided sill trimming studs beneath the opening are connected to the bracing element using 8/90mm gun nails, as illustrated in figure 34.

FIGURE 33: BL BRACING ELEMENTS (OPTION A)



'H' type elements with specific hold downs
'L' indicates the length of the bracing element

FIGURE 35: BL BRACING ELEMENTS (OPTION C)



'H' type elements with specific hold downs
'L' indicates the length of the bracing element

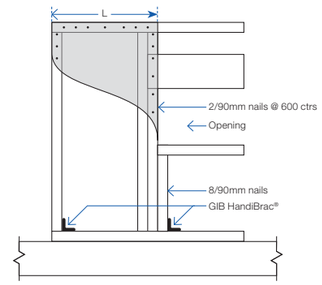
Spike doubling stud to trimming stud using a minimum of 2/90mm gun nails at 600mm centres. Lintel straps (where required for wind uplift) should be checked in and be located away from the bracing element fasteners.

Perimeter bracing fixing for linings of both 'H' and 'N' type elements is along the top and bottom plates, end stud, and doubling stud immediately adjacent to the opening as indicated in figures 34-36.

When using bracing straps, installed in accordance with p.17, fix the strap to the same framing member as shown for the GIB Handibrac® below, and install the adjacent anchor bolt in the same position as the GIB HandiBrac® bolt.

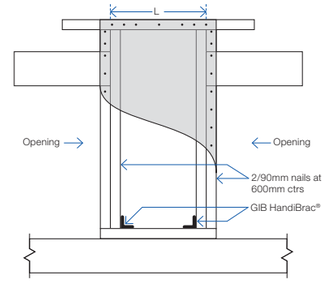
Fastener spacings and diagram scales shown in figures 33–36 are indicative only. Refer to p.23–30 for construction details.

FIGURE 34: BL BRACING ELEMENTS (OPTION B)



'H' type elements with specific hold downs
'L' indicates the length of the bracing element

FIGURE 36: BL BRACING ELEMENTS (OPTION D)



'H' type elements with specific hold downs
'L' indicates the length of the bracing element

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Bracing Cont.**

All work must comply with relevant NZS & council requirements. All dimensions to be verified on site by contractor prior to commencing work, do not scale from drawings. If there are any inaccuracies with the drawings please contact designer immediately. Copyright for design & drawings retained by Prime Designs Wgtn Ltd.

Drawing No: **413**

GIB EzyBrace® Systems specification GS1-N

Specification code	Minimum length (m)	Lining requirement
GS1-N	0.4	Any 10mm or 13mm GIB® Standard plasterboard to one side only

WALL FRAMING
Wall framing to comply with;

- NZBC B1 — Structure B1/AS1 Clause 3 Timber (NZS 3604:2011).
- NZBC B2 — Durability B2/AS1 Clause 3.2 Timber (NZS 3602).

Framing dimensions and height as determined by NZS 3604:2011 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING
Timber floor
Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or three power driven 90 x 3.15mm nails at 600mm centres.

Concrete floor
Internal Wall Bracing Lines: In accordance with the requirements of NZS 3604:2011 for internal wall plate fixing or 75 x 3.8mm shot fired fasteners with 16mm discs spaced at 150mm and 300mm from end studs and 600mm centres thereafter.

External Wall Bracing Lines: In accordance with the requirements of NZS 3604:2011 for external wall bottom plate fixing.

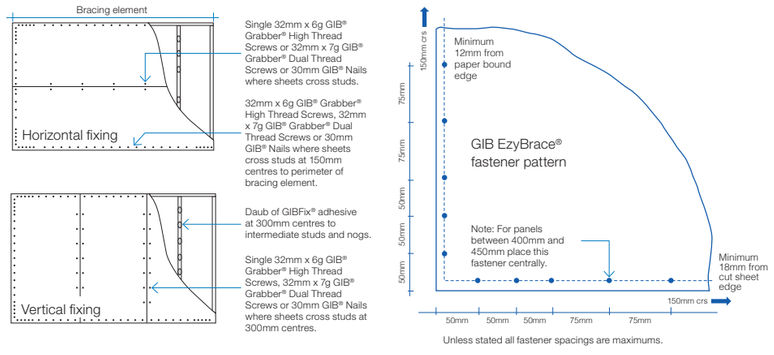
WALL LINING
- Any 10mm or 13mm GIB® plasterboard lining.
- Sheets can be fixed vertically or horizontally.
- Sheet joints shall be touch fitted.
- Use full length sheets where possible.

PERMITTED ALTERNATIVES
For permitted GIB® plasterboard alternatives refer to p. 5 in GIB EzyBrace® Systems literature.

FASTENING THE LINING
Fasteners
32mm x 6g GIB® Grabber® High Thread Screws, 32mm x 7g GIB® Grabber® Dual Thread Screws or 30mm GIB® Nails. If using the GIBFix® Angle use only 32mm x 7g GIB® Grabber® Dual Thread Screws.

Fastener centres
50,100,150, 225, 300mm maximum from each corner and 150mm thereafter around the perimeter of the bracing element. For vertically fixed sheets place fasteners at 300mm maximum centres to intermediate sheet joints. For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud. Use daubs of GIBFix® adhesive at 300mm maximum centres to intermediate studs. Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

JOINTING
Joint strength is important in delivering bracing system performance. All fastener heads stopped and all sheet joints GIB® Joint Tape reinforced and stopped in accordance with the GIB® Site Guide.



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This specification sheet is issued in conjunction with the publication GIB EzyBrace® Systems

GIB EzyBrace® Systems specification BLP-H

Specification code	Minimum length (m)	Lining requirement	Other requirements
BLP-H	0.4	10mm or 13mm GIB Braceline® to one side of the frame plus minimum 7mm structural plywood manufactured to AS/NZ 2269.0 :2012 to the other side	Hold downs

WALL FRAMING
Wall framing to comply with;

- NZBC B1 — Structure; B1/AS1 Clause 3 Timber (NZS 3604:2011).
- NZBC B2 — Durability B2/AS1 Clause 3.2 Timber (NZS 3602).

Framing dimensions and height as determined by NZS 3604:2011 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING
Timber floor
Use panel hold downs at each end of the bracing element. The GIB® HandiBrac is recommended. See details in GIB EzyBrace® Systems or GIB® Site Guide.

Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or Three power driven 90 x 3.15mm nails at 600mm centres.

Concrete floor
Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB EzyBrace® Systems or GIB® Site Guide. Within the length of the bracing element bottom plates are to be fixed in accordance with the requirements of AS/NZ 2269/0 :2012.

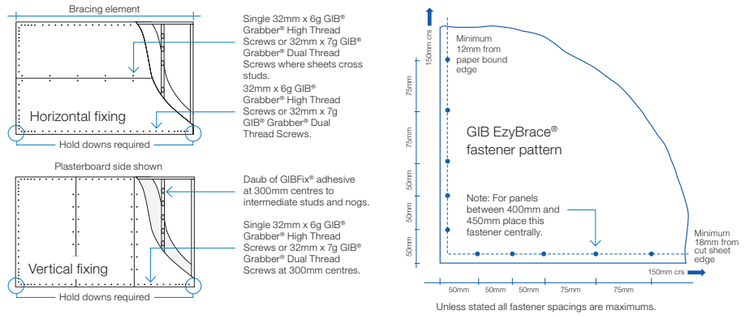
WALL LINING
- A layer of 10mm or 13mm GIB Braceline® to one side of the wall plus minimum 7mm structural plywood manufactured to AS/NZS 2269.0 :2012 to the other side.
- Sheets can be fixed vertically or horizontally.
- Plywood is to be fixed vertically with edges supported.
- Sheet joints shall be touch fitted.
- Use full length sheets where possible.

PERMITTED ALTERNATIVES
For permitted GIB® plasterboard alternatives refer to p. 5 in GIB EzyBrace® Systems literature.

FASTENING THE LINING
Fasteners
GIB Braceline® side: 32mm x 6g GIB® Grabber® High Thread Screws or 32mm x 7g GIB® Grabber® Dual Thread Screws. Plywood: 50 x 2.8mm Galv or Stainless steel annular grooved FH nails. If using the GIBFix® Framing System or if fastening through GIBFix® Angles use only 32mm x 7g GIB® Grabber® Dual Thread Screws.

Fastener centres
GIB® Plasterboard side: 50,100,150, 225, 300mm from each corner and then 150mm thereafter around the perimeter of the bracing element. For vertically fixed sheets place fasteners at 300mm centres to the intermediate sheet joints. For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud. Use daubs of GIBFix® adhesive at 300mm centres to intermediate studs. Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge. Plywood side: 150mm centres to the perimeter of each sheet. GIB® corner fastener pattern does not apply to the plywood side. 300mm centres to intermediate studs.

JOINTING
Joint strength is important in delivering bracing system performance. All fastener heads stopped and all sheet joints GIB® Joint Tape reinforced and stopped in accordance with the GIB® Site Guide.



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This specification sheet is issued in conjunction with the publication GIB EzyBrace® Systems

GIB EzyBrace® Systems specification BL1-H

Specification code	Minimum length (m)	Lining requirement	Other requirements
BL1-H	0.4	10mm or 13mm GIB Braceline® to one side only	Hold downs

WALL FRAMING
Wall framing to comply with;

- NZBC B1 — Structure B1/AS1 Clause 3 Timber (NZS 3604:2011).
- NZBC B2 — Durability B2/AS1 Clause 3.2 Timber (NZS 3602).

Framing dimensions and height as determined by NZS 3604:2011 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING
Timber floor
Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB EzyBrace® Systems or GIB® Site Guide.

Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or Three power driven 90 x 3.15mm nails at 600mm centres.

Concrete floor
Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB EzyBrace® Systems or GIB® Site Guide. Within the length of the bracing element bottom plates are to be fixed in accordance with the requirements of NZS 3604:2011.

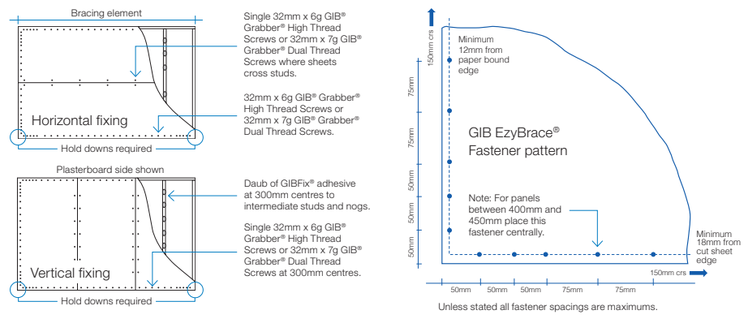
WALL LINING
- A layer of 10mm or 13mm GIB Braceline®
- Sheets can be fixed vertically or horizontally.
- Sheet joints shall be touch fitted.
- Use full length sheets where possible.

PERMITTED ALTERNATIVES
For permitted GIB® plasterboard alternatives refer to p. 5 in GIB EzyBrace® Systems literature.

FASTENING THE LINING
Fasteners
32mm x 6g GIB® Grabber® High Thread Screws or 32mm x 7g GIB® Grabber® Dual Thread Screws. If using the GIBFix® Framing System or if fastening through GIBFix® Angles use only 32mm x 7g GIB® Grabber® Dual Thread Screws.

Fastener centres
50,100,150, 225, 300mm from maximum each corner and 150mm thereafter around the perimeter of the bracing element. For vertically fixed sheets place fasteners at 300mm maximum centres to the sheet joint. For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud. Use daubs of GIBFix® adhesive at 300mm maximum centres to intermediate studs. Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

JOINTING
Joint strength is important in delivering bracing system performance. All fastener heads stopped and all sheet joints GIB® Joint Tape reinforced and stopped in accordance with the GIB® Site Guide.

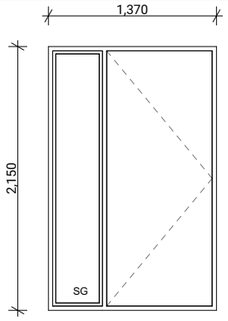


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Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	G.J. Gardner. HOMES	**Drawing Sheet:**	**Details - Bracing Cont.2**

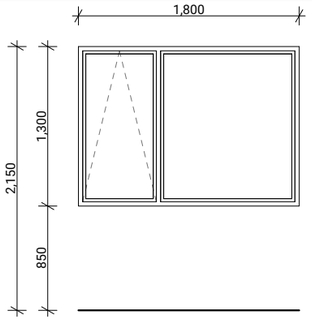
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Drawing No: 414



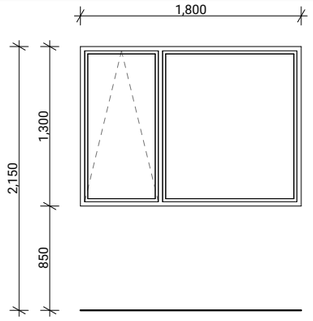
EJ01

Glazing	Double, Low E, Grade A Safety
Material	Aluminium, Thermally Broken
Type	Entry Door With Fixed Sidelight



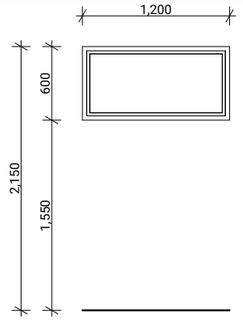
EJ02

Glazing	Double, Low E
Material	Aluminium, Thermally Broken
Type	Awning Window



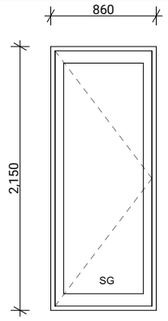
EJ03

Glazing	Double, Low E
Material	Aluminium, Thermally Broken
Type	Awning Window



EJ04, EJ05

Glazing	Double, Low E
Material	Aluminium, Thermally Broken
Type	Fixed Window



EJ06

Glazing	Double, Low E, Grade A Safety
Material	Aluminium, Thermally Broken
Type	External Hinged Door

Joinery Notes

General joinery notes
All dimensions to be checked on site prior to fabrication

Windows & doors viewed from exterior

Window & door supplier is responsible for ensuring that all components fit the structure and opening size

All windows & doors to be installed in accordance with construction details in drawing set

Aluminium joinery
Selected colour powder-coated thermally broken aluminium joinery. All head, jamb and sill liners to be 20mm H3.1 timber, painted

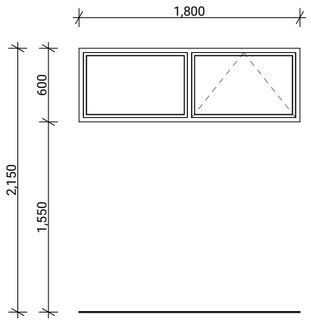
Glazing
Glazing weight to comply with NZS4223.
Glass to be Low E with a U value of 1.1.
Double Pane with argon gas.

Flashings and flexible flashing tape
All flashings and flashing tape to be installed to comply with NZBC E2/AS1 and manufacturer's specification. Do not fix through flashings unless otherwise specifically shown in details

Window and door opening widths
All window and door sizes shown on the plan refer to 'Box' size only and do not allow for packers. pre-nailer to increase opening width accordingly

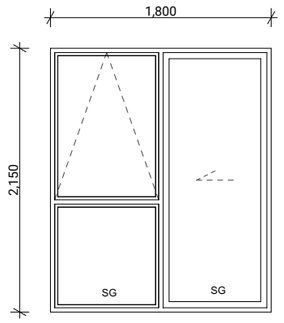
Reveal Depths
Joinery manufacturer to check reveal depths to suit cladding system, wall underlay, wall framing & interior lining thickness.

Window Restrictors
Place restrictor stays to all openable windows with sills within 760mm of floor level where a fall greater than 1m is possible from FFL to ground.



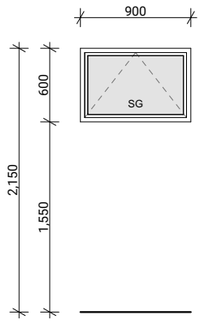
EJ07

Glazing	Double, Low E
Material	Aluminium, Thermally Broken
Type	Awning Window



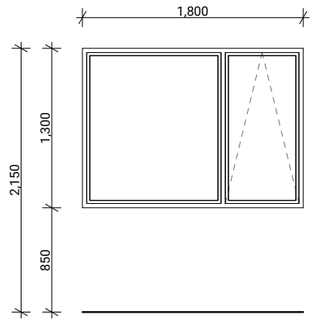
EJ08

Glazing	Double, Low E, Grade A Safety
Material	Aluminium, Thermally Broken
Type	Stacking Door With Awning Window



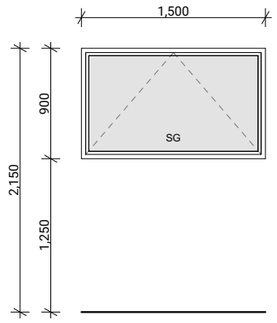
EJ09

Glazing	Double, Low E, Obscured, Grade A Safety
Material	Aluminium, Thermally Broken
Type	Awning Window



EJ10

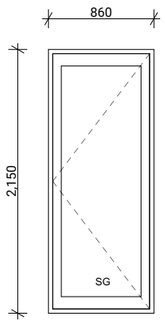
Glazing	Double, Low E
Material	Aluminium, Thermally Broken
Type	Awning Window



EJ11

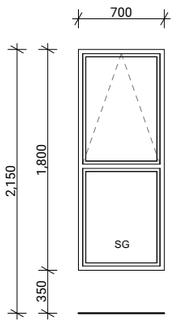
Glazing	Double, Low E, Obscured, Grade A Safety
Material	Aluminium, Thermally Broken
Type	Awning Window

AGP Solux-E glazing with Altherm ThermalHeart thermally broken powder-coated aluminium joinery (R0.50)



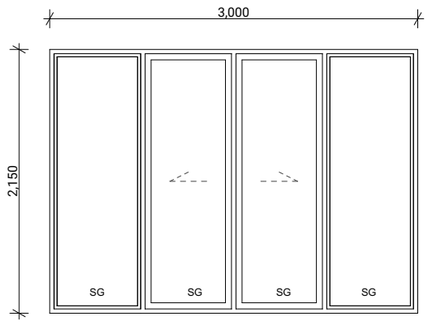
EJ12

Glazing	Double, Low E, Grade A Safety
Material	Aluminium, Thermally Broken
Type	External Hinged Door



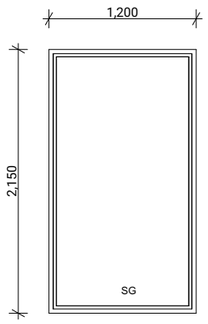
EJ13

Glazing	Double, Low E, Grade A Safety
Material	Aluminium, Thermally Broken
Type	Awning Window



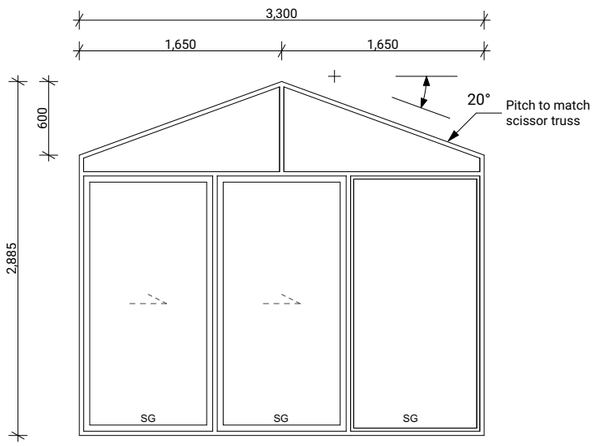
EJ14

Glazing	Double, Low E, Grade A Safety
Material	Aluminium, Thermally Broken
Type	Stacking Door With Fixed Window



EJ15

Glazing	Double, Low E, Grade A Safety
Material	Aluminium, Thermally Broken
Type	Fixed Window



EJ16

Glazing	Double, Low E, Grade A Safety
Material	Aluminium, Thermally Broken
Type	Stacking Door With Fixed Window

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color
2 Onyx Street, Hikuwai	**Job No:**	**880279**	G.J. Gardner. HOMES
Wanaka	**Date:**	**23/07/2025**	
wanaka.enquiries@gjgardner.co.nz	**03 443 2196**	**33 Reece Crescent, Wānaka**	

Drawing Set:	**Working Drawings**
Drawn By:	**E Lin**
Scale:	**1:50, 1:1**
Drawing Sheet:	**Window & Door Schedule**
Drawing No:	**501**

All work must comply with relevant NZS & council requirements. All dimensions to be verified on site by contractor prior to commencing work, do not scale from drawings. If there are any inaccuracies with the drawings please contact designer immediately. Copyright for design & drawings retained by Prime Designs Wgtn Ltd.

Site Notes

Permanent paving
Permanent paving including driveway, entry paths & patios to be 100mm thick 20MPa concrete, ensure all concrete is laid to fall @ 1:25 away from house for a distance of at least 1 metre.
Where site conditions do not readily allow such a 1m wide strip to be formed, then permanent paving shall be laid to the falls and dimensions shown in NZS3604:2011 figure 7.12

Paved access & accessible routes subject to wetting to have a crossfall between 1:50 & 1:100.

Minimum slip resistance co-efficient for level surface between 0.25 and 0.50 acceptable in accordance with NZBC: D1/AS1 Access.

Site levels
Site levels and datum have been taken from the Topographical Survey Plan provided. If there are any inaccuracies or inconsistencies, please contact designer for clarification prior to commencing work

Boundary information
Boundary information has been taken from the Certificate of Title. If there are any inaccuracies or the building position in relation to district plan constraints is critical, please consult designer prior to commencing work.

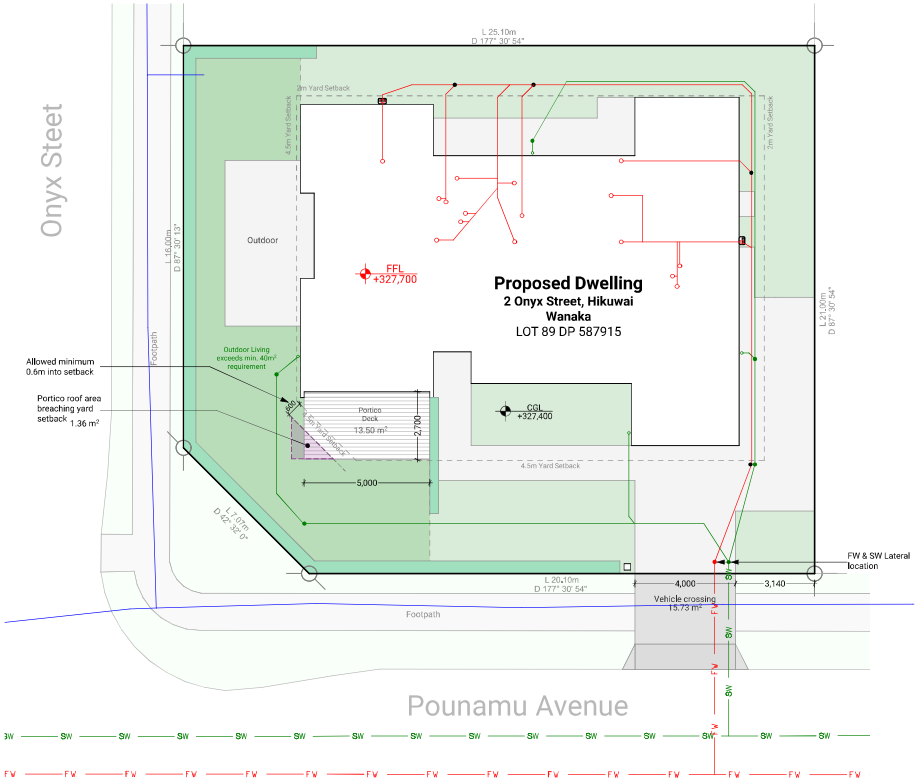
Site safety
All precautions are to be undertaken to prevent unauthorised access to the site, including access outside working hours. Any site fencing shall comply with NZBC F5/AS1 Construction and demolition hazard.

Where a construction site contains any hazard which might be expected to attract the unauthorised entry of children, the hazard shall be enclosed to restrict access by children.

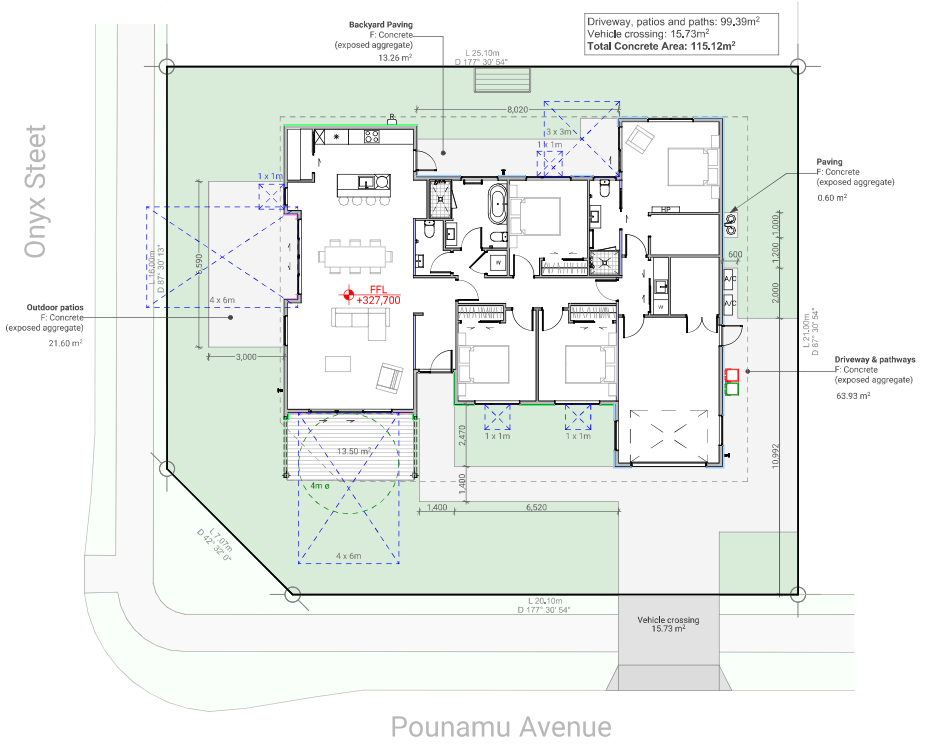
Dust Control
To minimise the amount of dust created, the following measures will be undertaken:
All permanent cut slopes should be vegetated as soon as possible.
Ensure adequate application of water is applied to control dust nuisance over the site during dry conditions, in particular at the entry to the site from the street.
The potential for dust formation should be monitored visually on a daily basis by the project manager during working hours.
Heavy earth moving machinery required to carry out works should not leave site carrying material on public roads unless they are vehicles specifically for transporting material off site.
Access to site should be continually monitored to ensure that dust nuisance is minimised.

Sediment control
Site runoff to be contained by sediment control fence at low point of site. Fence to be min. of 400mm high with H4 posts @ 200mm crs. max. set 400mm min. onto ground.

Site Information	
Site Area	514m²
Site Coverage Area	205.27m²
Site Coverage Percent	39.93%
Outdoor Spaces	Compliant
Outlook Spaces	Compliant
Earthworks	Site levelling only



1 Site Plan 1:200



2 Site / Floor Plan 1:200

Proposed Dwelling	**Client:**	**M Ch'Ng & R Chan**	Print In Color	**Drawing Set:**	**Working Drawings**
2 Onyx Street, Hikuwai	**Job No:**	**880279**		**Drawn By:**	**E Lin**
Wanaka	**Date:**	**23/07/2025**		**Scale:**	**1:200**
wanaka.enquiries@gjgardner.co.nz	03 443 2196	33 Reece Crescent, Wānaka	G.J. Gardner. HOMES	**Drawing Sheet:**	**Site Plan**

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Drawing No: 105

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