CENTRAL OTAGO DISTRICT COUNCIL

William Fraser Building
1 Dunorling Street, Alexandra 9320
PO Box 122, Alexandra 9340
New Zealand

TEL +64 3 440 0056
FAX +64 3 448 9196
EML info@codc.govt.nz
WEB www.codc.govt.nz

Form 7
CODE COMPLIANCE CERTIFICATE
Section 95, Building Act 2004

THE BUILDING

Street address of building:	24 Bragato Way, Cromwell
Legal description of land where building is located:	LOT 248 DP 574973
Valuation number:	2850406660
Building name:	New three bedroom dwelling with attached garage
Location of building within site/block number:	
Level/Unit number:	
Current, lawfully established, use: (include number of occupants per level and per use if more than one)	Housing - detached
Year first constructed:	2023

OWNER

Name of owner:	John Slater
Contact person:	John Slater
Mailing address:	14 Victoria Street Waikino 3610
Street address/registered office:	
Phone number:	
Mobile:	
Email address:	thephotoworkshop@outlook.com
Website:	
First point of contact for communications with the building consent authority:	Full Name: Barrett Homes (Central Otago) Limited Mailing Address: PO Box 10424, Bayfair, Mt Maunganui 3152 Phones:: 027 686 1355 Email: design@barretthomes.co.nz

BUILDING WORK

Building consent number:	BC 230600
Issued by:	Central Otago District Council

CODE COMPLIANCE

The building consent authority named below is satisfied, on reasonable grounds, that:

a) The building work complies with the building consent.

Signature:

Position:	Regulatory Support - Building
On behalf of:	**Central Otago District Council**
Date:	07 June 2024

CENTRAL OTAGO DISTRICT COUNCIL

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Form 5
BUILDING CONSENT 230600
Section 51, Building Act 2004

THE BUILDING

Street address of building:	24 Bragato Way, Cromwell
Legal description of land where building is located:	LOT 248 DP 574973
Valuation number:	2850406660
Building name:	New three bedroom dwelling with attached garage
Location of building within site/block number:	
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BUILDING WORK

The following building work is authorised by this building consent:

New three bedroom dwelling with attached garage

This building consent is issued under section 51 of the Building Act 2004. This building consent does not relieve the owner of the building (or proposed building) of any duty or responsibility under any other Act relating to or affecting the building (or proposed building). This building consent also does not permit the construction, alteration, demolition, or removal of the building (or proposed building) if that construction, alteration, demolition, or removal would be in breach of any other Act.

This building consent is subject to the following conditions:

- Building Inspectors are entitled to undertake inspections under Section 90 of the Building Act 2004.
-

COMPLIANCE SCHEDULE

A compliance schedule is not required for this building.

ATTACHMENTS

Copies of the following documents are attached to this building consent:

- Project information memorandum 230600

Signature:

Position: Regulatory Support - Building

On behalf of: **Central Otago District Council**

Date: 10 October 2023

CENTRAL OTAGO DISTRICT COUNCIL
Plans and Specifications Approved in accordance with The New Zealand Building Code and Approved Documents. To be retained on the building site and produced on request
hwm 10/10/2023

Barrett Homes

Welcome to the *whānau.*

CONTENTS:

RECEIVED
03/10/2023
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Central Otago District Council
230600
Approved Building Consent
10/10/2023

NEW DWELLING FOR:

JOHN SLATER

ADDRESS:

LOT 248, 24 BRAGATO WAY
WOOING TREE, STAGE 2A, CROMWELL

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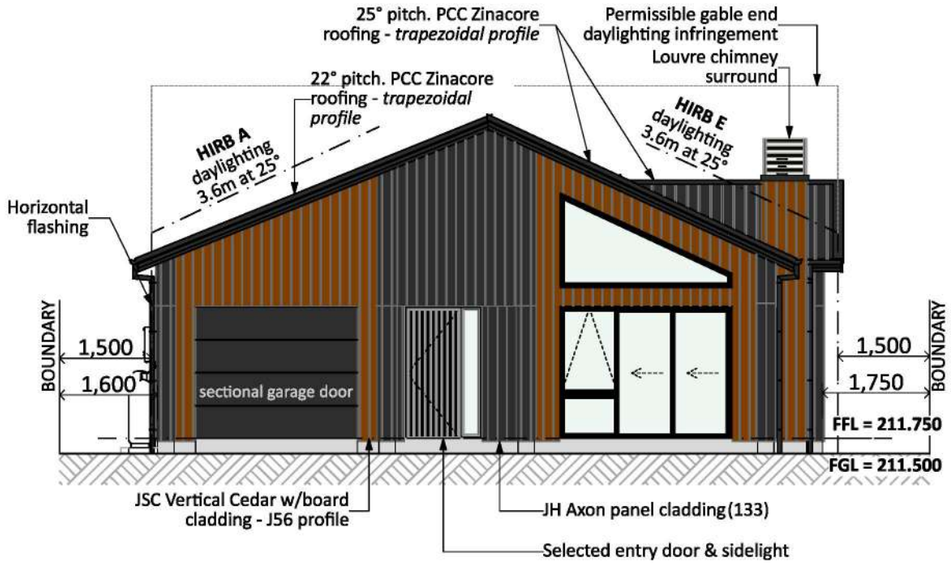
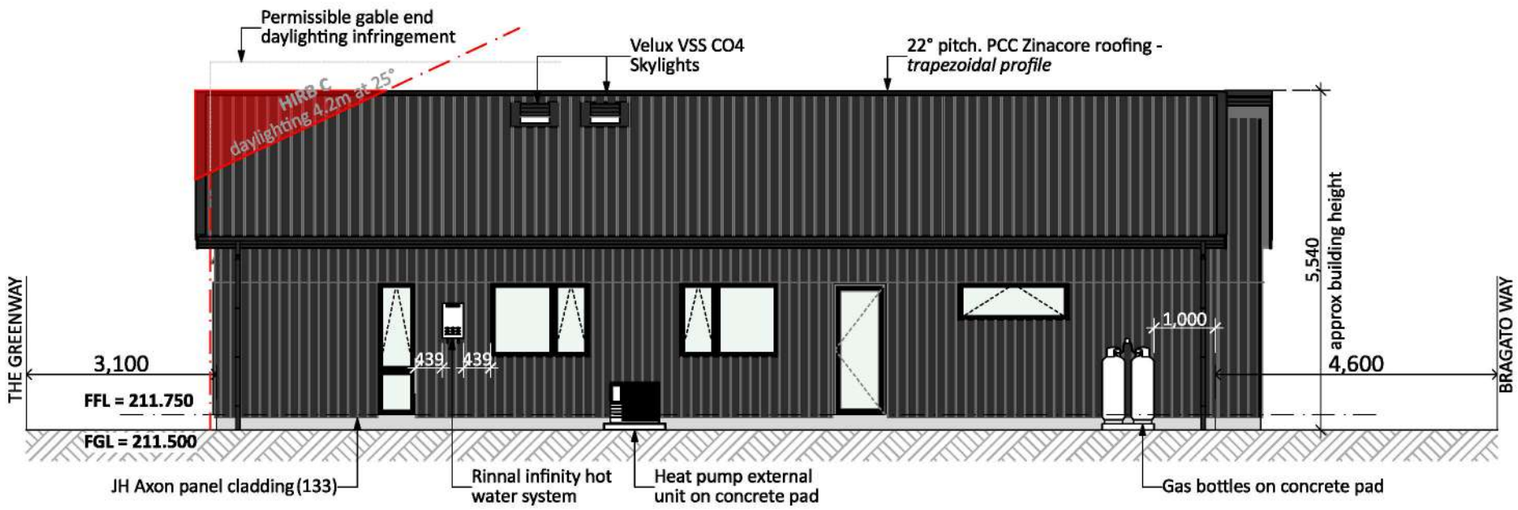
Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: COVER SHEET		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev:
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet:
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale:



NORTH ELEVATION



EAST ELEVATION

RECEIVED
03/10/2023
CODC

General Notes:

Any encroachments shown are to be confirmed by a registered surveyor prior to commencement of foundations. No liability shall be held by designer with this confirmation.

NZBC D1/AS1 Access
Minimum slip resistance to steps and landings
Concrete or H5 timber step to all access points, min. 150mm below finished floor level

REV A

Foundation:
MaxSlab 300 foundation to engineers design (see plan notes and details)

Wall Cladding:
JH Axon panel cladding (133)
JSC Vertical Cedar w/board cladding - J56 profile

Roof Cladding:
25° + 22° pitch. PCC Zinacore roofing - *Trapezoidal profile*

Fascia and Spouting:
COLORCOTE fascia, spouting with 80mm Ø downpipes

Joinery:
Selected powder coated aluminium joinery

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	Very high risk	5
Eaves width	High risk	2
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		**9**

Central Otago District Council
230600
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10/10/2023

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: ELEVATIONS		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 1
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:100

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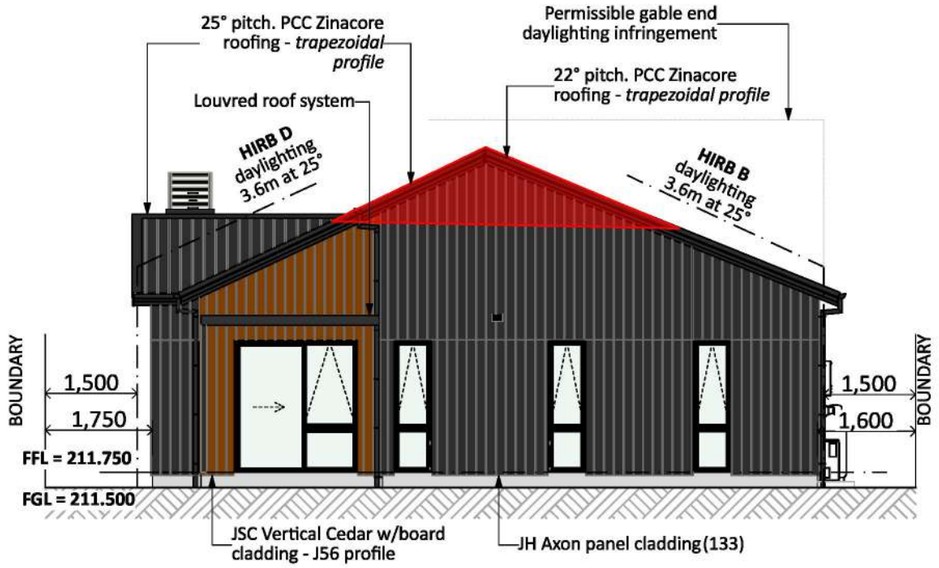
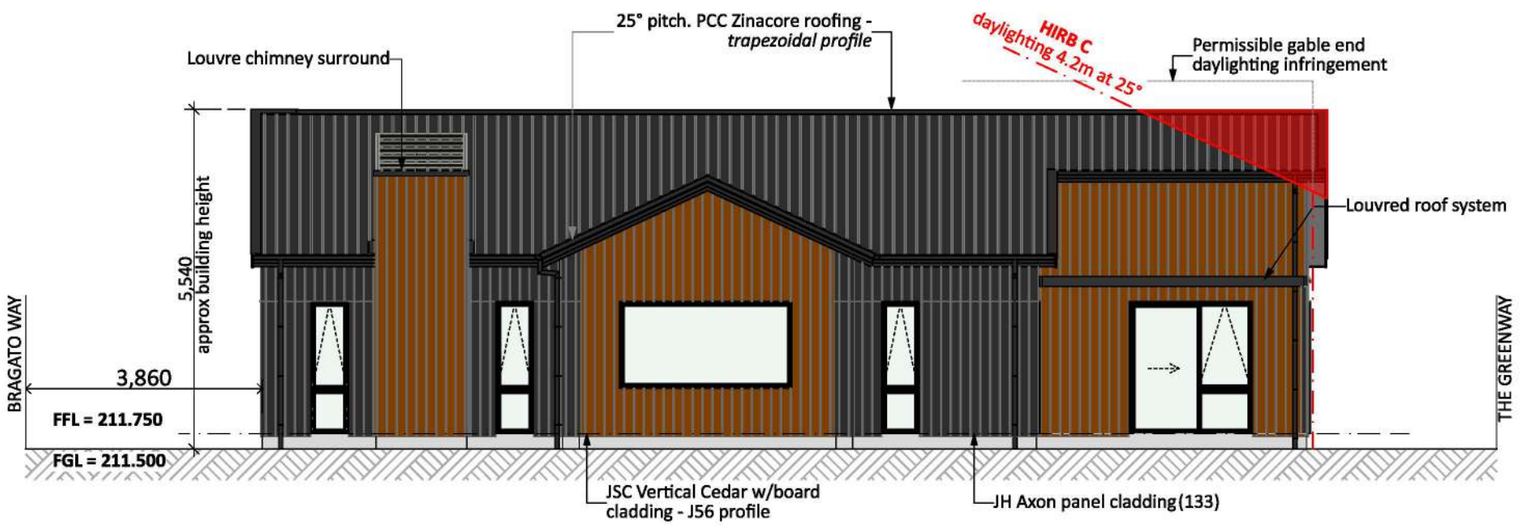


SOUTH ELEVATION



WEST ELEVATION

RECEIVED
03/10/2023
CODC

General Notes:

Any encroachments shown are to be confirmed by a registered surveyor prior to commencement of foundations. No liability shall be held by designer with this confirmation.

NZBC D1/AS1 Access
Minimum slip resistance to steps and landings
Concrete or H5 timber step to all access points, min. 150mm below finished floor level

REV A

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MaxSlab 300 foundation to engineers design (see plan notes and details)

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Deck design	Low risk	0
Total Risk Score:		**9**

Central Otago District Council
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10/10/2023

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: ELEVATIONS		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 2
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:100

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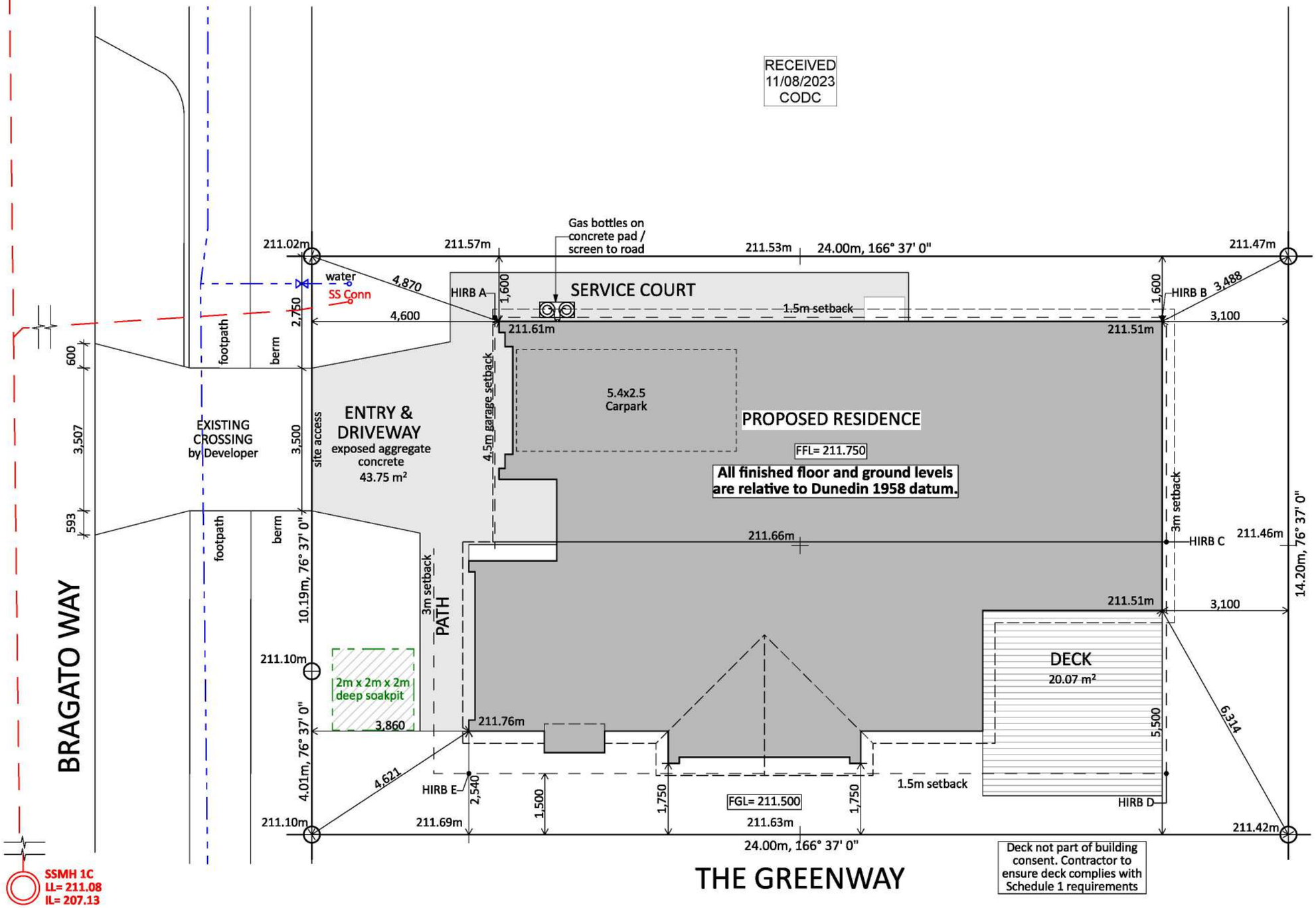
11/08/2023
CODC



SSMH 1C
LL= 211.08
IL= 207.13

General notes:

Any encroachments shown are to be confirmed by a registered surveyor prior to commencement of foundations. No liability shall be held by designer with this confirmation.

Siteworks notes:

Ensure final building platform and finished ground have an even fall away from building.
All rubbish, noxious matter and organic matter shall be removed from the area to be covered by the building.
Any fill to be dry and approved by engineer & compacted down in accordance with NZS.3604.2011.

- Contractor to confirm on site all boundary bearings, lengths and peg locations on site prior to commencement of works, to ensure house position is correct.
- Contractor to locate all service connections points on site prior to commencement of works. Check invert levels or pipes and manholes.
- Contractor to confirm plumbing routes and fixture positions on site prior to commencement of works.

Any discrepancies found from consented plans, alert design@barretthomes.co.nz prior to continuation of site works.

All dimensions shown are to building foundations (unless stated otherwise)

Construction and Demolition Hazards

Contractor to install galvanised chainlink netting or hoarding barrier, 2m min height to site perimeter to comply with NZBC:F5 Construction and Demolition Hazards, prior to commencing construction.

Toeboards to be installed for prevention of objects falling off storage or access platforms as per NZBC F5 1.4

Sediment Control Notes:

Sediment and runoff control shall be designed and installed by the licensed building practitioner prior to, or, during the siteworks for the project. The sediment controls shall be installed in accordance with the requirements of the District Plan/Council requirements.

Site Info:

LOT: 248
DP: 574973
AREA: 341m²

Site Coverage:

153.52 m² *(House area)* **/ 341m²** *(site area)* **= 45.01%**
Living Zone = Residential (Wooing Tree Overlay)
Max coverage = 50%

Snow Load:

Roof: 500 Pa
Ground: 1010 Pa

Central Otago District Council
230600
Approved Building Consent
10/10/2023

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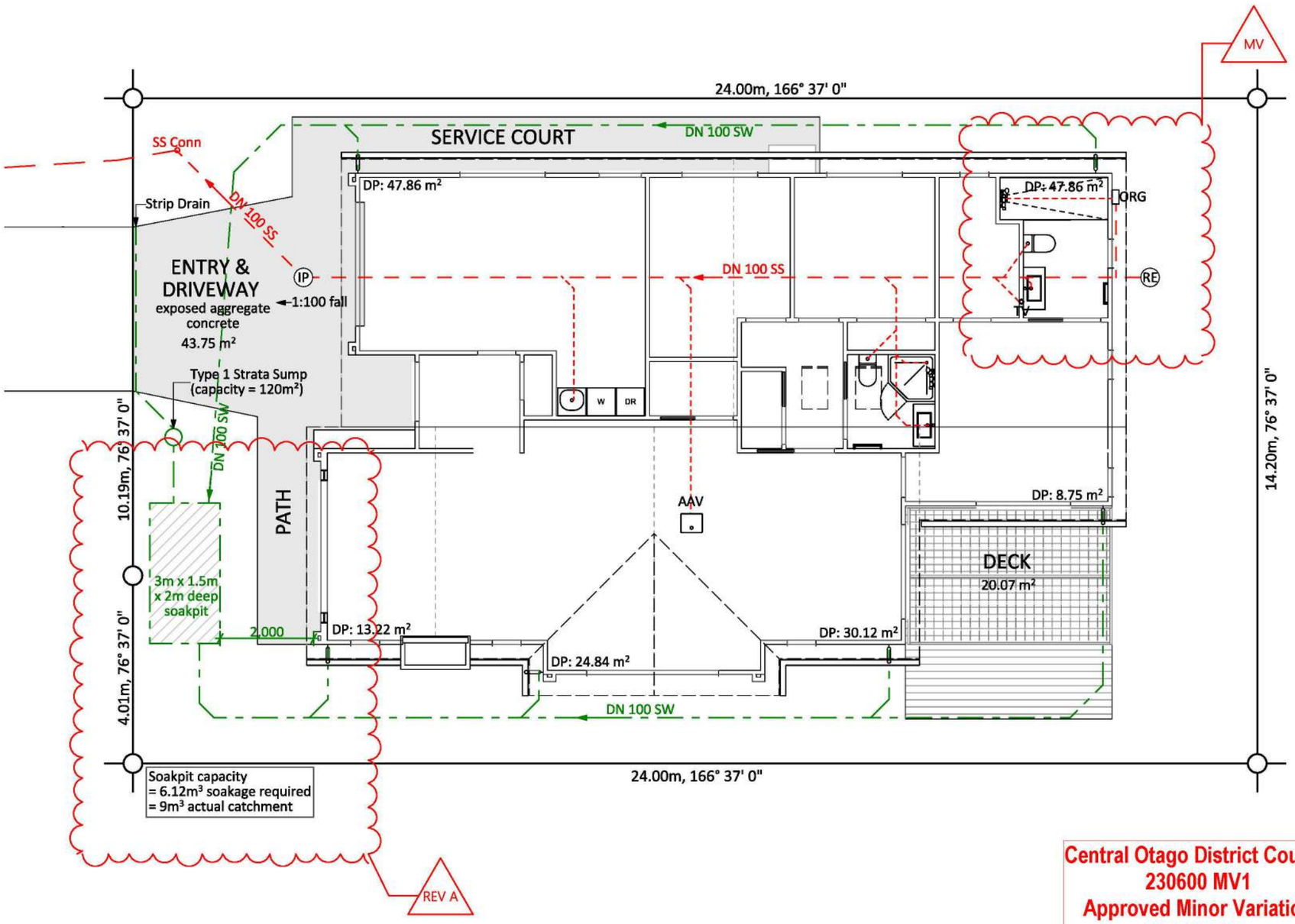
Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: SITE PLAN		Date: 9/08/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev:
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 3
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:100

Minor Variation Received
kys 06/11/2023



General notes:

Plumbing to AS/NZS:3500.2.2
Contractor to locate all service connections on site prior to earthworks,
All pipe gradients to be confirmed by a qualified tradesman.

Internal pipework and pipes to be PE-Xa.
All pipework and pipes exposed to freezing to be lagged with closed cell foam - as per NZBC:G12/AS1

Excavation notes:

Trenches should be excavated to allow for the specified depth of bedding, the pipes diameter and the minimum recommended cover, overlay plus backfill, above the pipes.
MIN. COVER:
- Roads and Streets: 750mm
- Driveways and similar areas: 600mm (subject to traffic)
- Footpaths, gardens: 500mm
- Construction traffic: 750mm

Bedding materials are listed as AS/NZS 3500.2

Foul water to AS/NZS 3500.2
Storm water to NZBC:E1/AS1

Legend

Symbol	Item
ORG	Overflow relief gully
IP	Inspection point
RE	Rodding eye
AAV	Air admittance valve
OFP→	Overland flow path
◦ DP	80mm ø downpipe
◦ TV	Terminal vent (vented pipe with 50mm terminal vent & cap to roof, weatherproofed by plumber with compatible flashing sealed & riveted to roof)

Symbol	Plumbing Key:
	SS = 100mm Ø uPVC - min 1:60 gradient, including wc's
	SW = 100mm Ø uPVC - min 1:120 gradient
	Minimum PVC pipe fixture sizes: DN40 single head showers, baths, sinks & ldy tubs, DN50 multiple heads showers, min 1:40 gradient (laundry tubs min 1:30 gradient & basins min 1:20 gradient).

All underslab drains in accordance with G13:AS3
Min pipe size under slab = 65mm

Central Otago District Council
230600 MV1
Approved Minor Variation
20/12/2023

Barrett Homes

Project No:	WT248	Designed:	RI/CJ/RS	Wind:	HIGH	Drawing:	DRAINAGE PLAN
Plan:	WT249 (mirror)	Drawn:	JH	EQ:	2	Client Name:	JOHN SLATER
Version:	1.5	Checked:	AC	Exposure:	B	Site Address:	LOT 248, 24 BRAGATO WAY
			design@barretthomes.co.nz	Council:	CODC		WOOING TREE, STAGE 2A, CROMWELL

Date:	6/11/2023
Rev:	
Sheet:	4
Scale:	1:100

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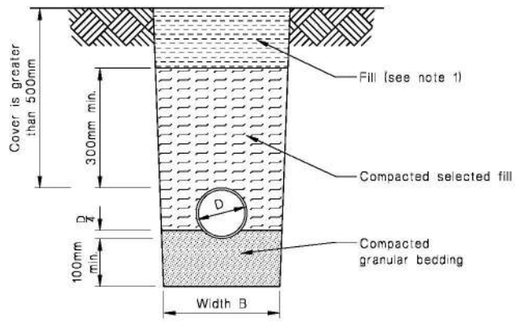
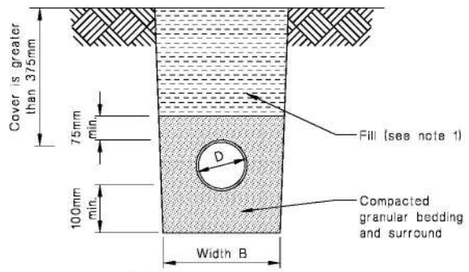
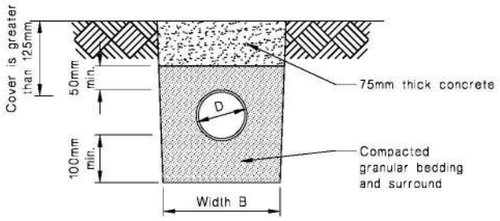
Figure 13: Bedding and backfilling
Paragraphs 3.9.2, 3.9.4 and 3.9.5



(a) Cover greater than 500mm



(b) Cover greater than 375mm



(c) Cover greater than 125mm

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

Soak Pit requirements:
1 Cubic Metre of storage area for every 50m² of catchment area.

Roof area = 187.05m²
Driveway area = 43.24m²
Total = 230.29m²

Calc. - Total area / Catchment area per 1m³ of Storage
230.29 / 50m² = 4.60m³

4.60 + 1.52 = 6.12m³ soak pit area required.
8m³ soak pit area provided.

- All soak holes shall be sealed to avoid infiltration other than the discharge area
- Where the soak pit comprises a rock filled hole then the volume of the hole shall be calculated V_{stor} times 0.38 (E1/VM1 9.0.6)
- Drainlayer to confirm dimensions of soak pit on site. specific to ground condition.

3.9.2 Bedding and backfilling

Figure 13 gives acceptable solutions for the bedding and backfilling of the drainage pipes listed in Table 1 except where:

a) The trench is located within or above peat, or

b) Scouring of the trench is likely due to unstable soils, or

c) The horizontal separation between any *building* foundation and the underside of the pipe trench is less than that required by Paragraph 3.9.7, or

d) The cover H to the pipe is more than 2.5 m.

3.9.4 Trench width

The width B of the trench shall be no less than the pipe diameter D plus 200 mm. Trench width at the top of the pipe shall be no more than 600 mm unless the pipe(s) in the trench are covered with concrete, as shown in Figure 13 (c).

3.9.5 Acceptable materials

Acceptable fill materials shown in Figure 13 are:

a) Bedding material of clean granular non-cohesive material with a maximum particle size of 20 mm, or

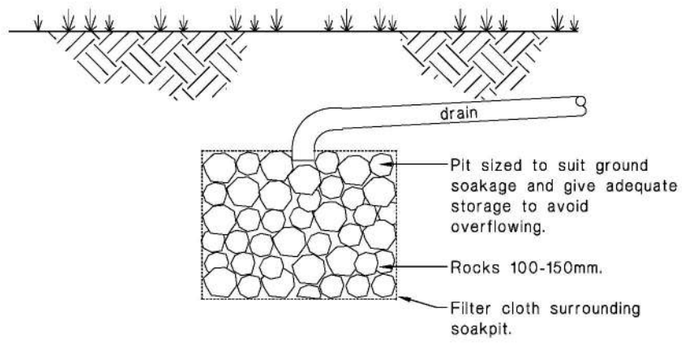
b) Selected compacted fill of any fine-grained soil or granular material which is free from topsoil and rubbish and has a maximum particle size of 20 mm, or

c) Ordinary fill which may comprise any fill or excavated material.

3.9.7 Proximity of trench to building

For light timber frame and concrete masonry *buildings* constructed to NZS 3604 or NZS 4229 in accordance with B1/AS1, pipe trenches which are open for no longer than 48 hours shall be located no closer than distance 'V' (see Figure 14) to the underside of any *building* foundation. Where the trench is to remain open for periods longer than 48 hours, the minimum horizontal separation shall increase to 3V in all ground except rock.

Figure 13: Soak Pit for Surface Water Disposal
Paragraph 9.0.4



(a) Rock soak pit

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

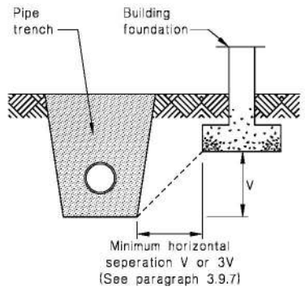
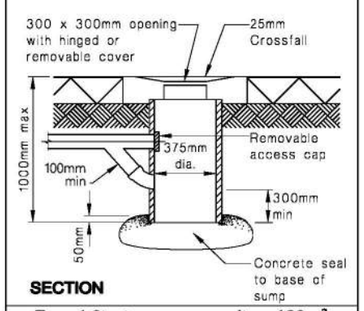


Figure 8: Type-one Surface Water Sump
Paragraph 3.6.2



Type 1 Strata sump capacity = 120m²

Roof Gutter profile calculations:

Gutter Type (CSAG)	Rainfall Intensity (RFI)	Roof Area
6300 mm²	55 mm/hr	187.05 m²

Roof Gutter Sizing Calc:

RFI: 55.00
CSAG: 6300 (based on 100mm/hr)

Adjusted Calc or CSAG to accommodate RFI of 55 (mm/hr)

6300 / 55.00 x 100 = 11454.55

Therefore plan area of roof allowed per (CSAG/RFI)

11454.5 / 55.00 = 208.26 m²

Number of downpipes required to accommodate RFI & CSAG calc;

Roof area / 208.26 = 0.90

Number of downpipes required: 1 (round up if required)

Number of DP provided = 6

Downpipe Calculations: *NZBC:E1*

Area per DP (based on 100mm/hr)	Rainfall Intensity (RFI)	Roof Area
70 m²	55.00 mm/hr	187.05 m²

Roof Gutter Sizing Calc:

RFI: 55.00
DP area: 70 (based on 100mm/hr)

Adjusted Calc to accommodate RFI of 55 (mm/hr)

70 / 55.00 x 100 = 127.27

Therefore plan area of roof allowed per Downpipe

Roof Area / Area served by DP
= 187.05 / 127.27 = 1.47 m²

Number of downpipes required: 1 (round up if required)

Number of DP provided = 6

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230600
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10/10/2023

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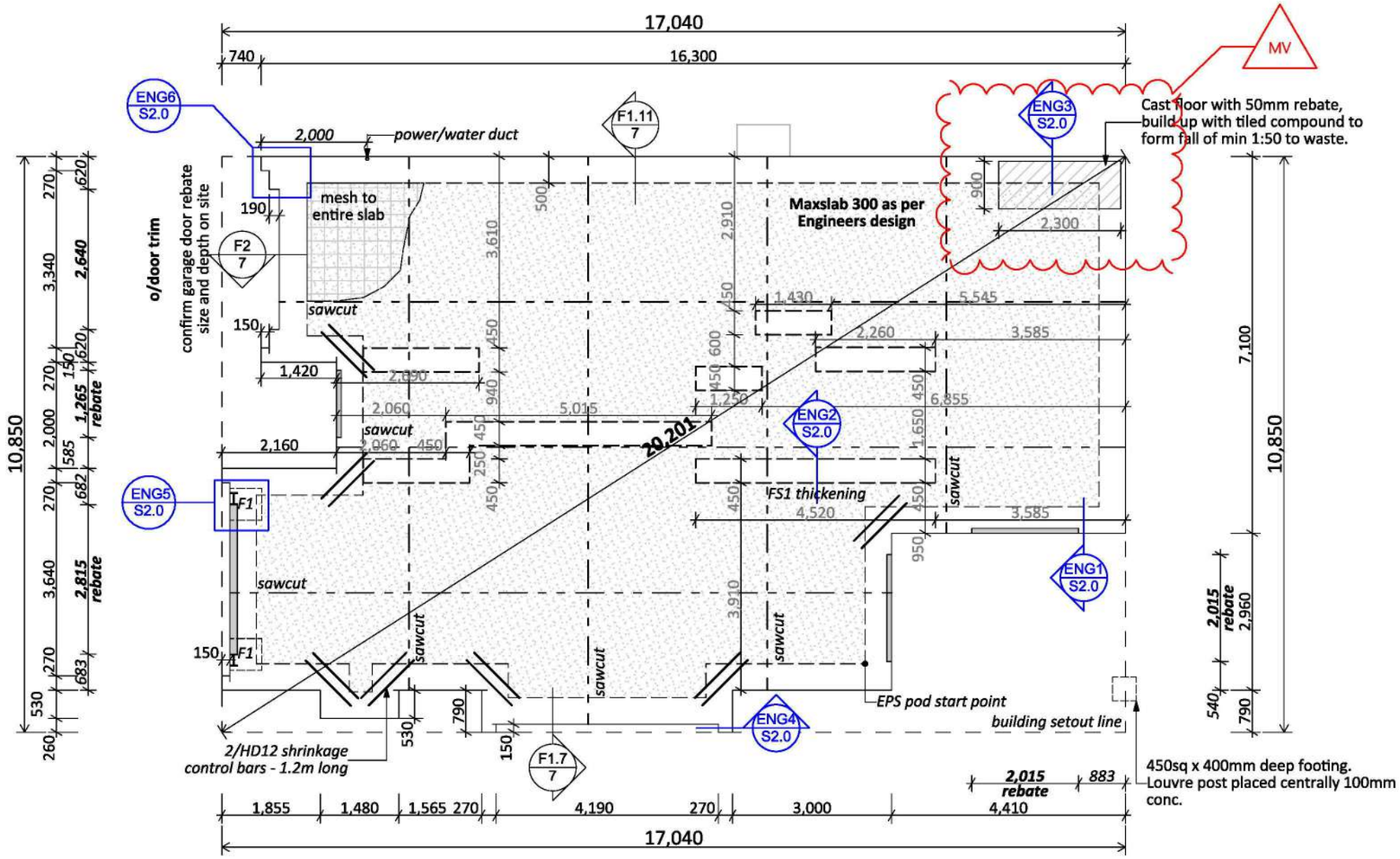
Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: DRAINAGE DETAILS	Date:	9/08/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER	Rev:	
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY	Sheet:	5
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL	Scale:	1:1

Central Otago District Council
230600 MV1
Approved Minor Variation
20/12/2023

Minor Variation Received
kys 06/11/2023



REV A

General notes:

Always cross reference the foundation plan with the floor plan prior to setting out. If any discrepancies occur contact: design@barretthomes.co.nz immediately.

- Check truss manufacturers producer statements for any further load bearing footings / slab thickenings that may be required to support roof loads
- Contractor to confirm on site all boundary bearings, lengths & peg locations on site prior to commencement of works, to ensure house position is correct.
- Contractor to locate all service connection points on site prior to commencement of works. Check invert levels or pipes and manholes.
- Contractor to confirm plumbing routes and ficture positions on site prior to commencement of works.

Site Maintenance:

The site should be maintained at essentially stable moisture conditions and extremes of wetting and drying prevented.

1. The site should be graded or drained so that water cannot pond against or near the building.
2. Careful consideration is required to ensure gardens do not interfere with the drainage requirements. Garden beds adjacent to the building should be avoided. Overwatering of gardens near the foundations should be avoided.
3. Planting of trees should be avoided near the foundation of the building as they may cause drying out of the clay.
4. Leaks in plumbing, stormwater and sewerage should be repaired promptly.

MAXSLAB TC1 INSULATED FLOOR SYSTEM

100mm CONCRETE SLAB TC1 CONCRETE MIX: 25MPa (CONCRETE STRENGTH AT 28 DAYS STANDARD CURED)

NOTE:
DESIGN CRITERIA FOR GROUND CONDITIONS TO BE CONFIRMED PRIOR TO CONSTRUCTION.
NOTE:
GROUND PREPARATION TO BE UNDERTAKEN IN ACCORDANCE WITH SPECIFIC GEOTECHNICAL REPORT RECOMMENDATIONS.
NOTE:
REFER TO TRUSS MANUFACTURES LAYOUT FOR LOCATIONS OF SLAB THICKENINGS TO LOAD BEARING WALLS AND POINT LOADS.
- LINE LOADS LESS THAN 10KN/m DO NOT REQUIRE SLAB THICKENINGS
- LINE LOADS GREATER THAN 20KN/m REQUIRE SPECIFC DESIGN
- SAW CUTS NOT OVER SLAB THICKENINGS

= Rebated sills for full height joinery

F1 = 600x600x300 Pad with 3HD12 'staple' bars top and bottom each way as detail 5B/S2.0 - Refer ENG

Engineering

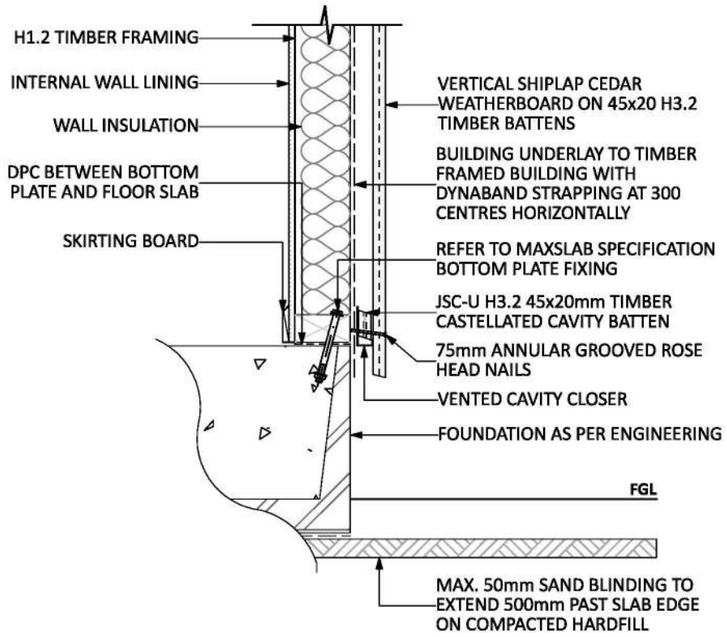
Plans are to be read in conjunction with Wilton Joubert structural documentation and details.
Reference: 129220

REV A

Y:¥GM Projects¥OTAGO¥Wooing Tree¥WT248¥Consent Plans¥WT248 Consent 1.5_MV_shower.pln

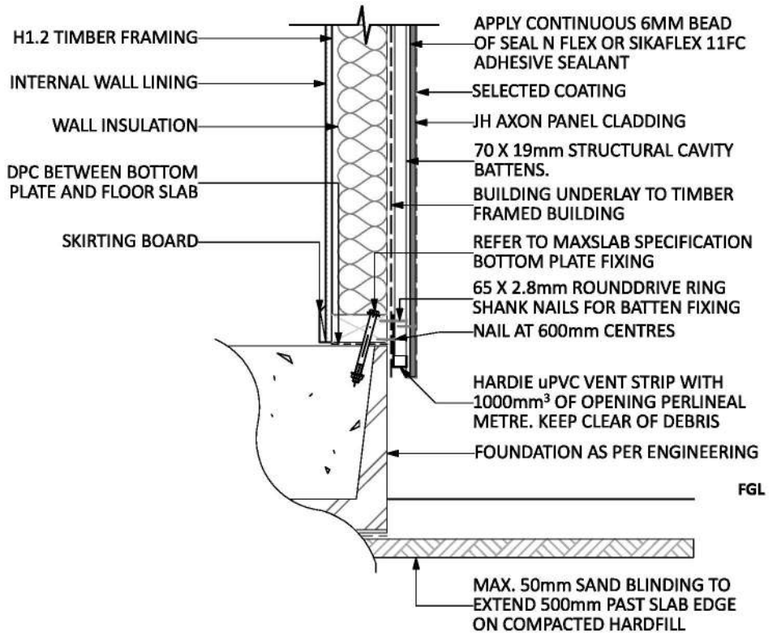
Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: FOUNDATION PLAN		Date: 6/11/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 6
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:100



TYPICAL EDGE DETAIL - F1.7

SCALE 1:10



TYPICAL EDGE DETAIL - F1.11

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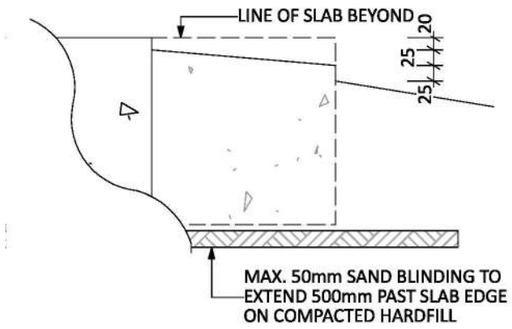


GARAGE EDGE DETAIL - F2

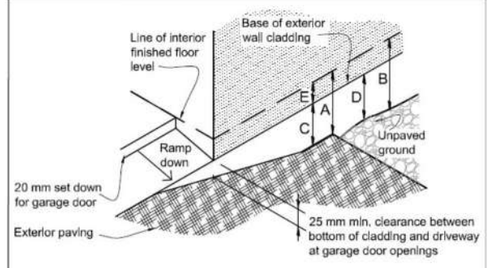
SCALE 1:10

Table 18: Minimum clearances
Paragraphs 9.1.3, 9.1.3.1, 9.1.3.2, 9.1.3.3, 9.1.3.4, 9.1.3.5 and 9.2.7

Minimum clearances (mm)	Masonry veneer		Other claddings				
	A	B	A	B	C	D	E
Concrete slab	100	150	150	225	100	175	50
Timber floor Refer Note 1)					100	175	50[2]

NOTE: 1) Refer to NZS 3604 for requirements.
2) Cladding to extend minimum 50 mm below bearer or lowest part of timber floor framing.

Figure 65: Levels and garage openings
Paragraphs 9.1.3, 9.1.3.4, 9.2.5, Table 18



REV A

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: FOUNDATION DETAILS		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 7
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:10

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Central Otago District Council
230600 MV1
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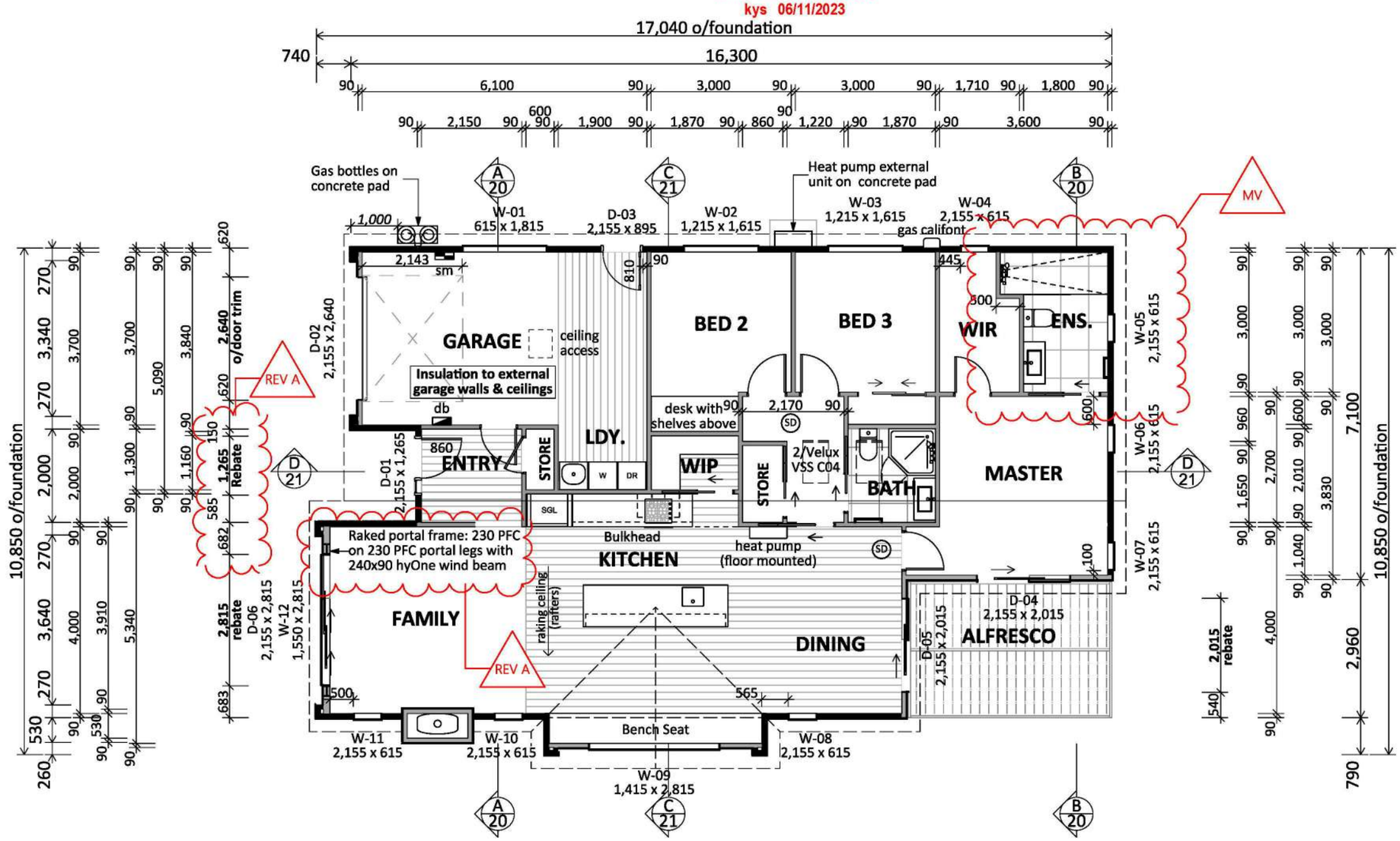
20/12/2023

Minor Variation Received
kys 06/11/2023



General notes:

Always cross reference the foundation plan with the floor plan prior to setting out.

All joinery sizes specified are to be confirmed with an on-site measure up prior to joinery fabrication. No liability shall be held by the Barrett Homes for incorrect supply of joinery.

Refer to attached pre-cut design and documents for all lintel sizes, truss and top plate fixings. Contractor to refer to truss manufacturers producer statements for any further load bearing footing / slab thickenings that may be required to support roof loads. This layout is preliminary. Read in conjunction with final PS1 and pre-cut design and documents.

Refer to all written dimensions, DO NOT scale off drawings.

2.415 stud height throughout, 2460 u/side of truss (unless specified)

Raking ceiling (rafters) to KITCHEN / DINING / LIVING

All joinery 2155 head height

Gas cooking with vented r/hood

Gas hotwater. Ensure gas appliance installation complies to NZS 5601.1: 2003. PE-Xa water supply pipes. Hot water supply pipes shall be thermally insulated to comply with H1/AS1 5.0

Gas bottles: 1000mm from door, drain or air vent, 1500mm from any point of ignition, 150mm under any opening window. Gas fitter to confirm

Gas water heater: 300mm from any opening door or window, 75mm from down pipes, 500mm fuse or electric box, 1000mm from gas botttles, 300mm from wall or corner, 1500mm from ground. Gas fitter to confirm

Please confirm plumbing fixture locations before foundation commences

Confirm shower tray size before commencing wall framing

Ensure entry lighting complies with NZBC D1/AS1 & G8/AS1. To provide a minimum *illuminance* of 20 lux, the total wattage required per m2 of floor area is shown in Table 1.

Down lights to be CA 80, CA 135. IC or IC-F Type (max 1 per 5m²).

SD - Approved smoke detectors required within 3m of any sleeping space - first alert of similar

Floor Area:

Area o/frame: 153.52 m²

Cladding Key:

JH 133 Axon panel

Vertical Cedar w/board

N

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: FLOOR PLAN		Date: 6/11/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 9
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:100

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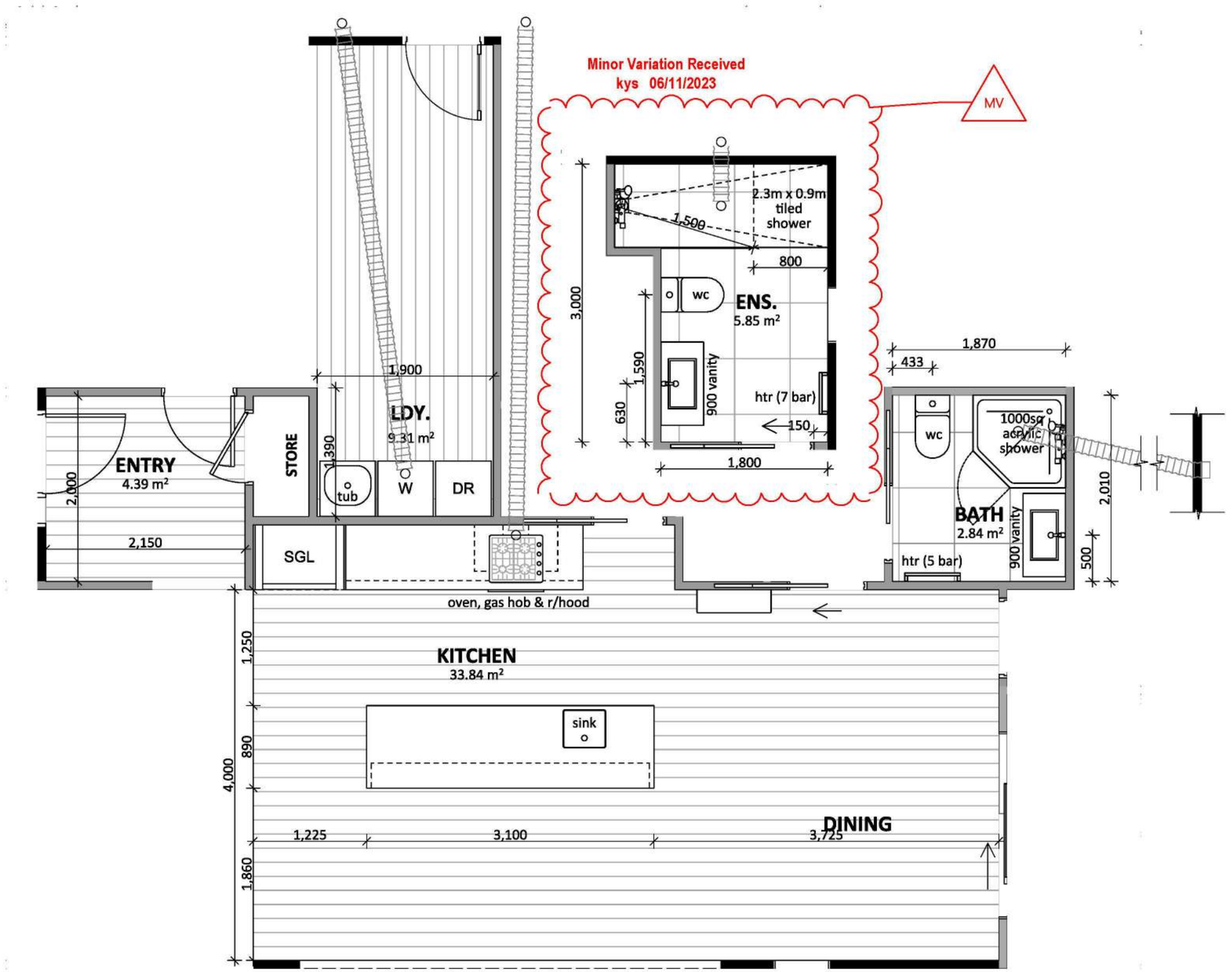

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General Notes:

Contractor to check and verify all dimensions on site prior to commencing construction.

REFER TO FINAL KITCHEN DESIGN PLAN BY OTHERS.
In case of any discrepancies, kitchen designer layout to take precedence.

Bench clearance is an alternative solution as requested by owner.

Shower glazing in accordance with NZS 4223 & 2016 amendments.

Wet Areas:

FLOOR FINISHES

BATHROOM / ENSUITE
Non-slip tiles over waterproofed floor. Minimum slip resistance co-efficient for level surface between 0.25 - 0.50 acceptable in accordance with NZBC: D1/AS1 Access.

Concrete floor Tiles laid by qualified tiler, lay 1 row of tiles up wall with flexible sealant to all internal and external corners - tiler to supply producer statement for tiling (Contractor/Owner to confirm finish)

KITCHEN / DINING / ENTRY / LAUNDRY
Non-slip vinyl lining over sealed floor. Minimum slip resistance co-efficient for level surface between 0.25 - 0.50 acceptable in accordance with NZBC: D1/AS1 Access.
Option 1 - Cove vinyl up wall 100mm, fix skirting or vinyl smooth edge to wall junction
Option 2 - Waterproof seal vinyl to edge of painted skirting, contractor to comply with NZBC: E3/AS1 Internal Moisture.

WALL AND CEILING FINISHES

LAUNDRY
10mm GIB Aqualine to entire wall behind tub only, standard GIB to ceiling and all other walls

WC
10mm GIB Aqualine to all walls, standard GIB to ceiling

BATHROOM / ENSUITE
13mm GIB Aqualine to walls and ceilings, 1/coat GIB Sealer with 2/coats semi-gloss or gloss, acrylic enamel paint

TILED SHOWER:
Tiler to waterproof floor and wall to comply with NZBC: E3/AS1 Internal Moisture. Approved waterproofer (ARDEX liquid waterproofing membrane) applied to manufacturers instructions, non-slip ceramic tiles laid over with even grout lines. Use flexible MS sealant to internal corners, wall and floor - tiler to supply producer statement for waterproofing and tiling (Contractor/Owner to confirm finish)

Floor Types Key:

= Tiled Floor

= Vinyl Floor

Mechanical Ventilation

Laundries = 20 litres/sec
20ℓ/s = 72m³/hr

ACH (Air changes per hour)
Laundries (domestic) = 20-30

Room size
1.39 x 1.90 x 2.4 = 6.33m³

30ACH = 7.1 x 30 = 189.9m³/hr
= 52.75ℓ/s

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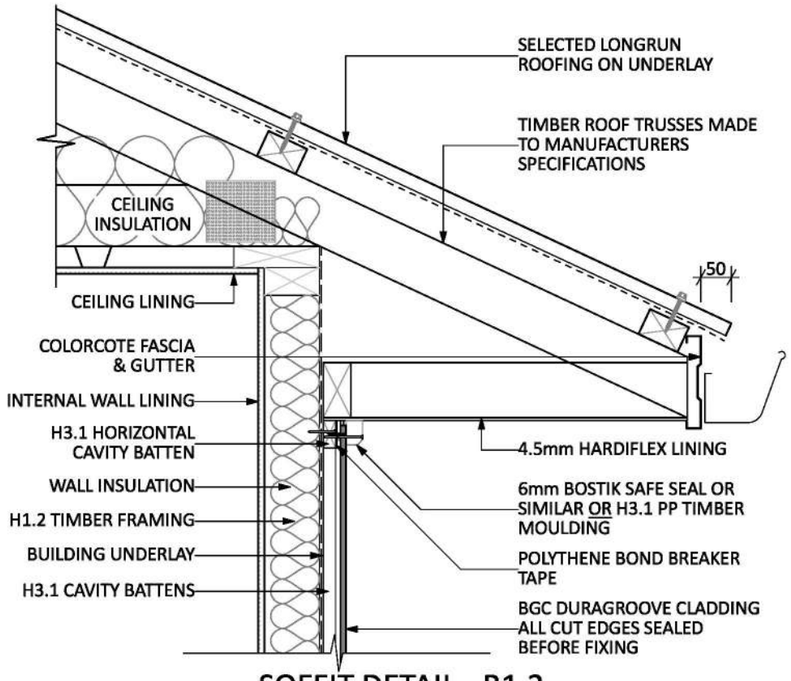
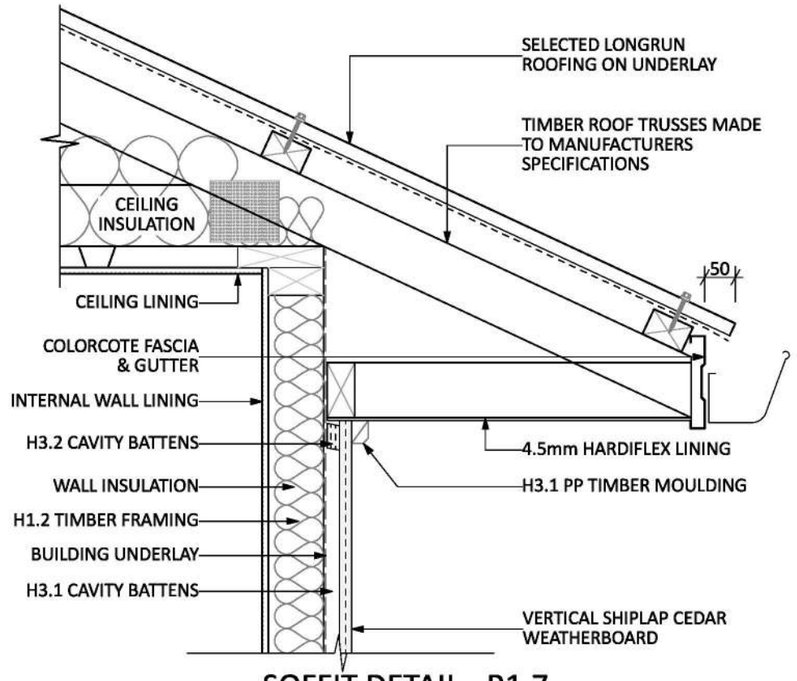
Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: KITCHEN & BATHROOM PLAN		Date: 6/11/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev:
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 10
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:50



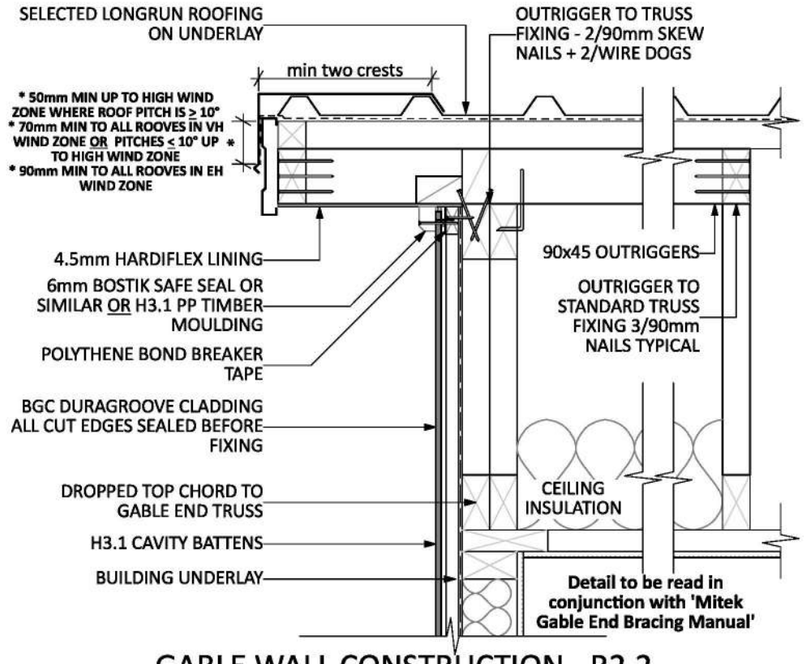
SOFFIT DETAIL - R1.2

SCALE 1:10



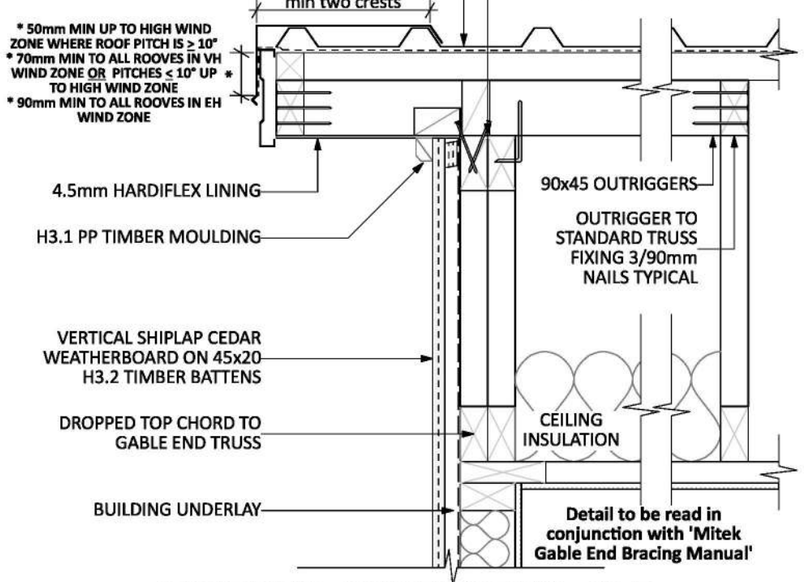
SOFFIT DETAIL - R1.7

SCALE 1:10



GABLE WALL CONSTRUCTION - R2.2

Scale 1:10



GABLE WALL CONSTRUCTION - R2.7

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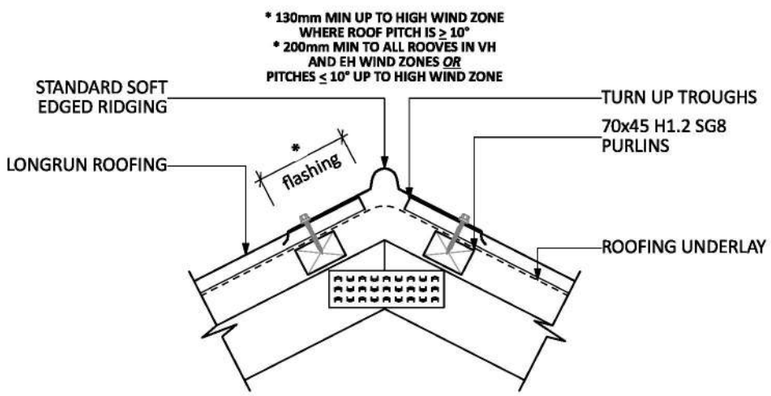
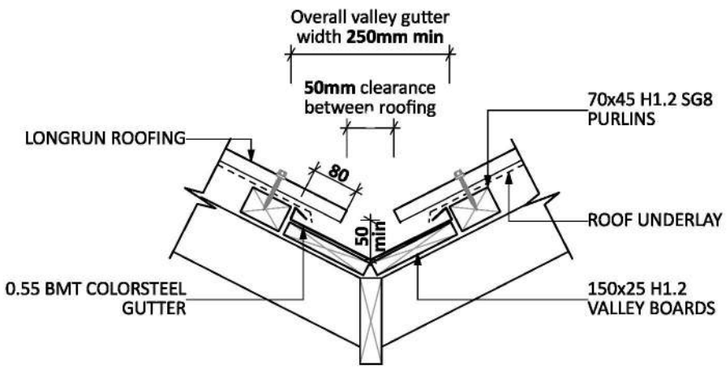


RIDGE DETAIL - R6

SCALE 1:10



VALLEY DETAIL - R5

SCALE 1:10

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: ROOF DETAILS		Date: 9/08/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev:
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 13
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:10

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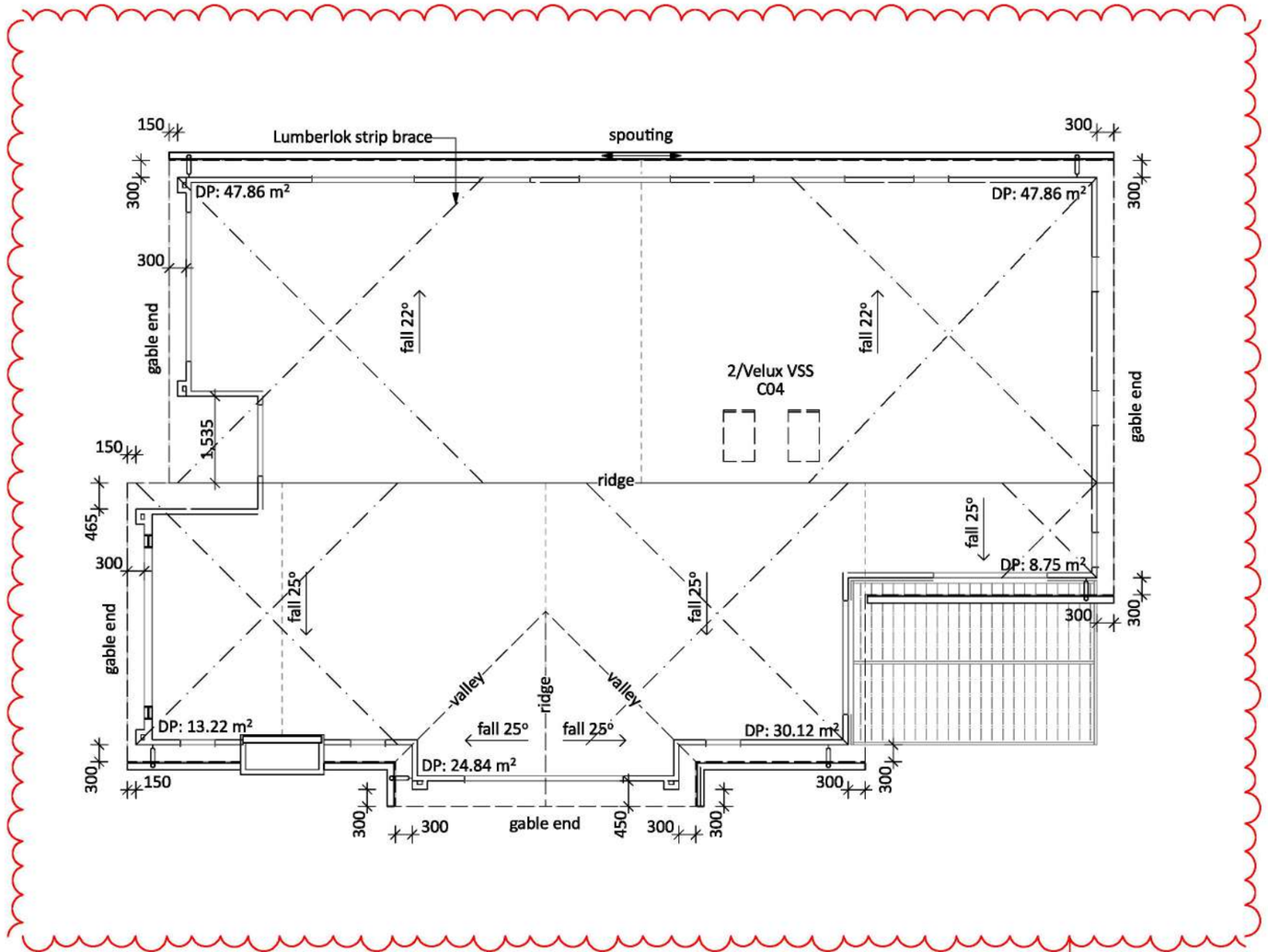
General notes:

Refer to attached pre-cut design and documents for all lintel sizes, truss and top plate fixings. Contractor to refer to truss manufacturers producer statements for any further load bearing footing / slab thickenings that may be required to support roof loads. This layout is preliminary. Read in conjunction with final PS1 and pre-cut design and documents.

Gutter fall



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8.4.2A Transition Flashing

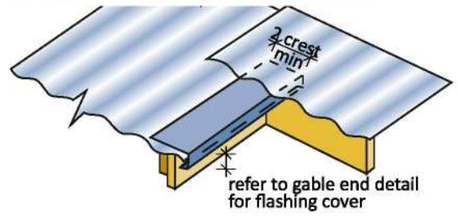
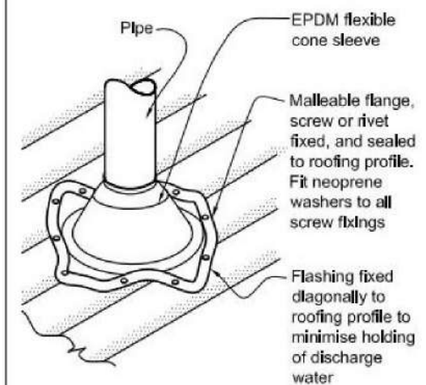


Figure 53: Flashing for small pipes
Paragraphs 8.3.10, 8.4.17, 9.6.8.5 and 9.6.9.6



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

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Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: ROOF PLAN		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev:
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 11
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:100

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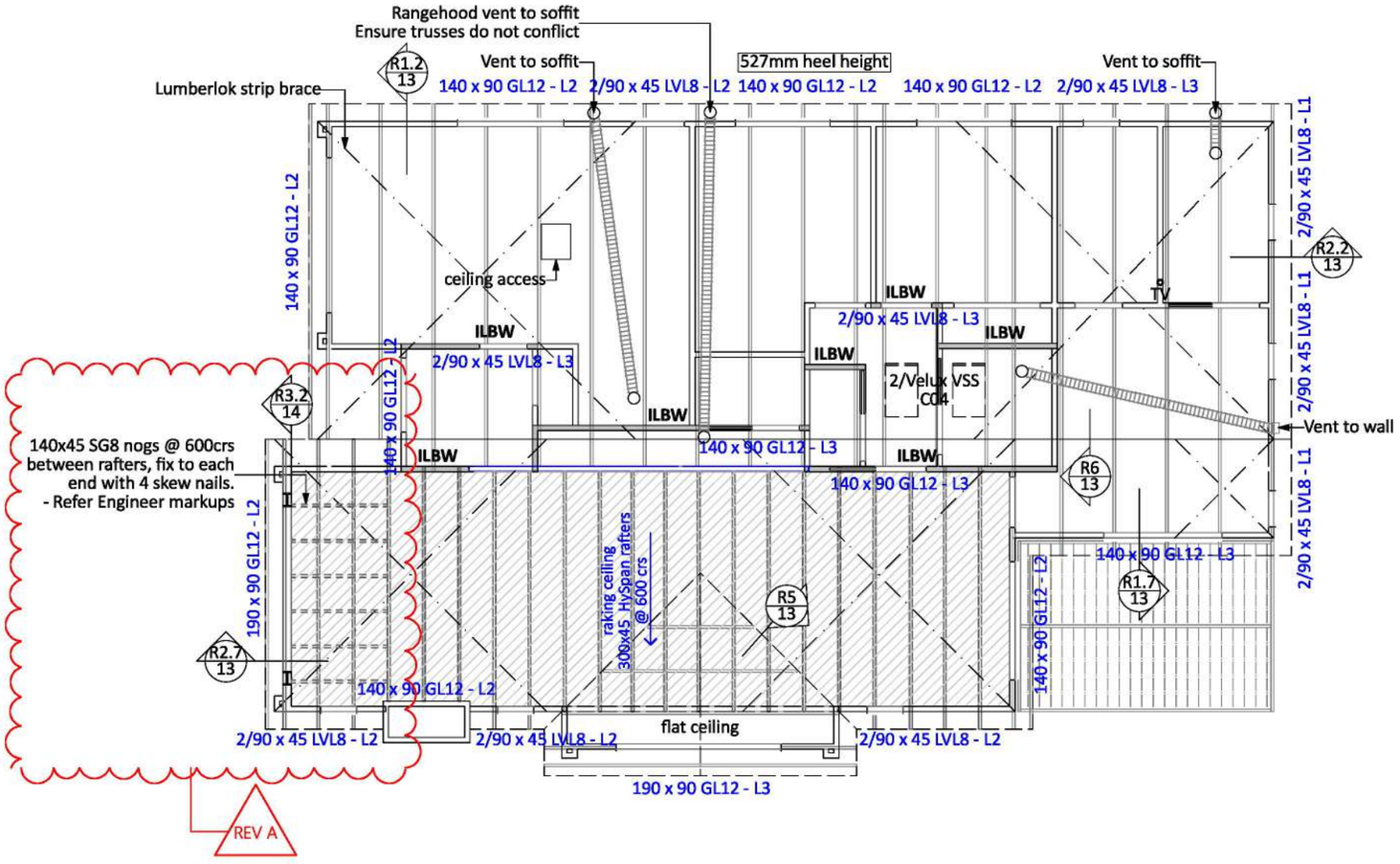

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General notes:

Refer to attached pre-cut design and documents for all lintel sizes, truss and top plate fixings. Contractor to refer to truss manufacturers producer statements for any further load bearing footing / slab thickenings that may be required to support roof loads. This layout is preliminary. Read in conjunction with final PS1 and pre-cut design and documents.

Stud To Top Plate Fixing Key:
Stud to top plate fixings use Pryda TP3 fixing
- Refer to Pryda manual
Gable end:
Stud to top plate fixings use Pryda TP2 fixing
- Refer to Pryda manual
Extra Top Plate To Top Plate
Power Driven - 3/90x3.15 nails at 500mm centres
Hand Driven - 2/100x3.75 nails at 500mm centres
Lintel & fixing key:
240x90-L3 = Lintel-Lintel fixing (refer to Pryda manual)

Lintel To Trimming Stud Fixing Key:
Lintel to Trimming Stud fixing use NZS:3604:2011 Table 8.19 (where fixings havent been specified).
Power Driven - 3/90x3.15 (end nails)
Hand Driven - 2/100x3.75 (end nails)

Lintels specified as per Truss Tech Ltd design.

Roof Bracing:

Light Roof = One per 50m² roof area
Roof Area = 187.05m² / 50 = 4 braces required (round up) = 2 valleys + 4 braces provided

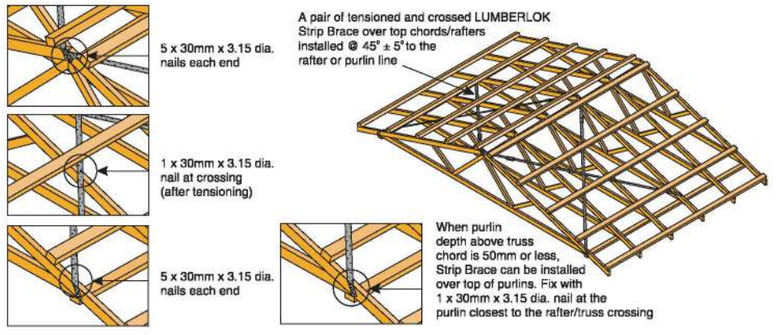
ILBW — Internal load bearing wall

i) ROOF PLANE BRACE

Each roof plane brace can be:
- A hip or valley rafter running continuously from ridge to the top plate in accordance with Clauses 10.2.1.3.2 or 10.2.1.3.3 NZS 3604:2011.

OR

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



Barrett Homes

Project No:	WT248	Designed:	RI/CJ/RS	Wind:	HIGH	Drawing:	ROOF FRAMING PLAN
Plan:	WT249 (mirror)	Drawn:	JH	EQ:	2	Client Name:	JOHN SLATER
Version:	1.5	Checked:	AC	Exposure:	B	Site Address:	LOT 248, 24 BRAGATO WAY
		design@barretthomes.co.nz		Council:	CODC		WOOING TREE, STAGE 2A, CROMWELL

Date:	3/10/2023
Rev:	REV A
Sheet:	12
Scale:	1:100

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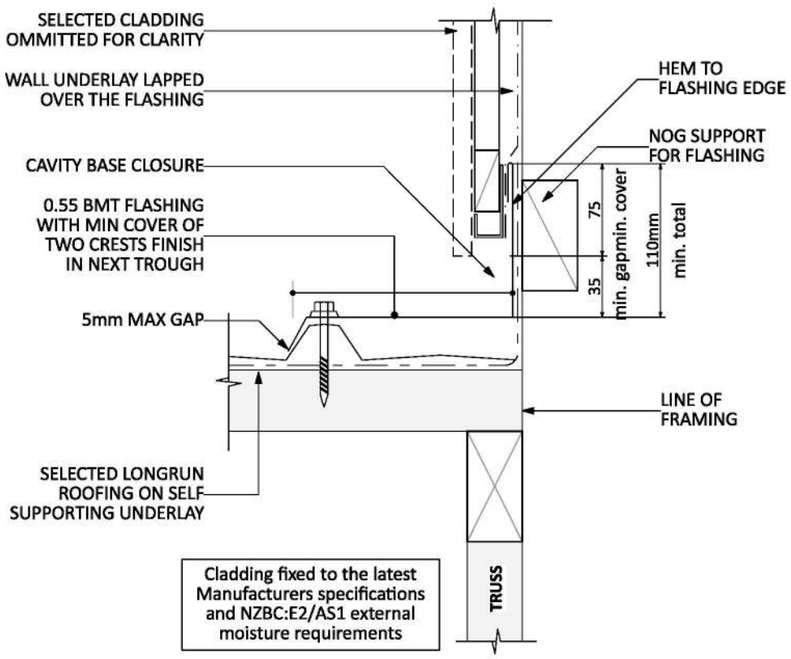
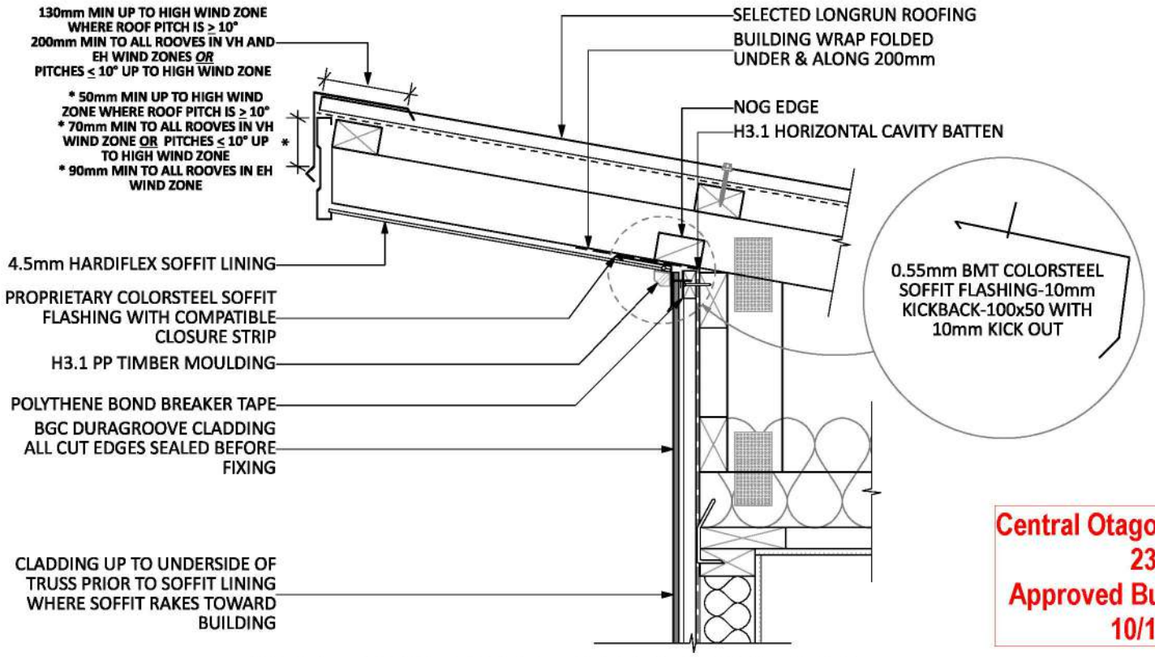


PARALLEL APRON DETAIL - R7

Scale 1:5



UPPER RAKING EAVE CONSTRUCTION - R3.2

Scale 1:10

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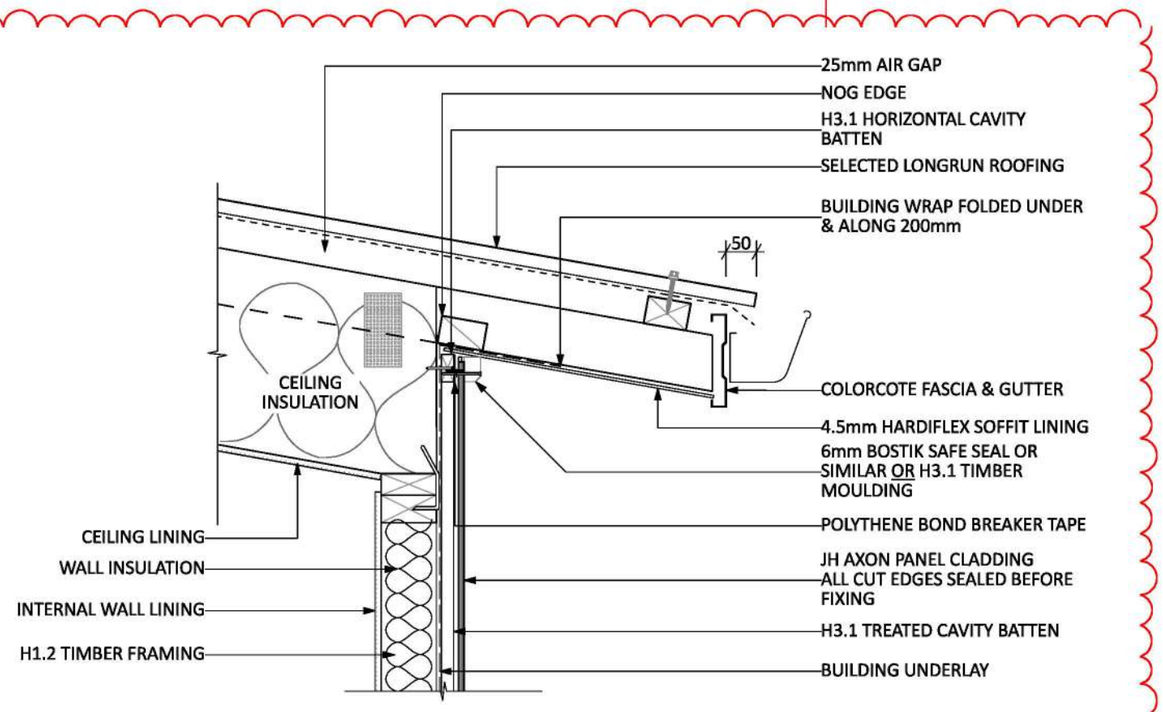
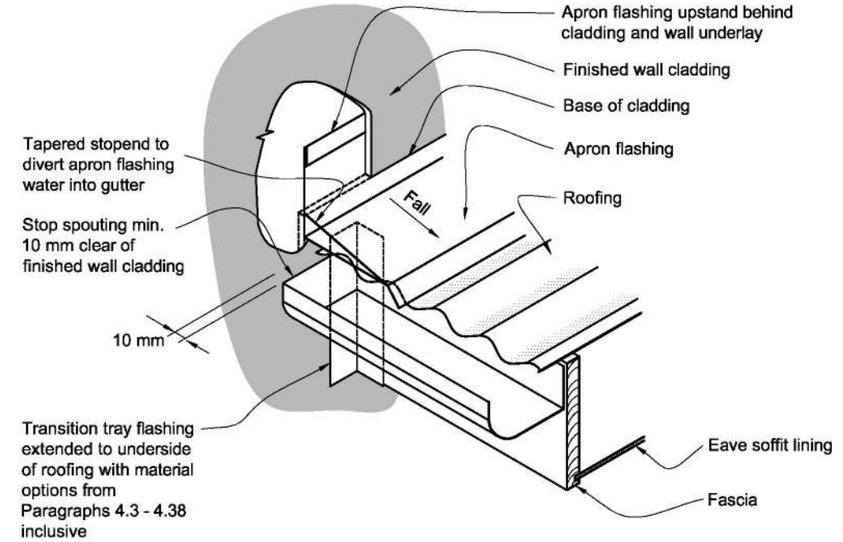


LOWER RAKING EAVE CONSTRUCTION - R4.2

Scale 1:10

Figure 8B: Gutter/wall junction
Paragraphs 5.1 and 5.2

NOTE: (1) The upstand at the lower edge of the *apron flashing* may be preformed to a larger size and then trimmed on site to suit.
(2) The transition *flashing* bridges gap at the end of the fascia to protect the soffit *framing*.
(3) *Wall underlay* omitted for clarity.



Barrett Homes

Project No:	WT248	Designed:	RI/CJ/RS	Wind:	HIGH	Drawing:	ROOF DETAILS
Plan:	WT249 (mirror)	Drawn:	JH	EQ:	2	Client Name:	JOHN SLATER
Version:	1.5	Checked:	AC	Exposure:	B	Site Address:	LOT 248, 24 BRAGATO WAY
			design@barretthomes.co.nz	Council:	CODC		WOOING TREE, STAGE 2A, CROMWELL

Date:	3/10/2023
Rev:	REV A
Sheet:	14
Scale:	1:10, 1:5

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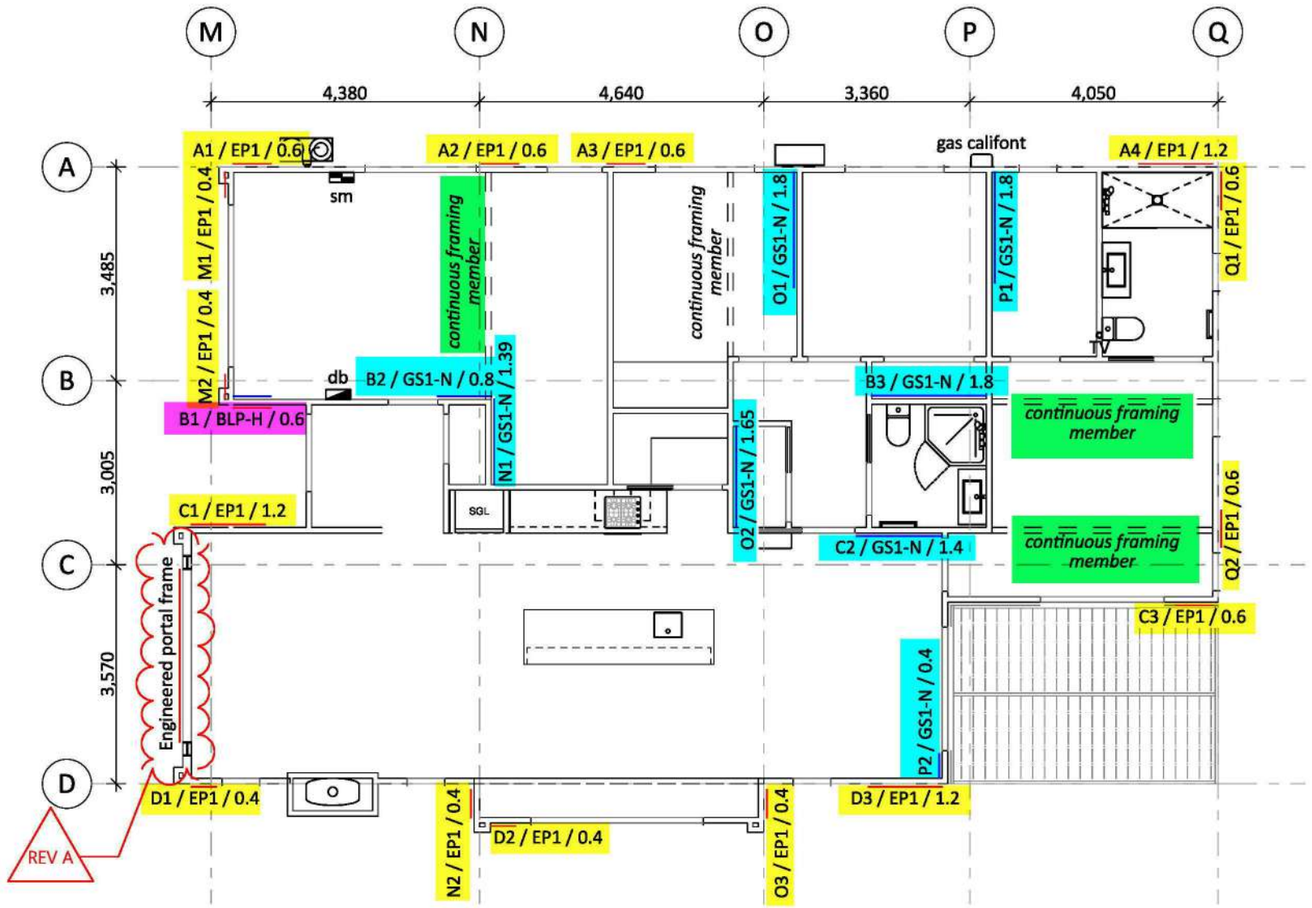

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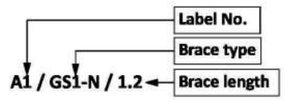
NOTE TO PRENAIL:
EXTERNAL PLY BRACES TO BE CHECKED INTO CLAD FRAMES ONLY

Symbol	Legend
	Smart Meter
	Distribution board

Bracing Notes:

All GIB® Braces fixed in accordance with the latest Winstones GIB bracing manual

(as per NZS 3604:2011 section 5.4.6)
Bracing lines in any storey shall be at not more than 6 m centres in each direction, provided that there need be no bracing lines within the area covered by a diaphragm complying with 5.6.1 supported by walls complying with 5.6.2. Where bracing lines are spaced between 5 and 6 m and there is a low density (less than 600 kg/m3) ceiling lining then an additional 140 x 35 mm top plate of the same grade as the wall frame shall be fitted (see figure 8.18). The distance between bracing lines may be 7.5 m where dragon ties provide lateral support to the external wall (see figure 8.1).



6kN — Top Plate/Packer plate brace fixings

continuous framing member — Wall to be connected at top plate level, either directly with a timber packer plate, or through a continuous framing member in the line of the wall as per NZS3604:2011 8.7.3.4

Openings in GIB Bracing Elements

(as per GIB Ezybrace System)
Openings are allowed within the middle third of a wall bracing element's length and height. Neither opening dimension shall be more than one third of the element height. Wall linings are fixed to opening trimmers at 150mm centres. 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.

Openings in Ply Bracing Elements

(as per CHH Ecoply Manual)
- Switch and power outlets – 90 x 90mm (max) outlet penetrations are to be positioned not less than 90mm from the perimeter of the bracing element
- Penetration holes - 150mmØ (max) hole penetrations are to be positioned not less than 150mm from the perimeter of the bracing element

Ply Braces:

(not as cladding)
All plywood specified is grade DD 7mm construction ply manufactured to AS/NZS 2269:2004, fixed with 50x2.8 flat head nails at 150mm crs around the perimeter of the bracing element and at 300mm crs to intermediate framing

Bracing Element Table

Brace Type	Primary Brace	Secondary Brace/s
GS1-N	10mm GIB Standard plasterboard on one side, minimum length 0.4m	N/A
EP1	7mm CHH Ecoply® one side, minimum length 0.4m	Hold-down conn. each end
BLP-H	10mm GIB Braceline on one side, min 7mm Ecoply on other side, min length 0.4m	Hold-down conn. each end

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: BRACING PLAN		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 15
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:100

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GIB EzyBrace® Bracing Software

Demand Calculation Sheet

Job Details

Name:	WT248
Street and Number:	24 Bragato Way
Lot and DP Number:	Lot 248 DP 574973
City/Town/District:	Cromwell
Designer:	JH
Company:	Barrett Homes
Date:	Thursday, 19 January 2023

Building Specification

Number of Storeys	1
Floor Loading	2 kPa
Foundation Type	Slab
	Single
Cladding Weight	Light
Roof Weight	Light
Room in Roof Space	No
Roof Pitch (degrees)	25
Roof Height above Eaves (m)	2.83
Building Height to Apex (m)	5.54
Ground to Lower Floor (m)	0.25
Average Stud Height (m)	2.415
Building Length (m)	10.85
Building Width (m)	17.04
Building Plan Area (m²)	153.50

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Building Location

Wind Zone = High

Earthquake Zone 2
Soil Type D & E (Deep to Very Soft)
Annual Prob. of Exceedance: 1 in 500 (Default)

Bracing Units required for Wind

	Along	Across
Single Level	**1006**	**686**

Bracing Units required for Earthquake

	Along & Across
Single Level	**599**

GIB EzyBrace® Version 12/18a

GIB EzyBrace® Bracing Software

Single Level Along Resistance Sheet

Job Name: WT248

									Wind	EQ
									Demand	
									1006	599
									Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	1067 106%	1132 189%
A	1	0.60		2.415	EP1 - 0.6	EcoPly	57	63		
	2	0.60		2.415	EP1 - 0.6	EcoPly	57	63		
	3	0.60		2.415	EP1 - 0.6	EcoPly	57	63		
	4	1.20		2.415	EP1 - 1.2	EcoPly	143	161		
									313 OK	349 OK
B	1	0.60		2.415	BLP-H	GIB®	80	85		
	2	0.80		2.415	GS1-N	GIB®	48	47		
	3	1.80		2.415	GS1-N	GIB®	123	107		
									252 OK	239 OK
C	1	1.20		2.415	EP1 - 1.2	EcoPly	143	161		
	2	1.40		2.415	GS1-N	GIB®	96	83		
	3	0.60		2.415	EP1 - 0.6	EcoPly	57	63		
									296 OK	307 OK
D	1	0.40		2.415	EP1 - 0.4	EcoPly	32	38		
	2	0.40		2.415	EP1 - 0.4	EcoPly	32	38		
	3	1.20		2.415	EP1 - 1.2	EcoPly	143	161		
									207 OK	237 OK

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GIB EzyBrace® Bracing Software

Single Level Across Resistance Sheet

Job Name: WT248

									Wind	EQ
									Demand	
									686	599
									Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	867 126%	795 133%
m	1	0.40		2.415	EP1 - 0.4	EcoPly	32	38		
	2	0.40		2.415	EP1 - 0.4	EcoPly	32	38		
	3				Portal Frame		150	100		
									213 OK	175 OK
n	1	1.39		2.415	GS1-N	GIB®	95	83		
	2	0.40		2.415	EP1 - 0.4	EcoPly	32	38		
									127 OK	121 OK
o	1	1.80		2.415	GS1-N	GIB®	123	107		
	2	1.65		2.415	GS1-N	GIB®	113	98		
	3	0.40		2.415	EP1 - 0.4	EcoPly	32	38		
									268 OK	243 OK
p	1	1.80		2.415	GS1-N	GIB®	123	107		
	2	0.40		2.415	GS1-N	GIB®	21	23		
									144 OK	130 OK
q	1	0.60		2.415	EP1 - 0.6	EcoPly	57	63		
	2	0.60		2.415	EP1 - 0.6	EcoPly	57	63		
									113 OK	125 OK

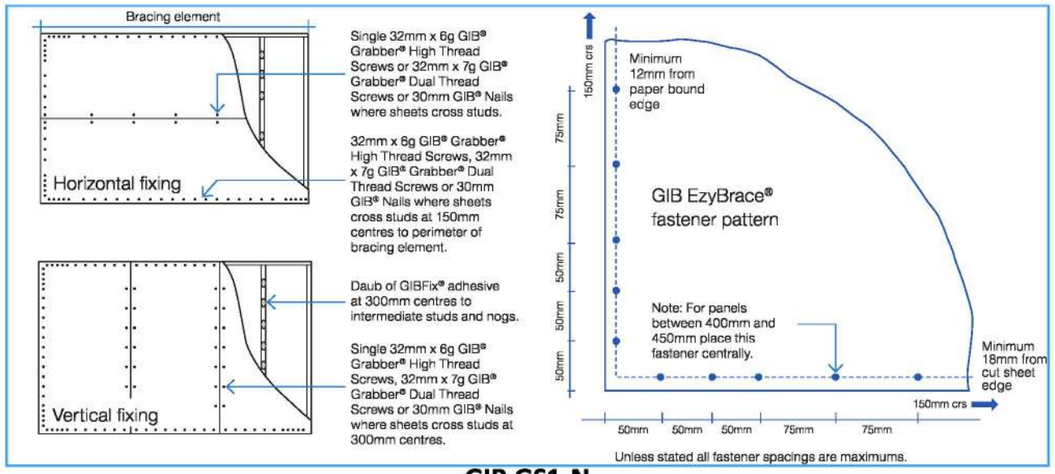
REV A

Barrett Homes

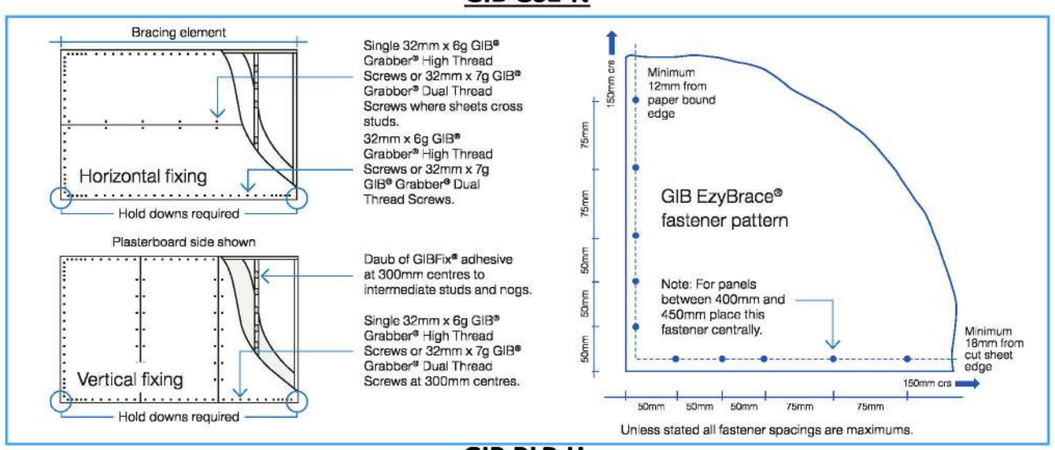
Project No:	WT248	Designed:	RI/CJ/RS	Wind:	HIGH	Drawing:	BRACING CALCULATIONS
Plan:	WT249 (mirror)	Drawn:	JH	EQ:	2	Client Name:	JOHN SLATER
Version:	1.5	Checked:	AC	Exposure:	B	Site Address:	LOT 248, 24 BRAGATO WAY
		design@barretthomes.co.nz		Council:	CODC		WOOING TREE, STAGE 2A, CROMWELL

Date:	3/10/2023
Rev:	REV A
Sheet:	16
Scale:	1:1

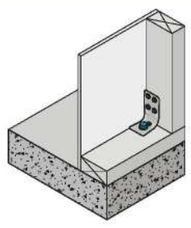
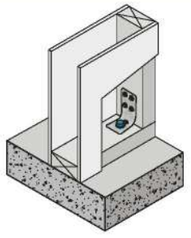
Y:¥GM Projects¥OTAGO¥Wooing Tree¥WT248¥Consent Plans¥WT248 Consent 1.5.pln



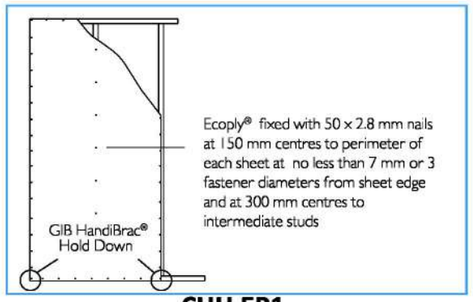
GIB GS1-N



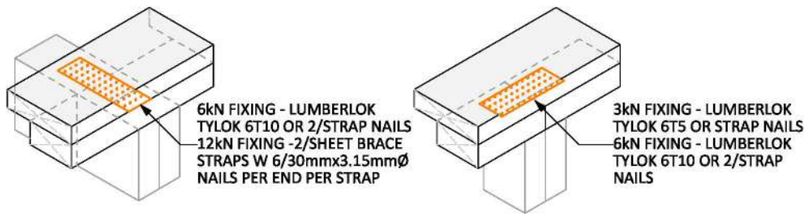
GIB BLP-H

Concrete floor	
External walls	Internal walls
 GEB009	 GEB010
Position GIB HandiBrac® as close as practicable to the internal edge of the bottom plate.	Position GIB HandiBrac® at the stud/plate junction and at mid-width of plate.
Hold-down fastener requirements	
A mechanical fastening with a minimum characteristic uplift capacity of 15kN or use supplied BT10/140 screwbolt in GIB HandiBrac® pack.	

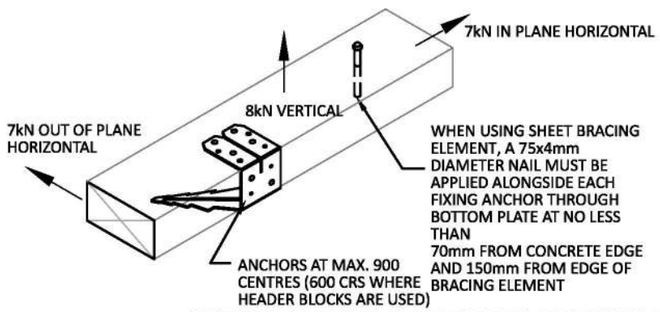
GIB HANDIBRAC - CONCRETE



CHH EP1



TOP PLATE BRACE FIXINGS



EXTERNAL WALL BOTTOM PLATE FIXING

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10/10/2023

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: BRACING FIXING DETAILS		Date: 9/08/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev:
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 17
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:100

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Lintel Fixing Schedule

Acceptable solutions in conjunction with tables 8:14 & Fig 8:12 of NZS3604:2011

Span Meters	Wind Zone	LIGHT ROOF Loaded Dimensions Meters					HEAVY ROOF Loaded Dimensions Meters				
		2	3	4	5	6	2	3	4	5	6
0.6	L	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1
	M	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1
	H	L1	L1	L1	L2	L2	L1	L1	L1	L1	L1
	VH	L1	L1	L2	L2	L2	L1	L1	L1	L2	L2
	EH	L1	L2	L2	L2	L3	L1	L1	L2	L2	L2
0.9	L	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1
	M	L1	L1	L1	L1	L2	L1	L1	L1	L1	L1
	H	L1	L1	L2	L2	L2	L1	L1	L1	L2	L2
	VH	L1	L2	L2	L3	L3	L1	L2	L2	L2	L2
	EH	L2	L2	L3	L3	L3	L2	L2	L2	L3	L3
1.2	L	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1
	M	L1	L1	L2	L2	L2	L1	L1	L1	L1	L1
	H	L1	L2	L2	L3	L3	L1	L1	L2	L2	L2
	VH	L2	L2	L3	L3	L3	L1	L2	L2	L3	L3
	EH	L2	L3	L3	L3	L3	L2	L2	L3	L3	L3
1.8	L	L1	L1	L1	L2	L2	L1	L1	L1	L1	L1
	M	L1	L2	L2	L2	L3	L1	L1	L1	L1	L2
	H	L2	L3	L3	L3	L3	L1	L2	L2	L3	L3
	VH	L3	L3	L3	L3	L4	L2	L3	L3	L3	L3
	EH	L3	L3	L3	L4	L4	L3	L3	L3	L3	L4
2.1	L	L1	L1	L2	L2	L2	L1	L1	L1	L1	L1
	M	L2	L2	L2	L3	L3	L1	L1	L1	L2	L2
	H	L2	L3	L3	L3	L3	L2	L2	L3	L3	L3
	VH	L3	L3	L3	L4	L4	L2	L3	L3	L3	L3
	EH	L3	L3	L4	L4	L4	L3	L3	L3	L4	L4
2.4	L	L1	L1	L2	L2	L2	L1	L1	L1	L1	L1
	M	L2	L2	L3	L3	L3	L1	L1	L1	L2	L2
	H	L2	L3	L3	L3	L4	L2	L2	L3	L3	L3
	VH	L3	L3	L4	L4	L4	L3	L3	L3	L3	L4
	EH	L3	L4	L4	L4	SED	L3	L3	L4	L4	L4
3.0	L	L1	L2	L2	L3	L3	L1	L1	L1	L1	L1
	M	L2	L3	L3	L3	L3	L1	L1	L2	L2	L2
	H	L3	L3	L3	L4	L4	L2	L3	L3	L3	L3
	VH	L3	L4	L4	L4	SED	L3	L3	L3	L4	L4
	EH	L3	L4	L4	SED	SED	L3	L4	L4	L4	SED
3.6	L	L2	L2	L2	L3	L3	L1	L1	L1	L1	L1
	M	L2	L3	L3	L3	L3	L1	L2	L2	L2	L3
	H	L3	L3	L4	L4	L4	L2	L3	L3	L3	L4
	VH	L3	L4	L4	SED	SED	L3	L3	L4	L4	L4
	EH	L4	L4	SED	SED	SED	L3	L4	L4	SED	SED
4.2	L	L2	L2	L3	L3	L3	L1	L1	L1	L1	L1
	M	L3	L3	L3	L3	L4	L1	L2	L2	L3	L3
	H	L3	L4	L4	L4	SED	L3	L3	L3	L4	L4
	VH	L4	L4	L4	SED	SED	L3	L4	L4	L4	SED
	EH	L4	L4	SED	SED	SED	L4	L4	L4	SED	SED
4.8	L	L2	L3	L3	L3	L3	L1	L1	L1	L1	L1
	M	L3	L3	L3	L4	L4	L1	L2	L2	L3	L3
	H	L3	L4	L4	L4	SED	L3	L3	L3	L4	L4
	VH	L4	L4	SED	SED	SED	L3	L4	L4	SED	SED
	EH	L4	SED	SED	SED	SED	L4	L4	SED	SED	SED

Notes:

Lintel spans and loaded dimensions measured in metres.

All frame nailing not indicated, refer to table 8.19 of NZS 3604:2011.

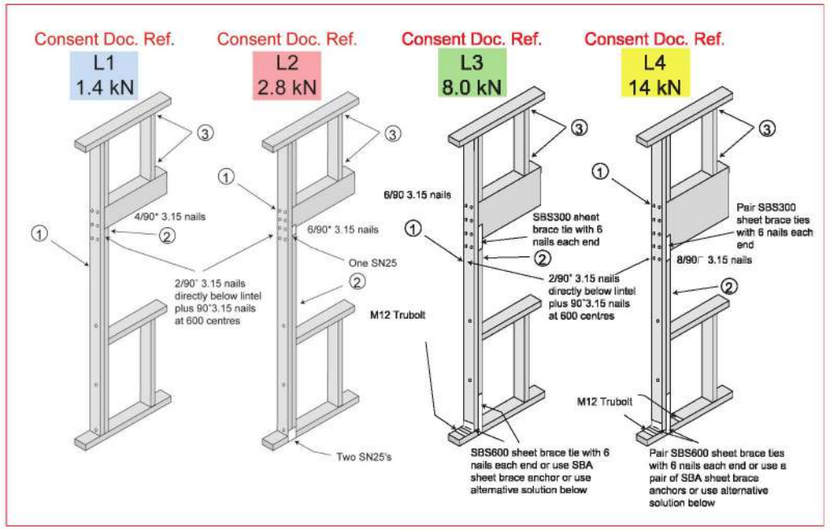
In all cases a 90mm thick external wall is assumed.

600mm overhangs allowed for in the tables.

SED designates that a Specific Design is required.

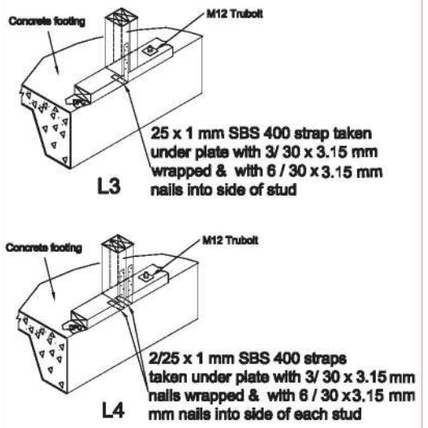
Lintel Fixing Schedule

Acceptable solutions in conjunction with tables 8:14 & Fig 8:12 of NZS3604:2011



1. For trimming stud thickness refer to Table 8.5 NZS 3604:2011. Additional studs to that shown to have a minimum stud to stud fixing of 11/90 x 3.15mm nails.
2. Where a double stud which provides support for a lintel is shorter by 400mm or more than the full stud height, its thickness shall not be included as contributing to the thickness of trimming studs.
3. Studs & Jack Studs to be fixed in accordance with the Pryda Top Plate to Stud Fixing Guide on page 39.

Alternative solution for L3 & L4 SBS use



All capacities are limit state design values and not characteristic strength therefore these may be compared directly to Pryda design software output. Capacitities assume a minimum timber grade of SG8.

Walls

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Barrett Homes

Project No:	WT248	Designed:	RI/CJ/RS	Wind:	HIGH	Drawing: FIXING CHARTS	Date: 9/08/2023
Plan:	WT249 (mirror)	Drawn:	JH	EQ:	2	Client Name: JOHN SLATER	Rev:
Version:	1.5	Checked:	AC	Exposure:	B	Site Address: LOT 248, 24 BRAGATO WAY	Sheet: 18
		design@barretthomes.co.nz		Council:	CODC	WOOING TREE, STAGE 2A, CROMWELL	Scale:

Ramset™

BOTTOM PLATE FIXING SOLUTIONS 2013

| Meets NZS 3604:2011 Requirements| 90 x 45 Bottom Plate |

Bottom Plate Durability

Fixing Requirements				Installation		
Bottom Plate Location	Bottom Plate Fixing Requirement	Concrete Strength (min.)	Floor Edge Type	Max Spacing	Fastener	Min Edge Distance (FROM OUTERFACE)
External Wall	NZS3604:2011	17.5 MPa	Concrete	900 mm	12120BPAG*1 OR T12140GH*1	55 mm
			Masonry Block	600 mm		
	Proprietary Bracing Systems (15 kN)	17.5 MPa	Concrete	900 mm	AS12150GH + RPBA	
			Masonry Block	600 mm		
Internal Wall	NZS3604:2011	17.5 MPa	N/A	900 mm	12120BPAG*1 OR T12140GH*1	N/A
				600 mm	8x75 Drive Pin & Washer	N/A
	Proprietary Bracing Systems (15 kN)	17.5 MPa	N/A	900 mm	12120BPAG*1 + RPBA OR T12140GH*1 + RPBA	N/A

HD875 DRIVE PIN

AS12150GH ANCHOR

12120BPAG ANCHOR

Ramset Bracing Anchor (RPBA)

Advantages

- Ease and speed of installation
- No checking of timber frame to ensure flush fitting of board
- The RPBA is a one piece anchor for either side of stud
- Slotted hole on bottom of bracket provides some flexibility in bolt & bracket position
- Installed prior to fixing of gypsum wallboard
- Easy inspection

The Ramset Bracing Anchor is sold as a set of 2.

Each set includes the following components;

- 2 Each Ramset Bracing Anchor
- 14 Each Tek screws

Fixings into timber or concrete floor to be purchased separately

pryda

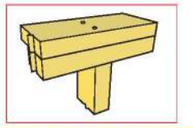
Top Plate to Stud Fixing Guide

Alternative Solution to NZS3604:2011 Table 8.18

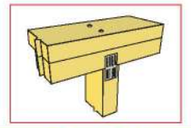
It is proposed that PRYDA Strapnails, Stud Ties or Concealed Cleats be preferred as opposed to PRYDA Z and U nails for ease of fixing and to lessen interference with the cladding.

Notes:

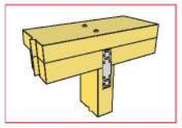
- Refer to NZS3604:2011 Table 8.18 and 8.19
- All truss to top plates to be fixed as per truss manufacturer's fixing schedule and details
- SG8 min dry wall framing with moisture content <18%
- Studs at 600mm centres. For 400mm stud centres divide loaded dimension by 1.5
- Nails specified are 90 x 3.15mm power driven or 100 x 3.75mm hand driven
- Assumed that the top plate is 45mm



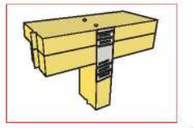
TPO - 0.7kN



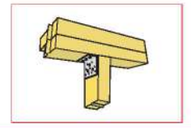
TP1 - 1.7kN



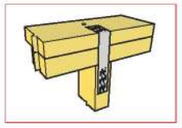
TP2 - 2.5kN



TP3 - 4.7kN



TP3 - 6.0kN



TP3 - 6.0kN

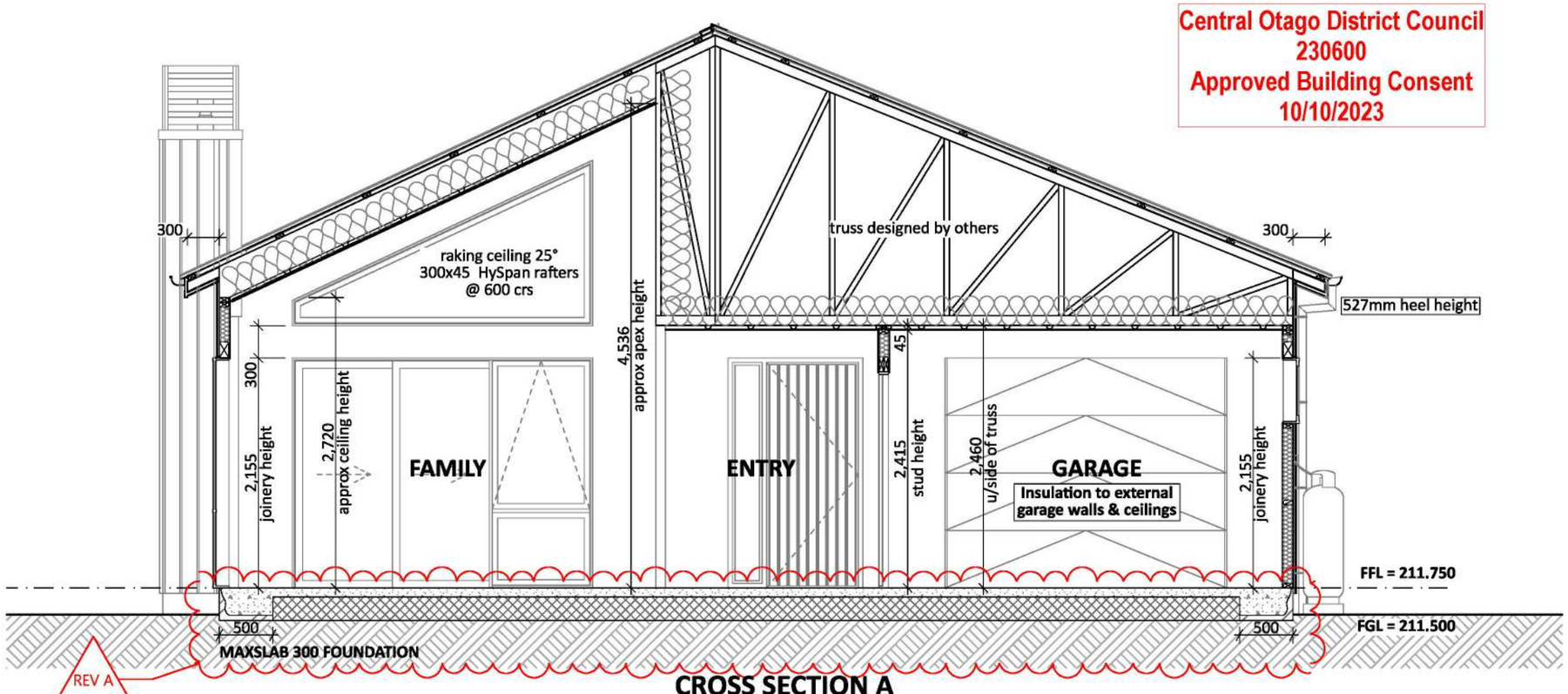
Minimum Top Plate to Stud Joint Fixing Table for roof member 600, 900 & 1200 Centres

Loaded Dimension (m)	Light Weight Roof Wind Zone					Heavy Weight Roof Wind Zones				
	L	M	H	VH	EH	L	M	H	VH	EH
2.0	TPO	TPO	TP1	TP2	TP3	TPO	TPO	TPO	TP1	TP2
3.0	TPO	TP1	TP2	TP3	TP3	TPO	TPO	TP1	TP2	TP3
4.0	TPO	TP2	TP3	TP3	TP3	TPO	TPO	TP2	TP3	TP3
5.0	TP1	TP2	TP3	TP3	TP3	TPO	TPO	TP2	TP3	TP3
6.0	TP2	TP3	TP3	TP3	TP3	TPO	TPO	TP3	TP3	TP3

Consent Doc Ref.	Fixing Capacity	Fixing Detail
TPO	0.7kN	2/End Nails
TP1	1.7kN	2/End Nails + MP2R4 Knuckle Plate
TP2	2.5kN	2/End Nails + MPSN2 Strapnail
TP3	4.7kN	2/End Nails + SN50L Strapnail
TP3	4.7kN	2/End Nails + NPPC6 with 3/T17 14g x 75mm hex head screws
TP3	6.0kN	2/End Nails + SST

Walls

Central Otago District Council
230600
Approved Building Consent
10/10/2023



CROSS SECTION A
SCALE 1:50

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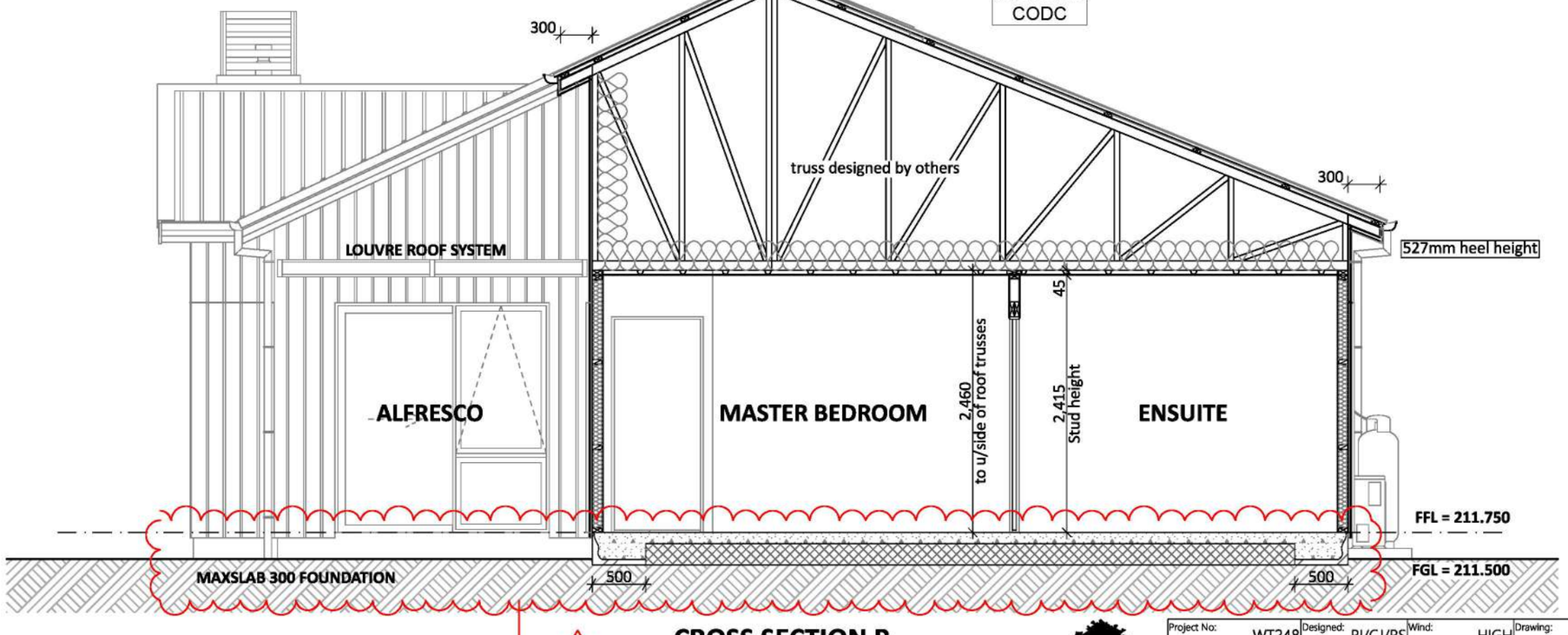

CROSS SECTION B
SCALE 1:50

Zone B

Note: Exposure Zone B (exposure environments as defined by NZS 3604: fig 4.2 & table 4.1)

Fixings & Fastenings (excludes nails and screws):
Nail Plates - In 'closed' & 'roof space' environments - *continuously coated galvanised steel*
Wire dogs & bolts - In 'closed' & 'roof space' environments - *hot-dip galvanised steel*
All other structural fixings - In 'closed' environments - *mild steel (uncoated, non-galvanised)*

All other structural fixings (except fabricated brackets (1))
- In sheltered environments - *hot-dip galvanised steel*
- In exposed environments - *type 304 stainless steel (2)*

**1. "Fabricated brackets" shall be made from 5mm (minimum thickness) mild steel and shall be hot-dip galvanised*

Nails & screws used for framing & cladding:
Structural cladding acting as bracing (50 year durability) - *galvanised steel (2)*
Non-structural cladding (15 year durability) - *galvanised steel (2)*
Framing in 'closed' areas including roof spaces - *mild steel (3)*
Framing in 'exposed or sheltered' areas - *galvanised steel (3)*

*2. Where cladding is a corrosive timber, such as western red cedar or redwood, or is treated with copper based ACQ or CuAz preservatives, use *type 304 stainless steel* or *silicon bronze*

*3. Steel fixings and fastenings in contact with timber treated with copper-based timber preservatives (H3.2 or higher) shall be minimum of *type 304 stainless steel* (exposed and Sheltered environments), and *hot-dip galvanised steel* (all other locations)

Minimum concrete strength after 28 days shall be:
(a) 10 MPa for unreinforced concrete in mass foundations
(b) 17.5 MPa for unreinforced concrete applications & for reinforced concrete
(c) 20 MPa for reinforced concrete Ribraft floor (Engineers design to supercede)

Fixing Materials:
(as per Acceptable Solution E2/AS1) - for defination refer to E2/AS1
Hidden:
Aluminium , or *Bronze*, or *type 304 stainless steel*
Nails - *galvanised steel (2)*
Screws - *galvanised steel (2)*, *Painted or unpainted to AS 3566: Part 2*
Exposed:
Aluminium , or *Bronze*, or *type 304 stainless steel*
Nails - *galvanised steel (2)*
Screws - *galvanised steel (2)*, *Painted or unpainted to AS 3566: Part 2*
Sheltered:
Aluminium , or *Bronze*, or *type 304 stainless steel*
Nails - *galvanised steel (2)*
Screws - *galvanised steel (2)*, *Painted or unpainted to AS 3566: Part 2*

** The use of stainless steel fixings is not recommended by steel manufacturers for use with coated steel in severe marine and industrial environments, as they are considered to cause deterioration*

Microclimatic considerations:

In addition to exposure zones, evidence of local environmental effects (microclimates), and those produced by the erection of a structure or installation of equipment, shall be considered. Significant acceleration of the corrosion of structural fasteners and fixings beyond what could be expected from the geographical location can occur in the following circumstances:

(a) Industrial contamination & corrosion atmospheres;

(b) Contamination from agricultural chemicals or fertilisers; and

(c) Geothermal hot spots. Hot spots are defined as being within 50m of a bore, mud pool, steam vent, or other souce.

Microclimatic conditions (a) to (c) require specific engineer design.

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: CROSS SECTIONS	Date:	3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER	Rev:	REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY	Sheet:	20
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL	Scale:	1:50

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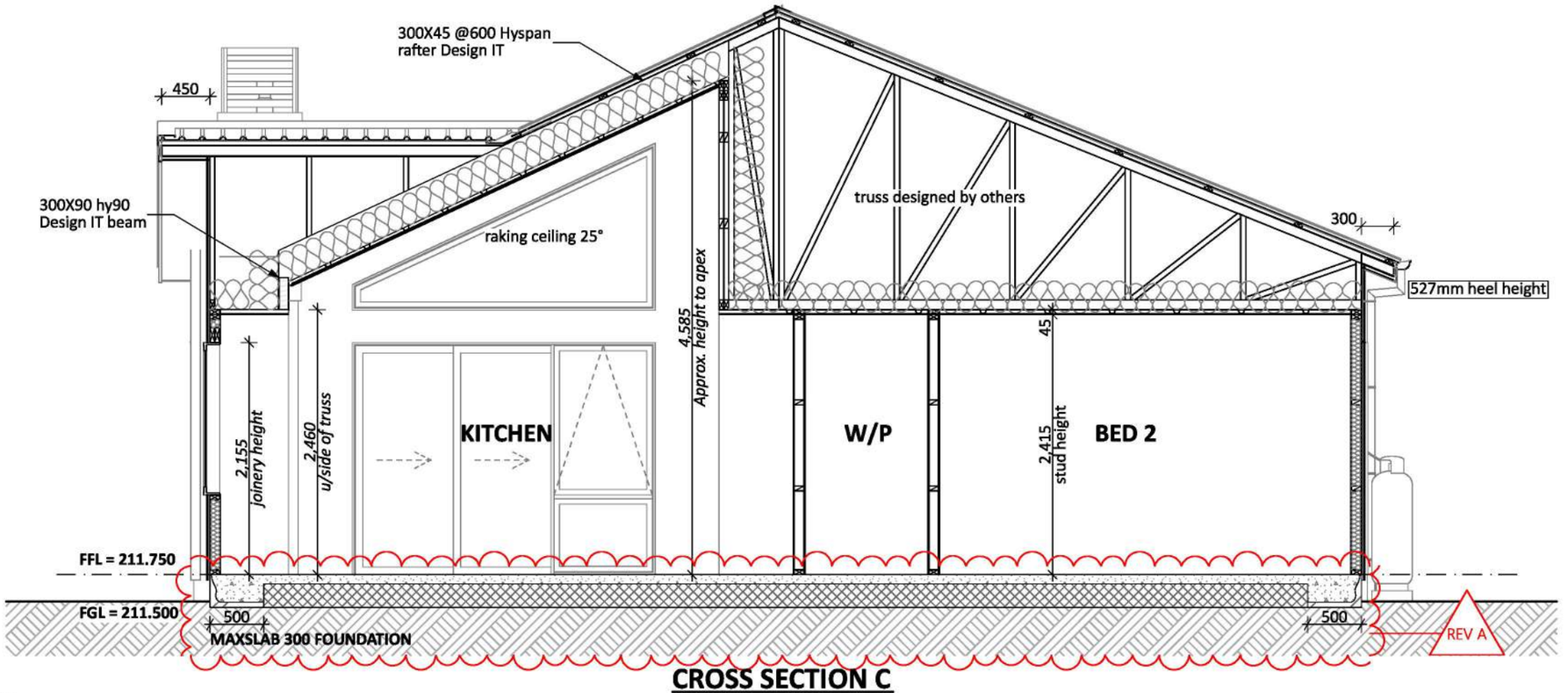
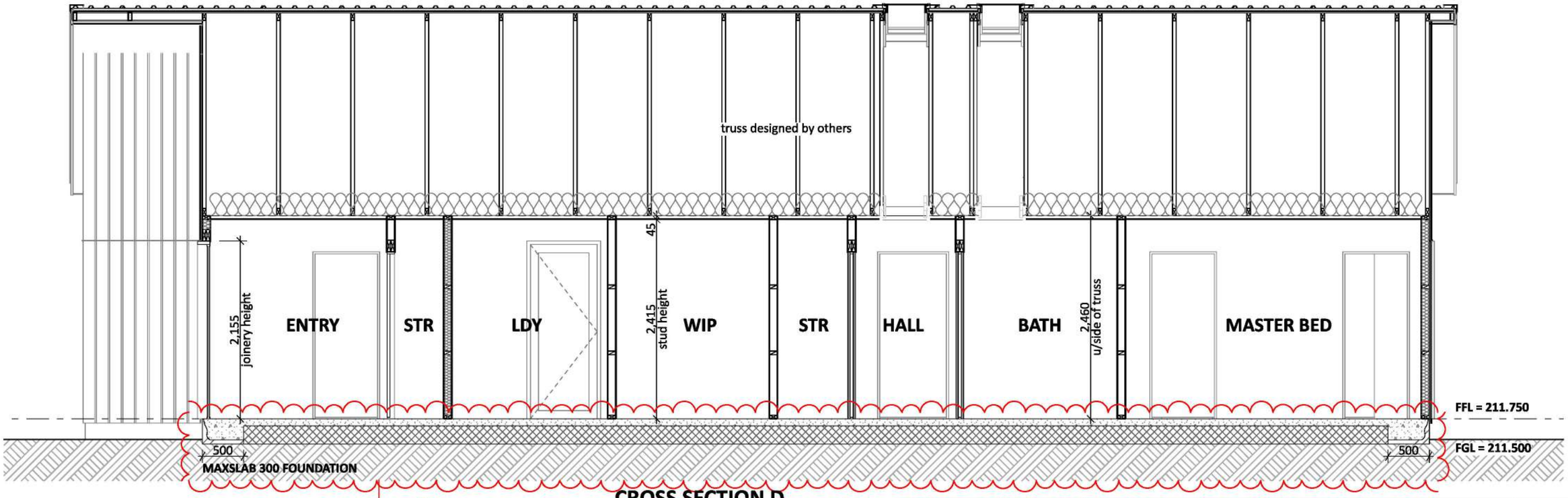


CROSS SECTION C
SCALE 1:50



CROSS SECTION D
SCALE 1:50

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Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: CROSS SECTIONS		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 21
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:50

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1. Foundation & Slab:

MaxSlab foundation to engineers design - in case of discrepancies engineers report shall take precedence. Reference 129220.

Note: 25MPa conc. to all - as per engineer's design

500wide x 250 deep conc. edge beam, refer to details for reinforcing requirements, 90mm wide malthoid under base plates to external walls. 1/anchor plate cast into slab 900crs to slab perimeter for hold-down connection plus 1/75x4mm concrete nail alongside anchor plate.
450 wide x 250 deep slab thickening

All concrete work and materials shall conform to NZS3109 and applicable building consent authority regulations.

Allow for shrinkage control saw cuts as per NZS3604:2011.

Where underfloor heating is installed, floor topping shall be increased to 120mm.

1/D12 bar to bend & lap min. 500mm between change in foundation construction

85mm thick conc. minimum of 2.27kg/m² of Grade 500E (Class E) 665 reinforcing mesh, min. 225mm lap, fully compliant with AS/NZS 4671 on 40mm chairs. Polystyrene pods arranged in waffle pattern placed on 0.25 polythene, on levelled ground

Reinforced slab shrinkage control joints - 25mm deep saw cuts to form bays with maximum ratio of 2:1. Bays in exposed or vinyl areas 6m max

300x305 deep slab thickening, 2/HD12 bars with min. 75mm cover to ground - **read in accordance with truss design**

REV A

2.External Framing:

Ground Floor.
Studs up to 2.4m: (as per NZS3604 Table 8.2 (a))
90x45 H1.2 frame + 140x35 H1.2 packer plate, studs @ 600crs max, dwangs @ 800crs max.

Studs up to 2.4m: 90x45 (as per NZS3604 Table 8.2 (a))
2 x 90x45 H1.2 top plate, studs @ 600crs max, dwangs @ 800crs max.

Studs up to 4.2m: 2/140x45 (as per NZS3604 Table 8.2 (a))
2 x 90x45 H1.2 top plate, studs @ 600crs max, dwangs @ 800crs max.

Studs up to 4.8m: 2/140x45 (as per NZS3604 Table 8.2 (a))
2 x 90x45 H1.2 top plate, studs @ 400crs max, dwangs @ 800crs max.

Masons Uniwrap building wrap taken up to top plate. Refer to codemark cert.

9.1.8.5 Wall framing behind cavities
Where stud spacings are greater than 450mm, and flexible wall underlays only are used, an intermediate means of restraining the flexible wall underlay and insulation from bulging into the drained cavity shall be installed.
- Polypropylene tape or galvanized wire at 300mm centres fixed horizontally and drawn taut

3.Cladding(s):

AXON - Timber Cavity Battens
James Hardie 9mm Axon Panel on 45x20 H3.1 timber cavity battens, installed flashed and finished to the latest James Hardie specifications and NZBC: E2/AS1 External Moisture (see attached technical specification for more fixing details and information). Merchant to include all flashings & fixings as required by cladding system. Note: LRV requirements- to be greater than 40% when using PVC flashings, darker paints can be used when aluminium flashings are specified.

VERT CEDAR (J56)
Cedar vertical shiplap J56 profile cladding installed on 20mm cavity battens stainless steel nailed to nogs and studs (nogs max 480mm centres vertically and max 400mm centres horizontally, forming a horizontal drained cavity), flashed and finished in strict accordance with manufacturers specifications & NZBC: E2/AS1 External Moisture.

4.Internal Walls

90x45 H1.2 frame + 140x35 H1.2 top plate packer, studs @ 600 crs max, dwangs @ 800 crs max.
10mm wall linings throughout unless noted otherwise. Fixed to comply with the latest Winstones GIB Manual.
Bottom plate fixings:
Concrete floor:
Non Loadbearing - Ramset HD875 drive pin (or equivalent) @ 600crs.
Load bearing: 1/M12 bolt @ 900crs

5.External Joinery:

Aluminium joinery installed to comply with NZBC: E2/AS1. H3.1 jambs - 20mm PP with selected architraves. Approved window sealing tape to all openings (see detail). Flashing tape over flashing fixings. Do not fix cladding through flashings. Glazing to comply with NZS:4223 & 2016 amendments.

6.Ceilings:

Metal battens fixed to trusses as per manufacturers specifications at 600mm centres. Ensure battens are straight prior to lining. 13mm GIB linings with min 25mm x 6g GIB Grabber fine thread self tapping screws at 600mm centres. Refer to GIB specifications. Glue daubs to be minimum of 200mm from centre screw. Do not screw where you glue. Min 25mm x 6g GIB Grabber screws at 200mm centres around the perimeter. Refer specific GIB System literature for more information.

7.Insulation:

R7.0C insulation to all ceilings, including garage.
R2.8W insulation to all exterior wall cavities including garage.

8. Roof notes:

(SG8)
Pre-fabricated GANGNAIL 25 & 17.5° pitch H1.2 trusses @ 900crs - Thermakraft 215 self supporting underlay laid vertically with min 150mm lap.

70x45 SG8 H1.2 purlins, spanning 900mm. Purlin spacings - End Span - 600mm, Intermediate Span - 900crs.
Type T - 1/10g self-drilling screw, 80mm long purlin/truss connection (2.4KN fixing)

Colorsteel valley trays fixed to ex 25mm H1.2 valley boards (see detail)

Lumberlok strip bracing & tensioners tightened firmly across roof planes.

0.40min BMT Longrun colorsteel roofing as per elevations. Roofing fixed with compatible roofing nails or screws and sealing washers, by qualified persons with flashings as required to all junctions - flashings fixed with compatible roofing screws and sealing washers

Fixing pattern =
T1 fixing pattern = Fix every crest
Note: every sheet of roof cladding to span at least 3 supports

8.4.8 Fixings:
Fixings shall be as shown in Tables 11, 12, 14 and 15, and shall be a minimum 12-gauge screw, as shown in Figure 39, which complies with Class 4 ofAS 3566: Part 2.

8.4.8.1 Fixing requirements
Fixings shall:
a) Be fixed through crests,
b) Penetrate purlins by a minimum of 40 mm for nail fixings and 30 mm for screw fixings,
c) Include sealing washers of:
i) neoprene (having a carbon black content of 15% or less by weight),
ii) profiled washer and EPDM washer where required to allow for expansion of the profiled metal roof cladding.

9. Soffit notes:

(see details)
4.5mm Hardiflex soffit lining fixed to 90x45 soffit bearers & 90x45 stringer at wall.
300 eaves to gables (90x45 outriggers + 90x45 fly rafter), 300 soffits to remainder (refer roof plan).

COLORCOTE fascia & spouting with 80mm Ø Alipipes - powder coated aluminium downpipes

COLORCOTE fascia, spouting & 80mm Ø downpipes

Snow straps at 450crs.

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Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: PLAN NOTES		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 22
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale:

BRANZ H1/AS1 5th Edition Calculation Method Spreadsheet - Results

Version: 4 May 2023

Client	John Slater		
Project name	WT248		
Address	24 Bragato Way		
Designer	JH		
Date	11/9/23		
Territorial Authority	Central Otago District	**Climate Zone**	6
When submitted	Before 2 November 2023	**Application**	Housing

Proposed Building

Element		Area (m²)	Proposed Building Heat Loss (W/K)	
Slab Floors		153.5	41.5	
Other Floors		0.0	0.0	
Roof		153.5	21.2	
Skylights		1.0	2.6	
Walls		140.6	60.3	
Glazing (walls & doors)	(21.3% of total wall area)	40.0	108.1	
Doors (opaque)		7.6	42.2	
		496.2	**Total**	**276.0**

Reference Building

Element	Area (m²)		Reference Building Heat Loss (W/K)	
Slab Floors	153.5	1.7	90.3	
Other Floors	0.0	3.0	0.0	
Total Roof (includes skylight area)	154.5	6.6	23.4	
Walls (70% of total wall area)	131.7	2.0	65.9	
Glazing allowance (30% of total wall area)	56.5	0.50	112.9	
	496.2	**Total**		**292.5**

Comparison of proposed building against the reference building — **PASS**

	Element type	Description	Embed heating?	Area (m²)	Construction R-value (m².K/W)	Heat Loss (W/K)	Errors
1	Slab Floors	Raft Floor	No	153.5	3.7	41.5	
2	Roof	Roof Insulation	No	153.5	7.2	21.2	
3	Skylights	VSS C04 Velux skylight 1		0.5	0.38	1.3	
4	Skylights	VSS C04 Velux skylight 2		0.5	0.38	1.3	
5	Walls	Timber wall Axon 90 wall	No	87.8	2.3	38.2	
6	Walls	Timber wall Cedar 90 wall	No	40.2	2.4	17.0	
7	Walls	Timber wall Internal 90 wall	No	4.0	2.3	1.8	
8	Walls	Timber wall Axon 140 wall	No	8.6	2.6	3.3	
9	Glazing (walls & doors)	W01		1.1	0.37	3.0	
10	Glazing (walls & doors)	W02		2.0	0.37	5.4	
11	Glazing (walls & doors)	W03		2.0	0.37	5.4	
12	Glazing (walls & doors)	W04		1.3	0.37	3.5	
13	Glazing (walls & doors)	W05		1.3	0.37	3.5	
14	Glazing (walls & doors)	W06		1.3	0.37	3.5	
15	Glazing (walls & doors)	W07		1.3	0.37	3.5	
16	Glazing (walls & doors)	W08		1.3	0.37	3.5	
17	Glazing (walls & doors)	W09		4.0	0.37	10.8	
18	Glazing (walls & doors)	W10		1.3	0.37	3.5	
19	Glazing (walls & doors)	W11		1.3	0.37	3.5	
20	Glazing (walls & doors)	W12		4.4	0.37	11.9	
21	Glazing (walls & doors)	D01 (Sidelight)		0.8	0.37	2.2	
22	Glazing (walls & doors)	D03		1.9	0.37	5.1	
23	Glazing (walls & doors)	D04		4.3	0.37	11.6	
24	Glazing (walls & doors)	D05		4.3	0.37	11.6	
25	Glazing (walls & doors)	D06		6.1	0.37	16.5	
26	Doors (opaque)	Entry Door		1.9	0.18	10.6	
27	Doors (opaque)	Garage Door		5.7	0.18	31.7	
28							

BRANZ H1/AS1 5th Edition Calculation Method Spreadsheet - Results

Version: 4 May 2023

Client: John Slater
Project name: WT248
Address: 24 Bragato Way
Designer: JH
Date: 11/9/23
Territorial Authority: Central Otago District
Climate Zone: 6
When submitted: Before 2 November 2023
Application: Housing

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REV A

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Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: H1 CALCULATION		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 23
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:1

Date: 11/09/2023

Timber Frame - JH Axon — 2.30 m²°C/W

Type: Wall: Timber Frame with vented Cavity

Timber Frame with vented Cavity [view detail]

external surface 0.03

Cladding : James Hardie Axon Cladding 9mm
R-value: 0.04

Air Barrier : generic - Building paper
R-value: 0.01

Timber Frame & Cavity : 90mm, studs @ 600mm, dwangs @ 800mm

Wall Frame Area: 14.4%	*Cavity Area: 85.6%*
15-90mm vented cavity (all R-values on ext. side of cavity will be halved), R: 0.08	15-90mm vented cavity (all R-values on ext. side of cavity will be halved), R: 0.08
Framing : *R-value: 0.75*	Pink®Batts® Ultra R2.8 90mm Wall 2.8
	still Airgap: none *R-value: 0.00*

Wall Lining : generic - gypsum Plasterboard 10mm
R-value: 0.04

internal surface 0.09

Date: 11/09/2023

Timber Frame - Axon 140mm — 2.60 m²°C/W

Type: Wall: Timber Frame with vented Cavity

Timber Frame with vented Cavity [view detail]

external surface 0.03

Cladding : James Hardie Axon Cladding 9mm
R-value: 0.04

Air Barrier : generic - Building paper
R-value: 0.01

Timber Frame & Cavity : 140mm, studs @ 600mm, dwangs @ 800mm

Wall Frame Area: 14.4%	*Cavity Area: 85.6%*
15-90mm vented cavity (all R-values on ext. side of cavity will be halved), R: 0.08	15-90mm vented cavity (all R-values on ext. side of cavity will be halved), R: 0.08
Framing : *R-value: 1.17*	Pink®Batts® Ultra R2.8 90mm Wall 2.8
	still Airgap: none *R-value: 0.00*

Wall Lining : generic - gypsum Plasterboard 10mm
R-value: 0.04

internal surface 0.09

Date: 11/09/2023

Timber Frame - Cedar — 2.36 m²°C/W

Type: Wall: Timber Frame with vented Cavity

Timber Frame with vented Cavity [view detail]

external surface 0.03

Cladding : generic - Weatherboard Rusticated or Shiplap
R-value: 0.16

Air Barrier : generic - Building paper
R-value: 0.01

Timber Frame & Cavity : 90mm, studs @ 600mm, dwangs @ 800mm

Wall Frame Area: 14.4%	*Cavity Area: 85.6%*
15-90mm vented cavity (all R-values on ext. side of cavity will be halved), R: 0.08	15-90mm vented cavity (all R-values on ext. side of cavity will be halved), R: 0.08
Framing : *R-value: 0.75*	Pink®Batts® Ultra R2.8 90mm Wall 2.8
	still Airgap: none *R-value: 0.00*

Wall Lining : generic - gypsum Plasterboard 10mm
R-value: 0.04

internal surface 0.09

Date: 11/09/2023

Timber Frame - Gib Wall — 2.27 m²°C/W

Type: Wall: Timber Frame (direct fixed Cladding)

Timber Frame (direct fixed Cladding) [view detail]

external surface 0.03

Cladding : generic - Gypsum plasterboard 10mm into still air (garage, etc.)
R-value: 0.10

Air Barrier : generic - none
R-value: 0.00

Timber Frame & Cavity : 90mm, studs @ 600mm, dwangs @ 800mm

Wall Frame Area: 14.4%	*Cavity Area: 85.6%*
Framing : *R-value: 0.75*	Pink®Batts® Ultra R2.8 90mm Wall 2.8
	still Airgap: none *R-value: 0.00*

Wall Lining : generic - gypsum Plasterboard 10mm
R-value: 0.04

internal surface 0.09

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Skylights (Pitched Roofs)

Size:	C01	C04	C08	M02	M04	M06	M08	S01	S06
VS	-	0.382	0.389	0.402	0.410	0.416	0.420	0.418	0.441
VSE	-	0.382	0.389	0.402	0.410	0.416	0.420	0.418	0.441
VSS	-	0.382	0.389	0.402	0.410	0.416	0.420	0.418	0.441
FS	0.356	0.372	0.385	0.385	0.398	0.406	0.413	0.397	0.430

What are your ground conditions?
Good/300kpa/TC1

What is your floor area (m2)?
153.52

What is your perimeter (lm)?
58.10

Are you specifying underfloor / embedded heating?
No

What is your frame size (mm)?
90

Brick cladding?
No

What is your Climate Zone?
6

Don't know your climate zone? See map

VIEW RESULTS

Results

Just looking to meet the building code then MAX85 is a great option, alternatively specify a MAXSlab for superior R-values

Internal Area Perimeter Ratio = 2.6

Recommended slab = MAX85 or MAXSlab 300

Required R-value = R1.7

Construction R-value = R1.96 or R3.7

MAX85

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MAX85 is designed to meet the requirements of the building code update May 2023. Unlike our other products MAX85 is not fully insulated and is designed simply to meet the minimum requirements of the building code.

REV A

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: H1 CALCULATIONS (REFERENCE SHEET)		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 24
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:1

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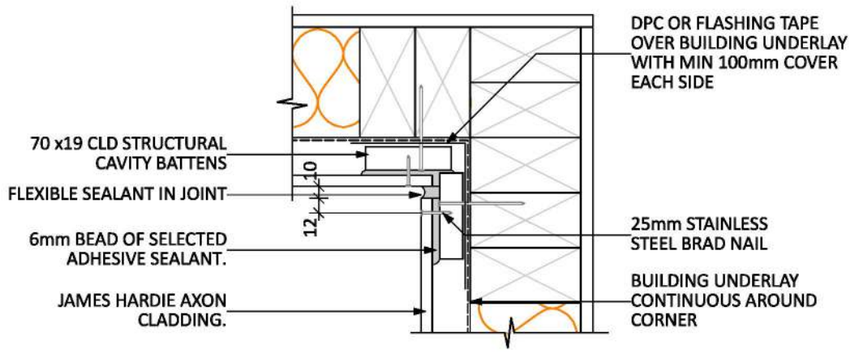
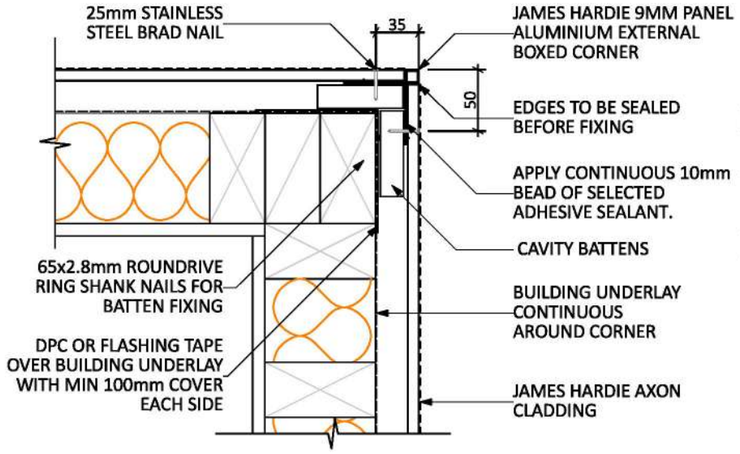
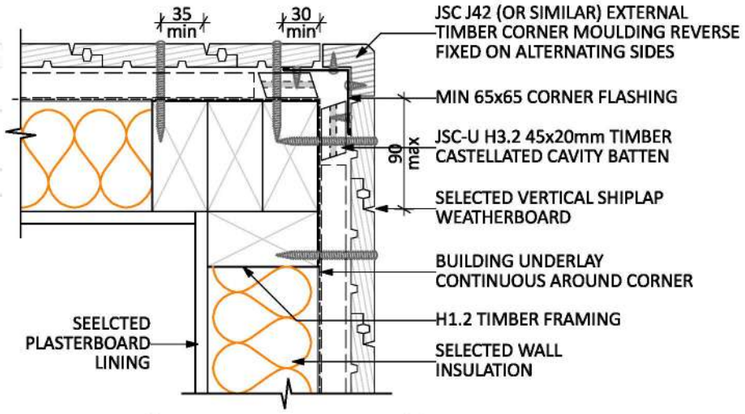


AXON INTERNAL CORNER

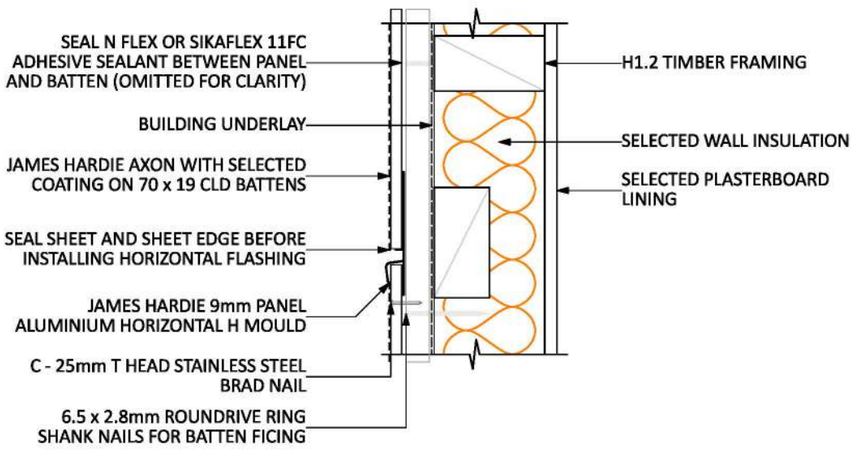


AXON EXTERNAL CORNER

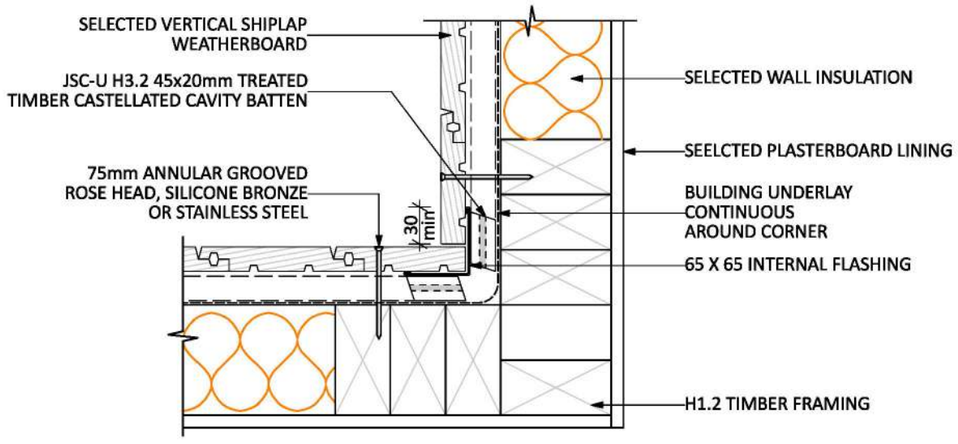


CEDAR EXTERNAL CORNER

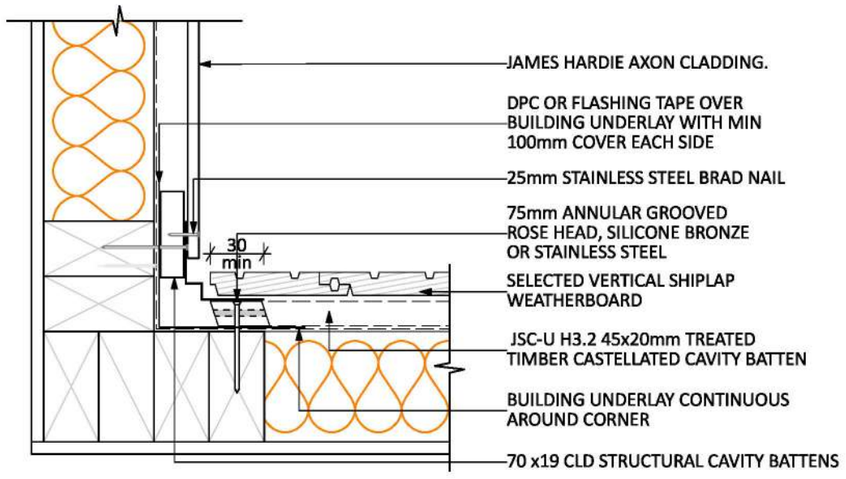
Note:
- Refer to Figure 27 for jointing with 'h' mould.
- Do not run corner mould continuous over floor joists.



AXON HORIZONTAL JOINT



CEDAR INTERNAL CORNER



INTERNAL CORNER JUNCTION

AXON & CEDAR V

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Barrett Homes

Project No:	WT248	Designed:	RI/CJ/RS	Wind:	HIGH	Drawing:	CLADDING DETAILS
Plan:	WT249 (mirror)	Drawn:	JH	EQ:	2	Client Name:	JOHN SLATER
Version:	1.5	Checked:	AC	Exposure:	B	Site Address:	LOT 248, 24 BRAGATO WAY
				Council:	CODC		WOOING TREE, STAGE 2A, CROMWELL

Date:	9/08/2023		
Rev:			
Sheet:	25		
Scale:	1:5		

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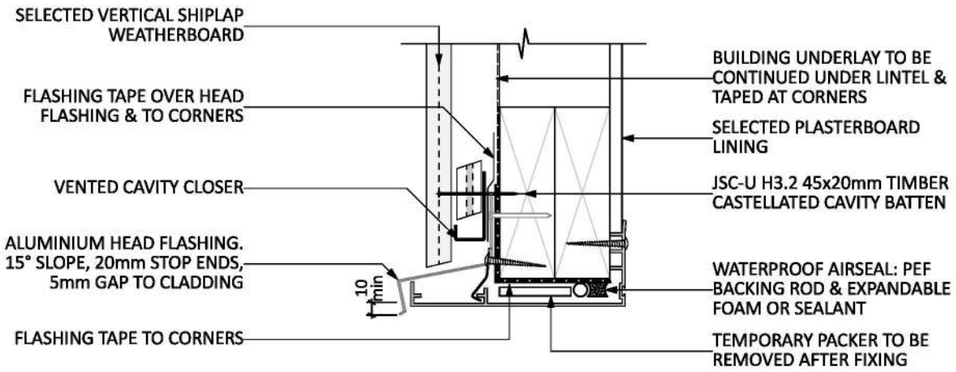
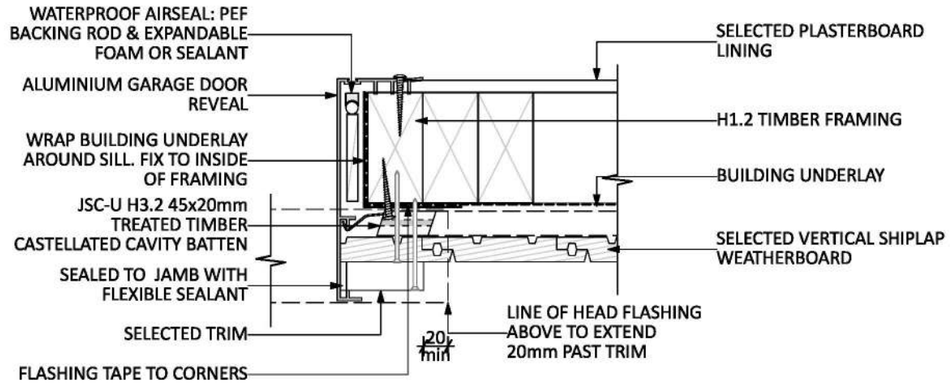
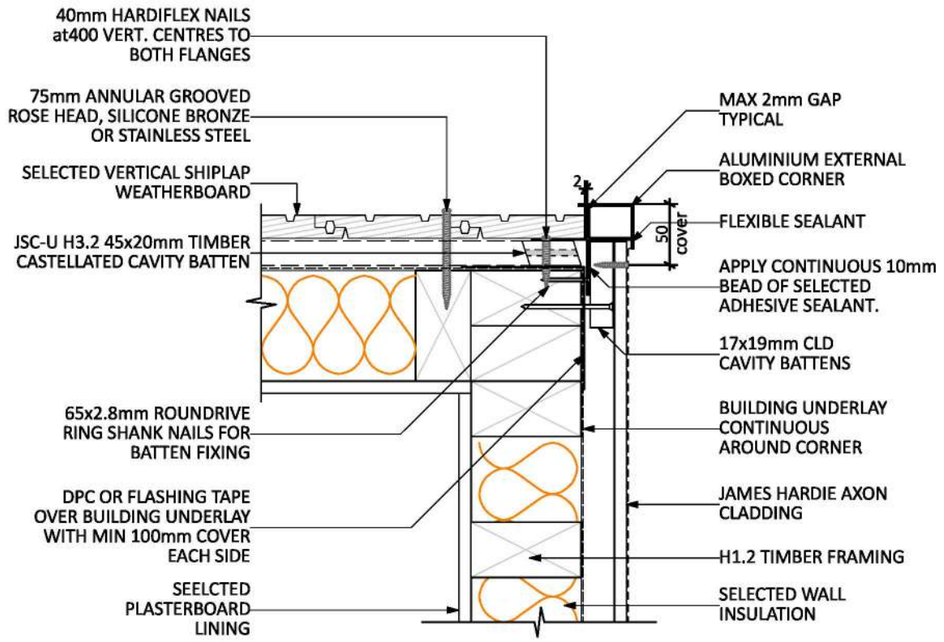


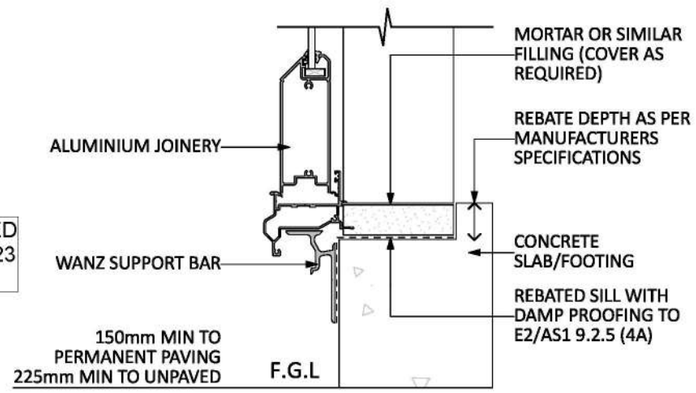
CEDAR GARAGE DOOR HEAD



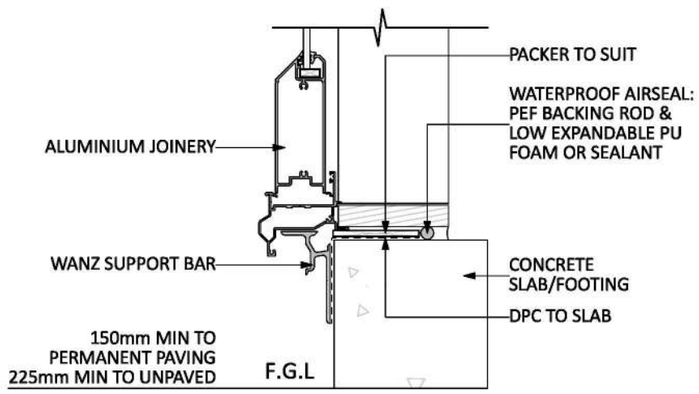
CEDAR GARAGE DOOR JAMB



AXON/CEDAR EXTERNAL CORNER



REBATED DOOR SILL DETAIL



NON REBATED DOOR SILL DETAIL

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230600
Approved Building Consent
10/10/2023

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: CLADDING AND JOINERY DETAILS		Date: 9/08/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev:
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 26
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:5

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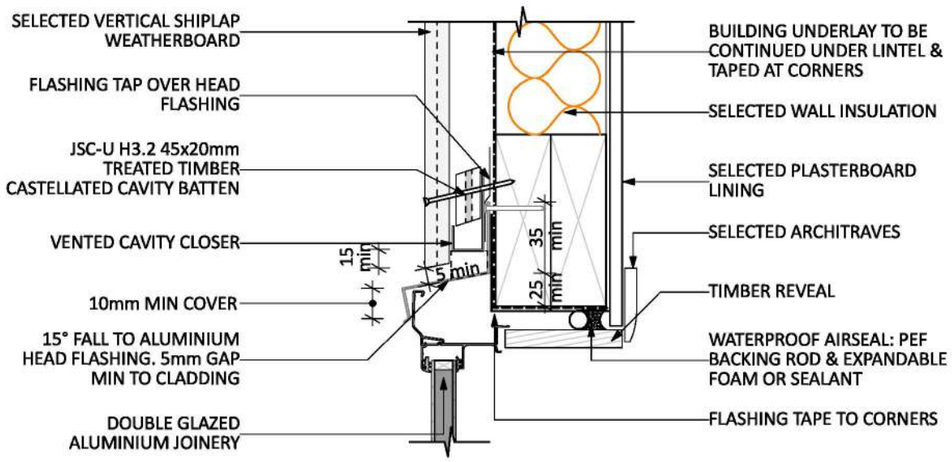
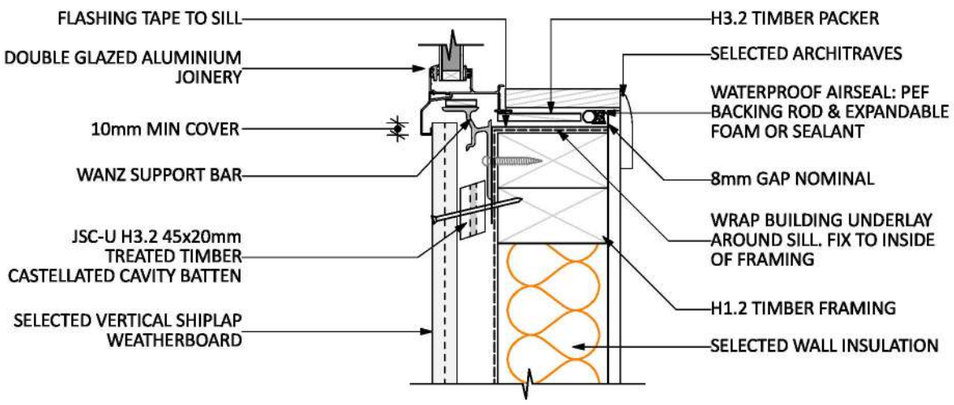


VERT. CEDAR WINDOW HEAD



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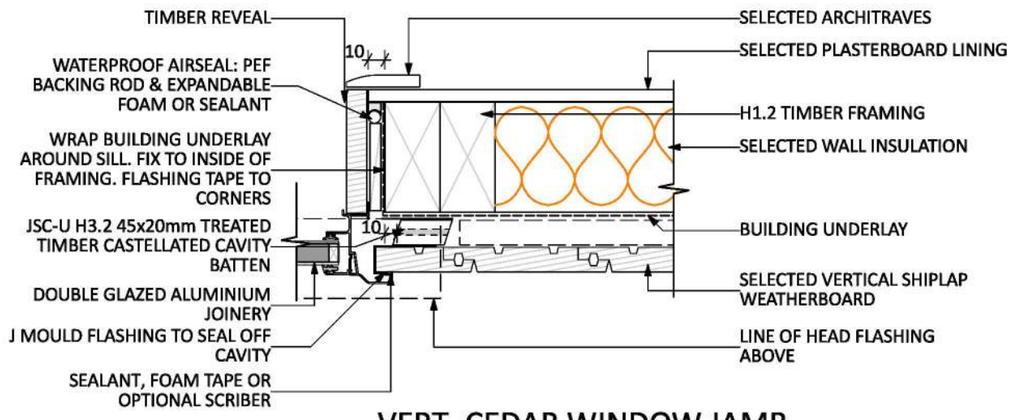
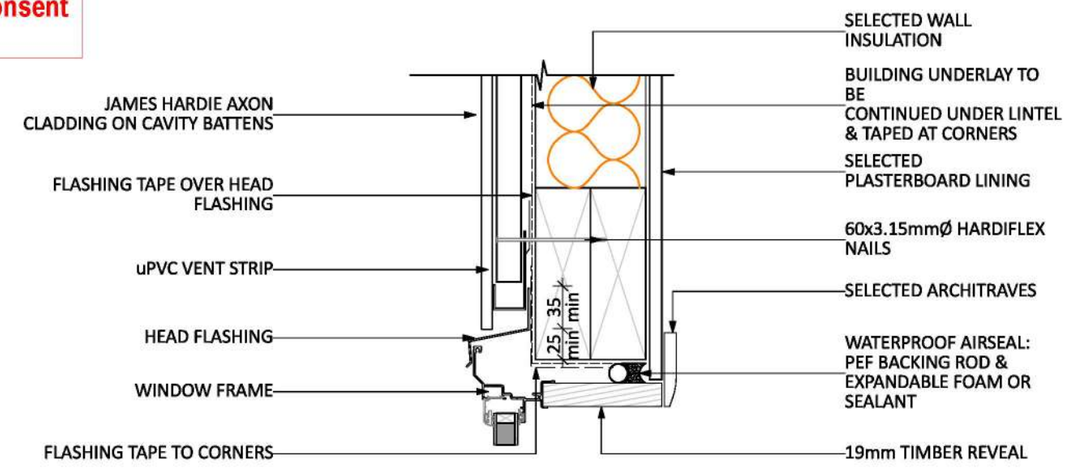
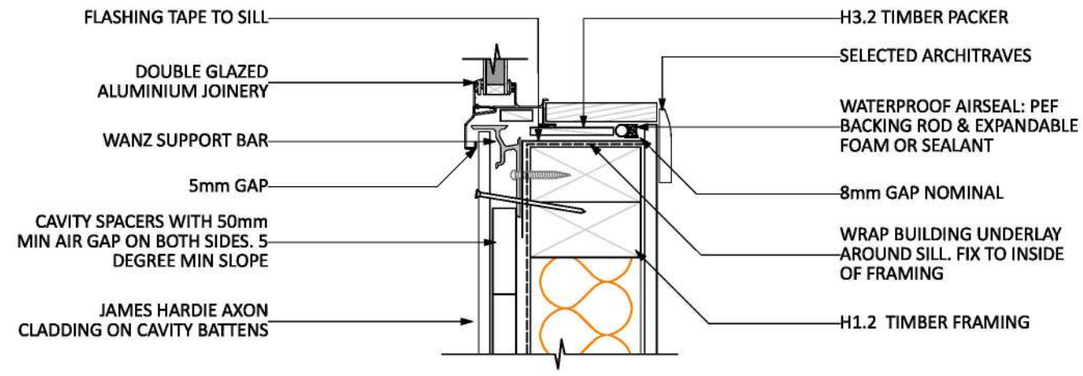


VERT. CEDAR WINDOW JAMB



AXON WINDOW HEAD



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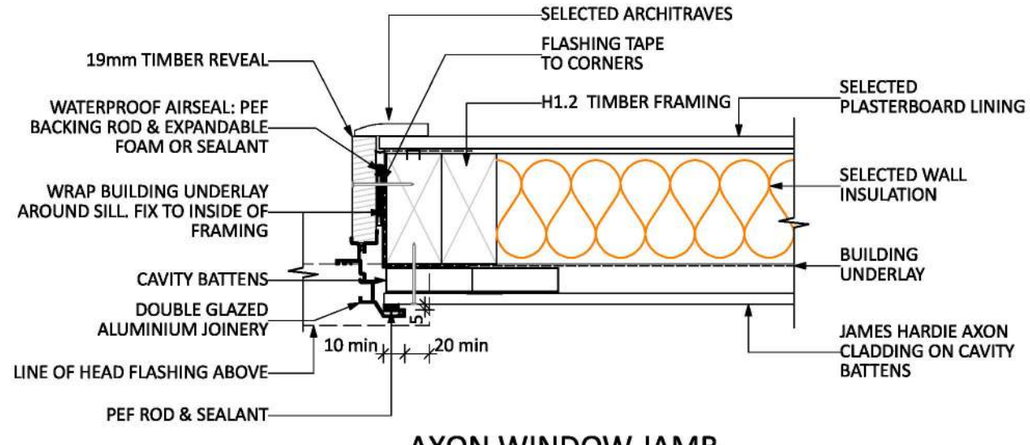

AXON WINDOW JAMB

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Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: JOINERY DETAILS		Date: 9/08/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev:
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 27
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:5

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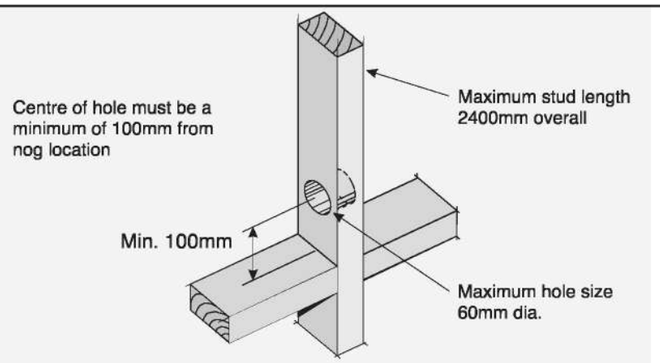
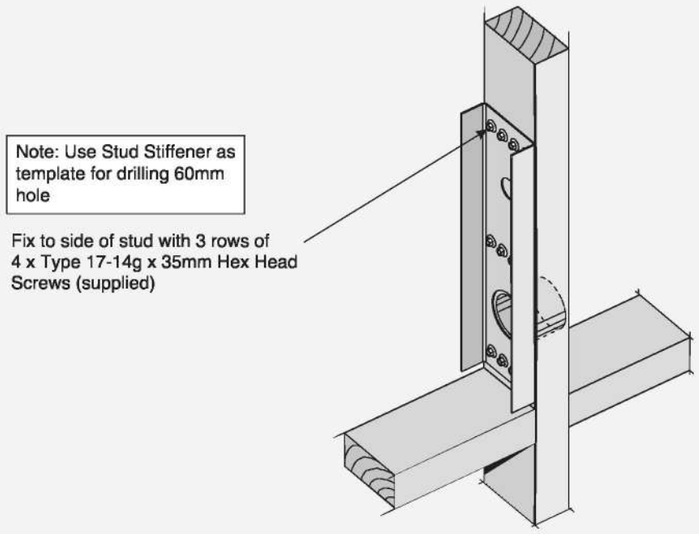
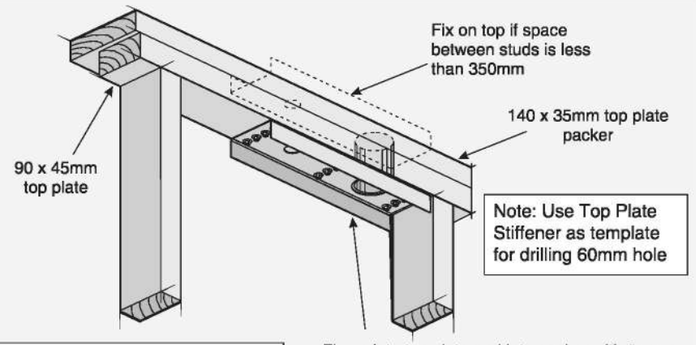
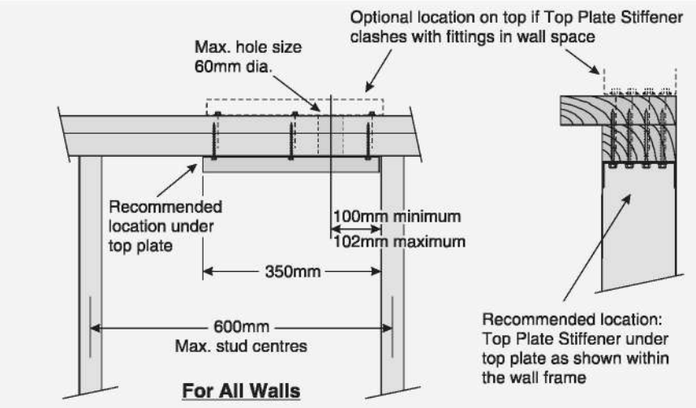




Code: FSS
Material: 1.55mm G300 Z275 Galvanised Steel
Packed: 8 x Framing Stud Stiffeners per Carton
100 x Type 17-14g x 35mm Hex Head Galvanised Screws

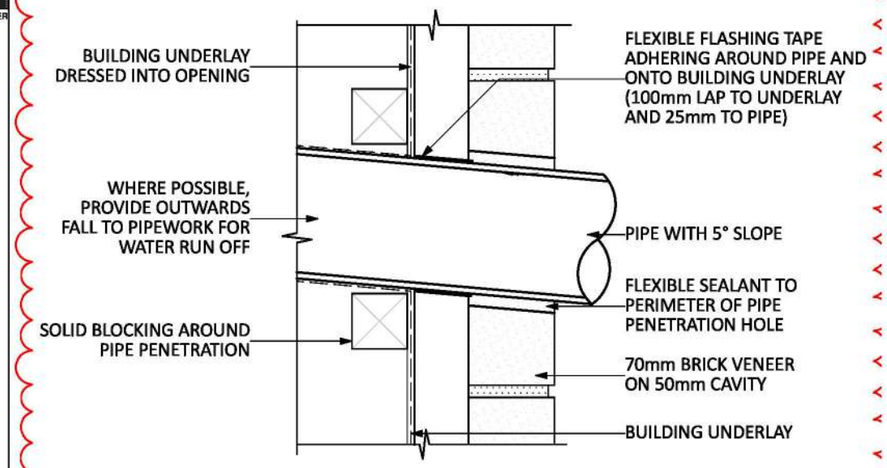
MITEK STUD STIFFENER





Code: TPS
Material: 1.55mm G300 Z275 Galvanised Steel
Packed: 8 x Top Plate Stiffeners per Carton
100 x Type 17-14g x 75mm Hex Head Galvanised Screws

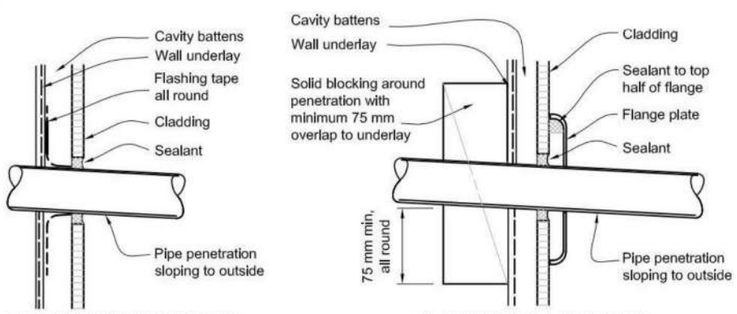
MITEK TOP PLATE STIFFENER



PIPE PENETRATION

REV A

Figure 68: General pipe penetration
Paragraph 9.1.9.3, Figure 126



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Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: CONSTRUCTION DETAILS	Date:	3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER	Rev:	REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY	Sheet:	28
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL	Scale:	1:5

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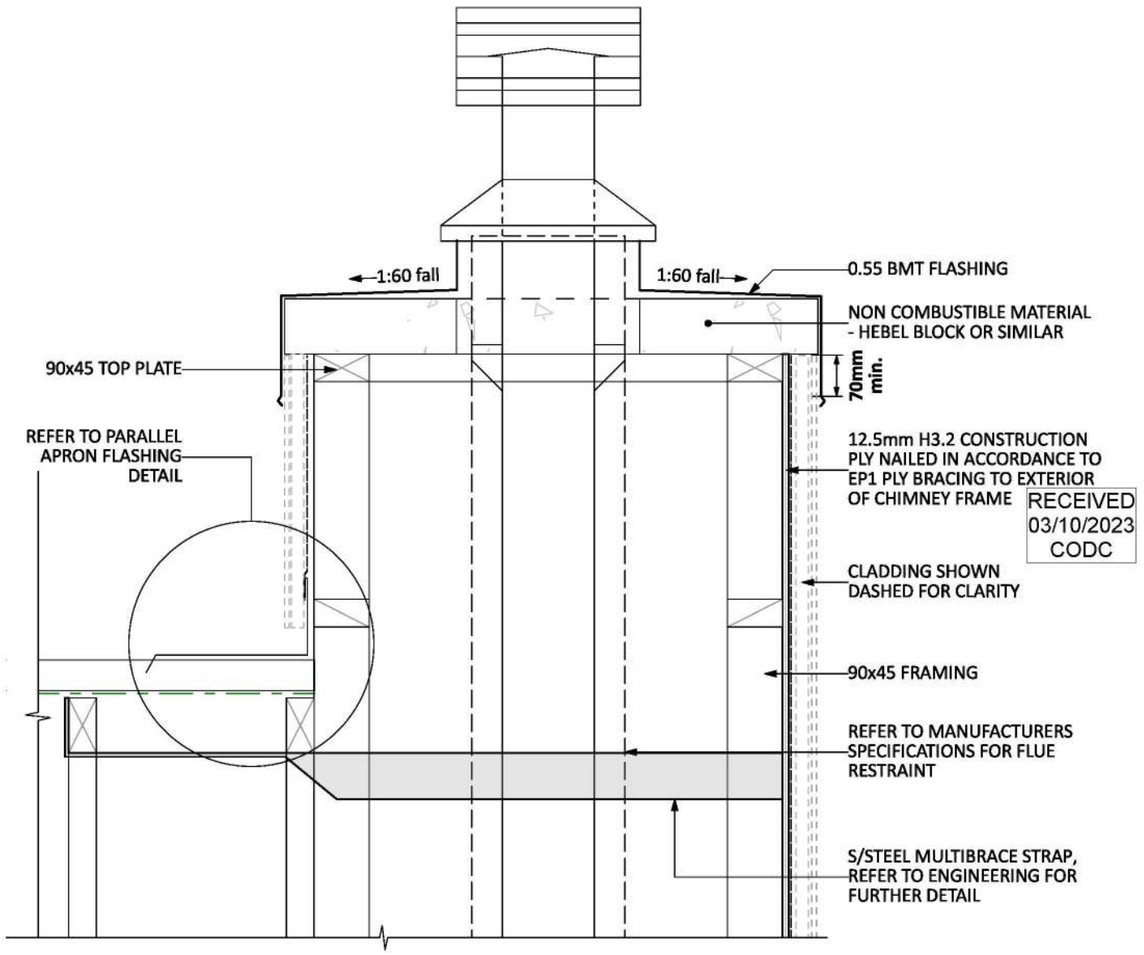
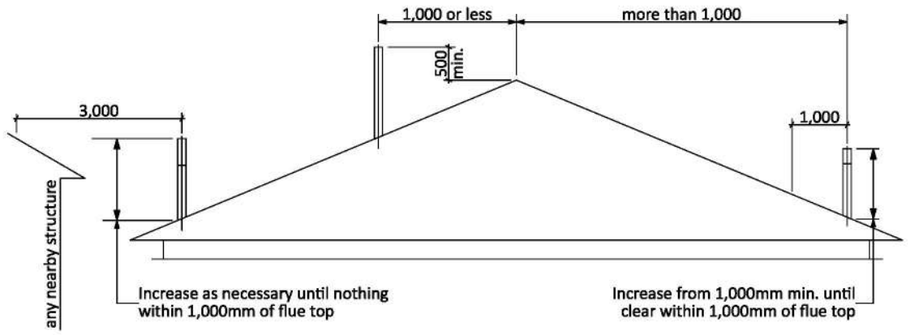
REV A



FLUE/CHIMNEY CONSTRUCTION - R11

SCALE 1:10

As per AS/NZS 5601.1:2013 clause 6.9.1



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Barrett Homes

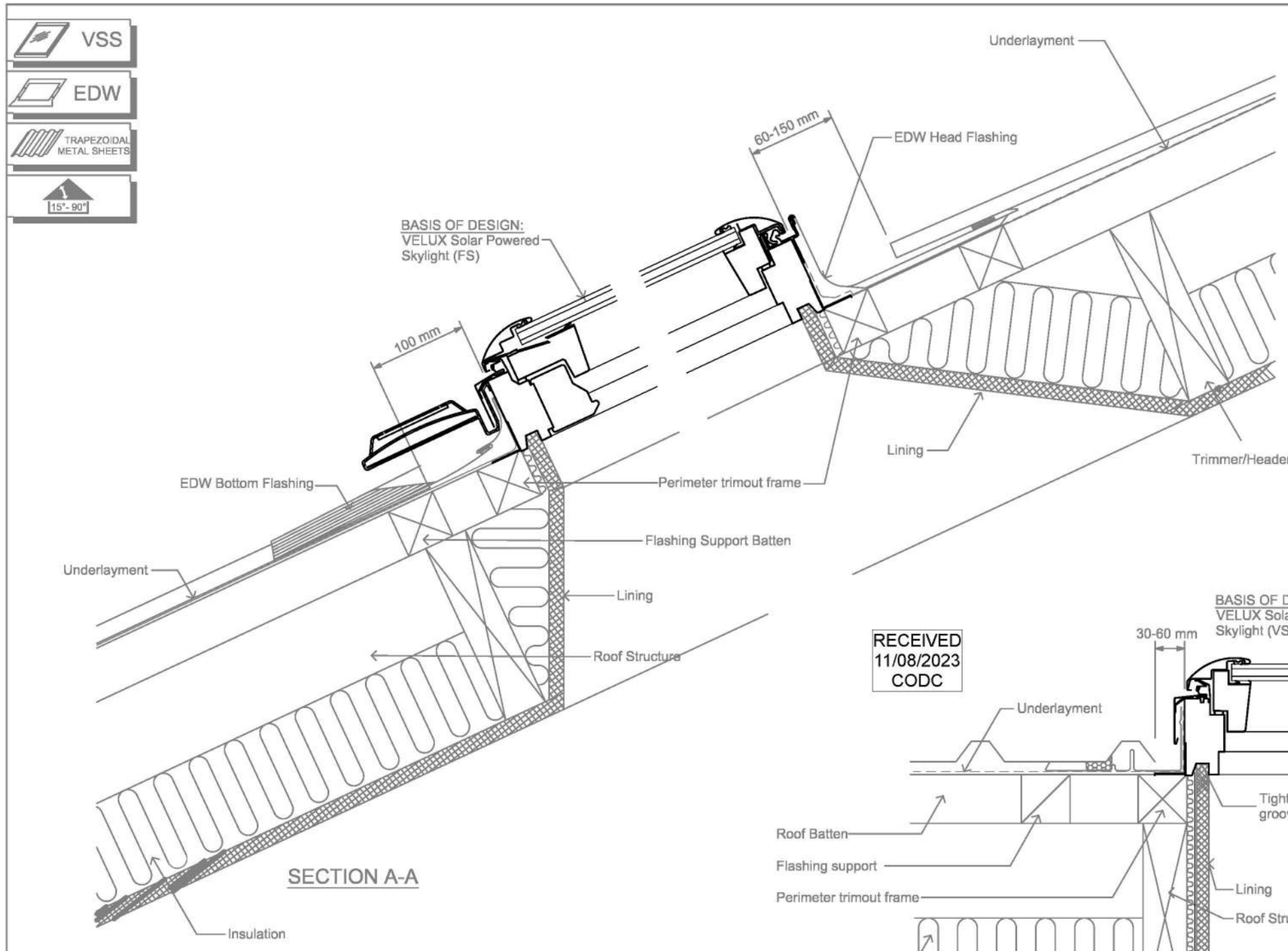
Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: CONSTRUCTION DETAILS		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 28B
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale: 1:10, 1:100

VSS

EDW

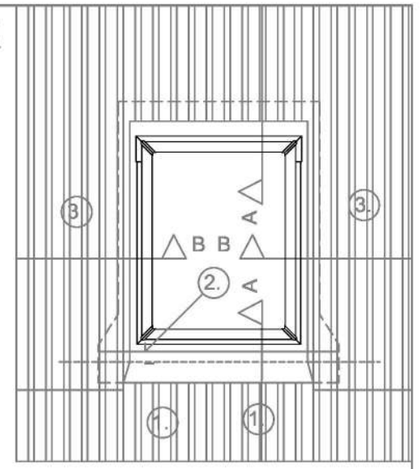
TRAPEZOIDAL METAL SHEETS

15°- 90°



SECTION A-A

ELEVATION



VELUX Skylight installed in new metal roofing.

1. The sheets are fitted 100 mm from the bottom frame
2. The flashing is mounted
3. Fit the metal sheets

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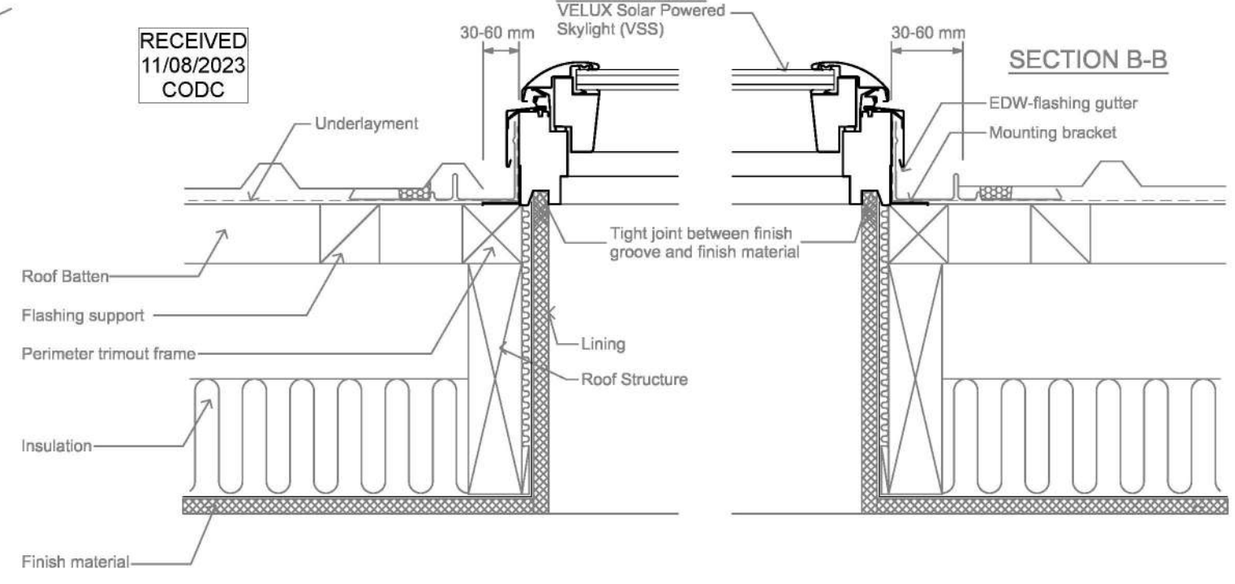

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VSS - Solar Powered Skylight and EDW Flashing in Trapezoidal Metal Roof

VELUX NEW ZEALAND LTD.
Sky-Product Management
0800 650 445

	Name	Date
Drawn by		Jan 18
Checked by		Jan 18
Drawing No.		

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: SKYLIGHT DETAILS		Date: 9/08/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev:
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 29
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale:

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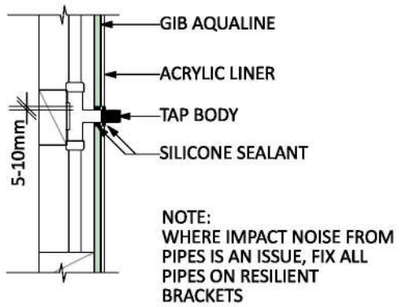
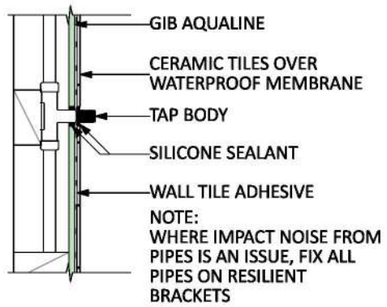
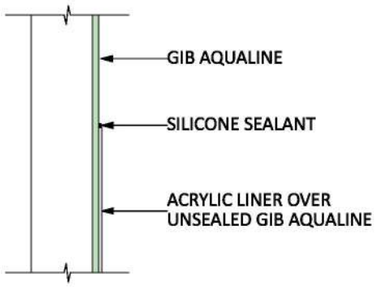


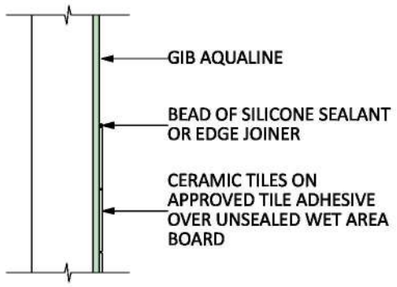
PENETRATION DETAIL



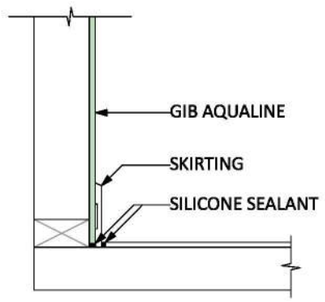
PENETRATION DETAIL



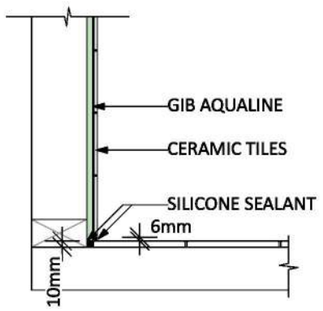
LINER TOP EDGE DETAIL



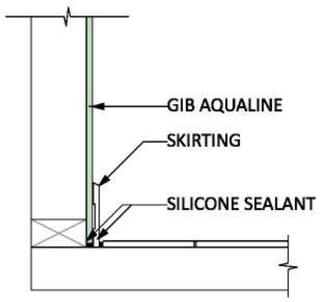
TILE TOP EDGE DETAIL



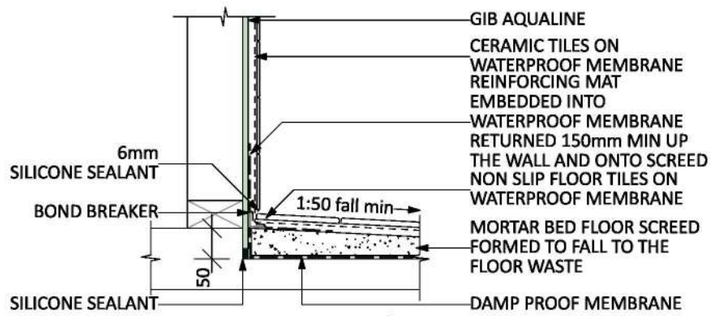
WALL/VINYL FLOOR DETAIL



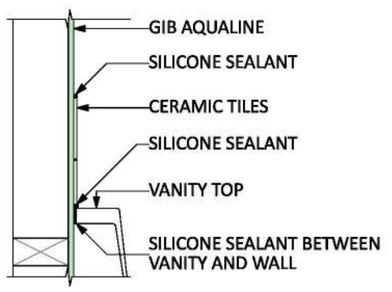
TILED WALL & FLOOR DETAIL



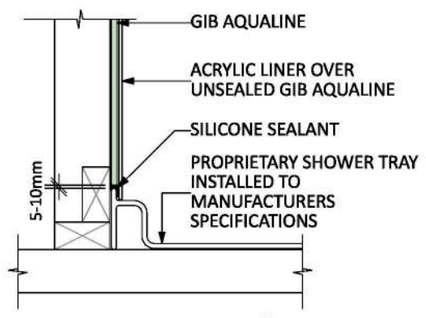
WALL/TILED FLOOR DETAIL



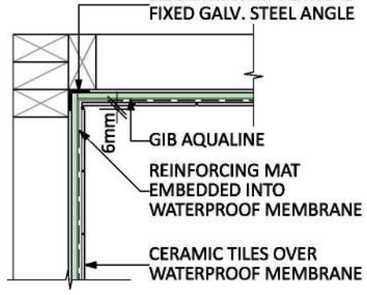
SHOWER WALL/FLOOR DETAIL



VANITY&TUB/WALL DETAIL



SHOWER WALL/TRAY DETAIL



SHOWER CORNER DETAIL
(PLAN VIEW)

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Barrett Homes

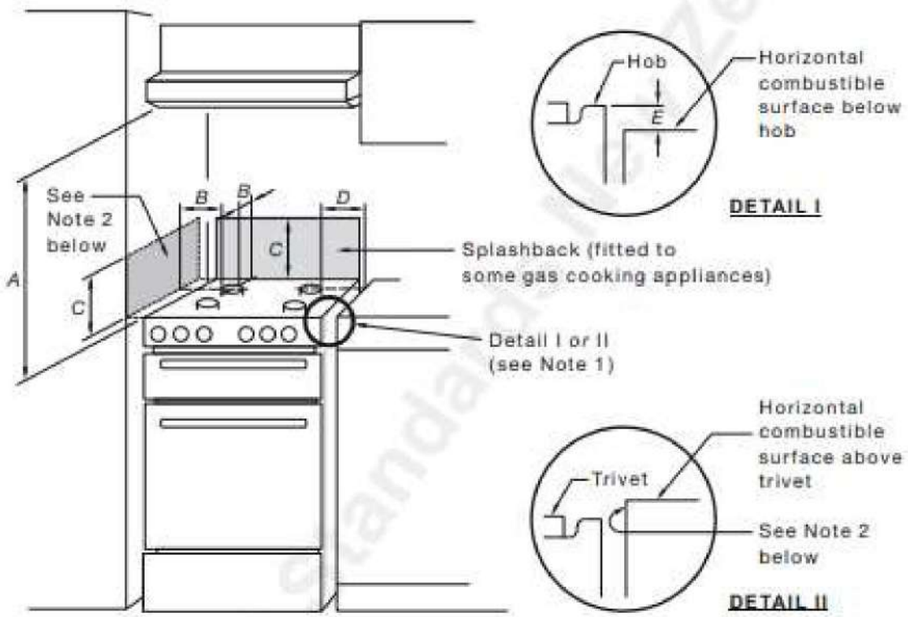
Project No:	WT248	Designed:	RI/CJ/RS	Wind:	HIGH	Drawing:	WET AREA DETAILS	Date:	9/08/2023
Plan:	WT249 (mirror)	Drawn:	JH	EQ:	2	Client Name:	JOHN SLATER	Rev:	
Version:	1.5	Checked:	AC	Exposure:	B	Site Address:	LOT 248, 24 BRAGATO WAY	Sheet:	30
		design@barretthomes.co.nz		Council:	CODC		WOOING TREE, STAGE 2A, CROMWELL	Scale:	1:10

6.10 ADDITIONAL REQUIREMENTS FOR INSTALLATION OF SPECIFIC GAS APPLIANCES

6.10.1 Domestic gas cooking appliances

6.10.1.1 *Clearance around a gas cooking appliance*

The required clearance between a *gas* cooking *appliance*, other than those covered under Clause 6.10.1.7, and a *combustible surface* shall be in accordance with the cooking *appliance manufacturer's specification*. In the event that clearances are not specified, clearances shall be as in Figure 6.3 and as follows:



NOTES:

1 Details I and II relate to Requirement 3 of Clause 6.10.1.1(c).

2 In this case, any vertical *combustible surface* needs to be protected in accordance with Requirement 2 of Clause 6.10.1.1(b).

FIGURE 6.3 REQUIRED CLEARANCES AROUND DOMESTIC GAS COOKING APPLIANCES

(a) *Requirement 1—Overhead clearances—(Measurement A)*

Range hoods and *exhaust fans* shall be installed in accordance with the *manufacturer's relevant instructions*.

Clearance *A*, between the highest part of the highest *burner* of the *gas* cooking *appliance* and a *range hood* or *exhaust fan* (overhead clearance), shall be no less than 600 mm for a *range hood*, and no less than 750 mm for an *exhaust fan*. Any other downward facing *combustible surface* less than 600 mm above the highest part of the highest *burner* shall be protected for the full width and depth of the cooking surface area in accordance with Clause 6.10.1.2. However, this clearance to any surface shall not be less than 450 mm.

(b) *Requirement 2—Measurements B (side clearances) and C (height)*

Where *B*, measured from the periphery of the nearest *burner* to any vertical *combustible surface*, is less than 200 mm, that surface shall be protected in accordance with Clause 6.10.1.2 to a height (*C*) of not less than 150 mm above the periphery of the nearest *burner* for the full dimension (width or depth) of the cooking surface area. Where the *gas* cooking *appliance* is fitted with a 'splashback', protection of the rear wall is not required provided the splashback achieves protection of any *combustible surface* less than 200 mm from the periphery of the nearest *burner* to a height not less than 150 mm above the periphery of the nearest *burner*.

(c) *Requirement 3—Additional requirements for freestanding and elevated gas cooking appliances—(Measurements D and E)*

Where *D*, the distance from the periphery of the nearest *burner* to a horizontal *combustible surface* is less than 200 mm, then *E* shall be 10 mm or more, or the horizontal *combustible* surface shall be above the *trivet*. See Details I and II in Figure 6.3.

NOTES:

1 Requirement 3 does not apply to a freestanding or elevated *gas* cooking *appliance* which is designed to prevent flames or the cooking vessels from extending beyond the periphery of the *gas appliance*.

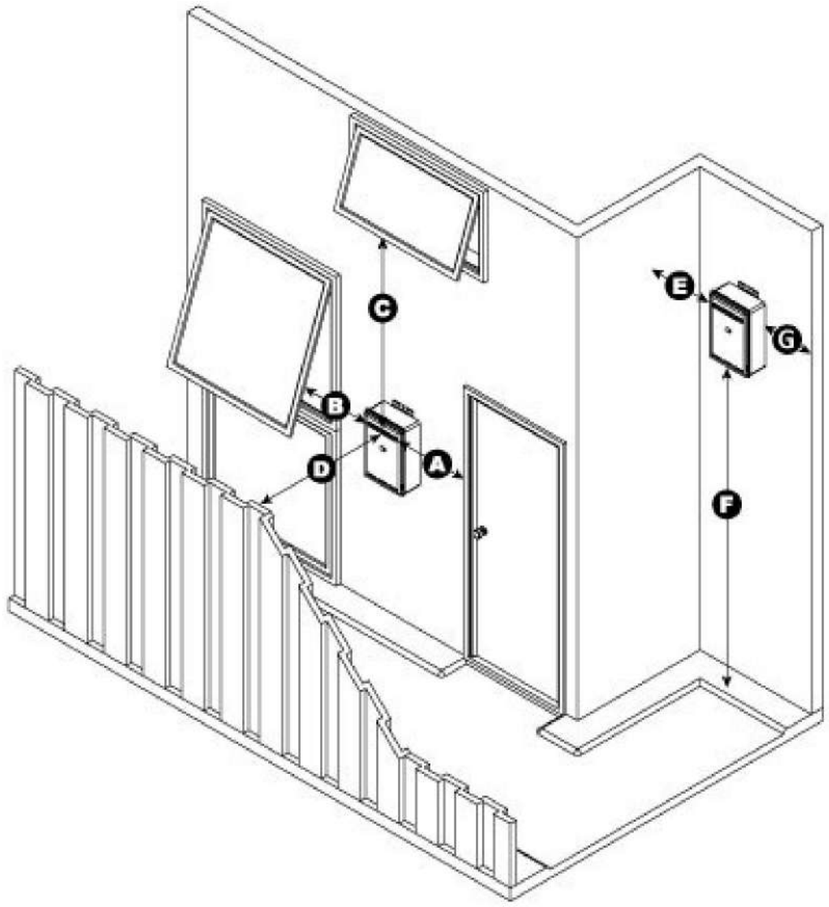
2 The 'cooking surface area' is defined as that part of the *gas appliance* where cooking normally takes place and does not include those parts of the *gas appliance* containing control knobs.

3 Consideration is to be given to window treatments and painted surfaces on glass splashbacks when located near cooking *appliances*.

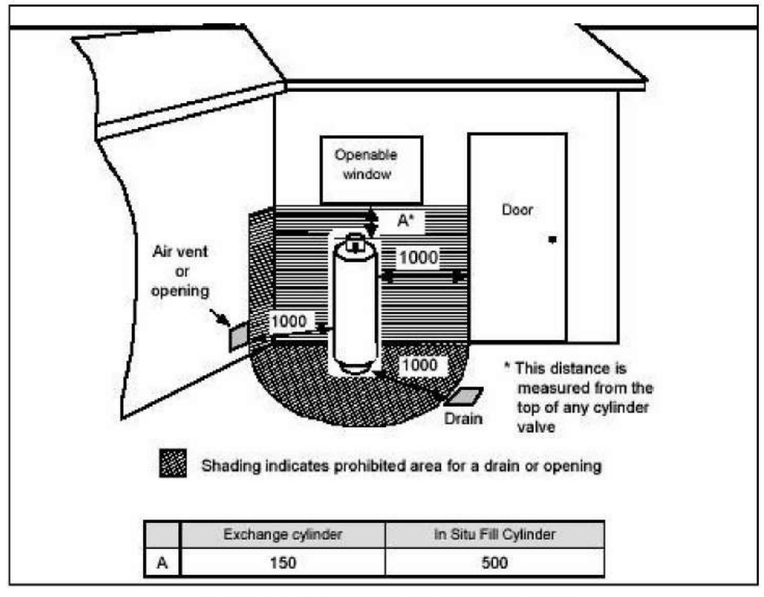
REV A

Barrett Homes

Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: SPLASHBACK DETAIL		Date: 3/10/2023
Plan: WT249 (mirror)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev: REV A
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 30B
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale:



Dimension	Infinity VT models Infinity HD200 models Infinity EF models	Infinity HD250 models
A	Min. 300 mm	Min. 500 mm
B	Min. 300 mm	Min. 500 mm
C	Min. 1.5 m	Min. 1.5 m
D	Min. 500 mm	Min. 500 mm
E	Min. 300 mm	Min. 300 mm
F	Min. 300 mm	Min. 300 mm
G	Min. 300 mm	Min. 300 mm

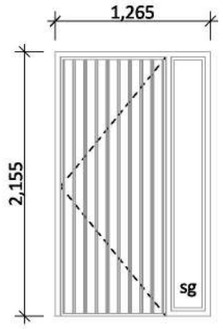


	Exchange cylinder	In Situ Fill Cylinder
A	150	500

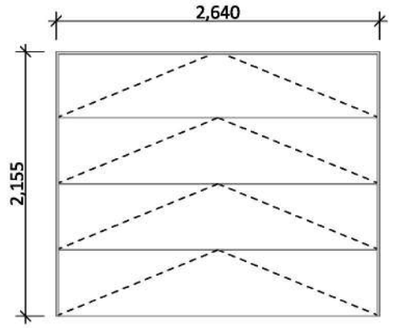
GAS CYLINDER PLACEMENT

Barrett Homes

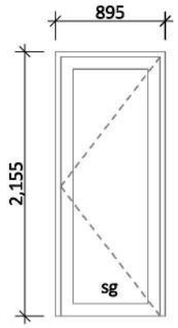
Project No: WT248	Designed: RI/CJ/RS	Wind: HIGH	Drawing: GAS DETAILS		Date: 9/08/2023
Plan: WT249 (mirron)	Drawn: JH	EQ: 2	Client Name: JOHN SLATER		Rev:
Version: 1.5	Checked: AC	Exposure: B	Site Address: LOT 248, 24 BRAGATO WAY		Sheet: 31
design@barretthomes.co.nz		Council: CODC	WOOING TREE, STAGE 2A, CROMWELL		Scale:



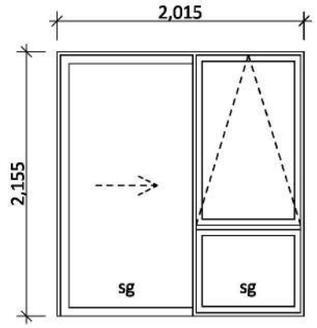
D-01
* Rebated Joinery



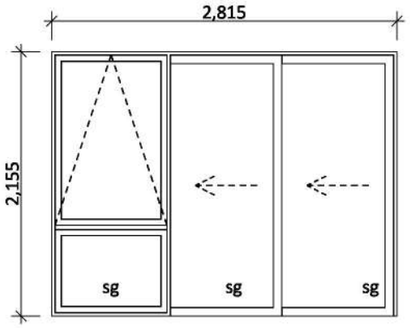
D-02



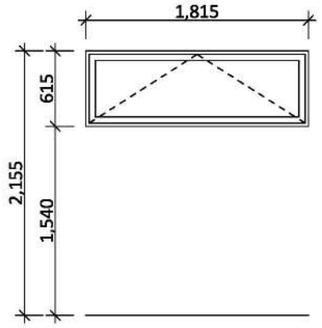
D-03



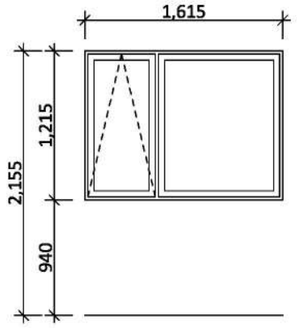
D-04, D-05
* Rebated Joinery



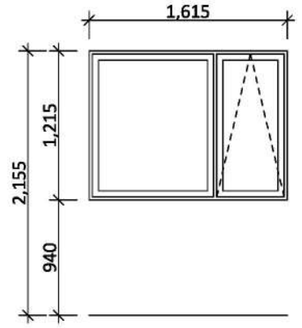
D-06
* Rebated Joinery



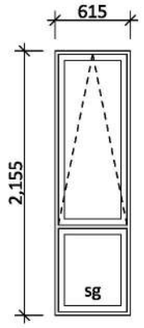
W-01



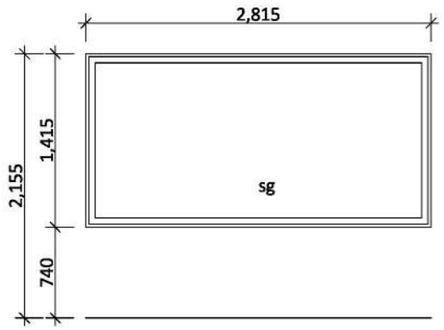
W-02



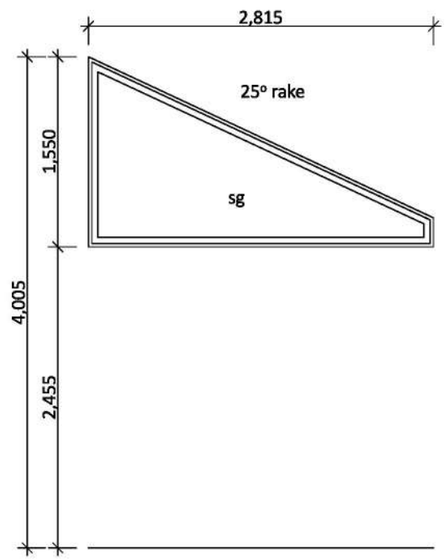
W-03



W-04, W-05, W-06, W-07, W-08,
W-10, W-11
obsc (W-04, W-05)



W-09



W-12

General notes:

Aluminium joinery head heights to be 2.155m (excludes rebated joinery units & raked windows). Refer to floor plan for door & window sizes. Joinery schedule & sizes to be confirmed on site PRIOR to manufacture

Double glazing to all window and door joinery excluding garage (unless specified)

Glazing in accordance with NZS 4223 & 2016 amendments.
All glazing clear float unless noted anywhere, (refer to joinery schedule)
- Low level glazing = Any glazing within 800mm from FFL, depending on size and proportions, safety glass or 5mm annealed will be required.
- Doors with glazing area > 0.75m² = safety glass
- Doors with glazing area < 0.75m² = 5mm annealed
- Side panels within 800mm of a door = safety glass, side panels not within 800mm of door considered a window.

sg = Safety glass as required by standards, joinery manufacturer to take precedence
ss = Safety stays (in accordance with NZBC:F4 clause 2.0)
obsc = Obscure glass

REBATED JOINERY

Rebated joinery sizes are to be confirmed with joinery manufacturer.

RECEIVED
11/08/2023
CODC

Central Otago District Council
230600
Approved Building Consent
10/10/2023

Barrett Homes

Project No:	WT248	Designed:	RI/CJ/RS	Wind:	HIGH	Drawing: JOINERY SCHEDULE	Date: 9/08/2023
Plan:	WT249 (mirror)	Drawn:	JH	EQ:	2	Client Name: JOHN SLATER	Rev:
Version:	1.5	Checked:	AC	Exposure:	B	Site Address: LOT 248, 24 BRAGATO WAY	Sheet: 32
		design@barretthomes.co.nz		Council:	CODC	WOOING TREE, STAGE 2A, CROMWELL	Scale: 1:50

Y:¥GM Projects¥OTAGO¥Wooing Tree¥WT248¥Consent Plans¥WT248 Consent 1.5.pln