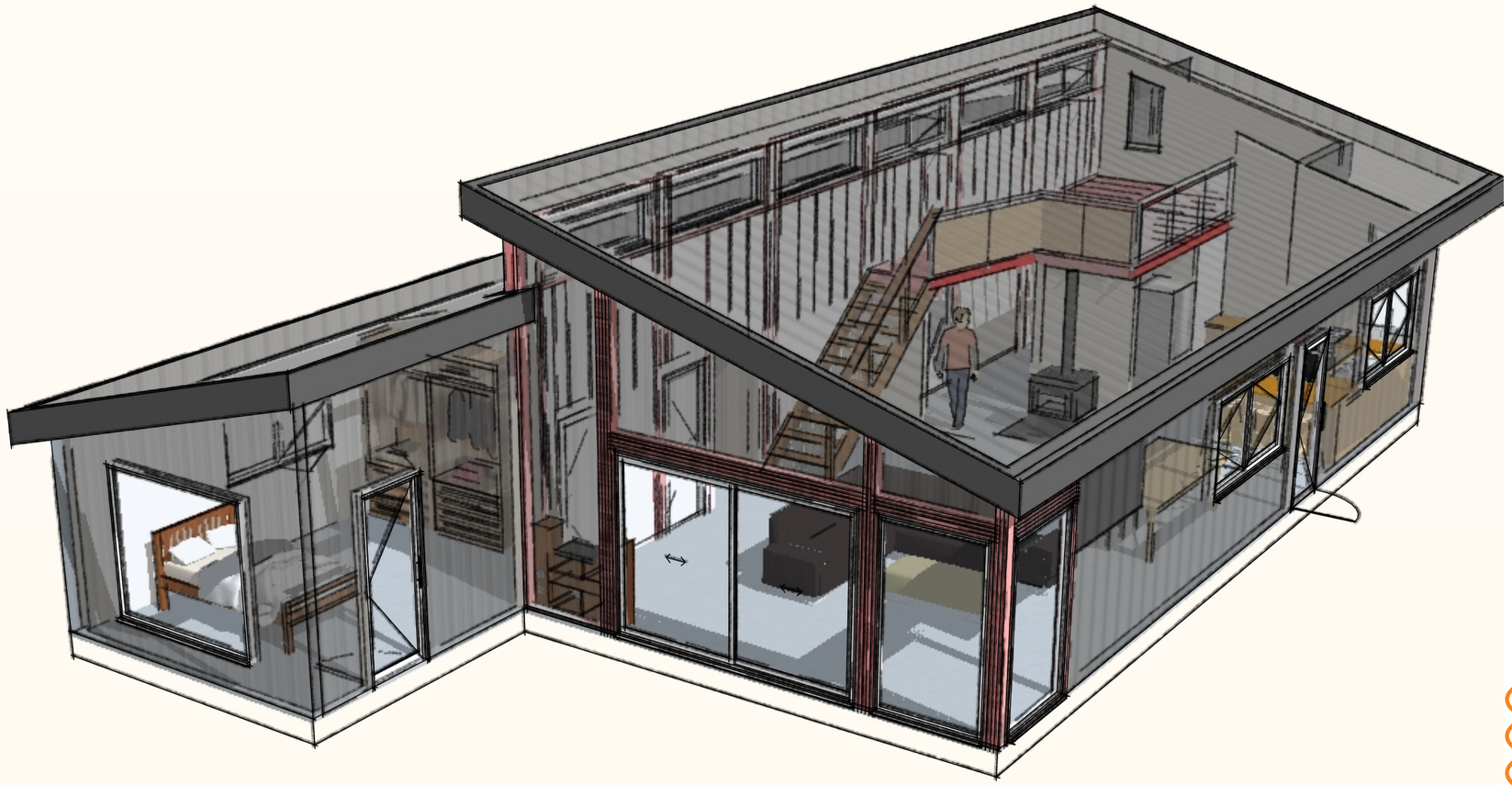

Sheet Number	Sheet Name
Sheet 01	STARTPAGE
Sheet 02	General IMORTANT Things
Sheet 03	site location
Sheet 04	persp.front left
Sheet 05	internal views
Sheet 06	elevations cad with roof
Sheet 07	window opening directions and
Sheet 08	electric plan and finishes
Sheet 09	shower details
Sheet 10	shower construction details
Sheet 11	floorplan cad with bracing
Sheet 12	Stud spacing and fixings
Sheet 13	foundation
Sheet 14	foundation site measure
Sheet 15	top view cad and color
Sheet 16	Sections color
Sheet 17	Sections CAD
Sheet 18	window schedule and Lintel Sizes
Sheet 19	window flashing details
Sheet 20	windowflashing details top windows
Sheet 21	Framework Middle wall
Sheet 22	Framework big window and Gallery
Sheet 23	Roof construction CAD
Sheet 24	wall and roof flashings
Sheet 25	H1/AS1 and risk matrix
Sheet 26	
Sheet 27	
Sheet 28	
Sheet 29	
Sheet 30	

Reason for Amendement:
The customer ordered a BlockHouse from a Christchurch company , which imports them from Chech republic.
The Christchurch company is now bankrobbed and my customer lost a lot of money.
As the foundation is already build and approved, I designed now a house following 3604 and engineer input on the same footprint. All walls are in the same place as before .

DesignWorx

LBP.:106952

Author:
Dirk Heffter
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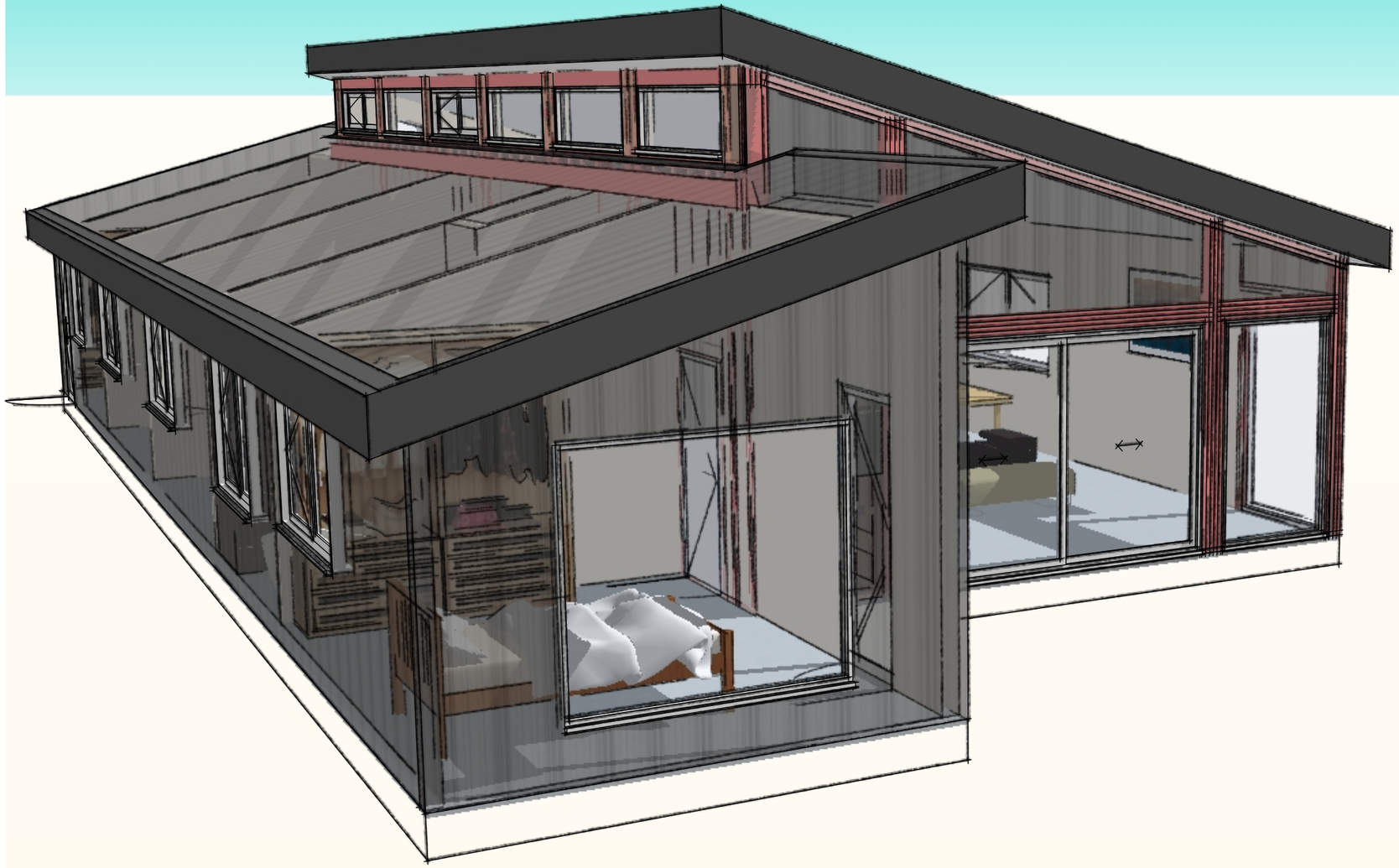
Nelson 7010
0211 53 96 00
dirk@craftworx.co.nz

Date Created: 02.07.2023
Date modified: 19.09.2023



Rafters will be 290 x 45 H1.2 to fit insulation.

All **Window** dimensions on the window Schedule are Box Sizes , meaning The Trim or Frame size will be 20 mm bigger each side, a window of 1000 x 800 in the window schedule will need
a framing opening of 1040 x 840 .
Doors don't require 20 mm on the bottom.
Windowswill be UPVC windows , double glazed , lowE from NK windows, Christchurch

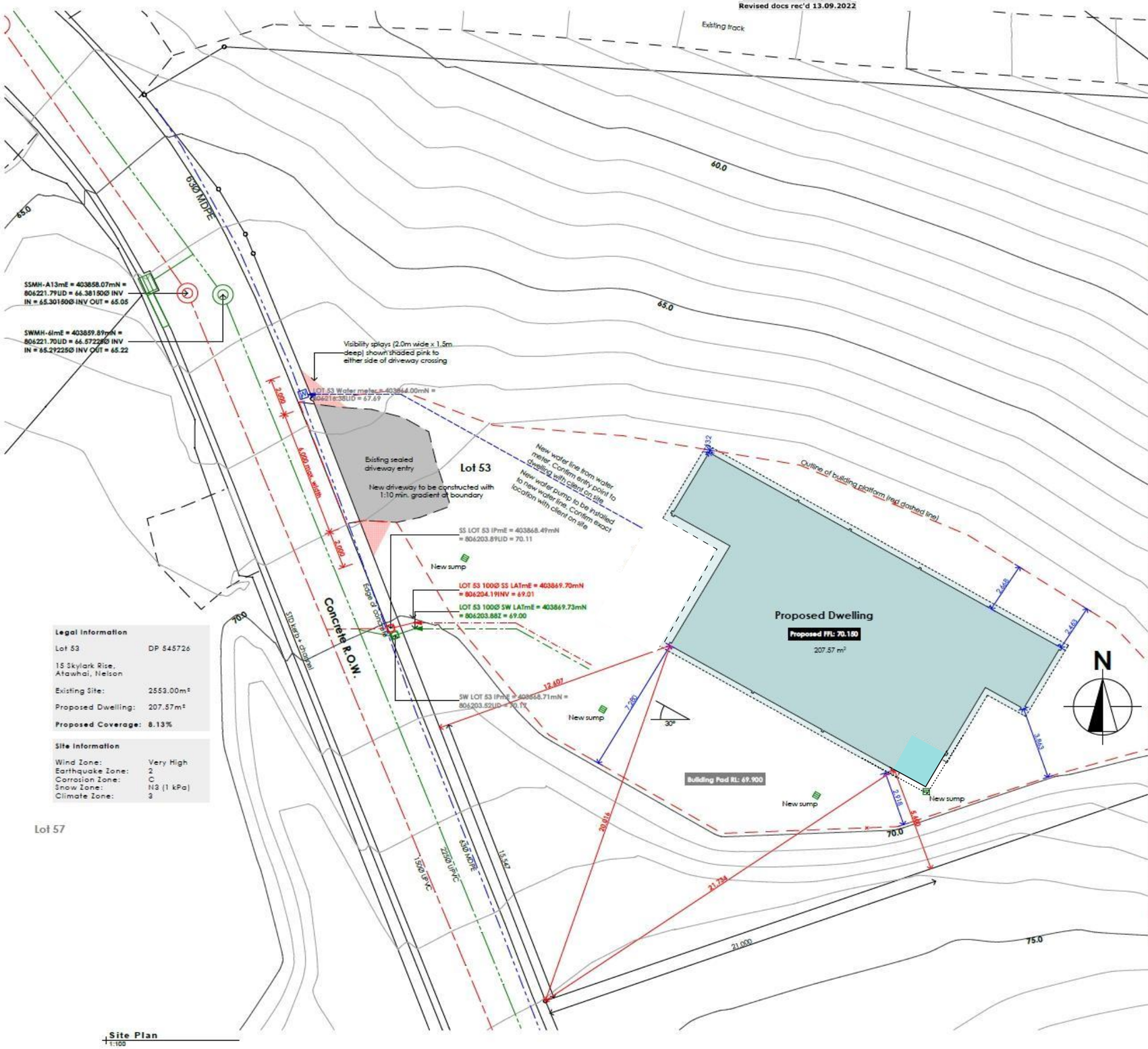
Cladding and roofing will be 5-rib (Roofdeck)
in a darker colour on cavity
with castellated battens.

Foundation is already done,and inspected
Rib raft concrete foundation
with polished concrete finish throughout, all services in place .

If you require updated plans or any other question, please contact me.

Dirk Heffter 0211 53 96 00
enjoinery.construction@gmail.com

GRANTED 03/10/2022
Revised docs rec'd 13.09.2022



Site Plan
1:100

Legal Information

Lot 53	DP 545726
15 Skylark Rise, Atawhai, Nelson	
Existing Site:	2553.00m²
Proposed Dwelling:	207.57m²
Proposed Coverage:	**8.13%**

Site Information

Wind Zone:	Very High
Earthquake Zone:	2
Corrosion Zone:	C
Snow Zone:	N3 (1 kPa)
Climate Zone:	3

Survey / Setout

Read in conjunction with Land Dimensions Survey Plan (Job No. 11076) for further information on site contours and/or levels

Surveyor to setout dwelling & provide survey location certificate for proposed dwelling footprint

Contractor to confirm setout with designer prior to commencement of any permanent work.

If any discrepancy occurs between the drawings & on-site measurements / circumstances. Please advise designer immediately

Setout dimensions shown in red are between boundary & foundation edge

Setout dimensions shown in blue are between existing platform edge & foundation edge

Contractor to confirm all existing + proposed levels (including finished floor level) on site prior to any excavation work.

Drainage Notes

AAV	Air admittance valve installed to fitting
——·——	100mmØ uPVC sewer at 1:100 min. grade
—— — ——	100mmØ uPVC stormwater at 1:120 min. grade
- - - -	New water line from boundary connection / meter. Pump to be installed, confirm exact location with client on site
	New Sump (Type One). 375mmØ x1000mm max. deep sump as per Figure 8 E1/AS1. Removable 300x300mm access grate (vehicle trafficable)

Location of all service laterals are shown in approximate locations. Contractor to confirm on site prior to dwelling setout

Confirm exact location of surface water sumps with client. Form surrounding ground level as 1:100 fall towards sump as required

Refer to Foundation + Drainage Plan for full drainage schematic

Drainage installed to NZBC G13/ AS1

Landscaping

Refer to Tim's Garden Landscape Design for all soft + hard landscaping to site.

Sediment & Security Control

1. The main contractor is responsible for maintaining sediment control measures
2. All erosion & sediment control measures to be installed prior to commencement of works.
3. All erosion & sediment control structures to be inspected each work day & maintained in good working order.
4. Install temporary bund to boundary at site access.
5. Install temporary silt trap to site access.
6. Install catch pit filter to top of all open stormwater sumps and/or drains. Install coarse aggregate over geotextile fabric to create catch pit filter to ensure no silt enters stormwater system.
7. All ground cover vegetation outside the building area to be preserved during the building process.
8. Stockpiles of clayey material to be covered with impervious sheet.
9. New roof water downpipes to be connected to the permanent underground stormwater drainage system as soon as practically possible after the roof has been installed.
10. Access to the site shall be restricted to the existing stabilised driveway
11. A3 sign to be erected advising that sediment control measures are in place on the site
12. Temporary mesh fence & vehicle access gate to be erected until dwelling is secure to prevent pedestrian access

D1 Access

Install external foot mat to external entry doors as required

All steps leading to external entry doors to be formed with a 190mm max. rise + 300mm min. tread. Contractor to confirm amount of steps required + confirm with client.

All concrete terraces / paths to have 1:100 fall away from building

Proposed decks to be constructed under schedule 1

FFL Ground Clearances

150mm min. to sealed ground level (concrete, paving etc)
225mm min. to unsealed ground level (garden bed, grass etc)

BC220342 Nelson City Council

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Drawing Scale A1 Size
Half Scale at A3
i.e. 1:100 at A1 =1:200 at A3

Project Information

Part Lot:	53
DP:	545726
Wind Zone:	Very High
EQ Zone:	2
Corrosion Zone:	D
Snow Zone:	N3 (1 kPa)
Climate Zone:	3

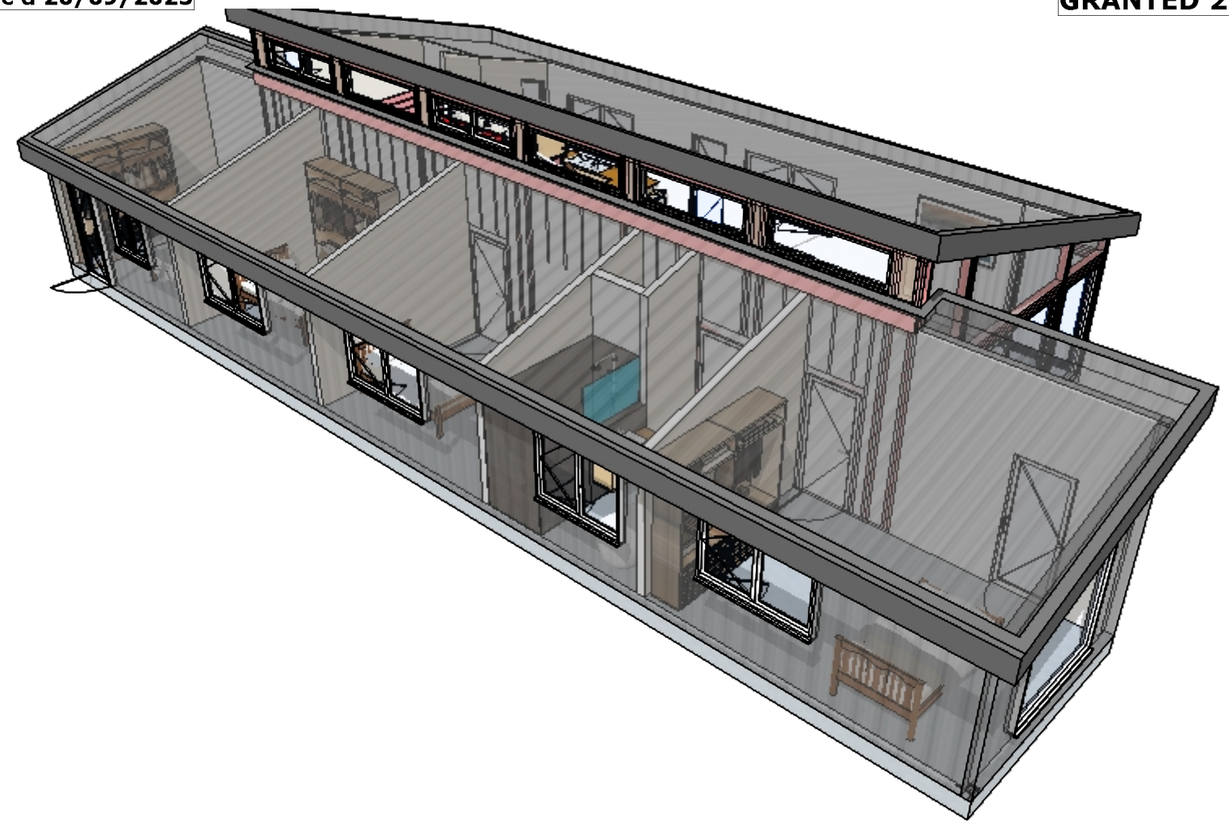
Site Information

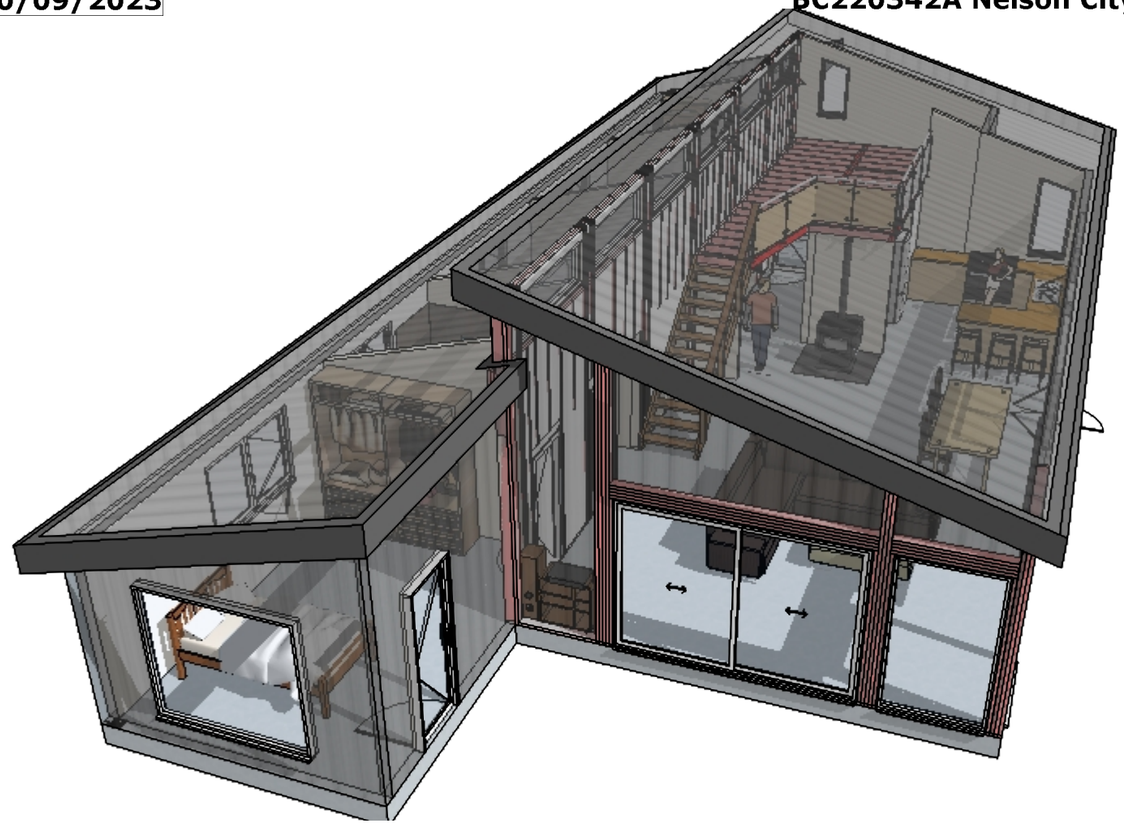
Developed Drawings - Engineer	22.03.2022
Working Drawings - Client	27.05.2022
Building Consent Application	06.06.2022
Building Consent RFI	16.08.2022
Building Consent RFI (Engineer)	05.09.2022
Building Consent RFI	13.09.2022

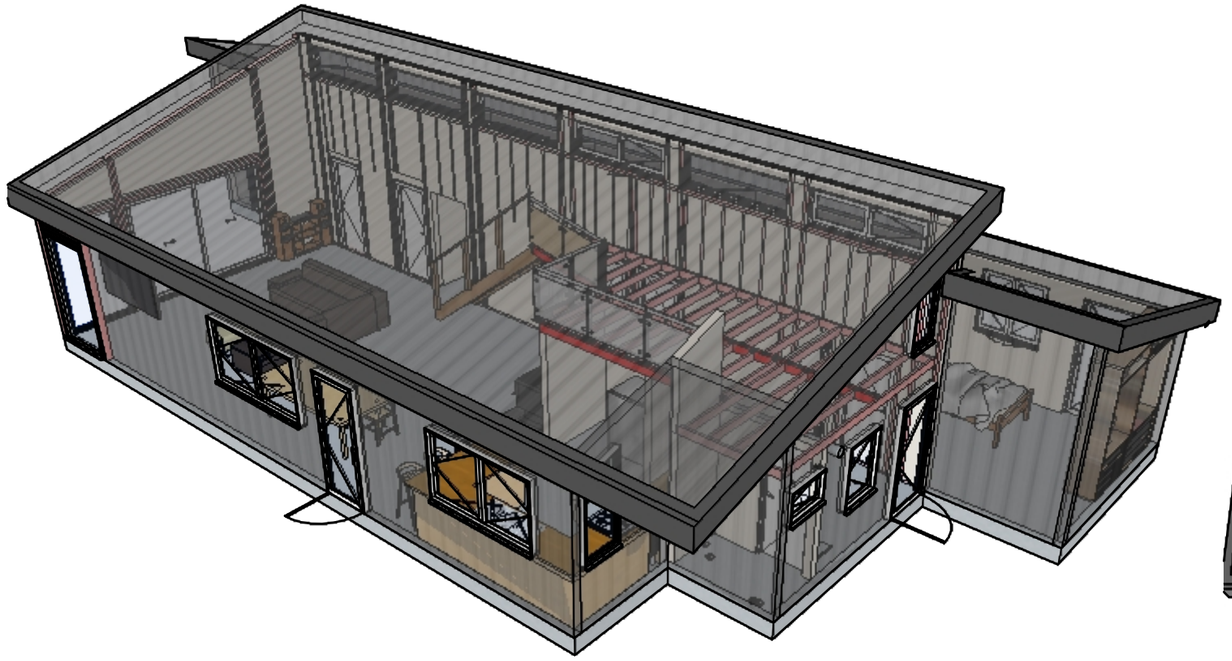
Project History

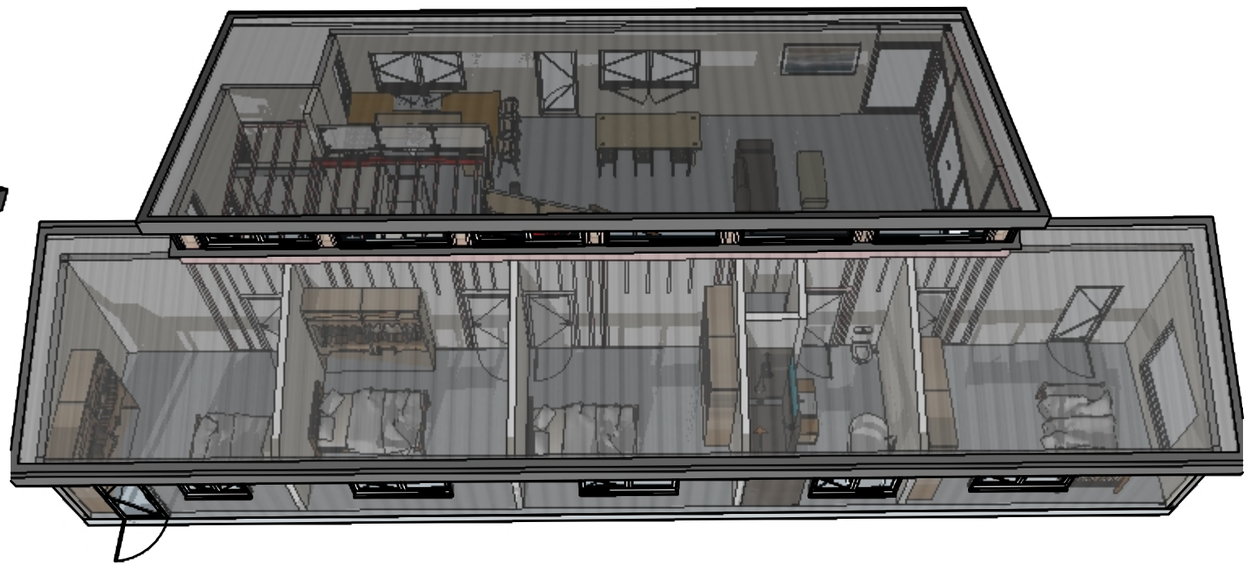
Revision History

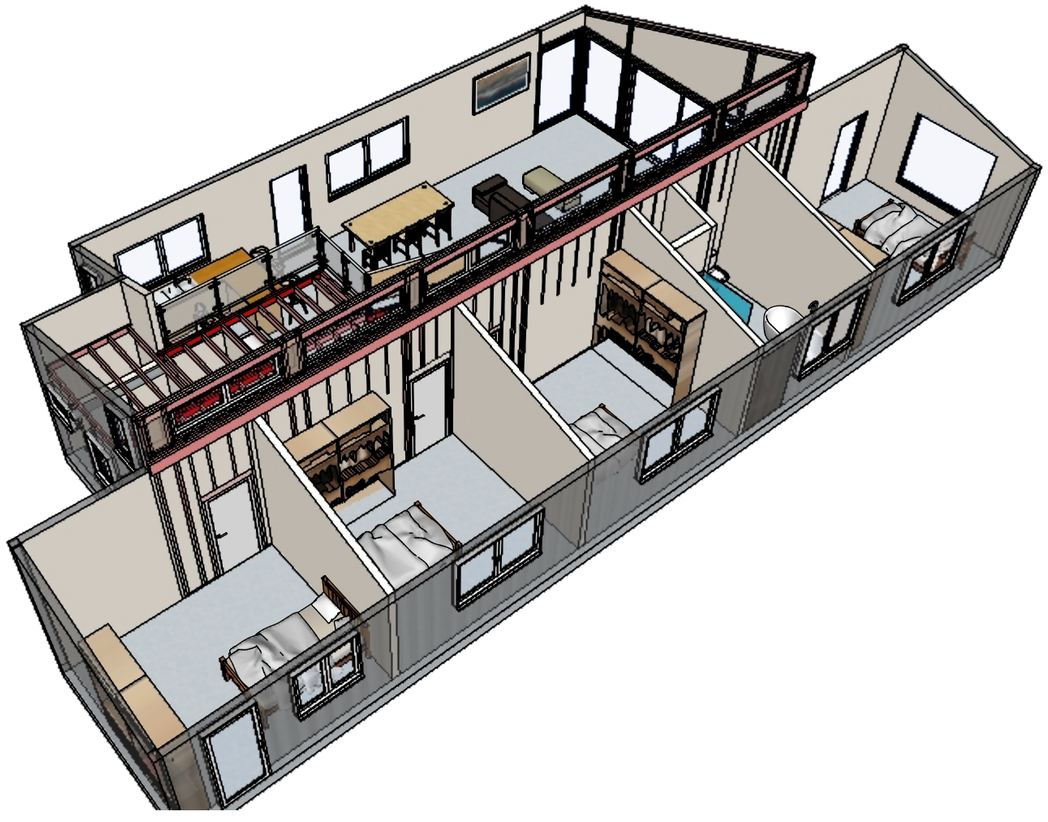
Date	13.09.2022
Job No.	1112
Sheet No.	02 of 15 Site Plan
Revision	











Rec'd 20/09/2023

GRANTED 20/09/2023

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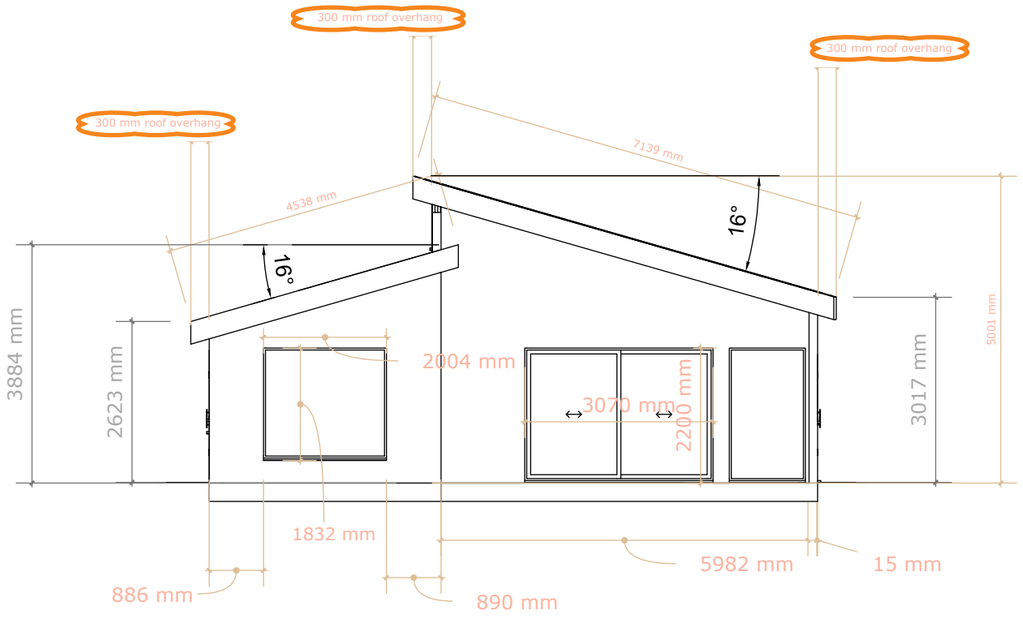
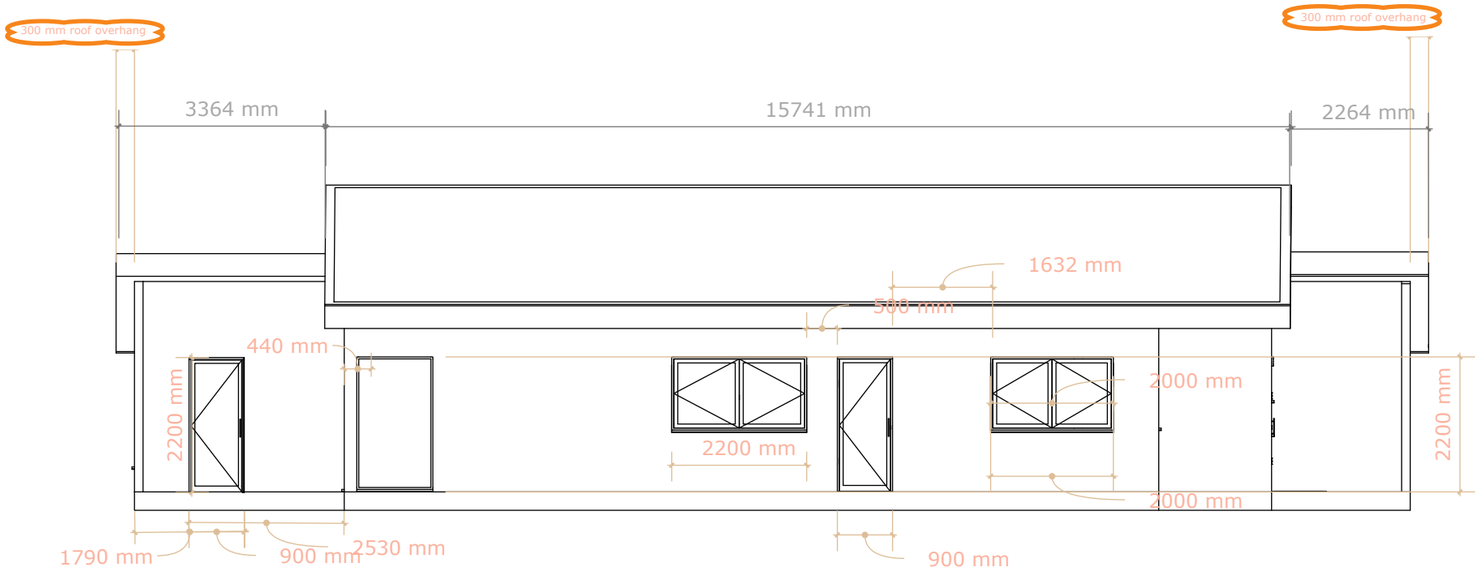
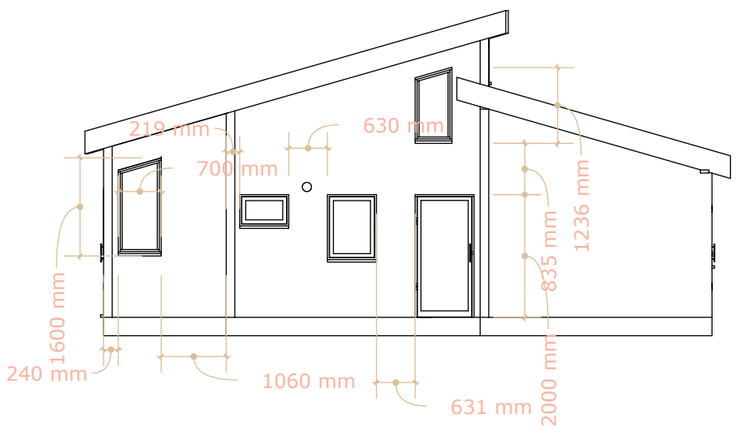
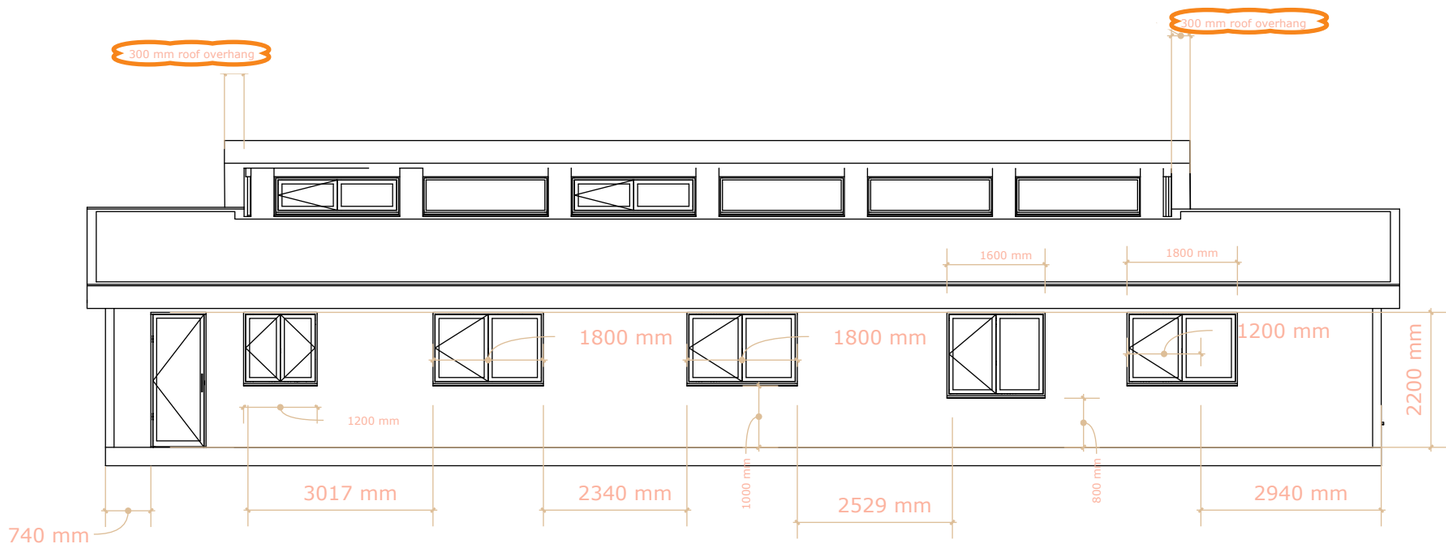








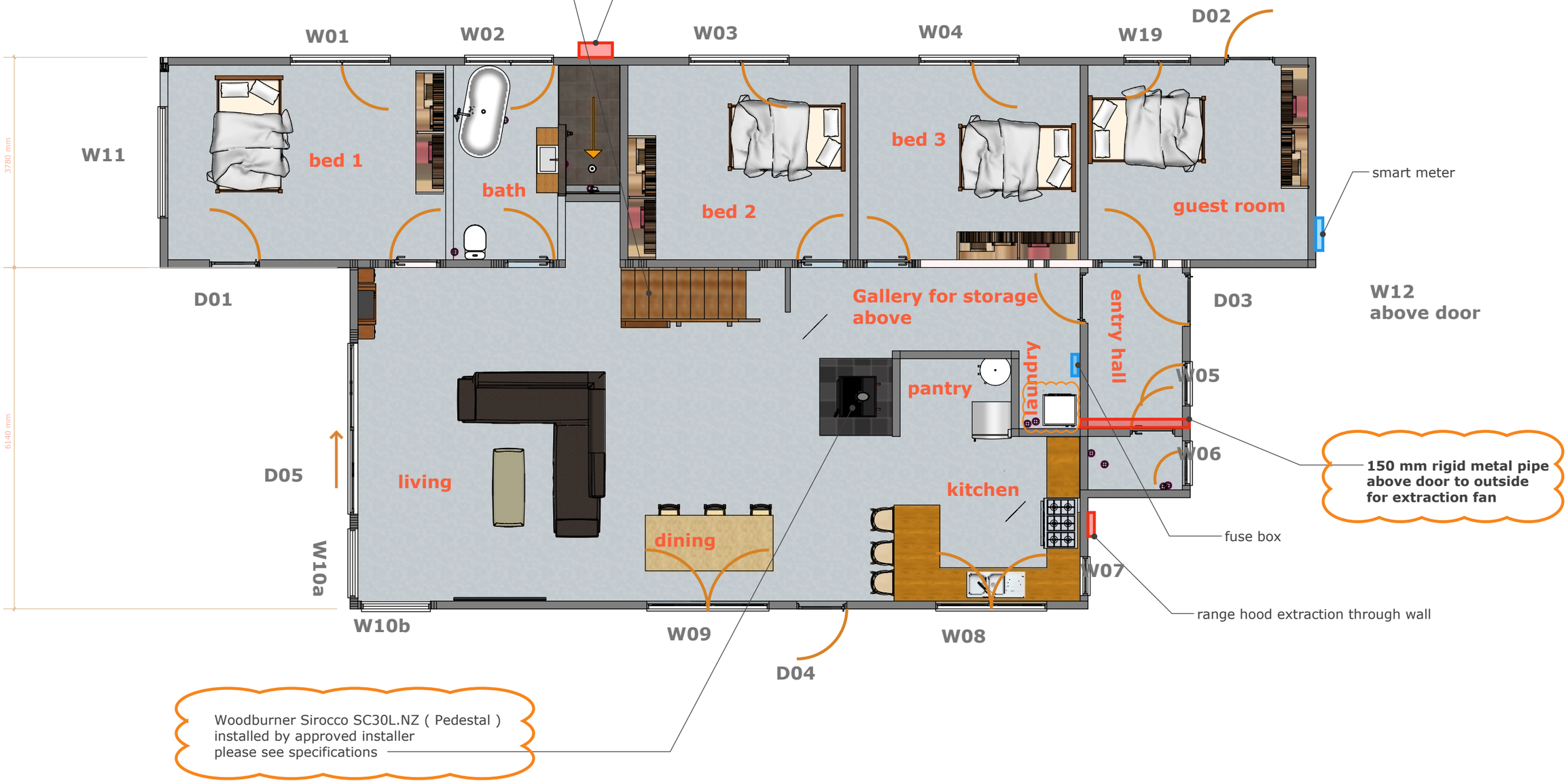
DesignWorx	Date Created: 02.07.2023 Date modified: 19.09.2023	elevations cad with roof	06/25

Table 6: Design Limits for Stairs
Paragraphs 4.1.1, 4.1.4 a), 4.4.2, 4.5.1 a) and Figure 17

Stair	Maximum pitch	Maximum riser height (mm)	Minimum tread (mm)
Service, minor private	47°	220	220
Secondary private	41°	200	250
Common and main private	37°	190	280
Accessible	32°	180	310

Tread 250 mm, raiser 195 mm secondary private

Floor polished concrete throughout , in wet areas finished with OSMO concrete oil (see specs)



Electrical Legend

Extract fan ducted through ceiling space & vented through roof and/or walls where shown. Allow for power supply. Flow rate to comply with G4/AS1:
- 50 L/s for cooktops +
- 25 L/s for showers / baths / laundry

Wall extract grill (refer to wall penetration detail). Ensure wall extract ducting is constructed with 100mmØ uPVC pipe. Weatherproof external wall grille to match paint colour of wall cladding

Extract duct from drier to exterior

New smart meter / distribution board

Ceiling mounted smoke alarm with 'hush' facility

Recessed LED dimmable downlights (zero insulation clearance required)

Pendant lighting

Recessed LED soffit downlight with motion sensor

Wall mounted light. Confirm height position with client on site

External spotlight with motion sensor

Television (aerial / SKY dish) output

Data socket

Double power point (switched) Confirm height position with client on site

Weatherproof double power point (switched) Confirm height position with client on site

Heated towel rail power point

Heated towel rail

Location of WIFI router

Ceiling fan

HWC — Rheem Optima mains pressure electric hot water cylinder 293 litres - 2x3kW 91330025 - with hot water diverter

Power points shown in indicative locations, final numbers & positions to be confirmed with electrical contractor on site.

Proposed ceiling fittings may clash with exposed roof beams

Confirm number of power points to kitchen area with client (above and below bench)

Allow to install dedicated power outlets to gas califonts, fridge, hobs, oven, kitchen extract, microwave, washing machine / dryer (if not shown).

Kitchen extract to have power for in line extract fan in ceiling space to serve extract hood. Install remote wall switch.

Confirm all electrical fittings colours, materials, model type etc with client prior to ordering

Kitchen Fittings

Sink	Stainless steel sink
Hobs / Oven	Client selected gas hobs + electric oven

Kitchen Finishes

Walls	Polyurethane sealer coat to timber walls (3x coats)
Kitchen Bench	High pressure laminate bench top
Bench Splashback	Client selected splashback (tiles or brushed stainless steel)
Kitchen Joinery	Low pressure laminate to all kitchen joinery doors / drawers / shelves
Hob Splashback	Brushed stainless steel plate screwed + glued to timber wall up to extract hood above Extend 200mm min. past each side of hobs

Bathroom Fittings

Shower Slide	Confirm with client
Shower Mixer	Confirm with client
Vanity	Confirm with client
WC	Confirm with client
Heater	Client selected fan heater
Extractor Fan	High level Ventech ceiling extractor fan ducted to exterior over shower.

All fittings sealed to wall with MS Sikaflex sealant to fitting / wall junction

Bathroom Finishes (Laundry Finishes similar)

Floor bathroom polished concrete with 2 layers of Osmo Concrete oil

Vanity Splashback	Tiled splashback
Shower Walls	Level entry 1500 min. long x850mm approx. wide tiled shower in recess to concrete slab. Preformed Marmox board installed to rebate to create fall to Allproof 'Vision' channel. Confirm extent of safety glass screen and/or door with client. Refer to details

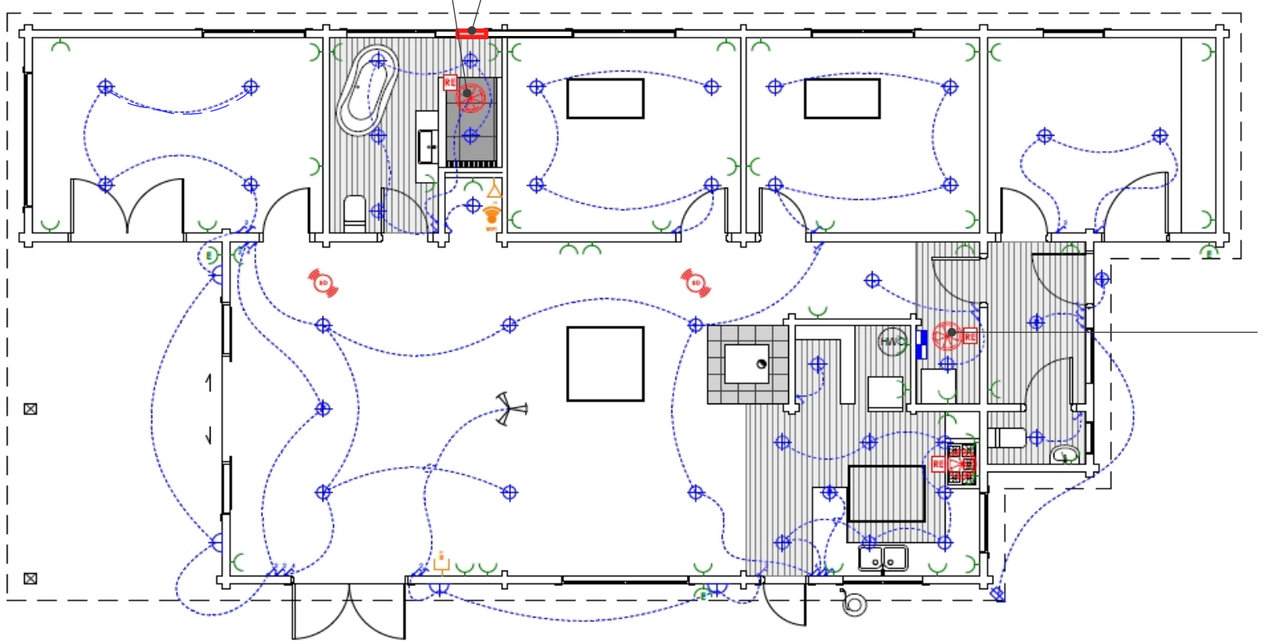
Kitchen / Bathroom / Laundry / WC Flooring

Floor bathroom polished concrete with 2 layers of Osmo Concrete oil

deleted

extraction fan through wall

deleted



Electrical + Finishes Plan
1:50

BC220342 Nelson City Council

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Drawing Scale A1 Size
Half Scale at A3
i.e. 1:100 at A1 =1:200 at A3

Proposed Dwelling
Euro Homes - Koelble
15 Skylark Rise
Atawhai
Nelson

Project Information

Site Information

Part Lot:	53
DP:	545726
Wind Zone:	Very High
EQ Zone:	2
Corrosion Zone:	D
Snow Zone:	N3 (1 kPa)
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Building Consent RFI	13.09.2022

Revision History

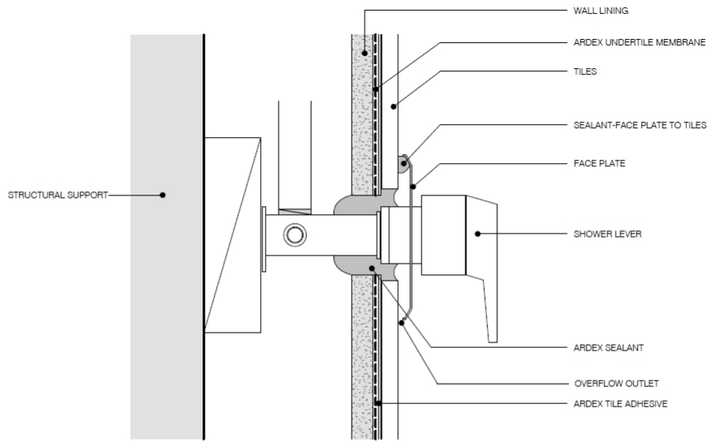
Date	13.09.2022
Job No.	1112
Sheet No.	Revision
14 of 15	
Electrical + Finishes Plan	

DANIEL HYNDMAN ARCHITECTURE
m | 021 0816 8179 e | daniel@dha.nz w | dha.nz

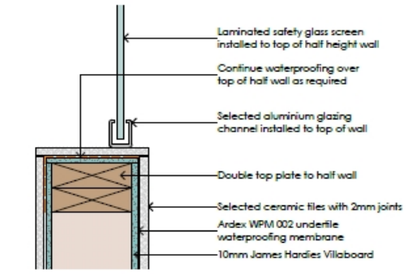
Daniel Hyndman Architecture Ltd
Unit 3, 27A Sir William Pickering Drive
Christchurch 8053

GRANTED 03/10/2022
Revised docs rec'd 13.09.2022

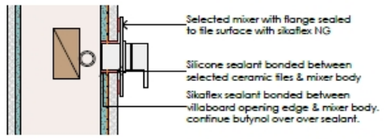
see also "GIB wet areas" and "ARDEX WPM 155 Rapid waterproofing" in Specifications



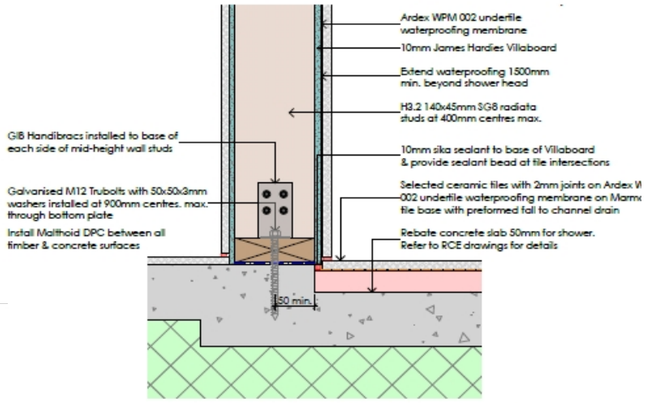
WET AREA WATERPROOFING | TYPICAL SHOWER MIXER USING SEALANT | DWG NO. AWW-25 | DATE 12.07.2022 | SCALE 1 : 2 @ A4



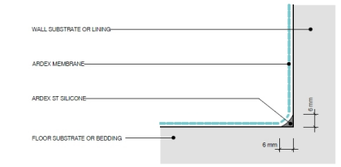
I-01 Half High Shower Wall Top 1:5



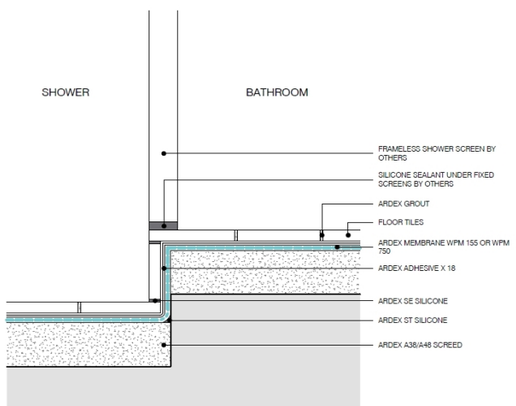
I-02 Half High Shower Wall Penetration 1:5



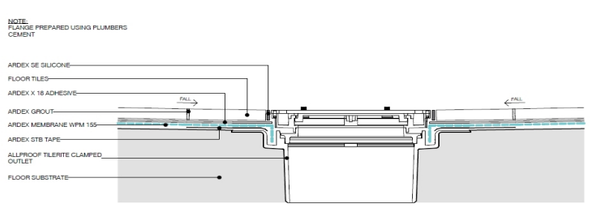
I-03 Shower Base / Half High Wall Junction 1:5



WET AREA WATERPROOFING | BOND BREAKER - CLASS 3 MEMBRANE | DWG NO. AWW-12 | DATE 30.04.2019 | SCALE 1 : 1 @ A4



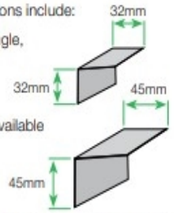
WET AREA WATERPROOFING | UNENCLOSED SHOWER - MEMBRANE BELOW TILE BED | DWG NO. AWW-09 | DATE 30.04.2019 | SCALE 1 : 2 @ A4



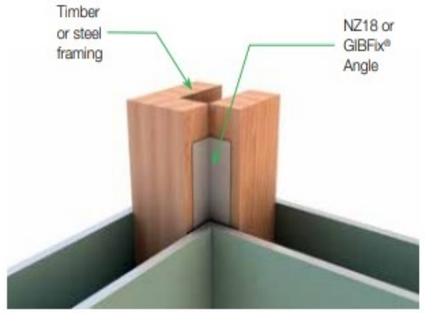
WET AREA WATERPROOFING | TYPICAL MEMBRANE TERMINATION AT DRAINAGE FLANGE | DWG NO. AWW-13 | DATE 30.04.2019 | SCALE 1 : 2 @ A4

METAL ANGLES FOR TILED INTERNAL CORNERS

- Prior to lining in tiled areas (shower cubicles and shower over bath only) the internal corners shall be reinforced with a minimum 32 x 32 x 0.55mm galvanised metal angle.
- Suitable GIB® metal angle options include:
  - GIB® Rondo® NZ18 metal angle, available length: 3.0m
  - GIBFix® Angle metal angle, available lengths: 2.4m and 2.7m



- Angles need to be temporarily held in place until secured by the lining fixings
- Minimum height of the metal angle is 1800mm



WATERPROOF MEMBRANE SYSTEMS

A waterproof membrane system must be applied to all lining materials used as a substrate for ceramic tiles in a shower or shower over a bath application, or any other tiled application exposed to frequent water splash.

For further information see p10.

TILES AND TILE WEIGHTS

In areas likely to be directly exposed to water, tiles may be ceramic, porcelain or stone must comply with the over-surface finish requirements of the IWAM Code of Practice and be bedded with a suitable tile adhesive on the waterproof membrane system. See page 10 for the minimum extent of wall surfaces requiring impervious sheet materials or waterproof membrane systems prior to tiling.

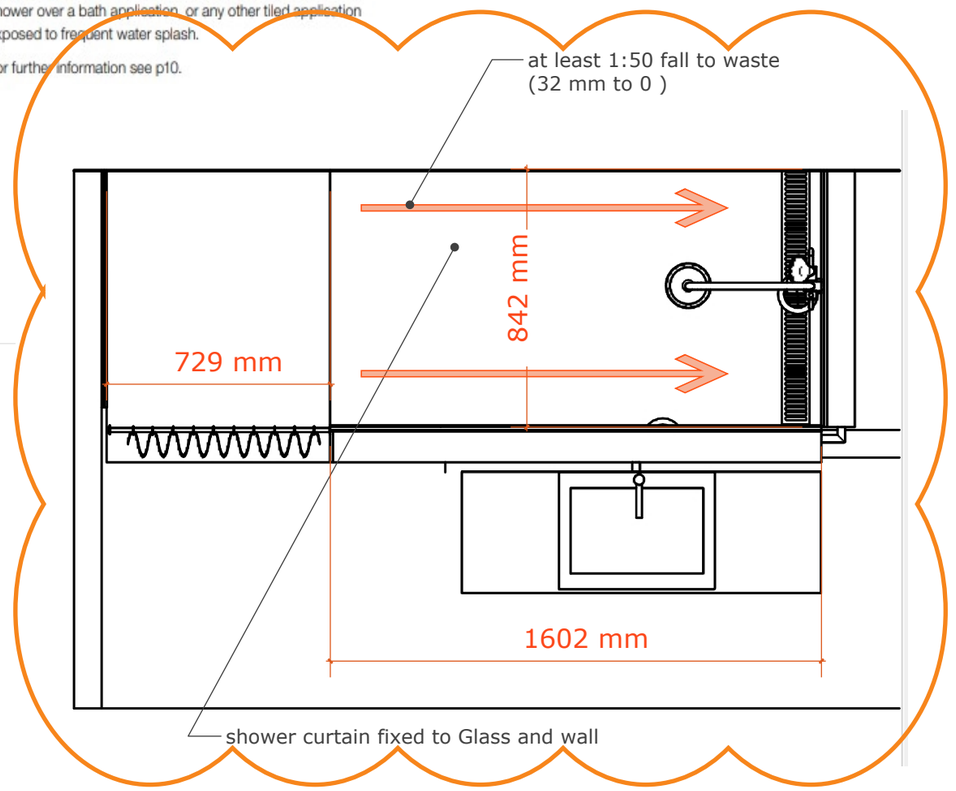
Smaller mosaic tiles are often lighter, but the integrity of grout joints might be more prone to impact, whilst heavier tiles are larger and have less and deeper grout and sealant joints. For more information also see AS 3958:2007 Ceramic tiles – Guide to the installation of ceramic tiles.

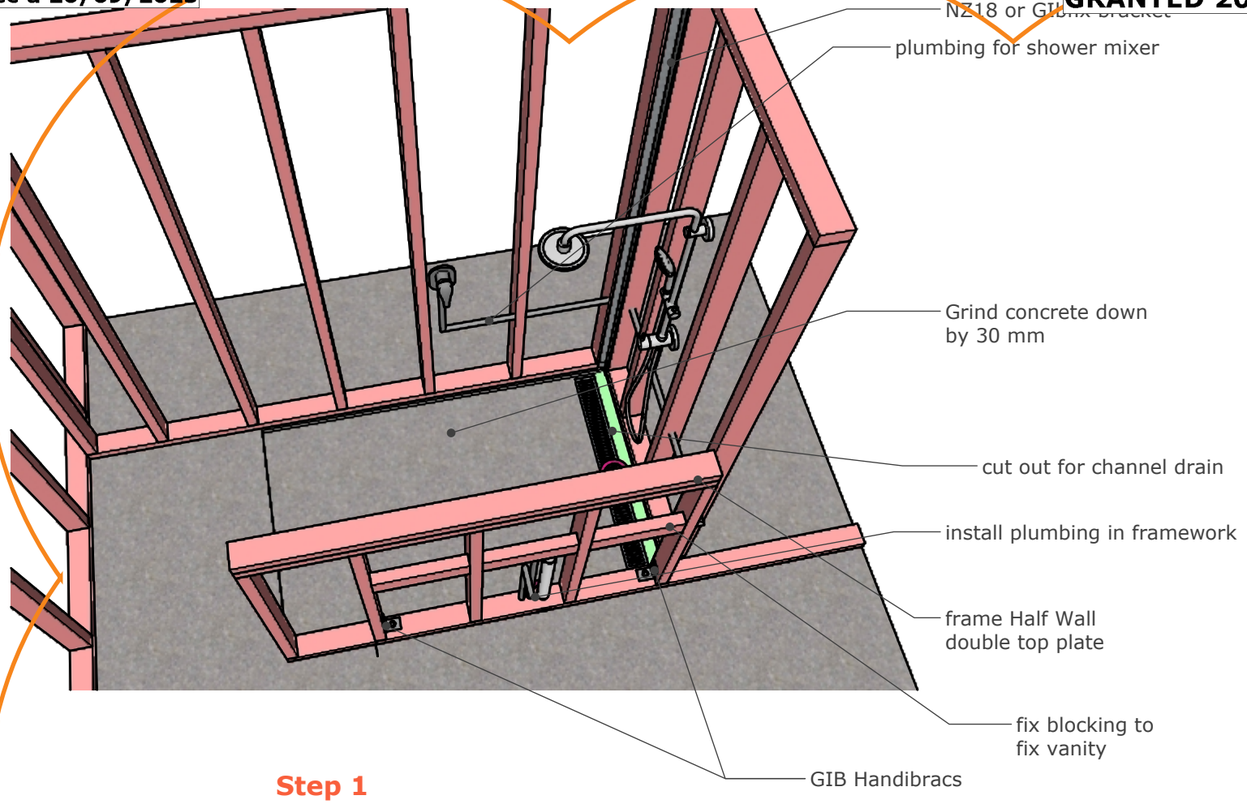
Table 2: Recommended maximum tile weights

Maximum Tile Weights for GIB Aqualine®, GIB Toughline® Aqua or GIB Weatherline®			
Stud Centre (maximum)	**Fasteners Centre (maximum)**	**Lining Thickness**	**Tile Weight**
600mm maximum	150mm maximum	10mm	26kg/m²
		13mm	40kg/m²

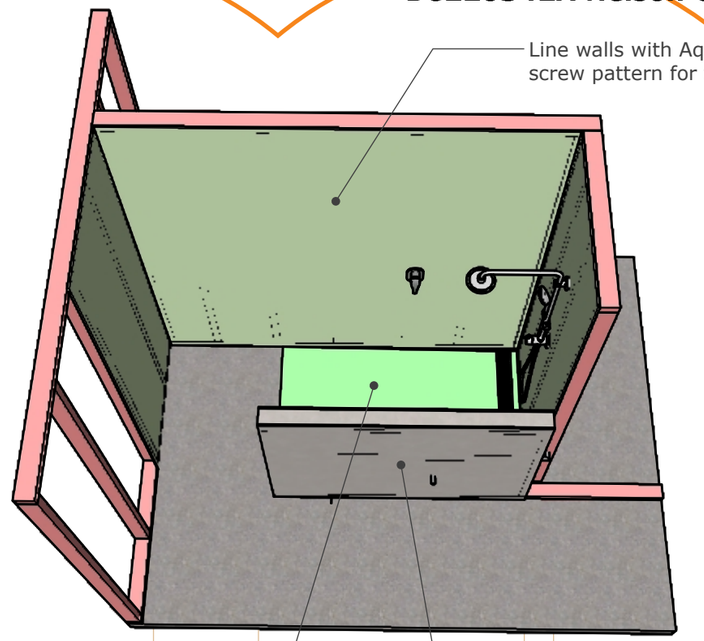
ADHESIVE AND GROUT WEIGHTS

The weight of adhesive and grout can vary depending on the type of tile and the installation process used. The maximum tile weights stated in table 2 are conservative and refer to the tile weight excluding grout and adhesive used. An additional 3kg/m² has been factored into tile adhesion testing on top of the above stated tile weights to account for adhesive and grout weight used during the installation of the tile.





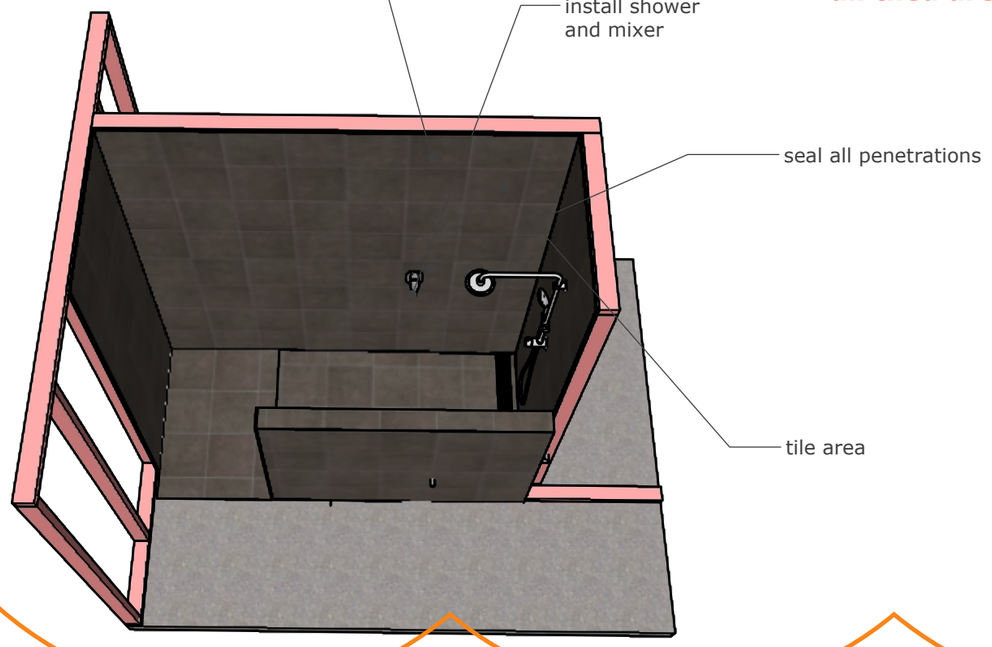
Step 1



Step 2

Step 3

Approved ARDEX Installer to waterproof all tiled area with ARDEX WPM 155 System



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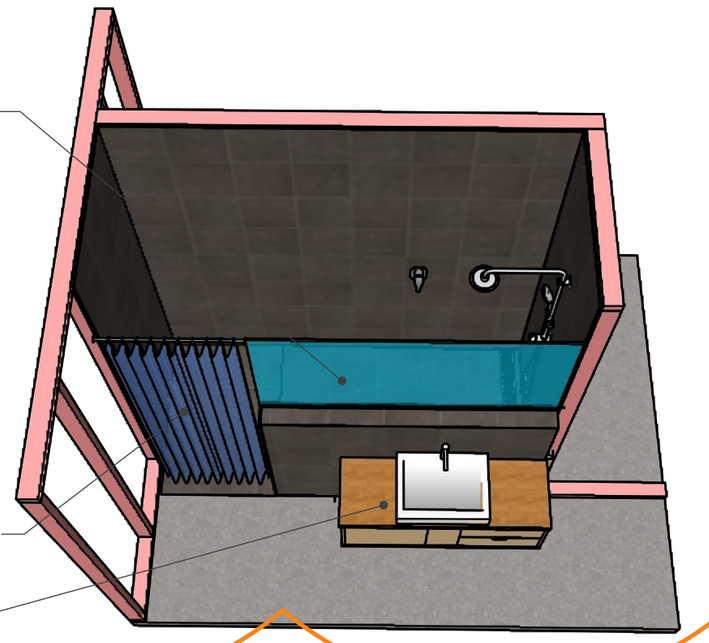

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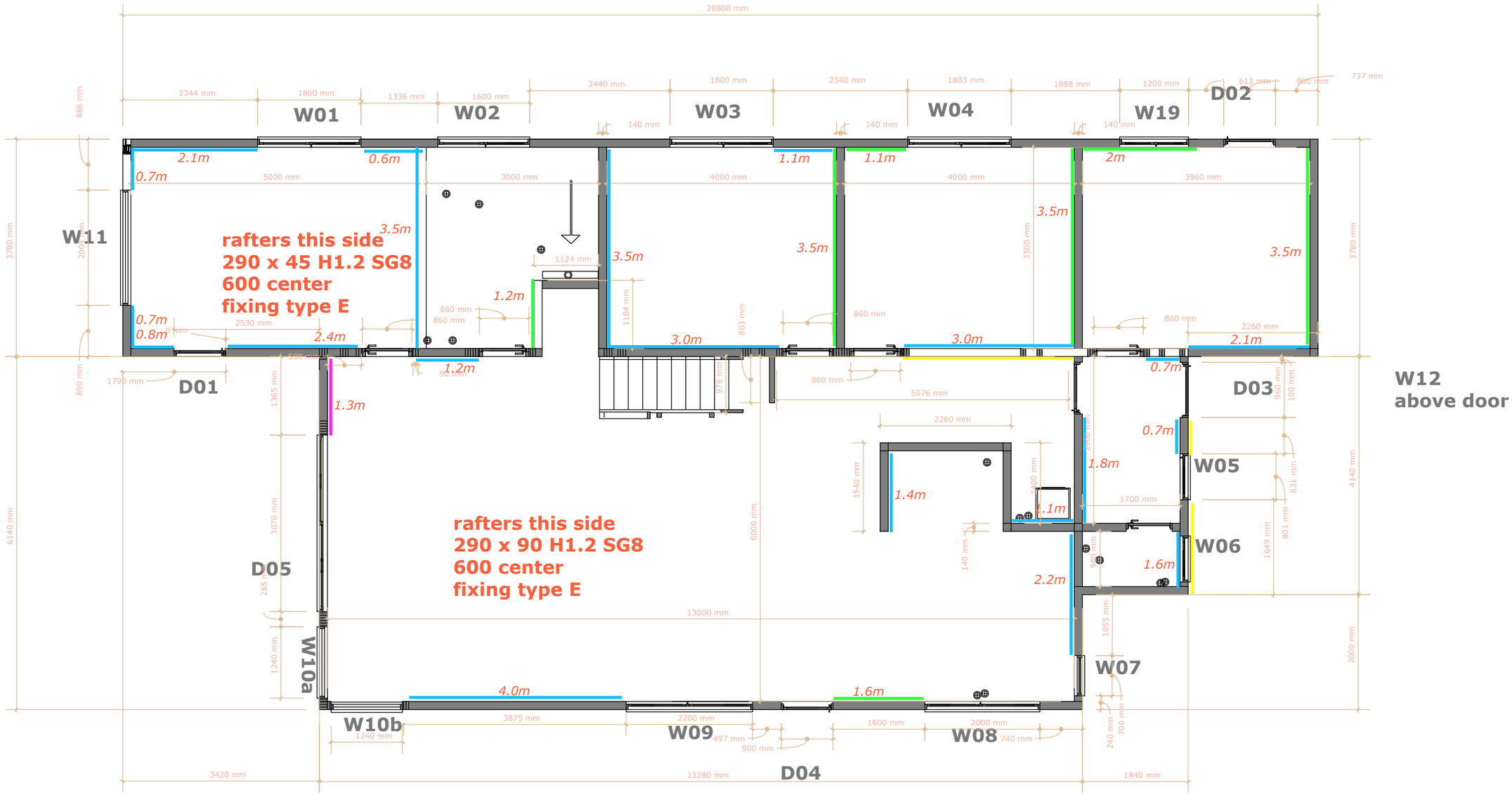


BL1-H , braceline Gib one side, hold downs

GL1-H , Standard Gib one side, hold downs

BLP-H , braceline Gib one side, 7 mm structural ply other side ,hold downs

SED, Details by engineer

all internal doors
1980x 820 mm sashes,
box size 860 x 2050

Rafter fixing Type E = 2/90x3.15 nails + 2 wire dogs (4.7 kN)

Wall underlay watergate plus
roof underlay covertec 403
DPM under bottom plate Supercourse 500

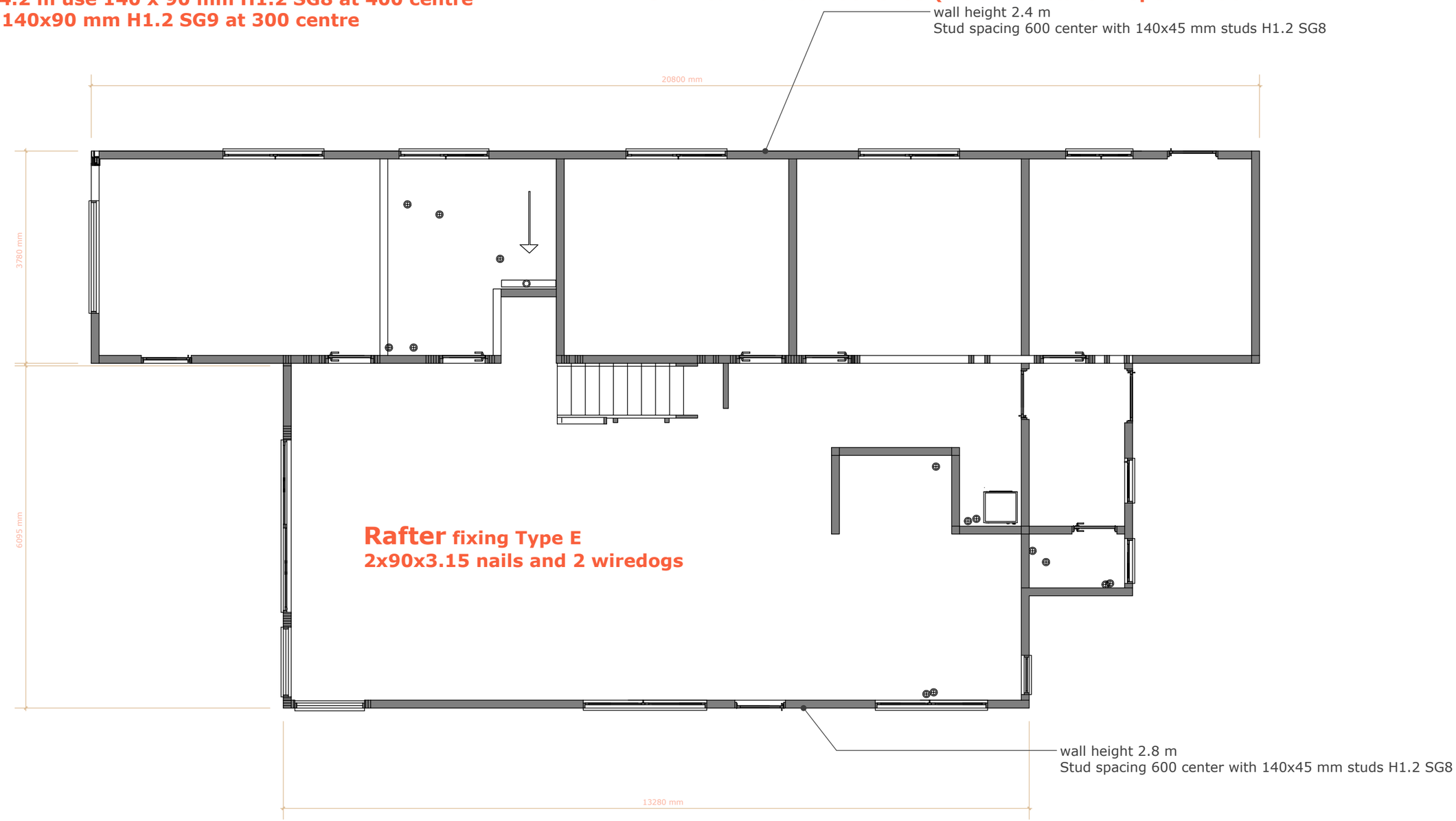
Studs shall be **spaced** 600 center when less than 3m,
over 3 m up to 4.2 m use 140 x 90 mm H1.2 SG8 at 400 centre
over 4.2 m use 140x90 mm H1.2 SG9 at 300 centre

Bottom plate fixing 900 mm center 7kN BOWMAC screw bolt (refer to specifications)

Top plate fixing Studlock SL (2@ SL125 Studlock screws to each stud)

Lintel fixings Type H for lintels min.190 mm (6xStudlock SL170)
Type G for lintel min. 140 mm (4xStudlock SL125

Trimmer fixed with Studlock SL80 (refer to details in specifications



Insulation :

Roof: Knauf Earthwool R7.4 Skillion 265mm x 430mm x 1160mm
outside walls : Knauf Earthwool R4.1 Super High Density wall 140mm x 580mm x 1160mm
Inside walls : Knauf Earthwool R3.2 Basic 140mm x 580mm x 1160mm

Drainage Notes

AAV	Air admittance valve installed to fitting. Vents to terminate in roof space or joinery for access
DP	80mm Colorcote 'Magnaflow' downpipe to terminate into uPVC pipe 100mm approx above ground. Install debris grate as required
MV	80mm uPVC main vent to terminate above roof. Refer to Roof Penetration Detail
IP	Inspection / access point
GT	Gully trap installed in site concrete with removable grate for cleaning / maintenance access
	100mmØ uPVC sewer at 1:100 min. grade
	100mmØ uPVC stormwater at 1:120 min. grade
	Existing sewer line
	Existing storm water line
	New Sump (Type One). 375mmØ x1000mm max. deep sump as per Figure 8 E1/AS1. Removable 300x300mm access grate (vehicle trafficable)

Location of sewer + stormwater laterals are not shown, refer to Site Plan. Contractor to confirm location + invert levels of sewer + stormwater laterals on site prior to any work commencing

Drainage installed to NZBC G13

All drainage pipes to be uPVC

Pipe run lines are indicative, use 'Y' connections as required. Allow to record as-built drainage plan.

All drain junctions shall be swept connections using 45° bends

Pipe Sizing & Gradients (min.)

Sink	40Ø	uPVC	1:40 gradient
Tub	40Ø	uPVC	1:30 gradient
Shower	40Ø	uPVC	1:40 gradient
Vanity	40Ø	uPVC	1:30 gradient
Bath	40Ø	uPVC	1:40 gradient
WC	80Ø	uPVC	1:60 gradient
Main Vent	80Ø	uPVC	n/a

Water Notes

Confirm location of water pipe entry into dwelling from water meter. Confirm with client

All hot & cold water pipes to fittings to be 20mmØ to comply with Table 4 - G12 (NZBC document)

LPG

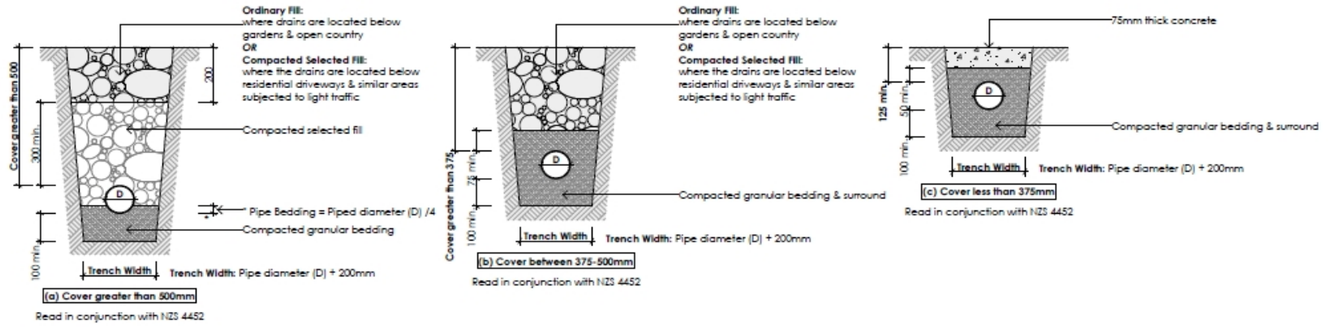
LPG Bottles
New 9kg LPG bottle on level concrete surface with chain restraints installed to location shown on Drainage Plan.

Install solid sheet cladding (James Hardies Hardieflex OR H3.2 treated plywood) to subfloor exterior behind LPG bottles for 1.50m min. each way from LPG bottles

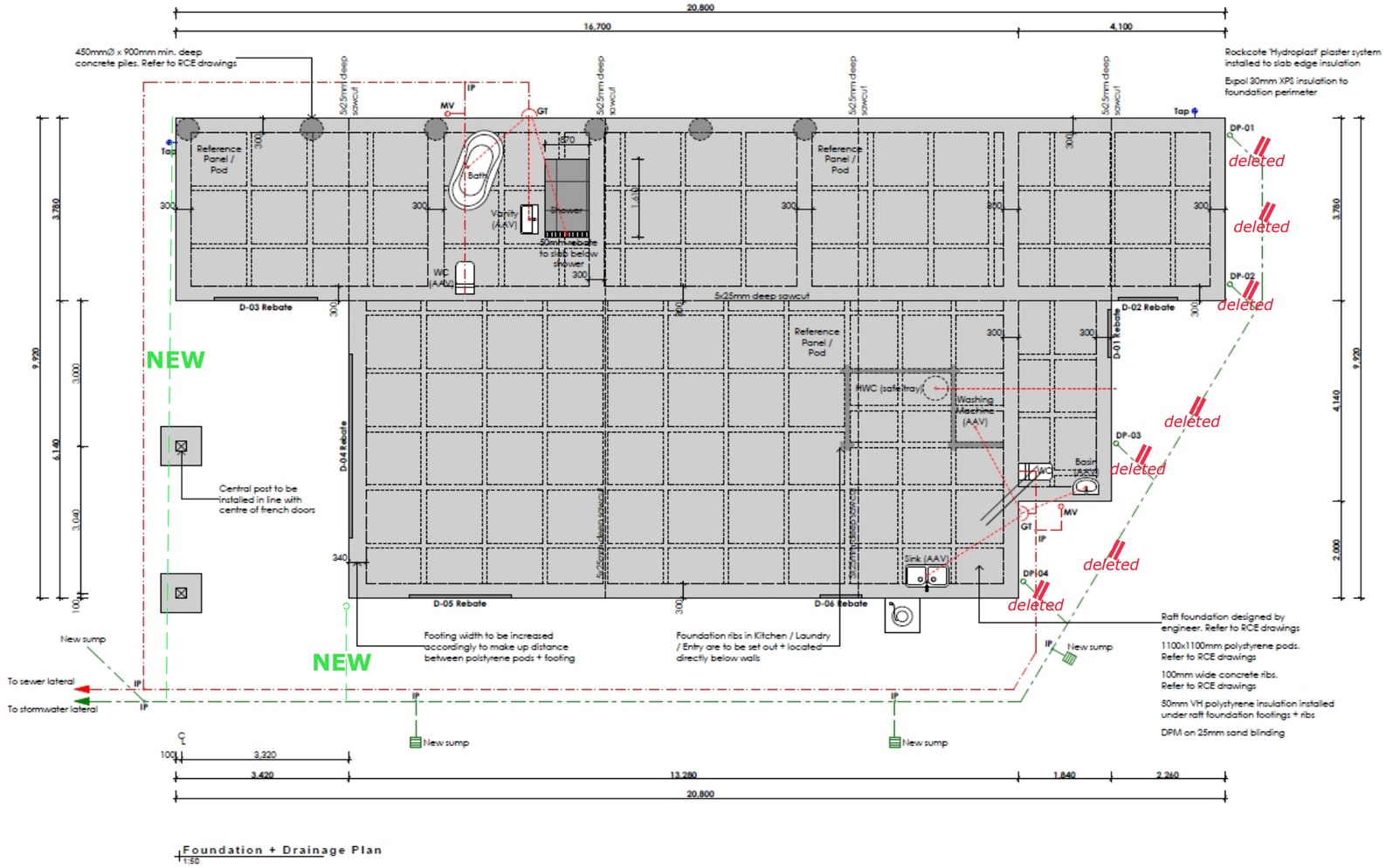
LPG bottle clearances to achieve the minimum clearances:

Opening Windows	150mm away
Doors	1.0m away
Open drains	1.0m away
Ignition sources	1.5m away

Measurements taken from base of bottle



Backfilling Details
1:10



Foundation + Drainage Plan
1:50

1. All work to comply with NZ building code + NZS3604

2. Contractor shall verify all dimensions on site prior to construction

3. Drawings not to be read in isolation from other architectural drawings and/or relevant supporting information. Drawings to be re-produced in colour

4. All drawings released prior to building consent being issued are preliminary & subject to change without notice.
To obtain a stamped building consent set of drawings, please contact Daniel Hyndman Architecture Ltd

5. Read in conjunction with RCE engineers documentation

6. Read in conjunction with Land Dimensions Survey Plan

7. If in doubt, please ask

8. Please provide 48 hours min. notice for Consultants and/or Designer to provide information for purposes of site inspection

Drawing Scale A1 Size
Half Scale at A3
i.e. 1:100 at A1 =1:200 at A3

Proposed Dwelling
Euro Homes - Koelble
15 Skylark Rise
Atawhai
Nelson

Project Information

Site Information

Part Lot:	53
DP:	545726
Wind Zone:	Very High
EQ Zone:	2
Corrosion Zone:	D
Snow Zone:	N3 (1 kPa)
Climate Zone:	3

Project History

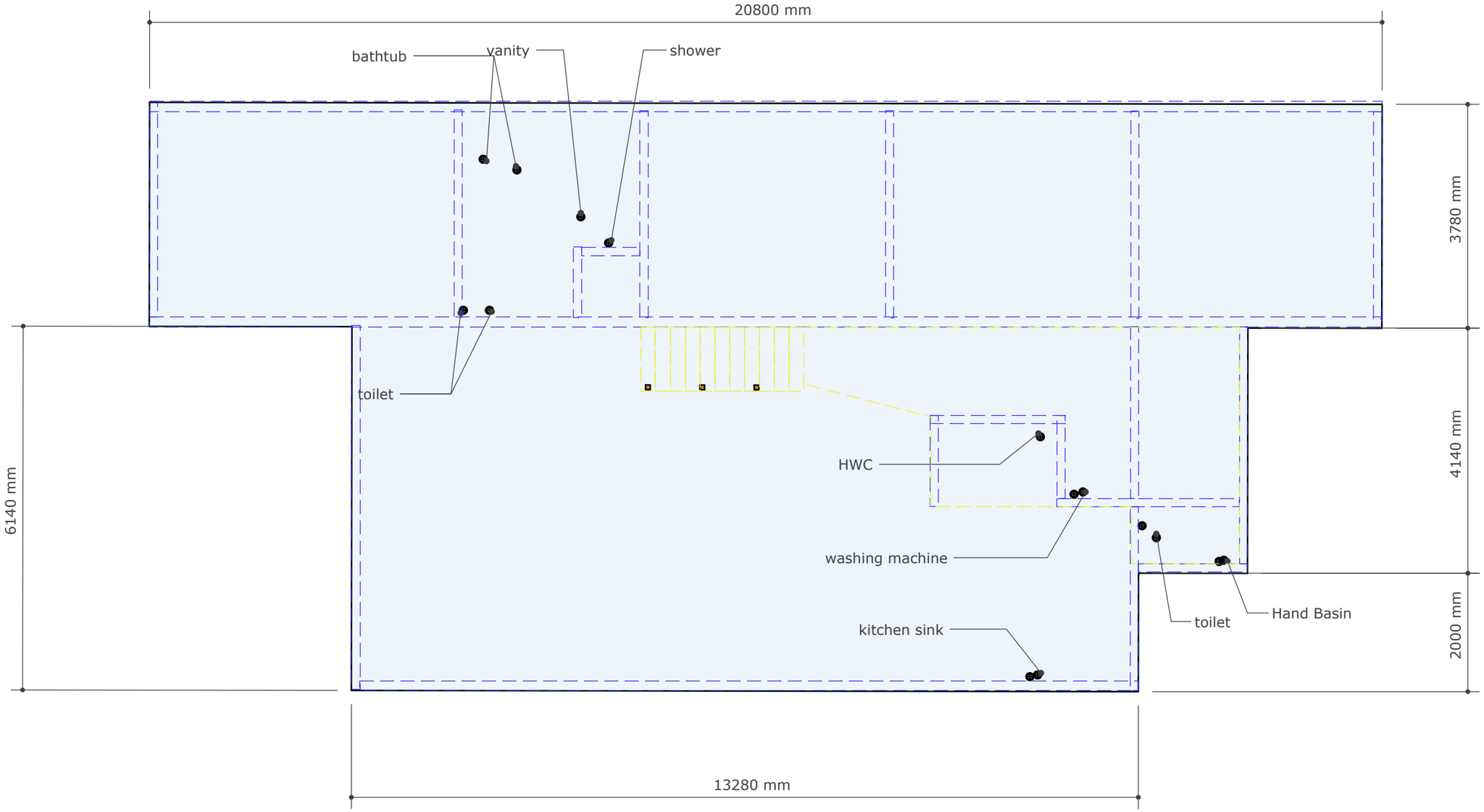
Developed Drawings - Engineer	22.03.2022
Working Drawings - Client	27.05.2022
Building Consent Application	06.06.2022
Building Consent RFI	16.08.2022
Building Consent RFI (Engineer)	05.09.2022
Building Consent RFI	13.09.2022

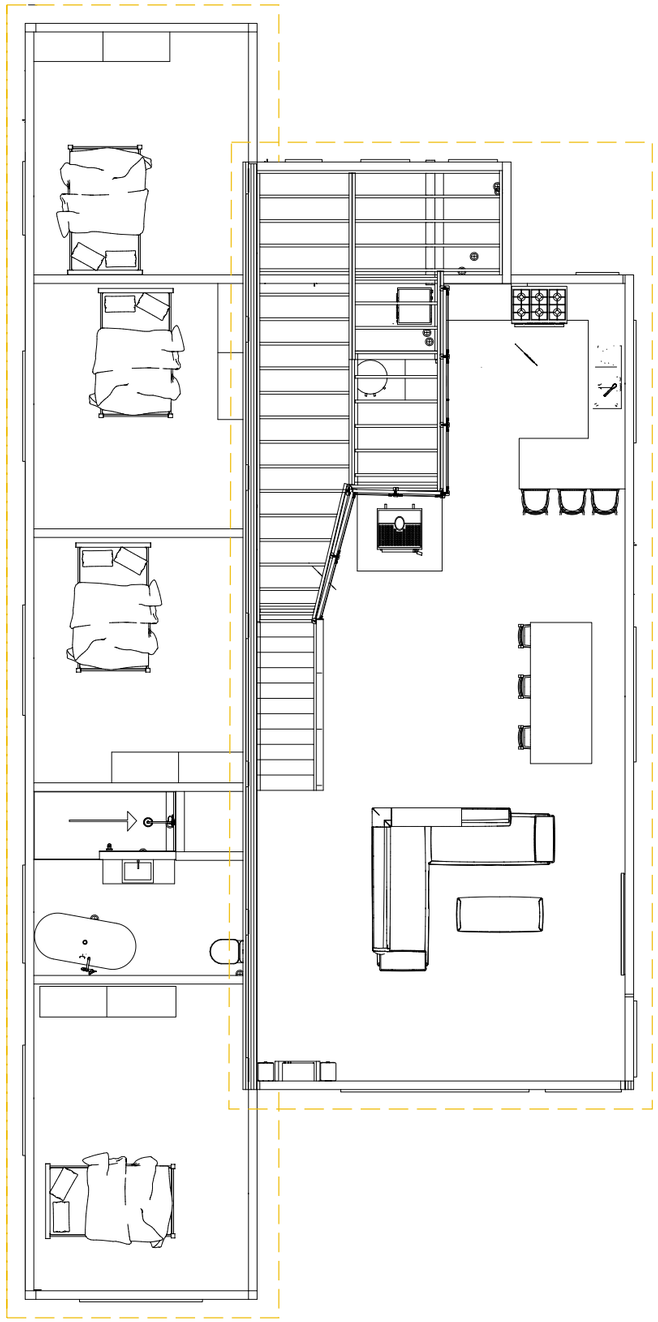
Revision History

Date	13.09.2022
Job No.	1112
Sheet No.	Revision
04 of 15	
Foundation + Drainage Plan	

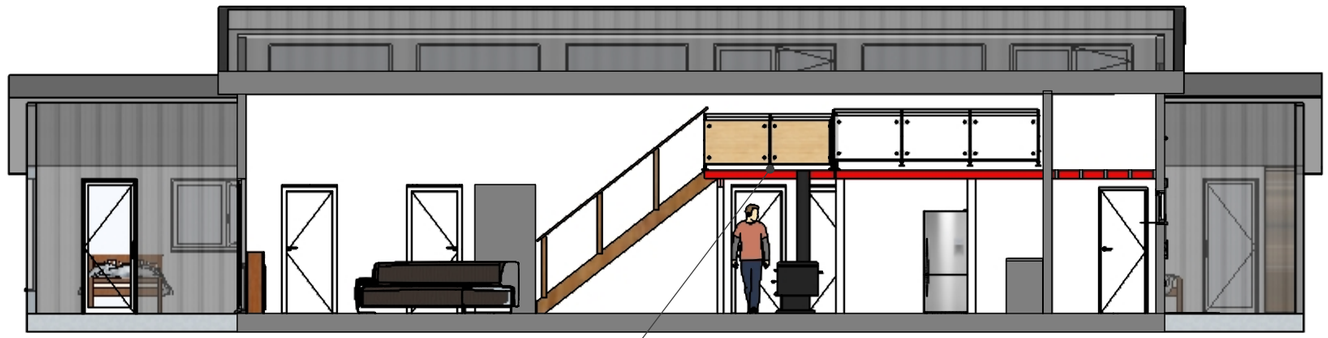
DANIEL HYNDMAN ARCHITECTURE
m | 021 0816 8179 e | daniel@dha.nz w | dha.nz

Daniel Hyndman Architecture Ltd
Unit 3, 27A Sir William Pickering Drive
Christchurch 8053

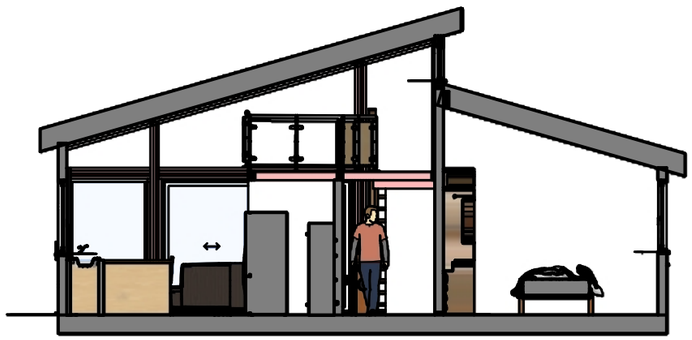

20800 mm
bathtub
vanity
shower
3780 mm
toilet
6140 mm
HWC
washing machine
kitchen sink
toilet
Hand Basin
4140 mm
2000 mm
13280 mm

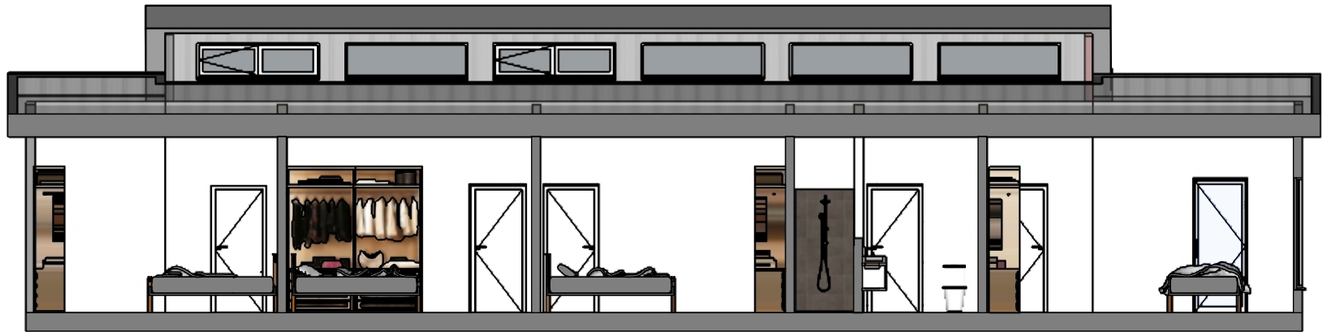


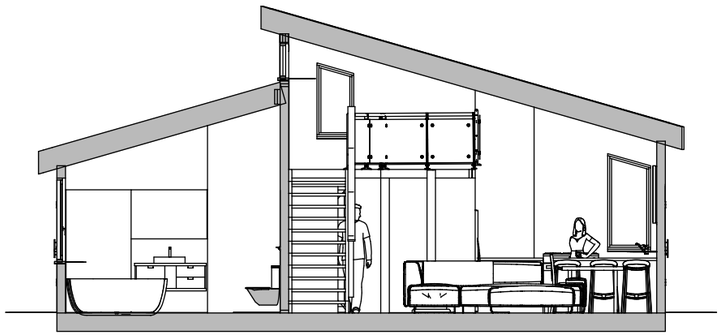
Diagonal roof bracing

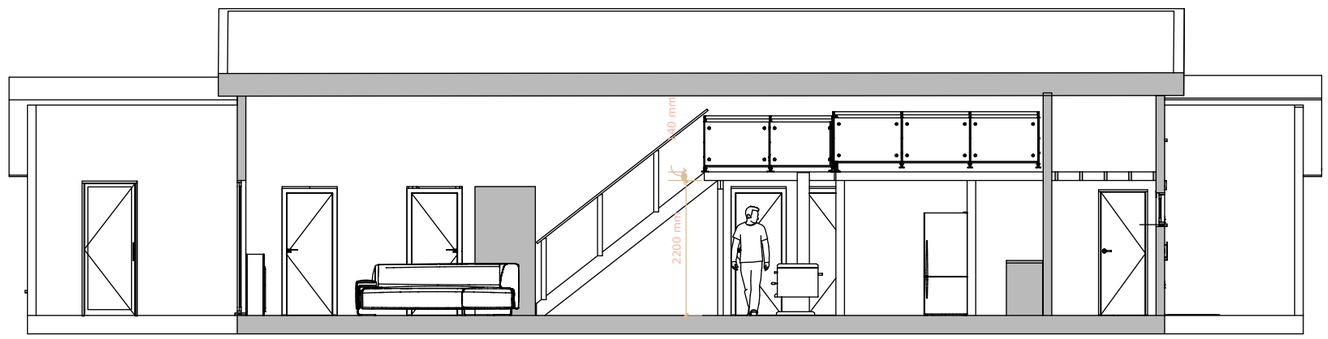


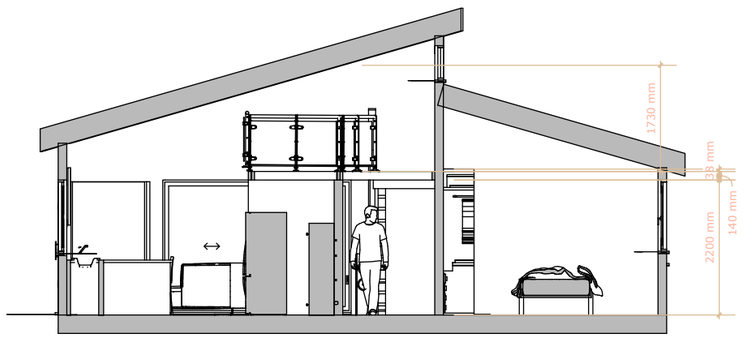
gallery sits on top of 2200 high internal walls

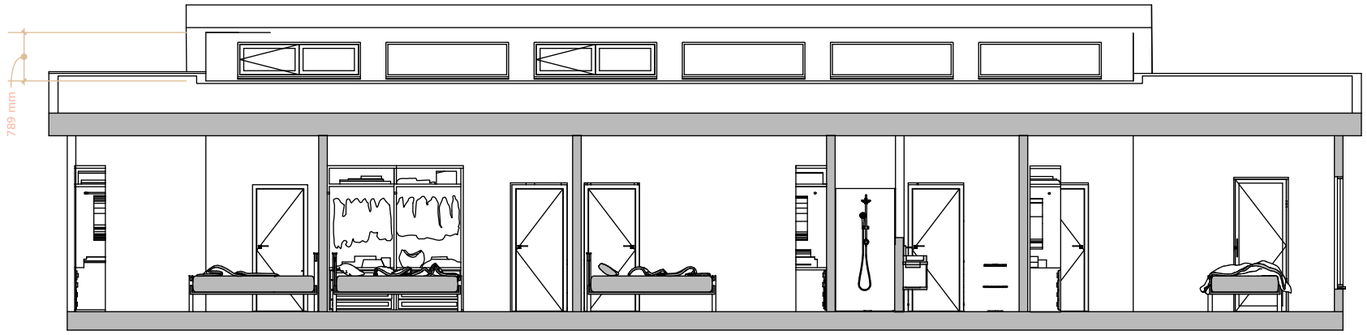




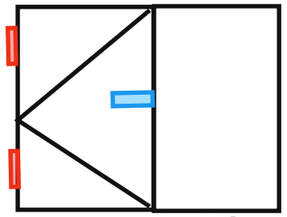



2200 mm
140 mm


1730 mm
2200 mm
140 mm


789 mm

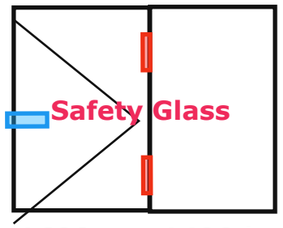
W01



1800 w x 1200 h

FFL to sill
1000 mm

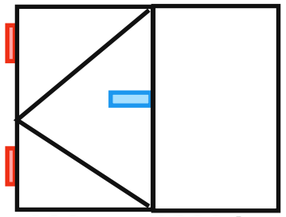
W02
Bathroom



1600 w x 1400 h

FFL to sill
800 mm

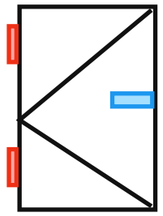
W03 W04



1800 w x 1200 h

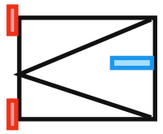
FFL to sill
1000 mm

W06



800 w x 1000 h

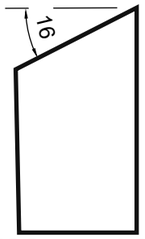
FFL to sill
1000 mm



800 w x 550 h

FFL to sill
1450 mm

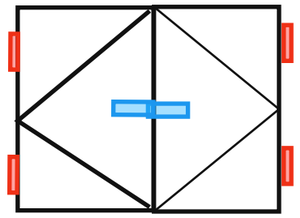
W07



700 w x 1400/1600 h

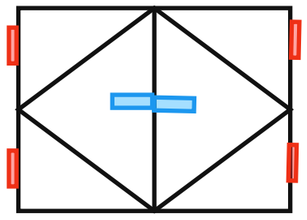
FFL to sill
1000 mm

W08



2000 w x 1200 h

FFL to sill
1000 mm



W09

2200 w x 1200 h

FFL to sill
1000 mm

W10a and W10b

1240 w x 2200 h

FFL to sill
0 mm

W11

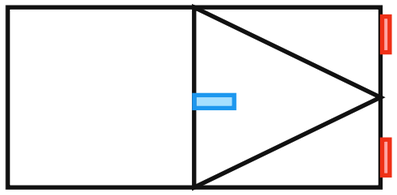
2000 w x 1800 h

FFL to sill
400 mm

W12
above door

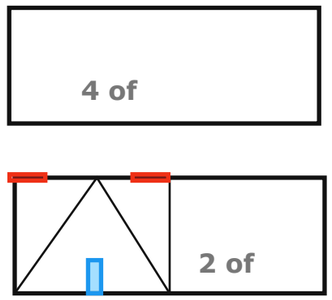
600 w x 980/ 1230 h

FFL (Galley) to sill
500 mm



W19

1200 w x 1200



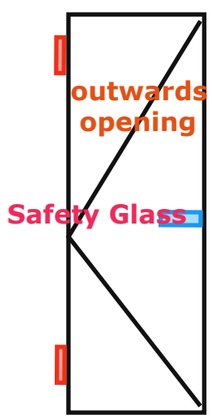
W13-18
Windows above roof 6 off
2000 w x 600 h

All windows and doors seeing from outside
All windows and doors inward opening ,
if not specified as outward opening

Window or door	Loaded dimension of Lintel	Window width	Lintel size (H1.2 SG8)
w1	1.9	1.2	90 x 90
w2	1.9	1.6	140x90
w3	1.9	1.8	140 x 90
w4	1.9	1.8	140x90
w5	1	0.6	90x90
w6	1	0.8	90x90
w7	1	2	140x90
w8	3.1	2	190x90
w9	3.1	2.2	190x90
w10	3.1	1.2	140x90
w11	1	2	140x90
d1	1	1	90x90
d2	1.9	1.4	90x90
d3	1	1	90x90
d4	3.1	0.9	90x90
d5	eng.	3.5	refer to engineer
w19	1.9	1.2	90x90

D01

900 w x 2200 h



D02

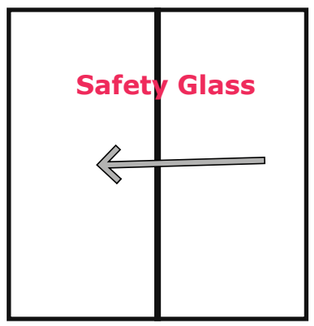
900w x 2200 h

D03

959 w x 2000 h

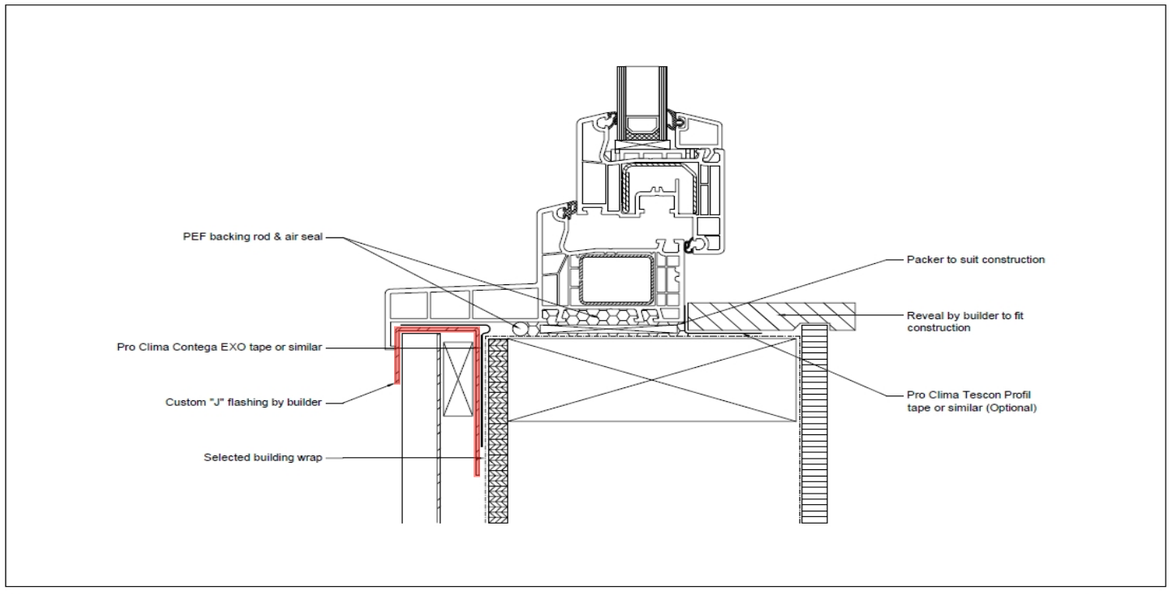
D04

900 w x 2200 h



D05

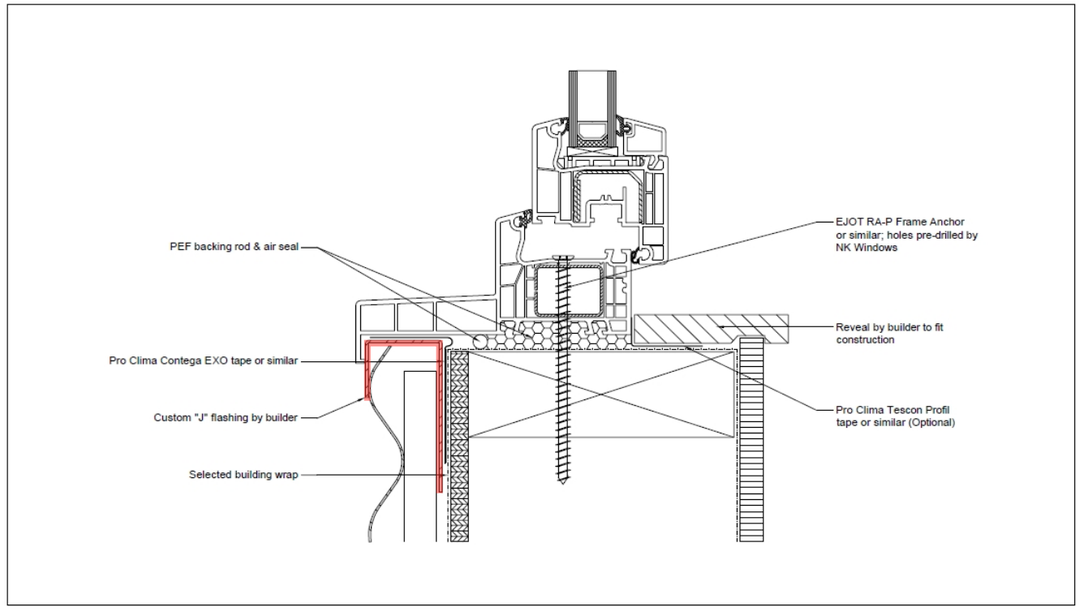
3070 w x 2200 h



NK WINDOWS
uPVC Systems

Inwards Opening Window Sill

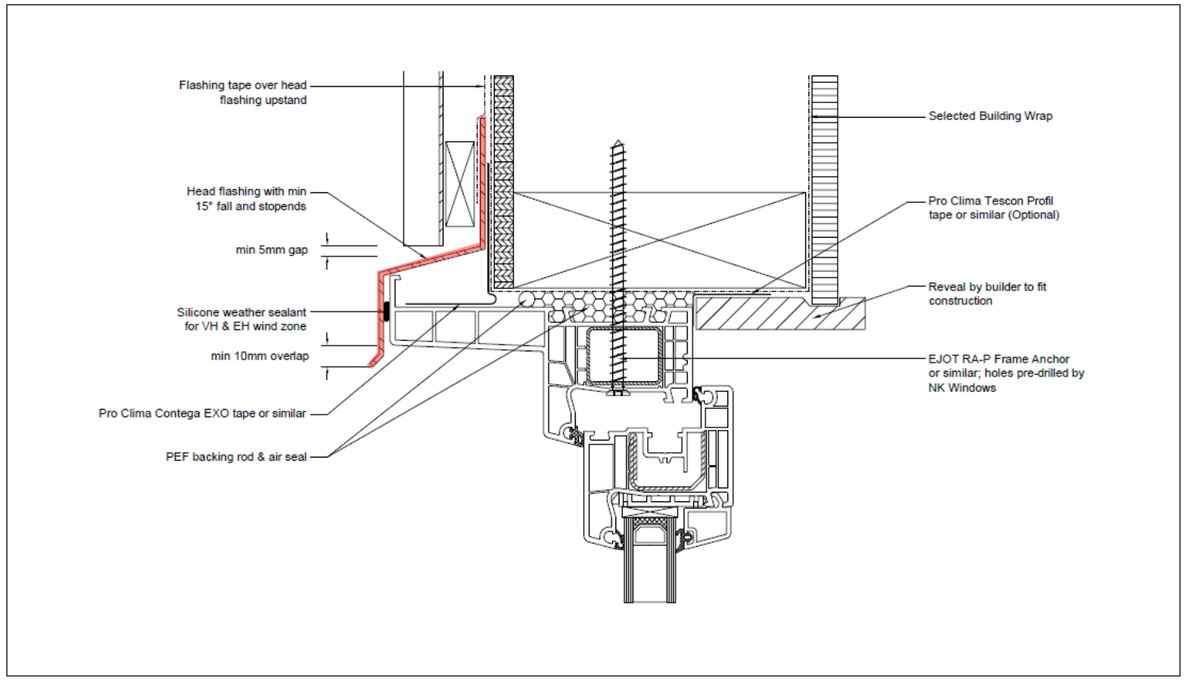
System: Aluplast Ideal 4000
Cladding: Profiled Metal
Version: 1.00, DEC19
Scale: 1 : 2
Code: 4NBPMMBWDI



Inwards Opening Window Jamb

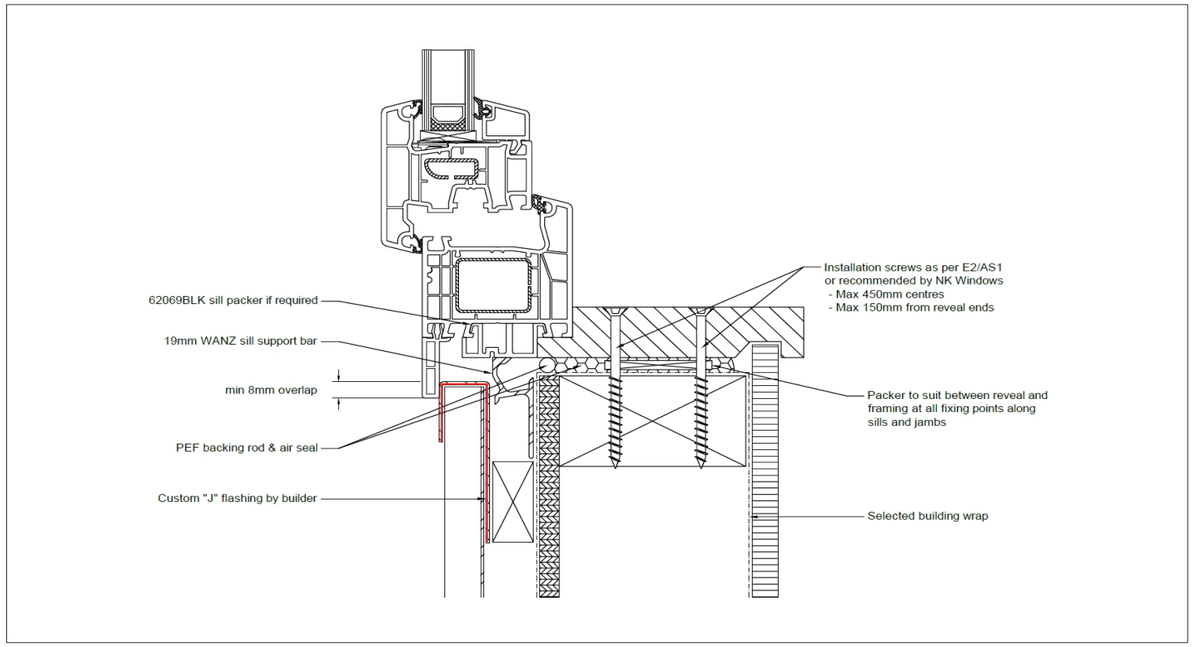
System: Aluplast Ideal 4000
Cladding: Profiled Metal
Version: 1.00, DEC19

Flashing details all windows and doors except w13-18 (next page)



Inwards Opening Window Head

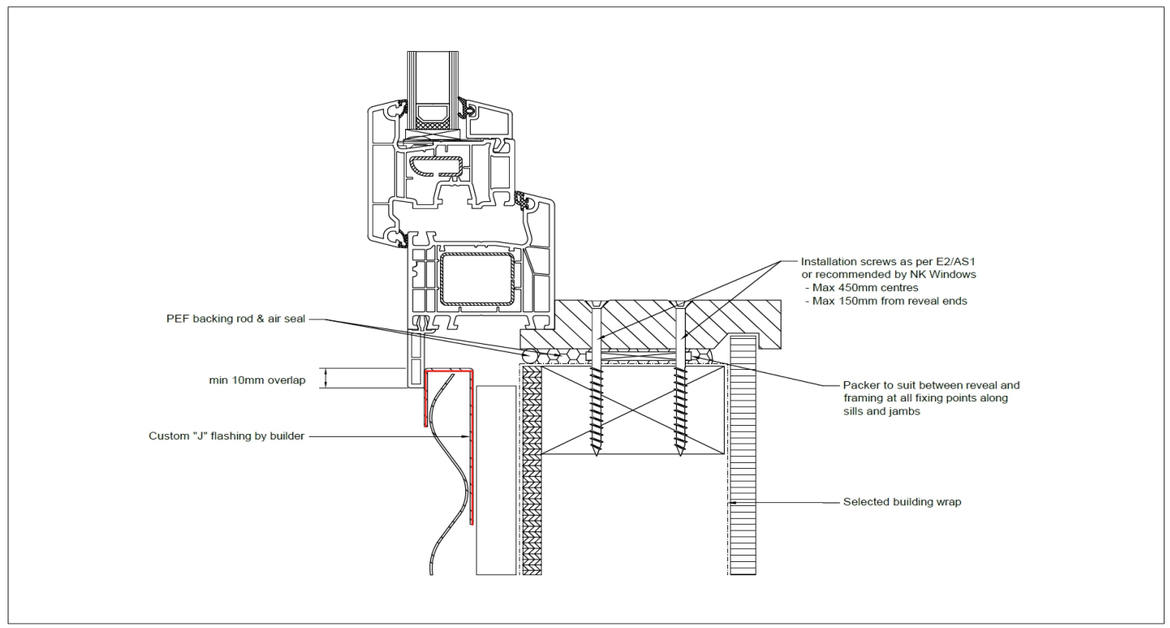
System: Aluplast Ideal 4000
Cladding: Profiled Metal
Version: 1.00, DEC19



NK WINDOWS
uPVC Systems

Outwards Opening Window Sill

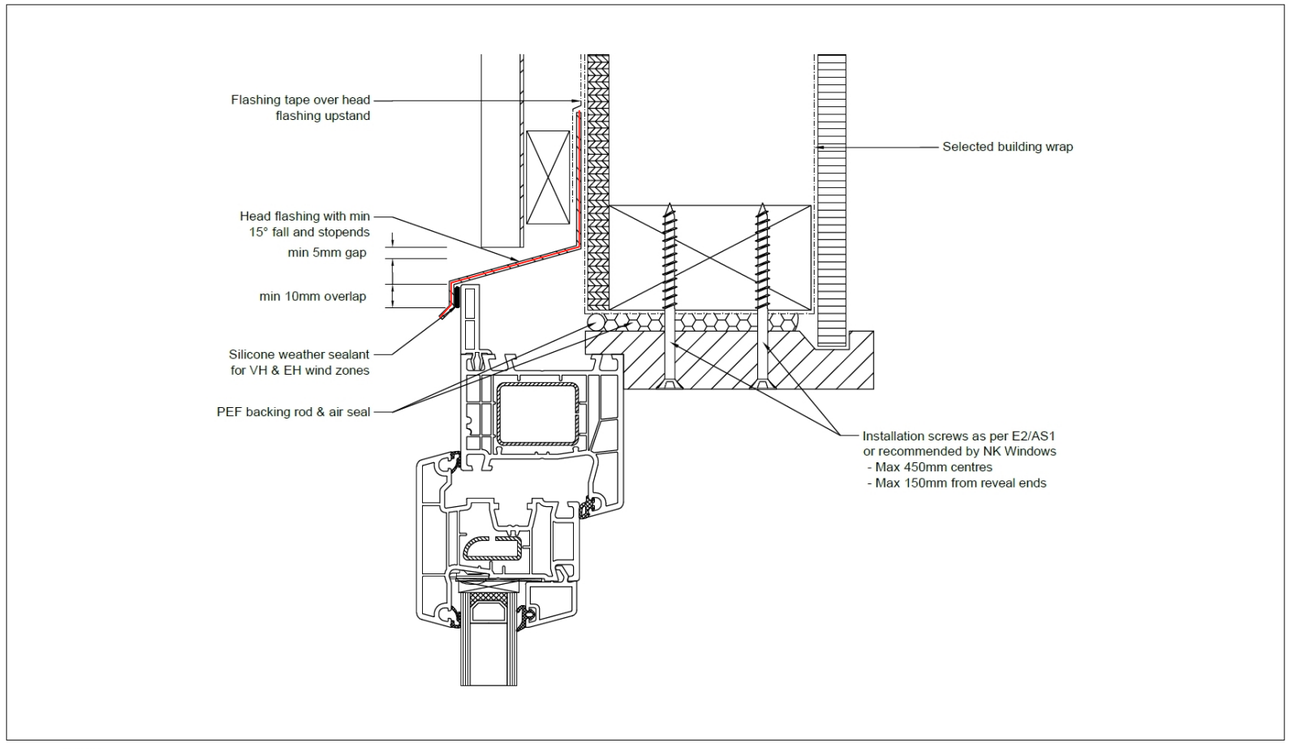
System: Aluplast Ideal 4000
Cladding: Vertical Profiled Metal
Version: 1.00, JUL19
Scale: 1 : 2
Code: 4NBPMRVWDO



NK WINDOWS
uPVC Systems

Outwards Opening Window Jamb

System: Aluplast Ideal 4000
Cladding: Vertical Profiled Metal
Version: 1.00, JUL19
Scale: 1 : 2
Code: 4NBPMRVWDO

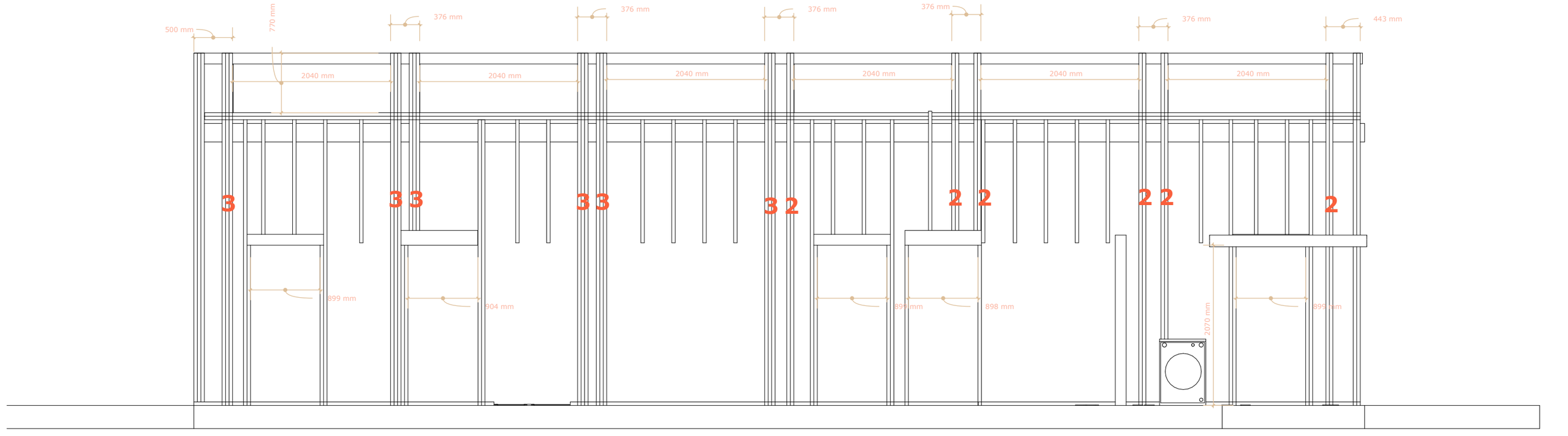


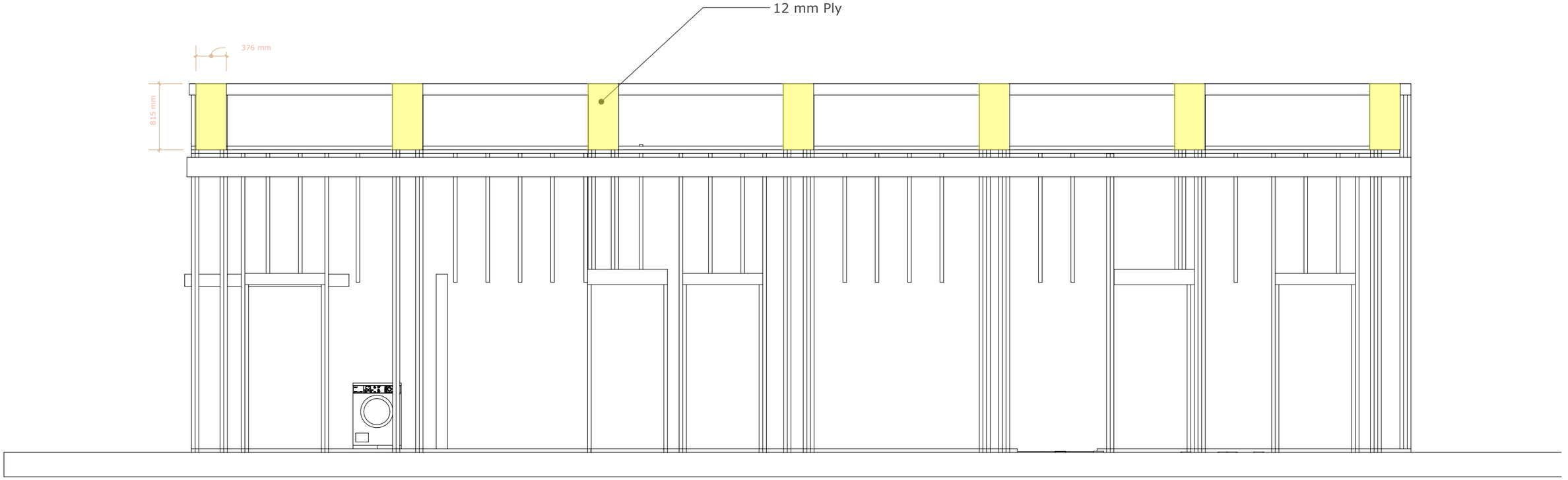
NK WINDOWS
uPVC Systems

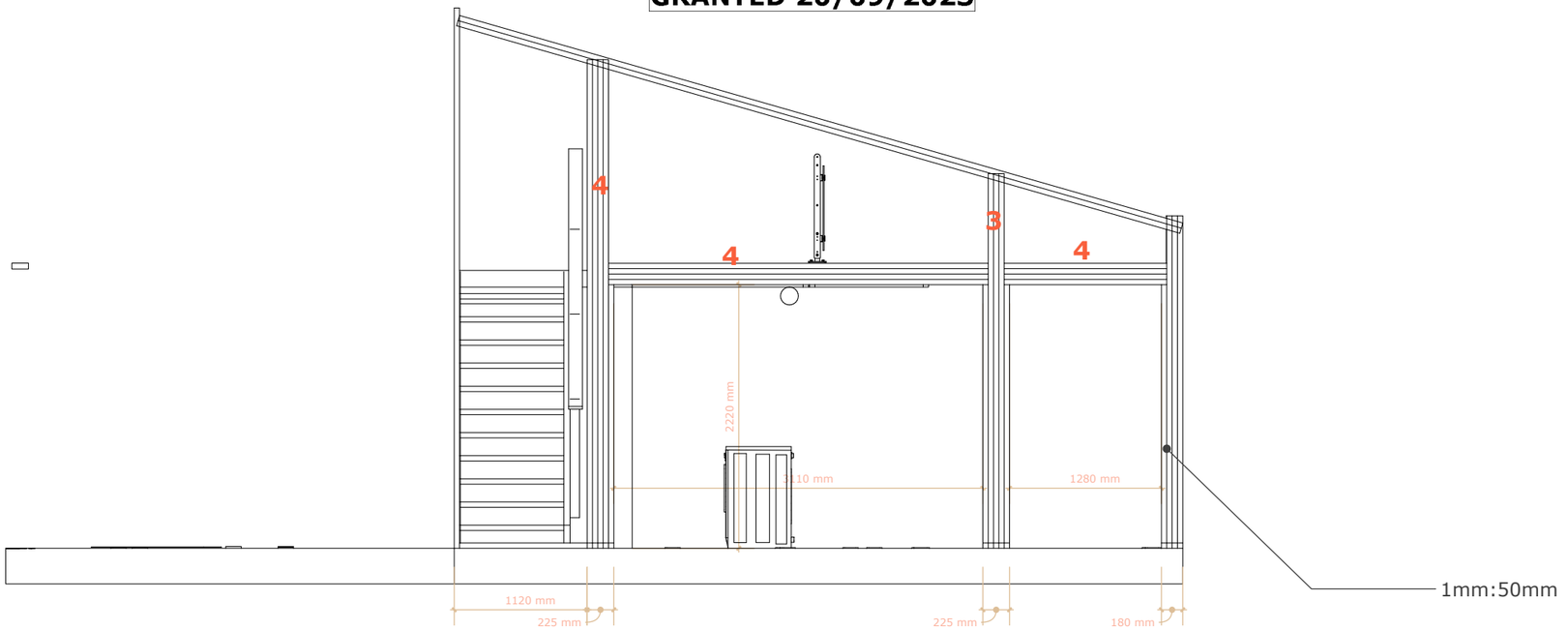
Outwards Opening Window Head

System: Aluplast Ideal 4000
Cladding: Vertical Profiled Metal
Version: 1.00, JUL19
Scale: 1 : 2
Code: 4NBPMRVWDO

Flashing window13 - 18


500 mm
770 mm
376 mm
376 mm
376 mm
376 mm
376 mm
443 mm
2040 mm
2040 mm
2040 mm
2040 mm
2040 mm
2040 mm
3
3 3
3 3
3 2
2 2
2 2
2
899 mm
904 mm
899 mm
898 mm
2070 mm
895 mm


12 mm Ply
376 mm
815 mm

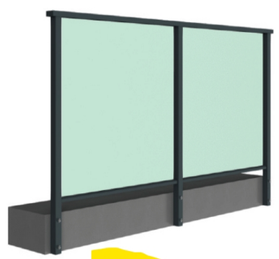


Clearspan Vista Balustrade

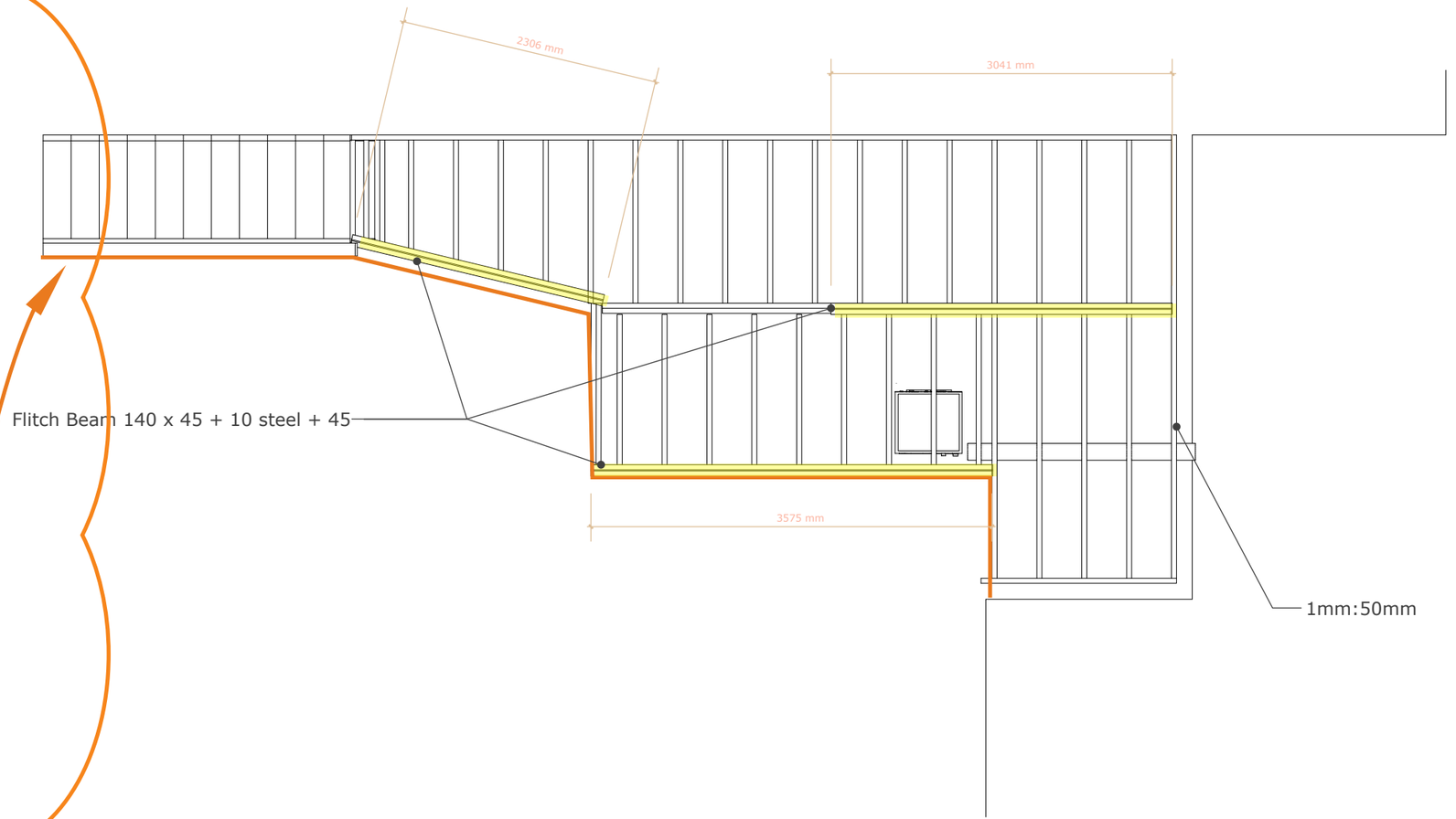
A traditional glass balustrade fully enclosed in a powder coated aluminium frame. Suitable for a broad range of applications including residential, commercial, external, internal, and pool fencing this balustrade system is super versatile and manufactured as a pre-assembled product meaning fast and easy installation.

Features

- Large range of glass options available
- Suitable for Pool fencing (F9)
- Tough powdercoated finish in your choice of colour*
- High quality T5/T6 aluminium and stainless steel fasteners
- Available to suit a range of substrates
- Designed and made in New Zealand



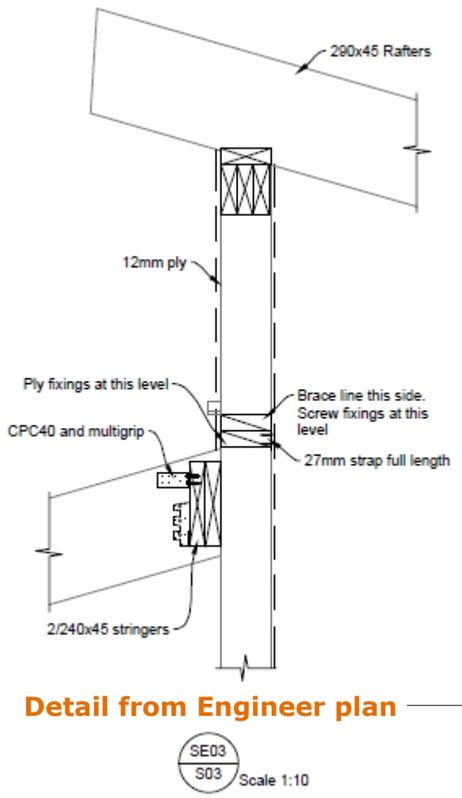
Balustrade for Gallery storage place in Specifications
" Clearspan or Clearview top fixed to timber "



Purlins (75 x 45 mm H1.2)
fixing Type D 3.45 kN
2 blue screws
max.purlin crs. 900 mm

Thermacraft Covertec 401
self supporting underlay

5-Rib Colorsteel 0.4 mm MAXX for all walls and roof



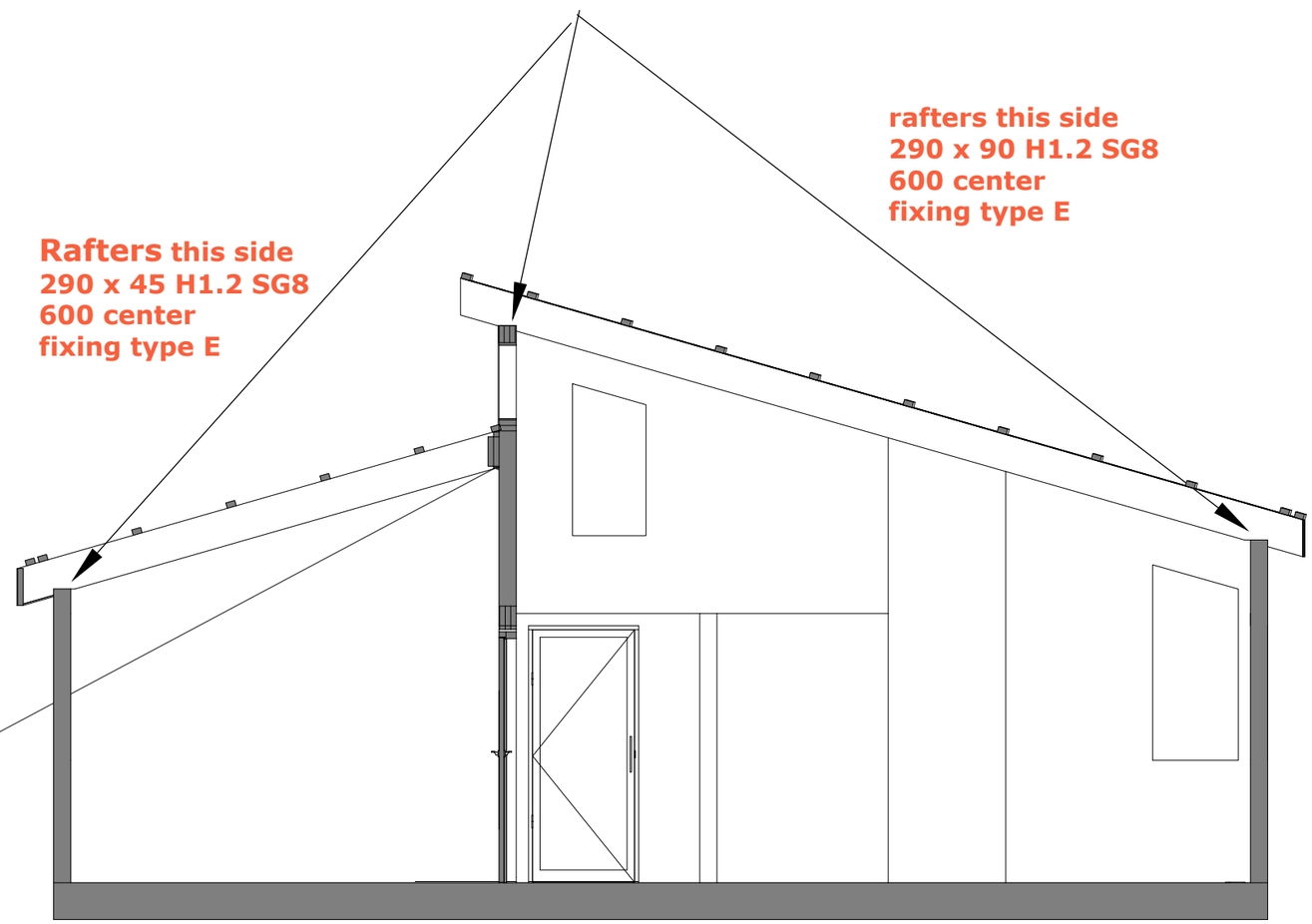
Detail from Engineer plan

SE03 / S03 Scale 1:10

Birdsmouth
Rafter fixing Type E
2x90x3.15 nails and 2 wiredogs

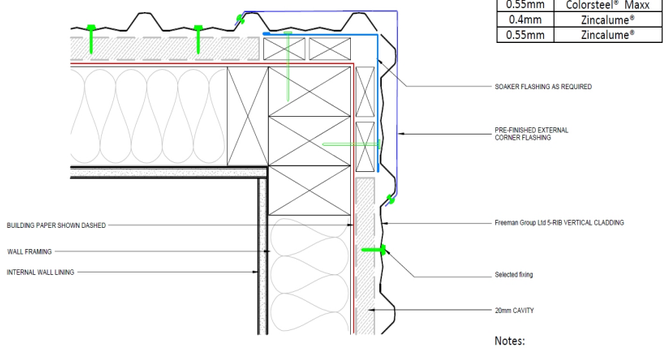
Rafters this side
290 x 45 H1.2 SG8
600 center
fixing type E

rafters this side
290 x 90 H1.2 SG8
600 center
fixing type E



external corner wall

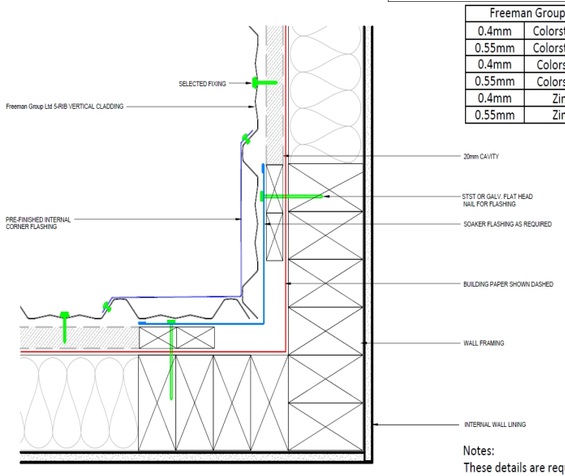
Freeman Group Ltd 5-Rib	
0.4mm	Colorsteel® Endura
0.55mm	Colorsteel® Endura
0.4mm	Colorsteel® Maxx
0.55mm	Colorsteel® Maxx
0.4mm	Zincalume®
0.55mm	Zincalume®



Notes:
These details are required to be fixed to allow thermal movement .

internal corner wall

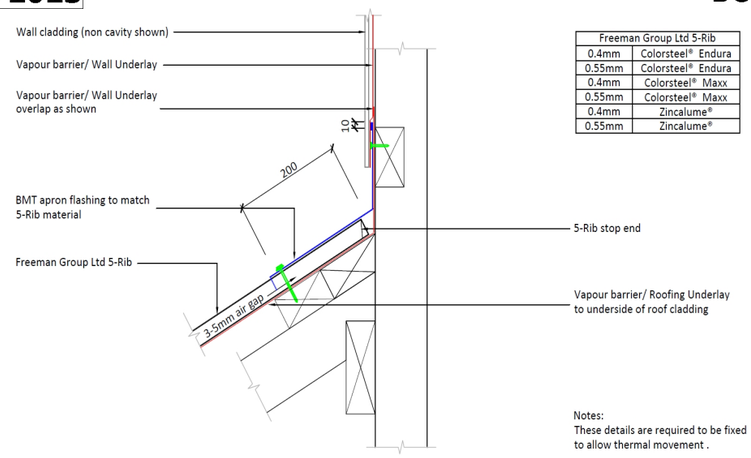
Freeman Group Ltd 5-Rib	
0.4mm	Colorsteel® Endura
0.55mm	Colorsteel® Endura
0.4mm	Colorsteel® Maxx
0.55mm	Colorsteel® Maxx
0.4mm	Zincalume®
0.55mm	Zincalume®



Notes:
These details are required to be fixed to allow thermal movement .

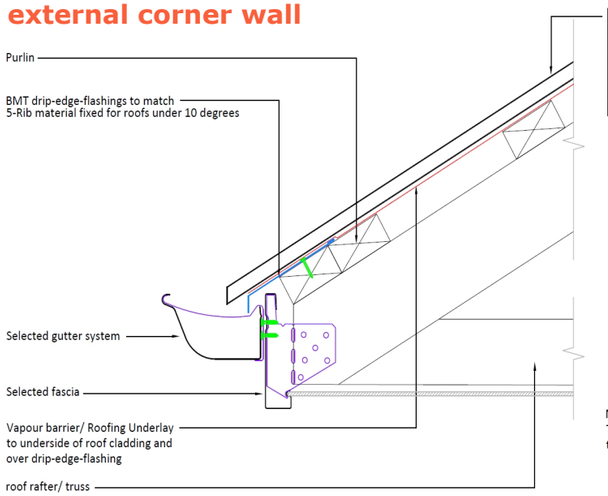
top apron flashing (under upper windows)

Freeman Group Ltd 5-Rib	
0.4mm	Colorsteel® Endura
0.55mm	Colorsteel® Endura
0.4mm	Colorsteel® Maxx
0.55mm	Colorsteel® Maxx
0.4mm	Zincalume®
0.55mm	Zincalume®

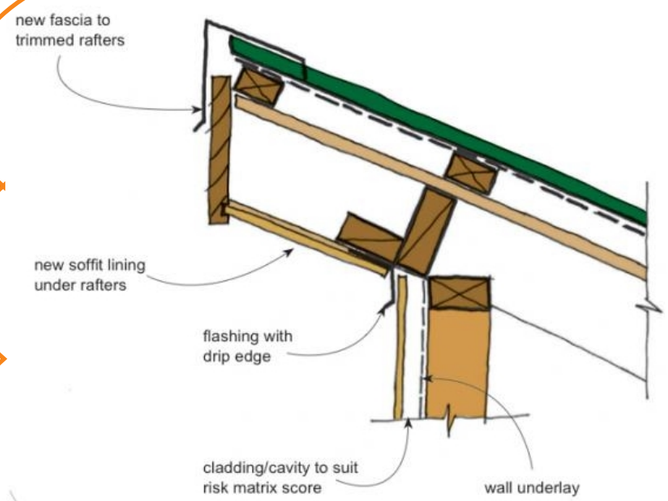


Notes:
These details are required to be fixed to allow thermal movement .

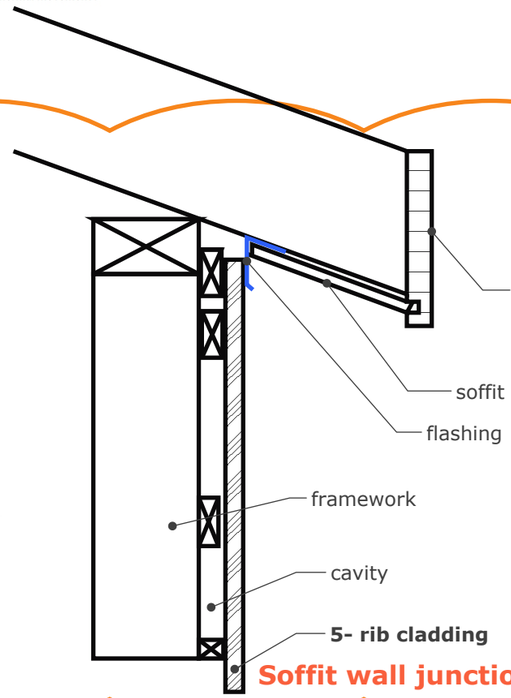
Drip edge Flashing



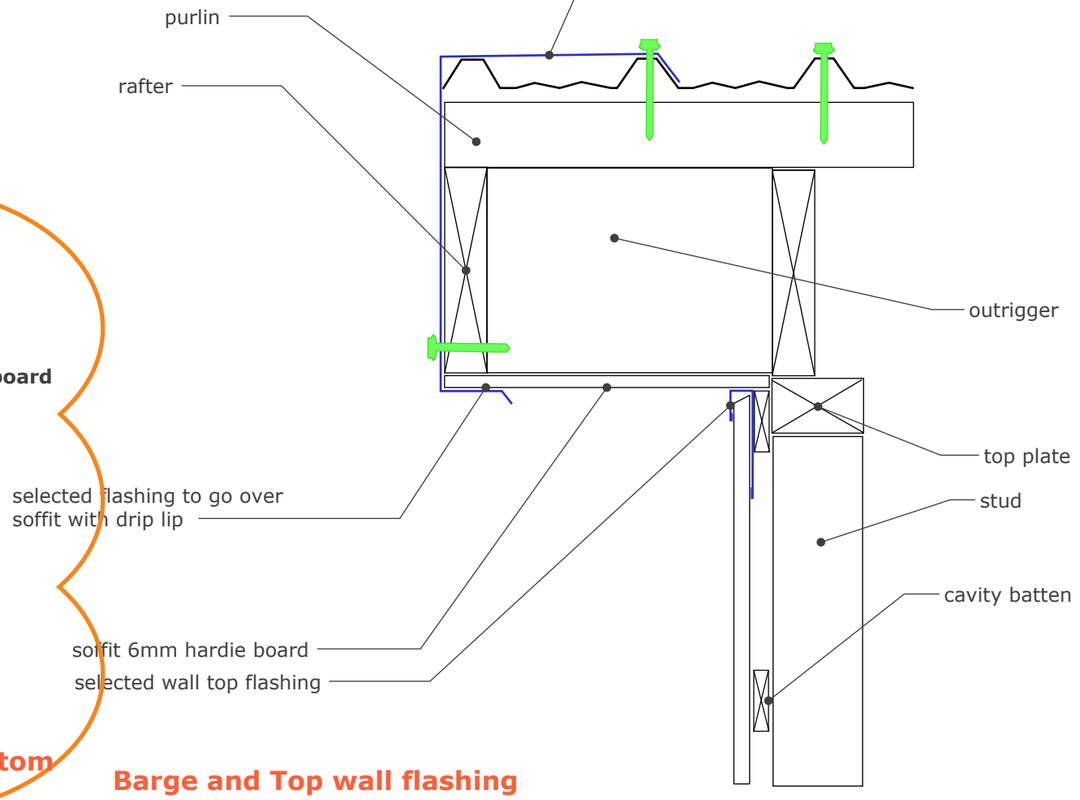
Soffit wall junction Top



Soffit wall junction bottom



Barge and Top wall flashing



BRANZ

H1/AS1 5th Edition Calculation Method Spreadsheet

Version: 4 May 2023

Client	
Project name	
Address	
Designer	Dirk Heffter
Date	30-08-23
Territorial Authority	Nelson City
Climate Zone	3
When submitted	Before 2 November 2023
Application	Housing

Proposed Building

Element		Area (m²)	Proposed Building Heat Loss (W/K)	
Slab-on-ground_Floors		167.0	104.4	
Other_Floors		0.0	0.0	
Roof		172.0	23.2	
Skylights		0.0	0.0	
Walls		160.0	39.0	
Glazing (in walls & doors)	(16.7% of total wall area)	32.0	41.6	
Doors (opaque)		0.0	0.0	
		531.0	Total	208.2

Reference Building

Element	(m²)		Reference Building Heat Loss (W/K)	
Slab-on-ground Floors	167.0	1.5	111.3	
Other_Floors	0.0	2.5	0.0	
Total Roof (includes skylight area)	172.0	6.6	26.1	
Walls (70% of total wall area)	134.4	2.0	67.2	
Glazing allowance (30% of total wall area)	57.6	0.46	125.2	
	531.0		Total	329.8

Comparison of proposed building against the reference building — PASS

HIG 6th Ed

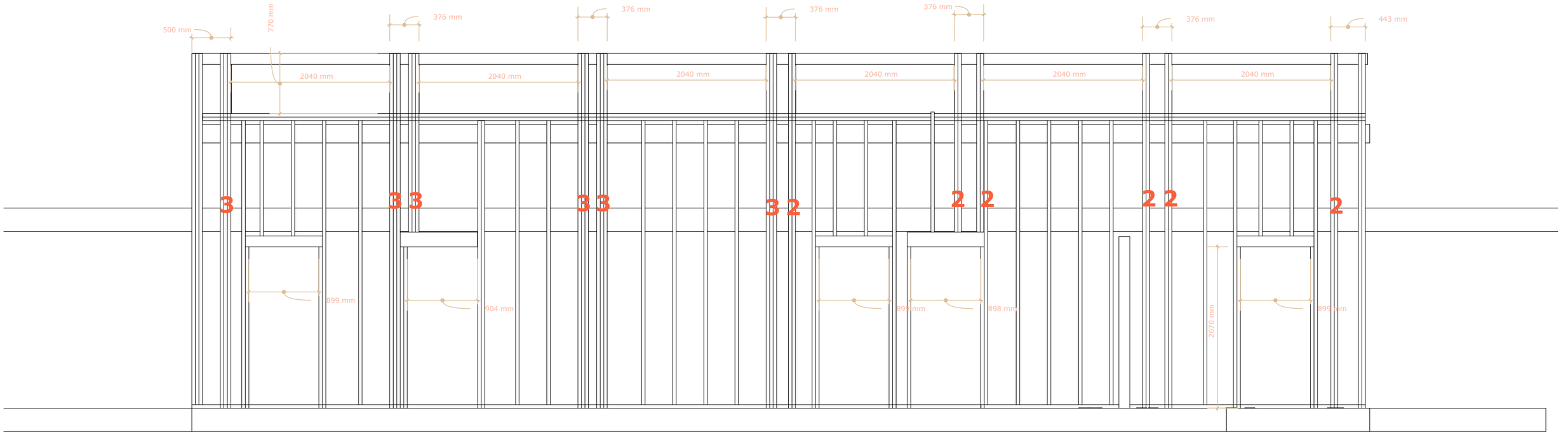
	Element type	Description	ID	Embed heating?	Area (m²)	Construction R-value (m².K/W)	Heat Loss (W/K)	Errors
1	Slab-on-ground_Floors	rib raft		No	167.0	1.6	104.4	
2	Other_Floors			No				
3	Roof	Glasswool		No	172.0	7.4	23.2	
4	Walls	Glasswool		No	160.0	4.1	39.0	
5	Glazing (in walls & doors)			No	32.0	0.77	41.6	
6	Doors (opaque)			No	0.0	0.77	0.0	

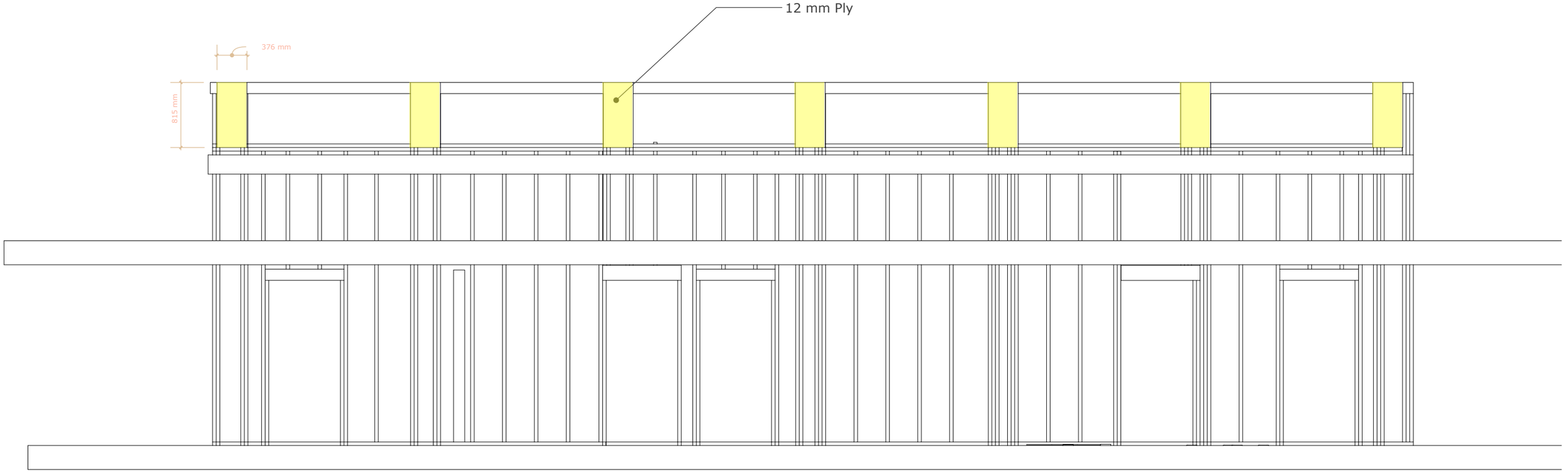
X

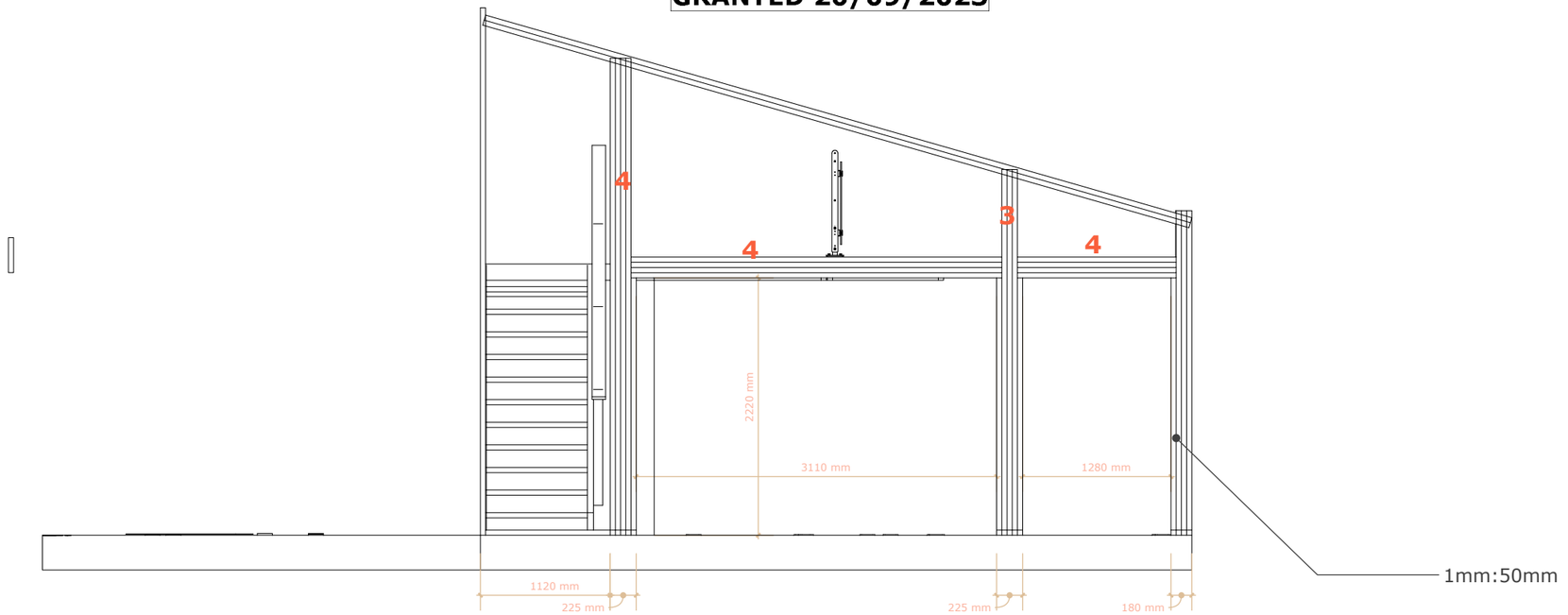
Risk Matrix
Wall Type: **Standard**

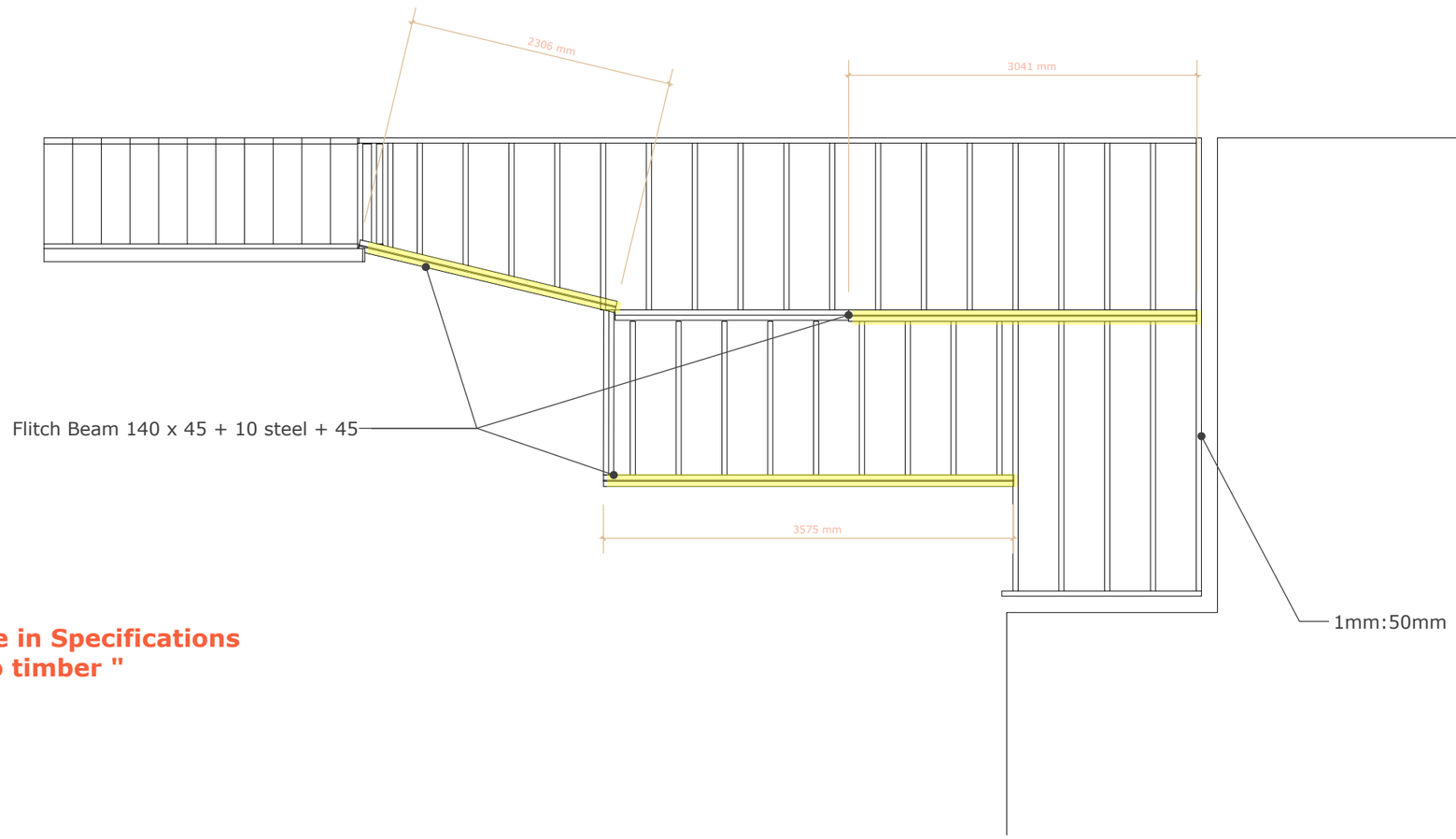
Risk Factor	*Low*	*Med.*	*High*	*Very High*	*Score*
Wind (NZS3604)	0	0	1	**2**	**2**
Storeys	**0**	1	2	4	**0**
R/W Intersection	0	1	3	**5**	**5**
Eaves Width	0	1	**2**	5	**2**
Complexity	0	**1**	3	6	**1**
Deck Design	**0**	2	4	6	**0**
Total Risk Score: **medium**					**10**

Risk Matrix created by Design Navigator


500 mm
770 mm
376 mm
376 mm
376 mm
376 mm
376 mm
443 mm
2040 mm
2040 mm
2040 mm
2040 mm
2040 mm
2040 mm
3
3 3
3 3
3 2
2 2
2 2
2
899 mm
904 mm
899 mm
898 mm
2070 mm
895 mm


12 mm Ply
376 mm
815 mm





Balustrade for Gallery storage place in Specifications
" Clerspan or Clearview top fixed to timber "

Page No:	Layout Name:	Issue Date	Current Revision	Revision Date	Initial
S01	Cover Page, Site Plan and Inspection Schedule	11-07-2023	P1		MY
S02	Scope of Works, Health & Safety Risk Matrix & Hazard Assessment	11-07-2023	P1		MY
S03	Ground Floor Plan	11-07-2023	P1		MY
S04	Bracing Plan	11-07-2023	P1		MY
S05	Superstructure Details	11-07-2023	P1		MY

Standard Details

These Standard details are to be read in conjunction with the drawing notes and specifications.

All Dimensions are to be verified on site before any site or prefabrication work commences. Any discrepancies are to be advised to the engineer for resolution before any work commences.

All tolerances shall comply with but not limited to NZS3109:1997, NZS3404:Part 1:2009 and NZS3604 and NZS3604:2011 Part 2.

Engineer required 24 hours notice before any foundation excavation is covered up, concrete is poured or steel elements are closed in, in order to undertake inspections.

Basic Weld Symbols

Fillet Weld	Single bevel butt weld (complete weld)	Plug or Slot Weld
Square Weld	Vee Butt Weld	U Butt Weld
Backing Run	Spot Weld	J Butt Weld

Additional Indicators

Site Weld	Weld all around	

Weld Dimensions

Size of weld 6	Length of Weld 150	Intermediate welds 150 (200)

Minimum Cover

Location	Component	Type of reinforcement	Cover (mm)
Not exposed to the weather or in contact with the ground (Exposure Classification A1)	Beams and Columns	Principle reinforcement	40
		Secondary reinforcement (Stirrups, ties etc.)	25
	Slabs, Walls and panels	Reinforcing bars	25
Exposed to the weather or in contact with the ground (Exposure Classification A2, B1)	Beams and Columns	Principle reinforcement	40
		Secondary reinforcement (Stirrups, ties etc.)	30
	Slabs, Walls and panels	Reinforcing bars	40
Exposed to the weather at coastal frontages (Exposure Classification B2)	Beams and Columns	Principle reinforcement	40
		Secondary reinforcement (Stirrups, ties etc.)	30
	Slabs, Walls and panels	Reinforcing bars	40
Cast against and permanently exposed to the ground	All components	Reinforcing bars	75

Minimum Bend Diameter of Reinforcing

Bar diameter	Deformed bars, D,HD & RB		Plain Bars, R		Galvanised Bars
	Main Bars	Stirrups, Ties	Main Bars	Stirrups, Ties	
6			30	12	30
10	50	40	50	20	50
12	60	48	60	24	60
16	80	64	80	32	80
20	100	80			160
25	150	150			200
32	192	192			256
40	240	240			320

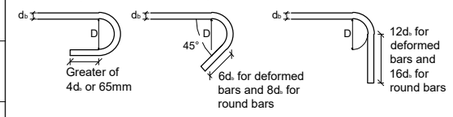
All reinforcing bars shall be cold bent except as otherwise noted.

Bending of bars must be done with a smooth applied force and a bending device. No impact loads shall be used to bend the bars.

Grade 500 bars are not to be re-bent. Contact engineer if required to do so.

Grade 300 bars may be re-bent only once. Any re-bending, including straightening shall be not be bent past their original straight position.

The surface of all re-bent bars is to be inspected after the re-bending has taken place. If any cracking in the bars is observed, the bars will be rejected.



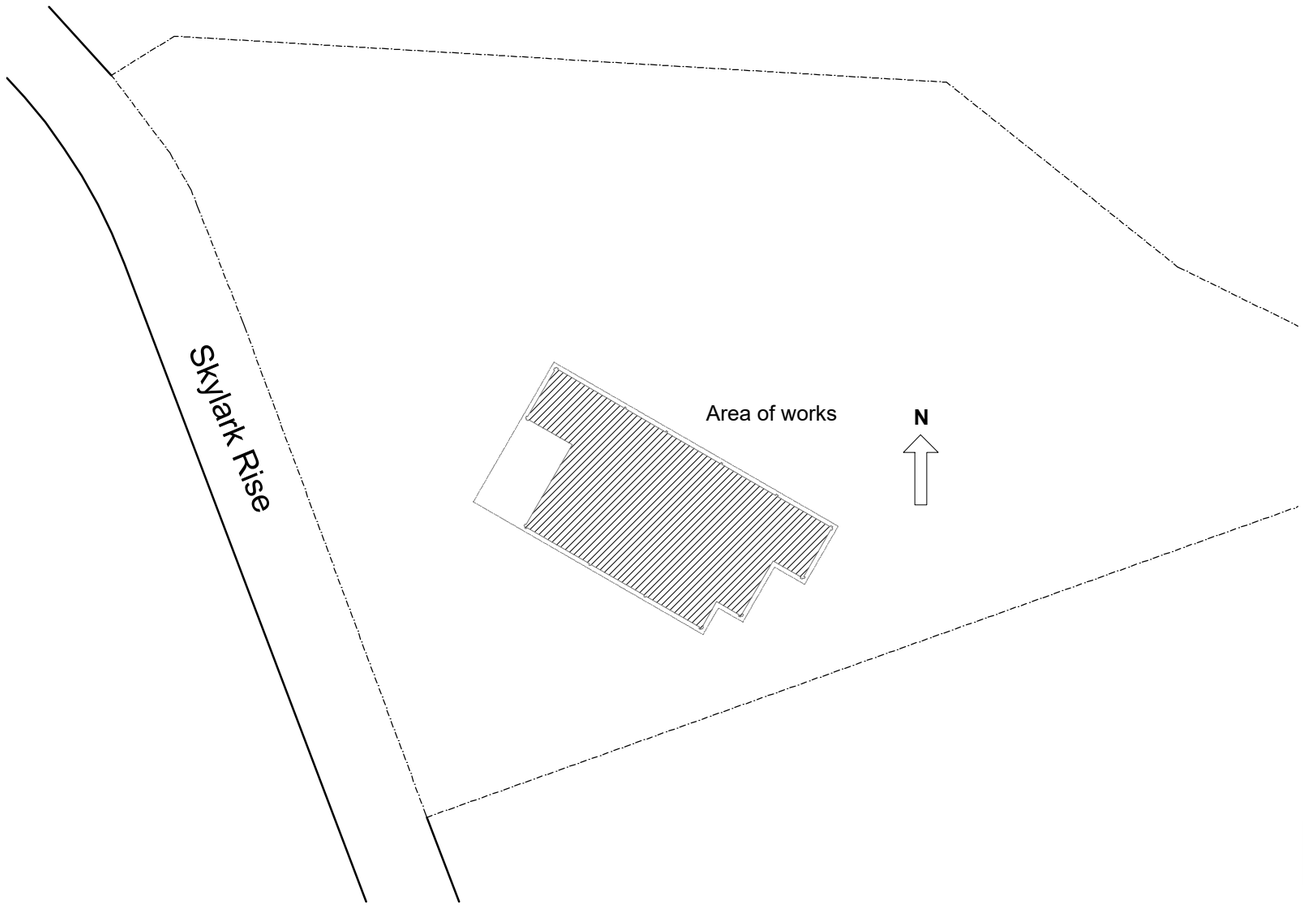
Semi- Circular Hook | Stirrup Hook | 90° Hook

Development Lengths of bars in tension

Bar diameter Grade 500E	Concrete Strength, MPa					
	17.5	20	25	30	35	40
10	600	560	500	460	430	400
12	720	680	600	550	510	480
16	960	900	800	740	680	640
20	1200	1120	1000	920	850	800
25	1500	1400	1250	1150	1060	990
32	1920	1790	1600	1470	1340	1270
Bar diameter Grade 300E						
10	360	340	300	300	300	300
12	440	410	360	330	310	300
16	580	540	480	440	410	380
20	720	680	600	550	510	480
25	900	840	750	690	640	600
32	1150	1080	960	880	820	760

Typical Reinforcing Bar Lap Table

Bar diameter	HD (Grade 500)	HD (Grade 300)
10mm	600mm	400mm
12mm	720mm	480mm
16mm	960mm	640mm
20mm	1200mm	800mm
25mm	1500mm	1000mm
32mm	1920mm	1280mm



Inspection Schedule

This schedule outlines the inspections required for the project. This schedule outlines the structural elements that need inspections. Following each inspection an Observation Report will be issued to the contractor. On completion of the project, the site reports will be compiled and issued with a Producer Statement of Construction Review (PS4). Please provide the engineer 24 hours' notice before an inspection is required.

The following structural elements of this project require inspection by a suitably qualified engineer or their representative during construction to ensure compliance with the New Zealand Standard Code of Practice under which they are designed. Such inspections are an integral part of the structural design process and are carried out to ensure the structure will perform as per the design intent. Failure to notify the engineer of an inspection listed below may in some circumstances limit the designers' liability for subsequent problems. This is particularly applicable to inspections of foundations and reinforced steel where verification of compliance with the structural design may not be possible after construction is complete.

Inspection Required	Inspected / Comments
Confirmation of site conditions	
Pile holes/ foundation excavation	
Foundation steel pre pour.	
Block wall steel inspection pre pour.	
Portal Frame and associated connection inspection.	
Steel wind beam connection pre closing in.	
Specific Timber Beams and connections pre closing in.	
Steel strap bracing and connection pre closing in.	
Bracing holddowns pre closing in.	
Bracing nail off patterns.	

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INFORMATION ONLY

PRELIMINARY

Refer Sheet S01 for Inspection Schedule

REV	DESCRIPTION	BY	APP	DATE
P1	Preliminary	?	MY	??/??/????

LEGA

CREATED: 10-07-2023
DRAWN BY: CvL
DESIGNED BY: DM
APPROVED BY: MY

PROJECT No: 1574

DRAWING TITLE:
Cover Page, Site Plan and Inspection Schedule

SCALE: 1:400 at A3 original A1 1:200 | DRAWING No: S01 | REV No: P1

STRUCTURAL ENGINEER:
MY CONSULTING ENGINEERS LIMITED
33 FORESTS ROAD
STOKE
NELSON 7011

TEL: 03 970 2502
www.myconsulting.nz

APPOINTED ARCHITECT:
DesignWorx
LBP.:100852

All levels/dimensions are to be confirmed on site before commencing any work, this applies to all trades. DO NOT SCALE off these drawings

Project No.: ???? Safety in Design - Risk Matrix

This Template can be used to identify unusual hazards not controlled by normal practises. Update the risks to reflect those in the project using the register

Likelihood level			CONSEQUENCE 1 Insignificant (No treatment required)	2 Minor (First Aid treatment only, contained at site)	3 Moderate (Medical treatment, short or long term disability)	4 Major (Extensive injuries, Permanent disability)	5 Catastrophic (Fatal eg., loss of life)
	4	Very likely Expected in most circumstances	3	8	12	16	20
	3	Likely Event likely to occur at most circumstances	3	6	9	12	15
	2	Possible Event may occur at some time	2	4	6	8	10
	1	Unlikely Occurrence is conceivable, but not expected to occur	1	2	3	4	5

Risk Score	Risk level	ACTION
15 to 20	Critical	ACT NOW - do something about the risks immediately. Requires immediate action. Redesign to eliminate or reduce risk
10 to 14	High	Highest management action is required, responsibilities specified. Redesign as far as reasonably practicable and altert others of any residual risk
5 to 9	Moderate	Manage by specific monitoring or response procedures,with management responsibility specified. Redesign if reasonably practicable
0 to 4	Low	Manage by routine procedures, unlikely to need specific application of resources

Using the risk matrix -example

1	Determine the hazard	Heavy vehicles on site. Potential risk of vehicles hitting personnels working on site
2	Evaluate the risk level with no controls	Consequence: catastrophic, likelihood: likely, Risk score: 15 (Critical)
3	Implement design control	Provide separate designated access to heavy vehicles
4	Review Risk level	Consequence: catastrophic, likelihood: Unlikely, Risk score: 5(Moderate)

RISK MANAGEMENT

Step 1	**Identify** the Hazards
Step 2	**Assess** the level of risk for each hazard
Step 3	**Control** by Using the hierarchy of controls

Hierarchy of controls

Most effective

1 Eliminate
Eliminate the hazard, remove it completely from the workplace. If this is not reasonably practical, then…

Minimise

Substitute the hazard (wholly or partly with safer alternative)

2 Isolate the hazards
Using physical barriers, time or distance,Use engineering controls adapt tools or equipments to reduce the risk

3 Use adminstrative controls
Develop methods of work, processes and procedures

4 Use personal Protective equipment (PPE)
this is the last option after you have considered all the other options for your workplace

Least effective

Project:	
Address:	

Project No	**Design discipline** Engineering		**Office Location** 33 Forests Road, Stoke		
	Name	Position	Signature	Date	Comments
Prepared by	Sanjeev Raturi	Designer			
Checked by	Michael Younghusband	Director			
Approved by	Michael Younghusband	Director			

Project No.: ???? Definitions

Ref No.	Reference number for each item	**Residual risk Score**	Remaining Risk score after application of design control measures
Activity	An identified activity associated with construction work	**Residual Risk Level**	Remaining Risk level after application of design control measures
Hazard	An object, substance or a set of circumstances with the potential to cause harm	**Design Control Measure**	Control measure employed by the designers to control the risk
L	Likelihood of risk	**Document/drawing reference**	Reference to additional documentation detailling the control measure
C	Consequence of risk	**Further suggested control Measure**	Details of additional control measures which may be employed to further reduce the residual risk, but which are out of the control of the designer and are therefore suggestions only
Risk score	Risk score = likelihood (L) x consequence (C)		
Risk Level	Risk classification based on risk score (Refer risk matrix)		

Note: This Hazard Table is not a standalone document and all PCBU's (Person conducting a Business or Undertaking) should carry-out their own assessment.

HAZARDS

Ref.	Activity	Hazard	Risk score L	C	L*C	Risk Level Low	Moderate	High	Critical	Design Control Measure	Document Reference	Residual Risk Score L	C	L*C	Residual Risk Level Low	Moderate	High	Critical	Further suggested control measures
Design																			
1.1	Acess and egress for vehicles	Vehicle traffic potential reversing within site area and out onto loop road	1	3	3	Low				Design out requirement to reverse with potential reversing of vehicles only in parking spaces - designed with compliant isle widths as per AS/NZS 2890:2004		1	3	3	Low				
1.2	Pedestrian public access to site and main entrance	Risk to pedestrians from interaction with vehicle traffic	1	4	4	Low				Designating pedestrian footpaths and separate footpath		1	4	4	Low				
1.3	Non slip materials on floor surfaces in areas exposed to weather or dedicated wet areas	Risk to pedestrians from interaction with vehicle traffic	1	2	2	Low				Design and specify non slip surfaces where required		1	1	1	Low				
1.4	Provide adequate lighting for intended tasks in the structure	Risk from tripping or falling	1	3	3	Low				Appropriate lighting lux levels designed for all spaces –Electrical Engineer		1	3	3	Low				
1.5	Designing adequate access widths	Provide adequate width to access routes for movement of people, egress and movement of equipment	1	3	3	Low				Design sufficient corridor widths for movement of occupants and equipment, egress routes as per Fire Engineer's report. External ramps and steps as per accessibility report.		1	3	3	Low				
1.6	Specification of safer materials and finishess	Risk to workers and public health & wellbeing through exposure	1	3	3	Low				Consider the specification of safer materials and finishes, e.g. low VOC paints, polyester insulation		1	1	1	Low				
1.7	Roof access safety system –cleaning & maintenance	Risk from falling	1	4	4	Low				Mitigate roof access with external plant at ground level. Consider access to clean/maintain skylights, roof cowls/louvres and gutters		1	1	1	Low				
1.8	Service valves location and accessibility	Safe access	1	3	3	Low				Accessible/hatches for servicing equipment		1	2	2	Low				
1.9	Overhead glazing	Injury risk below from breakage	1	3	3	Low				Treatment of glass - toughened/safety glass		1	1	1	Low				
Construction																			
2.1	Site hazards: protecting the public	Unauthorised public access onto site during construction and falling hazards Risk to public health, exposure to risks on site to machinery and plant	1	5	5		Moderate			Requires site areas to be defined, identified and isolated. Ensure Contractor has worksite fenced off from the public, boundary secure after hours, prevention of unauthorised access such as ladders, roadworks to have barriers, safety protection measures from falling material, clear signage warning of dangers, all plant immobilised to prevent unauthorised use.		1	4	4	Low				
2.2	Access on site	Identify site hazards such as trip hazards, safety from falling, falling material	1	5	5		Moderate			Ensure access routes in good condition and clearly signposted, site is tidy and materials stored safely, suitable edge protection where people could fall, holes protected with clearly marked and fixed covers to prevent falls, safety protection measures from falling material Site safe passports required for all personnel entering the site. Retaining wall construction to ensure safe batters achieved or temporary retaining to be provided. Provide adequate space behind walls to allow for tanking		1	5	5		Moderate			Contractor site management plan required
2.3	Existing services	Hazards from existing services such as electrical cables, gas mains, overhead power lines may cause injury and obstruction	1	5	5		Moderate			Locate and identify accurately routes and depths of existing services present on site and reroute or isolate to prevent harm from them		1	5	5		Moderate			Contractor site management plan required
2.4	Adjoining areas: Clearance required for construction equipment and techniques	Risk of contact and damage with adjacent structures, services, trees. Risk of damage from vibration.	1	4	4	Low				Site areas to be defined and identified. Height limitations established. Accessibility and loads of plant required for construction.		1	4	4	Low				Contractor site management plan required

All levels/dimensions are to be confirmed on site before commencing any work, this applies to all trades. DO NOT SCALE off these drawings

MYCE Scope of Works

Proposed dwelling on an existing foundation slab.

- Specific bracing design of the house (two sections, one with a storage area) and associated connections in complicated areas (the intersection area of the rooves specifically)
- Specific lintel above the sliding door and supporting posts.
- Communication to ensure we are all agree with the proposed structure before we commence the detailing stage of our documents.
- PS1 (Producer Statement 1);
- Schedule of Inspections letter
- PS4 upon completion of final inspection and payment

Note, as the foundations are already constructed this is out of our scope, however we need to ensure the specific proposed structure does not impose loads too large for this foundation.

Refer Sheet S01 for Inspection Schedule

REV	DESCRIPTION	BY	APP	DATE
P1	Preliminary	CvL	MY	12-07-2023

LEGAL DESCRIPTION: Lot 53 DP 545726

CREATED: 10-07-2023

DRAWN BY: CvL

PROJECT No: 1574

DESIGNED BY: DM

APPROVED BY: MY

DRAWING TITLE:

Health and Safety

SCALE:	DRAWING No:	REV No:
NTS original A1	S02	P1

STRUCTURAL ENGINEER:

MY CONSULTING ENGINEERS LIMITED
33 FORESTS ROAD
STOKE
NELSON 7011

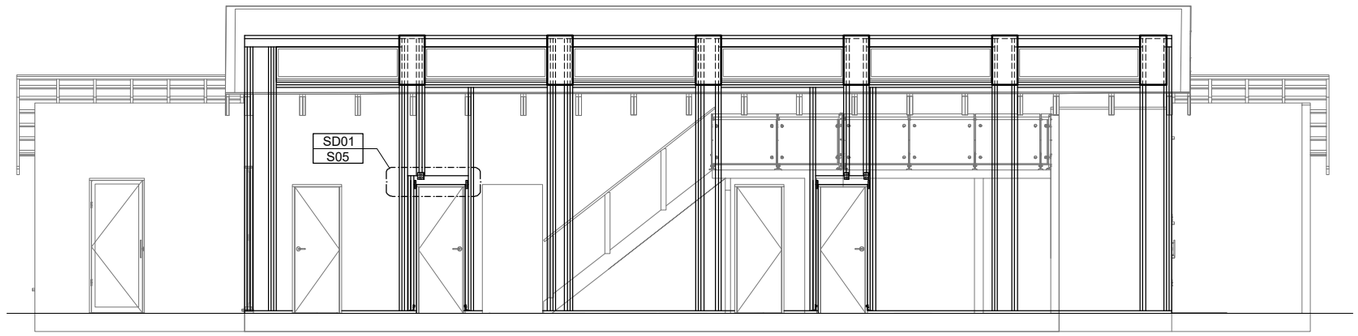
TEL: 03 970 2502
www.myconsulting.nz

APPOINTED ARCHITECT:

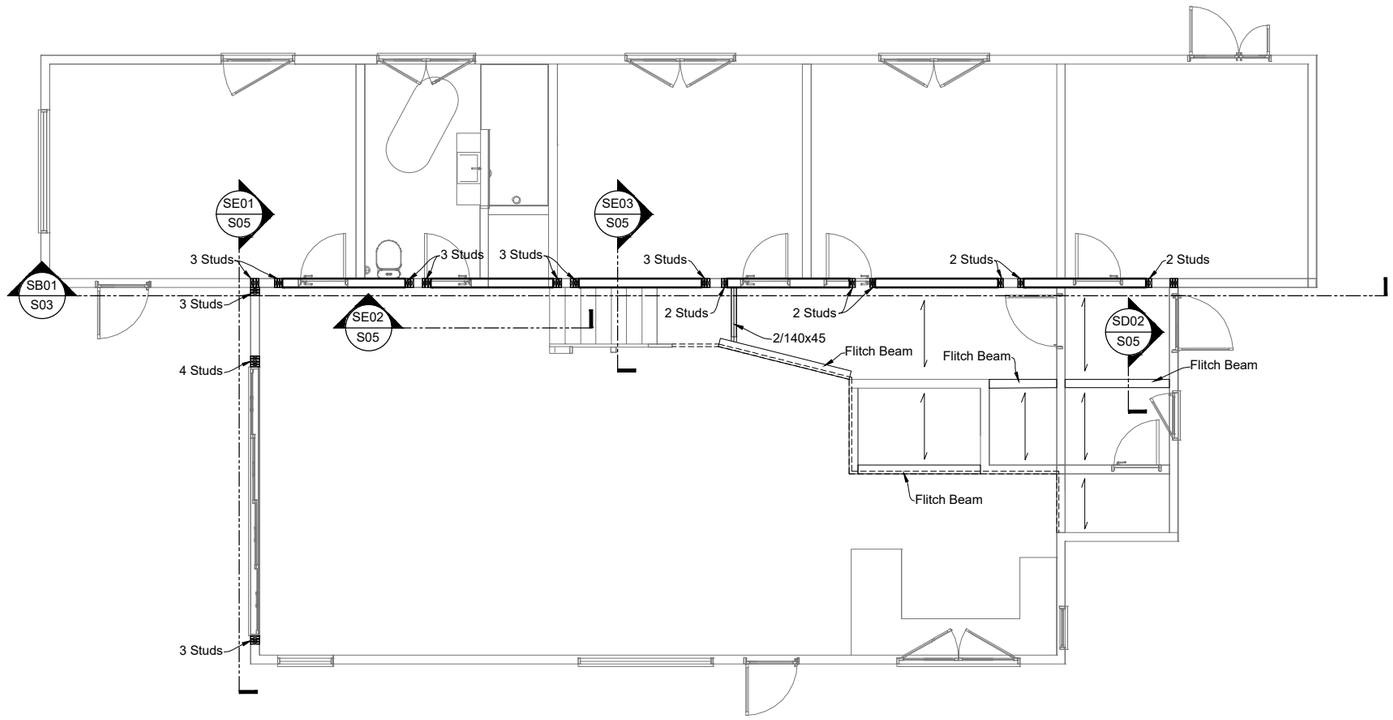
DesignWorx LBP.:106852

NOT FOR CONSENT
INFORMATION ONLY

PRELIMINARY



Scale 1:50



Ground Floor Plan

FOUNDATION NOTES:

1. DO NOT SCALE OFF THESE DRAWINGS
2. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF NZS3109:1997
3. CONCRETE SHALL BE:
   - SLABS AND FOOTINGS N25 (25MPa)
   - TIDY SLAB N10 (10MPa)
4. MAXIMUM SLUMP TO BE 100mm UNLESS NOTED OTHERWISE
5. CONCRETE FINISHES SHALL BE:
   - SLABS U3
   - EXPOSED FOOTINGS F4
6. CONCRETE COVER:
   - 25mm MIN. INTERIOR
   - 40mm MIN. EXTERIOR
   - 75mm MIN. IN CONTACT WITH GROUND
7. ALL REINFORCEMENT SHALL COMPLY WITH AS/NZS4671:2001 (HD BARS SHALL NOT BE RE-BENT)
8. ENGINEER TO INSPECT PRIOR TO POURING CONCRETE. ENGINEER REQUIRED 24 HOURS NOTICE BEFORE ANY VISIT.
9. WEATHERTIGHT CONCRETE SHALL:
   A. HAVE A MINIMUM SPECIFIED 28 DAY CONCRETE STRENGTH OF 30 MPa
   B. HAVE A WATER/CEMENTITIOUS (w/c) RATIO (by weight) NO GREATER THAN 0.50
10. REFER ARCH FOR UNDERFLOOR HEATING AND SERVICE LOCATIONS
11. SAWCUT WITHIN 24 HOURS OF CONCRETE PLACEMENT
12. REFER ARCHITECT FOR POLISHED CONCRETE FINISH SPECIFICATIONS

STRUCTURAL NOTES:

1. **DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO FABRICATION. DO NOT SCALE OFF THESE DRAWINGS**
2. ALL WELDS TO BE 6MM FILLET UNLESS NOTED OTHERWISE
3. ALL M12 BOLTS TO BE GRADE 4.6. ALL M16 BOLTS TO BE GRADE 8.8 UNLESS NOTED OTHERWISE.
4. ALL STEEL PLATES TO BE 10MM THICK UNLESS NOTED OTHERWISE.
5. STEEL GRADES
   - PLATES 300MPa OR OTHERWISE NOTED
   - HOT ROLLED STEEL SECTIONS 300MPa
   - HOLLOW SECTIONS 350MPa OR 450MPa UNLESS NOTED OTHERWISE
6. ALL WELD ELECTRODES TO BE 48XX OR W50X
7. ALL INTERNAL STRUCTURAL STEEL TO BE PAINTED WITH SYSTEM DESIGNATION AS/NZS2312/AKL6 BEFORE DELIVERY TO SITE. ANY AREAS DAMAGED TO BE MADE GOOD UPON INSTALLATION.
8. ALL EXTERNAL STEEL TO BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH SYSTEM DESIGNATION AS/NZS2312/HDG800. ANY AREAS DAMAGED TO BE MADE GOOD UPON INSTALLATION.
9. ALL BOLTED TIMBER CONNECTIONS TO HAVE 50X50X3MM WASHER ADJACENT TO TIMBER
10. ALL TIMBER TO BE MSG8 UNLESS SPECIFIED OTHERWISE
11. TIMBER CONNECTIONS NOT SPECIFIED TO BE IN ACCORDANCE WITH NZS3604. TIMBER SIZES NOT SPECIFIED REFER TO ARCHITECT
12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE STRUCTURE IS ADEQUATELY SUPPORTED DURING CONSTRUCTION
13. ENGINEER TO INSPECT ALL STEEL CONNECTIONS PRIOR TO CLOSING IN. ENGINEER REQUIRES 24HOURS NOTICE BEFORE ANY VISIT
14. RESPONSIBILITY OF CONTRACTOR TO IDENTIFY ANY UNDERGROUND SERVICES PRIOR TO EXCAVATION.
15. REFER ARCHITECT FOR ALL WATERPROOFING

ABBREVIATION LIST:

FFL	Finished Floor Level
TOS	Top of Slab
TOF	Top of Footing
BOF	Bottom of Footing
SC	Saw Cut
CJ	Control Joint

Refer Sheet S01 for Inspection Schedule

REV	DESCRIPTION	BY	APP	DATE
P1	Preliminary	CvL	MY	12-07-2023

LEGAL DESCRIPTION: Lot 53 DP 545726

CREATED: 10-07-2023

DRAWN BY: CvL

PROJECT No: 1574

DESIGNED BY: DM

APPROVED BY: MY

PROJECT NAME AND ADDRESS:

n

DRAWING TITLE:

Ground Floor Plan

SCALE:	original A1	DRAWING No:	REV No:
1:100 at A3	1:50	S03	P1

STRUCTURAL ENGINEER:

MY CONSULTING ENGINEERS LIMITED
33 FORESTS ROAD
STOKE
NELSON 7011

TEL: 03 970 2502
www.myconsulting.nz

APPOINTED ARCHITECT:

DesignWorx LBP.:106852

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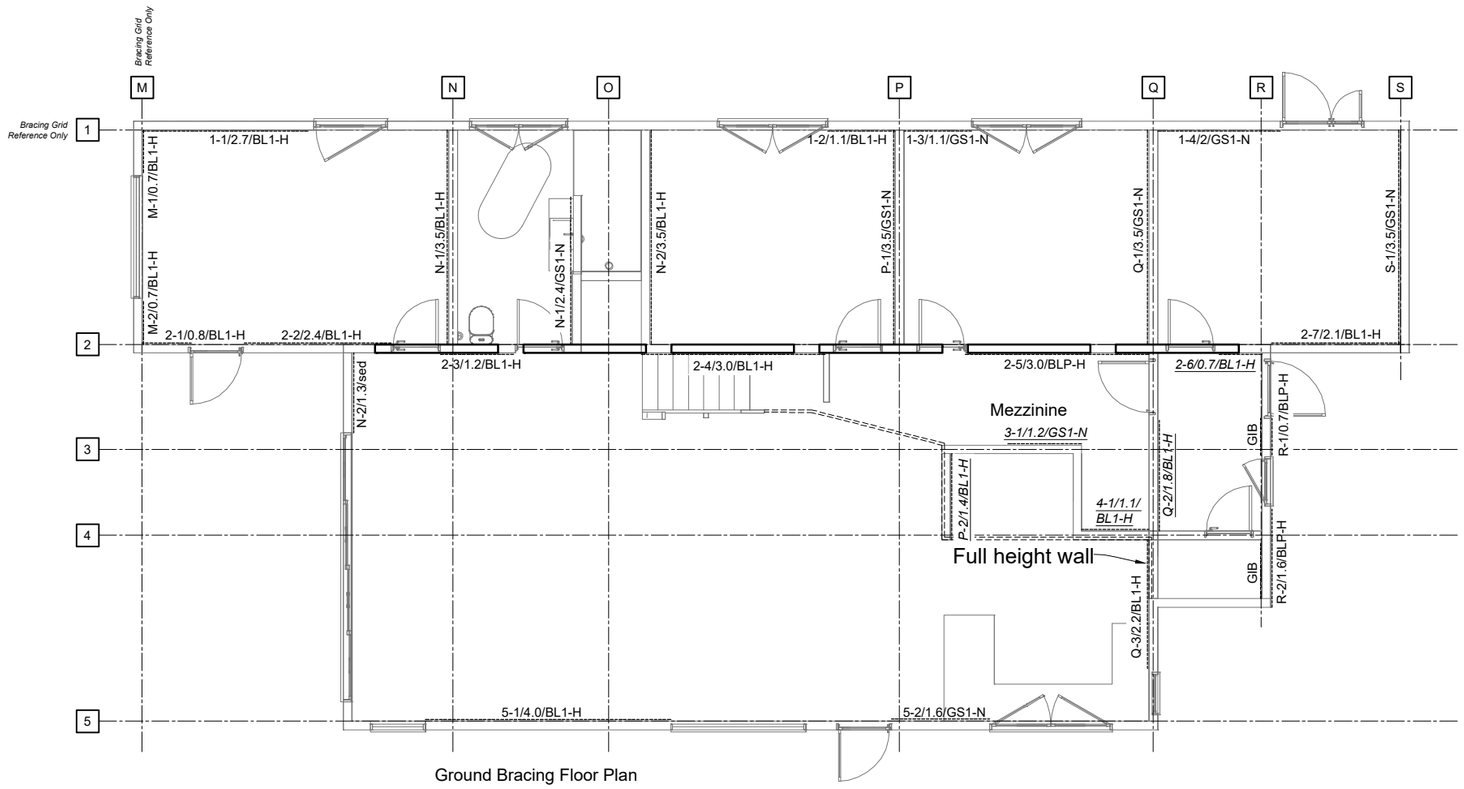
PRELIMINARY

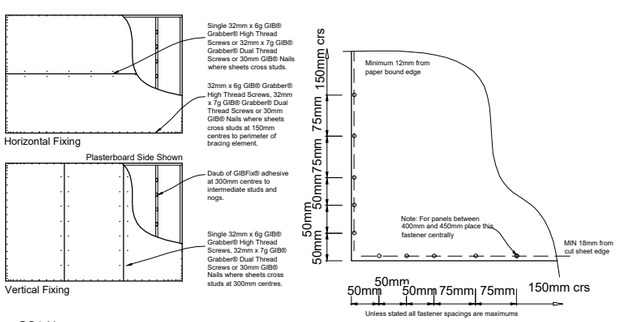
Bracing Key

A 1 / 0.9 / GS1-N

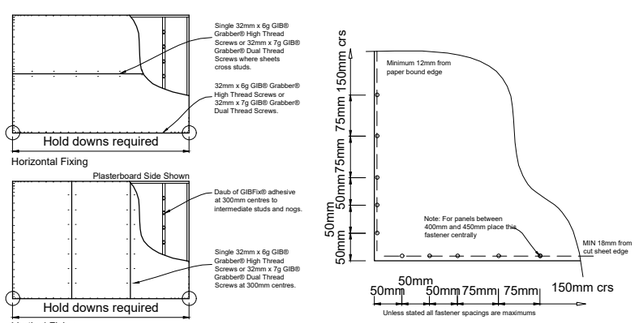
Grid Number | Bracing Element Number | Bracing Element Length | Bracing Type



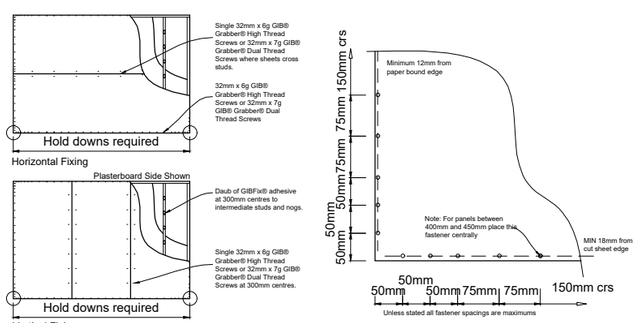
Ground Bracing Floor Plan



GS1-N
Any 10mm or 13mm GIB® Standard plasterboard to one side only



BL1-H
10mm or 13mm GIB Braceline® to one side only, with Hold downs



BLP-H
10mm or 13mm GIB Braceline® to one side of the frame plus minimum 7mm structural plywood manufactured to AS/NZ 2269.0 :2012 to the other side, with Hold downs

Refer Sheet S01 for Inspection Schedule

REV	DESCRIPTION	BY	APP	DATE
P1	Preliminary	CvL	MY	12-07-2023

LEGAL DESCRIPTION: Lot 53 DP 545726

CREATED: 10-07-2023

DRAWN BY: CvL

PROJECT No: 1574

DESIGNED BY: DM

APPROVED BY: MY

PROJECT NAME AND ADDRESS:

DRAWING TITLE:

Bracing Plan

SCALE:	original A1	DRAWING No:	REV No:
1:100 at A3	1:50	S04	P1

STRUCTURAL ENGINEER:
MY CONSULTING ENGINEERS LIMITED
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DesignWorx
LBP.:106852

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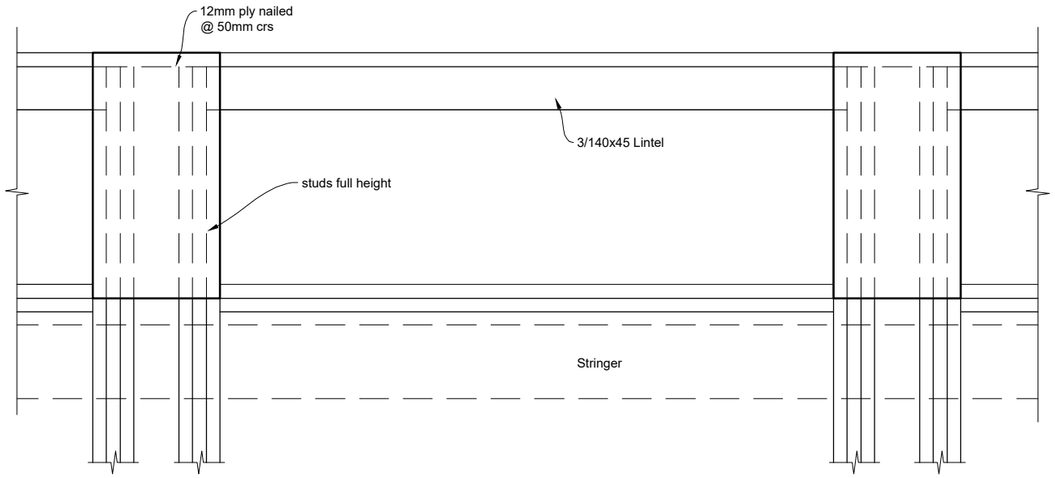
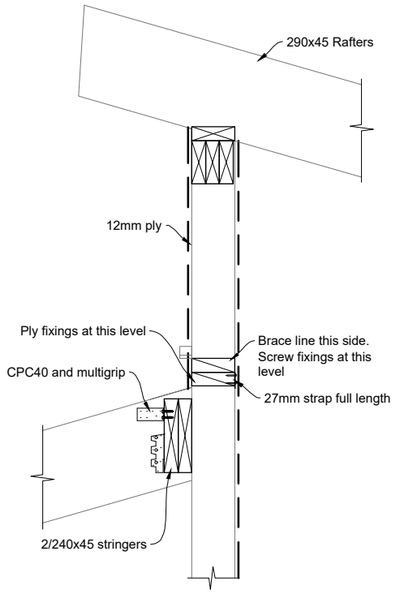
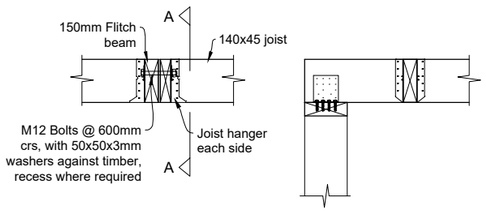
PRELIMINARY



SE02 / S03 Scale 1:10

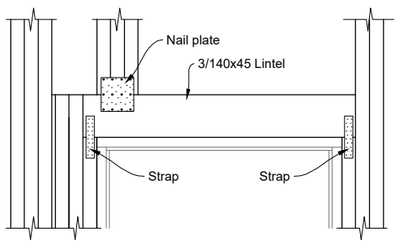


SE03 / S03 Scale 1:10

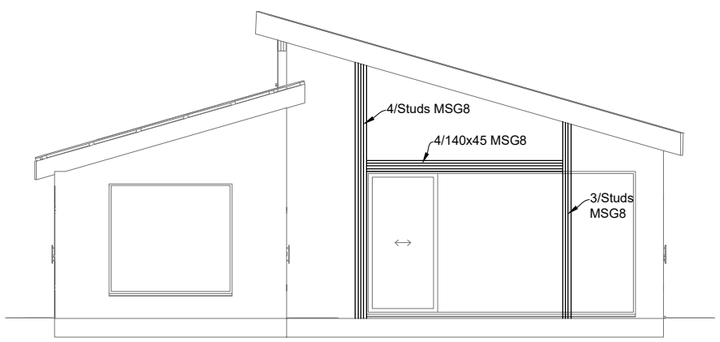


SD02 / S03 Scale 1:10

Section AA



SD01 / S04 Scale 1:10



SB01 / S05 Scale 1:50

FOUNDATION NOTES:

1. DO NOT SCALE OFF THESE DRAWINGS
2. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF NZS3109:1997
3. CONCRETE SHALL BE:
   - SLABS AND FOOTINGS N25 (25MPa)
   - TIDY SLAB N10 (10MPa)
4. MAXIMUM SLUMP TO BE 100mm UNLESS NOTED OTHERWISE
5. CONCRETE FINISHES SHALL BE:
   - SLABS U3
   - EXPOSED FOOTINGS F4
6. CONCRETE COVER:
   - 25mm MIN. INTERIOR
   - 40mm MIN. EXTERIOR
   - 75mm MIN. IN CONTACT WITH GROUND
7. ALL REINFORCEMENT SHALL COMPLY WITH AS/NZS4671:2001 (HD BARS SHALL NOT BE RE-BENT)
8. ENGINEER TO INSPECT PRIOR TO POURING CONCRETE. ENGINEER REQUIRED 24 HOURS NOTICE BEFORE ANY VISIT.
9. WEATHERTIGHT CONCRETE SHALL:
   A. HAVE A MINIMUM SPECIFIED 28 DAY CONCRETE STRENGTH OF 30 MPa
   B. HAVE A WATER/CEMENTITIOUS (w/c) RATIO (by weight) NO GREATER THAN 0.50
10. REFER ARCH FOR UNDERFLOOR HEATING AND SERVICE LOCATIONS
11. SAWCUT WITHIN 24 HOURS OF CONCRETE PLACEMENT
12. REFER ARCHITECT FOR POLISHED CONCRETE FINISH SPECIFICATIONS

STRUCTURAL NOTES:

1. **DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO FABRICATION. DO NOT SCALE OFF THESE DRAWINGS**
2. ALL WELDS TO BE 6MM FILLET UNLESS NOTED OTHERWISE
3. ALL M12 BOLTS TO BE GRADE 4.6. ALL M16 BOLTS TO BE GRADE 8.8 UNLESS NOTED OTHERWISE.
4. ALL STEEL PLATES TO BE 10MM THICK UNLESS NOTED OTHERWISE.
5. STEEL GRADES
   - PLATES 300MPa OR OTHERWISE NOTED
   - HOT ROLLED STEEL SECTIONS 300MPa
   - HOLLOW SECTIONS 350MPa OR 450MPa UNLESS NOTED OTHERWISE
6. ALL WELD ELECTRODES TO BE 48XX OR W50X
7. ALL INTERNAL STRUCTURAL STEEL TO BE PAINTED WITH SYSTEM DESIGNATION AS/NZS2312/AKL6 BEFORE DELIVERY TO SITE. ANY AREAS DAMAGED TO BE MADE GOOD UPON INSTALLATION.
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Refer Sheet S01 for Inspection Schedule

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LEGAL DESCRIPTION: Lot 53 DP 545726

CREATED: 10-07-2023

PROJECT No: 1574

DRAWN BY: CvL

DESIGNED BY: DM

APPROVED BY: MY

PROJECT NAME AND ADDRESS:

DRAWING TITLE:

Super Structure Details

SCALE:	original A1	DRAWING No:	REV No:
1:20 at A3	1:10	S05	P1

STRUCTURAL ENGINEER:

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APPOINTED ARCHITECT:

DesignWorx LBP.:106862

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PRELIMINARY

BRANZ

H1/AS1 5th Edition Calculation Method Spreadsheet

Version: 4 May 2023

Client	
Project name	
Address	
Designer	Dirk Heffter
Date	30-08-23
Territorial Authority	Nelson City
Climate Zone	3
When submitted	Before 2 November 2023
Application	Housing

Proposed Building

Element		Area (m²)	Proposed Building Heat Loss (W/K)	
Slab-on-ground_Floors		167.0	104.4	
Other_Floors		0.0	0.0	
Roof		172.0	23.2	
Skylights		0.0	0.0	
Walls		160.0	39.0	
Glazing (in walls & doors)	(16.7% of total wall area)	32.0	41.6	
Doors (opaque)		0.0	0.0	
		531.0	Total	208.2

Reference Building

Element		(m²)		Reference Building Heat Loss (W/K)	
Slab-on-ground Floors		167.0	1.5	111.3	
Other_Floors		0.0	2.5	0.0	
Total Roof (includes skylight area)		172.0	6.6	26.1	
Walls (70% of total wall area)		134.4	2.0	67.2	
Glazing allowance (30% of total wall area)		57.6	0.46	125.2	
		531.0		Total	329.8

Comparison of proposed building against the reference building — PASS

HIG 6th Ed

	Element type	Description	ID	Embed heating?	Area (m²)	Construction R-value (m².K/W)	Heat Loss (W/K)	Errors
1	Slab-on-ground_Floors	rib raft		No	167.0	1.6	104.4	
2	Other_Floors			No				
3	Roof	Glasswool		No	172.0	7.4	23.2	
4	Walls	Glasswool		No	160.0	4.1	39.0	
5	Glazing (in walls & doors)			No	32.0	0.77	41.6	
6	Doors (opaque)			No	0.0	0.77	0.0	

Risk Matrix for 15 skylark
Wall Type: **Standard**

Risk Factor	*Low*	*Med.*	*High*	*Very High*	*Score*
Wind (NZS3604)	0	0	1	**2**	**2**
Storeys	0	**1**	2	4	**1**
R/W Intersection	**0**	1	3	5	**0**
Eaves Width	0	1	**2**	5	**2**
Complexity	0	**1**	3	6	**1**
Deck Design	**0**	2	4	6	**0**
			Total Risk Score: **low**		**6**

Risk Matrix created by Design Navigator