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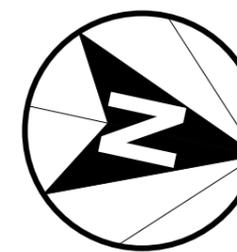
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**New Residence for :
 DGS Builders Ltd.
 Lot 279
 Vista Crescent
 Falcons Landing, Rolleston**

LINE RENDERS

6/08/2025

NTS (@ A3)



SITE INFORMATION
 Site Area : 571m²
 Floor Area : 173.36m² / 30.36%
 Roof Area : 206.27m² / 36.12%
 Wind High
 Earthquake 2
 Exposure C
 Snow N 4 (up to 1kPa)

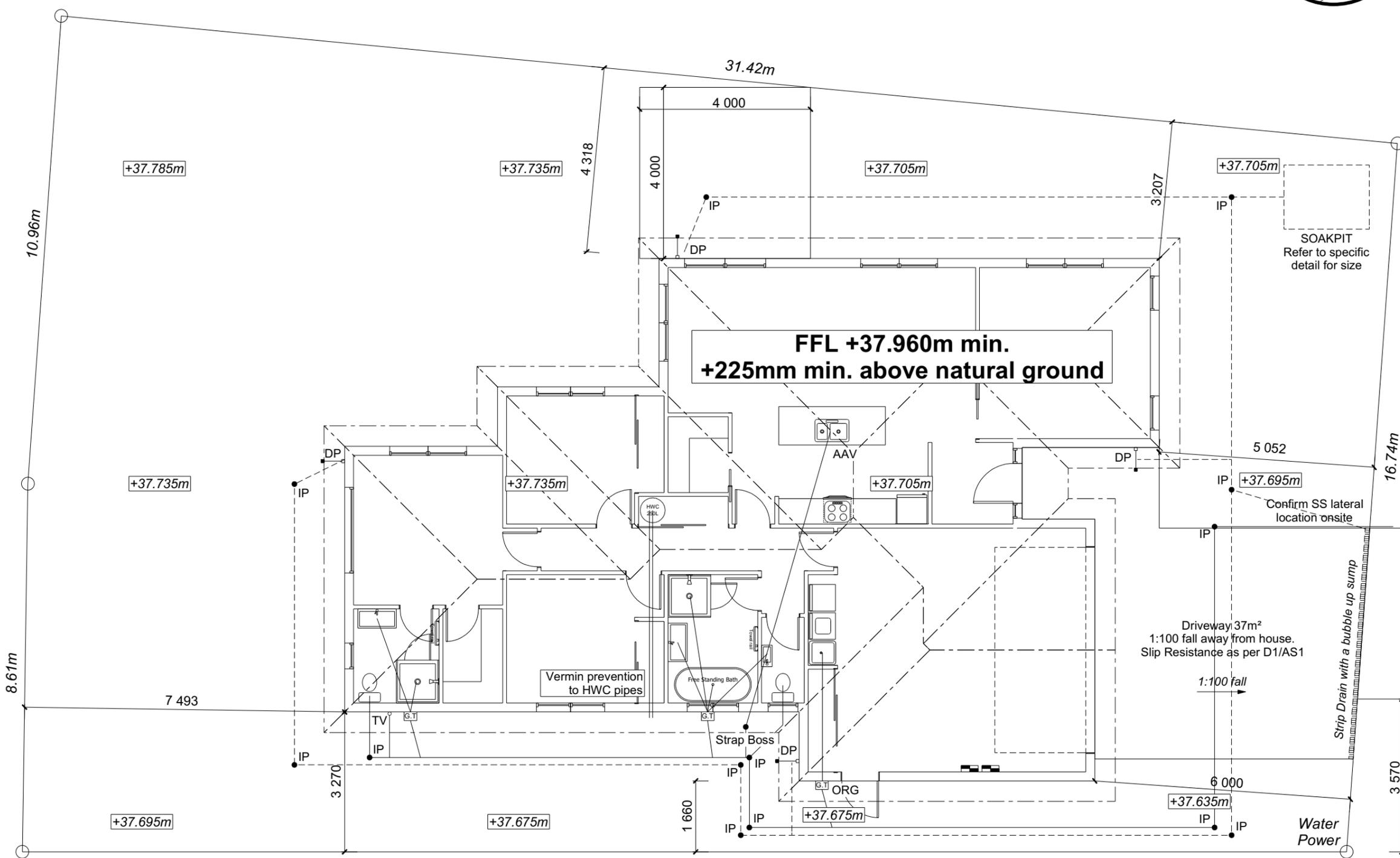
Dimensions are shown from the boundaries to the exterior cladding.
 Refer to Foundation Plan for foundation setout dimensions

Refer to specifications for extent of sediment control measures.

Provide safety fencing to perimeter of site - permanent or temporary - to comply with NZBC F5/AS1

Provide safety fencing to perimeter of site - permanent or temporary - to comply with NZBC F5/AS1

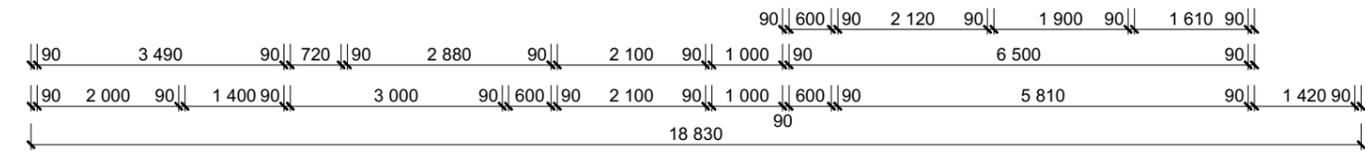
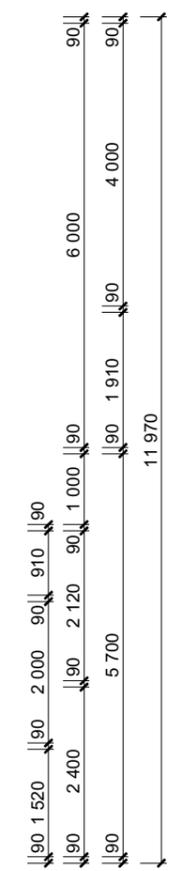
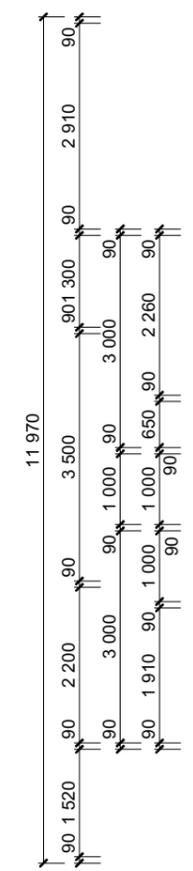
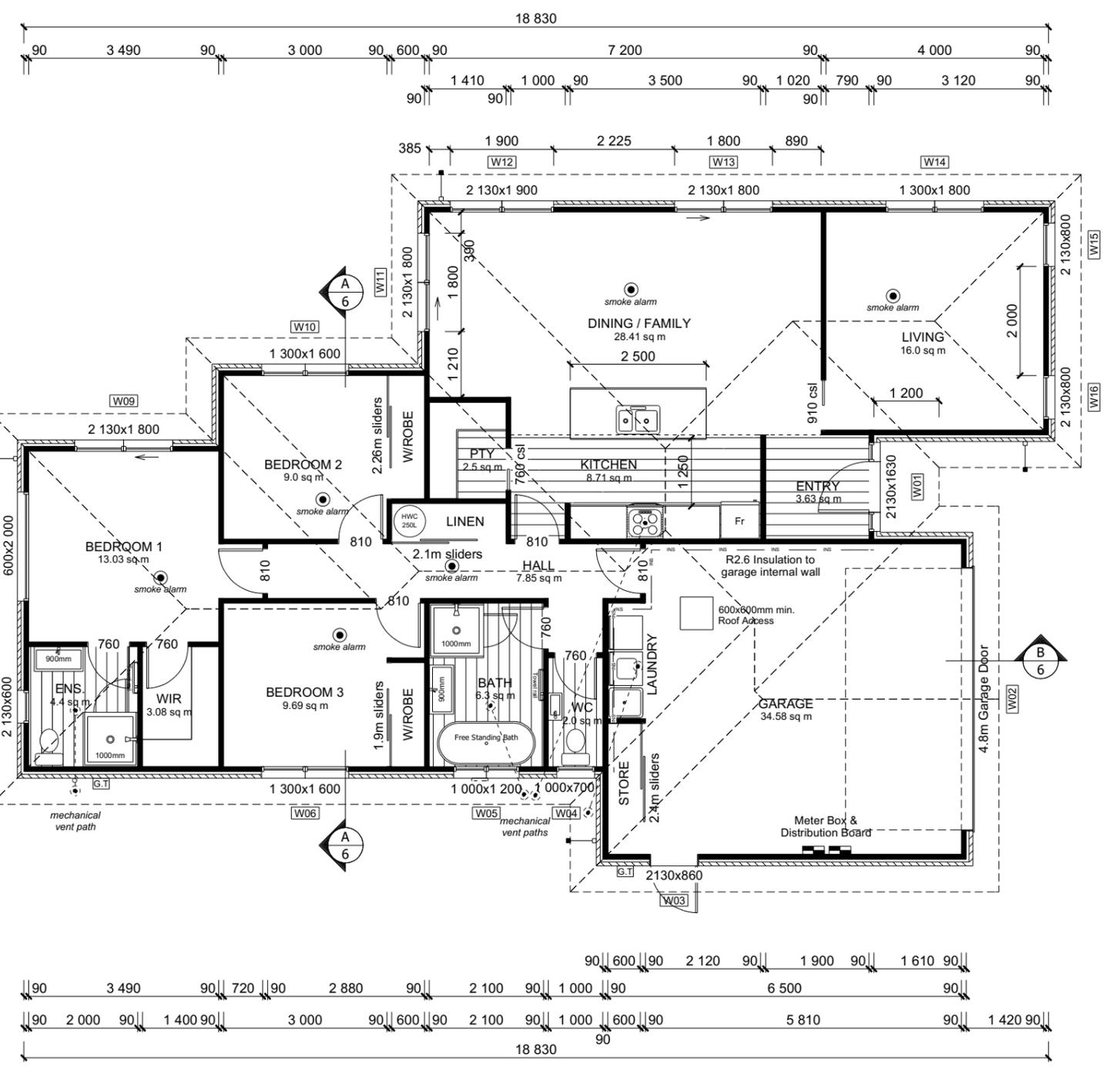
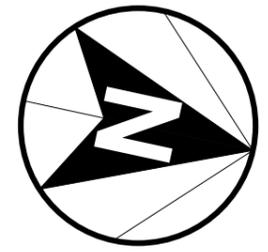
+37.635m DATUM
 Top of Kerb



VISTA CRESCENT

**New Residence for :
 DGS Builders Ltd.
 Lot 279
 Vista Crescent
 Falcons Landing, Rolleston**

SITE PLAN
 6/08/2025 1:100 (@ A3)



ROOF & WALL CLADDINGS
 Roof : 25° Corrugate Colorsteel
 Walls : 70 Series Brick Veneer with a 50mm cavity
 James Hardie Vert. Linea Oblique with a 20mm cavity

DWELLING AREAS
 Framing: 165.53m² Perimeter: 64.80m
 Veneer/Foundation: 173.36m² Perimeter: 65.76m
 Roof: 206.27m² Perimeter: 68.40m

SMOKE ALARMS
 Domestic Smoke Alarms (hush type) to be interconnected and located in each bedroom, hallway & living room space. To comply with one of the following standards: UL 217, ULCS531, AS 3786, BS 5446 (part 1).

FLOOR PLAN NOTES
 Dimensions shown are to the frame, GIB thickness not shown.
 Mechanical ventilation to comply with G4/AS1
 Air Seals to have PEF rod & low expansion foam
 All windows and doors centered in room unless shown otherwise
 Laundering facilities provided complying with G2/SA1 1.0

FLOOR FINISHES
 Carpet & Vinyl Plank

KITCHEN HOB
 Electric Hobs

WALL FRAMING:
 Stud Height: 2420 mm (2455mm to u/s of truss bottom chord)
 External Studs H1.2, 90x45 @ 600crs SG8,
 Dwangs @ 800crs for Brick & 600crs for Vertical Oblique
 Internal Studs H1.2, 90x45 @ 600crs SG8, Dwangs @ 800crs
 Lintels: Lintels are shown on the Truss design. (All Lintels SG8 unless stated otherwise).
 Building Wrap: Dristud with Dristud flexible flashing tape
 Air Barrier to unlined wall and gables: Dristud building wrap
 Building wrap to be strapped @ 300crs between dwangs.

INTERNAL DOORS & SLIDERS
 1.98m High

JOINERY
 Thermally Broken (R0.5) joinery throughout with Low/4 Glazing

SHOWERS
 Both showers to have acrylic bases and wall liners.
 Refer to the shower details on Sheet 18.

New Residence for :
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Vista Crescent
Falcons Landing, Rolleston

FLOOR PLAN
 6/08/2025 1:100 (@ A3)

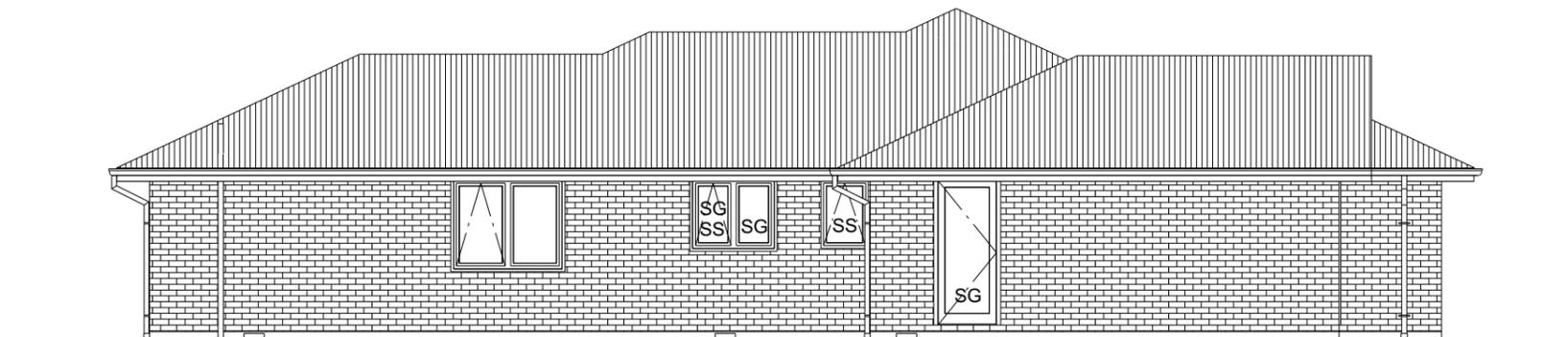
ROOF & WALL CLADDINGS

Roof : 25° Corrugate Colorsteel
 Walls : 70 Series Brick Veneer with a 50mm cavity
 James Hardie Vert. Linea Oblique
 with a 20mm cavity

ELEVATION NOTES

Gutter : Coloured Steel Gutter
 Fascia : Coloured Steel 185 Fascia
 Downpipes : Colorsteel Rectangular 75x55mm
 Soffits : Hardiflex 4.5mm
 Joinery : Thermally Broken
 SS: Safety Stays
 SG: Safety Glass

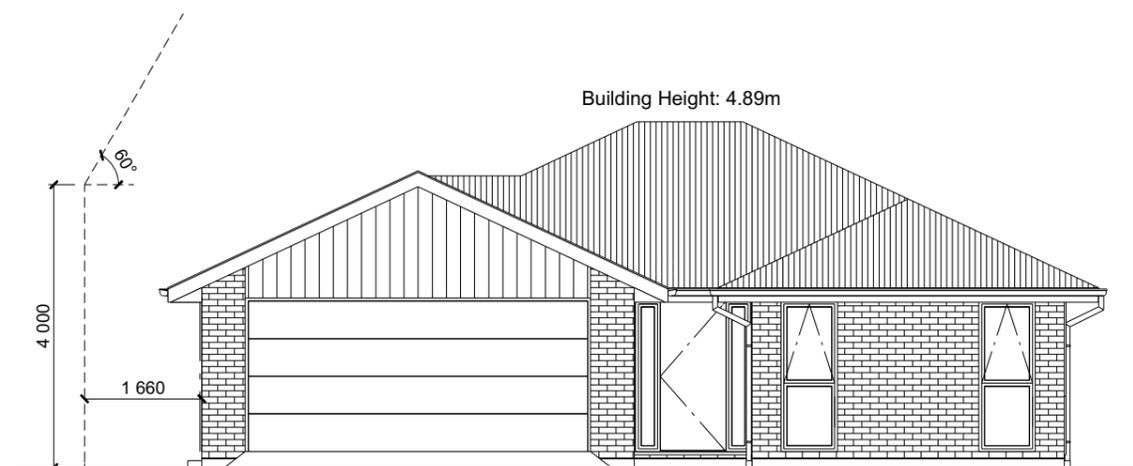
Access routs to have slip resistance surface
 in compliance with NZBC D1/AS1 Table 2
 and to have a 1:100 fall away from the building
 All egress points to have a maximum step
 down of 190mm.



ELEVATION A - EAST

BUILDING ENVELOPE RISK MATRIX

RISK CRITERIA	RISK	SCORE
Wind Zone	High	1
Number of Stories	Low	0
Roof Wall Junction	Low	0
Eaves Width	Medium	1
Building Envelope	Medium	1
Decks & Balconies	Low	0
Total		3



ELEVATION B - NORTH

**New Residence for :
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 Lot 279
 Vista Crescent
 Falcons Landing, Rolleston**

ELEVATIONS

6/08/2025 1:100 (@ A3)

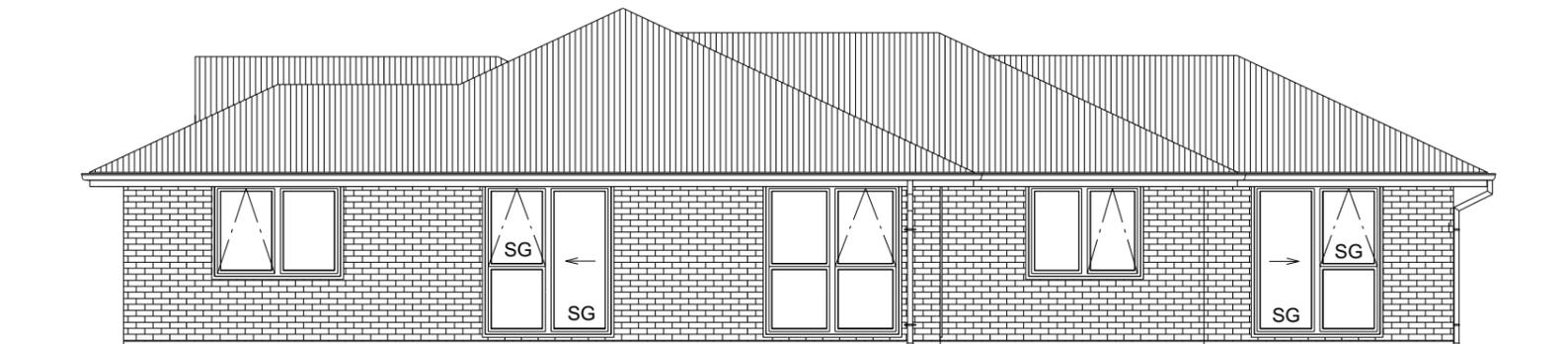
ROOF & WALL CLADDINGS

Roof : 25° Corrugate Colorsteel
 Walls : 70 Series Brick Veneer with a 50mm cavity
 James Hardie Vert. Linea Oblique
 with a 20mm cavity

ELEVATION NOTES

Gutter : Coloured Steel Gutter
 Fascia : Coloured Steel 185 Fascia
 Downpipes : Colorsteel Rectangular 75x55mm
 Soffits : Hardiflex 4.5mm
 Joinery : Thermally Broken
 SS: Safety Stays
 SG: Safety Glass

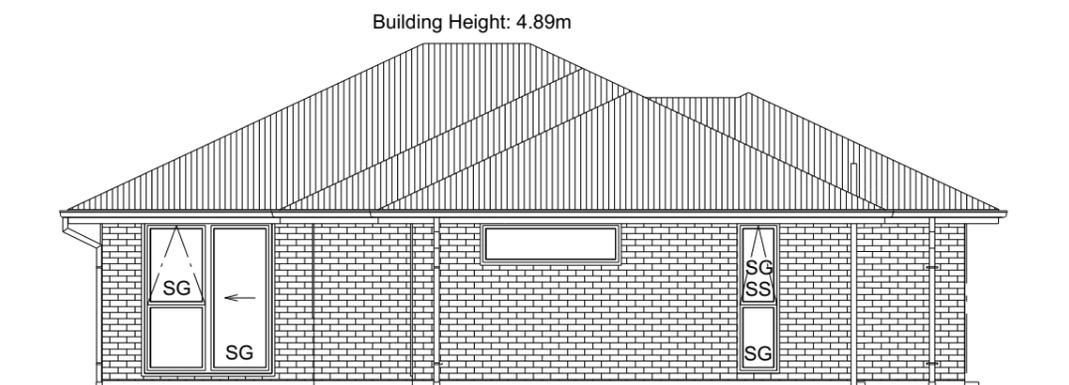
Access routs to have slip resistance surface
 in compliance with NZBC D1/AS1 Table 2
 and to have a 1:100 fall away from the building
 All egress points to have a maximum step
 down of 190mm.



ELEVATION C - WEST

BUILDING ENVELOPE RISK MATRIX

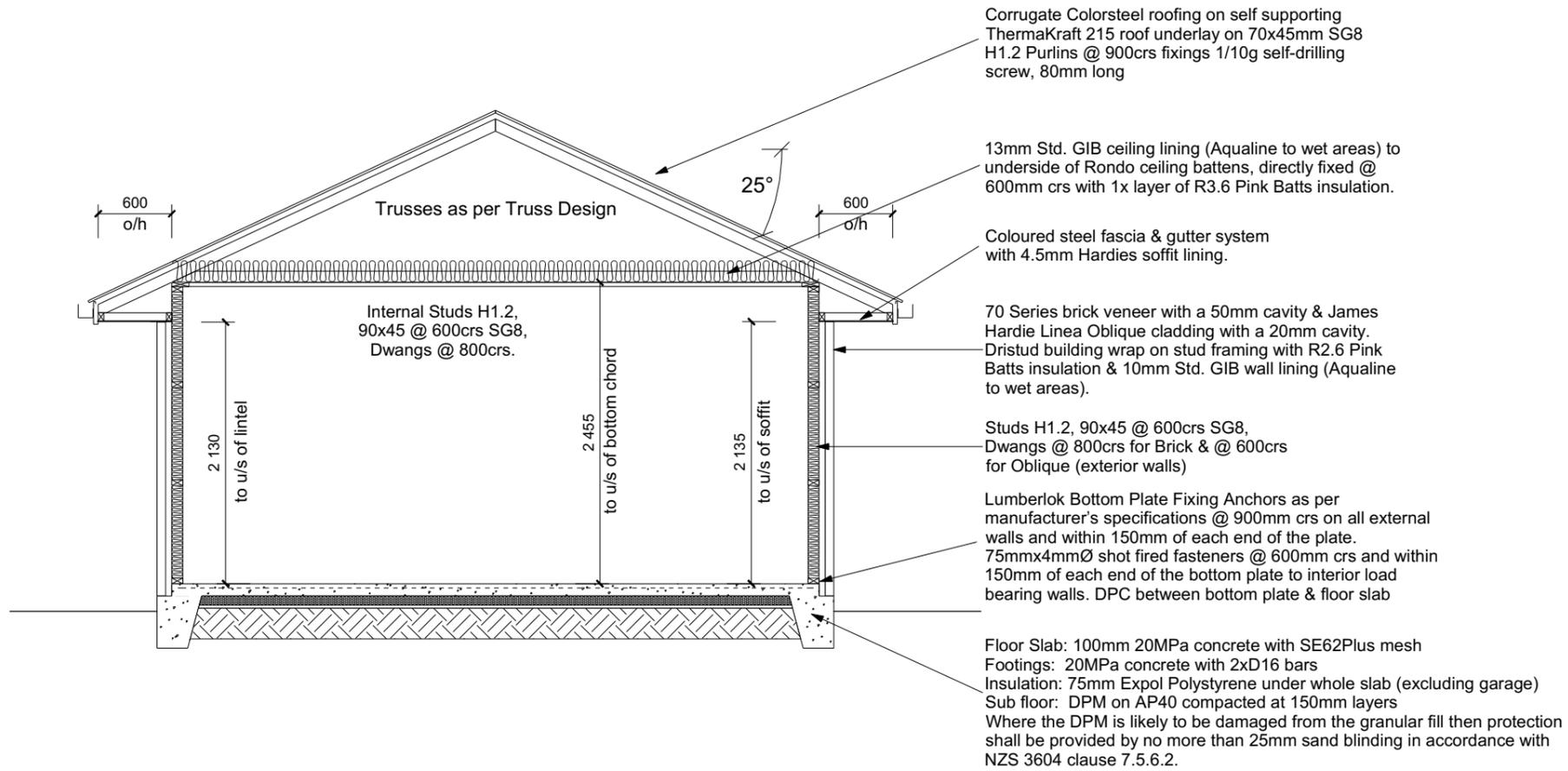
RISK CRITERIA	RISK	SCORE
Wind Zone	High	1
Number of Stories	Low	0
Roof Wall Junction	Low	0
Eaves Width	Medium	1
Building Envelope	Medium	1
Decks & Balconies	Low	0
Total		3



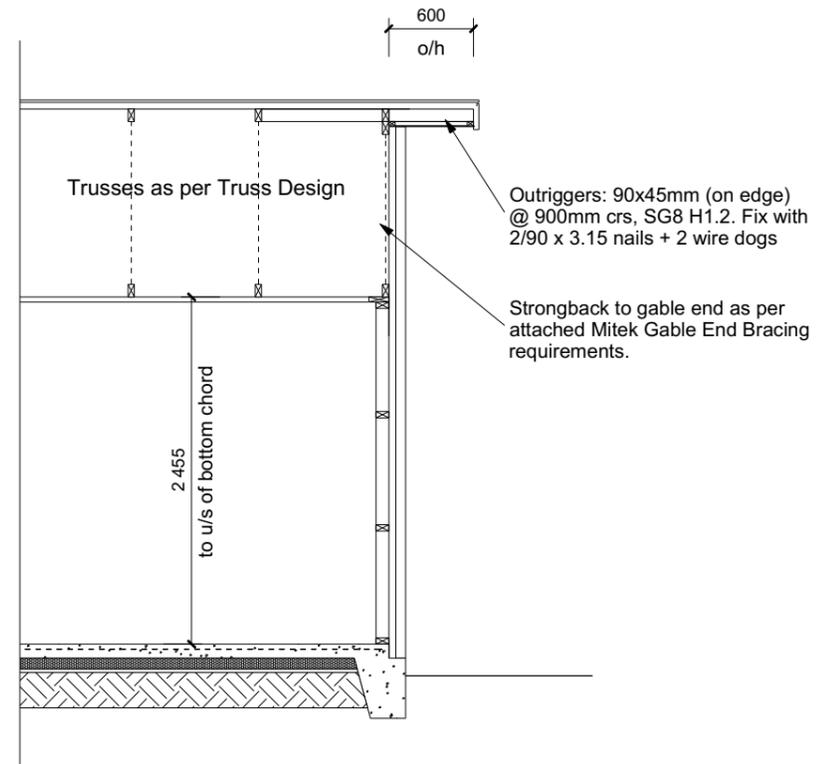
ELEVATION D - SOUTH

**New Residence for :
 DGS Builders Ltd.
 Lot 279
 Vista Crescent
 Falcons Landing, Rolleston**

ELEVATIONS
 6/08/2025 1:100 (@ A3)



CROSS SECTION A-A



CROSS SECTION B

ROOF & WALL CLADDINGS

Roof : 25° Corrugate Colorsteel
Walls : 70 Series Brick Veneer with a 50mm cavity
James Hardie Vert. Linea Oblique
with a 20mm cavity

CROSS SECTION NOTES

Building wrap is to comply with E2/AS1 & NZS 3604:2011.

Flashing materials must be selected based on environmental exposure. Refer to NZS 3604:2011 & table 20 of E2/AS1.

Flashing tape must have proven compatibility with the selected wrap & other materials with which it comes into contact as per table 21 of E2/AS1.

Fixings shall comply with NZS 3604:2011 Section 4 Durability Tables 4.1-4.3

Unless stated otherwise, timber members on drawings are to be a minimum of SG8 strength graded as per NZS3604:2011.

INSULATION

Ceiling: Pink Batts 1x layer of R3.6 Ceiling Batts
Wall: Pink Batts R 2.6 Wall Batts

Thermally Broken (R0.5) joinery throughout with Low/4 Glazing

New Residence for :
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Lot 279
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Falcons Landing, Rolleston

CROSS SECTIONS

6/08/2025

1:50 (@ A3)

Figure 43: Ridge to hip flashings
Paragraphs 8.4.11 and 8.4.12

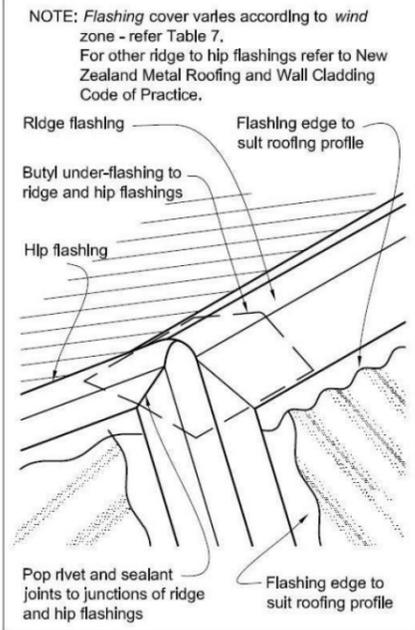
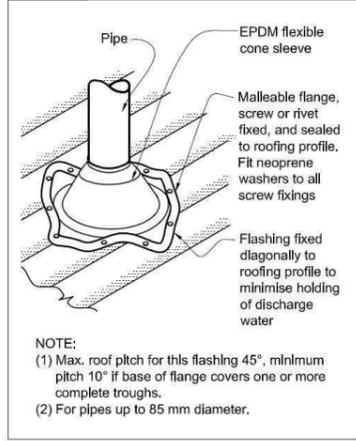
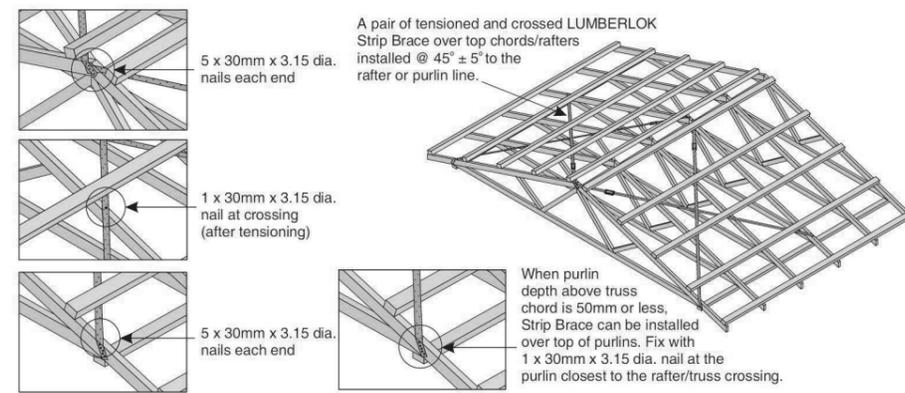


Figure 53: Flashing for small pipes
Paragraphs 8.3.10, 8.4.17, 9.6.8.5 and 9.6.9.6



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



ROOF & WALL CLADDINGS
Roof : 25° Corrugate Colorsteel
Purlins : 70x45 SG8 H1.2 @ 900crs, fixings 1/10g self-drilling screw, 80mm long. End span of purlins to be 600crs as per E2 Table 11.

ROOF PLAN NOTES
Gutter : Coloured Steel Quad Gutter
Fascia : Coloured Steel 185 Fascia
Downpipes : Colorsteel Rectangular 75x55mm
Soffits : 4.5mm Hardiflex

Underlay: Thermakraft 215 roof underlay

Roof Bracing: Diagonally opposed pair 25x1mm galv straps with 8Kn tension capacity. After tensioning strap, fix to each rafter with 2/60x3.15mm nails.
Fold down strap and fix with 3/60x3.15mm nails each into the top chord and into the top plate.

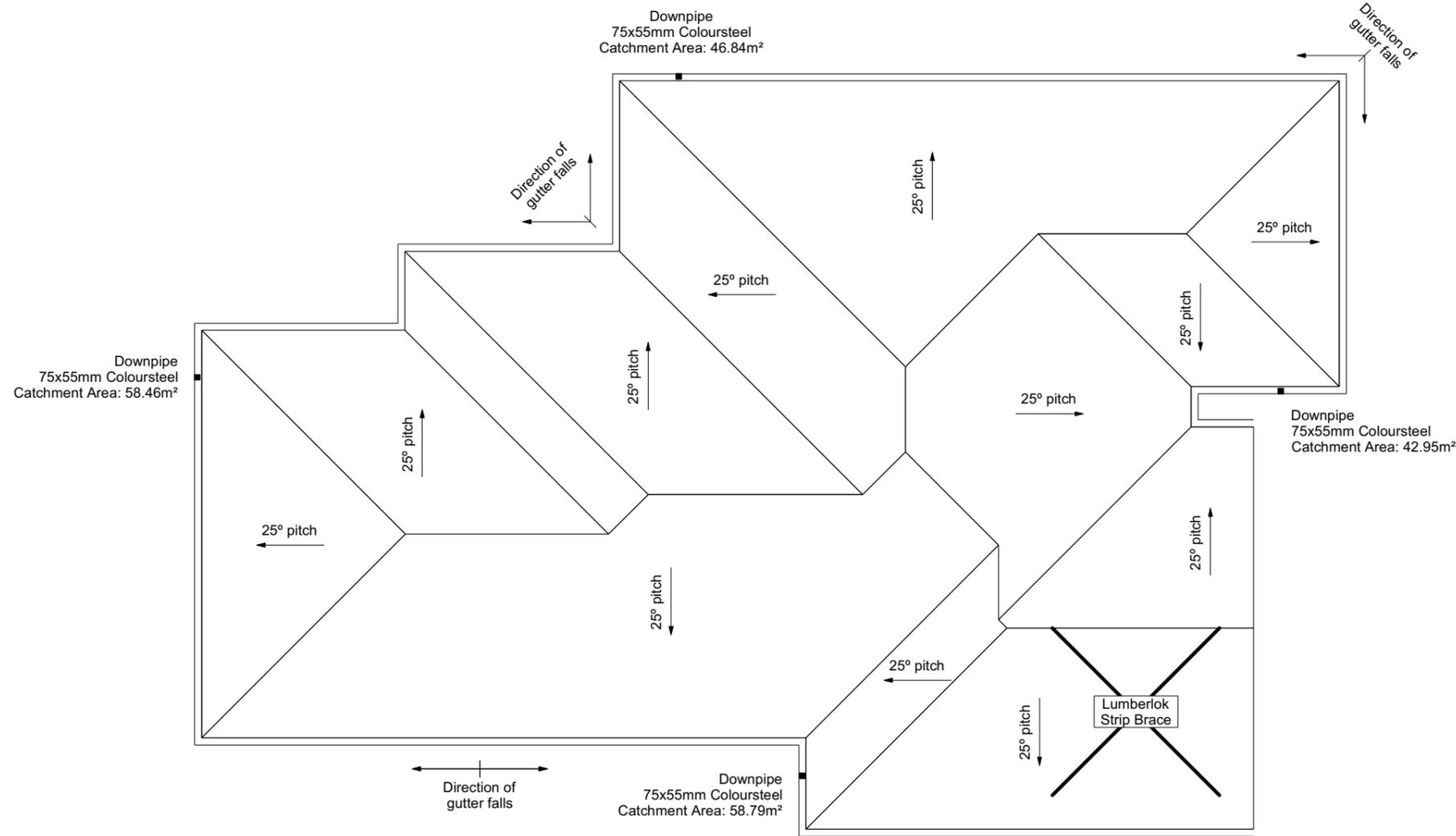


Figure 8: Relationship of pipe trench to building foundation
Paragraph 5.6.1

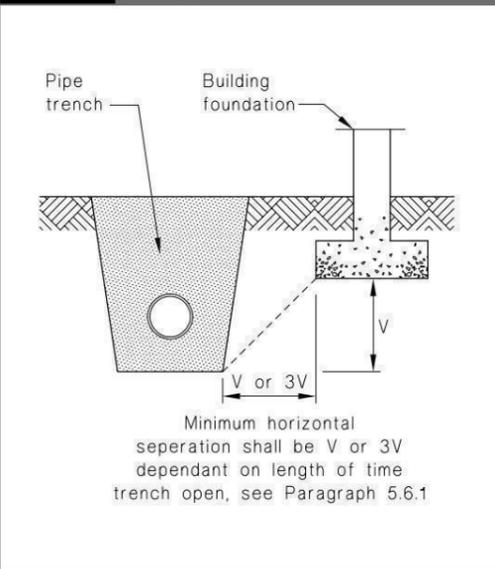


Figure 6: Bubble-up Chamber
Paragraph 3.4.2

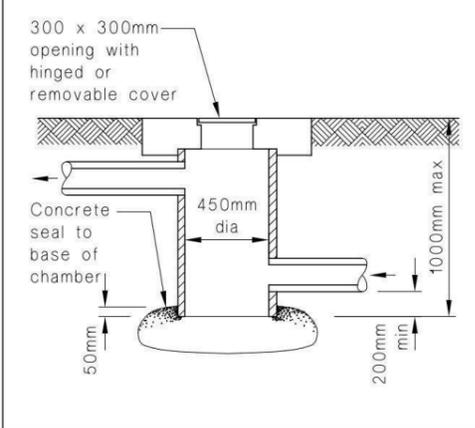
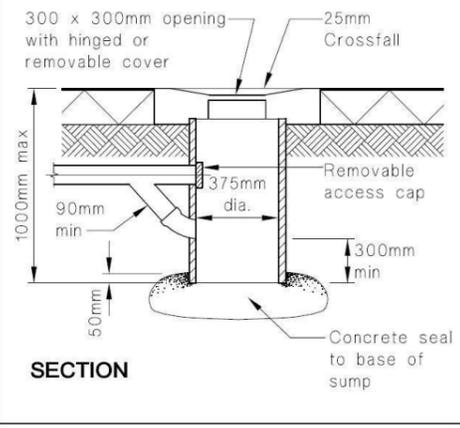


Figure 8: Type-one Surface Water Sump
Paragraph 3.6.2



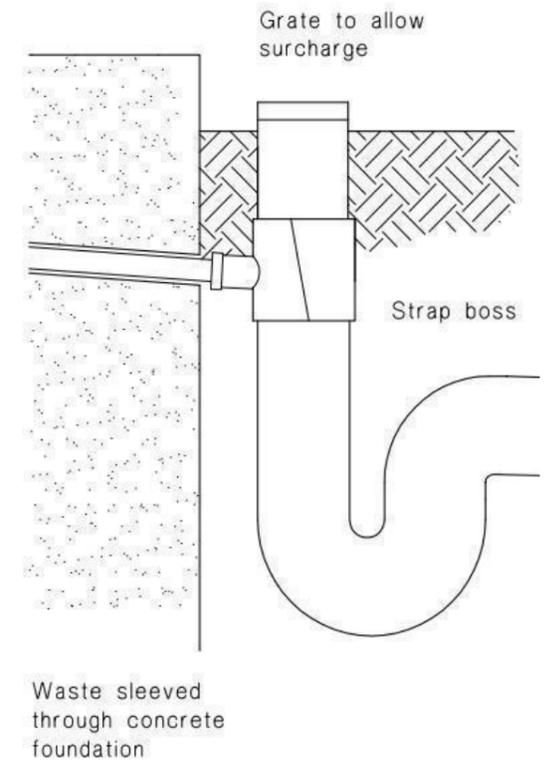
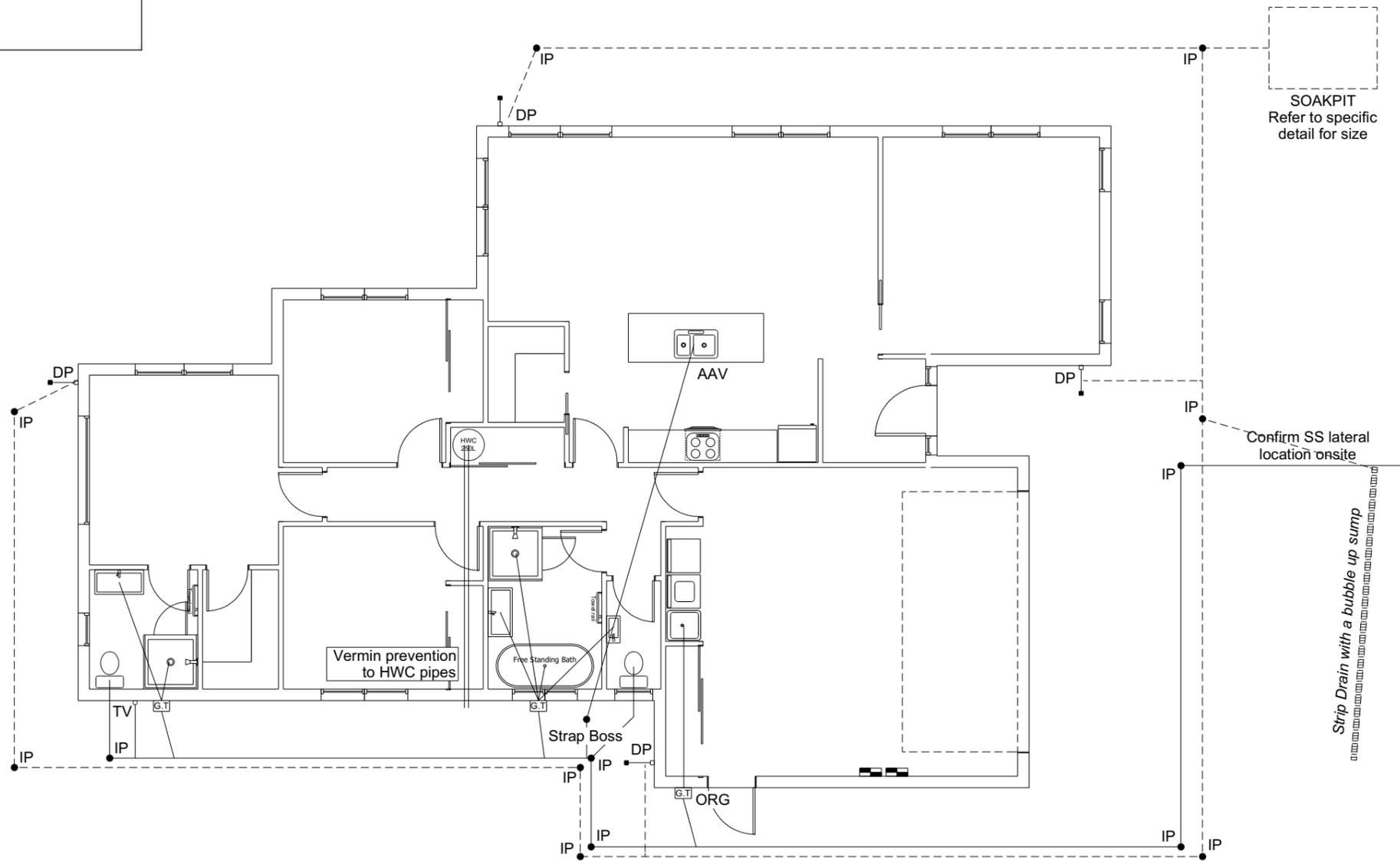
Plumbing Schedule NZBC G13

Kitchen Sink:	Ø50mm @1:40	(3 discharge units)
Bathrooms Vanity:	Ø40mm @1:40	(1 discharge units)
Shower:	Ø40mm @1:40	(2 discharge units)
Bath:	Ø40mm @1:40	(4 discharge units)
WC:	Ø100mm @1:40	(4 discharge units)
Laundry Sink:	Ø40mm @1:30	(5 discharge units)
Main Foulwater Vented Drain:	Ø100mm @1:60	
Stormwater Drain:	Ø100mm @1:60 (1:120max)	
Terminal Vent:	Ø80mm	
Heatpump:	Drain over DP	
ORG:	Overflow Relief Gully	

ORG to be positioned so the top of gully dish is no less than 150mm below overflow level of lowest fixture
All drains passing through concrete, provide sleeve or wrap in durable and flexible to allow for expansion and contraction. (as per G13/AS2 5.8.1)

DRAINAGE LEGEND

-----	Stormwater DN100mm uPVC
-----	Sewer Drain DN100mm uPVC
DP	Downpipe
GT	Gully Trap
ORG	Overflow Relief Gully
TV	Terminal Vent
AAV	Air Admittance Valve
IP	Inspection Point



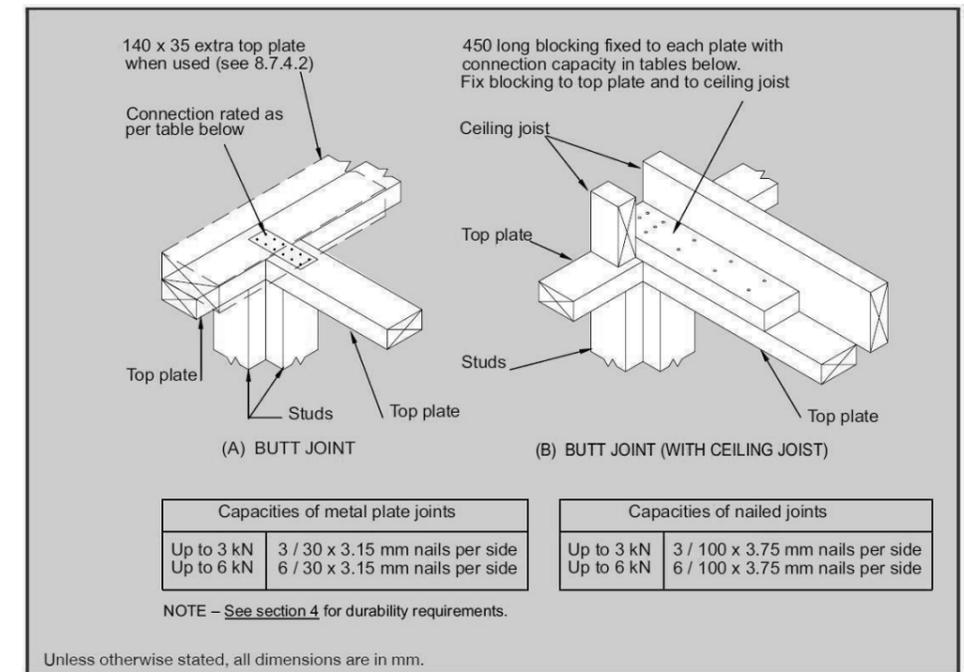
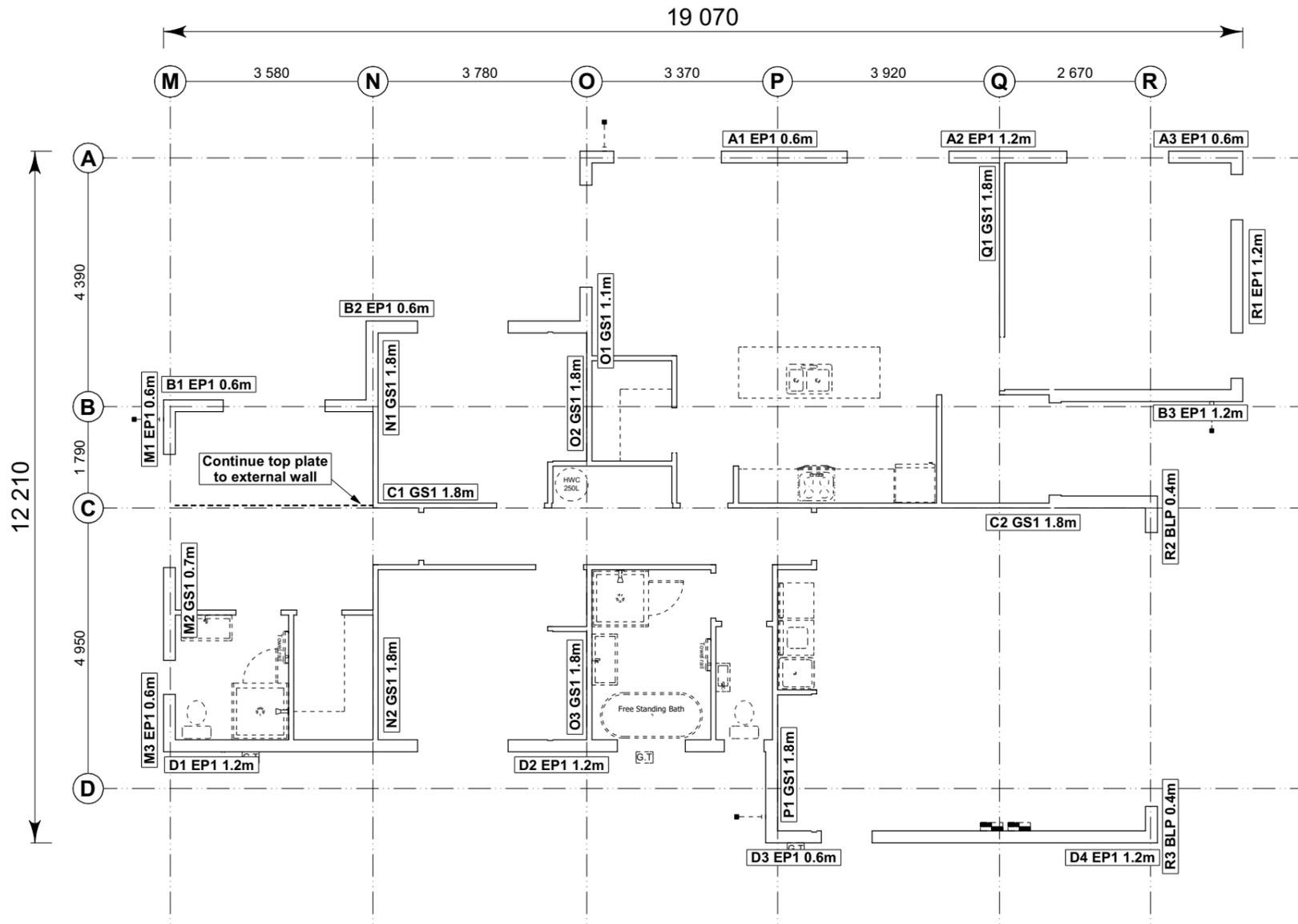


Figure 8.16 - Connecting top plates to external walls at right angles - Walls containing bracing (see 8.7.3.4)

8.7.3.4
 Each wall that contains one or more wall bracing elements shall be connected at the top plate level, either directly, or through a framing member in the line of the wall, to external walls at right angles to it. Top plate fixing(s) of the capacity in tension or compression along the line of the wall bracing element are given as follows:

- For each wall containing wall bracing elements with a total bracing capacity of not more than 125 bracing units: to at least one such external wall by a fixing as shown in figure 8.16 of 6 kN capacity;
- For each wall containing wall bracing elements with a total bracing capacity of not more than 250 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each of 6 kN capacity;
- For each wall containing wall bracing elements with a total bracing capacity of more than 250 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each having a rating of not less than 2.4 kN per 100 bracing units.

Single Level Along Resistance Sheet

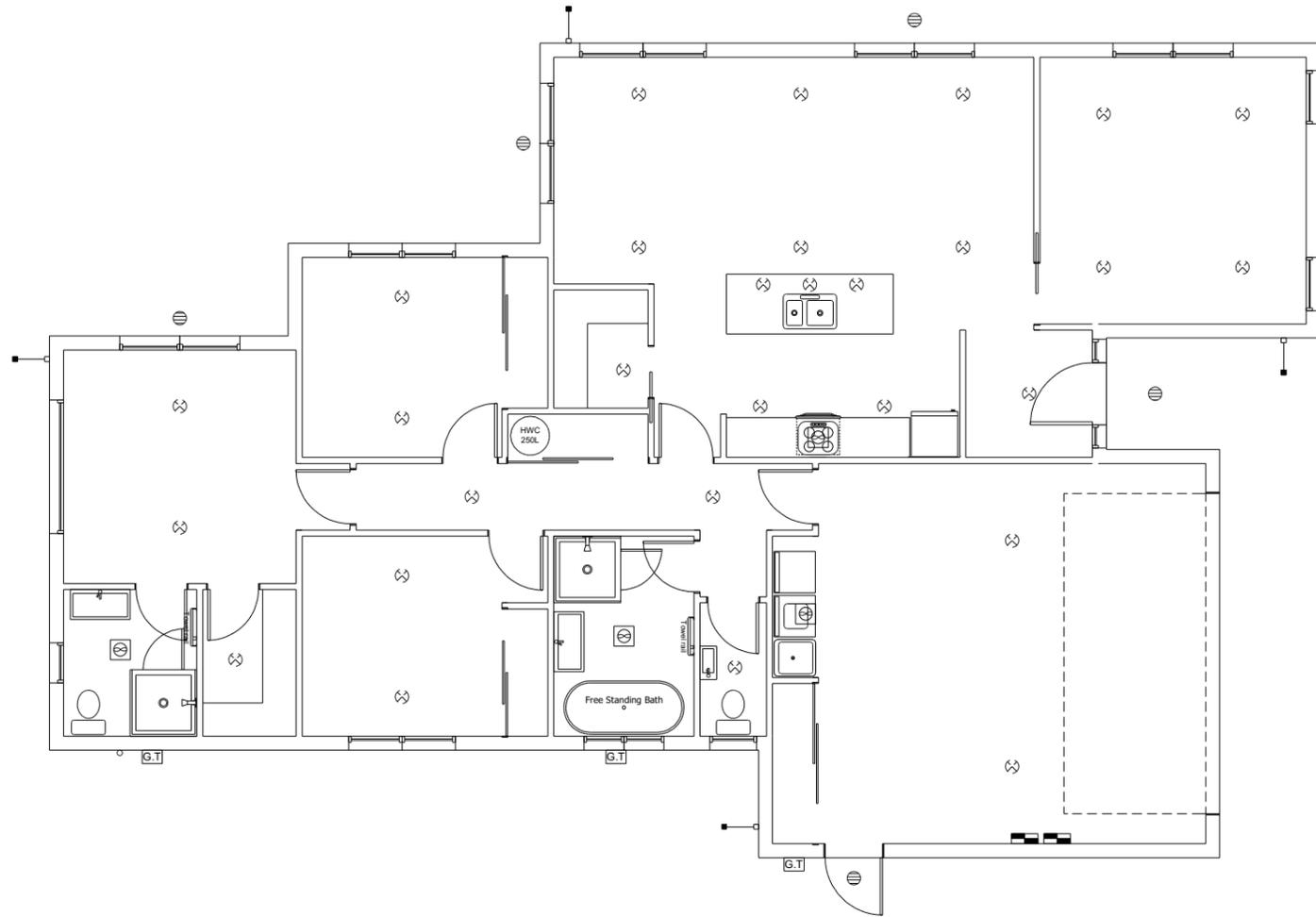
Job Name: DGS Builders Ltd.

Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Demand		Achieved	
							Wind	EQ	1253	1341
							(BUs)	(BUs)	196%	129%
A	1	0.60		2.40	EP1 0.6	Ecoply®	57	63	258 OK	288 OK
	2	1.20		2.40	EP1 1.2	Ecoply®	144	162		
	3	0.60		2.40	EP1 0.6	Ecoply®	57	63		
B	1	0.60		2.40	EP1 0.6	Ecoply®	57	63	258 OK	288 OK
	2	0.60		2.40	EP1 0.6	Ecoply®	57	63		
	3	1.20		2.40	EP1 1.2	Ecoply®	144	162		
C	1	1.80		2.40	GS1-N	GIB®	124	108	248 OK	216 OK
	2	1.80		2.40	GS1-N	GIB®	124	108		
D	1	1.20		2.40	EP1 1.2	Ecoply®	144	162	489 OK	549 OK
	2	1.20		2.40	EP1 1.2	Ecoply®	144	162		
	3	0.60		2.40	EP1 0.6	Ecoply®	57	63		
	4	1.20		2.40	EP1 1.2	Ecoply®	144	162		

Single Level Across Resistance Sheet

Job Name: DGS Builders Ltd.

Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Demand		Achieved	
							Wind	EQ	1215	1151
							(BUs)	(BUs)	120%	111%
M	1	0.60		2.40	EP1 0.6	Ecoply®	57	63	155 OK	167 OK
	2	0.70		2.40	GS1-N	GIB®	41	41		
	3	0.60		2.40	EP1 0.6	Ecoply®	57	63		
N	1	1.80		2.40	GS1-N	GIB®	124	108	248 OK	216 OK
	2	1.80		2.40	GS1-N	GIB®	124	108		
O	1	1.10		2.40	GS1-N	GIB®	74	66	322 OK	282 OK
	2	1.80		2.40	GS1-N	GIB®	124	108		
	3	1.80		2.40	GS1-N	GIB®	124	108		
P	1	1.80		2.40	GS1-N	GIB®	124	108	124 OK	108 OK
Q	1	1.80		2.40	GS1-N	GIB®	124	108	124 OK	108 OK
R	1	1.20		2.40	EP1 1.2	Ecoply®	144	162	241 OK	270 OK
	2	0.40		2.40	BLP-H	GIB®	48	54		
	3	0.40		2.40	BLP-H	GIB®	48	54		



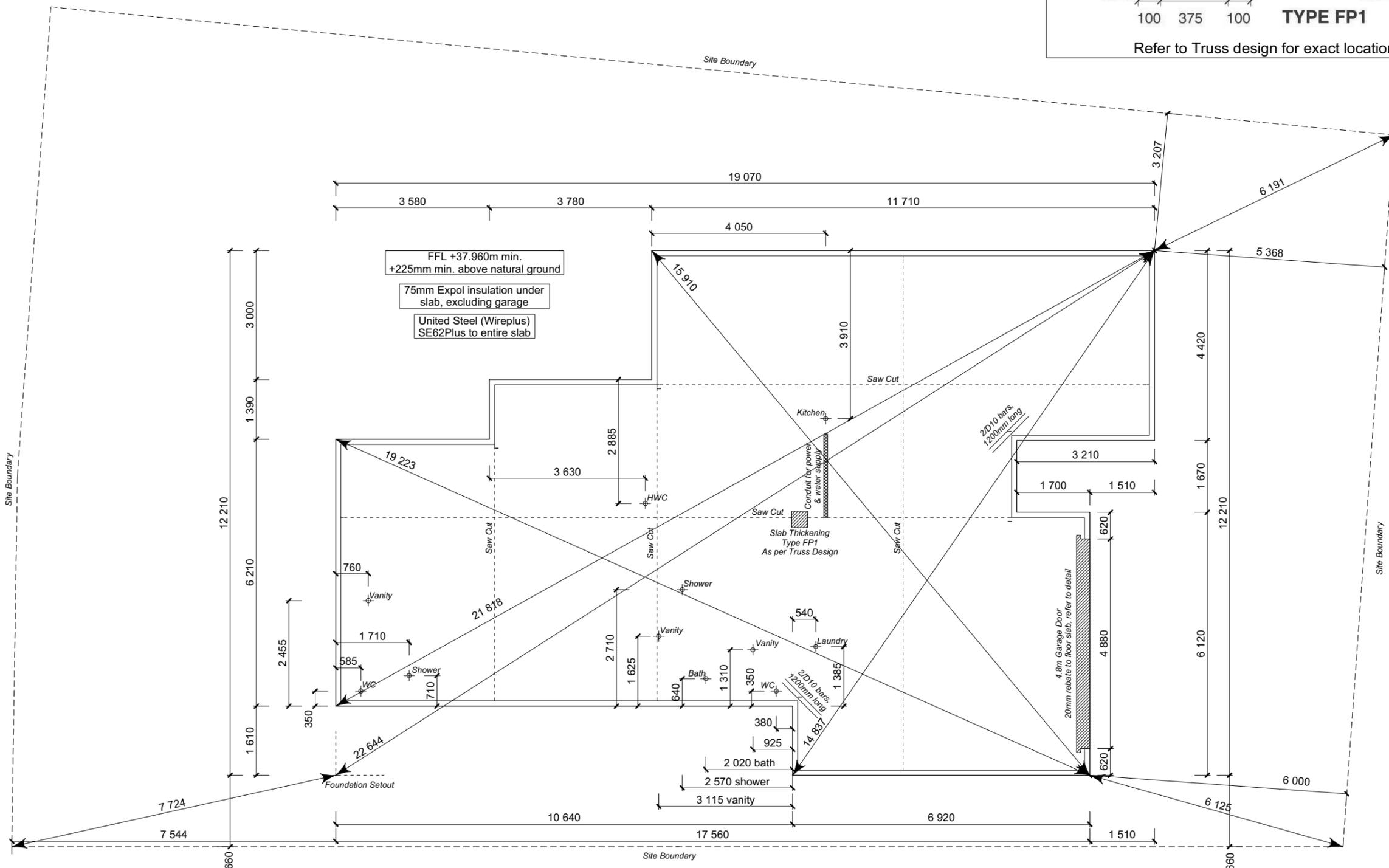
LEGEND	
Refer to Electrical Section in Specification for further details	
⊗	CA80 / CA135 Approved Down Light
⊖	Exterior Bulkhead Light
⊞	Extractor
Electrical Plan is indicative only and is to be confirmed onsite with electrician and client	

FOUNDATION PLAN NOTES

All dimensions over foundation face.
 W/C location indicated on plan has assumed a 140mm offset from internal frame line, please consult manufacturer's documentation to confirm offset.
 Contractor to consult manufacturer's documentation to determine the correct location for all wastes positioned through floor slabs.
 Earth bar to be bonded to the reinforcing mesh
 Refer to Truss design for exact location of slab thickenings

All reinforcing is to be Ductility Class E, in accordance with NZS 4671.
 All concrete to comply with NZS3604:2011 Section 4 Durability Clause 4.5.2.

Bearing reaction up to & including 20kN	TYPE FP1 375 x 375 PAD	TYPE FS1 300 STRIP THICKENING	STUD HEIGHT	NO. OF STUD UNDER TRUSS	MIN. TIMBER SIZE
			2400	2	90 x 35
			2700	2	90 x 45
			3000	3	90 x 45



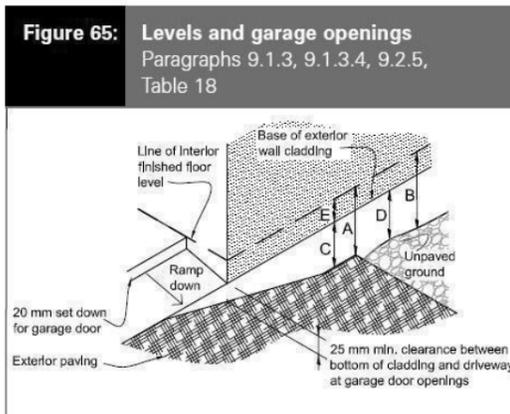
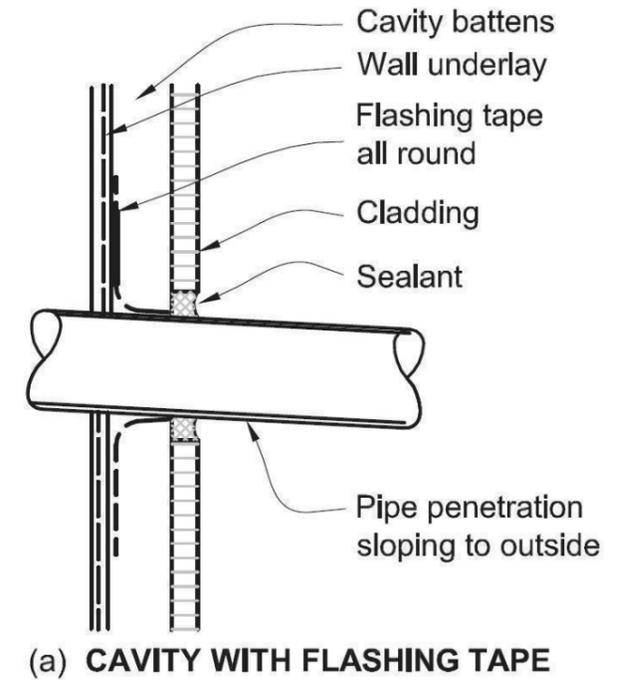
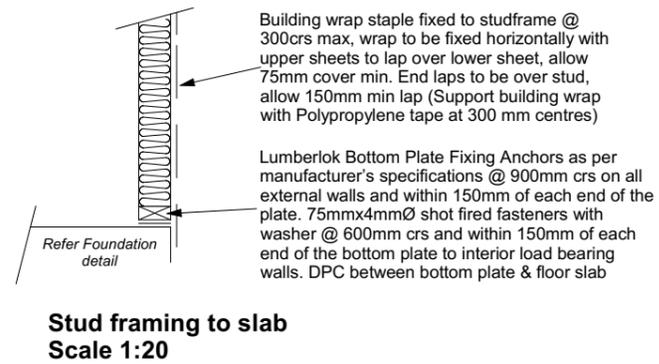
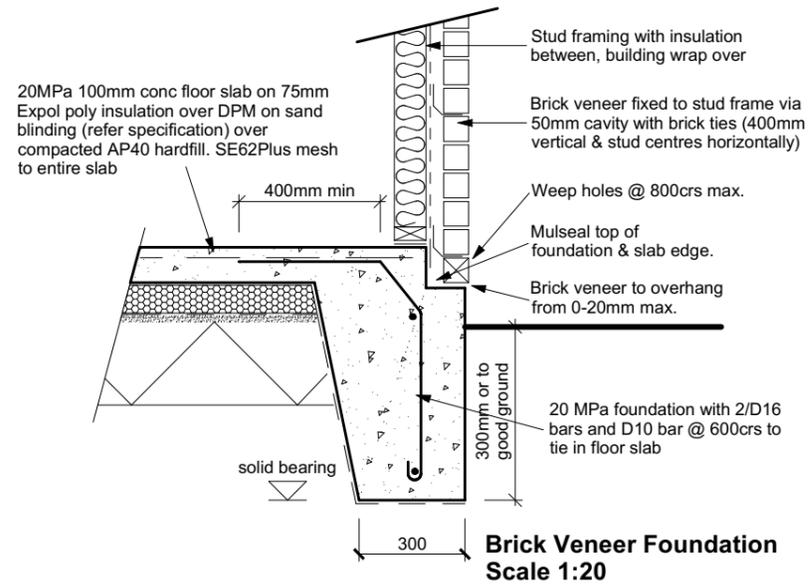
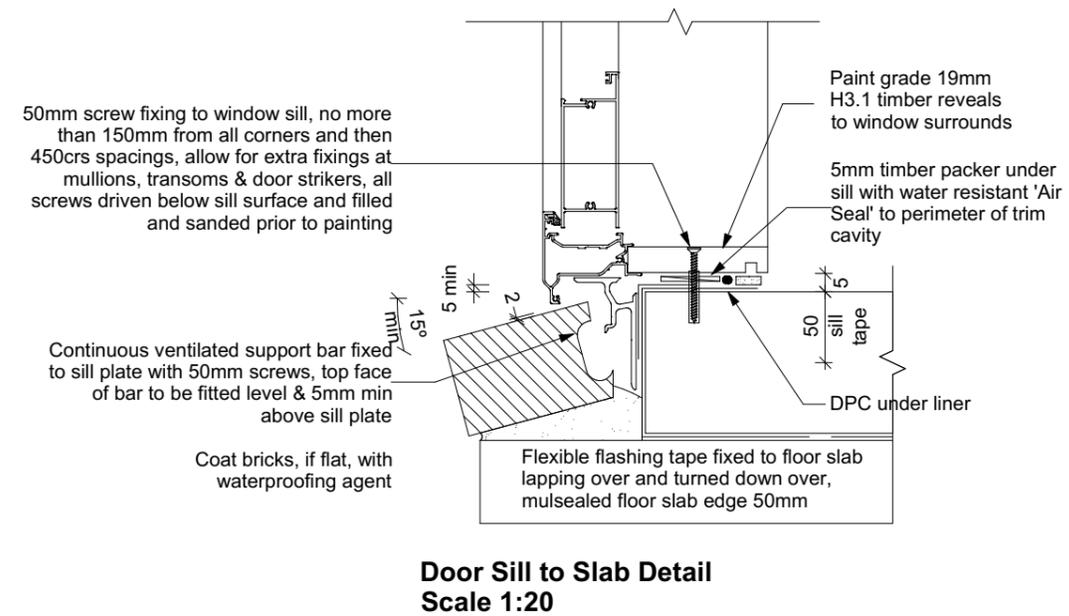
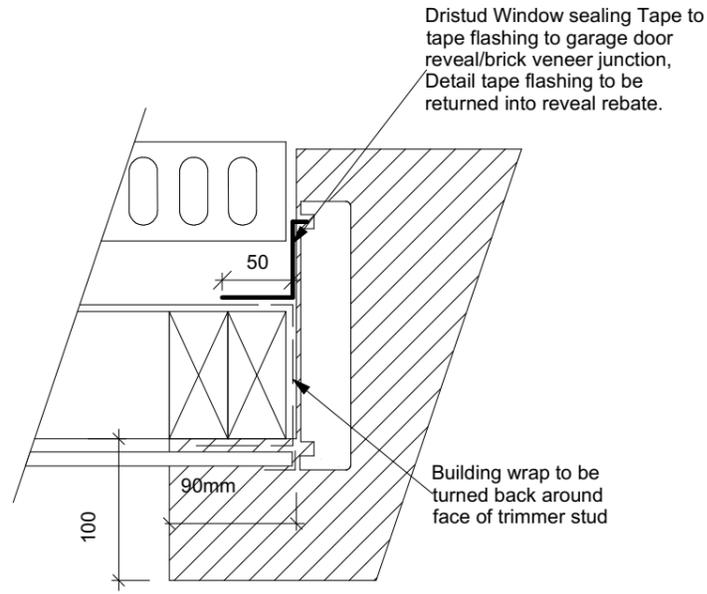


Table 18: Minimum clearances
Paragraphs 9.1.3, 9.1.3.1, 9.1.3.2, 9.1.3.3, 9.1.3.4, 9.1.3.5 and 9.2.7

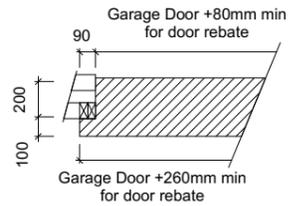
Minimum clearances (mm)	Masonry veneer		Other claddings				
	A	B	A	B	C	D	E
Concrete slab	100	150	150	225	100	175	50
Timber floor	Refer Note 1)		100	175	502)		

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

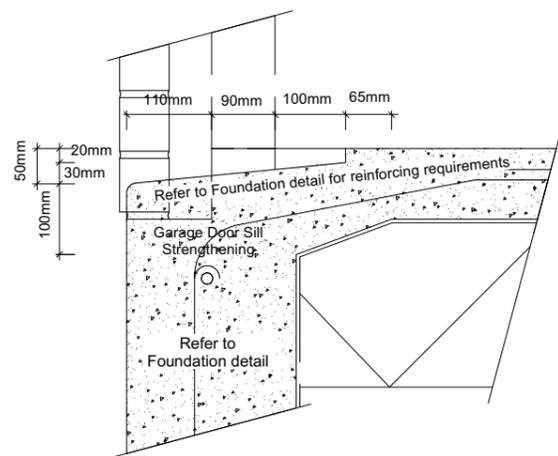




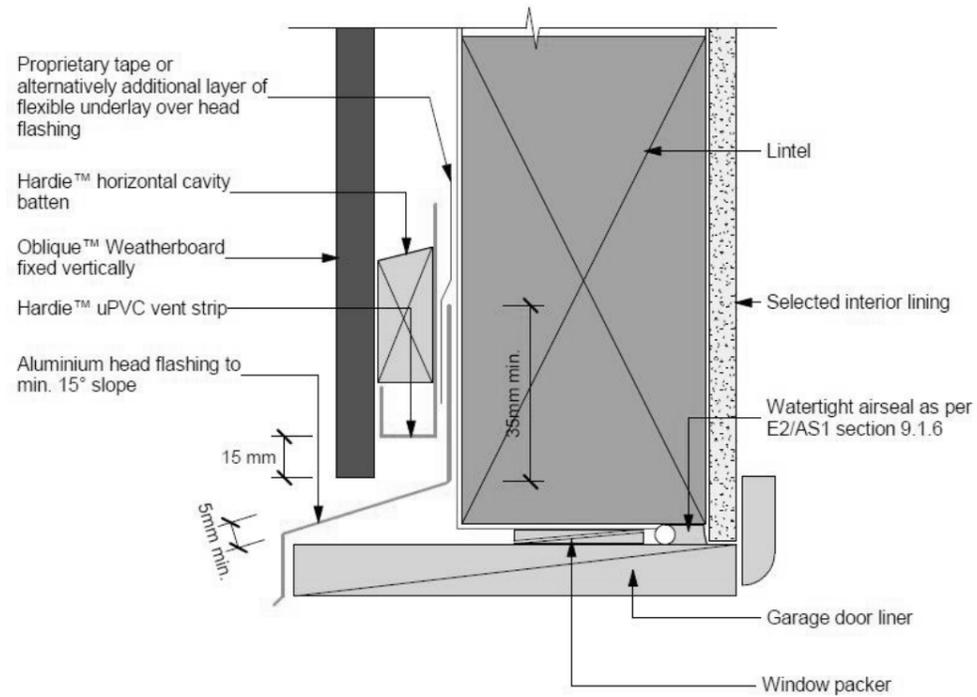
**Garage Door Jamb Detail
Scale 1:5**



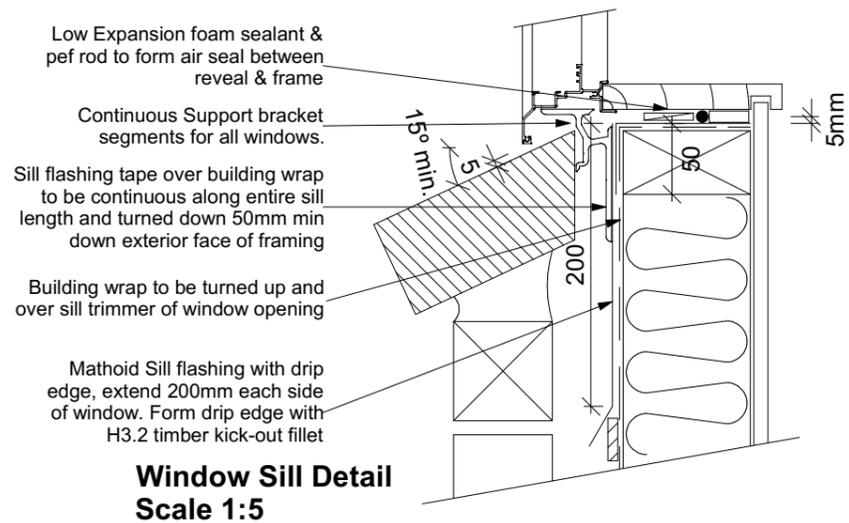
**Garage Door Rebate Details
Scale 1:10**



**Garage Door Rebate Details
Scale 1:10**



Note:
 • Sealant must be applied between head flashing and liner in VH and EH wind zones and SED wind pressures
 • Site cut edges to be primed



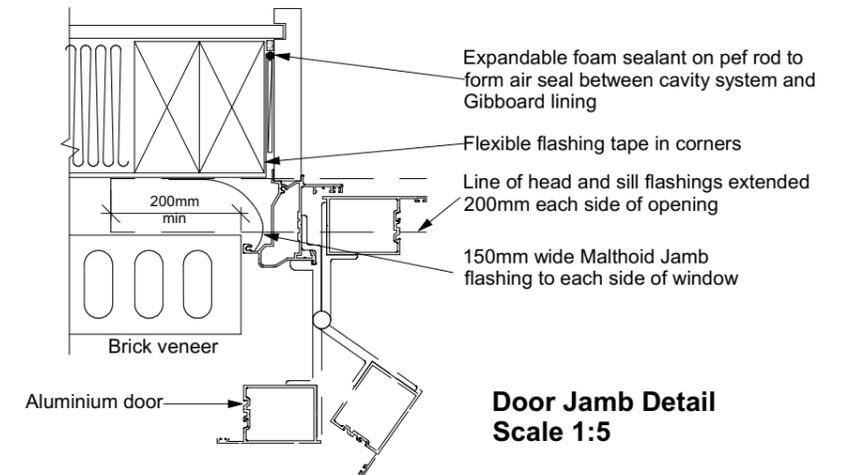
**Window Sill Detail
Scale 1:5**

9.1.10.8 Attachments for windows and doors

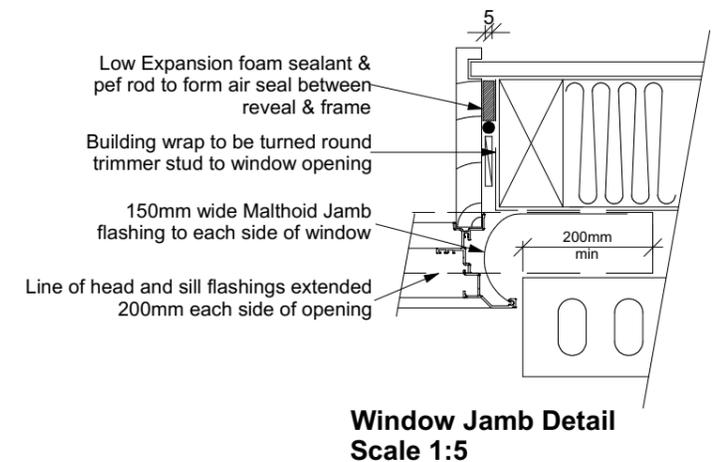
Install windows and doors using pairs of minimum 75 x 3.15 galvanised jolt head nails or 8 gauge x 65 mm stainless steel screws, through reveals into surrounding framing at:

- Maximum 450 mm centres along sills, jambs and heads, and
- Maximum 150 mm from reveal ends.

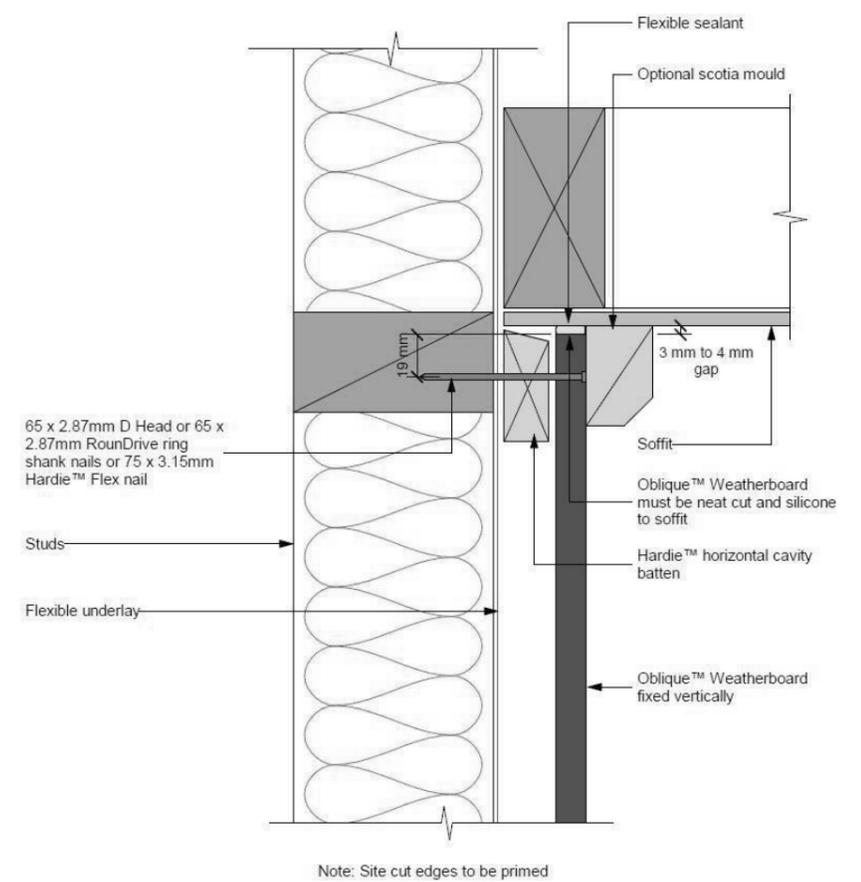
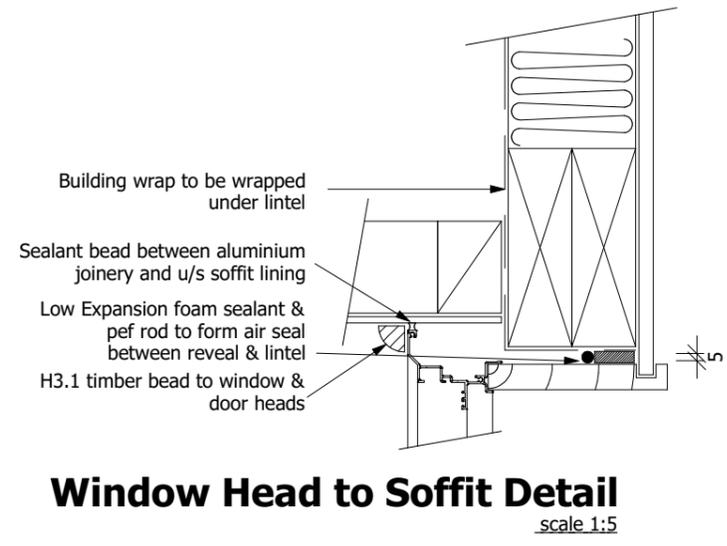
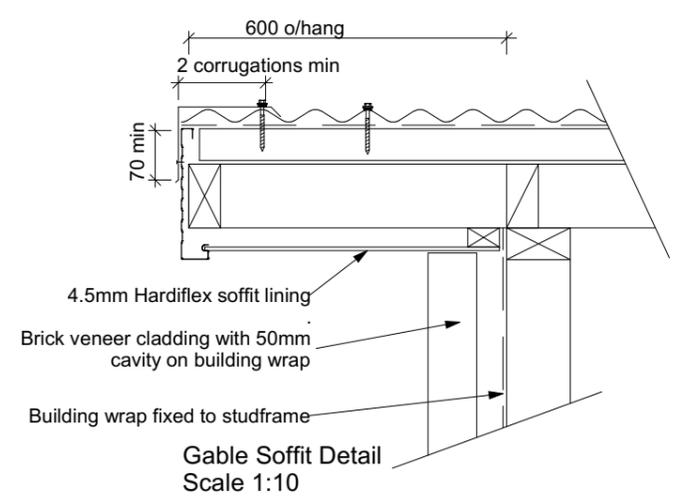
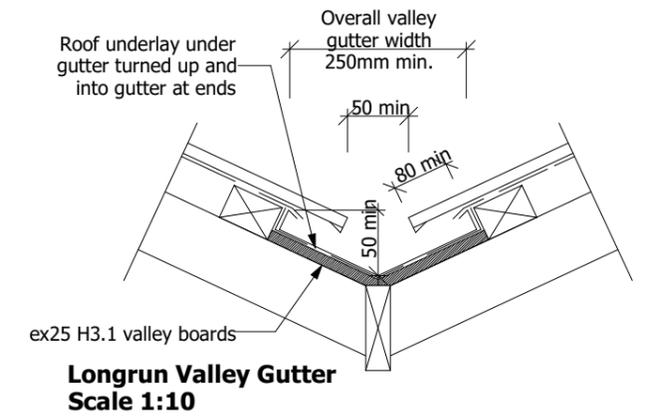
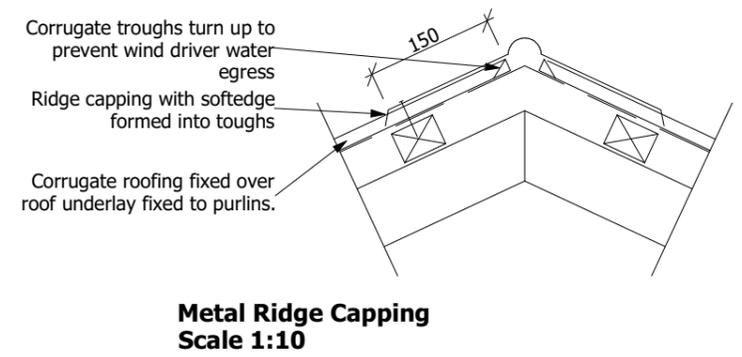
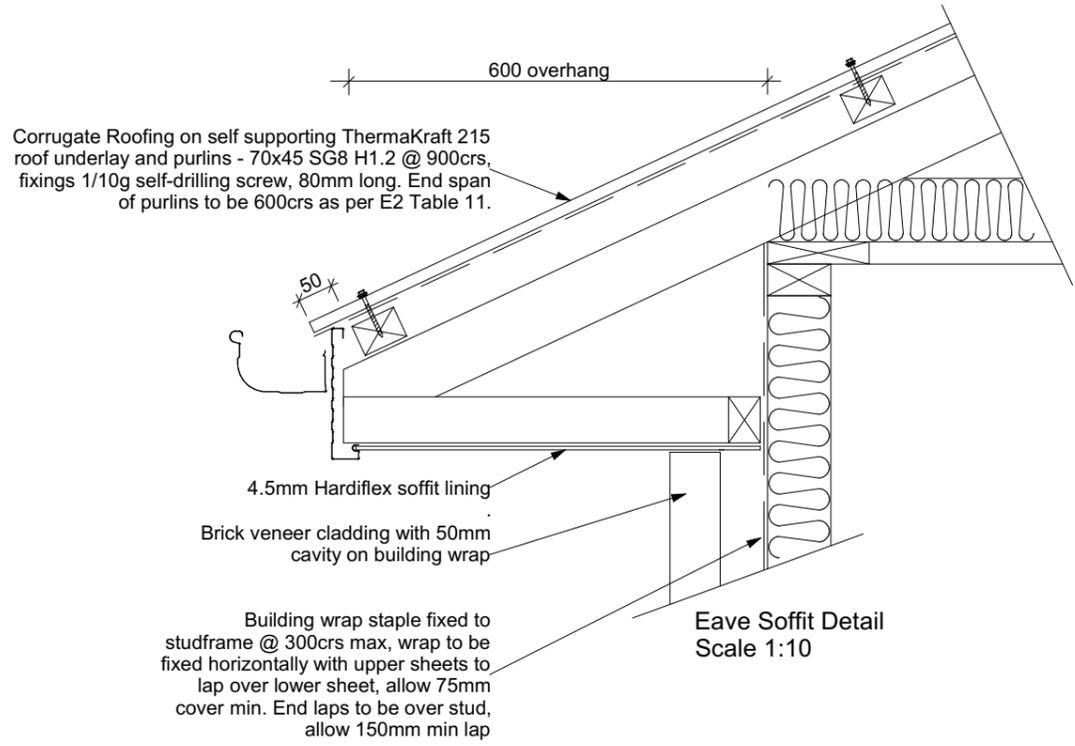
Install packers between reveals and framing at all fixing points, except between head reveals and lintels.

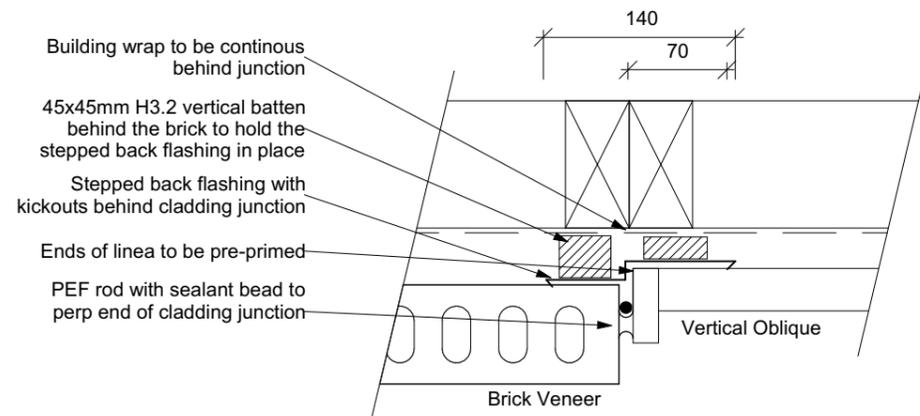


**Door Jamb Detail
Scale 1:5**



**Window Jamb Detail
Scale 1:5**





Brick / Linea Oblique Vertical Junction
Scale 1:5

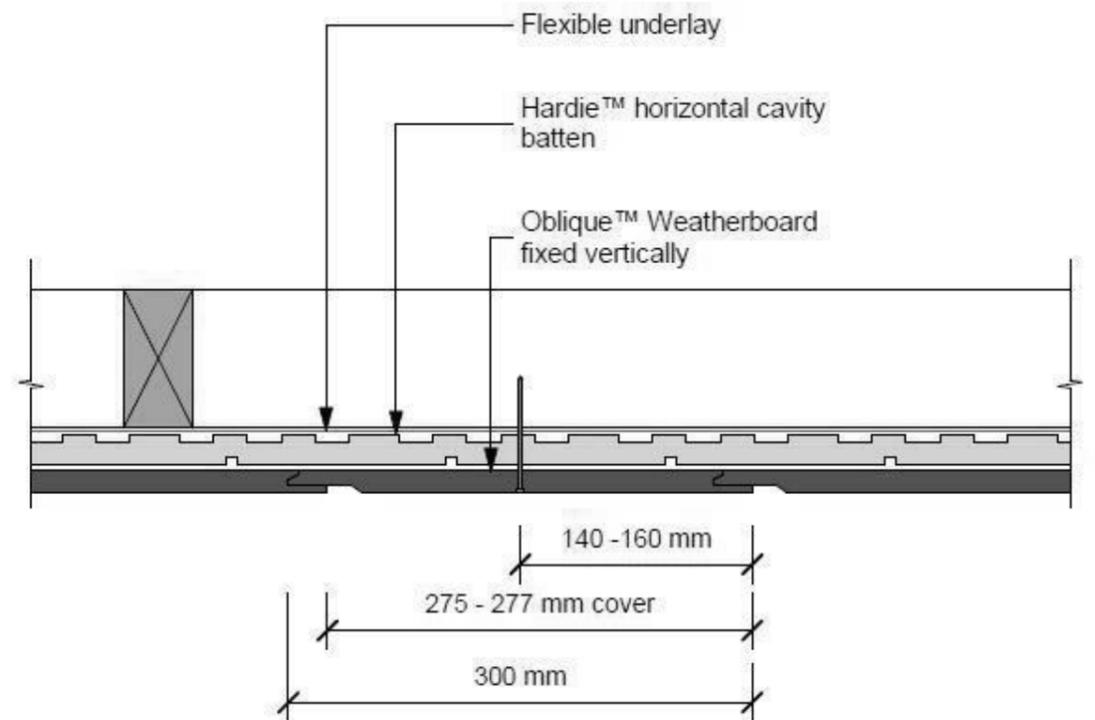
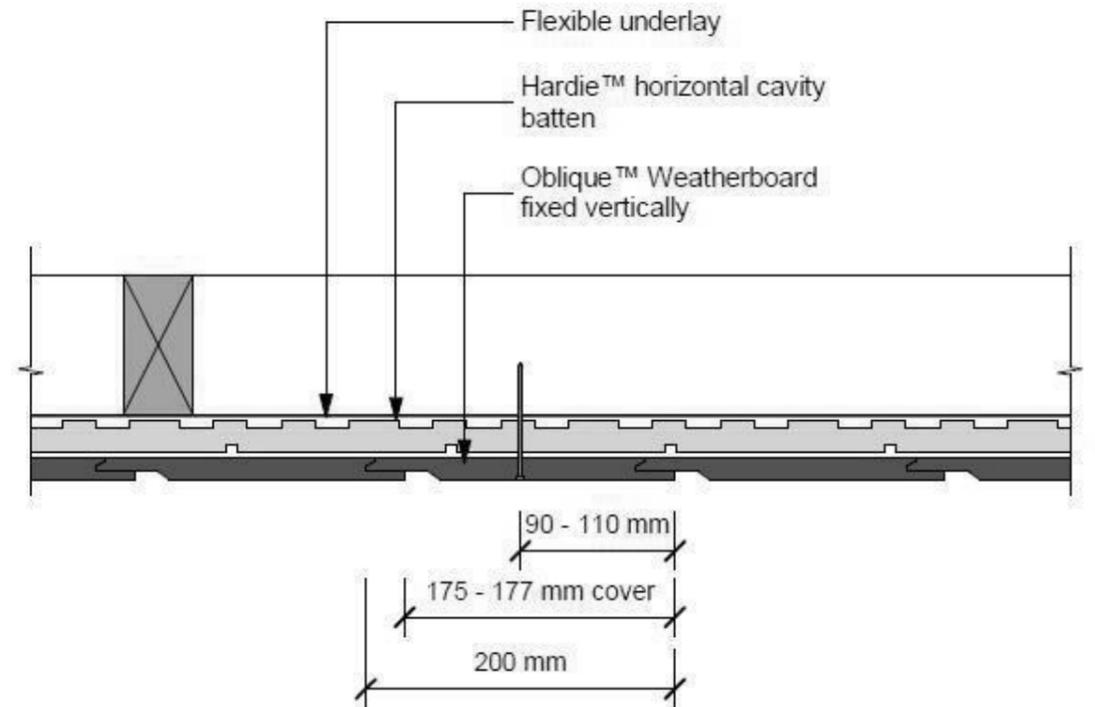
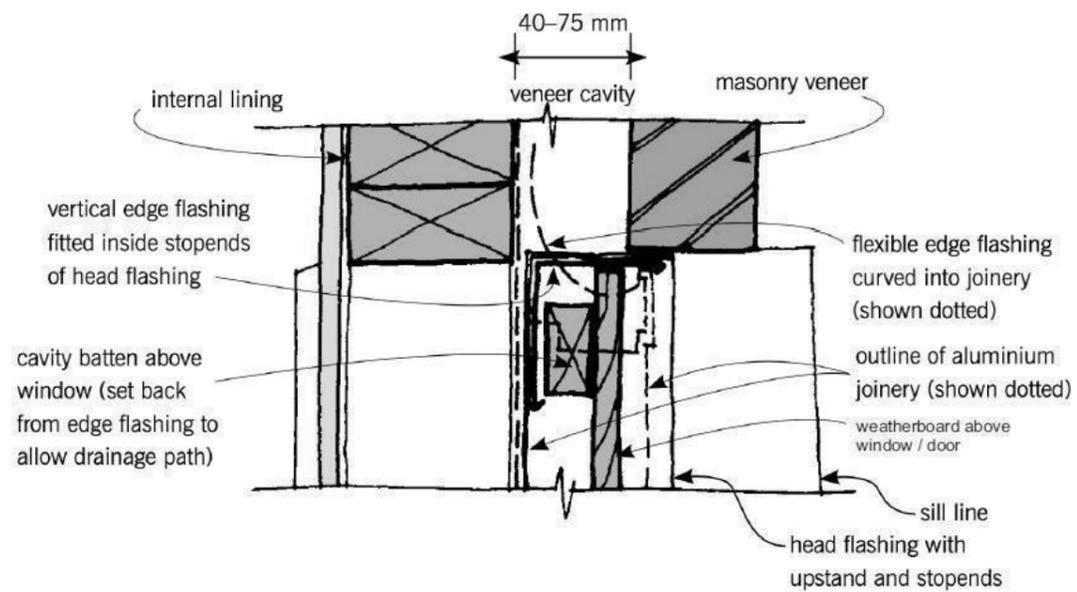
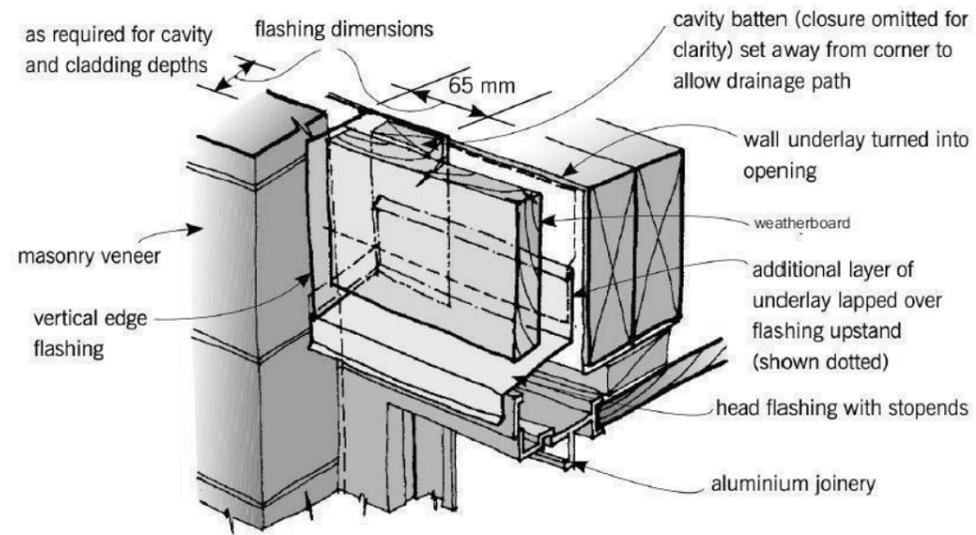


Figure 72B: General window and door opening with drainage cavity
 Paragraphs 9.1.5, 9.1.9.3, 9.1.10.2, Figures 73C, 76, 85, 86, 91, 99, 116 and 128

NOTE:

- (1) Detailed *cladding* omitted for clarity, refer to specific *claddings*.
- (2) Head to be treated similarly with continuous *wall underlay* and *flexible tape* at corners.
- (3) Refer individual cladding details for jamb flashings.

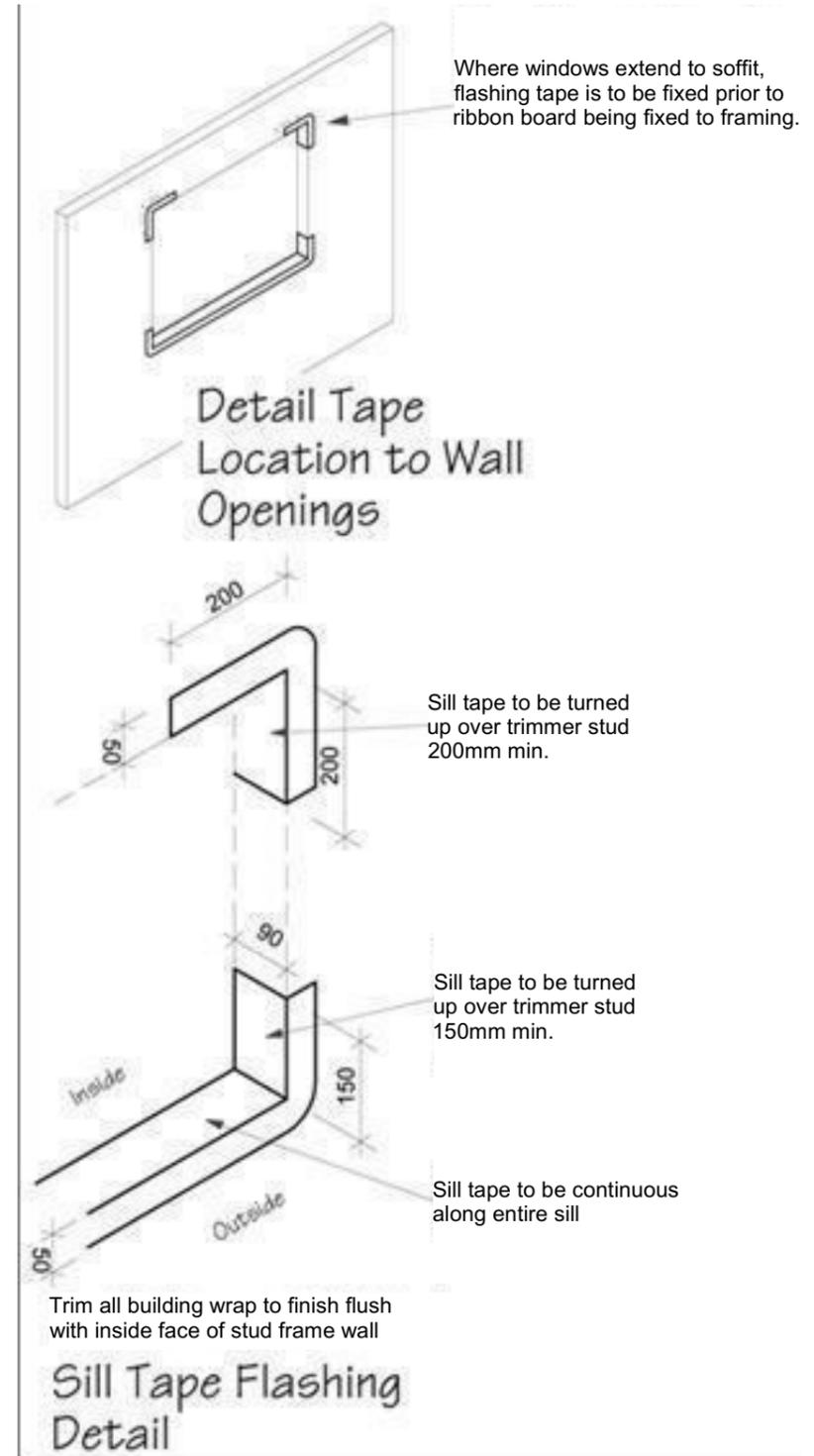
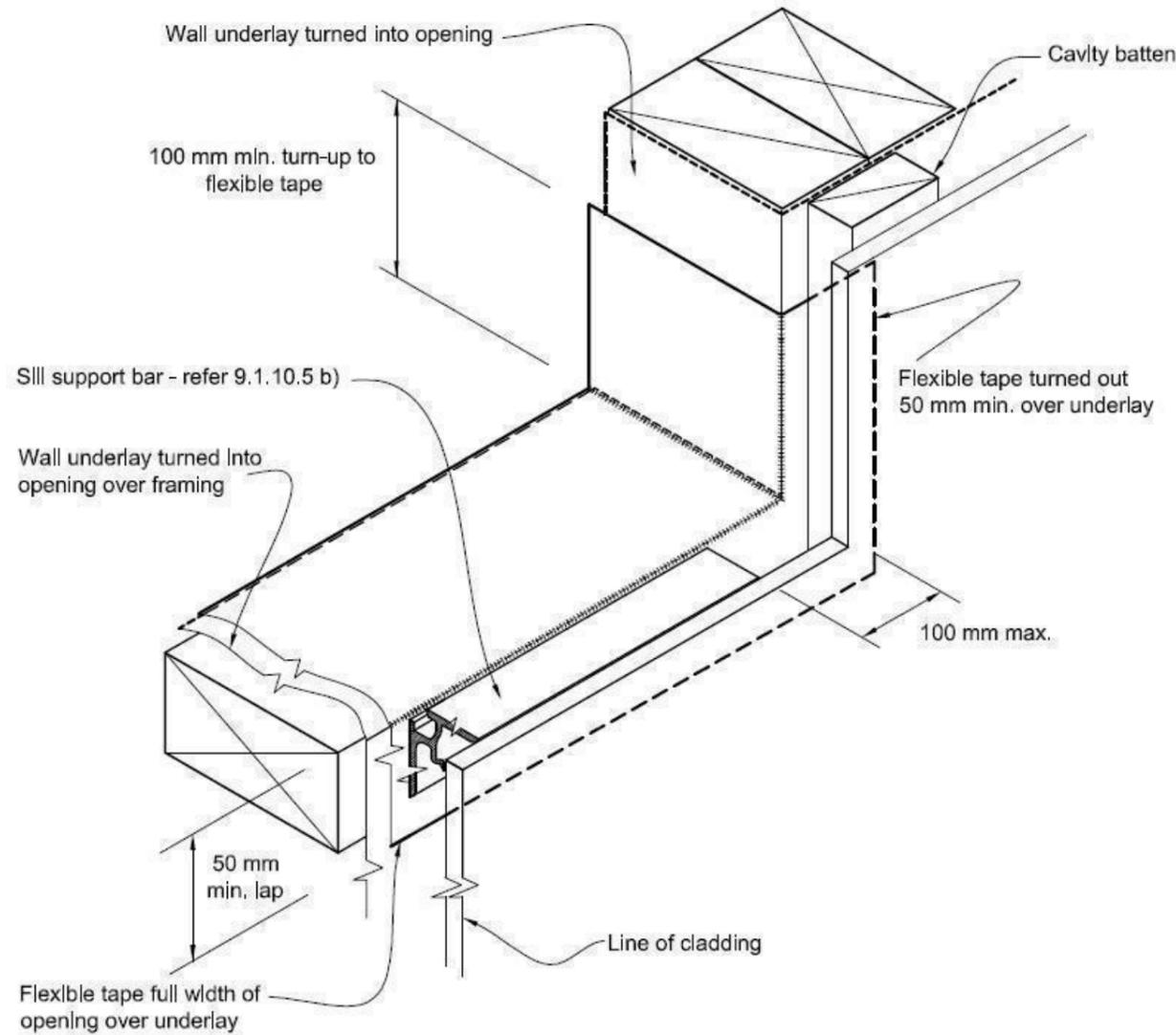
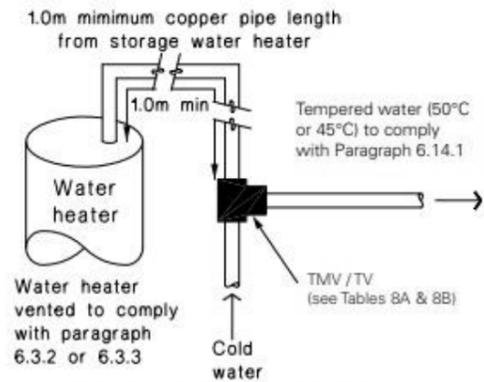
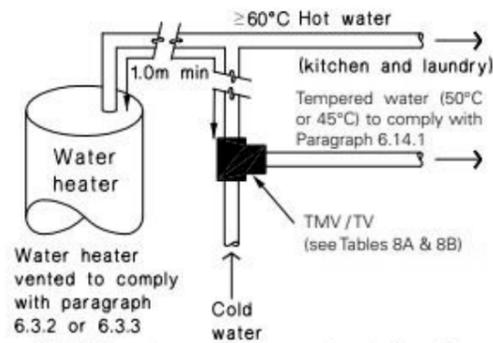


Figure 16: Tempering Valve or Thermostatic mixing Valve Installation
Tables 8A and 8B



(a) Where all hot water is tempered



(b) With untempered hot water to laundry and kitchen fixtures and appliances

Notes:

1. For optimum system efficiency the temperature control device, for other than a mains pressure system, may be located as low as practicable to achieve the manufacturer's recommended head, at the temperature control device.
2. 1.0 m minimum copper pipe length from storage water heater to temperature control device.
3. Untempered hot water must not be provided to fixtures or appliances from a storage water heater that is connected to an uncontrolled heat source, such as a wet-back or solar water heater.

Figure 8(b): Mains Pressure Storage Water Heater System (unvented) - Expansion Control Valve
Paragraphs 6.1.2 and 6.2.1 c)

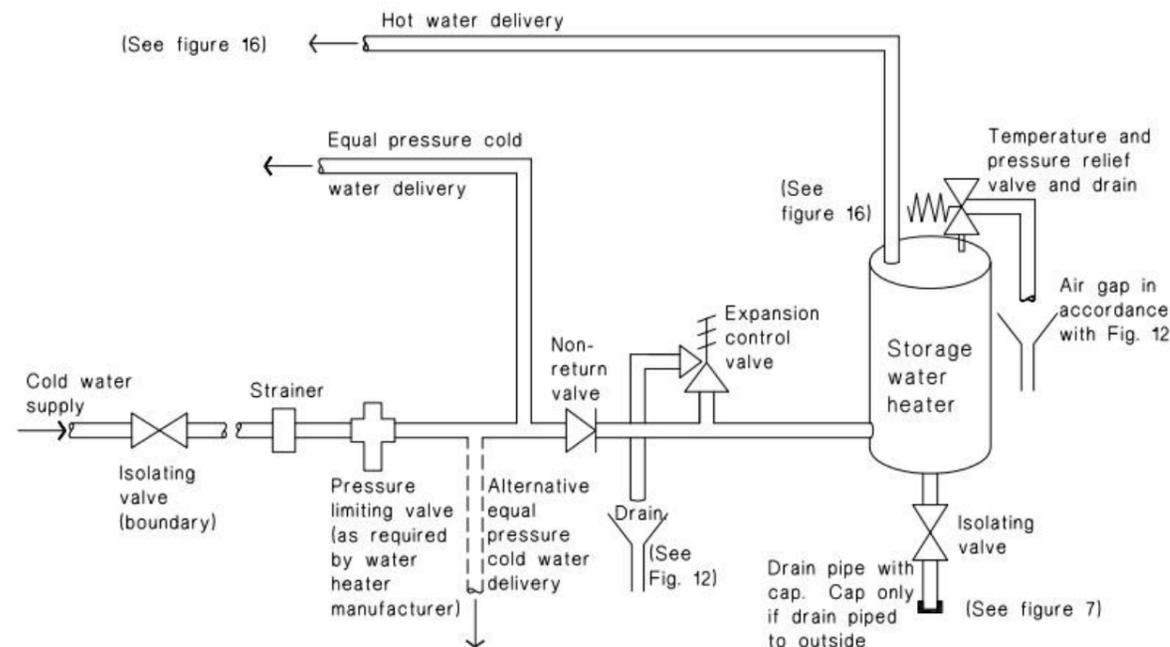
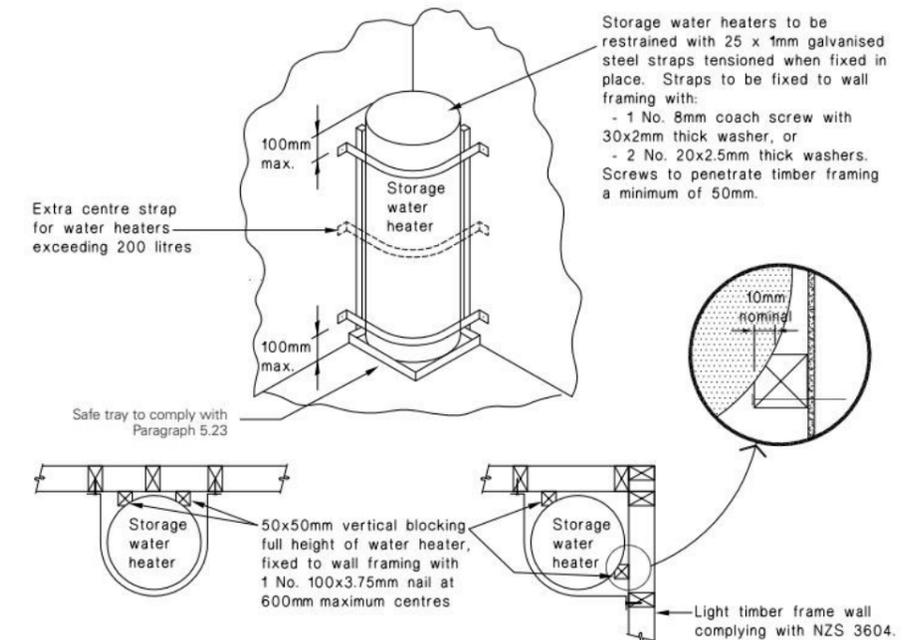


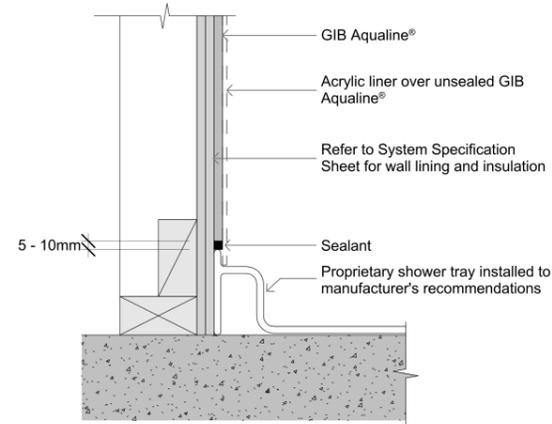
Figure 14: Seismic Restraint of Storage Water Heaters 90 – 360 litres
Paragraph 6.11.4



Notes:

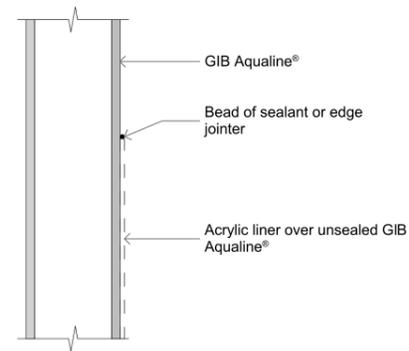
1. An additional centre strap is required where a storage water heater is located more than 12 m above finished ground level.
2. Additional timber framing may be required in retrofit situations to ensure adequate strap fixing is available.
3. Straps shall not be installed where they clash with water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

A: MOULDED SHOWER TRAY DOUBLE LINING JUNCTION



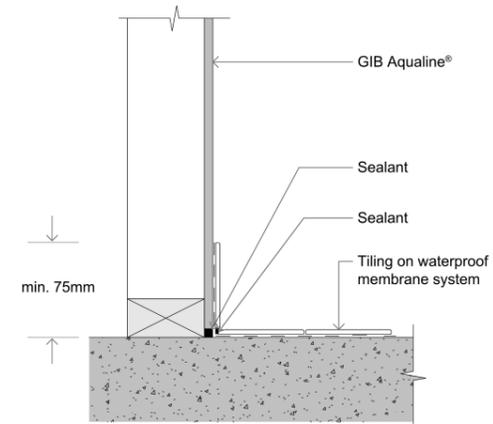
GAL-015

C: UNSEALED PLASTERBOARD LINING



GAL-028

B: CERAMIC FLOOR SKIRTING LINING JUNCTION



GAL-001

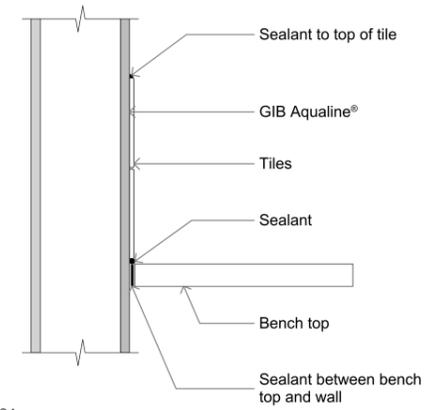
D: SHOWER MIXER PENETRATION IN WET WALL LININGS

Refer to the shower mixer manufacturer for shower mixer installation detailing including the use of proprietary products to prevent water or moisture ingress behind the wet wall lining.



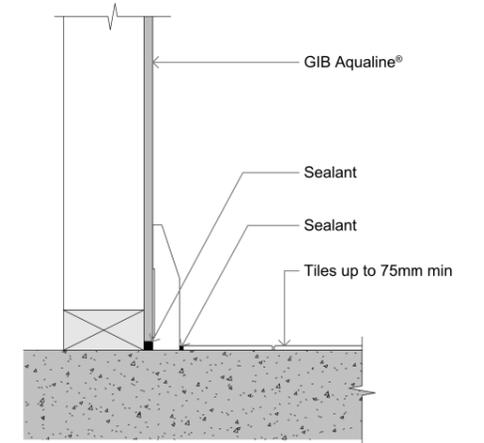


A: BENCH TOP LINING JUNCTION



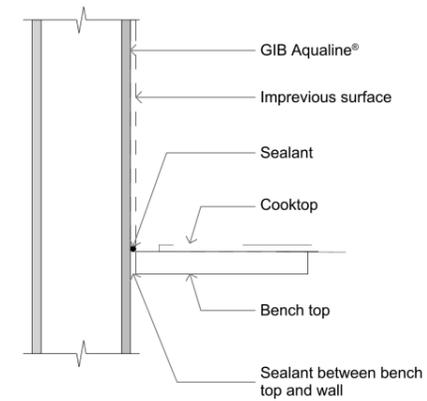
GAL-024

CERAMIC FLOOR SKIRTING LINING JUNCTION



GAL-001A

B: COOKTOP LINING JUNCTION



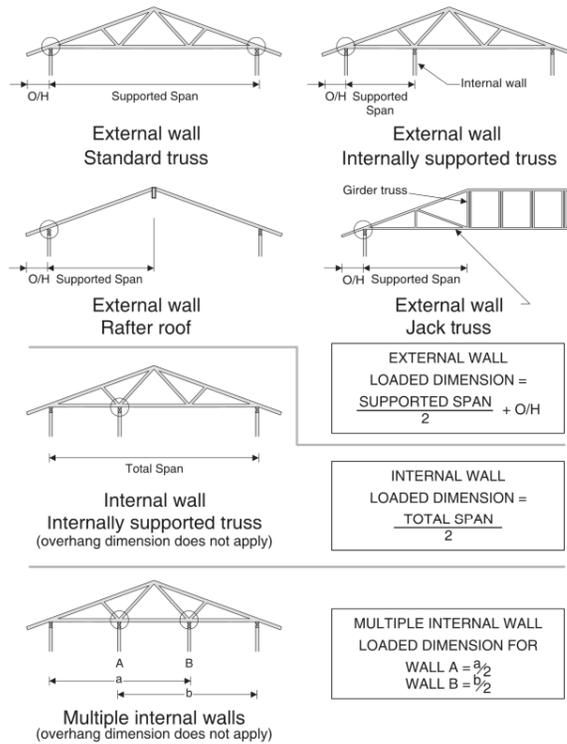
GAL-023B

STUD TO TOP PLATE FIXING SCHEDULE ALTERNATIVE TO TABLE 8.18 NZS 3604:2011

NOTE:

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

LOADED DIMENSION DEFINITION



FIXING SELECTION CHART

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

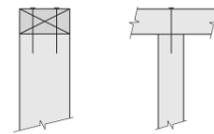
Wind Zones L, M, H, VH, EH, as per NZS 3604:2011

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

FIXING OPTIONS

FIXING TYPE A 0.7 kN

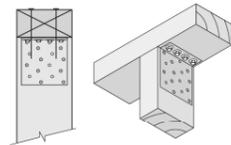
2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



FIXING TYPE B 4.7 kN

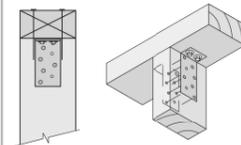
CHOOSE ANY OF THE 3 OPTIONS BELOW

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



Plus LUMBERLOK 6kN Stud Anchor (CPC80)

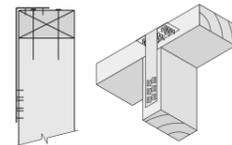
2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus 2 x LUMBERLOK CPC40

Recommended for internal wall options to avoid lining issues

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

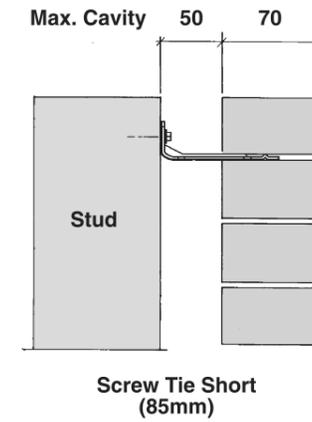


Plus LUMBERLOK Stud Strap (one face only)

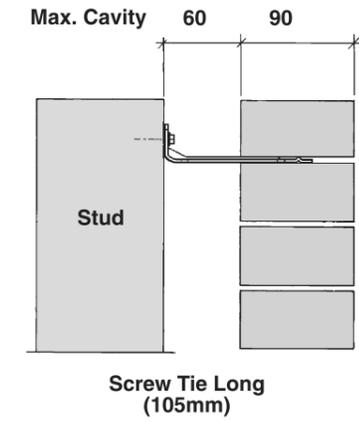
Note:

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

70 SERIES BRICK



90 SERIES BRICK



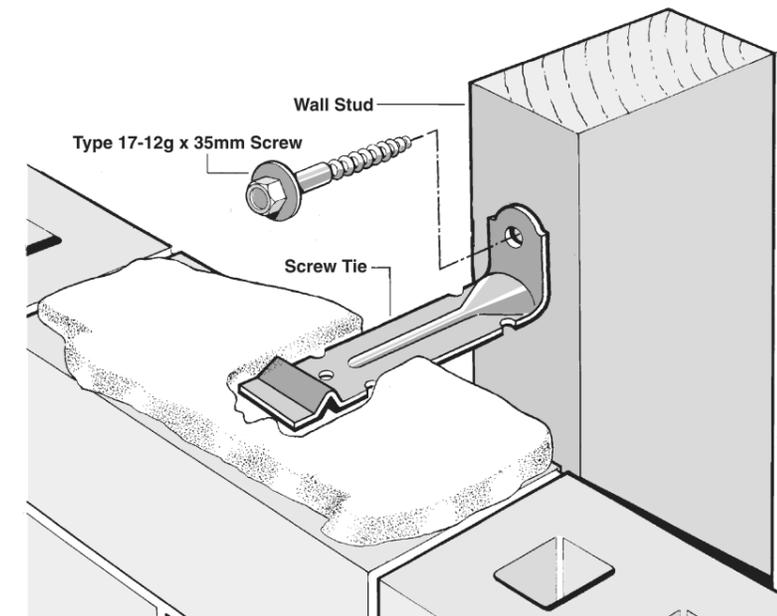
- ★ All brick work must be constructed in accordance with NZS 4210:2001 Masonry Construction: Materials and Workmanship. Screw Ties must be applied accordingly and are not to be hammered into timber framing.
- ★ Water shedding shoulder prevents transfer of the moisture from tie to building.
- ★ Nail hole for Oamaru Stone.
- ★ Angled neck encourages increased tie embedment in mortar.

Material: 1.2mm NZCC-SD Hot Dip Galvanised Steel
Screws: Type 17-12g x 35mm Hex Head Hot Dip Galvanised Screws
Packaging: 250 ties per box including screws

Also available in Stainless Steel Grade 316 for Zone D.

SCREW TIES FOR BRICK VENEER FIXING

- ★ Medium duty (EM) classification
- ★ Tested by BRANZ in accordance with AS/NZS 2699.1:2000
- ★ BRANZ test report No. ST0725 November 2007
- ★ Suitable for both 'dry bedding' and encapsulated mortar
- ★ Hot Dip Galvanised ties for Zones B & C, and Stainless Steel Grade 316 ties for Zone D meet NZS 3604:2011 Sect. 4 Durability
- ★ Available in 85mm and 105mm sizes



New Residence for :
DGS Builders Ltd.
Lot 279
Vista Crescent
Falcons Landing, Rolleston

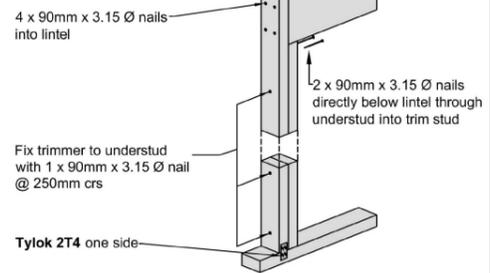
FRAMING DETAILS

6/08/2025

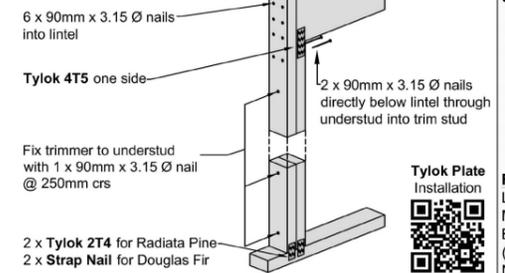
NTS (@ A3)

LUMBERLOK® LINTEL FIXING OPTIONS

TYPE E 1.4 kN



TYPE F 4.0 kN

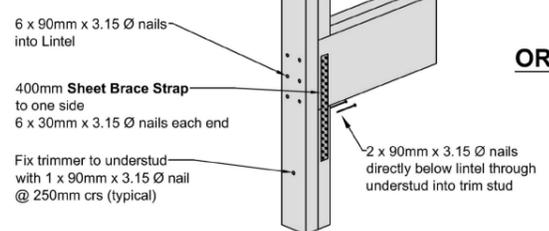


NOTES:

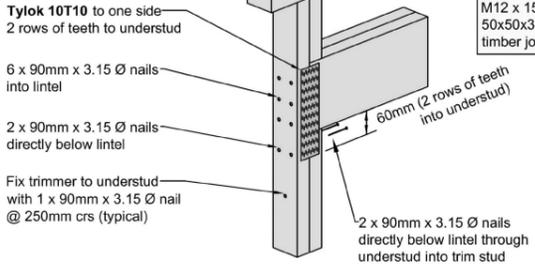
- For fixing of jack studs to lintel and top plate, refer to **Stud to Top Plate Fixing Schedule**
- Stud numbers indicative only. Refer to Table 8.5 NZS 3604:2011**

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

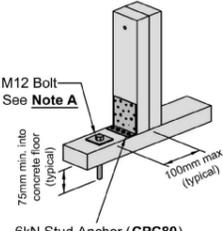
TYPE G 7.5 kN



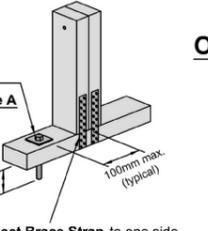
OR



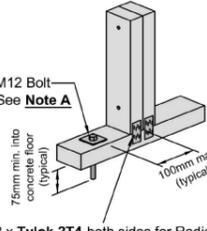
Note A:
M12 proprietary concrete fixing bolt with 50x50x3mm square washer
or
M12 x 150mm coach screw with 50x50x3mm square washer into timber joist/bearer



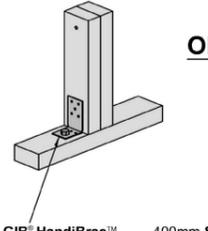
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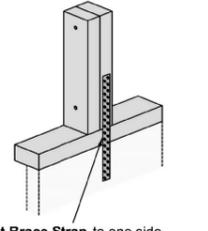
OR



OR



OR



6kN Stud Anchor (CPC80)

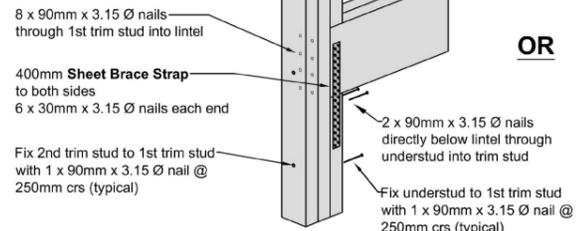
2 x 200mm Sheet Brace Strap to one side. Each Strap to have 3 x 30mm x 3.15 Ø nails into stud & 3 x 30mm x 3.15 Ø nails into bottom plate

2 x Tylok 2T4 both sides for Radiata Pine
2 x Strap Nail both sides for Douglas Fir

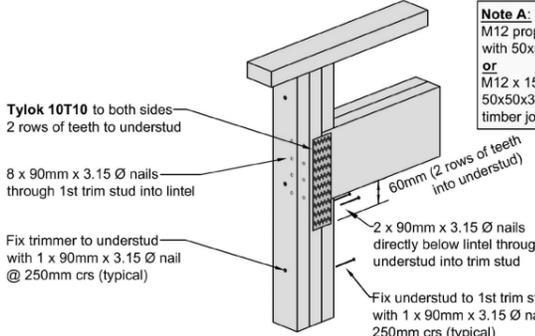
GIB® HandiBrac™

400mm Sheet Brace Strap to one side. 6 x 30mm x 3.15 Ø nails into stud. 3 x 30mm x 3.15 Ø nails into bottom plate. 6 x 30mm x 3.15 Ø nails into timber joist/bearer

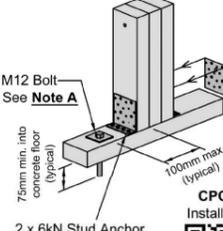
TYPE H 13.5 kN



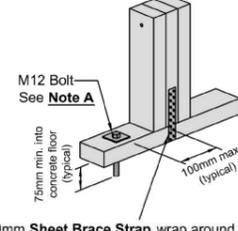
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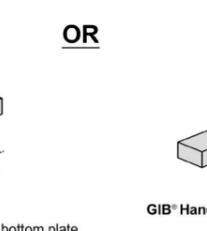
Note A:
M12 proprietary concrete fixing bolt with 50x50x3mm square washer
or
M12 x 150mm coach screw with 50x50x3mm square washer into timber joist/bearer



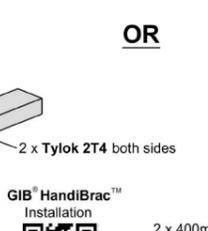
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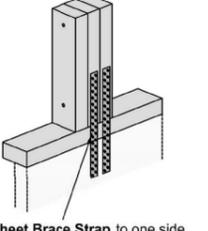
OR



OR



OR



2 x 6kN Stud Anchor (CPC80)

400mm Sheet Brace Strap wrap around bottom plate and up the other side. 6 x 30mm x 3.15 Ø nails into each side of stud. 3 x 30mm x 3.15 Ø nails into each side of bottom plate.

2 x Tylok 2T4 both sides

GIB® HandiBrac™ Installation

2 x 400mm Sheet Brace Strap to one side. 6 x 30mm x 3.15 Ø nails into stud. 3 x 30mm x 3.15 Ø nails into bottom plate. 6 x 30mm x 3.15 Ø nails into timber joist/bearer

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

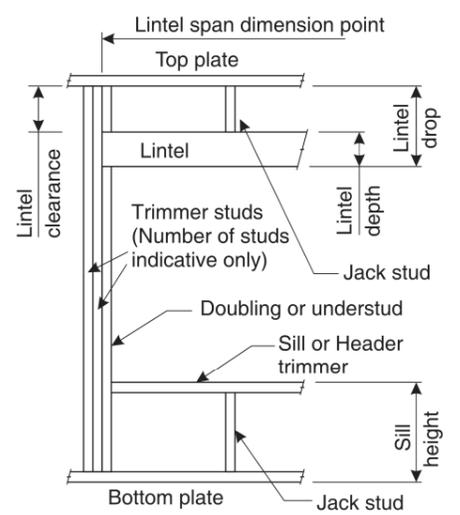
NOTE:

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

SELECTION CHART FOR LINTEL FIXING

Lintel Span	Loaded Dimension (See Fig. 1.3 NZS 3604:2011)	Light Roof					Heavy Roof				
		Wind Zone					Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
0.7	2.0	E	E	E	E	F	E	E	E	E	F
	3.0	E	E	E	F	F	E	E	E	E	F
	4.0	E	E	F	F	F	E	E	E	F	F
	5.0	E	F	F	F	G	E	E	F	F	F
	6.0	E	F	F	G	G	E	E	F	F	G
0.9	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	E	F	F	F	E	E	F	F	F
	5.0	E	F	F	F	G	E	E	F	F	F
	6.0	E	F	F	G	G	E	E	F	F	G
1.0	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	F	F	F	G	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	F
	6.0	E	F	F	G	G	E	E	F	F	G
1.2	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	F	G	E	E	F	F	G
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	F	F	G	G	H	E	E	F	G	G
1.5	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	F	F	F	G	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	F	F	G	G	H	E	E	F	G	G
	6.0	F	F	G	H	H	E	E	F	G	H
2.0	2.0	E	F	F	F	G	E	E	F	F	F
	3.0	E	F	F	G	G	E	E	F	F	G
	4.0	F	F	G	G	H	E	E	F	G	G
	5.0	F	F	G	H	H	E	E	F	G	H
	6.0	F	G	G	H	H	E	E	F	G	H
2.4	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	G	H	E	E	F	G	G
	4.0	F	F	G	H	H	E	E	F	G	H
	5.0	F	G	G	H	H	E	E	F	G	H
	6.0	F	G	H	H	-	E	E	F	G	H
3.0	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	G	H	H	E	E	F	G	H
	5.0	F	G	H	H	-	E	E	F	G	H
	6.0	F	G	H	-	-	E	E	F	G	H
3.6	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	H	H	-	E	E	F	G	H
	5.0	F	G	H	-	-	E	E	F	G	H
	6.0	G	H	H	-	-	E	E	F	H	-
4.2	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	G	H	H	-	E	E	F	G	H
	4.0	F	G	H	-	-	E	E	F	G	H
	5.0	G	H	H	-	-	E	E	F	H	-
	6.0	G	H	-	-	-	E	E	F	H	-
4.5	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	E	F	G	H
	3.4	F	G	H	H	-	E	E	F	G	H
	4.0	F	G	H	-	-	E	E	F	G	H
	5.0	G	H	-	-	-	E	E	F	H	-
6.0	G	H	-	-	-	E	E	F	H	-	
4.8	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	E	F	G	H
	3.2	F	G	H	H	-	F	F	G	H	-
	4.0	F	G	H	-	-	E	E	F	H	-
	5.0	G	H	-	-	-	E	E	F	H	-
6.0	G	H	-	-	-	E	E	F	H	-	

DEFINITIONS



Lintel Supporting Girder Trusses:

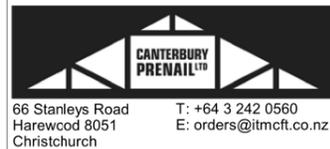
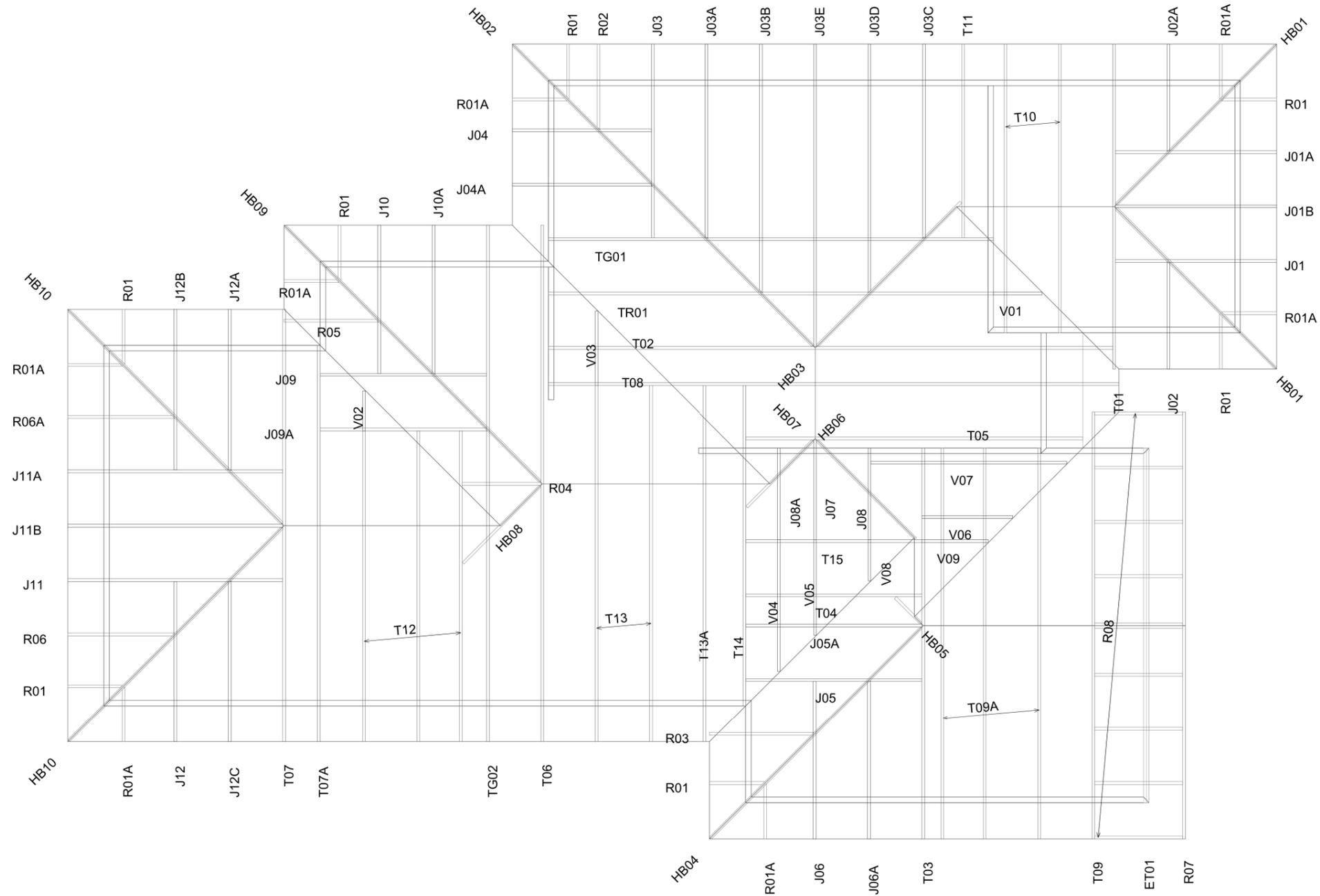
Roof Tributary Area	Light Roof					Heavy Roof				
	Wind Zone					Wind Zone				
	L	M	H	VH	EH	L	M	H	VH	EH
8.6 m ²	G	G	H	G	G	H				
11.6 m ²	G	H	H	G	G	H				
12.1 m ²	G	H	H	G	H	H				
15.3 m ²	H	H	-	G	H	H				
19.1 m ²	H	-	-	G	H	-				
20.9 m ²	H	-	-	H	H	-				
21.8 m ²	H	-	-	H	-	-				
34.3 m ²	-	-	-	H	-	-				

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

New Residence for :
DGS Builders Ltd.
Lot 279
Vista Crescent
Falcons Landing, Rolleston

FRAMING DETAILS

6/08/2025 NTS (@ A3)



Site Address :
JDM Developments
Lot 279 Falcons Landing
Rolleston

Sheet Title :
For Building Consent
Buildable Truss Layout

Date : 4 Jul, 2025 Drawn : Eric Finn
 Scale : NTS System : MiTek 20/20

Job Details:
 Roof Pitch : 25.00deg
 Roof Material : Galv Iron .5mm
 Ceiling Material : Metal battens fixed to BC
 Wind Zone : High
 Roof Snow Load : 0.441kPa

Truss Centres : 900mm
 Roof Live Load : 0.250kPa
 Floor Live Load :
 Wind Speed : 44m/s
 Overhang : 600mm



Job Title :
254519PS
 Sheet :
1
 Revision Number :

PrimeCad v4.7.346

New Residence for :
DGS Builders Ltd.
Lot 279
Vista Crescent
Falcons Landing, Rolleston

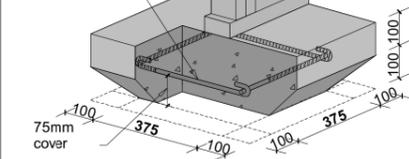
TRUSS DESIGN

6/08/2025 NTS (@ A3)

SLAB THICKENING & STUD REQUIREMENTS

TYPE FP1 375mm² Pad

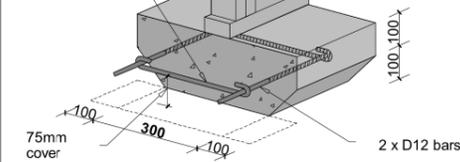
2 x D12 Bars
both ways



2 3

TYPE FS1 300mm Strip

R10 bars @
600 crs



2 3

Notes:

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

Refer to:

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

Concrete Slab Thickening Guide

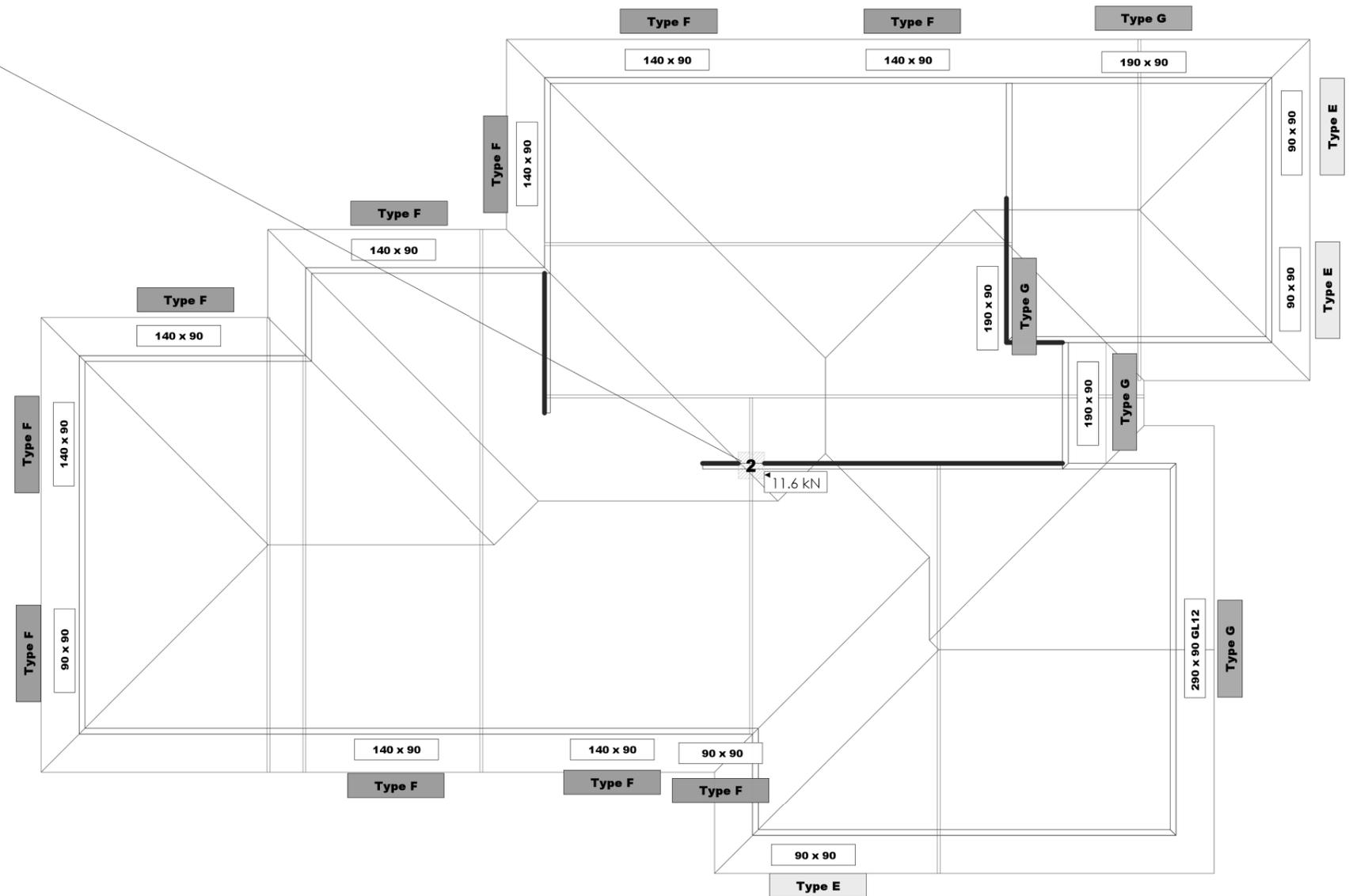


Internal Loadbearing

Internal Loadbearing Walls with floor loads less than 8kN not requiring thickening

LINTELS SIZED USING
MITEK GANGLAM CHARTS 2008
AND MITEK BEAM

All lintels are GL8 unless otherwise specified
All 90x90 lintels are 2/90x45 SG8



Site Address :
JDM Developments
Lot 279 Falcons Landing
Rolleston

Sheet Title :
**For Building Consent
Slab Thickening**

Date : 4 Jul,2025 Drawn : Eric Finn
Scale : NTS System : MiTek 20/20

Job Details:
Roof Pitch : 25.00deg
Roof Material : Galv Iron .5mm
Ceiling Material : Metal battens fixed to BC
Wind Zone : High
Roof Snow Load: 0.441kPa

Truss Centres : 900mm
Roof Live Load : 0.250kPa
Floor Live Load :
Wind Speed : 44m/s
Overhang : 600mm



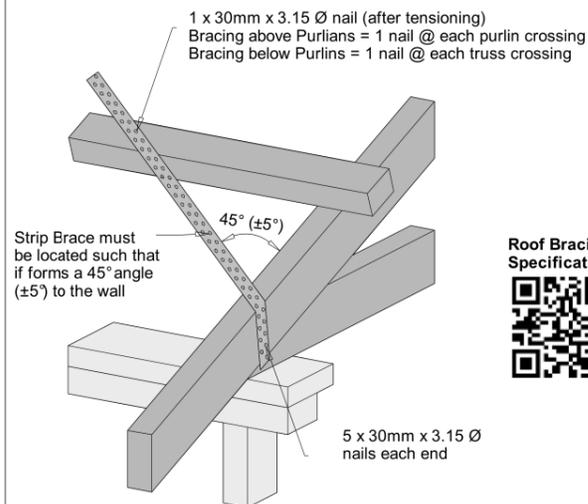
Job Title :
254519PS
Sheet :
2
Revision Number :

**New Residence for :
DGS Builders Ltd.
Lot 279
Vista Crescent
Falcons Landing, Rolleston**

TRUSS DESIGN

6/08/2025 NTS (@ A3)

LUMBERLOK[®] ROOF BRACING



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

LUMBERLOK[®] TRUSS FIXINGS

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

Joist Hanger Installation



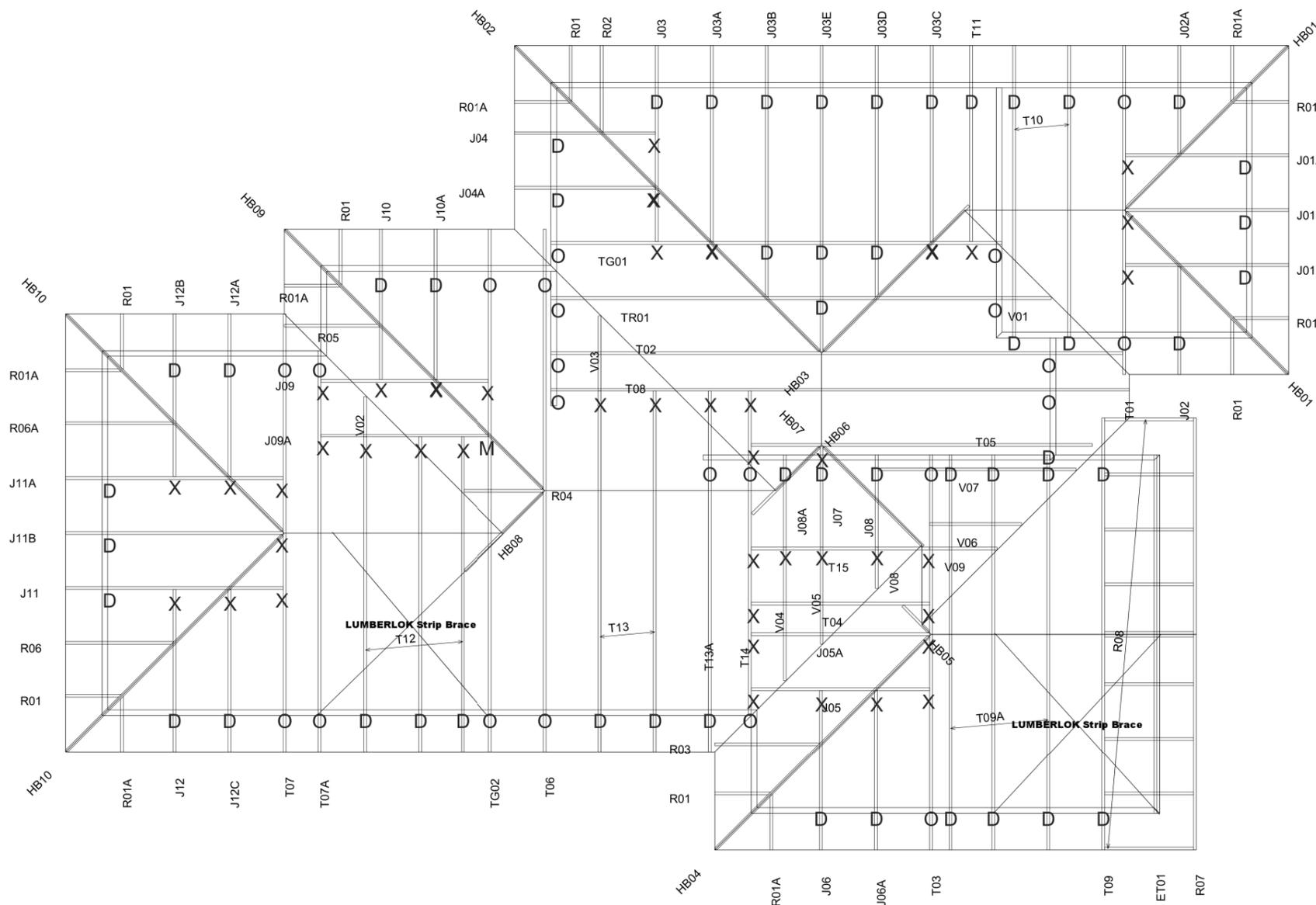
CT200 Truss to Top Plate Fixing Installation



16kN & 9kN Truss to Top Plate Fixing Installation



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



PrimeCad v4.7.346



Site Address :
JDM Developments
Lot 279 Falcons Landing
Rolleston

For Building Consent Truss Fixings & Roof Bracing

Date : 4 Jul, 2025
Scale : NTS
Drawn : Eric Finn
System : MiTek 20/20

Job Details:
Roof Pitch : 25.00deg
Roof Material : Galv Iron .5mm
Ceiling Material : Metal battens fixed to BC
Wind Zone : High
Roof Snow Load : 0.441kPa

Truss Centres : 900mm
Roof Live Load : 0.250kPa
Floor Live Load :
Wind Speed : 44m/s
Overhang : 600mm



Job Title :
254519PS
Sheet :
3
Revision Number :

**New Residence for :
DGS Builders Ltd.
Lot 279
Vista Crescent
Falcons Landing, Rolleston**

TRUSS DESIGN

6/08/2025 NTS (@ A3)