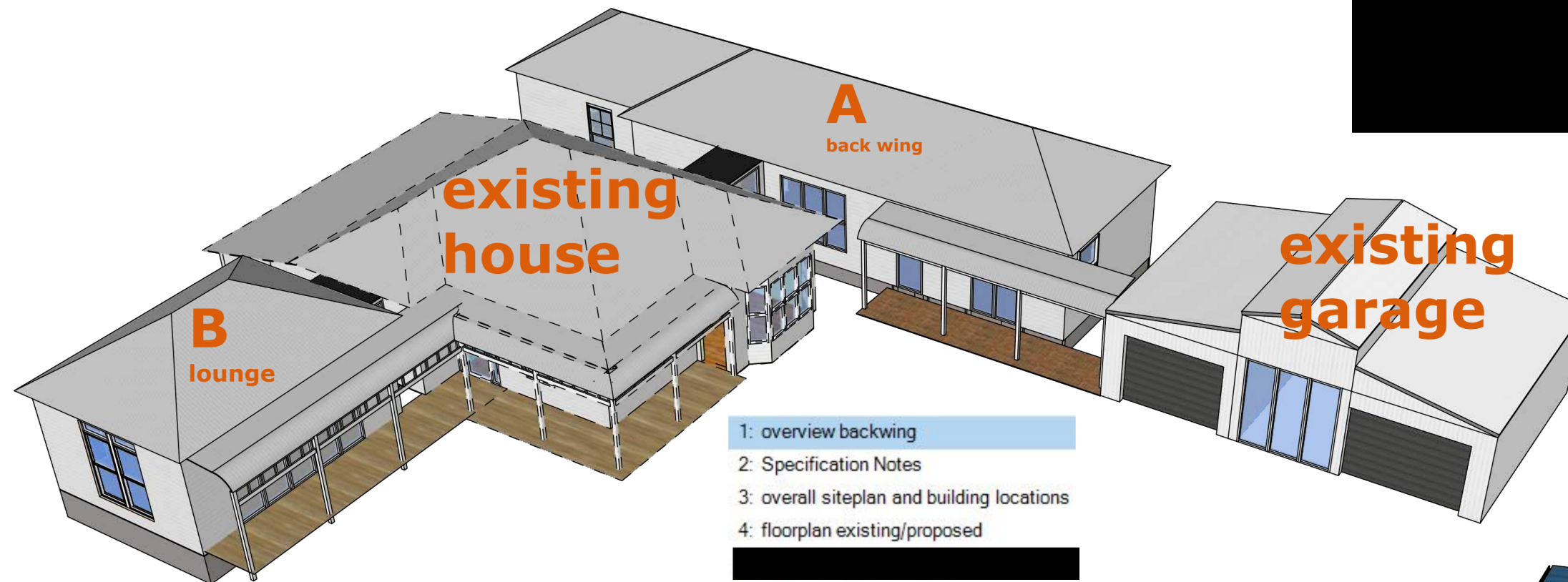
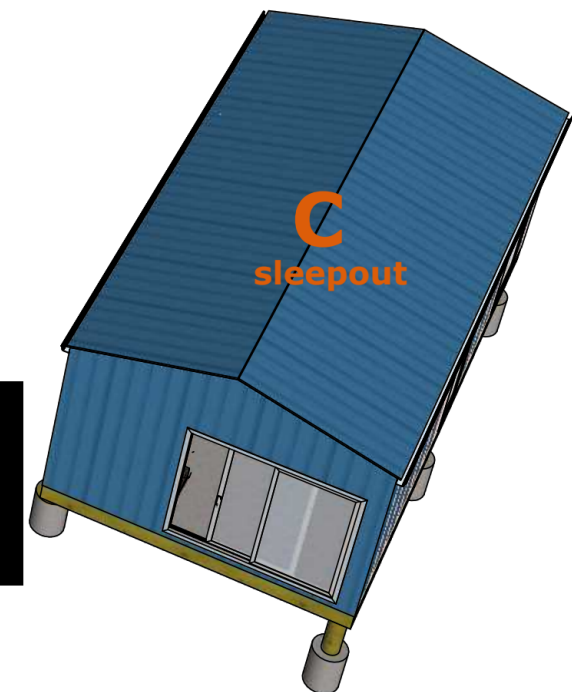




- 1: overview backwing
- 2: Specification Notes
- 3: overall siteplan and building locations
- 4: floorplan existing/proposed

- 6: Erosion Site Control Plan
- 7: Site Plan all buildings
- 8: room names and electrical plan
- 9: septic system
- 10: dimensions foundation and frames
- 11: building A
- 12: building A persp. views
- 13: elevations color
- 14: foundation and roof
- 15: detail wall and foundation
- 16: detail wall head and bottom
- 17: details weatherboard fixings
- 18: risk matrix , trench details, roof fixing
- 19: Drainage Plan existing proposed
- 20: window schedule
- 21: Gib Bracing calculation
- 22: shower waterproofing details
- 23: flashing detail walkway



Building A backwing and general

SPECIFICATION NOTES

SPECIFICATION NOTES - GENERAL:

All work to be completed to NZS 3604:2011 unless otherwise specified

Read in conjunction with drawings, details and calculations as applicable.

Confirm site boundaries and set-out conditions prior to commencement of works. Check all existing dimensions and existing construction prior to commencement of works. Construction may vary to suit existing. Do not scale off drawings. Framing and /or detail may vary to suit existing.

The whole of the works are to comply with the requirements of The NZ Building Code, construction with specified sections of NZS 3604: 2011 and other relevant standards and codes of practice as applicable. Items not detailed are to be specific design or manufacturers detail as applicable.

All work is to be undertaken by persons experienced in their respective trades and completed weathertight to a standard of 'best trade practice' and in a safe manner. All persons working on site shall have a knowledge and understanding of the legislative requirements relating to health and safety in the workplace and shall comply with these requirements.

Prefabricated elements are to be constructed following confirmation of site conditions and dimensions and are to be supplied with fabricators installation details and BCA required design certificate(s). These elements are to be erected and fixed to the fabricators details.

Proprietary products shall be handled and installed in accordance with manufacturers instructions and details.
Foundations and footings are to bear on 100kPa safe bearing strength original ground and concrete will be 20 Mpa.

All timber adjacent concrete will be separated by "Malthoid damp proof course.

Timber is to be grade SG8 radiata pine treated to the current NZS 3602 requirements as follows:

Piles and inground timbers = H5.

A Plumbing to AS/NZS 3500
All plumbing and drainage work to comply with G13/AS1, AS/NZS3500.2 and specific design where applicable.

Plumbing shall be by registered persons, wastes to be PVC to sizes indicated to minimum 1 in 40 falls to outlets.

CONTD..

Drain laying will be undertaken by registered persons with all pipe work uPVC run at minimum 1:100 falls as indicated.

Stormwater piped from downpipes as detailed.

All fixtures and fittings to owners selection. Confirm sizes and location of fixtures and fittings with owners prior to construction and installation of pipework or wiring.

Any new work to detail as existing. New flooring to line with existing floor.

Exterior walls to have "Fastwrap" building wrap or similar approved over exterior face.

New roof to have "Thermacraft 215" underlay or similar approved flashed and finished weathertight.

Electric HWC

Electric HWC: Hot water cylinder to be sited as detailed complete with seismic restraints - and as detailed.

Electrical fittings: Downlights if used - Loretto EL90 recessed downlights are C (closed) A (abutted) rated, keep 50mm from timber and 50mm from insulation.

Wall Linings:

All walls 10 mm standard GIB.

Bathrooms 10 mm aquagib to all walls

All ceilings 13 mm Standard Gib

Internal painting:

All wet areas - to be primed with a pigmented sealer bottom coat and then finished with a waterbourne enamel top coat. To comply with NZBC E3 3.1.2
All other areas to be primed and then finished with a 2 coat acrylic paint finish.

External cladding:

As detailed.

Exterior painting:

3 coat acrylic paint system to comply with NZBC

Smoke alarms:

Smoke alarms to AS3786 (or other appropriate standard where shown). Stand alone smoke alarms are to be installed in all bedrooms as detailed or within 3.0m of door to every sleeping space. To comply with NZBC F7 clauses 3.1, 3.2 and 3.3

Insulation:

Insulation underfloor insulation to concrete slab in new area:

Min 50mm Expol underfloor insulation to achieve R1.3

All exterior walls R2.4 Pink Batts

All ceiling spaces R3.6 Pink Batts

All windows and glass exterior doors double glazed to R0.26

Windows and glazed exterior doors:

All glazing to NZS:4223, Installation details to manufacturers specification.
Bathroom window(s), glazed door(s) to be glazed with grade 'A' safety glass to NZS 4223:PART 3 1999.

Timber Treatment:

Timber treatment as detailed to NZS: 3602

STRUCTURAL TIMBER

Pinus radiata sawn or gauged timber shall have a minimum grade of SG8 to NZS3622:2004.

A Poles shall be naturally round timbers conforming to NZS3605.

Timber construction not specifically shown is to comply with NZS3604:2011.

Unless specified otherwise, timber shall have the following treatment:

Exposed to the weather but not in contact the ground	H3.2
In contact with the ground	H4
Embedded in the ground	H5

All nails and bolt fixings shall be galvanised unless exposed and located in the seaspray zone where all fixings shall be stainless steel. Where galvanised bolts pass through timber H3 or higher treated timber then the bolts shall be greased prior to installation.

All bolts shall have washers placed against timber faces.

For M12 bolts use 50x50x3 washers.

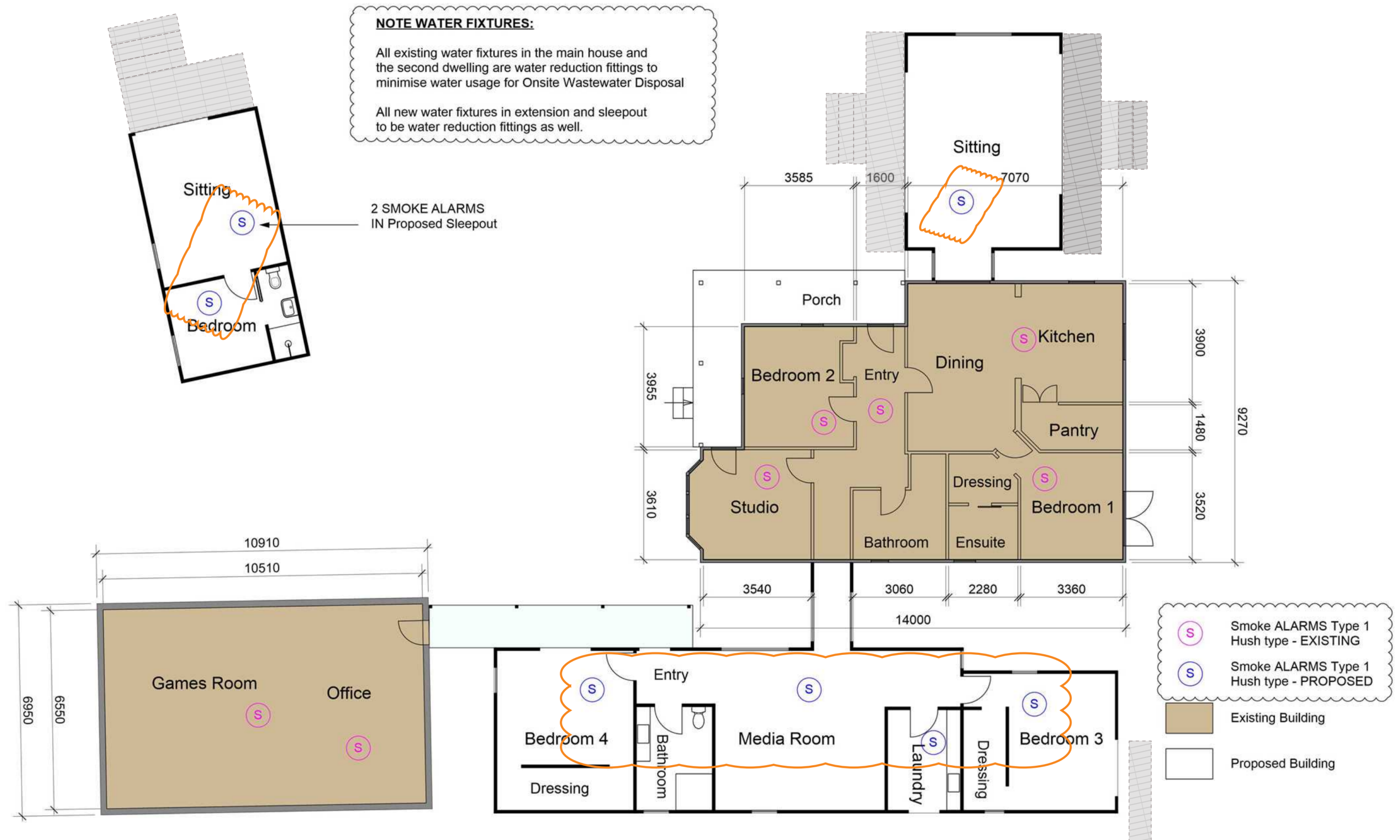
For M16 bolts use 50x50x5 washers.

The use of coach bolts is not permitted.

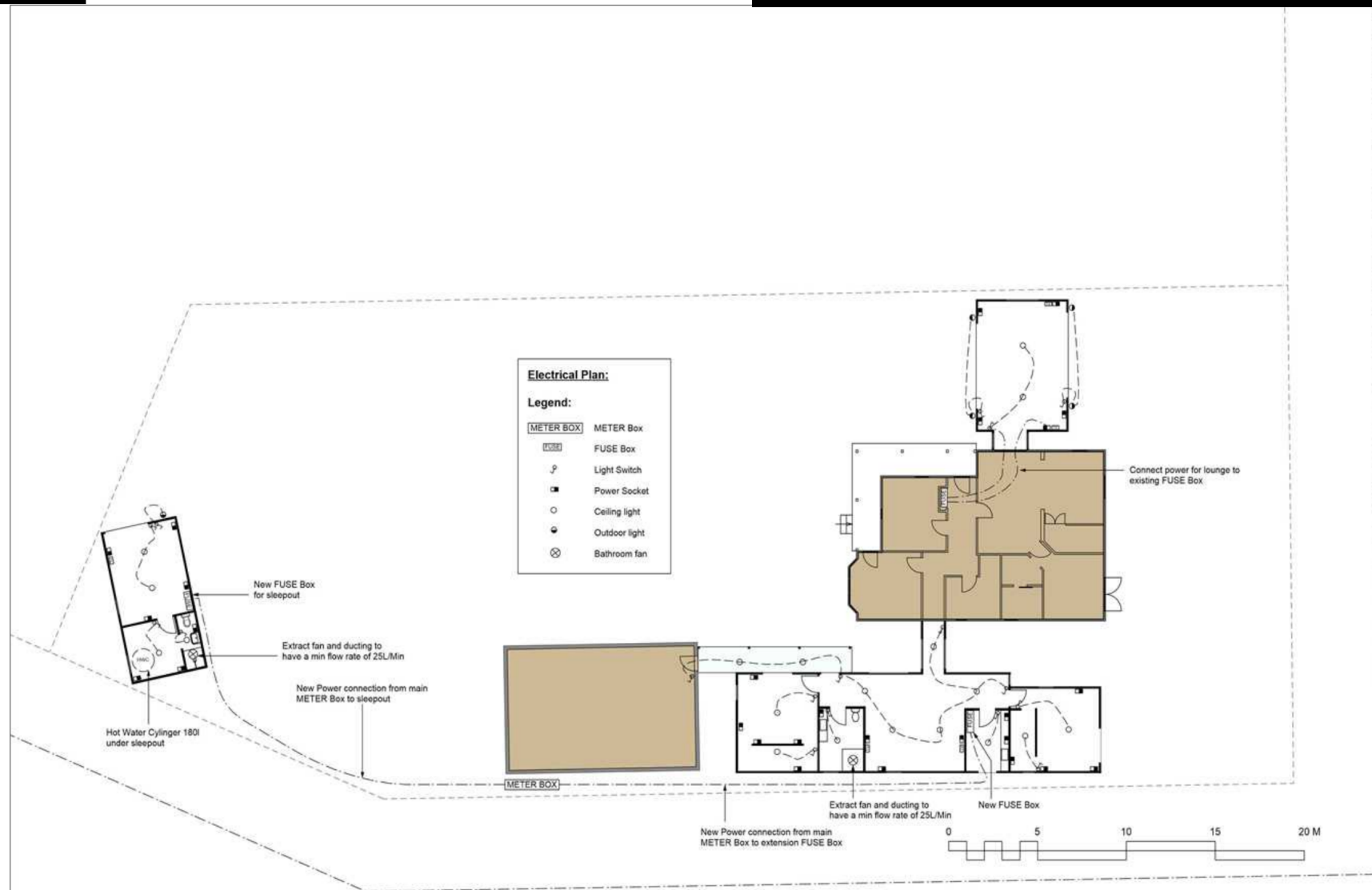
Unless shown otherwise on the drawings bolts shall be positioned at a distance 4 times the bolt diameter from the edge of the timber and 8 times the bolt diameter from the end. Bolts shall be spaced at no less than 5 times the bolt diameter.

The length of nails shall be selected so that the penetration into the second member is at least 10 times the nail diameter. Nails in radiata pine shall be placed at least 5 times the nail diameter from the edge of the timber with a minimum spacing of 5 times the diameter across the grain and 10 times the nail diameter along the grain.

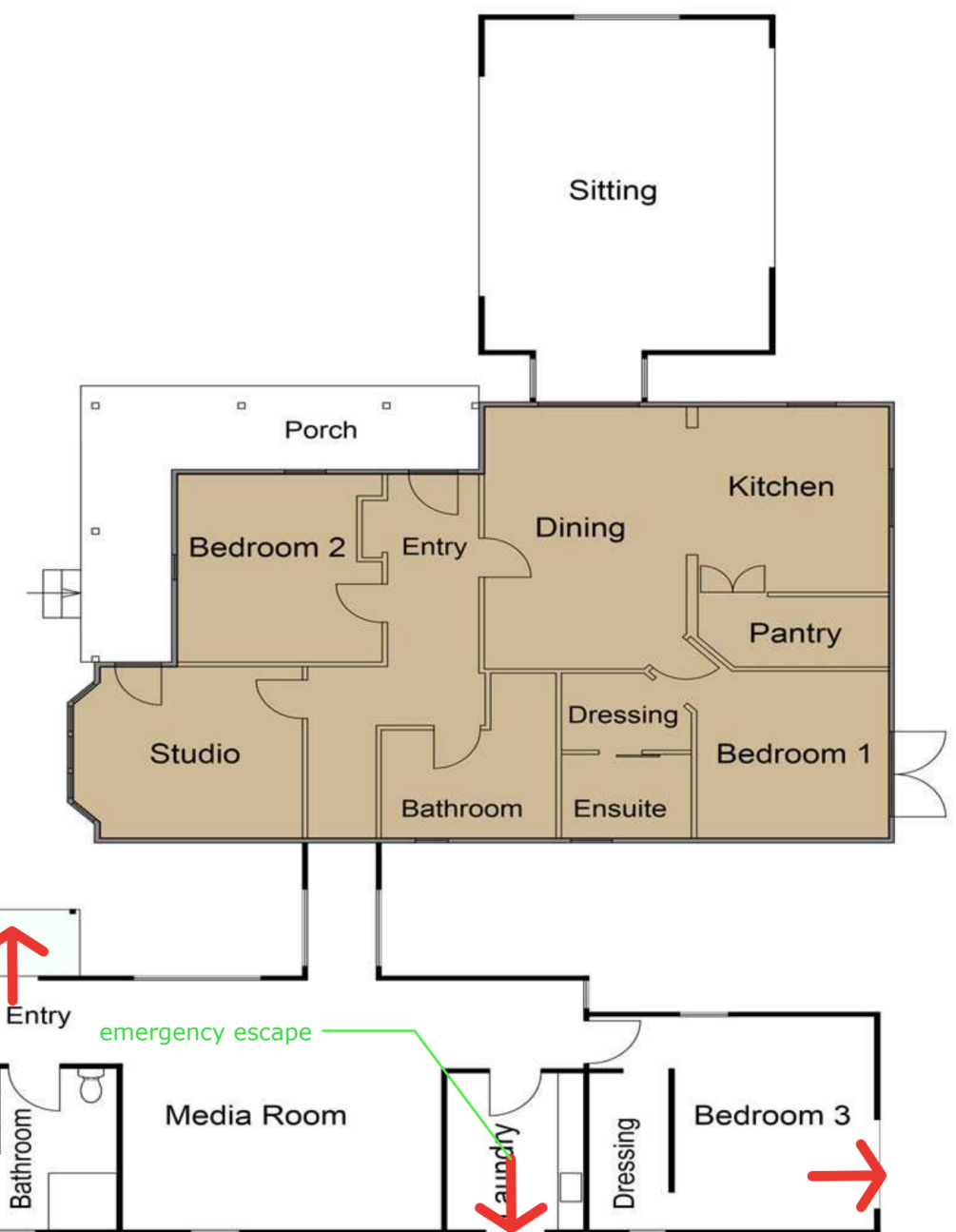
All propriety fixing brackets and connectors shall be installed in accordance with the manufacturer's instructions.



Floor Plan Existing and Proposed Buildings - Smoke ALARM Locations



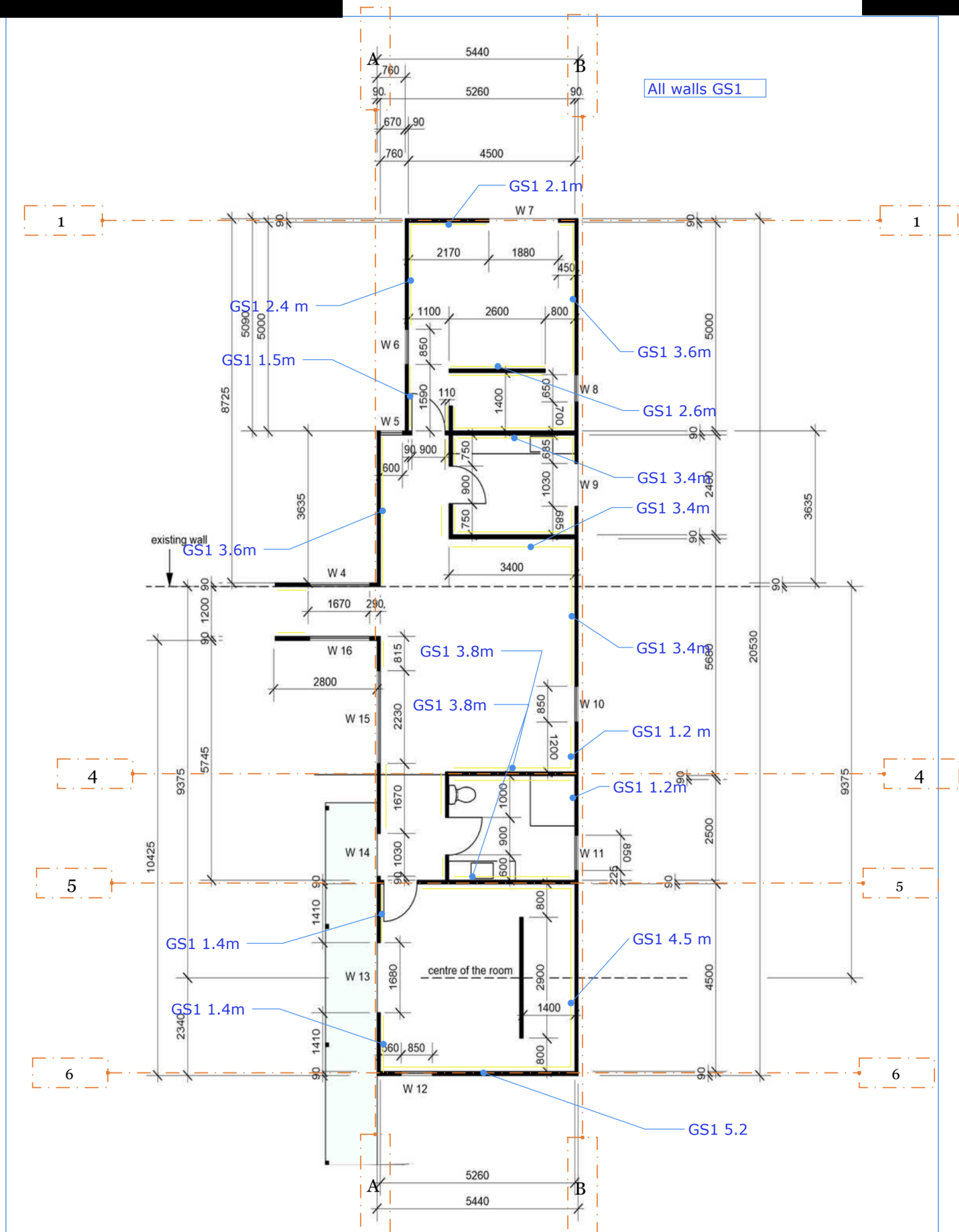
M 09 electrical plan
no scale



Doors at floor level, not higher than 180 mm max.

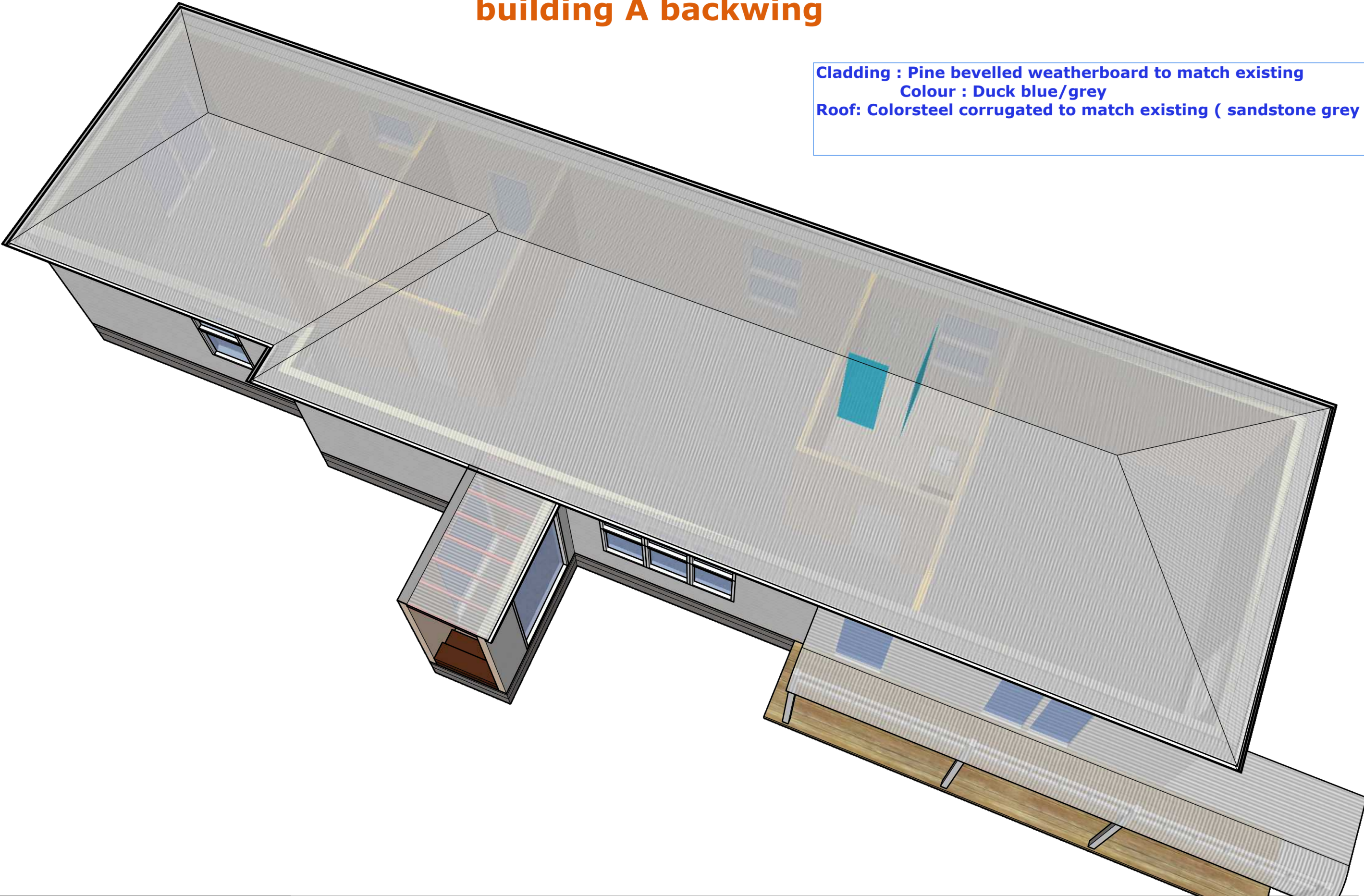
Building A backwing and general

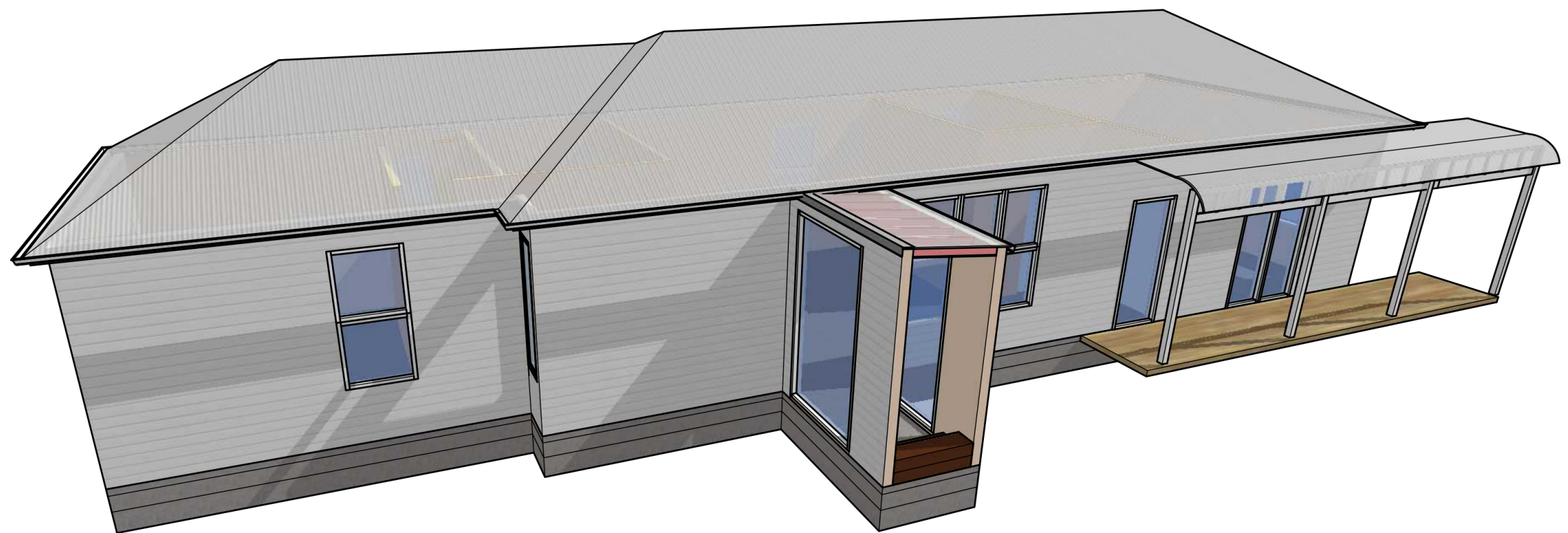
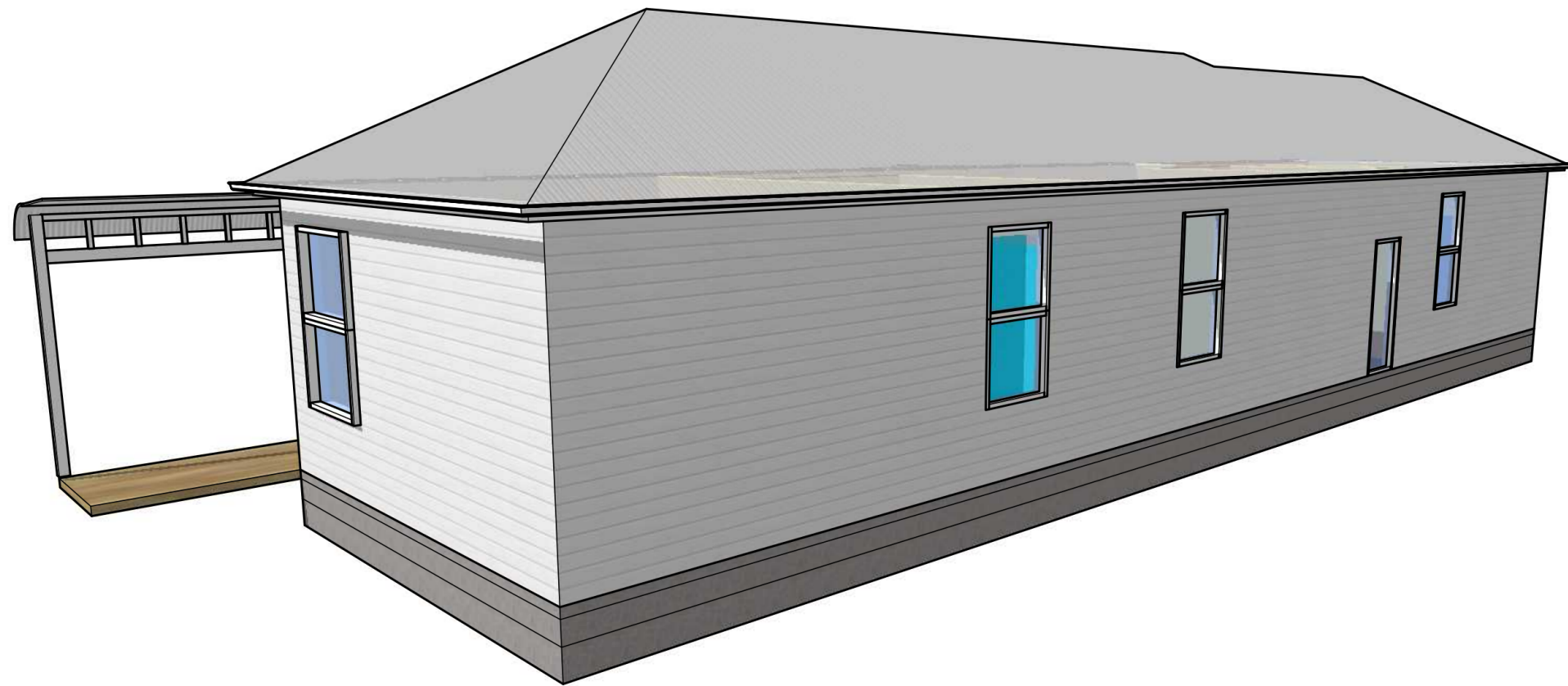
A 09 room names and electrical plan
no scale



building A backwing

Cladding : Pine bevelled weatherboard to match existing
Colour : Duck blue/grey
Roof: Colorsteel corrugated to match existing (sandstone grey)

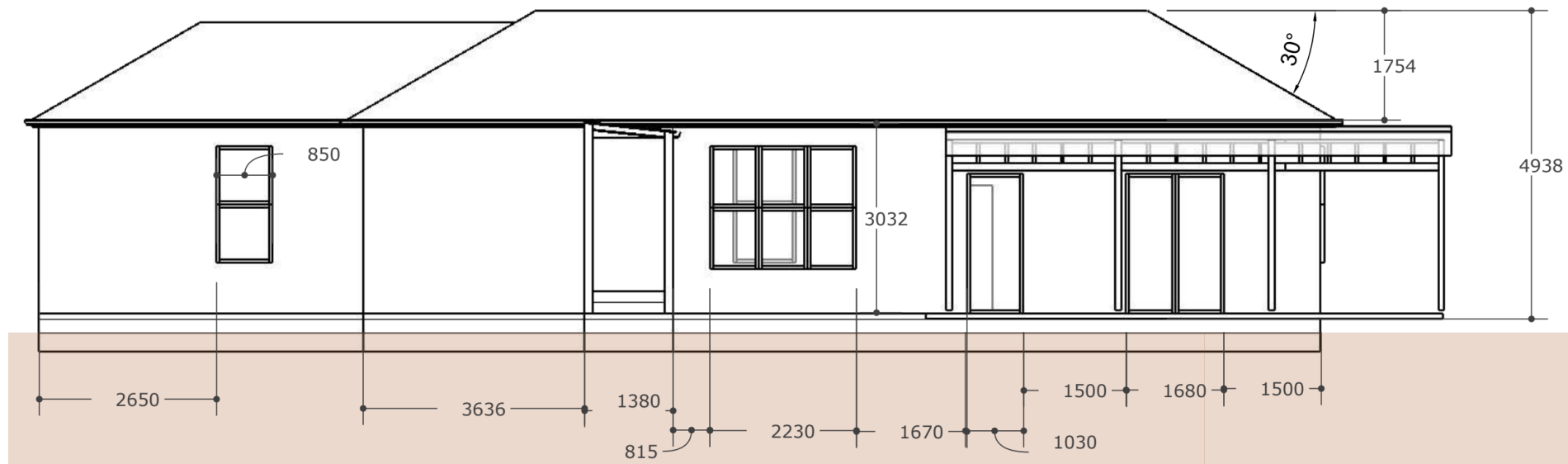




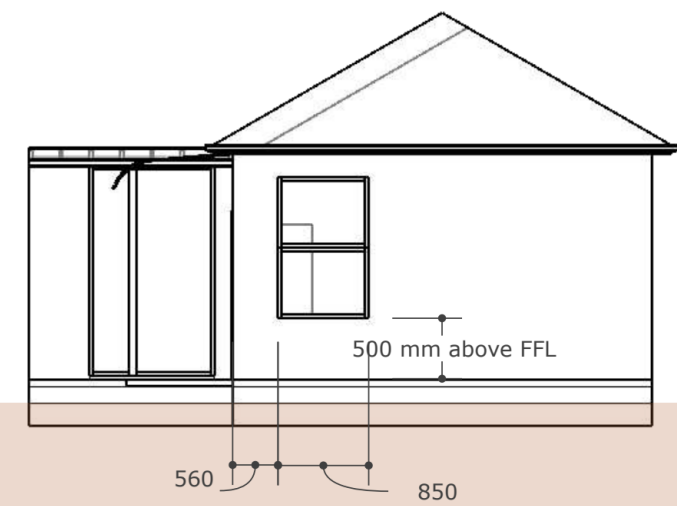
building A backwing

Building A backwing and general

M Building A persp.
12 Scale: 1:100

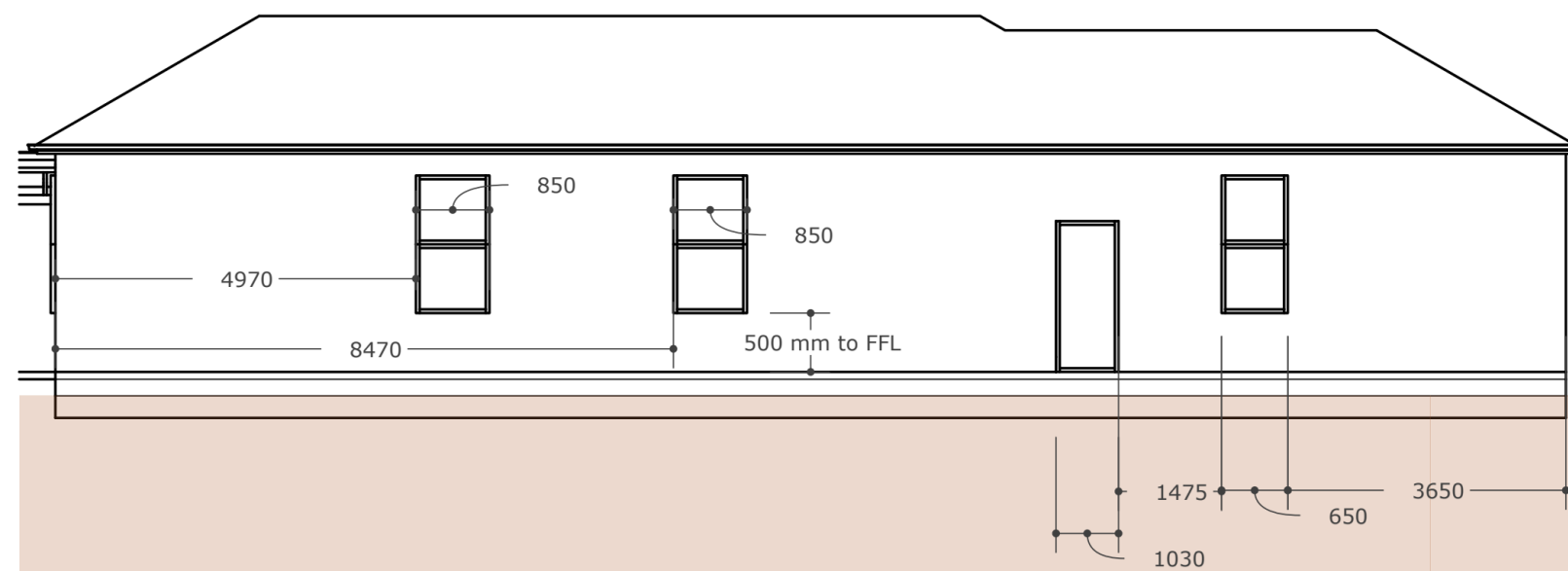


north

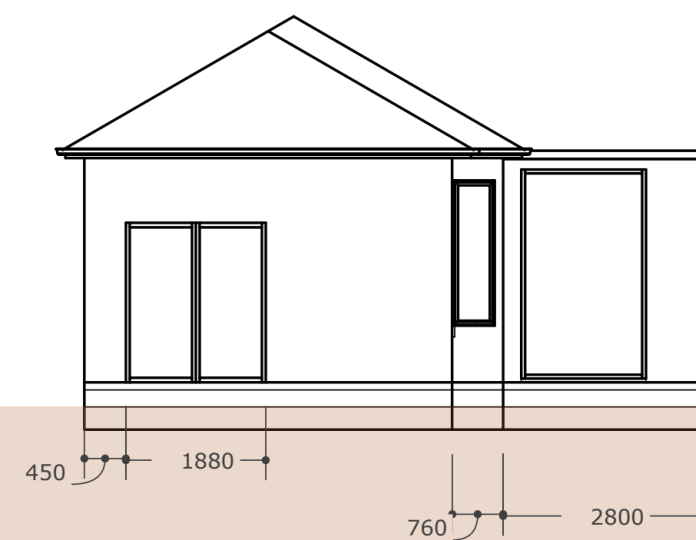


west

All measurements to frame work

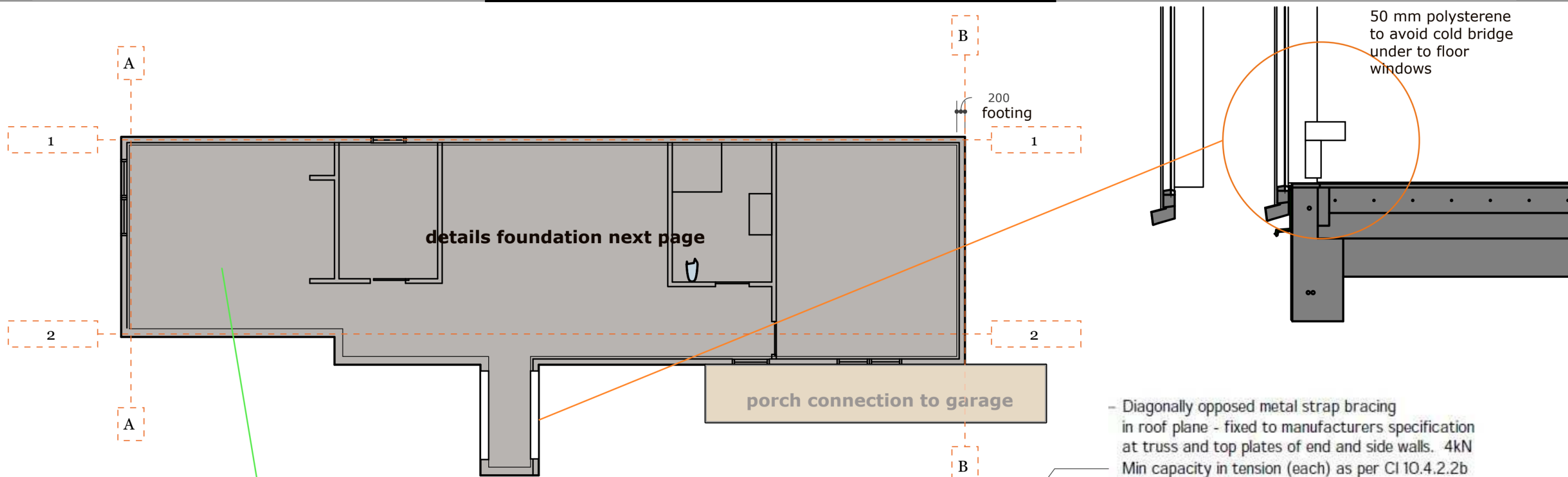


south



east

Building A backwing and general



25 MPa concrete

COMPONENT	Description	Area	R-Value	Heatloss
Roof	Glasswool R=3.6	145	3.3	43.94
Walls	Glasswool R> 2.6	137	2	68.50
Walls 2		1	1	1.00
Floor	PIR 90 mm R=2.25	111	1.3	85.38
Glazing	wooden windows, double glazed, LowE	35	0.48	72.92
Skylight				
				271.74

Insulation:

Walls: Pink batts or ECO -Wool R > 2.6

Underfloor : PIR 90 mm R = 4.05 under 100 mm concrete

roof: Pink batts R min. 3.6

90 x 45 MDG 8 Douglas Fir framing
studs at 600 centre with R2.6 insulation

G3 Building Wrap

vertical battens 600 centre
35 x 20 mm

bevelled weatherboard

140 mm Tru.bolt with 50 x 50 galv.
washers at max 1200 spacing

Cavity closer

FFL

color steel base flashing ,
paper overlaps

10 mm Gib lining

140 x 45 thermal break H3.2

skirting

12 - 15 mm flooring overlay

DPM

mesh SE62

concrete

polystyrene 100 mm

225 mm
min. 50 mm

min. 30 mm offset mesh

min. 600mm in slab

PIR panel 90 mm R= 4.05

FGL

D10

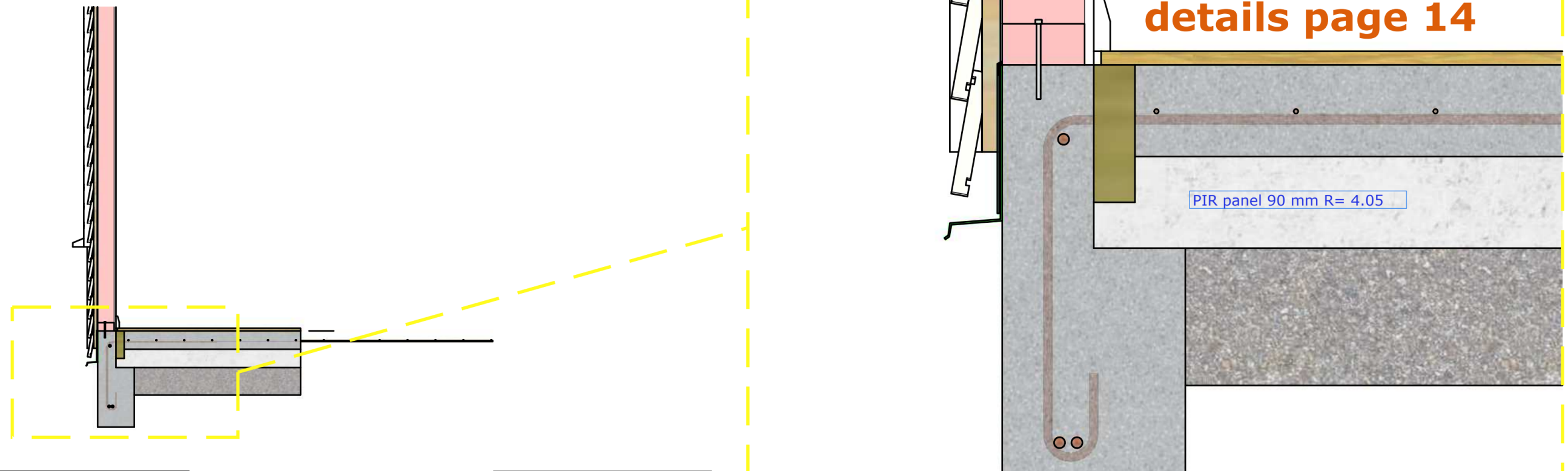
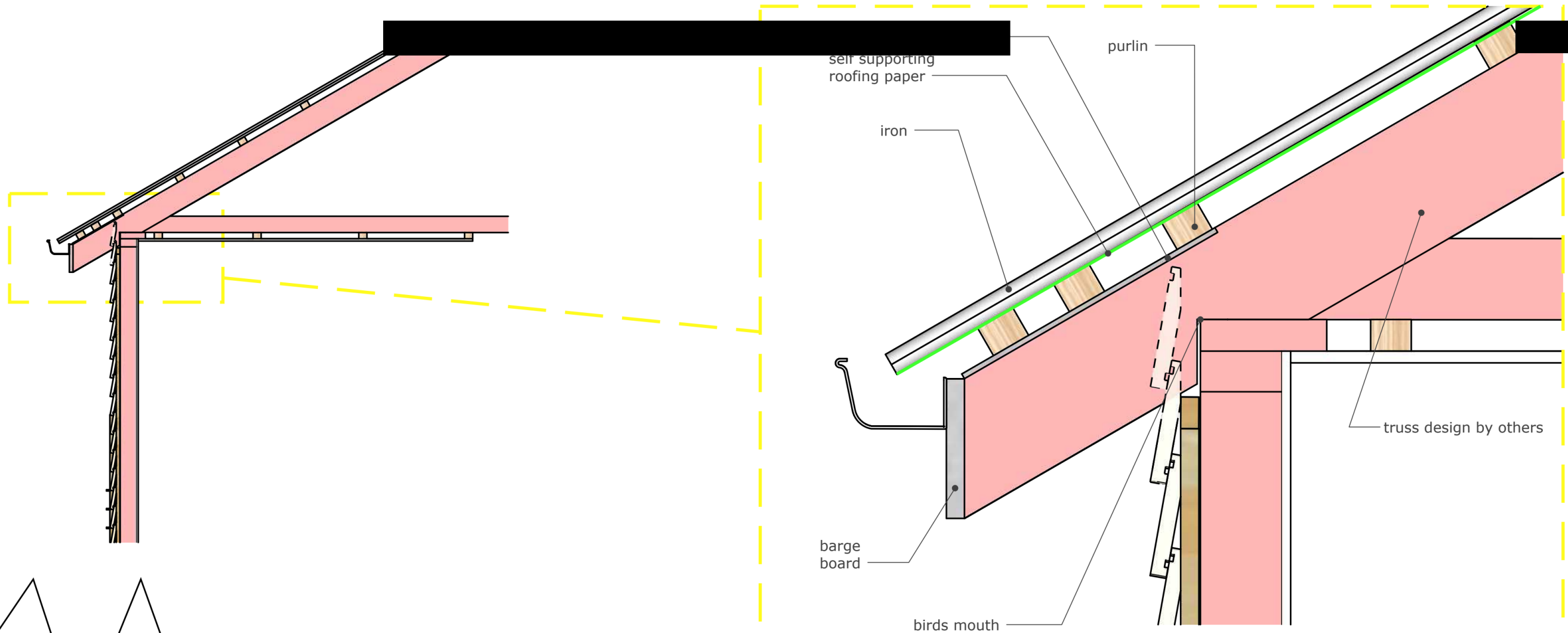
min. 300 mm

Ground

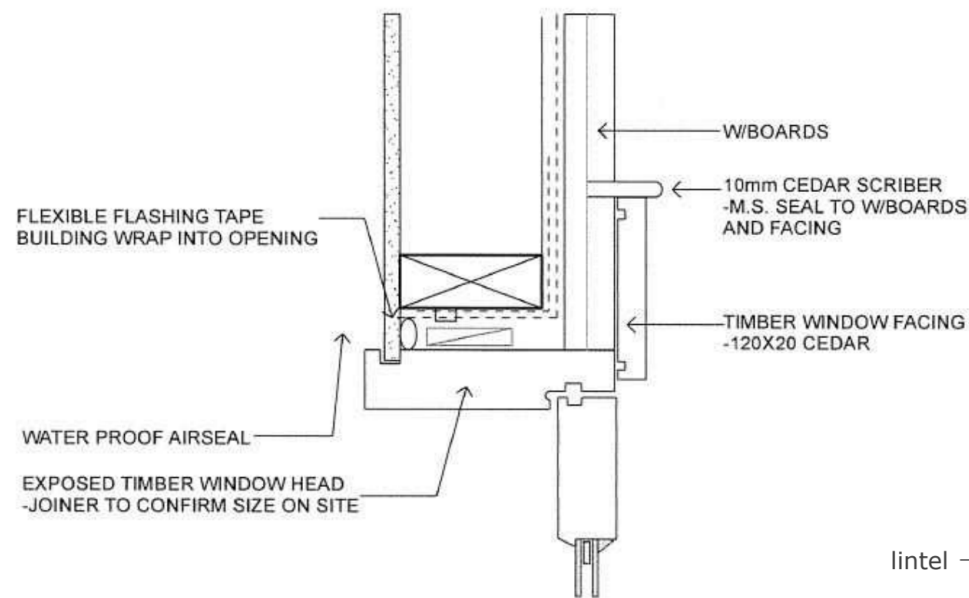
150 mm hardfill

R10 starters bend 400 into slab
@600 centre with D12
perimeter rods 75 mm

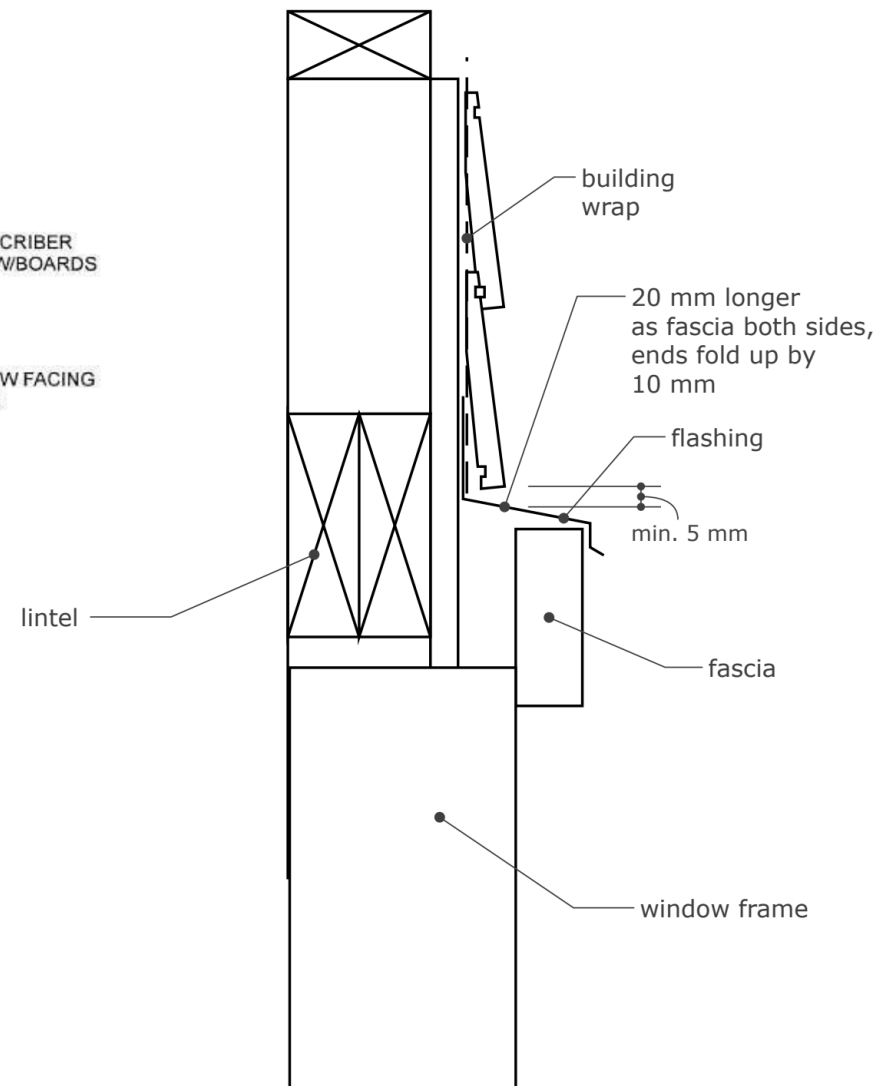
200 mm



DOOR AND WINDOW JAMB DETAIL

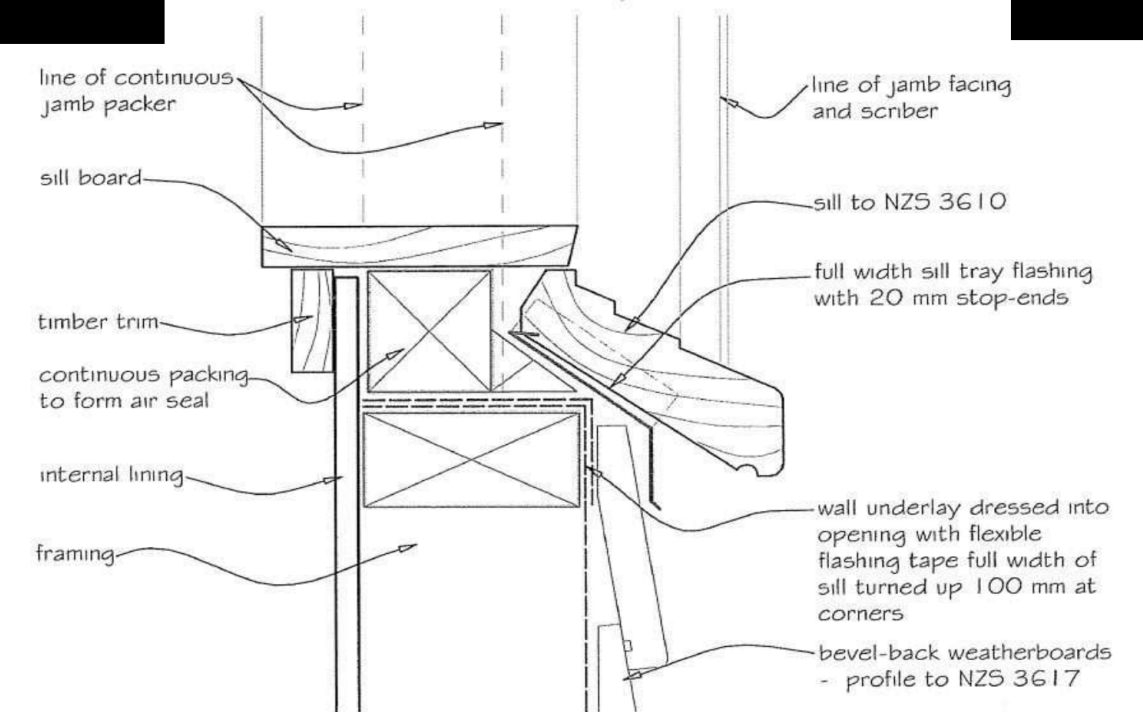
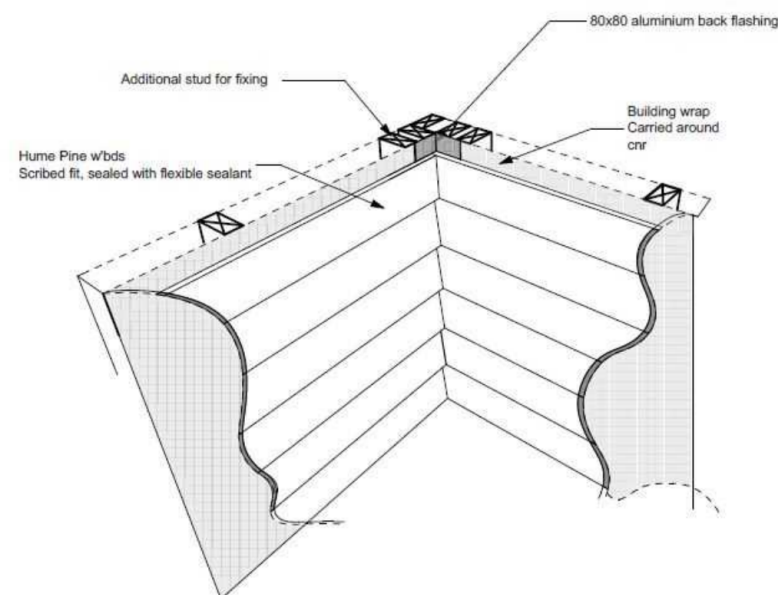


even more details in Specifications " Pineclad weather boards types and fixing".



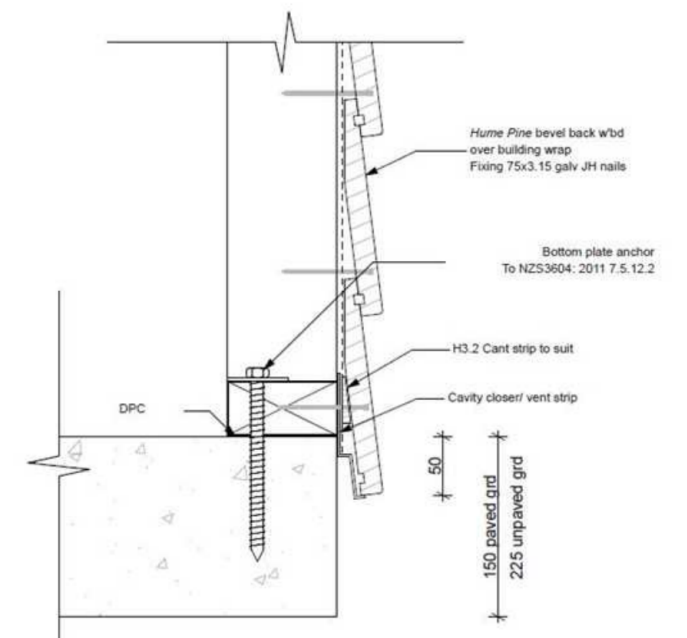
window head detail

Figure DD-1.12 BB,DF Int Cnr | Scale 1:100



window sill detail

Figure D-1.2 BD, DF Foundation Conc Floor | Scale 1:5



Risk factor	Low	Score	Medium	Score	High	Score	Very high	Score	Subtotal for each risk factor
Wind zone (per NZS 3604)	0		0		1		2	2	2
Number of storeys	0	0	1		2		4		0
Roof / wall intersection design	0		1	1	3		5		1
Eaves width	0		1	1	2		5		1
Envelope complexity	0		1	1	3		6		1
Deck design	0	0	2		4		6		0
[Enter the appropriate risk severity score for each risk factor in the score columns. Transfer these figures across to the right-hand column. Finally, add up the figures in the right-hand column to get the total risk score.]								Total risk score:	5

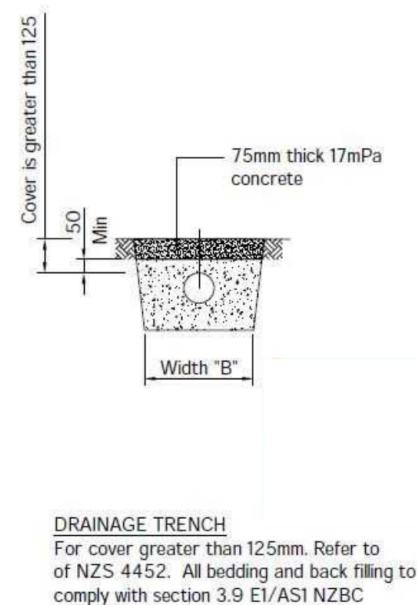
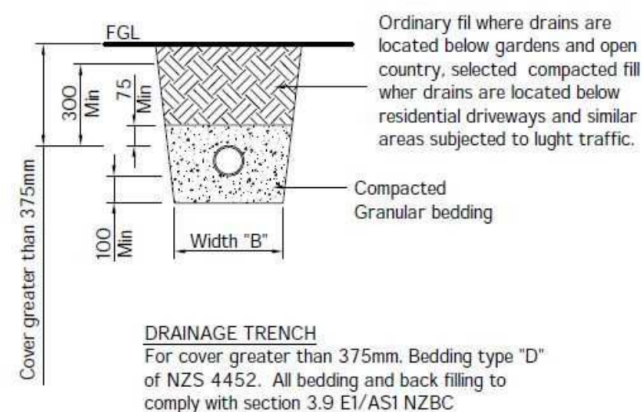
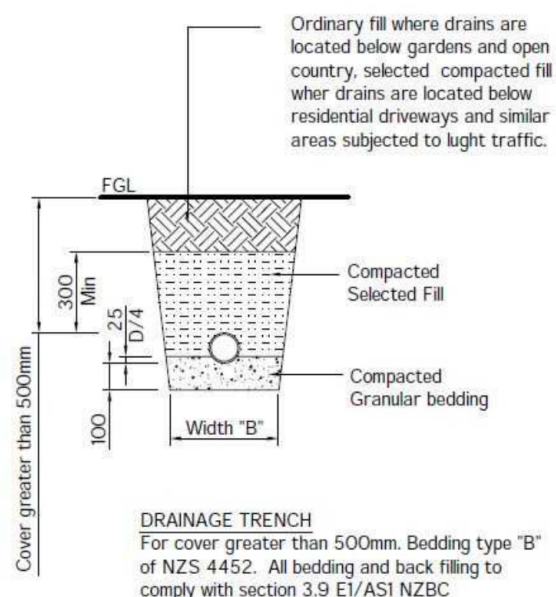
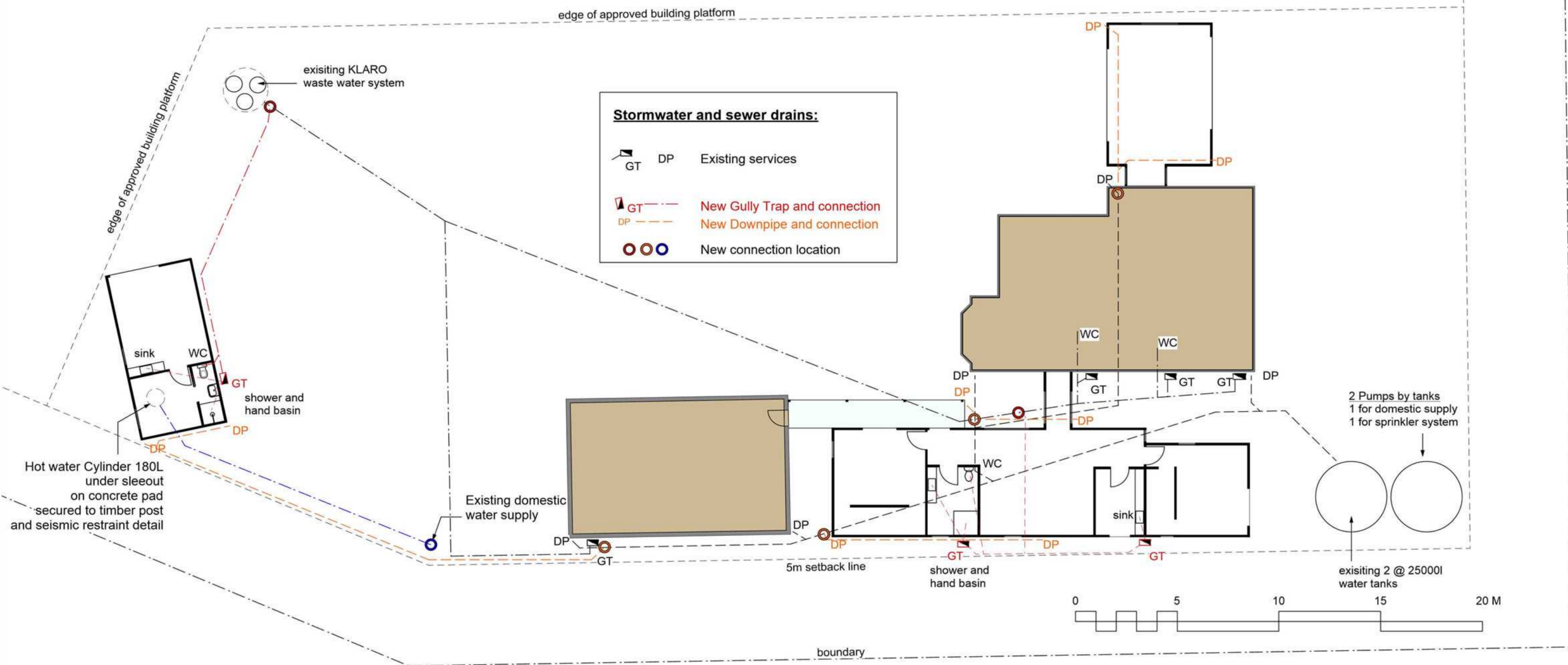
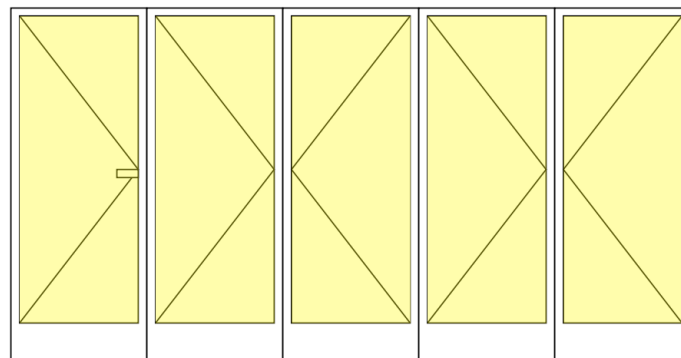
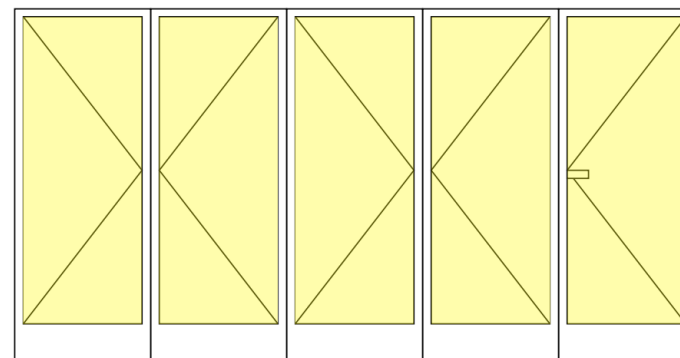


TABLE 3	Suitable wall claddings (paragraphs 3.1.2, 3.4.1.1, 3.4.2.1, 3.4.2.2, 3.4.3.2, 9.1.1, 9.4.1.2, 9.4.1.3, 9.6, figure 1 (E2/AS1))	
Risk score	Suitable wall claddings	
	Direct fixed to framing	Over 20mm minimum drained cavity
0 - 6	a) Timber weatherboards - all types b) Fibre cement weatherboards c) Vertical profiled metal (3) - corrugated and symmetrical trapezoidal (3) d) Fibre cement sheet (4) (Jointed finish) e) Plywood sheet	a) Masonry veneer (2) b) Stucco c) Horizontal profiled metal (3) - corrugated and trapezoidal only d) Fibre cement – flush-finished e) EIFS
7 - 12	a) Bevel-back weatherboards b) Vertical timber board and batten c) Vertical profiled metal (3) - corrugated only(3)(6)	a) Masonry veneer (2) b) Stucco c) Horizontal profiled metal - corrugated and trapezoidal only d) Rusticated weatherboards e) Fibre cement weatherboards f) Fibre cement sheet – flush and jointed finish g) Plywood sheet a) EIFS

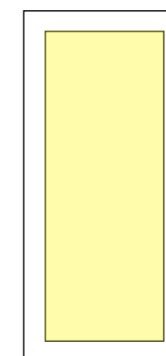




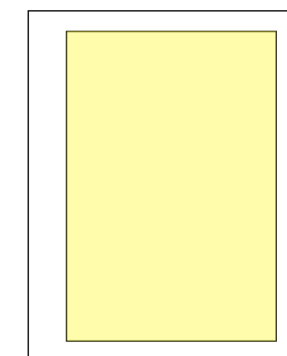
Bifold door
Box size 2350 h x 4590 w
Trim size 2370 h x 4630 w



Bifold door
Box size 2350 h x 4590 w
Trim size 2370 h x 4630 w

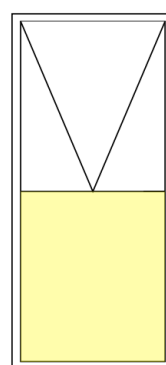


fixed window
Box size 2390 h x 790 w
Trim size 2410 h x 830 w

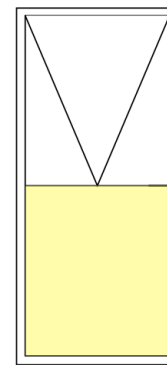


fixed window
Box size 2390 h x 1590 w
Trim size 2410 h x 1630 w

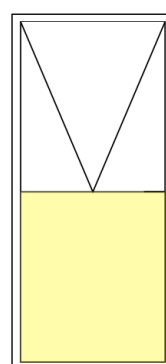
Windows flush with FFL, details page 11



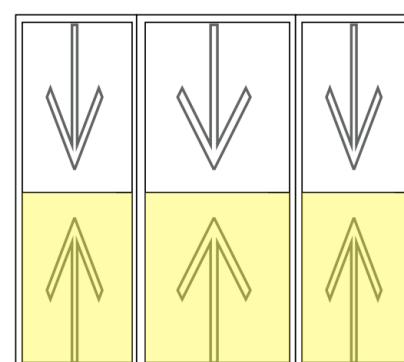
Flap window
Box Size 2210 h x 560 w
Trim Size 2230h x 600 w



Flap window
Box Size 2210 h x 810 w
Trim Size 2230 h x 850 w

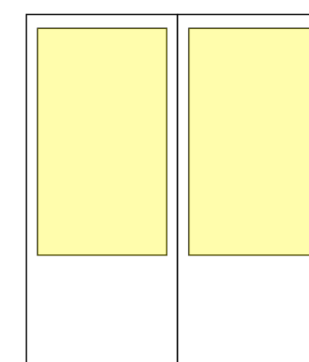


Flap window
Box Size 2210 h x 610 w
Trim Size 2230h x 650 w

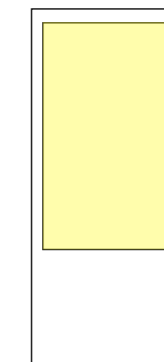


Sash window
Box size 2210 h x 2100 w
Trim size 2230 h x 2140 w
all panes fixed
match existing

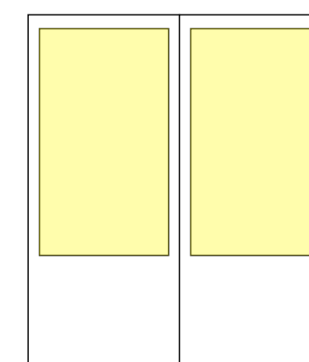
All windows top of sill
500 mm above FFL,
Framework, sill trimmer
380 mm above FFL



French door
Box size 2205 h x 1840 w
Trim size 2225 h x 1880 w



Single Door
Box Size 2205 h x 990 w
Trim size 2225 h x 1030 w



French door
Box size 2205 h x 1640 w
Trim size 2225 h x 1680 w
60 thick sill inside

- NOTES:
1. Windows and doors veiwed from the exterior.
 2. Dimensions are to window and door frames.
 3. For clear openings: Allow 30mm extra height and width to allow for reveals.
 4. At full height windows, extend vermin strip and fold ends to ensure gap between support bars and cladding is sealed.
 5. Windows and glazed exterior doors:
 6. All glazing to NZS:4223, Installation details to manufacturers specification.
 7. Bathroom window(s), glazed door(s) and full height windows to be glazed with grade 'A' safety glass to NZS 4223:PART 3 1999. Denoted "S" on the window schedule.
 8. Glazed shower doors Grade A safety glass.
 9. All glazing - double glazed to achieve a minimum R0.26

All windows lower than 600 mm of FFL
have to be safety glass

Job Details

Name:

Street and Number:

Lot and DP Number:

City/Town/District:

Designer:

Company:

Date:

Building Specification

Number of Storeys Floor Loading Foundation Type

Single

Cladding Weight Roof Weight Room in Roof Space Roof Pitch (degrees) Roof Height above Eaves (m) Building Height to Apex (m) Ground to Lower Floor (m) Stud Height (m) Building Length (m) Building Width (m) Building Area (m²)

Bracing Units required for Wind

Along

Across

Single Level

346

1011

Bracing Units required for Earthquake

Along and Across

Single

517

Demand

Single Along

To Add Elements, right click when on the Element above which you want to insert the Element.

Import

Line	Ext. Len. (m)	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BU)	Earthquake (BU)
a	20.5	1	1.4		2.8	GS1-N	GIB®	83	72
		2	1.4		2.8	GS1-N	GIB®	83	72
		3	4.7		2.8	GS1-N	GIB®	278	242
		4	3.6		2.8	GS1-N	GIB®	213	185
		5	5		2.8	GS1-N	GIB®	296	257
b	7.1	1	4.5		2.8	GS1-N	GIB®	266	231
		2	6.1		2.8	GS1-N	GIB®	361	314
		3	5		2.8	GS1-N	GIB®	296	257

Wind	Earthquake
Demand	
346	517
Resistance	
1875	1630
542%	315%
952 OK	828 OK
923 OK	802 OK

File Home

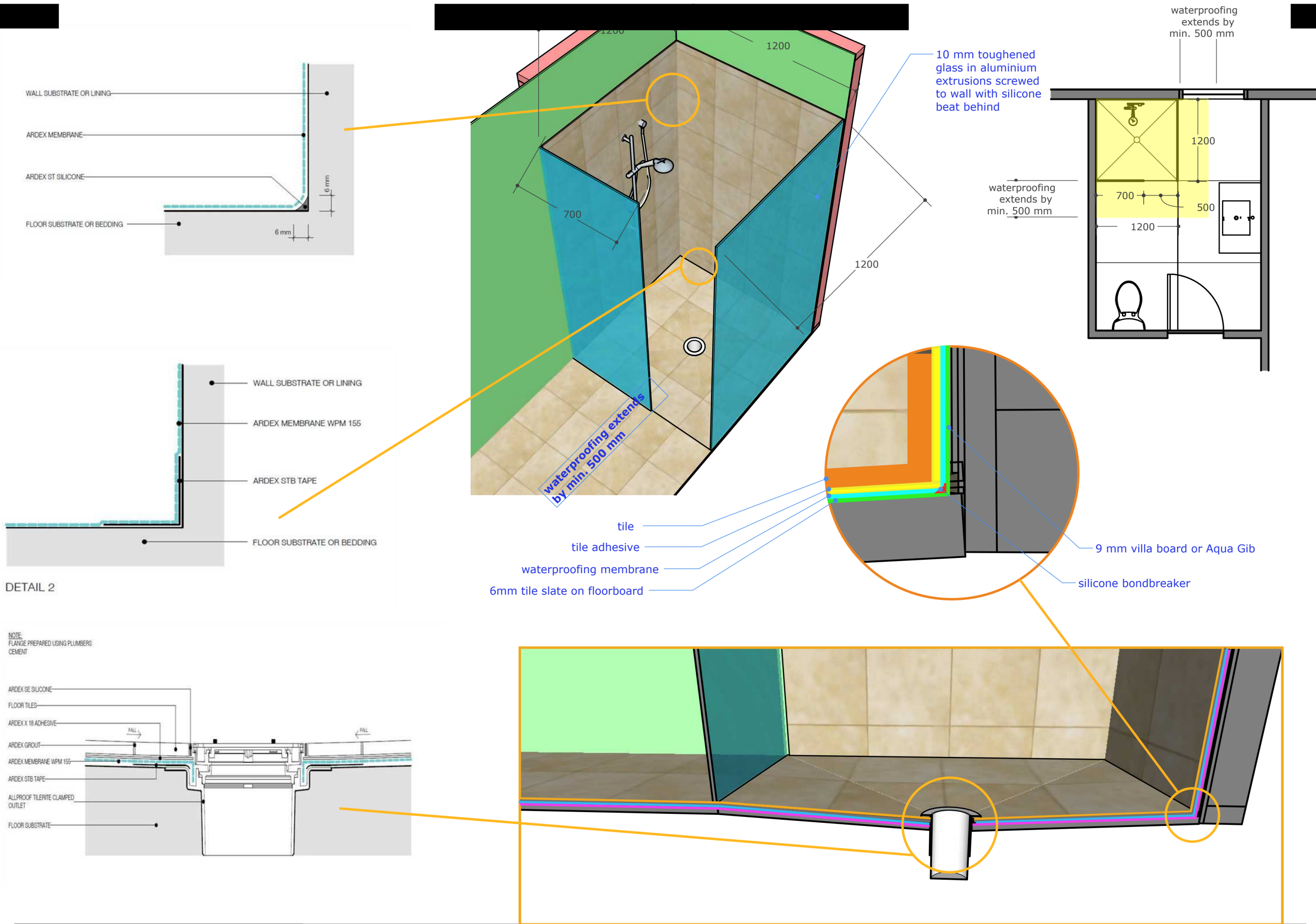
Single Across

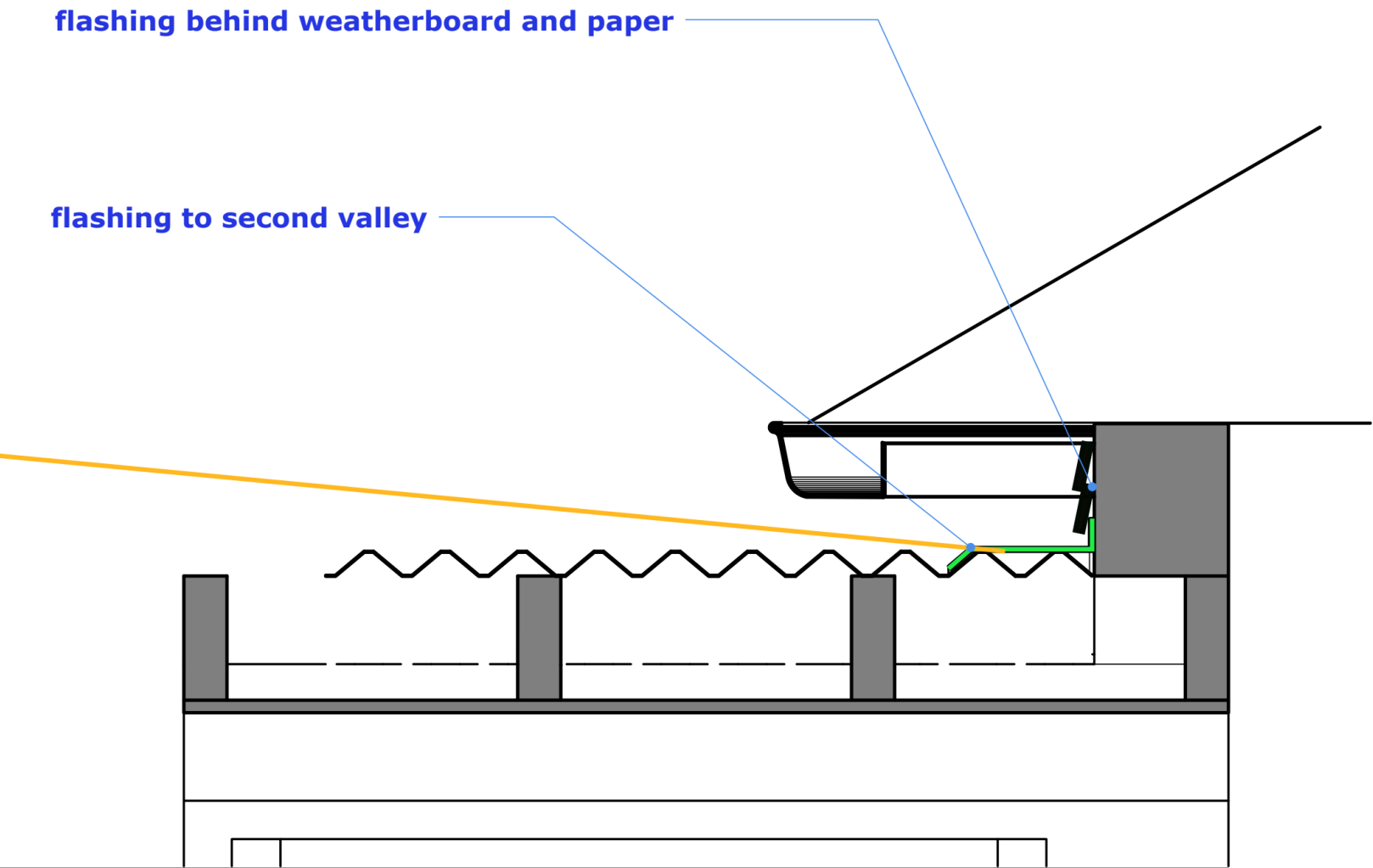
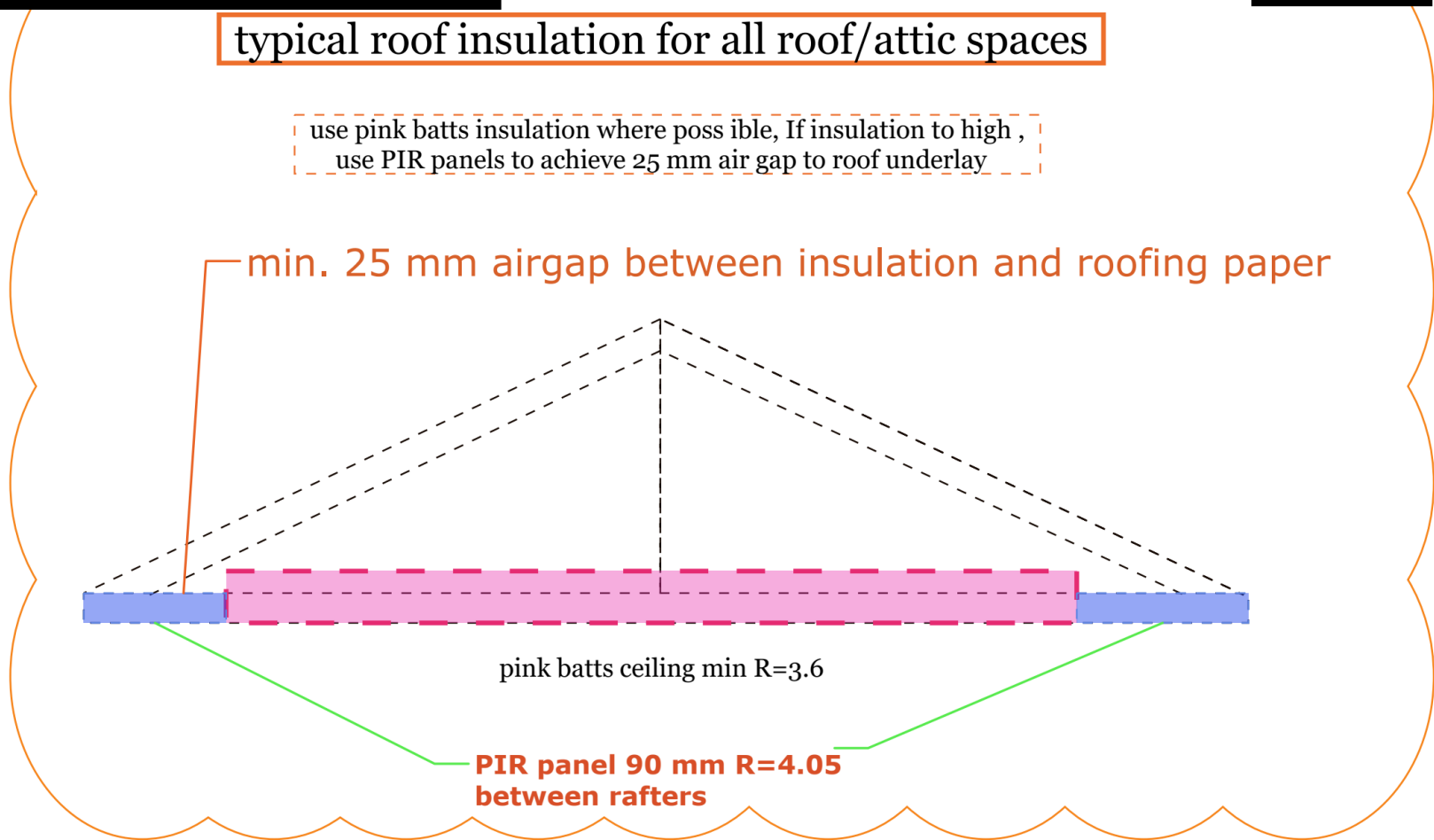
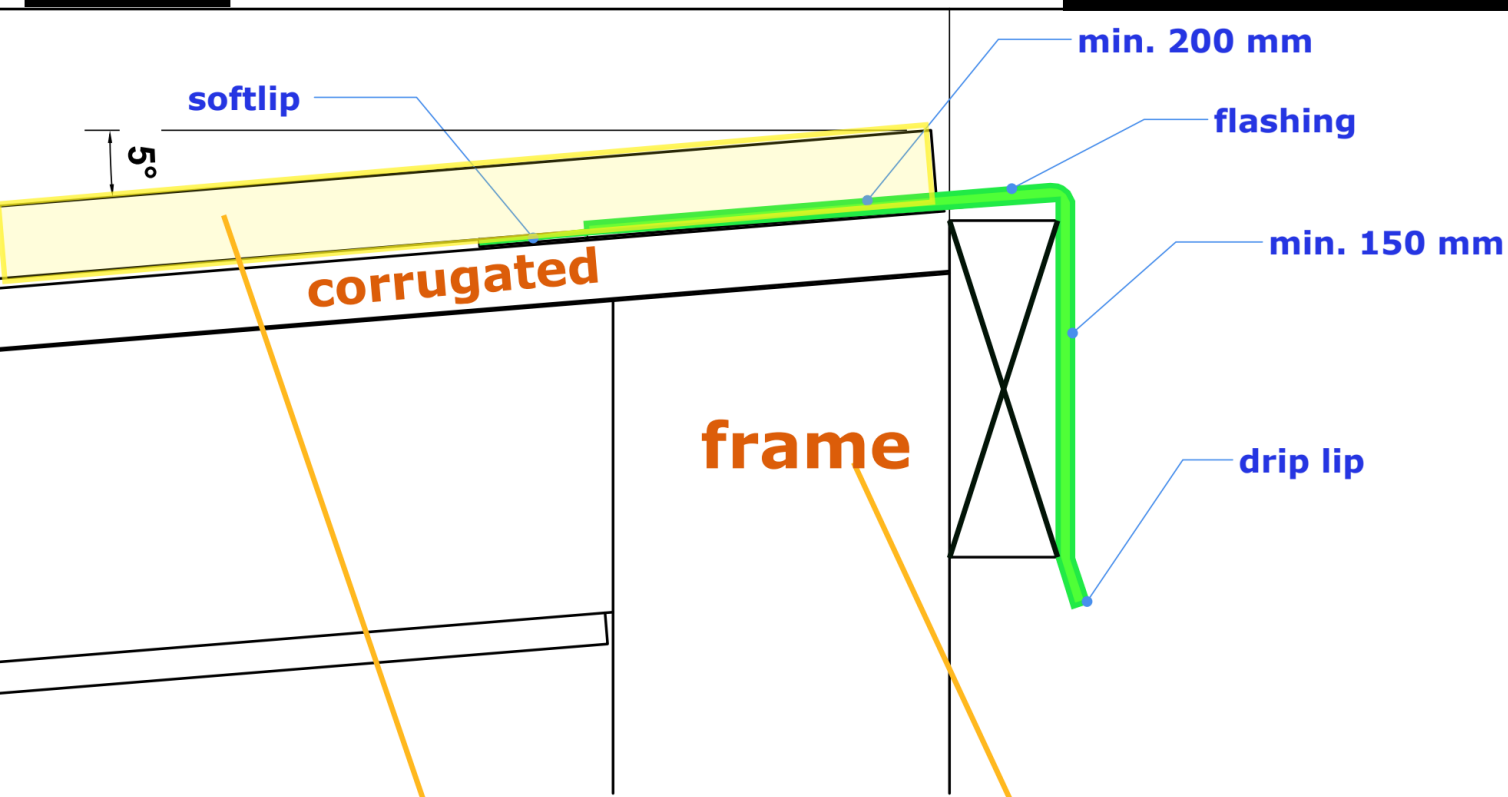
To Add Elements, right click when on the Element above which you want to insert the Element.

Import

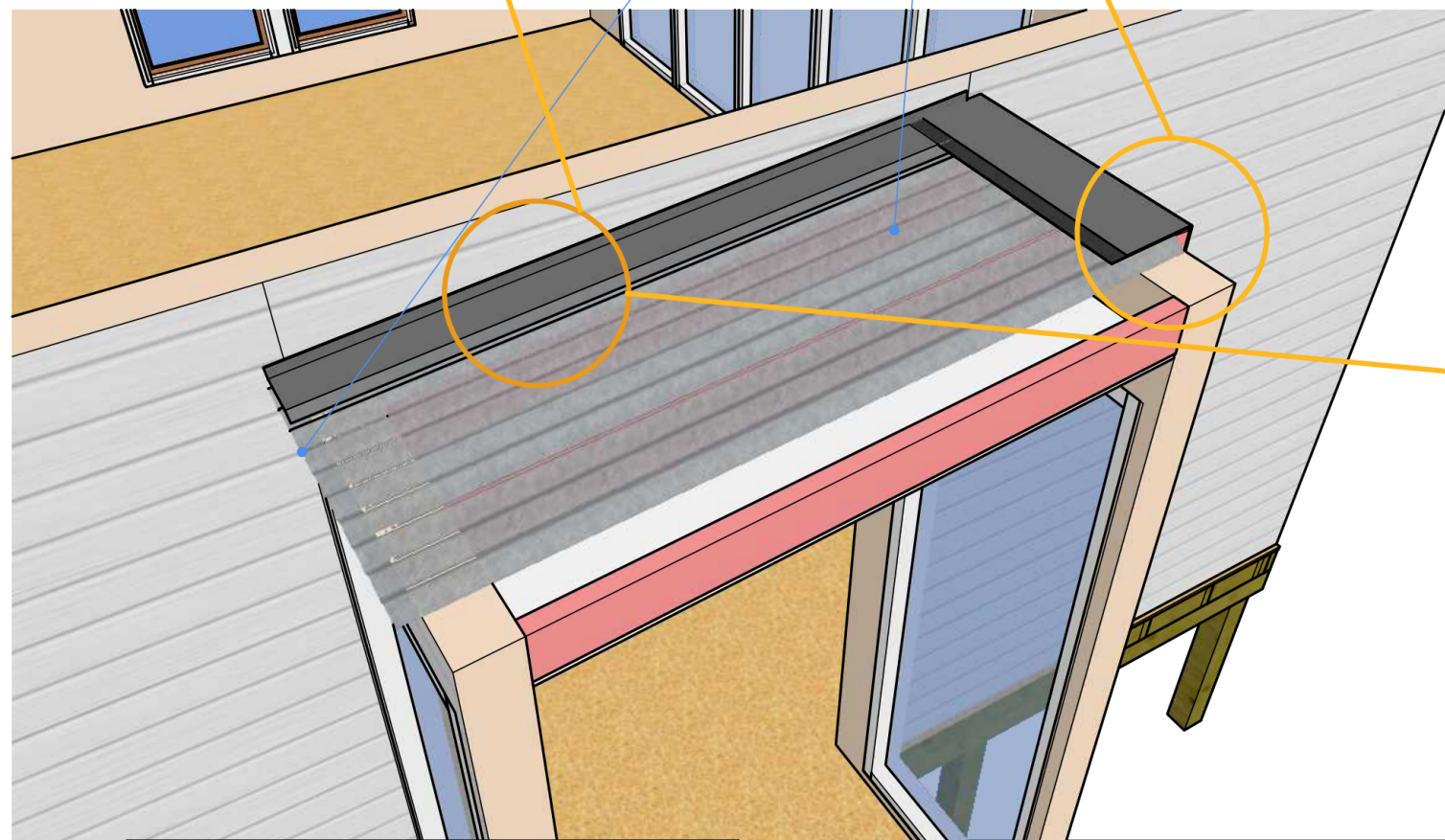
Line	Ext. Len. (m)	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BU)	Earthquake (BU)
1	5.1	1	2.1		2.8	GS1-N	GIB®	124	108
		2	2.6		2.8	GS1-N	GIB®	154	134
		3	3.4		2.8	GS1-N	GIB®	201	175
		4	3.4		2.8	GS1-N	GIB®	201	175
		5	3.8		2.8	GS1-N	GIB®	225	195
		6	3.8		2.8	GS1-N	GIB®	225	195

Wind	Earthquake
Demand	
1011	517
Resistance	
1130	982
112%	190%
1130 OK	982 OK





5% fall
area under 2 sqm, no spouting



Building A backwing and general

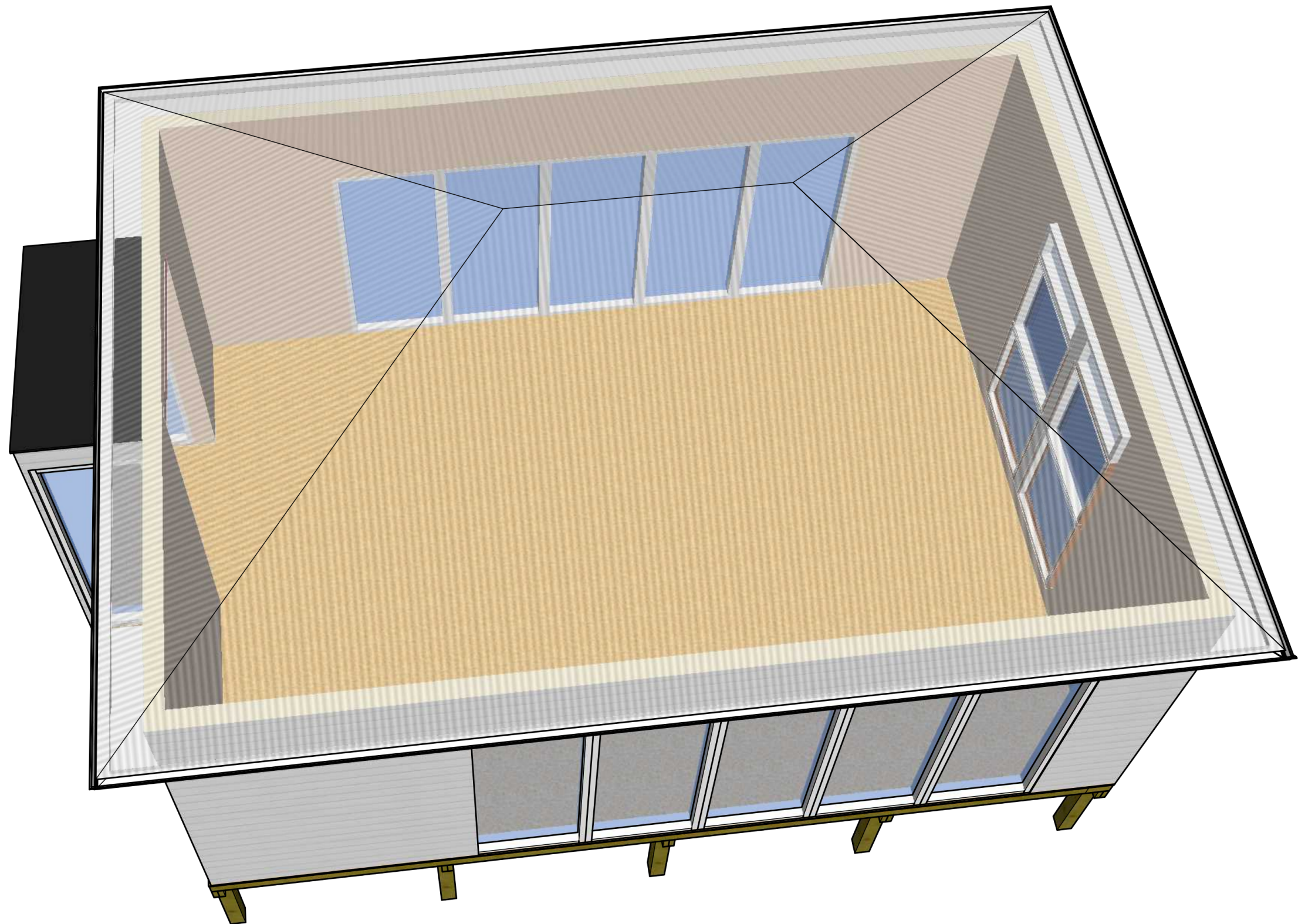


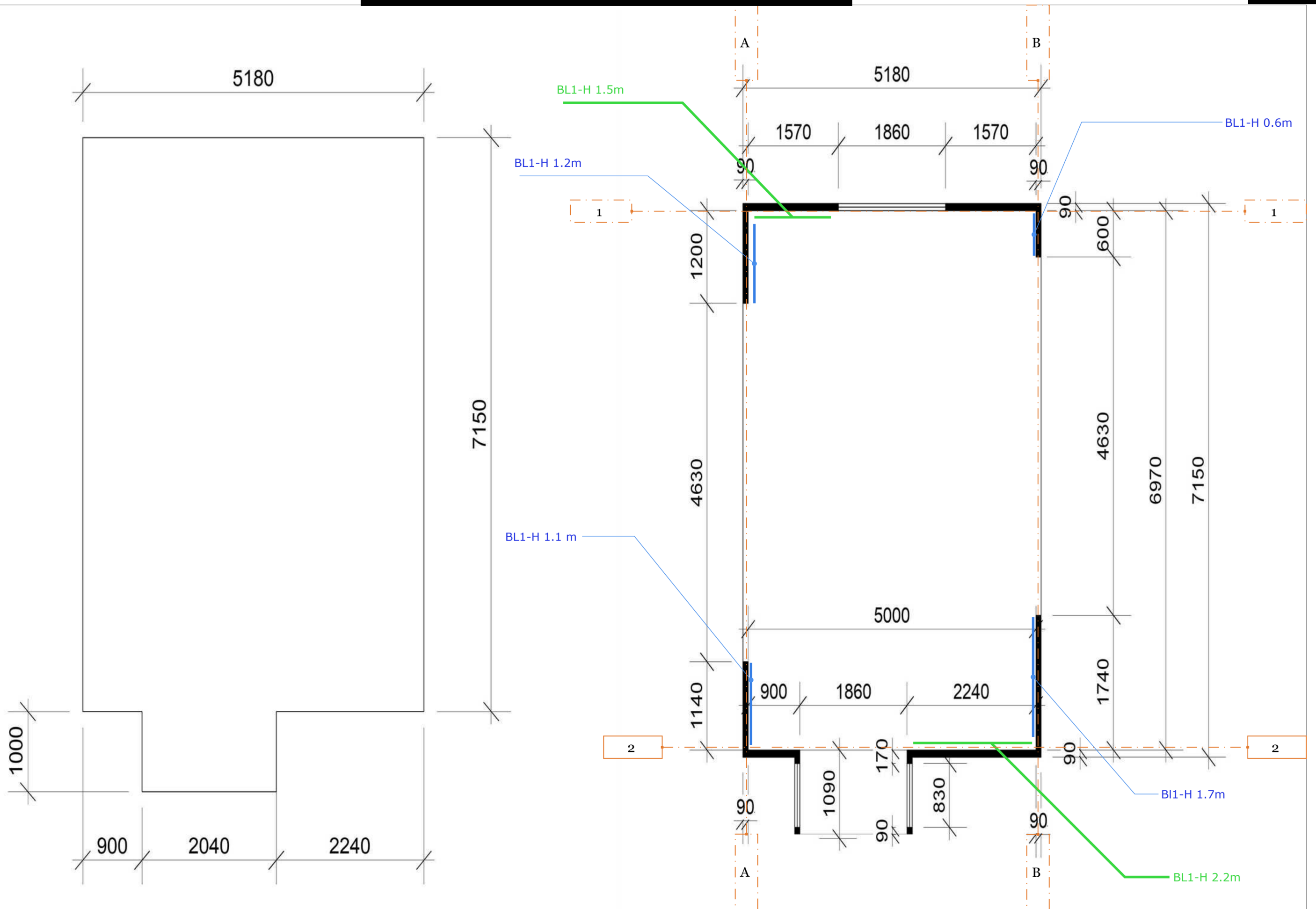
Cladding : Pine bevelled weatherboard to match existing
Colour : Duck blue/grey
Roof: Colorsteel corrugated to match existing (sandstone grey)

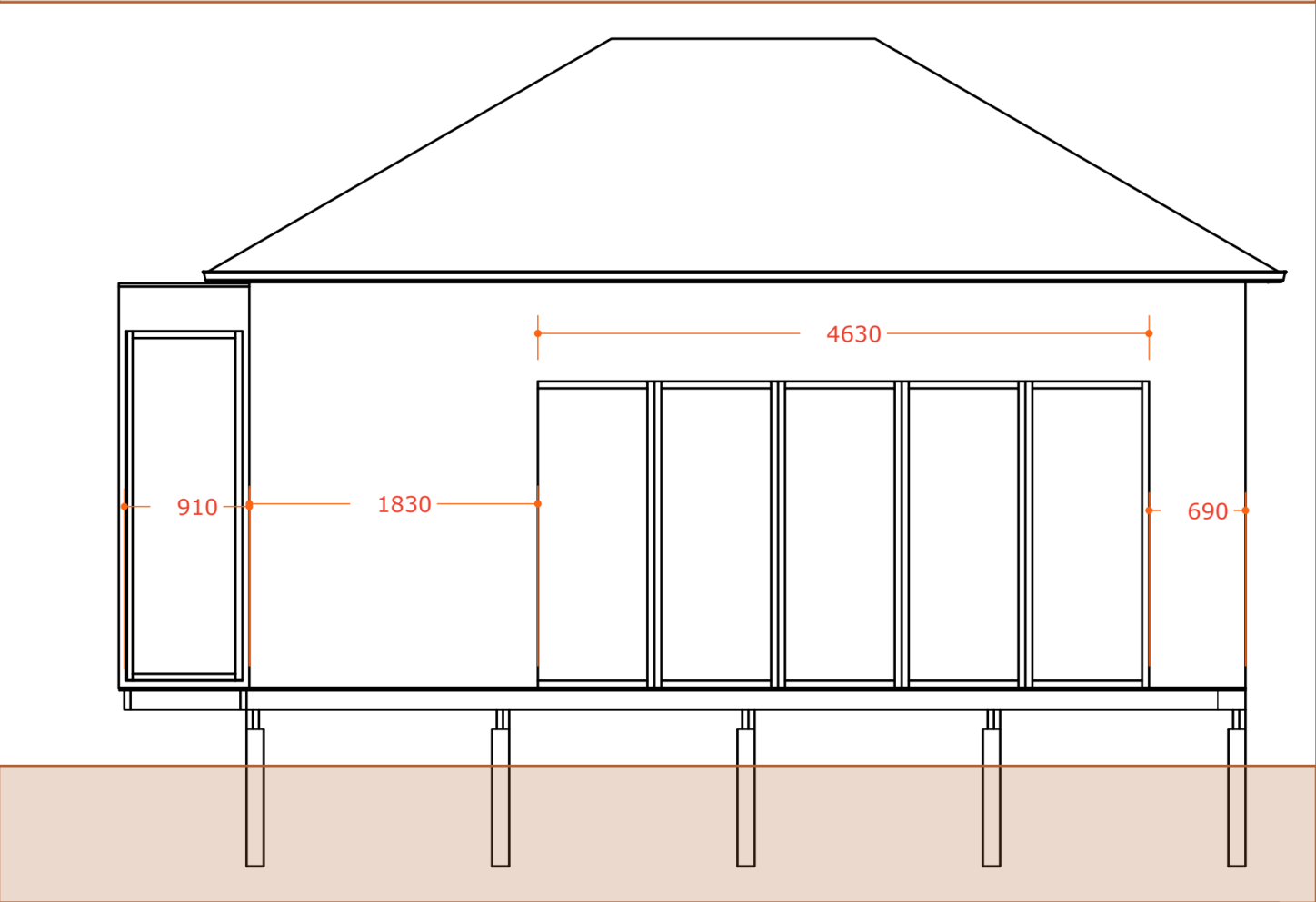
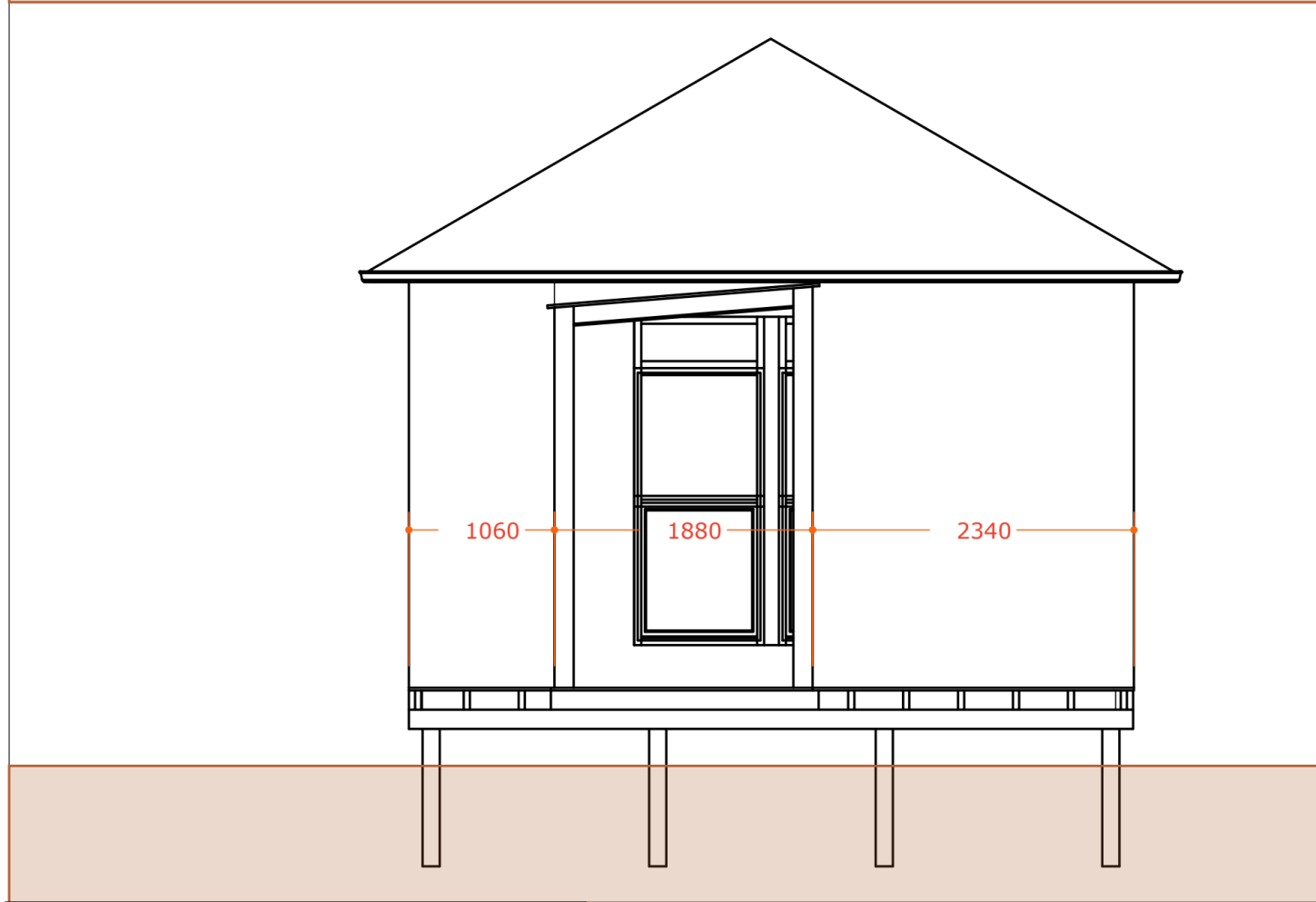
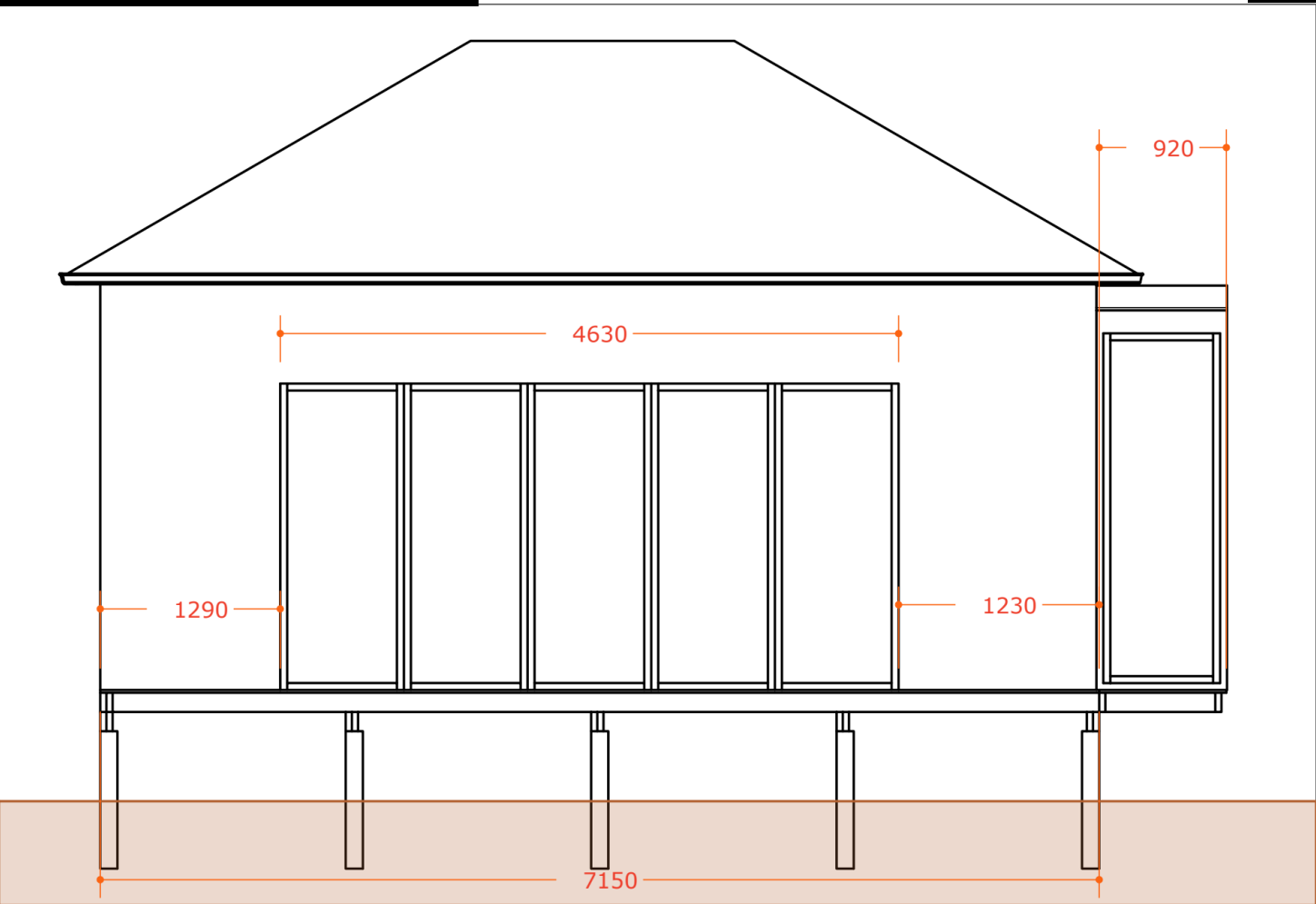
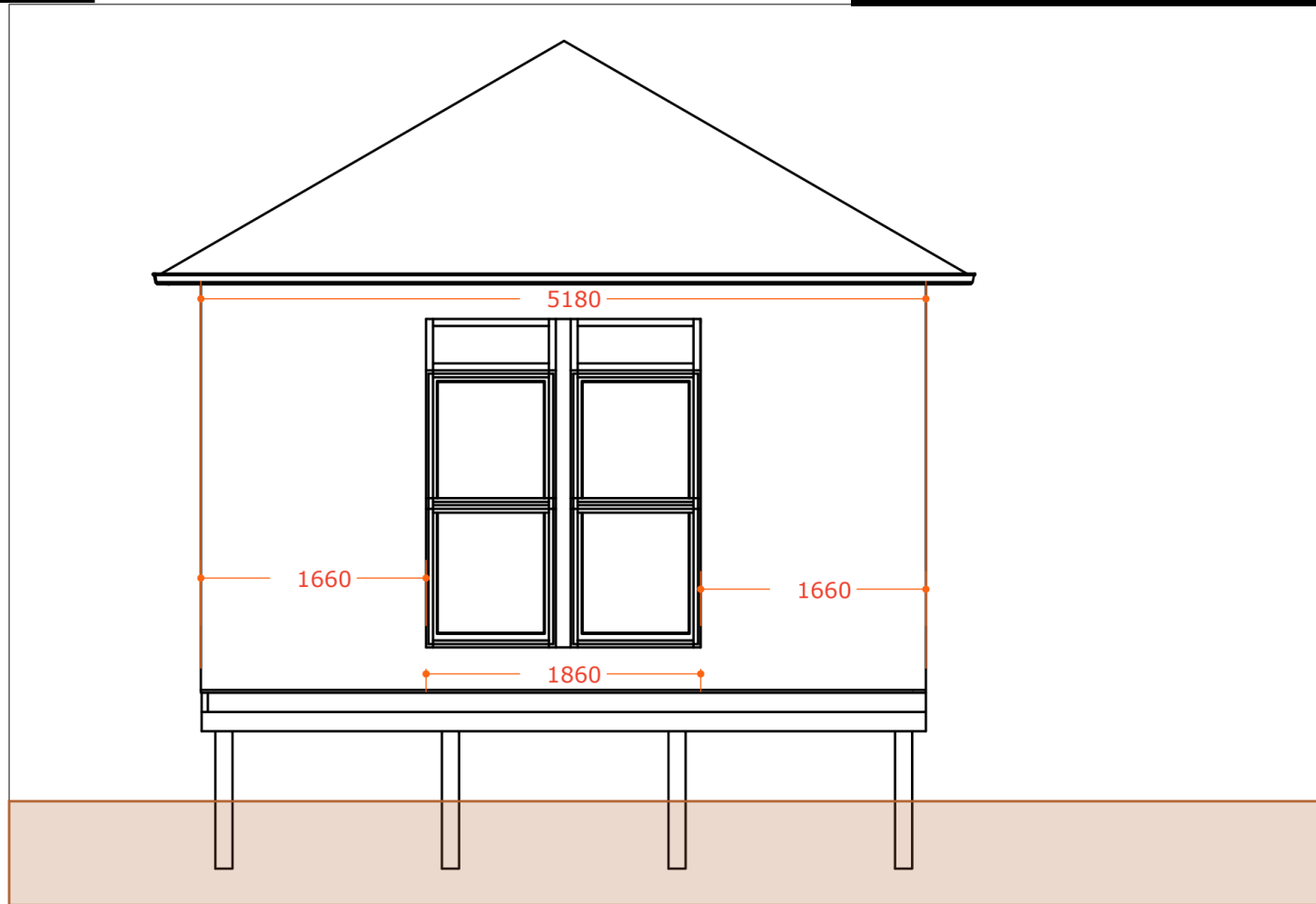
Building B Lounge

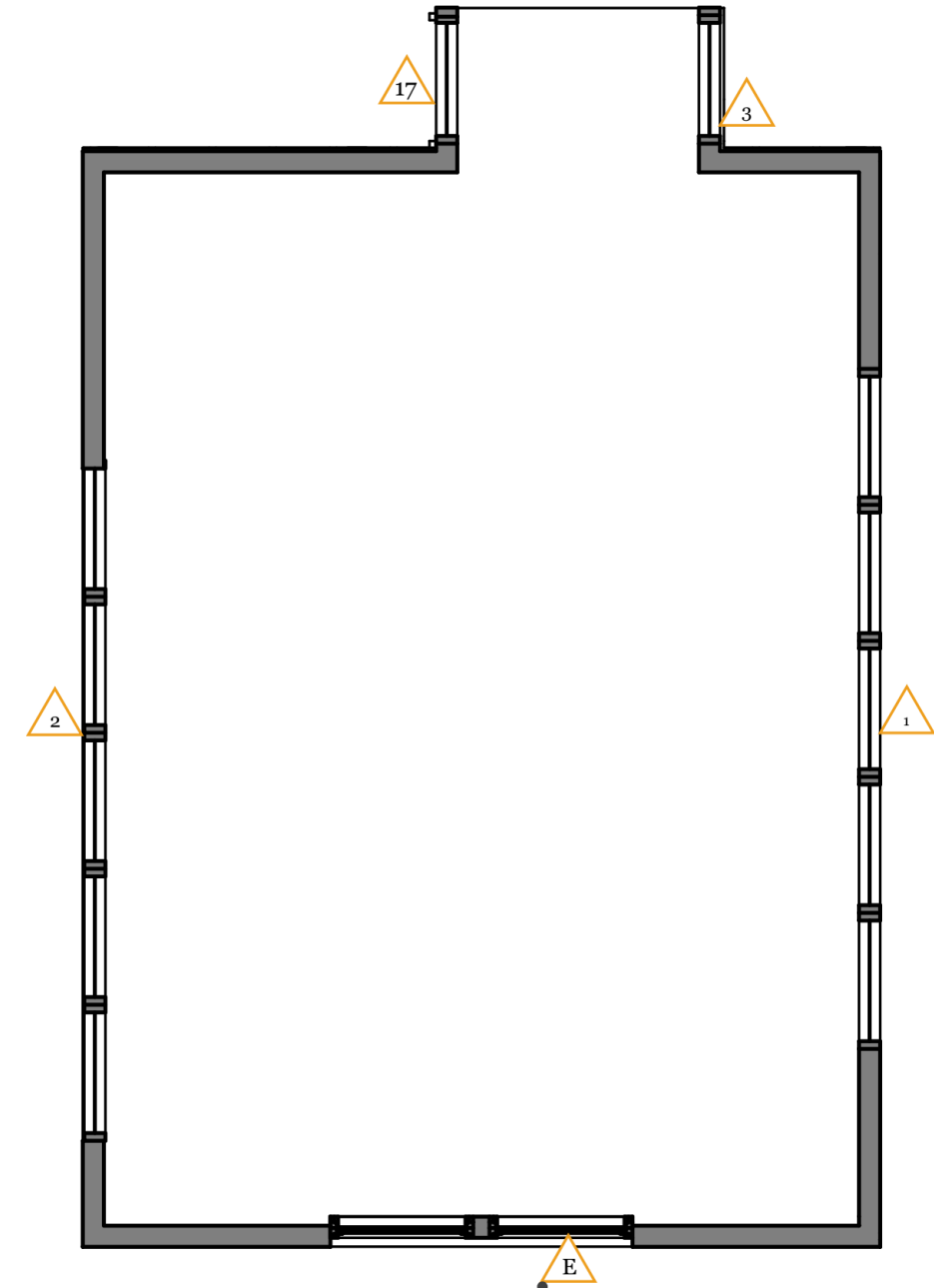
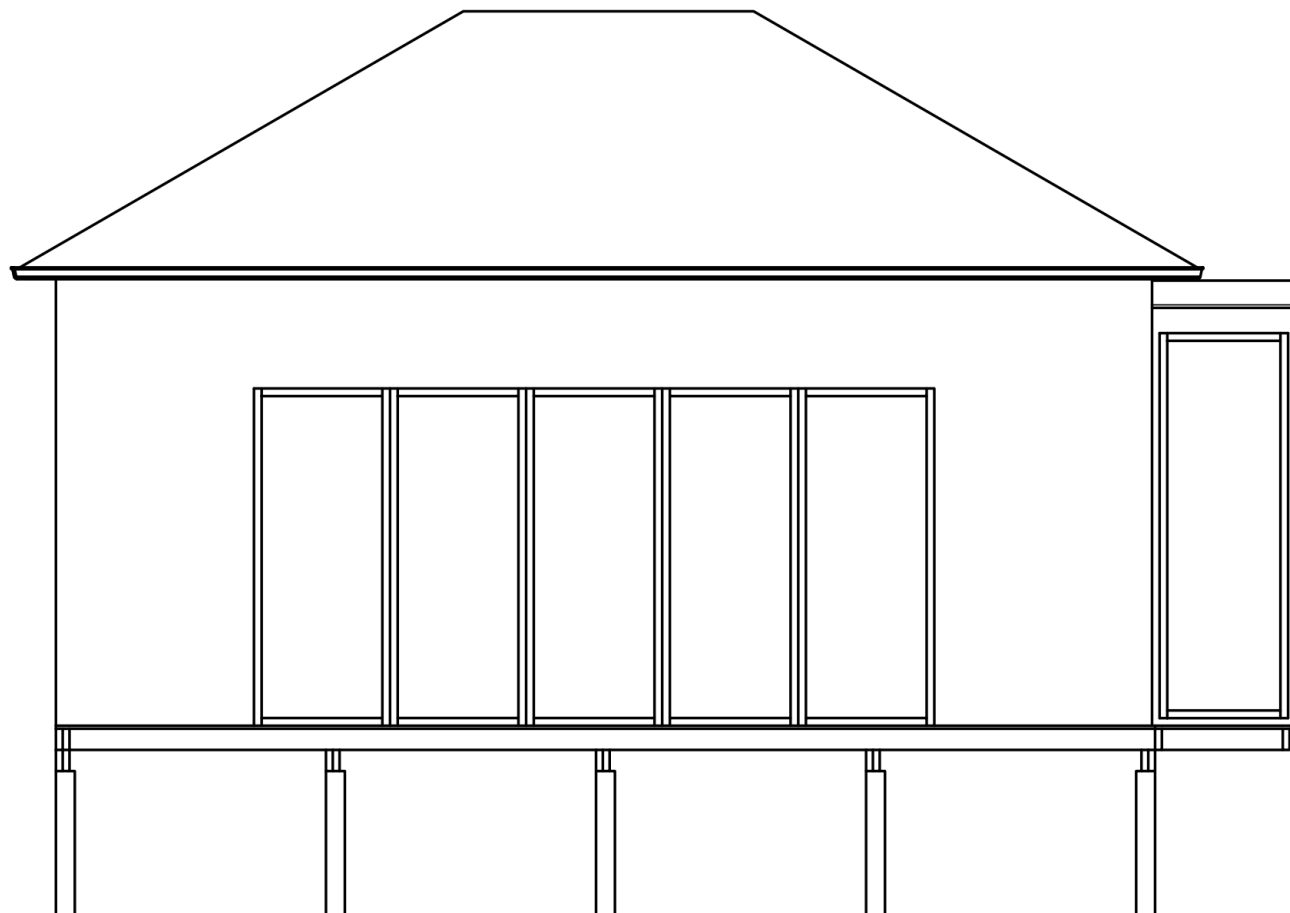
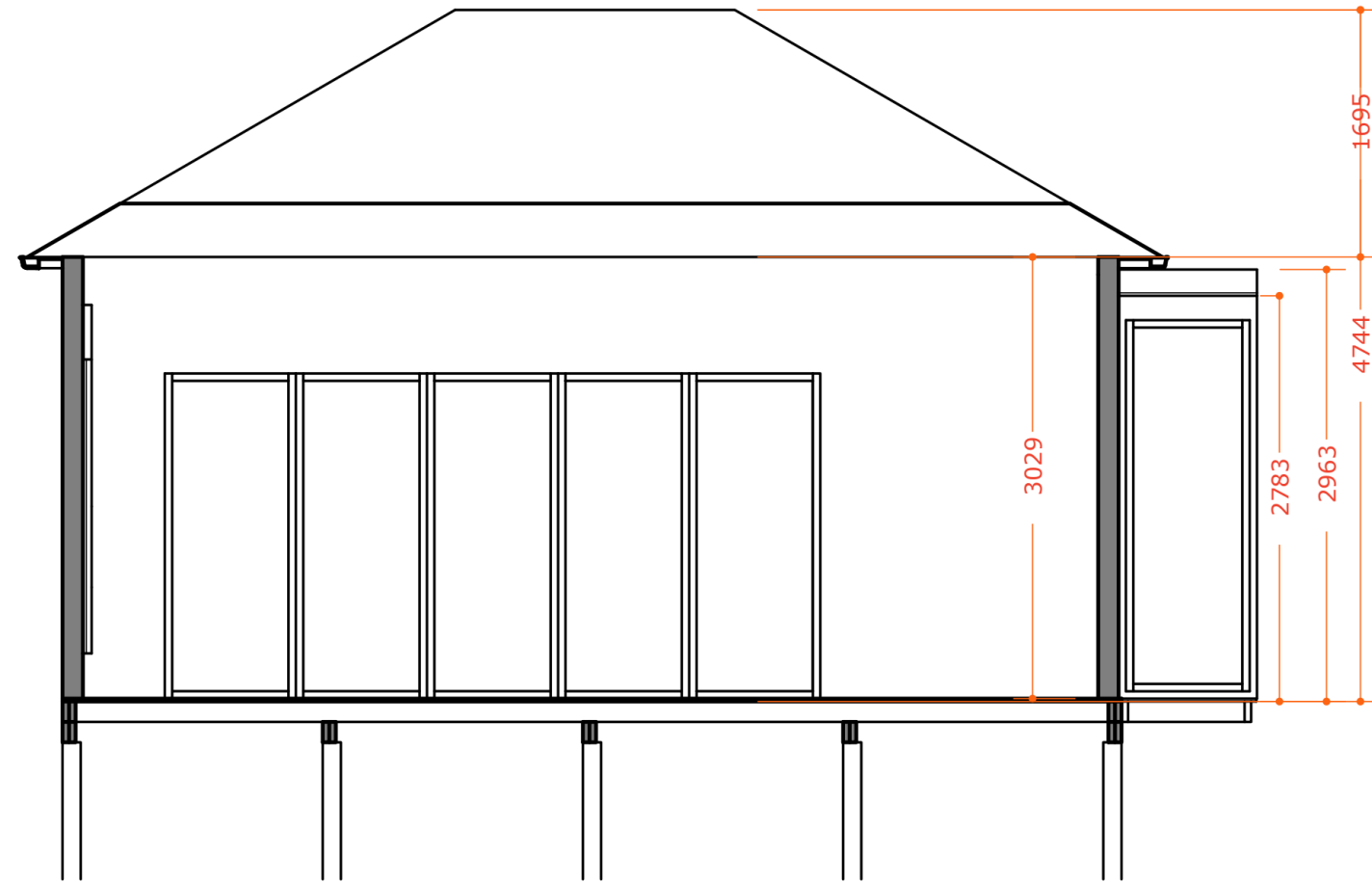
- 1: overview
- 2: 3D overview top
- 3: dimensions frames and foundation
- 4: elevations color
- 5: windows and heights
- 6: foundation and roof bracing
- 7: bottom wall / foundation detail
- 8: details wall head bottom
- 9: Gib Bracing , risk matrix
- 10: flashing detail walkway

building B Lounge









Move existing window from existing house

Insulation:

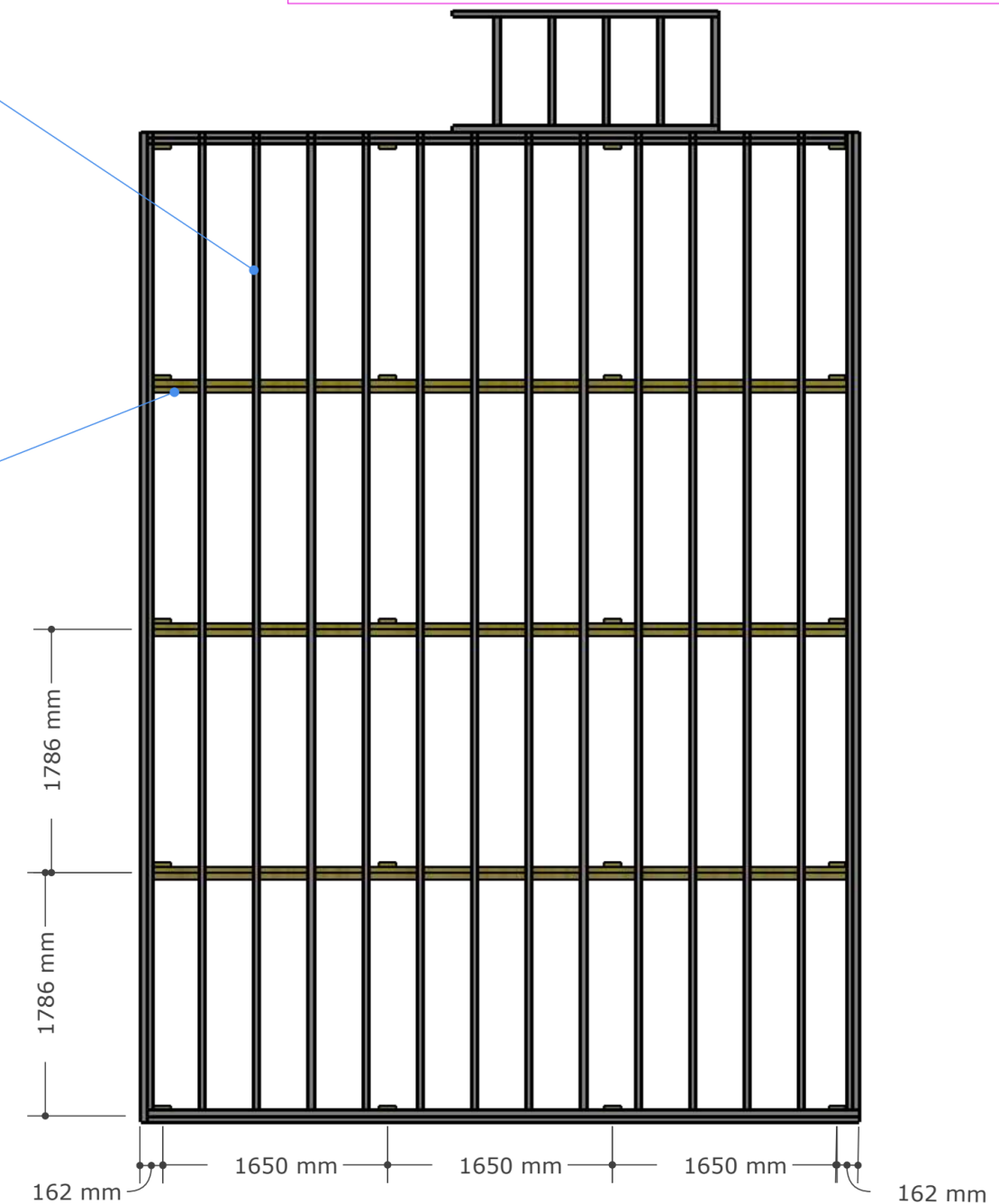
Walls: Pink batts or ECO -Wool $R > 2.6$
Underfloor : PIR 90 mm $R = 2.25$ on top
of floorboard

roof: Ceiling insulation between joists
+ Ceiling blanket on top. $R \geq 3.6$

- Diagonally opposed metal strap bracing in roof plane - fixed to manufacturers specification at truss and top plates of end and side walls. 4kN Min capacity in tension (each) as per CI 10.4.2.2b NZS 3604: 2011
- Total roof area = 79.9m²
- Min cross strap bracing - 1 per 50m²
- 2 required

140 x 45 SG8
max . Span 2m

2/140 x 45 SG8
bearer with piles
@ 1.65 c/c



foundation

top view

Gib ceiling diaphragm

building B Lounge

C
06

foundation , roof bracing

06

90 x 45 MDG 8 Douglas Fir framing
studs at 600 centre with R2.6 insulation

G3 Building Wrap

vertical battens 600 centre
35 x 20 mm

bevelled weatherboard

FFL

Cavity closer

color steel base flashing ,
paper overlaps

10 mm gib lining

skirting

8mm expansion gap for floating floor

20 mm polysterene

50 mm polysterene

50 mm concrete poured in situ

20 mm strand floor or copine flooring boards

min. 150 mm

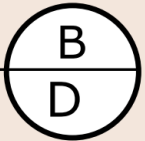
FGL

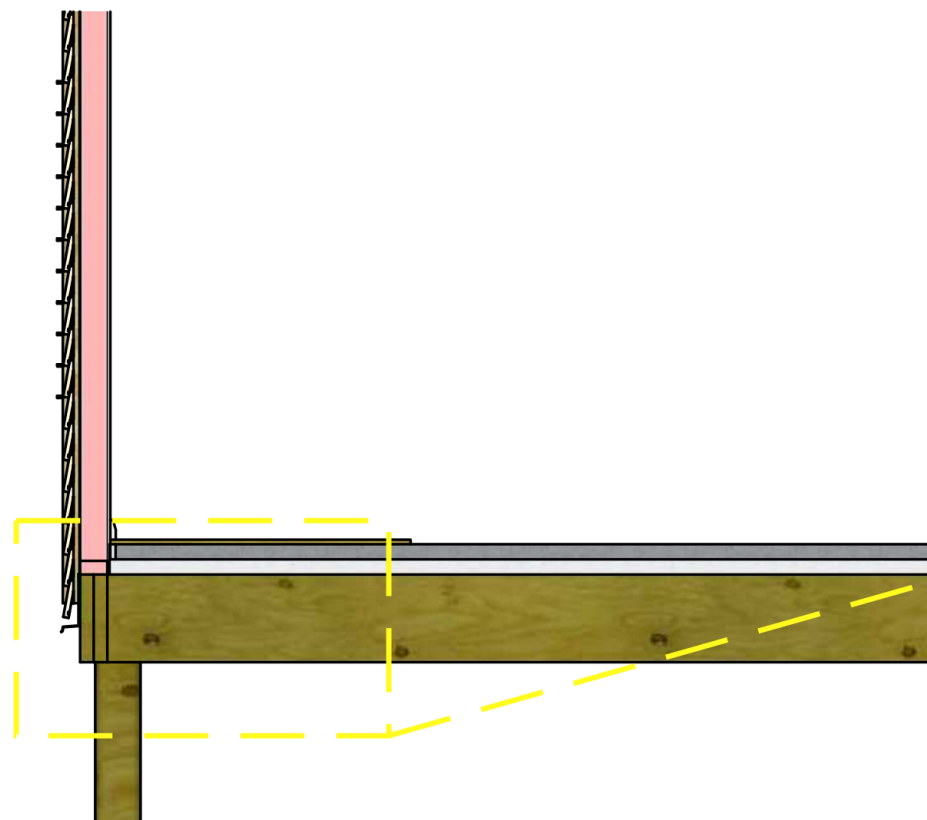
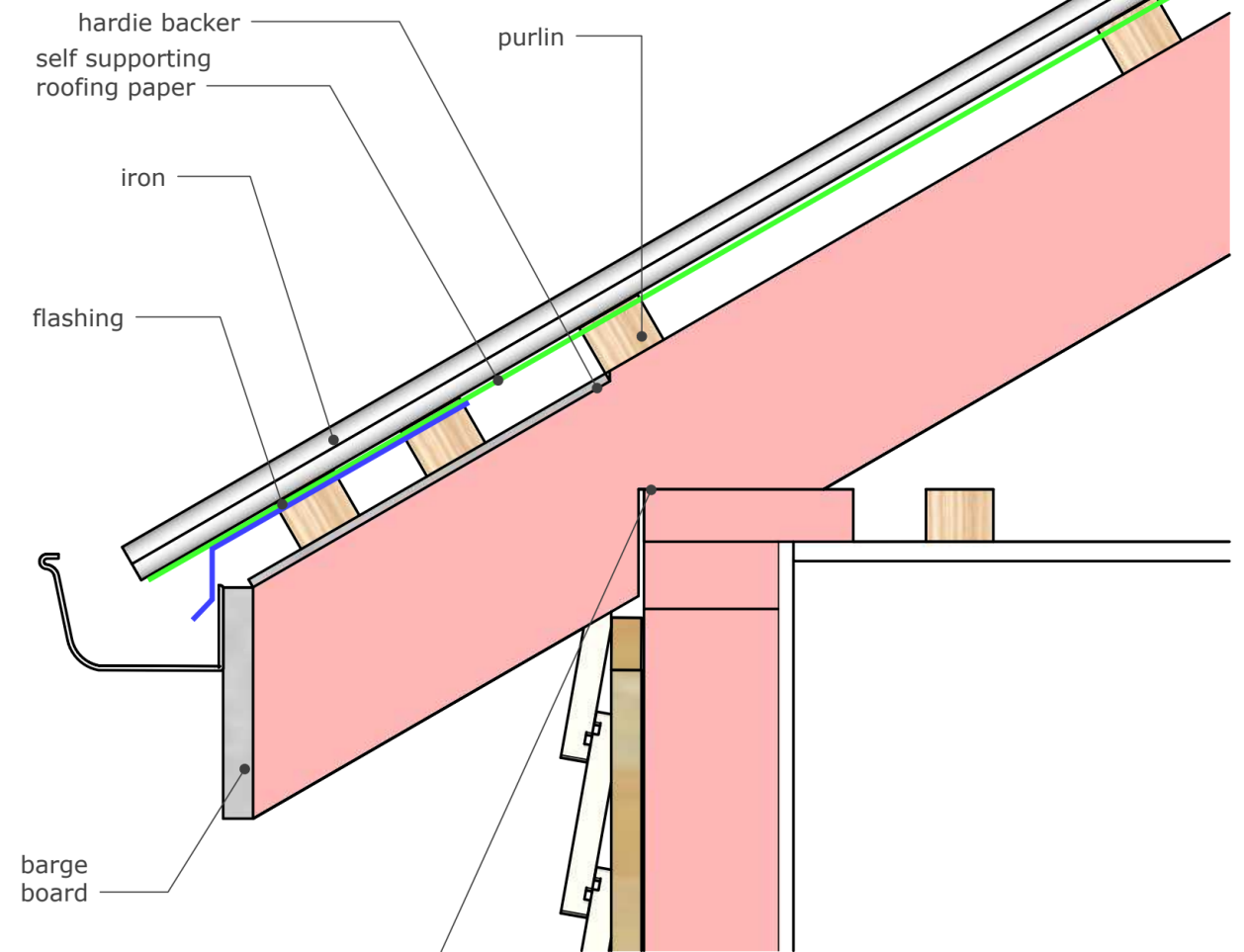
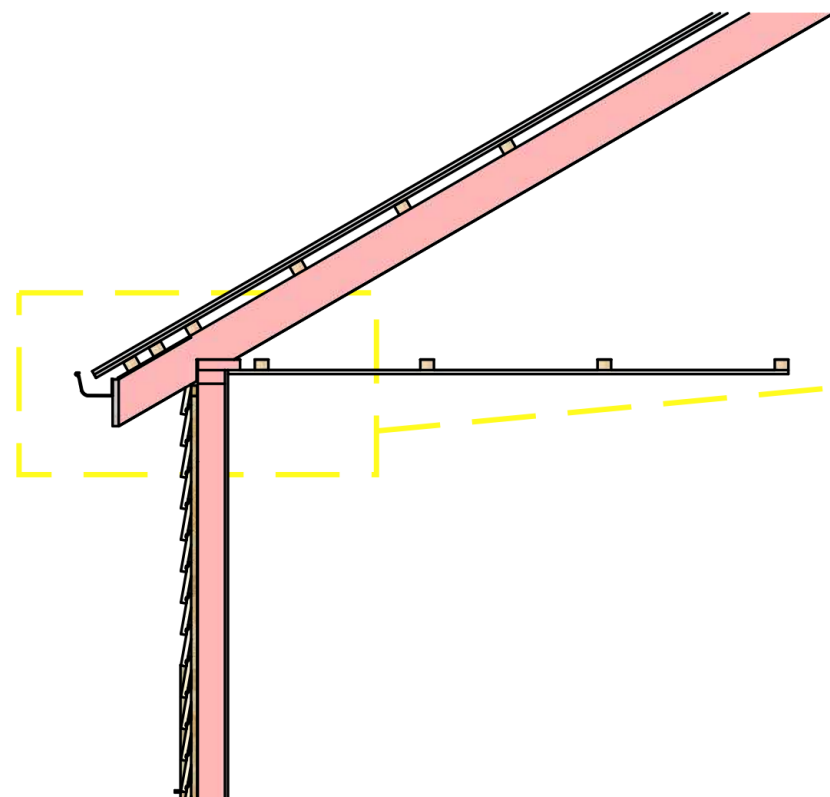
3 KN foundation

Ground

Lounge wall , foundation

no scale





details page 7

building B Lounge

C
08

details cladding top and bottom

Job Details

Name:

Street and Number:

Lot and DP Number:

City/Town/District:

Designer:

Company:

Date:

Building Specification

Number of Storeys	Single
Floor Loading	3 kPa
Foundation Type	Subfloor
Sub Floor Cladding	Light
Single	
Cladding Weight	Light
Roof Weight	Light
Room in Roof Space	12.5 to 24
Roof Pitch (degrees)	30
Roof Height above Eaves (m)	1.75
Building Height to Apex (m)	5
Ground to Lower Floor (m)	0.3
Stud Height (m)	3
Building Length (m)	7.1
Building Width (m)	5.1
Building Area (m²)	38

Single Along

To Add Elements, right click when on the Element above which you want to insert the Element.

Limit Element Resistance to 120 BU/m									
Line	Ext. Len. (m)	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BU)	Earthquake (BU)
a	7.2	1	1200		3	BLP-H	GIB®	115200	115200
		2	1.1		3	BLP-H	GIB®	106	106
b	7.2	1	0.8		3	BLP-H	GIB®	58	58
		2	1.7		3	BLP-H	GIB®	163	163

Wind	Earthquake
Demand	Demand
330	323
Resistance	Resistance
115526	115526
35008%	35767%
115306 OK	115306 OK
221 OK	221 OK

Single Across

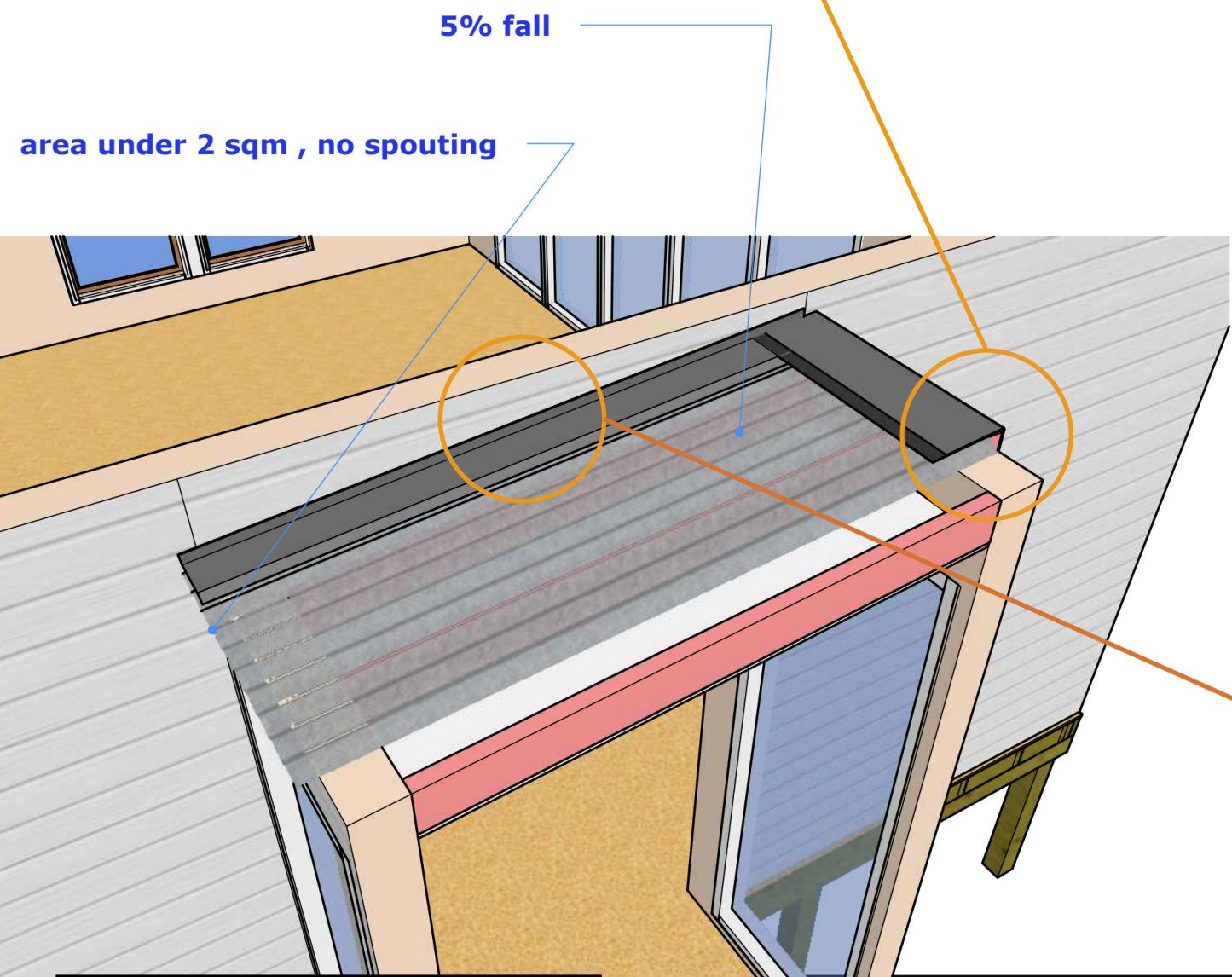
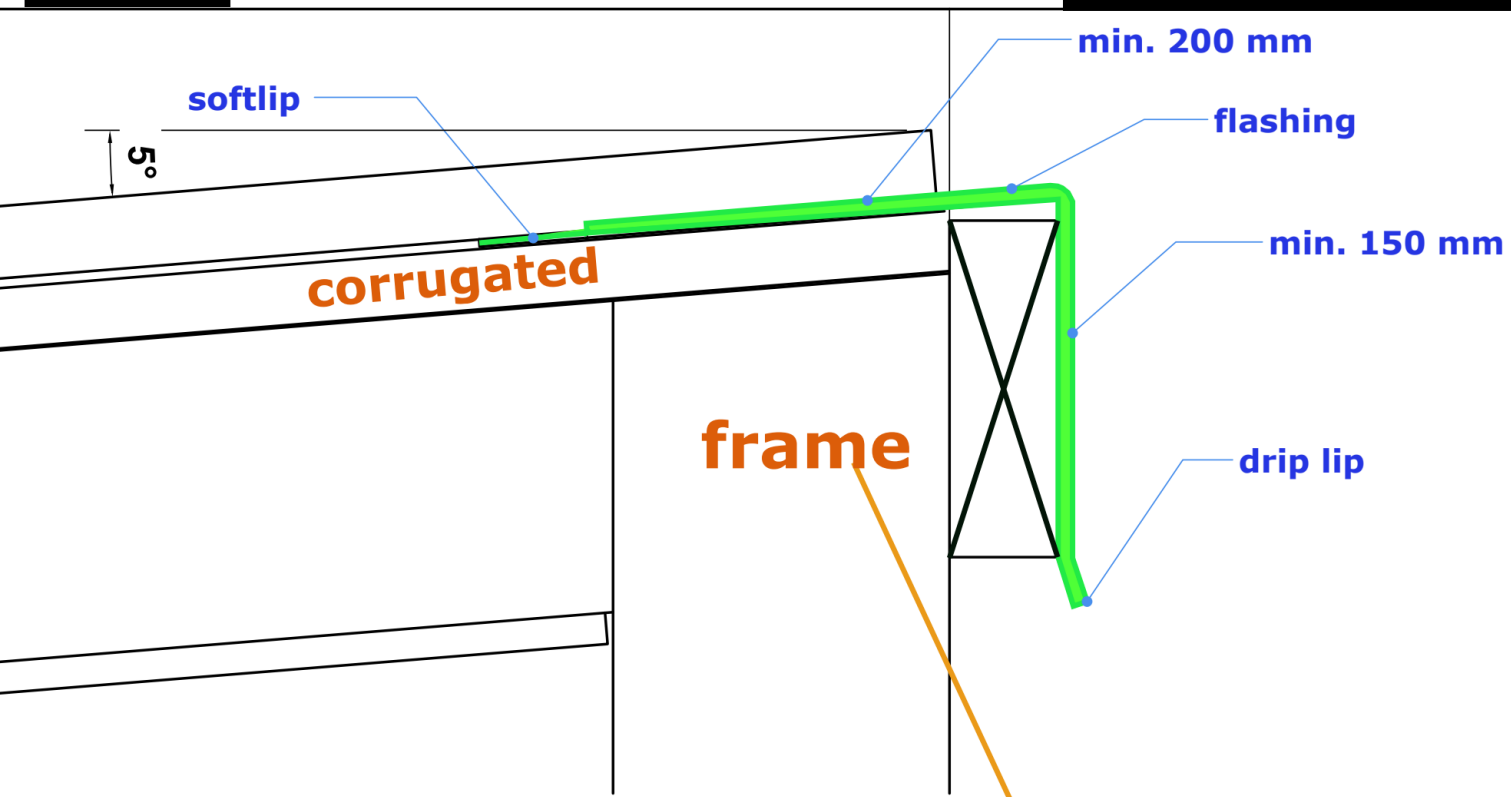
To Add Elements, right click when on the Element above which you want to insert the Element.

Limit Element Resistance to 120 BU/m									
Line	Ext. Len. (m)	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BU)	Earthquake (BU)
1	5.2	1	1.4		3	BLP-H	GIB®	134	134
		2	1.4		3	BLP-H	GIB®	134	134
2	5.2	1	0.9		3	BLP-H	GIB®	88	88
		2	2.2		3	BLP-H	GIB®	211	211

Wind	Earthquake
Demand	Demand
387	323
Resistance	Resistance
566	566
146%	175%
269 OK	269 OK
298 OK	298 OK

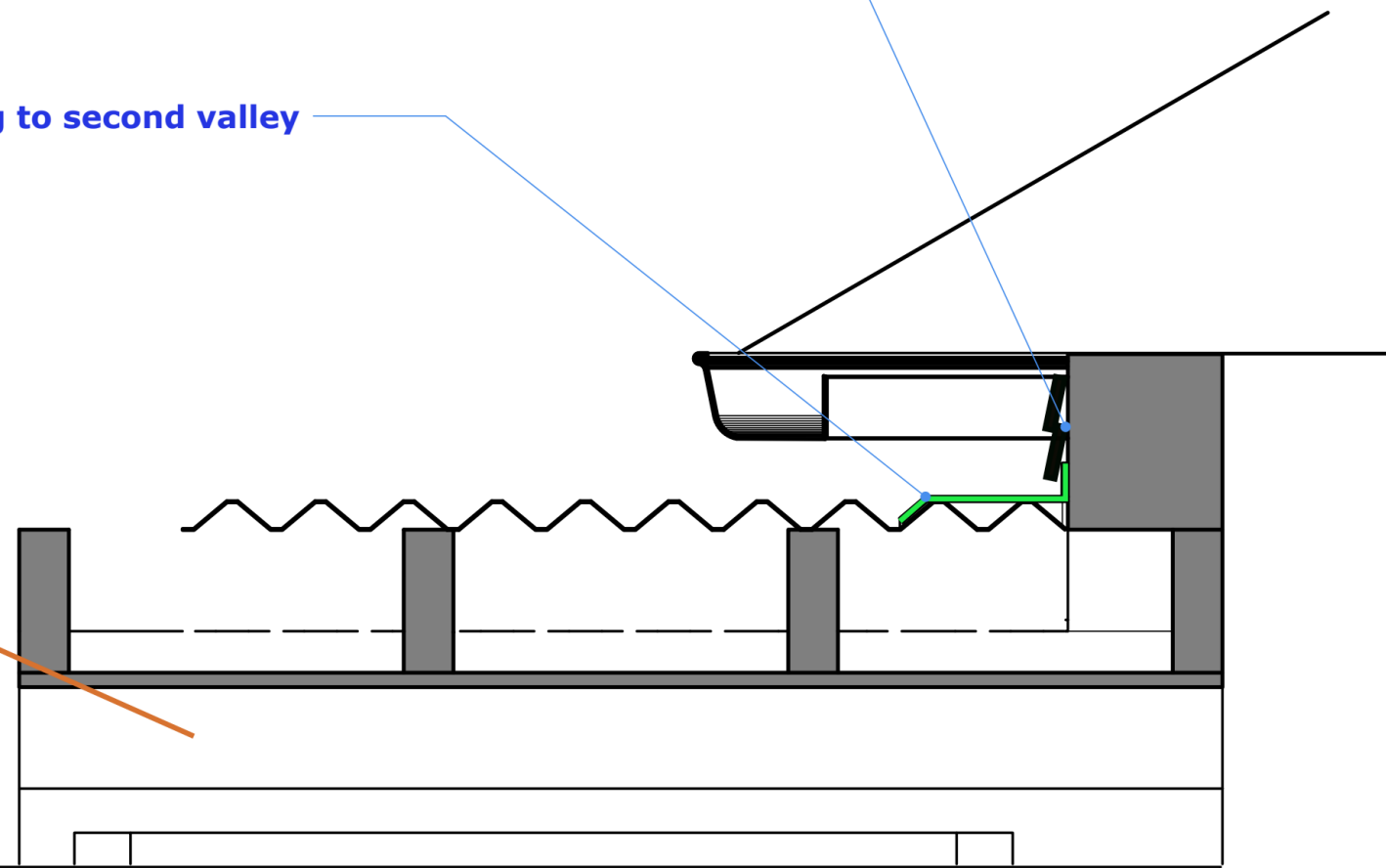
Risk factor	Low	Score	Medium	Score	High	Score	Very high	Score	Subtotal for each risk factor
Wind zone (per NZS 3604)	0		0		1		2	2	2
Number of storeys	0	0	1		2		4		0
Roof / wall intersection design	0		1	1	3		5		1
Eaves width	0		1	1	2		5		1
Envelope complexity	0		1	1	3		6		1
Deck design	0	0	2		4		6		0
[Enter the appropriate risk severity score for each risk factor in the score columns. Transfer these figures across to the right-hand column. Finally, add up the figures in the right-hand column to get the total risk score.]							Total risk score:		5

TABLE 3	Suitable wall claddings (paragraphs 3.1.2, 3.4.1.1, 3.4.2.1, 3.4.2.2, 3.4.3.2, 9.1.1, 9.4.1.2, 9.4.1.3, 9.6, figure 1 (E2/AS1))	
Risk score	Suitable wall claddings	
	Direct fixed to framing	Over 20mm minimum drained cavity
0 - 6	a) Timber weatherboards - all types	a) Masonry veneer (2)
	b) Fibre cement weatherboards	b) Stucco
	c) Vertical profiled metal (3) - corrugated and symmetrical trapezoidal (3)	c) Horizontal profiled metal (3) - corrugated and trapezoidal only
	d) Fibre cement sheet (4) (Jointed finish)	d) Fibre cement - flush-finished
	e) Plywood sheet	e) EIFS
7 - 12	a) Bevel-back weatherboards	a) Masonry veneer (2)
	b) Vertical timber board and batten	b) Stucco
	c) Vertical profiled metal (3) - corrugated only(3)(6)	c) Horizontal profiled metal - corrugated and trapezoidal only
		d) Rusticated weatherboards
		e) Fibre cement weatherboards
		f) Fibre cement sheet - flush and jointed finish
		g) Plywood sheet
		a) EIFS



flashing behind weatherboard and paper

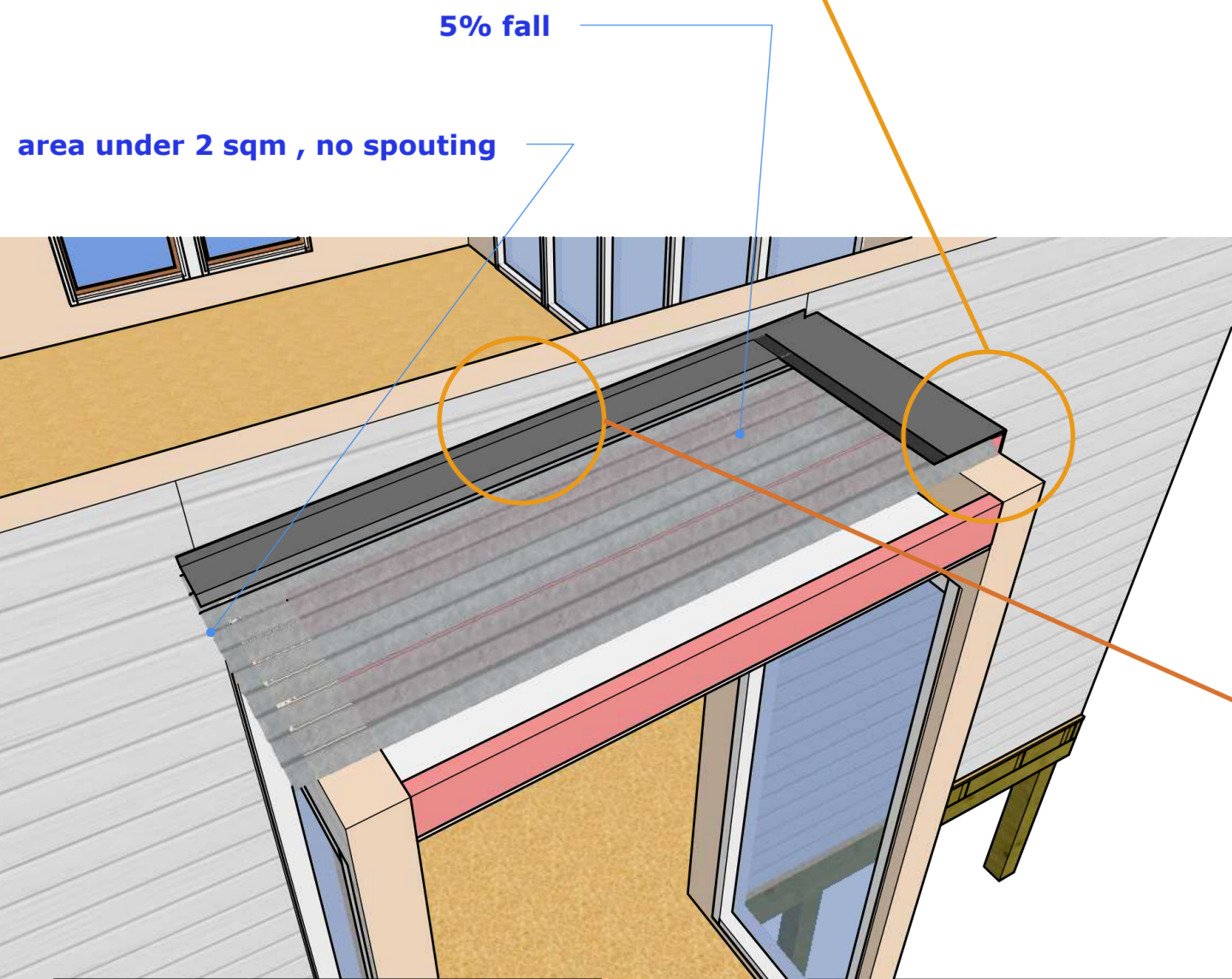
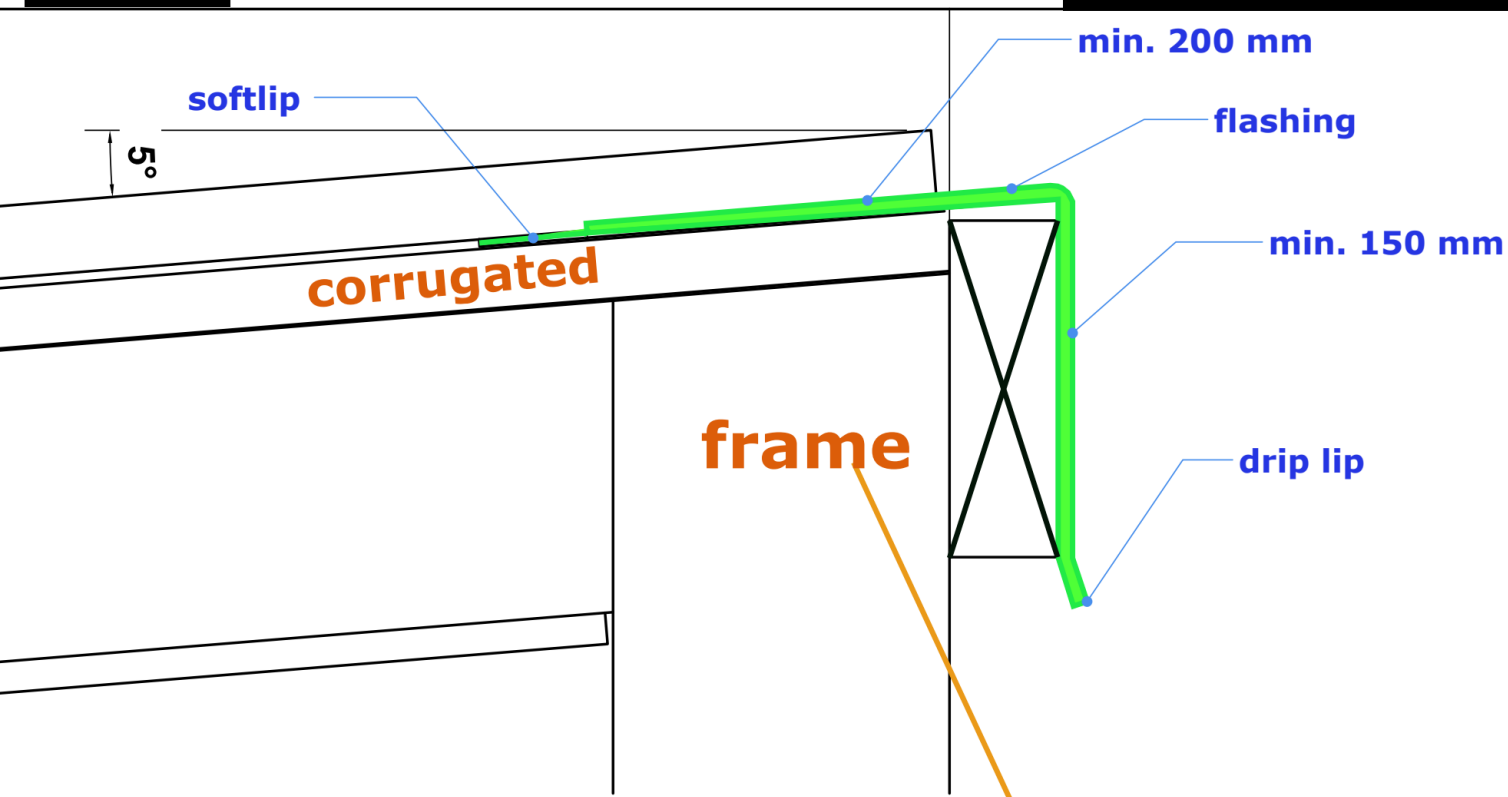
flashing to second valley



building B Lounge

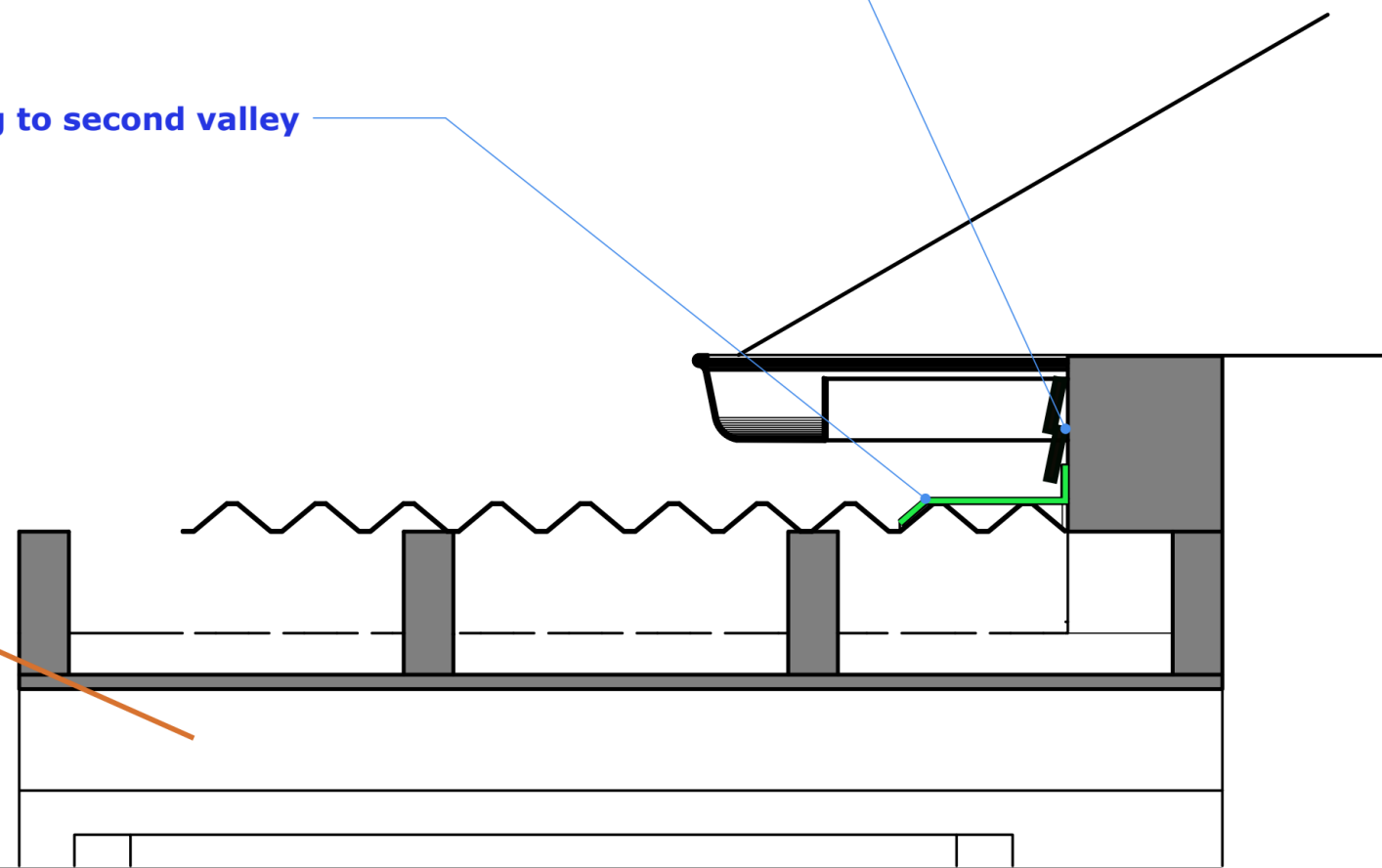
B
11

flashing detail walkway
no scale



flashing behind weatherboard and paper

flashing to second valley



building B Lounge

C
10

flashing details walkway



2 Type 1 Smoke Alarms will be installed
as per plan Mail Building A back wing page 5,
Also sprinkler system will be install for extra safety

Cladding : 5 Rip Colorsteel endura ,
colour : grey Friar

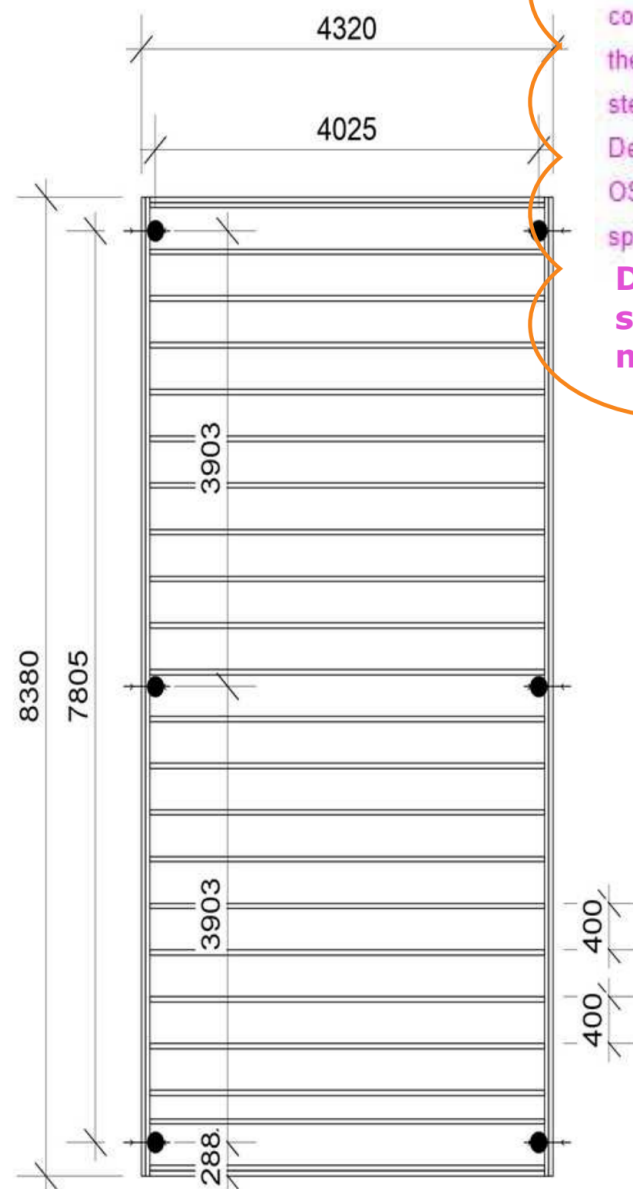
Roofing : 5 Rip Colorsteel Endura,
Colour : sandstone grey

- 1: overview
- 2: floorplan . measurements
- 3: framework, lintels, HWC restrain
- 4: elevations cad
- 5: roof bracing, risk matrix
- 6: foundation
- 7: detail cladding - foundation
- 8: details cladding top and bottom
- 9: Gib Bracing Calculation
- 10: waterproofing details

Building C sleepout

C
01

overview
no scale



Decks will be done under Schedule 1 and are not part of this application.
 It is intended that the decks not requiring building consent be constructed at the time of building the dwelling so that the need for temporary steps at entrance will then not be required.
 Decks at the main entrance will be oiled using OSMO anti-slip decking oil 430 to comply with anti-slip regulations, specifications attached.
Deck at least 1.5 m wide, steps max raiser 180 mm min tread 280

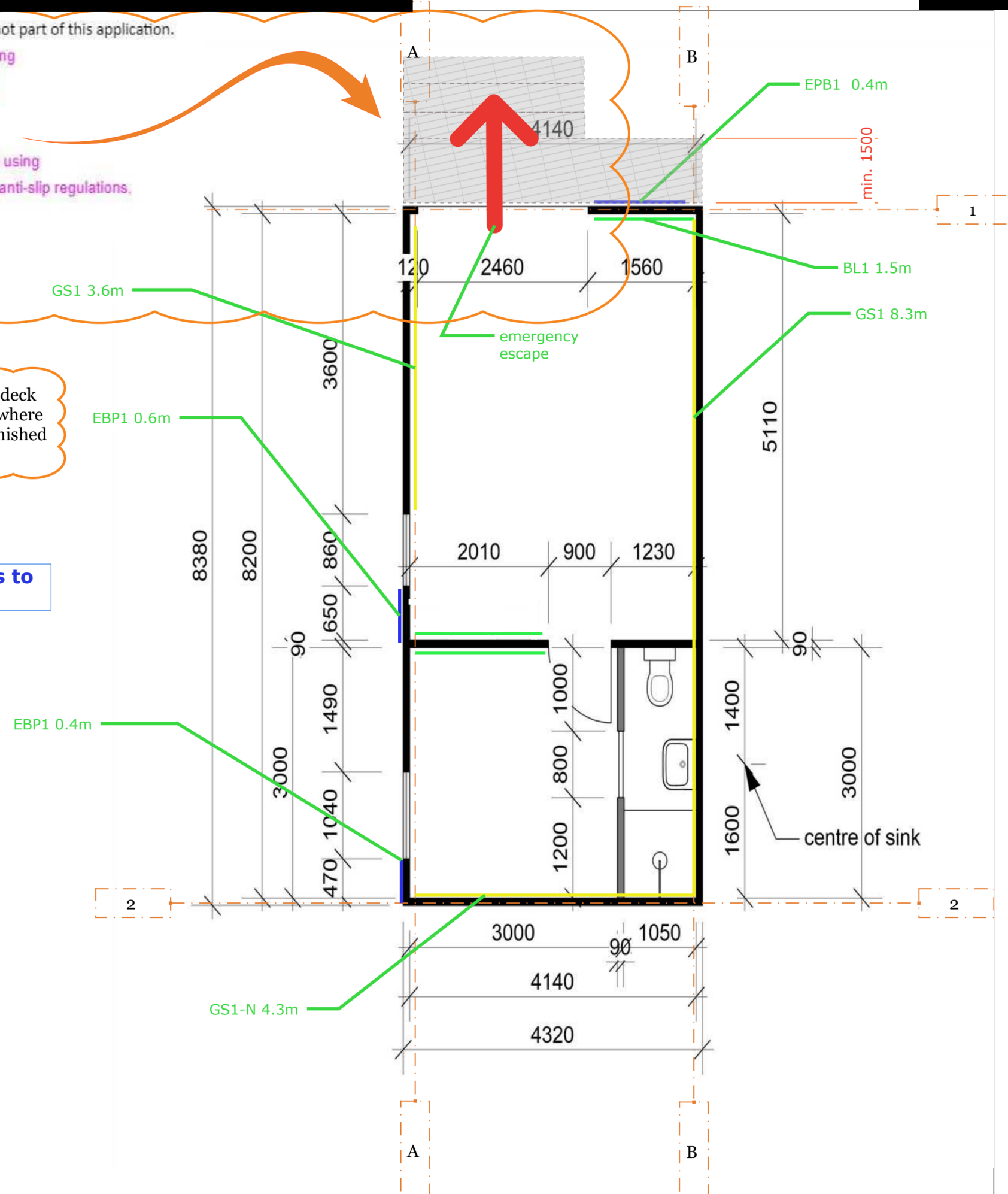
Ground level next to the entrance deck will be raised so there is no point where the deck is more than 1m above finished ground level.

All Measurements to Frames

150 Ø SED - H5 Piles, 0.9m deep into natural ground, 600mm Ø hole back filled with 17.5 MpA concrete.

2 @ 300 x 45 LVL13 bearer fixed to post using 2 x M12 s/s bolts and 50x50x3 s/s square washers

290 x 45 H3.2 joists in between fixed using joist hangers @ 400 cts.



Building C sleepout

C
02 floorplan , measurements
no scale

truss design
by others

Rafters 140x45 SG8
@600 centre

6 kn strap over rafter pair

no ceiling in living area
2/300 x 45 LVL 13
Ridge beam

ceiling in bath and
bedroom

90x90 H1 lintel

2/300 x45
LVL13 full width
2/6kn straps to double stud
HandiBrac to floor

2/300 x 45
LVL13 beam
in end wall

2/300 x 45
LVL13 beam
in wall

ridge jack stud
on lintel
see engineer details

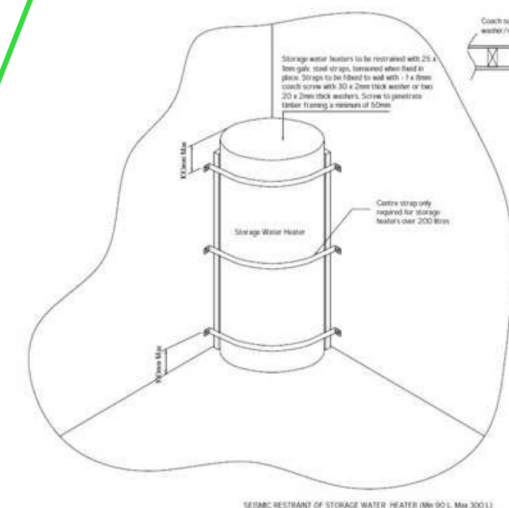
190 x 90 lintel H1

concrete and polisterene
see details foundation

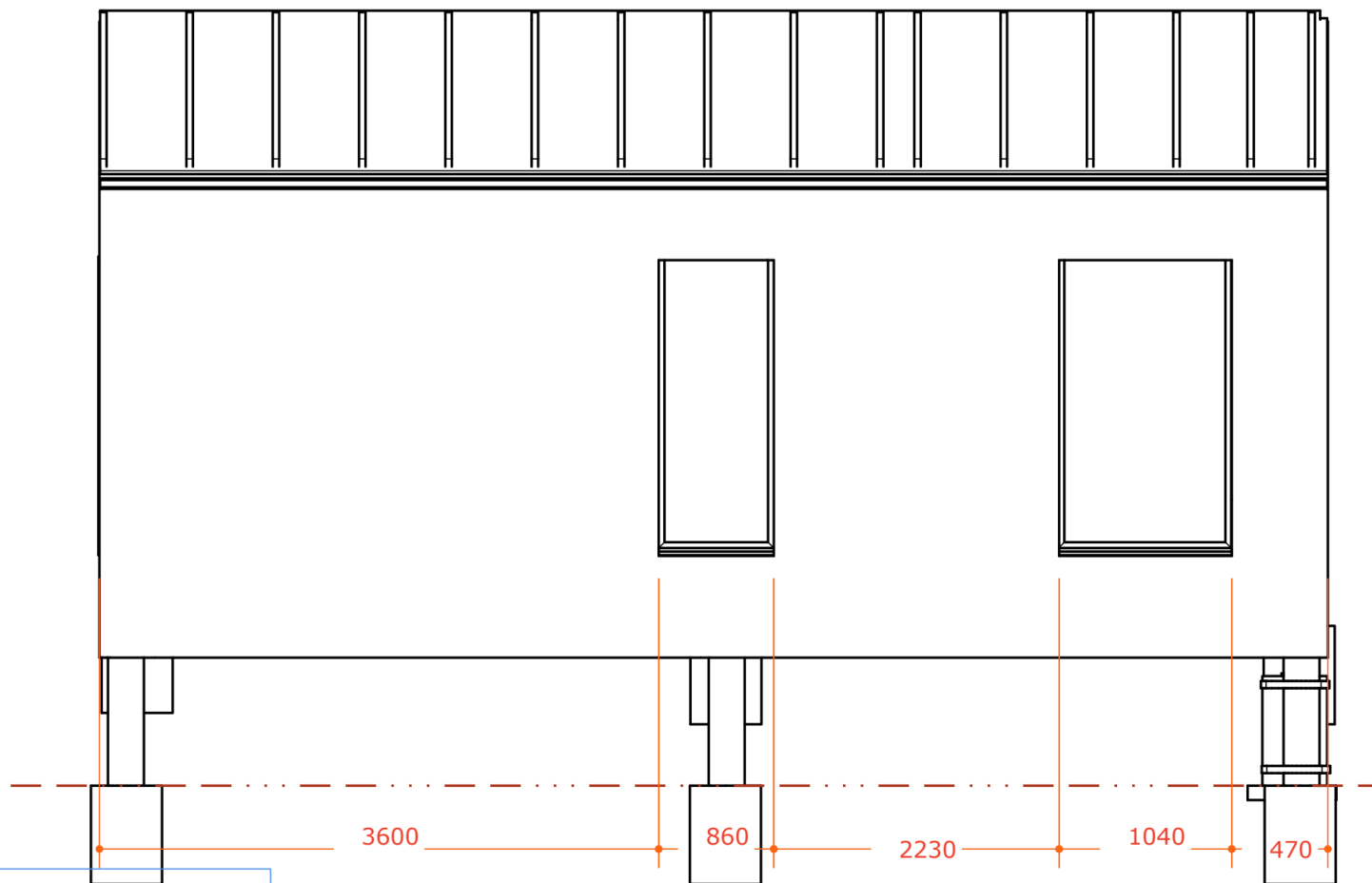
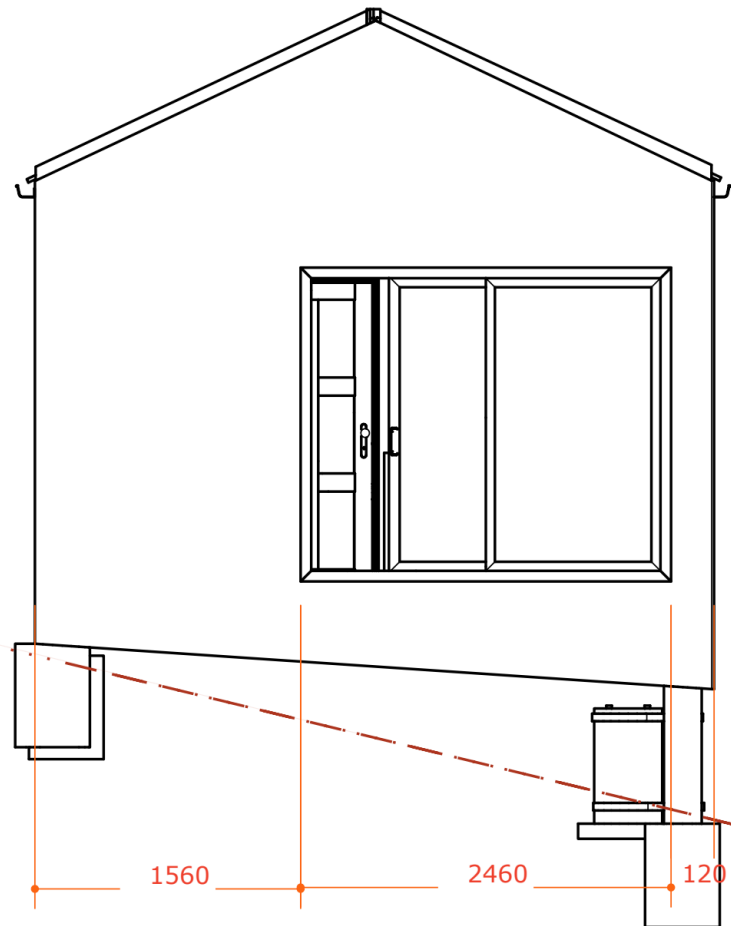
CPC 40 to top plate

all wall framing 90 x 45

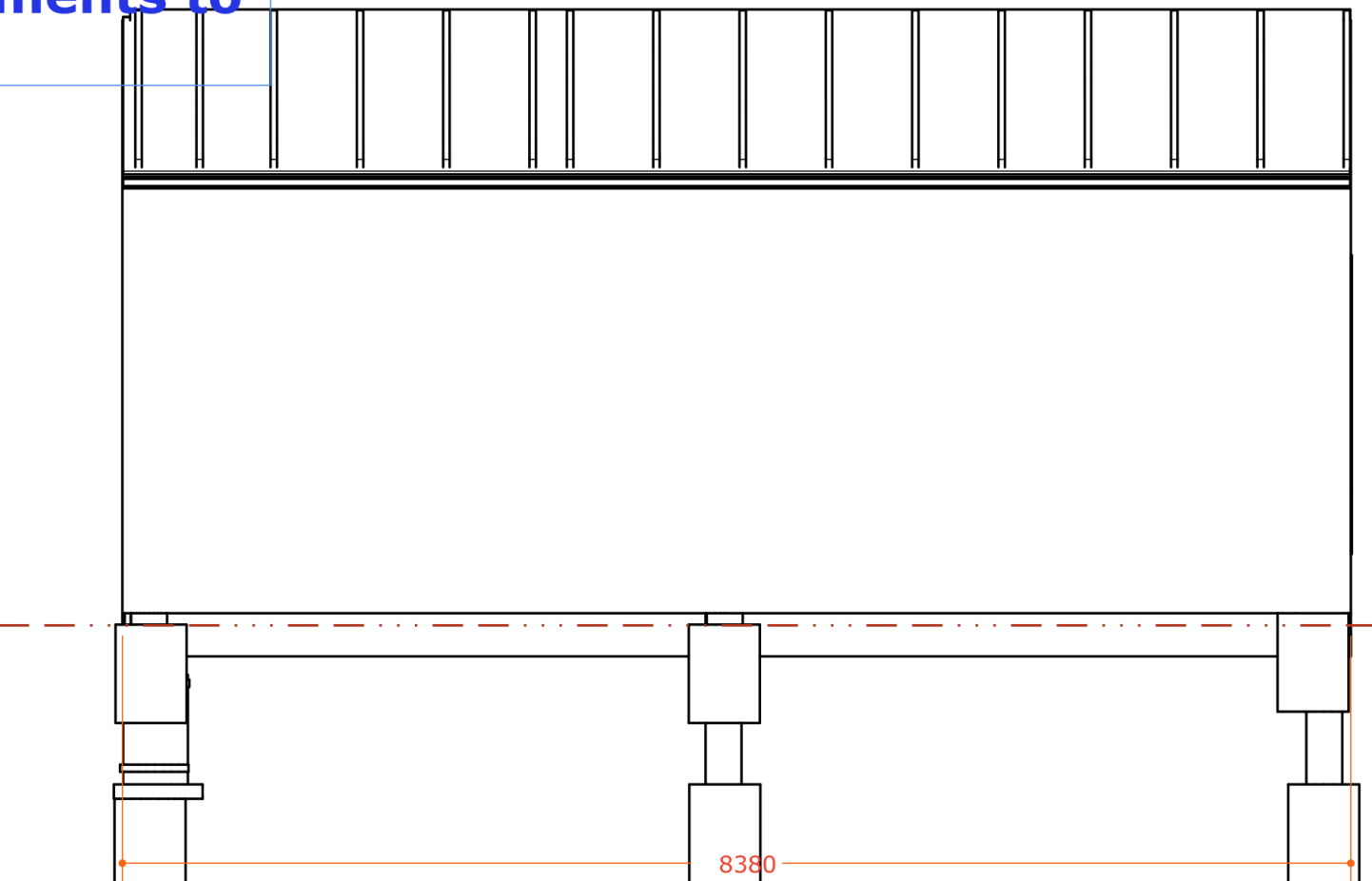
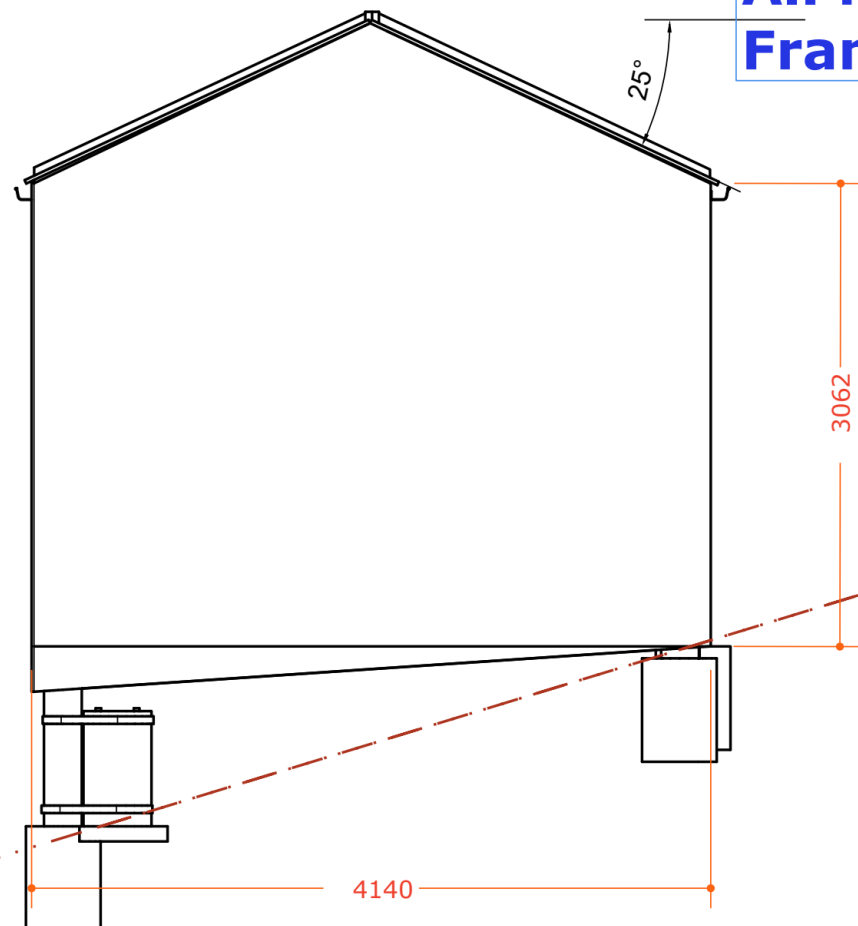
Engineer details in green

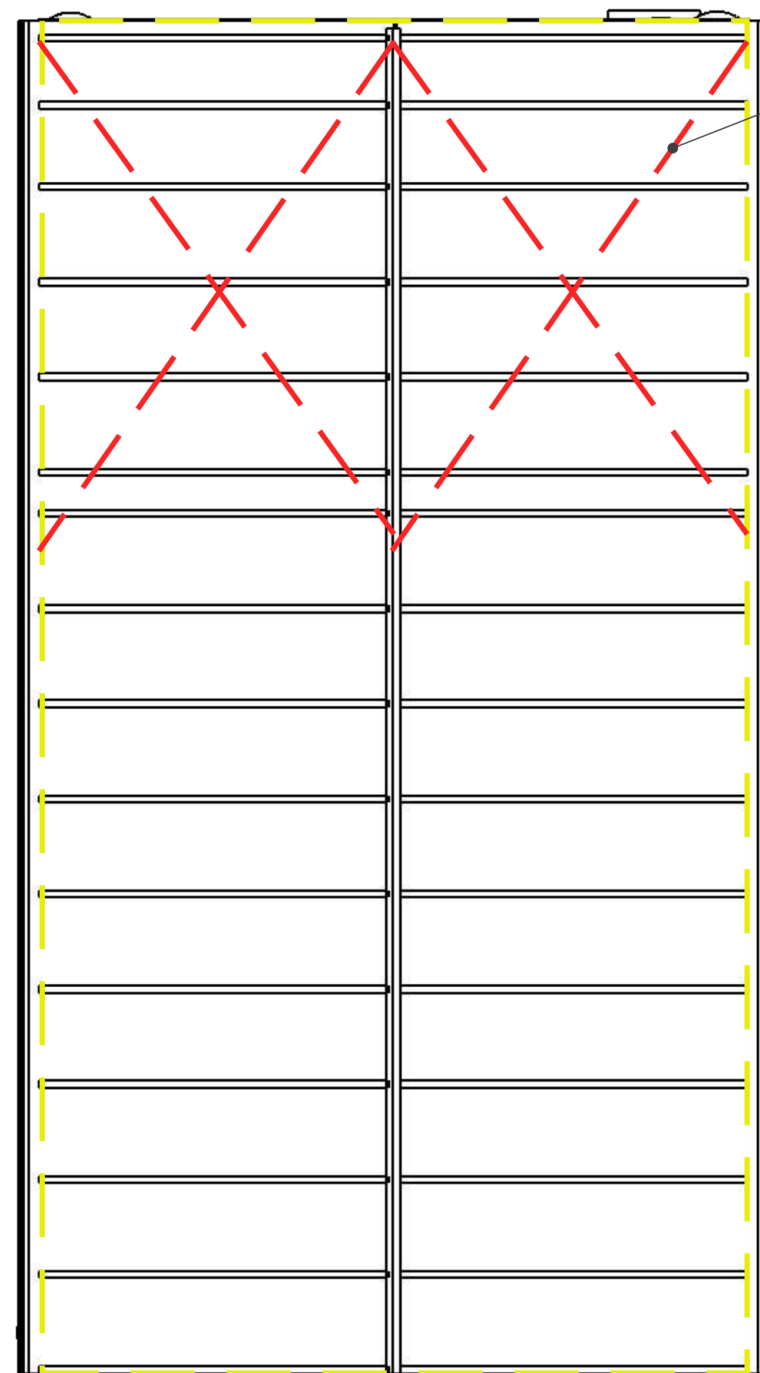


HWC seismic bracing
to pile, HWC on concrete
footing ,
Straps min. 25 x 1mm galv,
fixed with min.50 mm
screws into pile
with 30 x 2 mm washers



All Measurements to
Frames





- Diagonally opposed metal strap bracing in roof plane - fixed to manufacturers specification at truss and top plates of end and side walls. 4kN Min capacity in tension (each) as per CI 10.4.2.2b NZS 3604: 2011
- Total roof area = **40**
- Min cross strap bracing - 1 per 50m²
- 1** required

Risk factor	Low	Score	Medium	Score	High	Score	Very high	Score	Subtotal for each risk factor
Wind zone (per NZS 3604)	0		0		1		2	2	2
Number of storeys	0	0	1		2		4		0
Roof / wall intersection design	0	0	1		3		5		0
Eaves width	0		1		2	2	5		2
Envelope complexity	0	0	1		3		6		0
Deck design	0	0	2		4		6		0
[Enter the appropriate risk severity score for each risk factor in the score columns. Transfer these figures across to the right-hand column. Finally, add up the figures in the right-hand column to get the total risk score.]								Total risk score:	4

TABLE 3	Suitable wall claddings (paragraphs 3.1.2, 3.4.1.1, 3.4.2.1, 3.4.2.2, 3.4.3.2, 9.1.1, 9.4.1.2, 9.4.1.3, 9.6, figure 1 (E2/AS1))	
Risk score	Suitable wall claddings	
	Direct fixed to framing	Over 20mm minimum drained cavity
0 - 6	a) Timber weatherboards - all types b) Fibre cement weatherboards c) Vertical profiled metal (3) - corrugated and symmetrical trapezoidal (3) d) Fibre cement sheet (4) (Jointed finish) e) Plywood sheet	a) Masonry veneer (2) b) Stucco c) Horizontal profiled metal (3) - corrugated and trapezoidal only d) Fibre cement - flush-finished e) EIFS
7 - 12	a) Bevel-back weatherboards b) Vertical timber board and batten c) Vertical profiled metal (3) - corrugated only(3)(6)	a) Masonry veneer (2) b) Stucco c) Horizontal profiled metal - corrugated and trapezoidal only d) Rusticated weatherboards e) Fibre cement weatherboards f) Fibre cement sheet - flush and jointed finish g) Plywood sheet a) EIFS

top view

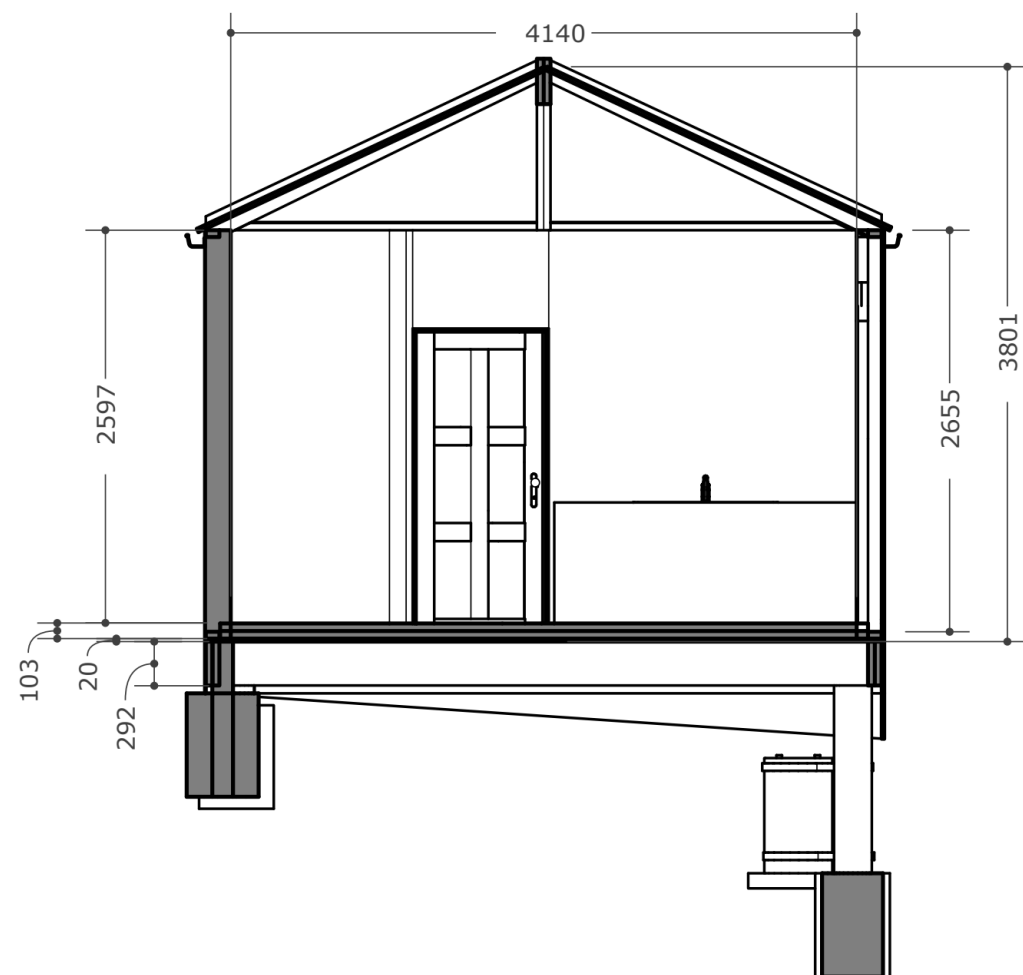
Cladding : 5 Rip Colorsteel endura , colour : grey Friar

Roofing : 5 Rip Colorsteel Endura, Colour : sandstone grey

Insulation:

Walls: Pink batts or ECO -Wool R > 2.6

Underfloor : PIR 50 mm R = 2.25 between joists
roof: PIR panels 90 mm R= 4.05 between rafters



3 Kpa floorload

290 x45 VSG8 and MSG8 joists

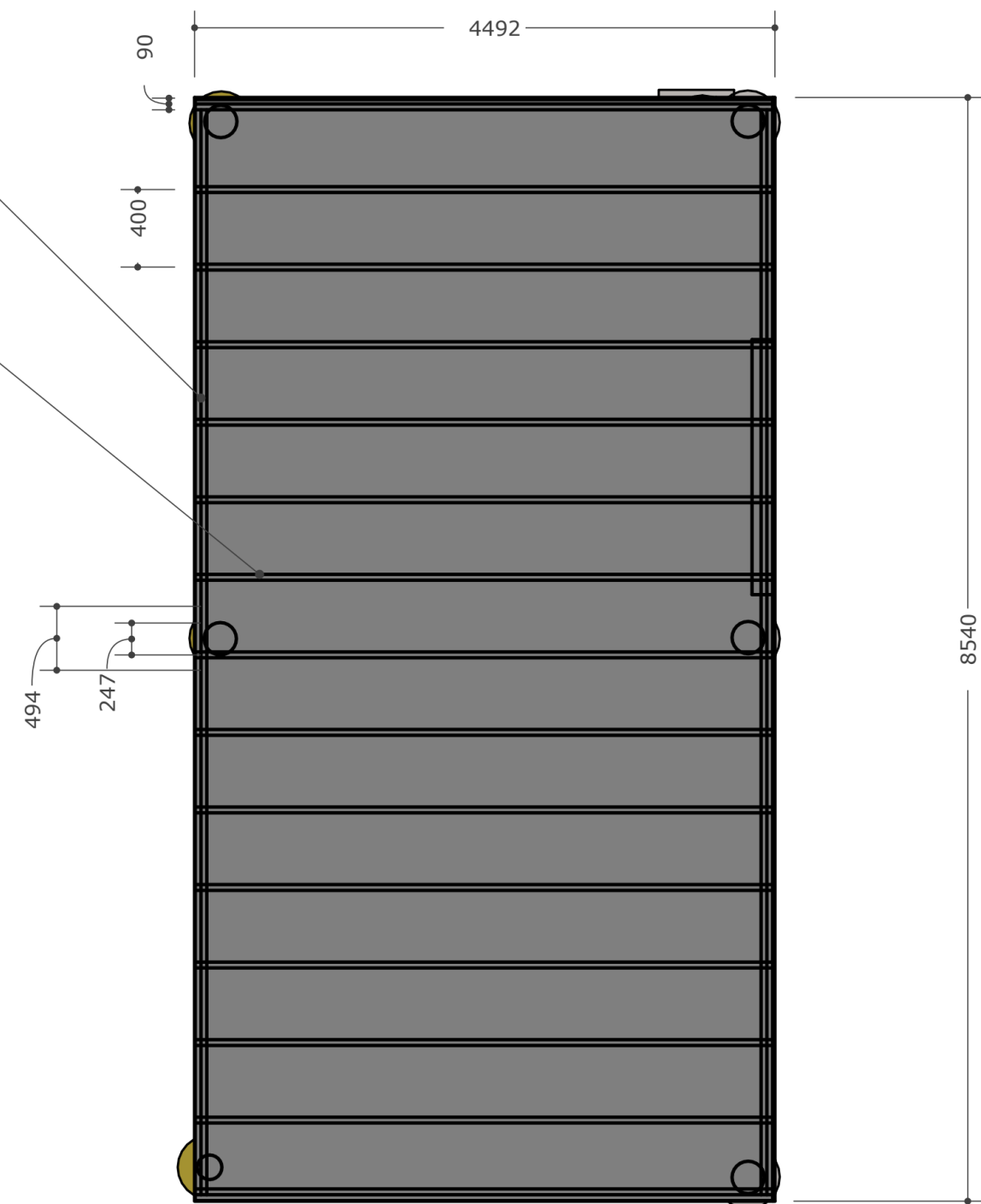


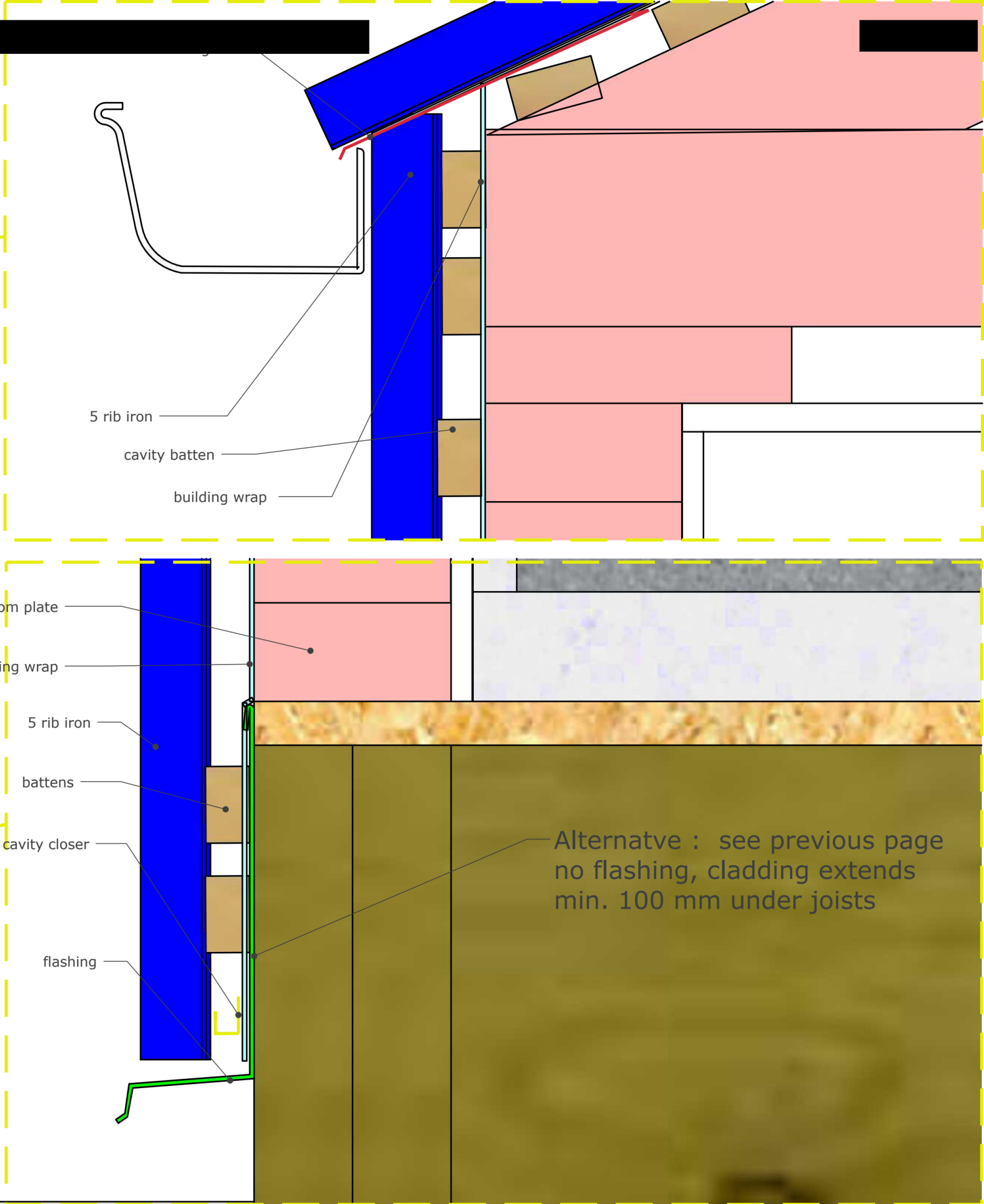
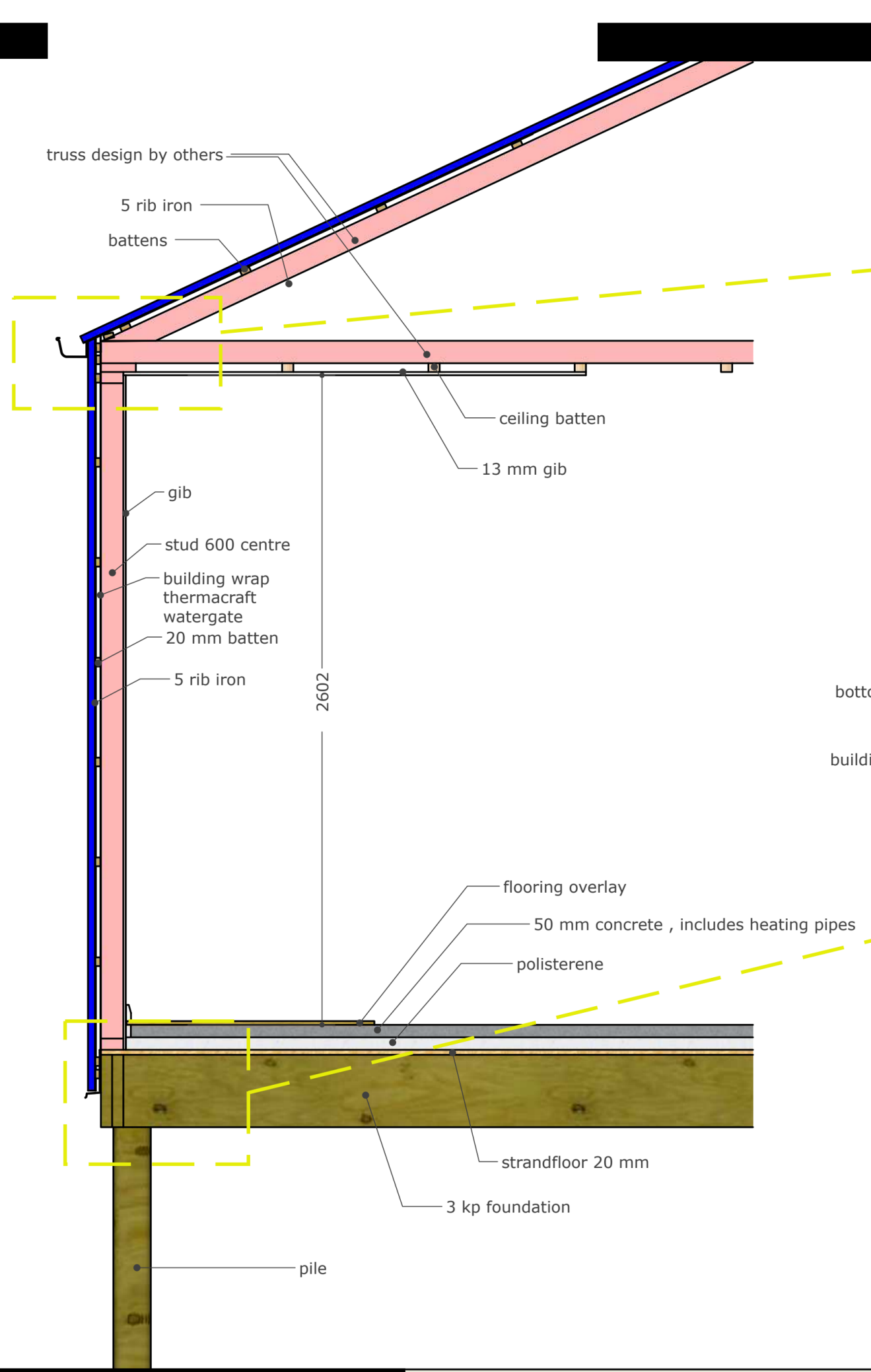
Table 14.8 – Floor joists for 3 kPa floor load (see 7.1.1.1) – VSG 8 and MSG 8

Floor joist size	Maximum span* of joists at a maximum spacing (mm) of:		
	400	450	600
(mm x mm)	(m)	(m)	(m)
90 x 35	1.25	1.15	1.00
90 x 45	1.40	1.35	1.15
140 x 35	1.95	1.85	1.60
140 x 45	2.20	2.10	1.80
190 x 45	3.00	2.85	2.45
240 x 45	3.80	3.60	3.10
290 x 45	4.60	4.35	3.75

* May be increased by 10 % for joists continuous over 2 or more spans.

2/300x45 LVL13 bearers.
6/150SED H5 piles in 600mm dia holes 900mm into good ground .
Fix to bearer with 2/m12 s/s bolts





Building C sleepout

C
08

details cladding top and bottom



GIB EzyBrace® Bracing Software



Job Details

Name: [Redacted]
 Street and Number: [Redacted]
 Lot and DP Number: [Redacted]
 City/Town/District: [Redacted]
 Designer: [Redacted]
 Company: [Redacted]
 Date: [Redacted]

Building Specification

Number of Storeys: Single
 Floor Loading: 3 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): 1.2
 Building Height to Apex (m): 4.1
 Ground to Lower Floor (m): .5

Stud Height (m): 2.8
 Building Length (m): 8.8
 Building Width (m): 4.5
 Building Area (m²): 39

Bracing Units required for Wind

	Along	Across
Single Level	181	286

Bracing Units required for Earthquake

	Along and Across
Single	152

Demand Single Along Single Across Custom

GIB EzyBrace® Bracing Software



Custom Wall Elements

Supplier	System	Min. Length m	Wind BUs/m	EQ BUs/m	Element Height Dependant	Element Foundation Dependant	Import Proprietary Custom
CHH	EPB1 1	0.4	80	95	☒	☒	
CHH	EPB1 2	0.6	95	105	☒	☒	
CHH	EPB1 3	1.2	120	135	☒	☒	
Specific Design Brac	SD1	1	260	260	☒	☒	
IBS	system 7	.4	94	104	☒	☒	
IBS	system 8	.6	120	120	☒	☒	
IBS	system 9	1.2	130	130	☒	☒	
SED	310UB46 portal	1	300	300	☒	☒	
					☒	☒	
					☒	☒	
					☒	☒	
					☒	☒	
					☒	☒	
					☒	☒	
					☒	☒	
					☒	☒	
					☒	☒	

GIB EzyBrace® Bracing Software



Single Across

To Add Elements, right click when on the Element above which you want to insert the Element.
 To Add Lines, right click when on the Line above which you want to insert the Line.

Line	Ext. Len. (m)	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (RII)	Earthquake (RII)
1		1	1.5		2.8	BL1-H	GIB®	177	144
2		1	2.01		2.8	GS2-N	GIB®	182	160
3		1	4.3		2.8	GS1-N	GIB®	274	238

Wind	Earthquake
Demand	Demand
286	152
Resistance	Resistance
633	542
221%	356%

177 OK	144 OK
182 OK	160 OK
274 OK	238 OK

GIB EzyBrace® Bracing Software



Single Along

To Add Elements, right click when on the Element above which you want to insert the Element.
 To Add Lines, right click when on the Line above which you want to insert the Line.

Line	Ext. Len. (m)	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (RII)	Earthquake (RII)
A		1	3.6		2.8	GS1-N	GIB®	229	199
B		1	8.3		2.8	GS1-N	GIB®	529	460

Wind	Earthquake
Demand	Demand
181	152
Resistance	Resistance
758	659
419%	434%

229 OK	199 OK
529 OK	460 OK

Job Details

Name:

Street and Number:

Lot and DP Number:

City/Town/District:

Designer:

Company:

Date:

Building Specification

Number of Storeys Floor Loading Foundation Type Sub Floor Cladding

Single

Cladding Weight Roof Weight Room in Roof Space Roof Pitch (degrees) Roof Height above Eaves (m) Building Height to Apex (m) Ground to Lower Floor (m) Stud Height (m) Building Length (m) Building Width (m) Building Area (m²)

Single Along

To Add Elements, right click when on the Element above which you want to insert the Element.

☐ Limit Element Resistance to 120 BU/m

Line	Ext. Len. (m)	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BU)	Earthquake (BU)
a	7.2	1	1200		3	BLP-H	GIB®	115200	115200
		2	1.1		3	BLP-H	GIB®	105	105
b	7.2	1	0.6		3	BLP-H	GIB®	58	58
		2	1.7		3	BLP-H	GIB®	163	163

Wind	Earthquake
Demand	Demand
330	323
Resistance	Resistance
115526	115526
35008%	35767%
115306 OK	115306 OK
221 OK	221 OK

SubFloor Along

To Add Elements, right click when on the Element above which you want to insert the Element.

To Add Lines, right click when on the Line above which you want to insert the Line.

Line	Ext. Len. (m)	Element	Length(m) or No.	Angle (degrees)	Type	Supplier	Wind (BU)	Earthquake (BU)
A		1	3		Anchor Pile	NZS360	480	360
B		1	2		Anchor Pile	NZS360	320	240

Wind	Earthquake
Demand	Demand
657	360
Resistance	Resistance
800	600
122%	167%
480 OK	360 OK
320 OK	240 OK

Single Across

To Add Elements, right click when on the Element above which you want to insert the Element.

☐ Limit Element Resistance to 120 BU/m

Line	Ext. Len. (m)	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BU)	Earthquake (BU)
1	5.2	1	1.4		3	BLP-H	GIB®	134	134
		2	1.4		3	BLP-H	GIB®	134	134
2	5.2	1	0.9		3	BLP-H	GIB®	86	86
		2	2.2		3	BLP-H	GIB®	211	211

Wind	Earthquake
Demand	Demand
387	323
Resistance	Resistance
566	566
146%	175%
269 OK	269 OK
298 OK	298 OK

SubFloor Across

To Add Elements, right click when on the Element above which you want to insert the Element.

To Add Lines, right click when on the Line above which you want to insert the Line.

Line	Ext. Len. (m)	Element	Length(m) or No.	Angle (degrees)	Type	Supplier	Wind (BU)	Earthquake (BU)
1		1	2		Anchor Pile	NZS360	320	240
3		1	1		Anchor Pile	NZS360	160	120
5		1	2		Anchor Pile	NZS360	320	240

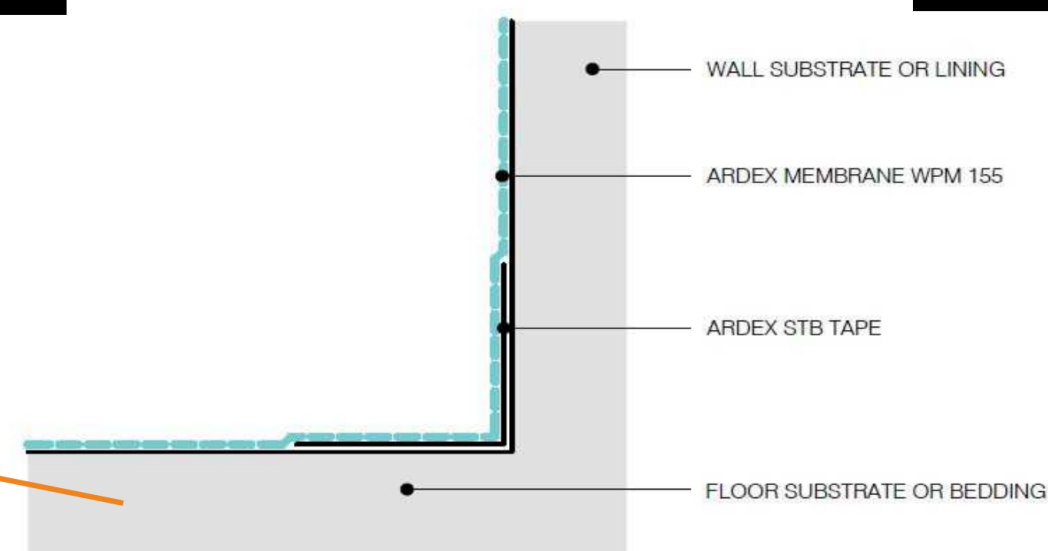
Wind	Earthquake
Demand	Demand
731	360
Resistance	Resistance
800	600
109%	167%
320 OK	240 OK
160 OK	120 OK
320 OK	240 OK

Risk factor	Low	Score	Medium	Score	High	Score	Very high	Score	Subtotal for each risk factor
Wind zone (per NZS 3604)	0		0		1		2	2	2
Number of storeys	0	0	1		2		4		0
Roof / wall intersection design	0		1	1	3		5		1
Eaves width	0		1	1	2		5		1
Envelope complexity	0		1	1	3		6		1
Deck design	0	0	2		4		6		0
[Enter the appropriate risk severity score for each risk factor in the score columns. Transfer these figures across to the right-hand column. Finally, add up the figures in the right-hand column to get the total risk score.]							Total risk score:		5

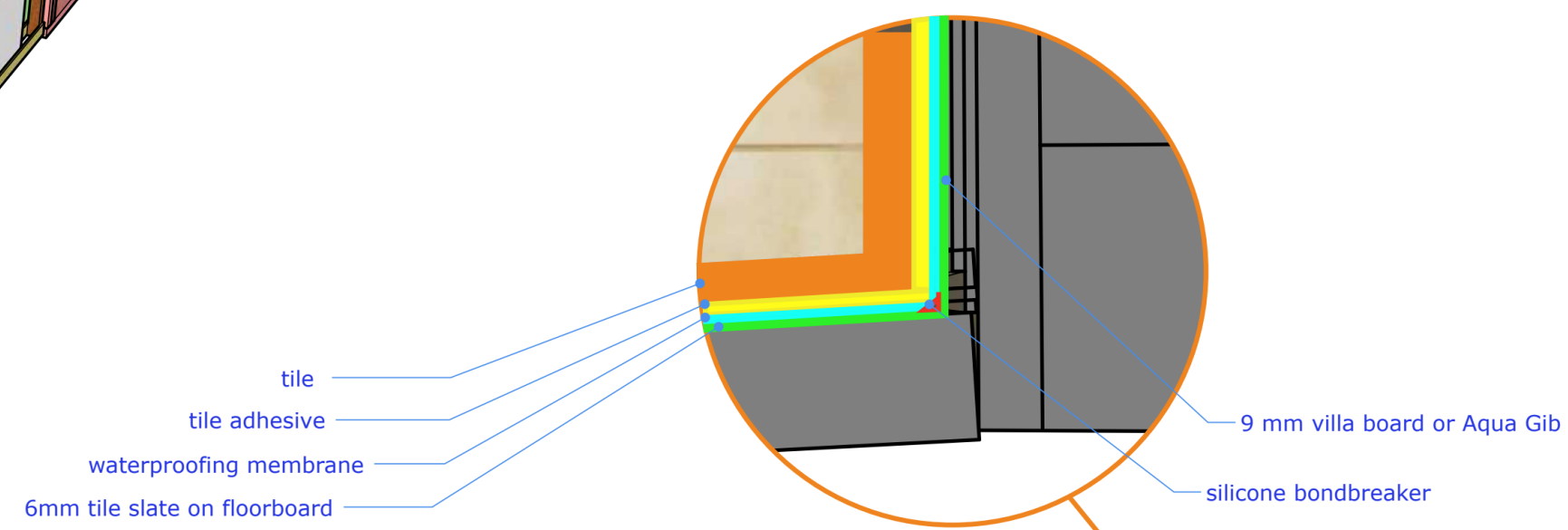
TABLE 3	Suitable wall claddings	
Risk score	Suitable wall claddings	
	Direct fixed to framing	Over 20mm minimum drained cavity
0 - 6	a) Timber weatherboards - all types b) Fibre cement weatherboards c) Vertical profiled metal (3) - corrugated and symmetrical trapezoidal (3) d) Fibre cement sheet (4) (Jointed finish) e) Plywood sheet	a) Masonry veneer (2) b) Stucco c) Horizontal profiled metal (3) - corrugated and trapezoidal only d) Fibre cement - flush-finished e) EIFS
7 - 12	a) Bevel-back weatherboards b) Vertical timber board and batten c) Vertical profiled metal (3) - corrugated only(3)(6)	a) Masonry veneer (2) b) Stucco c) Horizontal profiled metal - corrugated and trapezoidal only d) Rusticated weatherboards e) Fibre cement weatherboards f) Fibre cement sheet - flush and jointed finish g) Plywood sheet a) EIFS



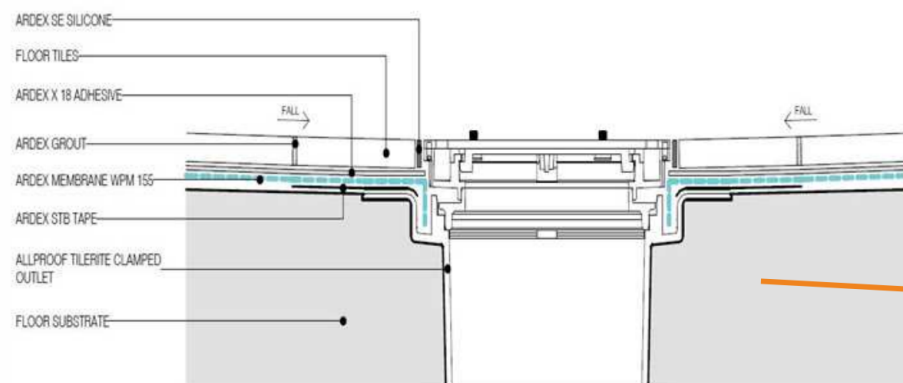
waterproofing extends
by min. 500 mm



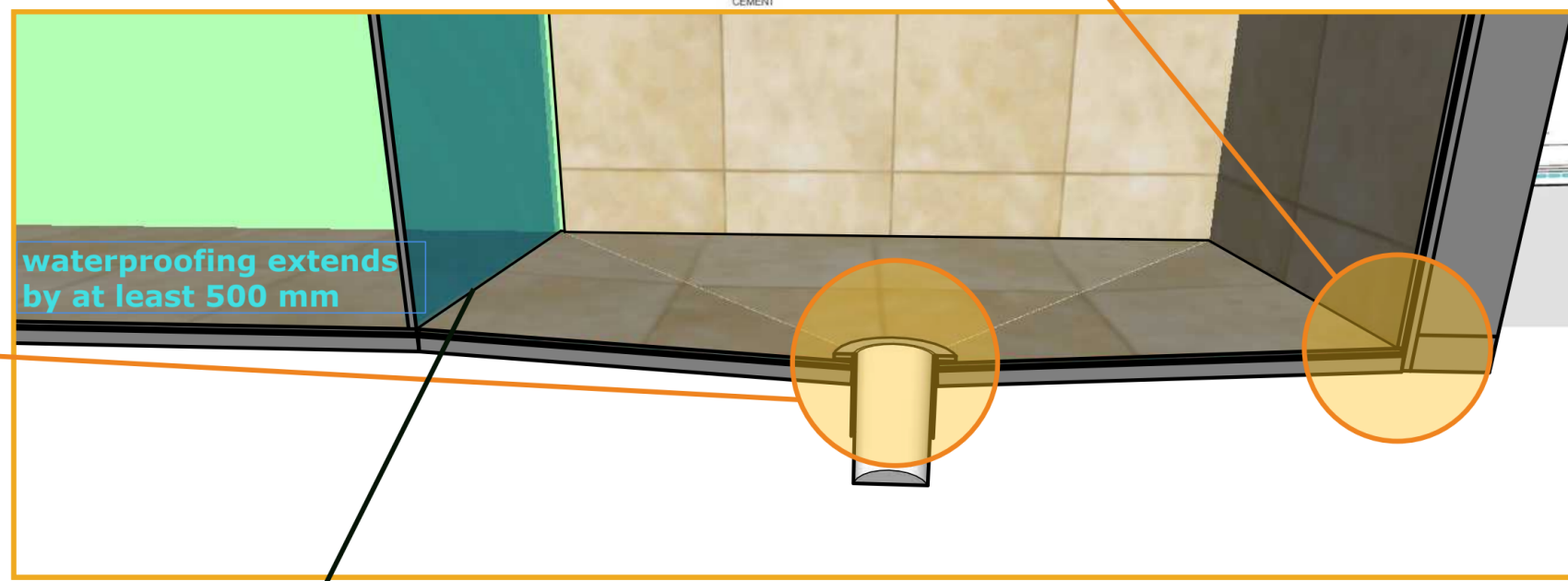
DETAIL 2



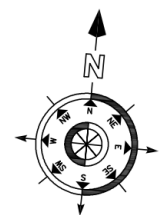
NOTE:
FLANGE PREPARED USING PLUMBERS
CEMENT



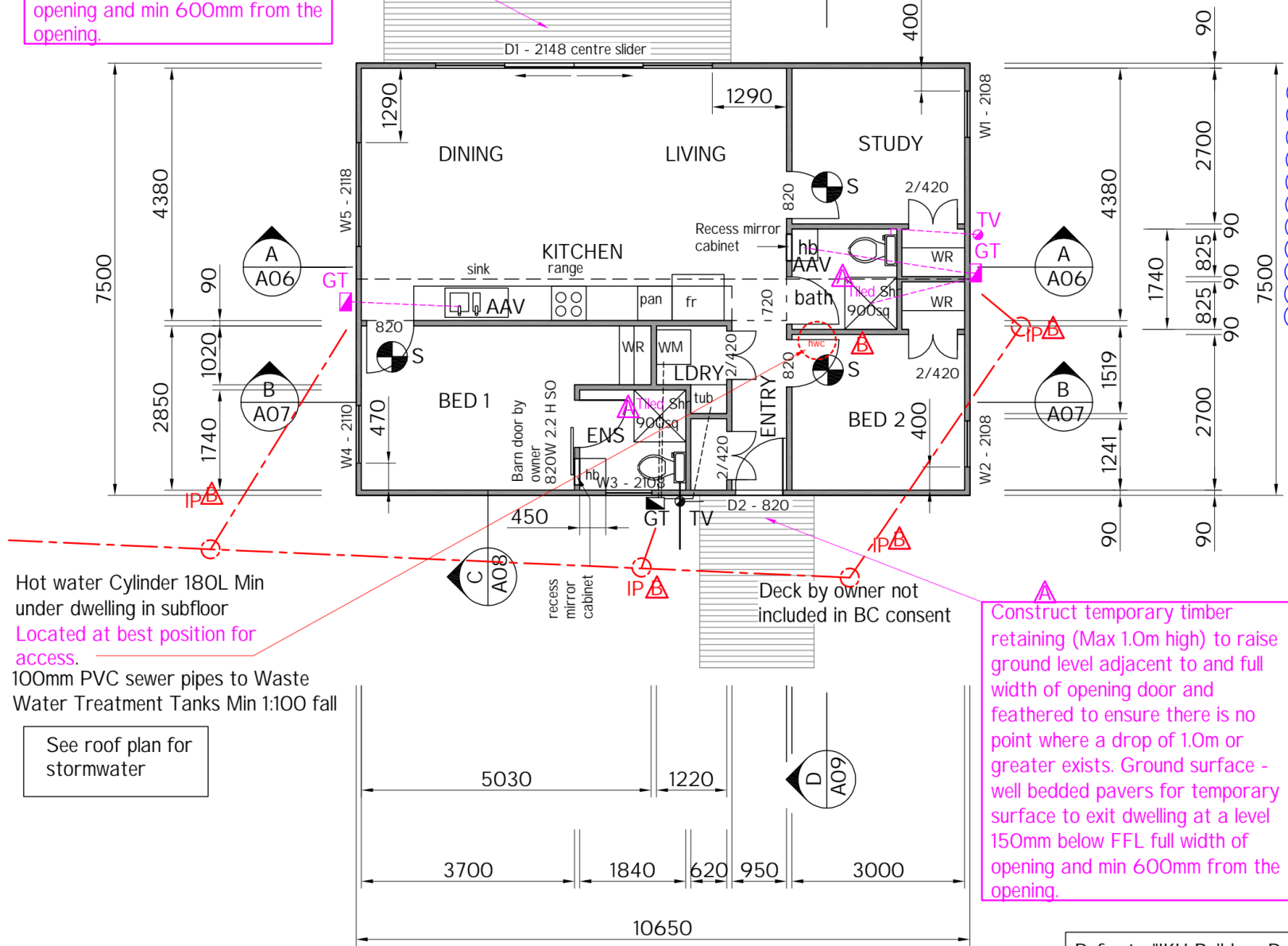
NOTE:
FLANGE PREPARED USING PLUMBERS
CEMENT



hinged glass door



Construct temporary timber retaining (Max 1.0m high) to raise ground level adjacent to and full width of opening door and feathered to ensure there is no point where a drop of 1.0m or greater exists. Ground surface - well bedded pavers for temporary surface to exit dwelling at a level 150mm below FFL full width of opening and min 600mm from the opening.



Hot water Cylinder 180L Min under dwelling in subfloor
Located at best position for access.
100mm PVC sewer pipes to Waste Water Treatment Tanks Min 1:100 fall

See roof plan for stormwater

Construct temporary timber retaining (Max 1.0m high) to raise ground level adjacent to and full width of opening door and feathered to ensure there is no point where a drop of 1.0m or greater exists. Ground surface - well bedded pavers for temporary surface to exit dwelling at a level 150mm below FFL full width of opening and min 600mm from the opening.

Refer to "IKH Builders Pack" (attached) for all fixings to be used in construction of steel frame construction

RISK MATRIX

	LOW	Score	MEDIUM	Score	HIGH	Score	VERY HIGH	Score	Subtotals for each risk factor
Wind Zone per NZS 3604	0		0		1	1	2		1
Number of storeys	0	0	1		2		4		0
Roof/Wall intersection design	0		1	1	3		5		1
Eaves width	0		1		2		5	5	5
Envelope complexity	0	0	1		3		6		0
Deck design	0	0	2		4		6		0

TOTAL RISK SCORE 7

CLADDING - Monolithic Weathertex over 20mm drained cavity
Per E2 NZBC pp 29 + 30

Floor Plan of existing Second Dwelling
Total 3 bedrooms

- NOTES:
- Internal plumbing pipes - 40mm wastes for handbasins, sink, tub, washers and showers with Air Admission Valves as noted (AAV) Min 1:40 falls.
Sewer pipes from WC's 100mm min fall 1:40 to main laterals.
Water tanks servicing this dwelling adjacent to future garage, to be fitted with a 50mm Camlock coupling to enable connection with fire fighting equipment.
 - Water supply via double filter (20 Micron prefilter, 1 Micron secondary filter and Sterilight Ultraviolet Water Sterilizer UV S 12Q-PA sterilisation system to tank outlet supply to dwelling - Filter system to be housed within the subfloor area
 - Existing WWTS irrigation field assessed as adequate for the extra loading imposed by this additional dwelling - refer to attached report.

It is intended that the decks not requiring building consent be constructed at the time of building the dwelling so that the need for temporary steps at entrance will then not be required.

LEGEND

 Smoke alarm

Waste water IPs added, Pipe layout altered
HWC location corrected

AMENDMENTS:	DATE:
Temporary steps to exits allowed for if required, prior to deck construction. Safety from falling addressed. Showers revised and noted as tiled. Ventilation and energy inserts removed and resubmitted as attachments. HW relocated	27-11-19

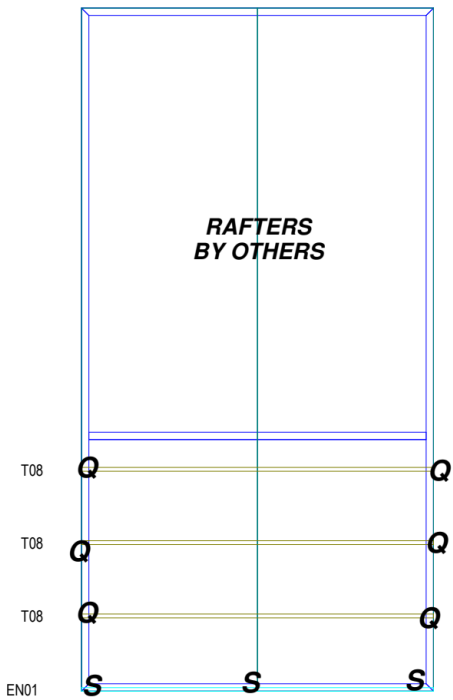
FLOOR PLAN AND PLUMBING

BUILDABLE CONSENT LAYOUT

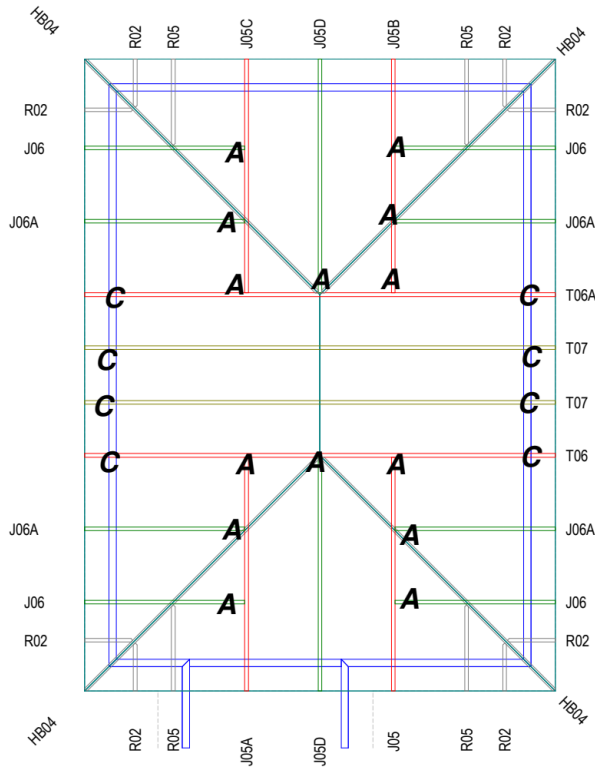
dogs at 900mm centres for up to and including a very high wind zone.
Or a pair of CT200's at 900mm centres for extra high wind zone.
This fixing is to meet the minimum requirements as per NZS3604.

CARTERS

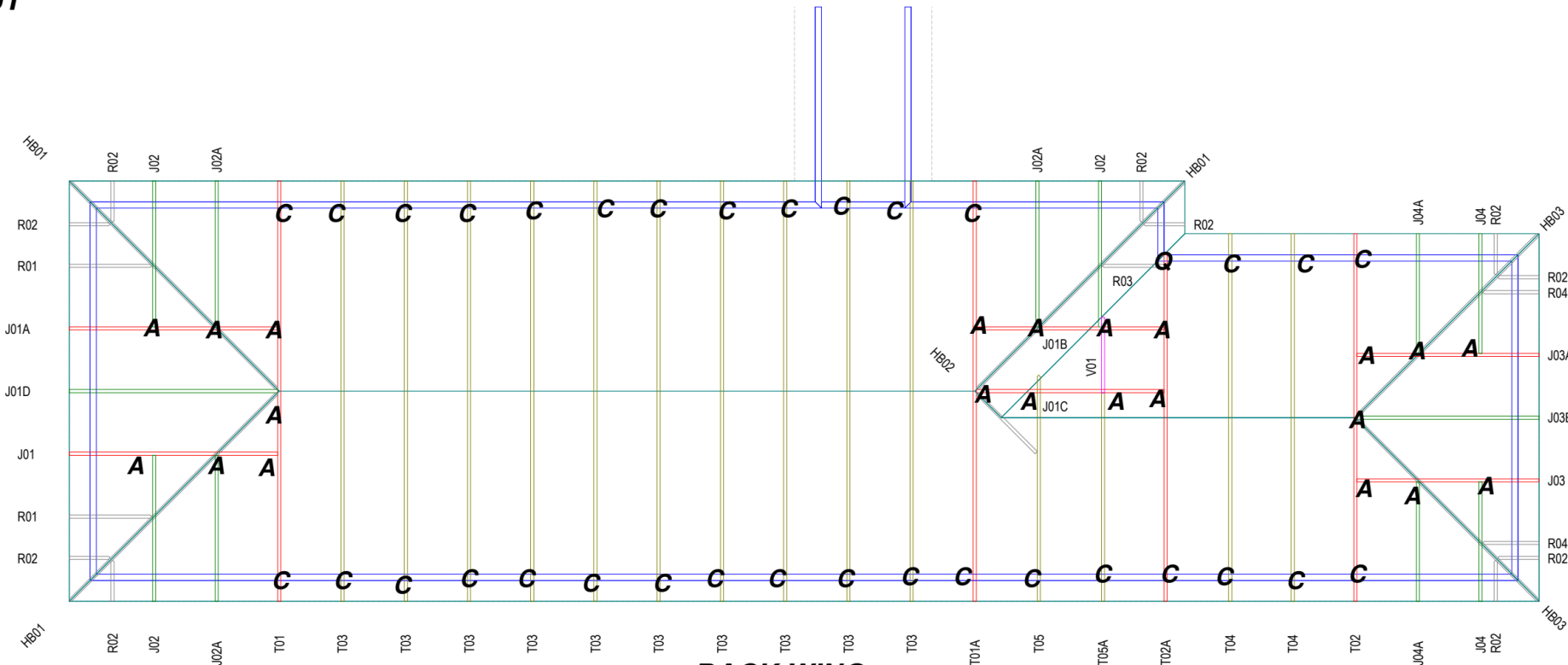
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SLEEPOUT



LOUNGE



BACK WING

Pitch: 30.0deg
Roof Type: Galv Iron .5mm
Overhang: 300mm
Wind Area: Very High
Roof Snow: 0.400kPa
Ceiling Restraint Centres:600mm

Trusses and rafters at 900mm max centres unless stated otherwise. This layout is to be read in conjunction with the Architectural plans.

FIXINGS

- A = 47x90 Joist Hanger**
- B = 47x120 Joist Hanger**
- C = CT200 (pair)**
- D = 47x190 Joist Hanger**
- E = 95x165 Joist Hanger**
- F = SH-140 Split Hanger**
- G = SH-180 Split Hanger**
- H = SH-220 Split Hanger**
- J = 2x6kN Strap (12kN Total)**
- K = 6kN Strap**
- L = Multigrip (single)**
- M = Multigrips (pair)**
- N = Nailon Plate (240x110x1)**
- P = 16kN Pack**
- Q = 9kN Pack**
- S = CPC 40 Single Cleat**
- T = CPC 40 Short (pair)**
- U = CPC 80 Single Cleat**
- V = 16kN Uplift**
- W = 24kN Uplift**
- X = 25kN Uplift**
- Y = 35kN Uplift**
- Z = 45kN Uplift**

Unless otherwise indicated, all specified truss fixings are to use L/Lok product nail fasteners (as per the MiTek On-site Guide) when the choice of using screws or nails is optional.

All truss to frame fixings require 2 additional 2/90x3.15dia skew nails.

All truss fixings not indicated as above must have 2 wire dogs for cross joints and 2/90x3.15dia nails for butt joints.

Fixings shown are for fixing trusses to the top plate. Any other point load uplift fixings down through the framing stud to top plate, stud to bottom plate, bottom plate to floor remain the responsibility of the architect / draughtsman.

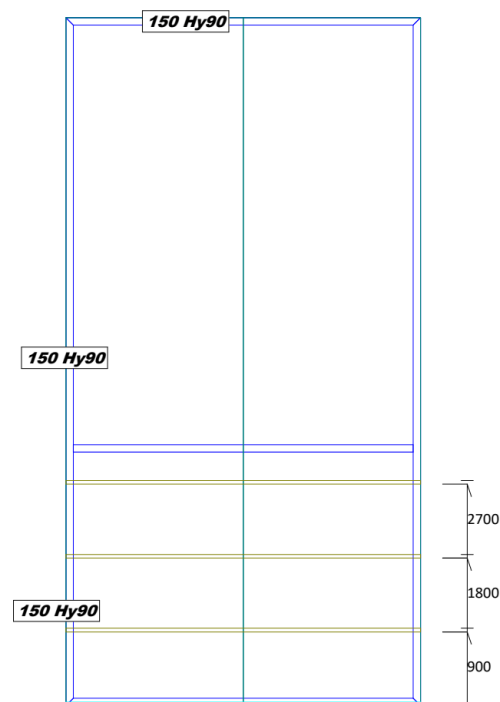
If metal ceiling battens on clips are used, 90x45 SG8 bottom chord restraints are required at 1800mm centres fixed with 2/90x3.15dia nails (skew nails if on edge).
All gable trusses are designed to suit cladding manufacturer's framing requirements.
If a gable truss requires a windbeam brace, the type of MiTek brace will be noted as such on the layout.

Truss Layout

BUILDABLE CONSENT LAYOUT

CARTERS

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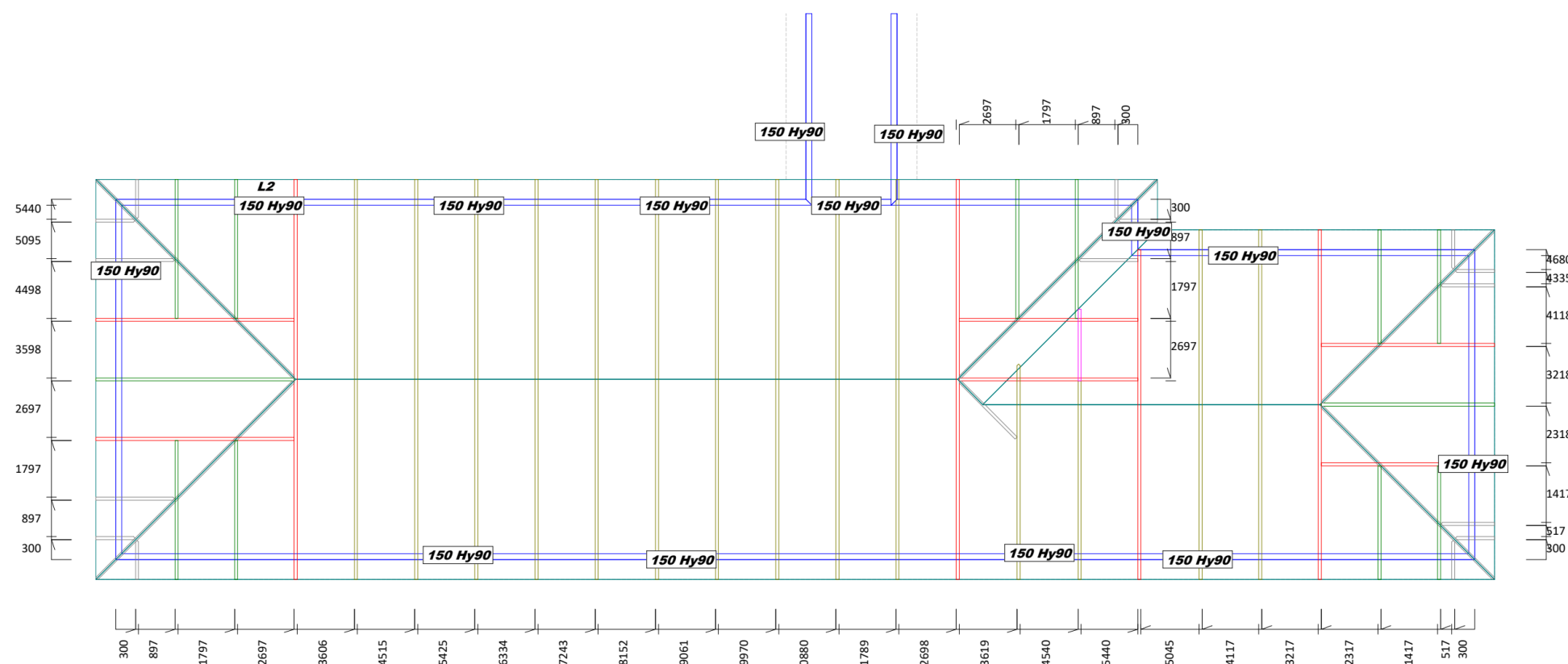
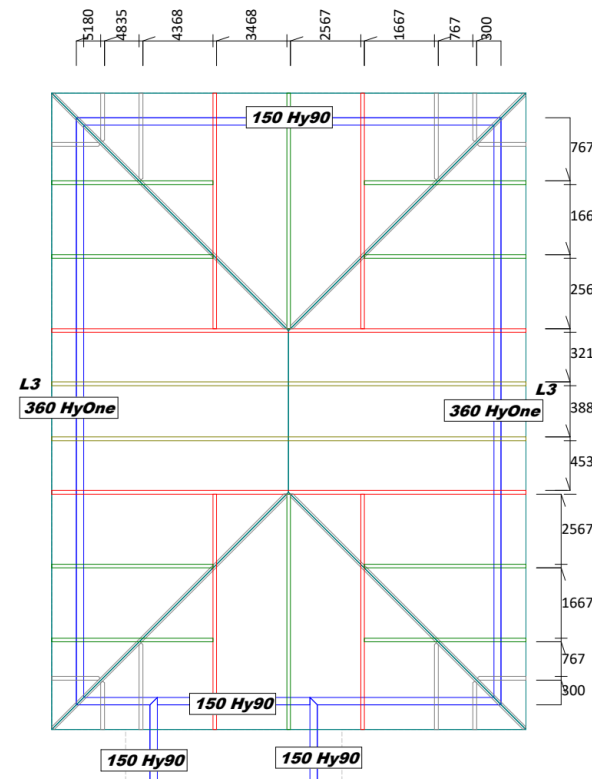


INTERNAL LOAD BEARING WALLS

Internal loadbearing walls used as part of truss design. Standard slab construction only need thickenings if loads exceed 10kN. All truss loads exceeding 8kN are noted.

Note if Ribraft or similar floor system is used separate engineers confirmation of thickenings to be confirmed from supplier of floor system.

ALL LINTELS ARE L1 UNLESS NOTED OTHERWISE



All internal walls shown hatched on this layout are considered to be loadbearing
Lintel fixing specification remains the responsibility of the architect / draughtsperson

Pitch: 30.0deg
Roof Type: Galv Iron .5mm
Overhang: 300mm
Wind Area: Very High
Roof Snow: 0.400kPa

Trusses and rafters at 900 mm max centres unless stated otherwise. This layout is to be read in conjunction with the Architectural plans.

Ultimate Limit State Loads

Notification of point loaded lintels or point loads on internal walls where the downward load is higher than 8kN (85mm raft type slab) or 10kN (100mm standard slab), or the upward load is greater than 10kN.

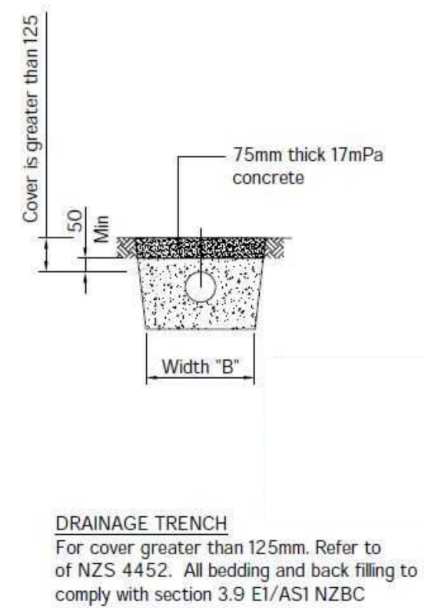
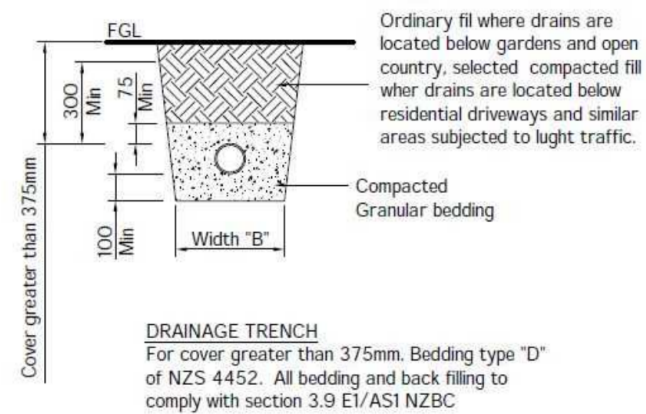
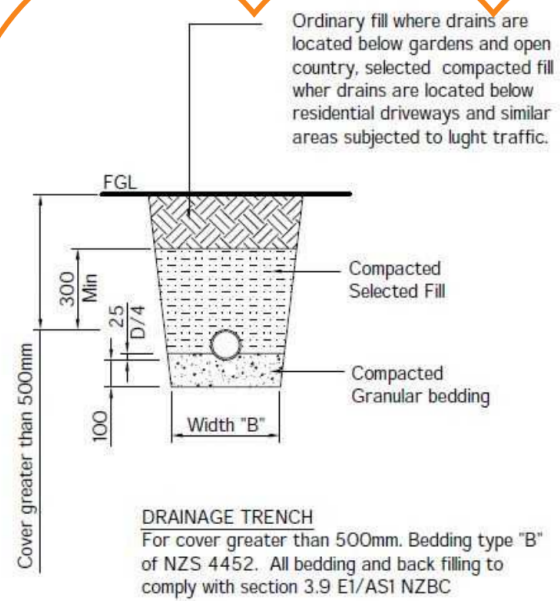
Any roof loads as stated on this layout over 16kN up or down are outside the scope of NZS3604, and the architect / draughtsperson is responsible for the design to transfer the loads to the ground.

The lintels have been sized using one of the following:

hy90, hyONE and hySPAN lintels have been sized using the designIT for houses - New Zealand series 6 software.

GANGLAM and FLITCH BEAMS have been sized using the MiTek Beam Program V1.10 June 2011.

Unless otherwise stated the timber grade for all lintels is SG8. Lintels not shown are to be selected as per NZS3604: 2011.



C/AS1

Type 1/Hush smoke alarms will be installed, see page 5 Main Building A showing existing and proposed, we will install more than legally required