

Contents:

Sheet 1 :	Cover Sheet
Sheet 2 :	Site Plan
Sheet 3 :	Floor Plan
Sheet 4 :	Elevations
Sheet 5 :	Elevations
Sheet 6 :	Cross Sections
Sheet 7 :	Cross Sections
Sheet 8 :	Roof Plan
Sheet 9 :	Set Out Dimensions
Sheet 10 :	Foundation Plan
Sheet 11 :	Drainage Plan
Sheet 12 :	Lighting Plan
Sheet 13 :	Framing Details
Sheet 14 :	Framing Details
Sheet 15 :	Construction Details
Sheet 16 :	Construction Details
Sheet 17 :	Construction Details
Sheet 18 :	Construction Details
Sheet 19 :	Construction Details
Sheet 20 :	Construction Details
Sheet 21 :	Bathroom Details
Sheet 22 :	Truss Design
Sheet 23 :	Truss Design

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275 Original Plan:
'Rifleman 142' Sheet Name:
COVER PAGE
Sales: D Ryan Drawn: J Rana QS: T de la Lama Print Date: 26/04/2022 Scale: @ A3

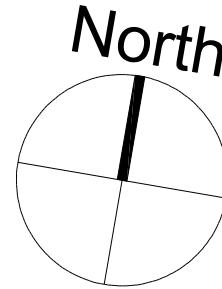
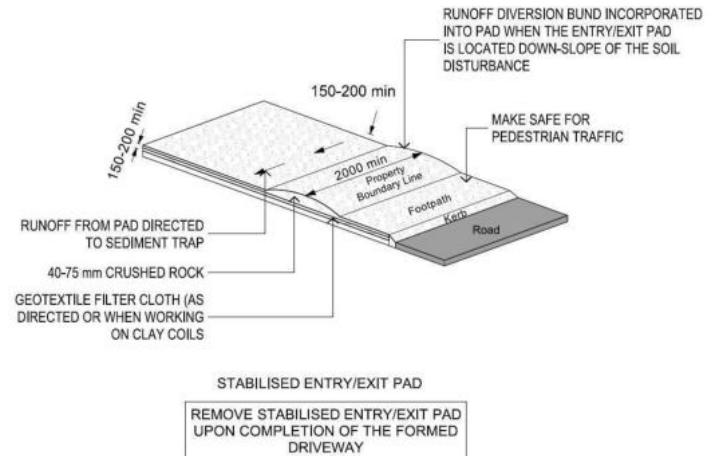
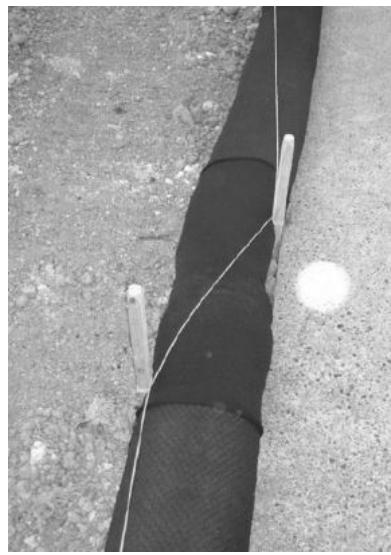
CONSENT PLANS

Sheet No.:
1
of 23 sheets

CCC Advice Note

Building work will not start until the
Section 224 certificate has been issued

Silt sock joined using a sleeve and pegged
and secured using bailing twine with 1 m
overlapping joint (Source: Erosion Control Ltd)



SITE INFORMATION

Site Area : 435.00m²
Floor Area (VENEER) : 141.34m²
Site Coverage : 32.49%

Wind High
Earthquake 2
Exposure B
Snow N 4 at 50m (up to 1kPa)

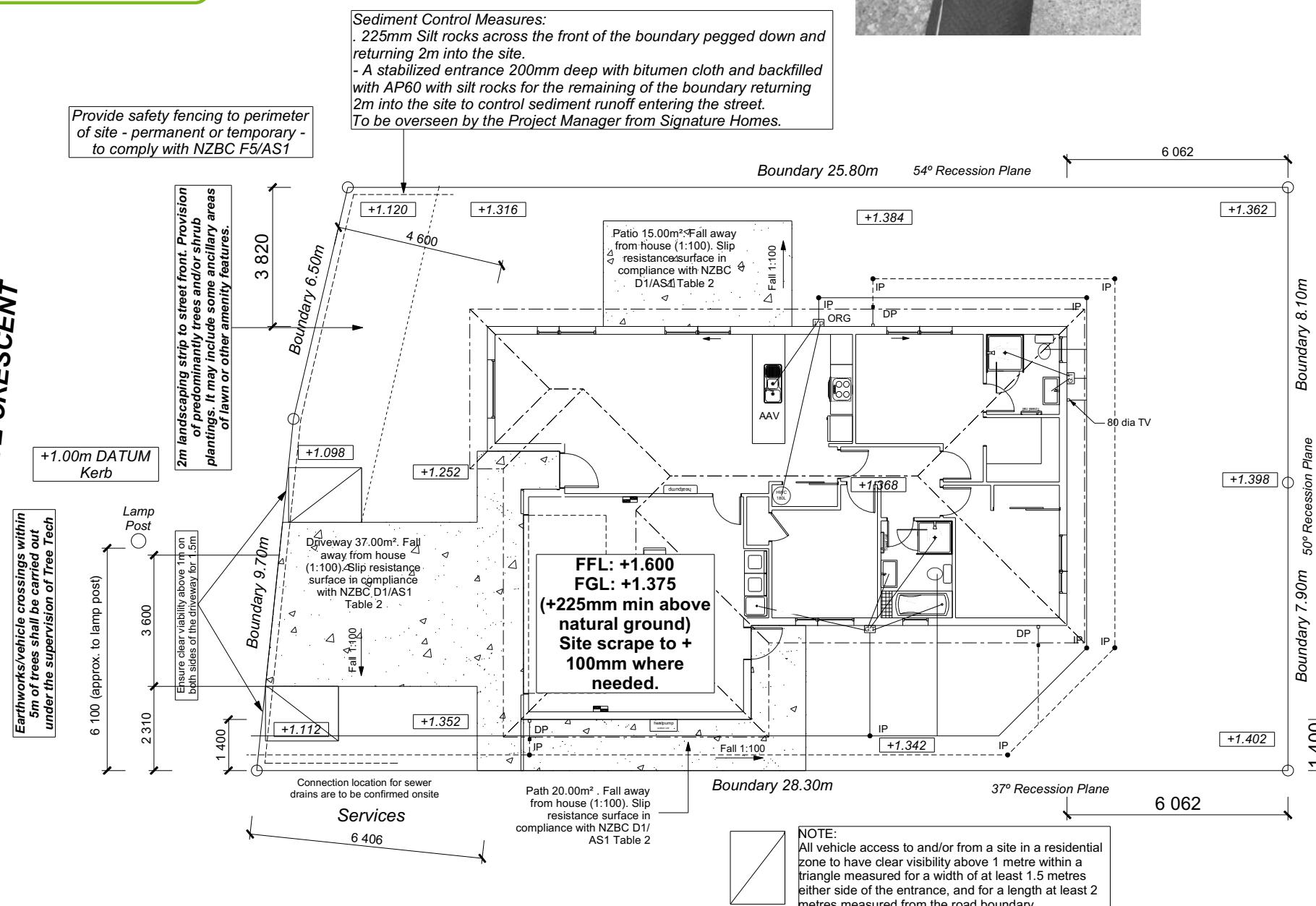
Note: The dimensions shown are from cladding to boundary. Refer to sheet 8 for foundation to boundary dimensions.

Sediment control and site safety requirements are noted in the attached Specifications.

DRAINAGE LEGEND

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

APPLEGROVE CRESCENT



DRAWING NOTES

These drawings are subject to copyright and remain the property of Signature Homes Ltd.

Verify all dimensions, sizes and levels on site prior to commencing any work. Any discrepancies are to be confirmed with Signature Homes Ltd.

Refer to attached Specifications for further information.

All work is to comply with the NZBC Acceptable Solutions, NZS 3604:2011 and Local Authority bylaws.

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

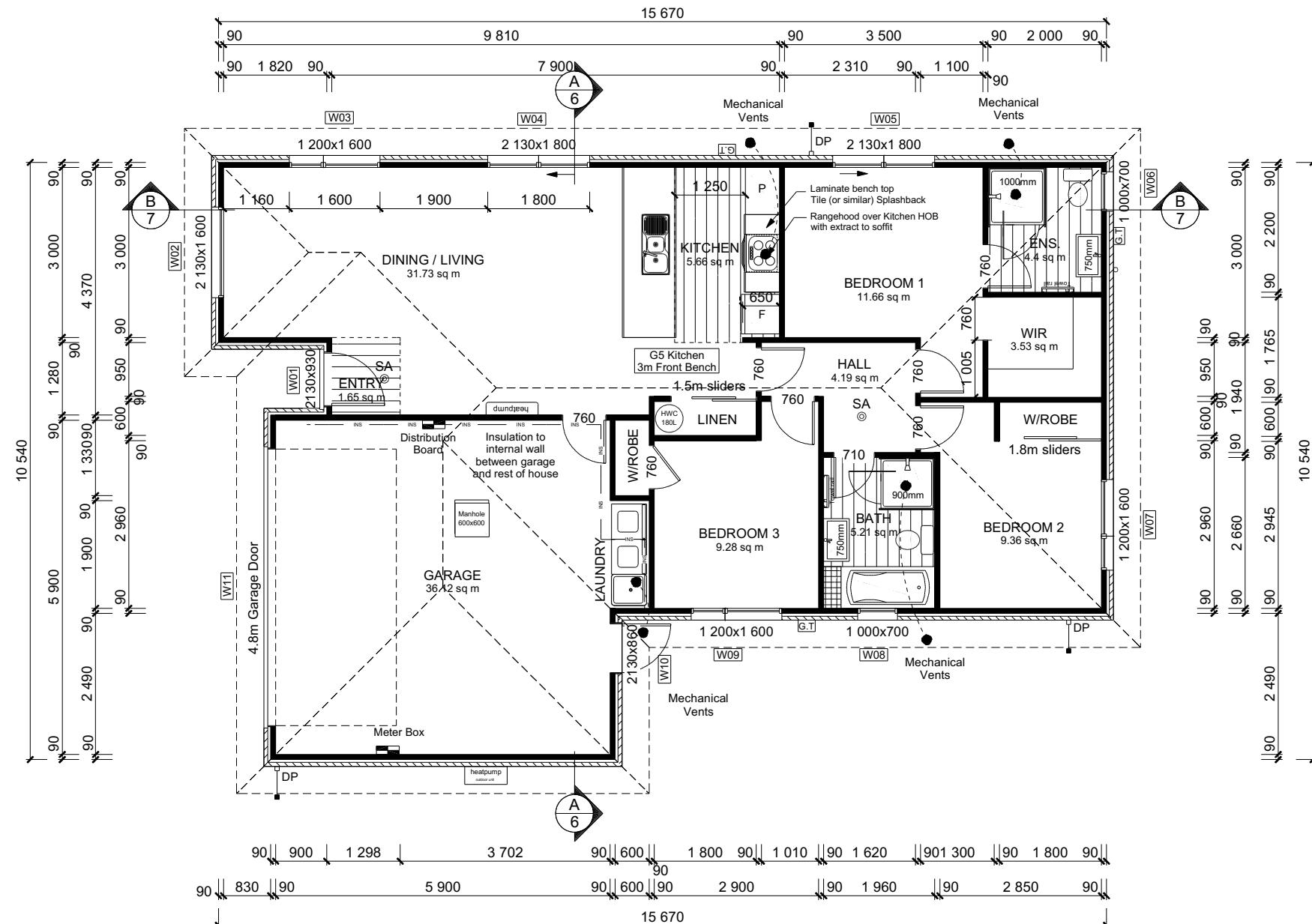
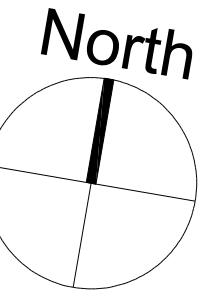
Job Number:
141275
Original Plan:
'Rifleman 142'
Sheet Name:
SITE PLAN
Sales: D Ryan Drawn: J Rana QS: T de la Lama Print Date: 26/04/2022 Scale: 1:150 @ A3

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.:
2

of 23 sheets



ROOF & WALL CLADDINGS
Roof: 25° Pressed Metal Tiles
Walls: 70 Series Brick Veneer with a 50mm cavity

DWELLING AREAS
Framing Area: 134.75m² (Perimeter: 54.40m)
Veneer Area: 141.34m² (Perimeter: 55.36m)
Roof Area: 168.91m² (Perimeter: 57.22m)

SMOKE ALARMS (hush type)
Domestic Smoke Alarms to be fitted within 3.0m of sleeping areas and on Escape routes, as indicated on plan. To comply with one of the following standards: UL 217, ULC-S531, AS 3786, BS 5446 (part 1).

FLOOR PLAN NOTES
Dimensions shown are to the frame, GIB thickness not shown.
Mechanical ventilation to comply with G4/AS1
Air Seals to have PEF rod & low expansion foam
All windows and doors centered in room unless shown otherwise
Laundries facilities provided complying with G2/SA1 1.0
Provide sealant under skirting and paint to concrete around tub & W/M fixtures

WALL FRAMING
Stud Height: 2400mm
(2455mm to u/s of bottom chord)

FLOOR FINISHES
Carpet & Vinyl

KITCHEN HOB
Electric Hobs

DOORS
Internal Height: 1980mm (leaves)
Type: Hollow core flush panel
Front Door Type: Latitude Aluminium

INTERNAL TRIMS
Scotia: 55mm GIB Coving (excluding garage)
Skirting: 60x12mm Pine, single bevel edge
Architrave: N/A

SHELVING
Shelf & Rails to all wardrobes
4 shelves to Linen cupboard

DRAWING NOTES
These drawings are subject to copyright and remain the property of Signature Homes Ltd.

Verify all dimensions, sizes and levels on site prior to commencing any work. Any discrepancies are to be confirmed with Signature Homes Ltd.

Refer to attached Specifications for further information.

All work is to comply with the NZC
Acceptable Solutions, NZS 3604:2011 and
Local Authority bylaws.



Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275

Original Plan:
'Rifleman 142'

Sheet Name:
FLOOR PLAN

Sales: D Ryan Drawn: J Rana QS: T de la Llama Print Date: 26/04/2022 Scale: 1:100 @ A3

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.: **3**
of 23 sheets

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



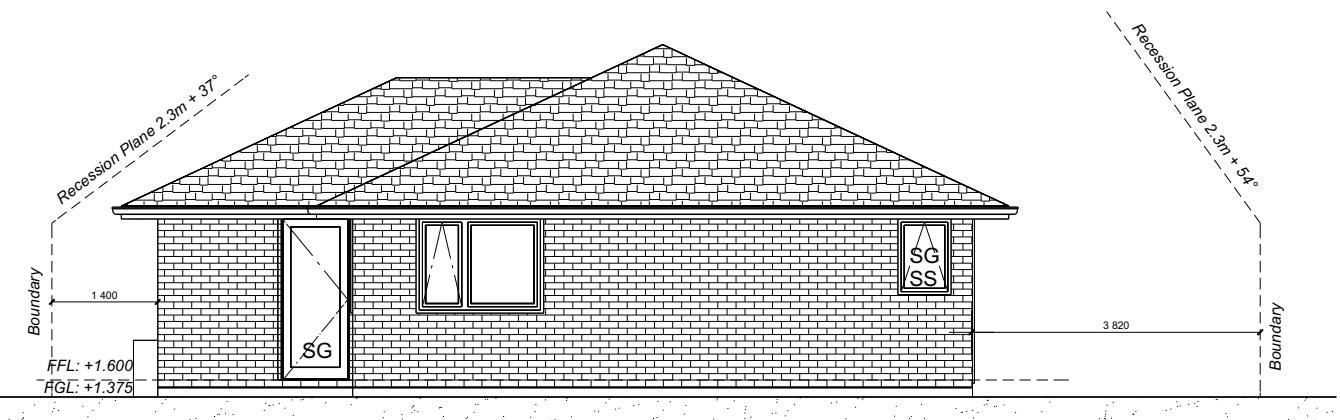
TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

BUILDING ENVELOPE RISK MATRIX		
ELEVATION A		
RISK CRITERIA	RISK	SCORE
Wind Zone	High	1
Number of Stories	Low	0
Roof Wall Junction	Low	0
Eaves Width	Medium	1
Building Envelope	Low	0
Decks & Balconies	Low	0
Total		2



ELEVATION A



ELEVATION B

ROOF & WALL CLADDINGS
Roof : 25° Pressed Metal Tiles
Walls : 70 Series Brick Veneer
with a 50mm cavity

ELEVATION LEGEND
SS Safety Stays
SG Safety Glass
MB Meter Box
TV Terminal Vent

ELEVATION NOTES
Gutter : Coloured Steel Quad Gutter
Fascia : Coloured Steel 185 Fascia
Downpipes : Colorsteel Rectangular 75x55mm
Soffits : Hardiflex 4.5mm
Joinery : Double glazed aluminum

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

BUILDING ENVELOPE RISK MATRIX		
ELEVATION B		
RISK CRITERIA	RISK	SCORE
Wind Zone	High	1
Number of Stories	Low	0
Roof Wall Junction	Low	0
Eaves Width	Medium	1
Building Envelope	Low	0
Decks & Balconies	Low	0
Total		2

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

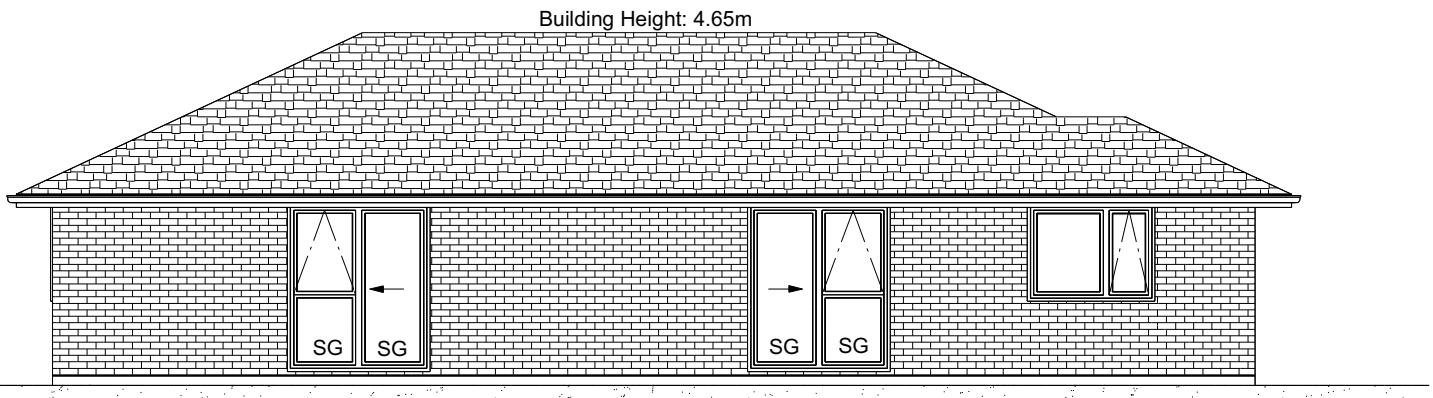
Job Number:
141275
Original Plan:
'Rifleman 142'
Sheet Name:
ELEVATIONS
Sales: D Ryan Drawn: J Rana QS: T de la Lama Print Date: 26/04/2022 Scale: 1:100 @ A3

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

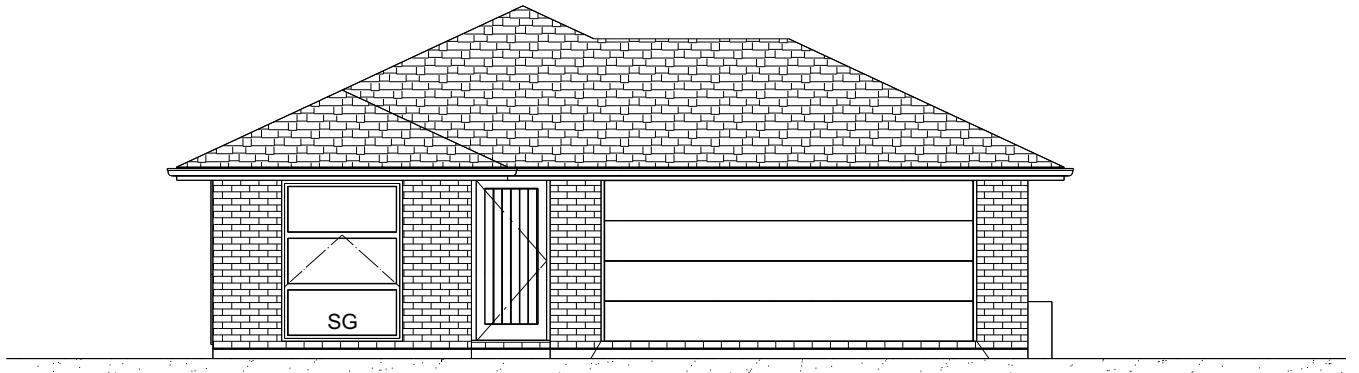
Sheet No.: **4**
of 23 sheets

BUILDING ENVELOPE RISK MATRIX		
ELEVATION C		
RISK CRITERIA	RISK	SCORE
Wind Zone	High	1
Number of Stories	Low	0
Roof Wall Junction	Low	0
Eaves Width	Medium	1
Building Envelope	Low	0
Decks & Balconies	Low	0
Total		2



ELEVATION C

BUILDING ENVELOPE RISK MATRIX		
ELEVATION D		
RISK CRITERIA	RISK	SCORE
Wind Zone	High	1
Number of Stories	Low	0
Roof Wall Junction	Low	0
Eaves Width	Medium	1
Building Envelope	Low	0
Decks & Balconies	Low	0
Total		2



ELEVATION D

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275 Original Plan:
'Rifleman 142' Sheet Name:
ELEVATIONS
Sales: D Ryan Drawn: J Rana QS: T de la Llama Print Date: 26/04/2022 Scale: 1:100 @ A3

ROOF & WALL CLADDINGS
Roof: 25° Pressed Metal Tiles
Walls: 70 Series Brick Veneer
with a 50mm cavity

ELEVATION LEGEND
SS Safety Stays
SG Safety Glass
MB Meter Box
TV Terminal Vent

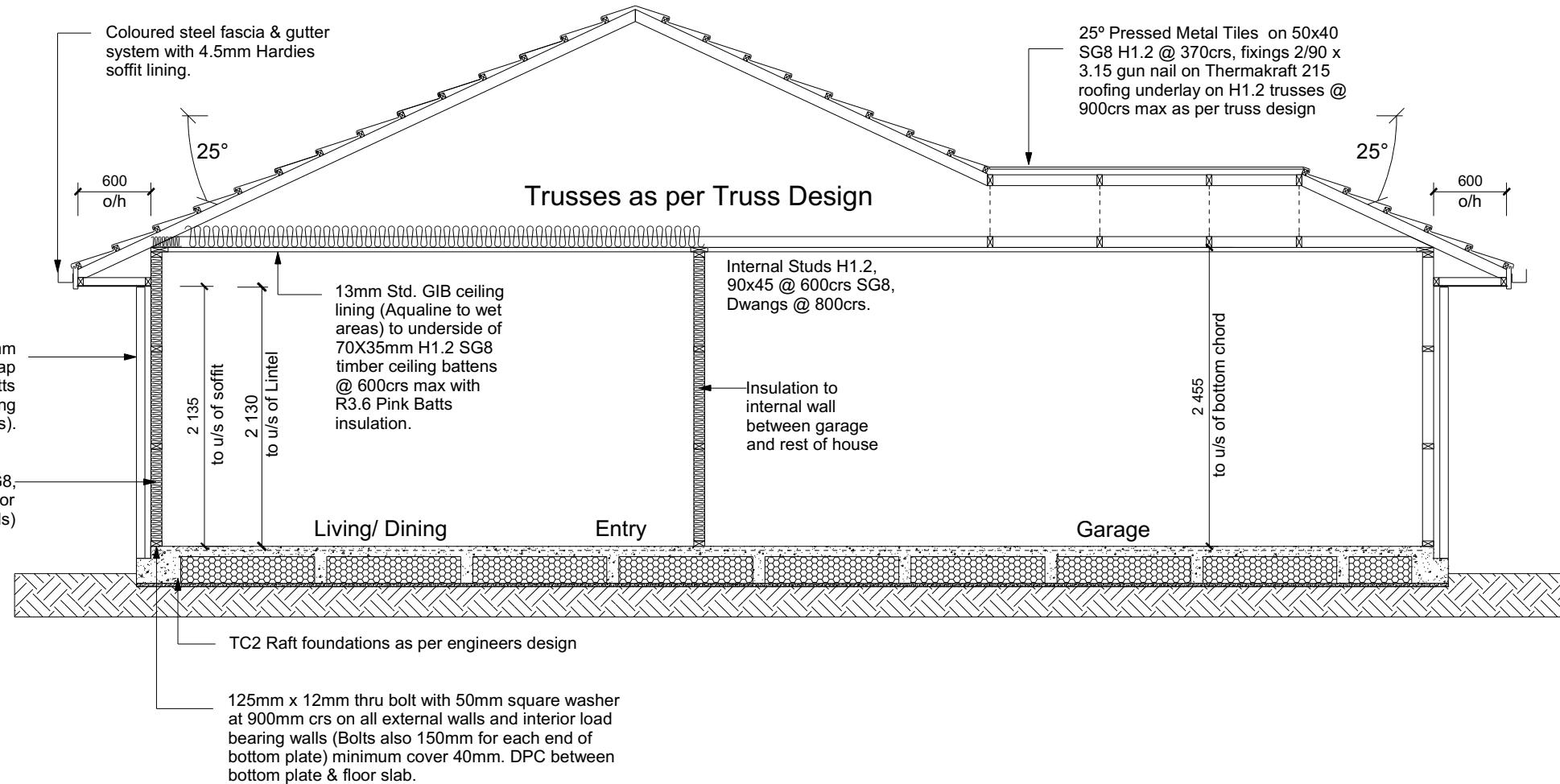
ELEVATION NOTES
Gutter: Coloured Steel Quad Gutter
Fascia: Coloured Steel 185 Fascia
Downpipes: Colorsteel Rectangular 75x55mm
Soffits: Hardiflex 4.5mm
Joinery: Double glazed aluminum
All egress points to have a maximum step down of 190mm.
Access routes to have slip resistance surface in compliance with NZBC D1/AS1 Table 2 and to have a 1:100 fall away from the building

Sheet No.:
5
of 23 sheets

ROOF & WALL CLADDINGS
Roof : 25° Pressed Metal Tiles
Walls : 70 Series Brick Veneer
with a 50mm cavity

CROSS SECTION NOTES
Building wrap is to comply with E2/AS1 & NZS 3604:2011.
Flashing materials must be selected based on environmental exposure. Refer to NZS 3604:2011 & table 20 of E2/AS1.
Flashing tape must have proven compatibility with the selected wrap & other materials with which it comes into contact as per table 21 of E2/AS1.
Fixings shall comply with NZS 3604:2011 Section 4 Durability Tables 4.1-4.3
Unless stated otherwise, timber members on drawings are to be a minimum of SG8 strength graded as per NZS3604:2011.

INSULATION
Ceiling: Pink Batts R3.6 Ceiling Batts
Wall: Pink Batts R 2.6 Wall Batts



CROSS SECTION A-A

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275 Original Plan:
'Rifleman 142' Sheet Name:
CROSS SECTIONS
Sales: D Ryan Drawn: J Rana QS: T de la Lama Print Date: 13/12/2021 Scale: 1:50 @ A3

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.: **6**
of 23 sheets

DRAWING NOTES
These drawings are subject to copyright and remain the property of Signature Homes Ltd.

Verify all dimensions, sizes and levels on site prior to commencing any work. Any discrepancies are to be confirmed with Signature Homes Ltd.

Refer to attached Specifications for further information.

All work is to comply with the NZC Acceptable Solutions, NZS 3604:2011 and Local Authority bylaws.

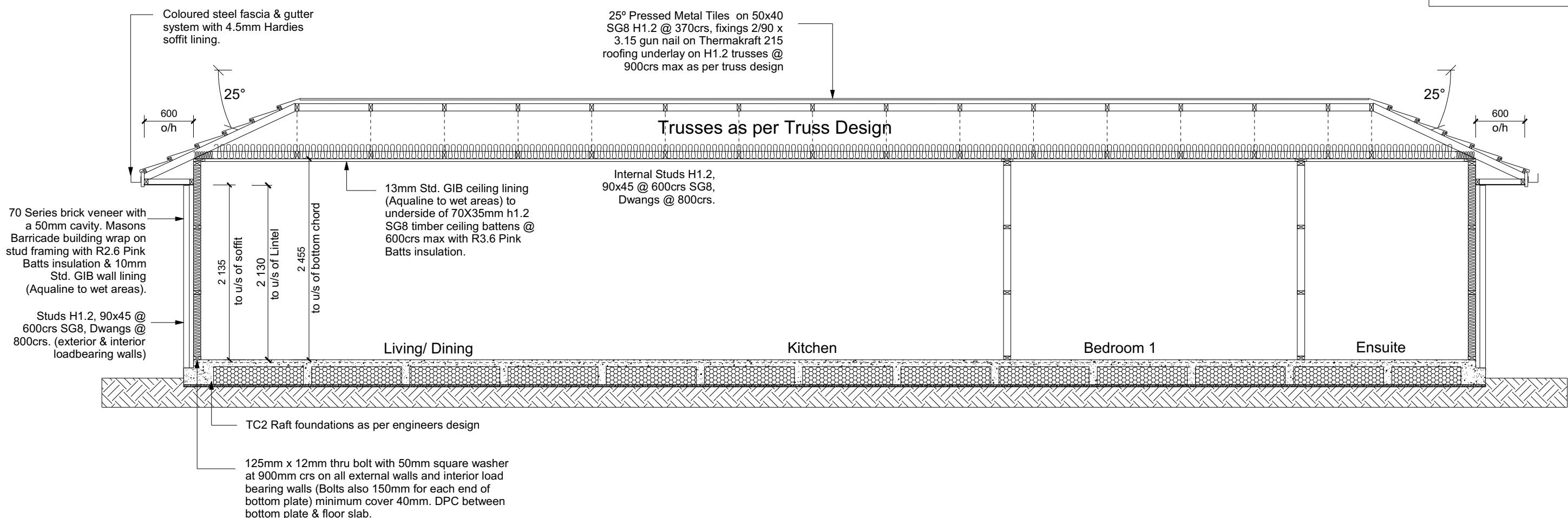
ROOF & WALL CLADDINGS
Roof : 25° Pressed Metal Tiles
Walls : 70 Series Brick Veneer
with a 50mm cavity

CROSS SECTION NOTES

Building wrap is to comply with E2/AS1 & NZS 3604:2011.
Flashing materials must be selected based on environmental exposure. Refer to NZS 3604:2011 & table 20 of E2/AS1.
Flashing tape must have proven compatibility with the selected wrap & other materials with which it comes into contact as per table 21 of E2/AS1.
Fixings shall comply with NZS 3604:2011 Section 4 Durability Tables 4.1-4.3
Unless stated otherwise, timber members on drawings are to be a minimum of SG8 strength graded as per NZS3604:2011.

INSULATION

Ceiling: Pink Batts R3.6 Ceiling Batts
Wall: Pink Batts R 2.6 Wall Batts



CROSS SECTION B-B

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275

Original Plan:
'Rifleman 142'

Sheet Name:
CROSS SECTIONS

Sales: D Ryan	Drawn: J Rana	QS: T de la Lama	Print Date: 13/12/2021	Scale: 1:50 @ A3
---------------	---------------	------------------	------------------------	------------------

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

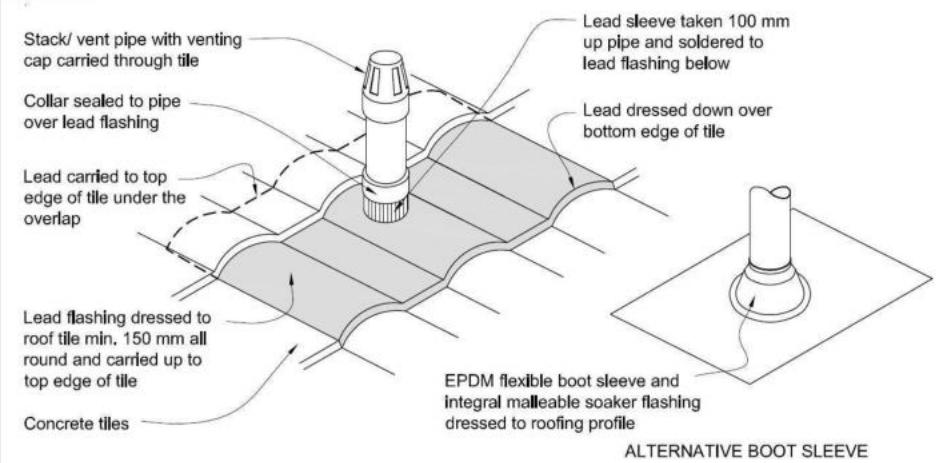
Sheet No.: **7**
of 23 sheets

All work is to comply with the NZC
Acceptable Solutions, NZS 3604:2011 and
Local Authority bylaws.

Verify all dimensions, sizes and levels on site prior to commencing any work. Any discrepancies are to be confirmed with Signature Homes Ltd.

Refer to attached Specifications for further information.

Figure 29: Pipe penetration for masonry tile
Paragraph 8.2.7

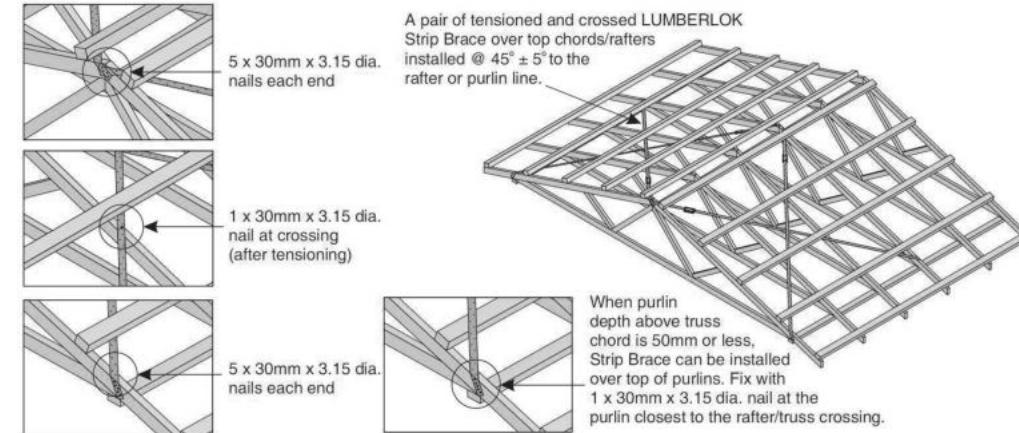


Metal Tile Penetration Detail
Scale NTS

8.3.10 Roof penetrations

Pipe penetrations shall be flashed using EPDM flashings similar to that shown for masonry tiles, Figure 29.

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



ROOF CLADDING
Roofing : 25° Pressed Metal Tiles
Tile Battens : 50x40 SG8 H1.2 @ 370cs, fixings 2/90 x 3.15 gun nail

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

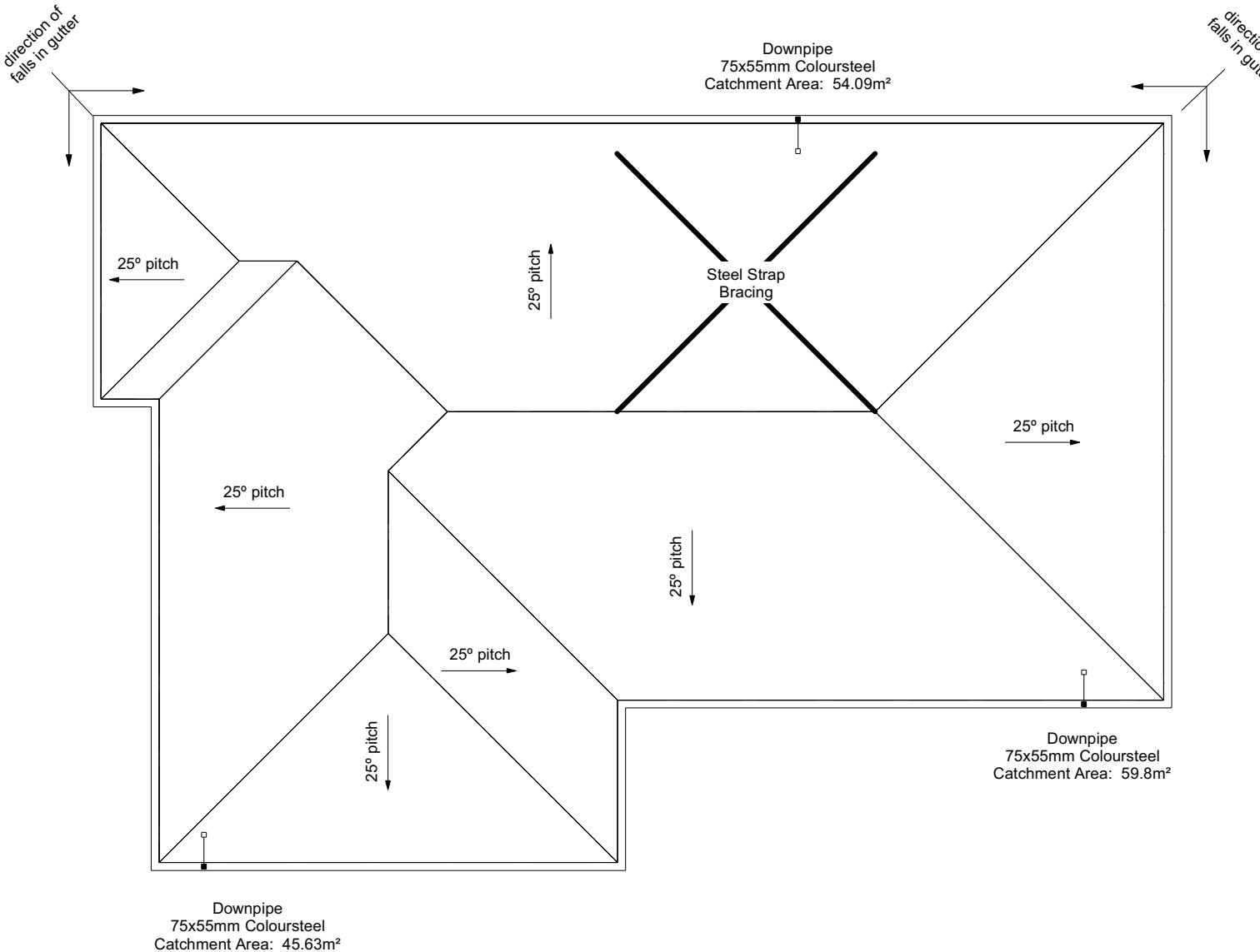
Underlay: Thermakraft 215 roof underlay
Roof Bracing: Diagonally opposed pair 25x1mm galv straps with 8Kn tension capacity.
After tensioning strap, fix to each rafter with 2/60x3.15mm nails.
Fold down strap and fix with 3/60x3.15mm nails each into the top chord and into the top plate.

Downpipes: 75x55 Rectangle Colorsteel
As per NZBC E1/AS1 Table 5 75x55 down pipes can collect up to 60m² of 0-25° roof plan area.

Use Coloured steel Quad Gutter
As per NZ Metal Roof and Wall Cladding Code of Practice Version 2 section 8 the above gutter with a cross sectional area of 5550mm² can collect up to 60m² of 0-25° roof plan area. Refer to the specifications for exact calculations.

Valley Boards: Thickness 19mm
Timber Treatment: H1.2

Use Lumberlock top plate fixing chart attached to the main specifications to determine top plate fixings.



Christchurch
City Council
BCN/2022/2124

Page 8 of 29

Approved Building Consent
Document

27/04/2022

Laird, David

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

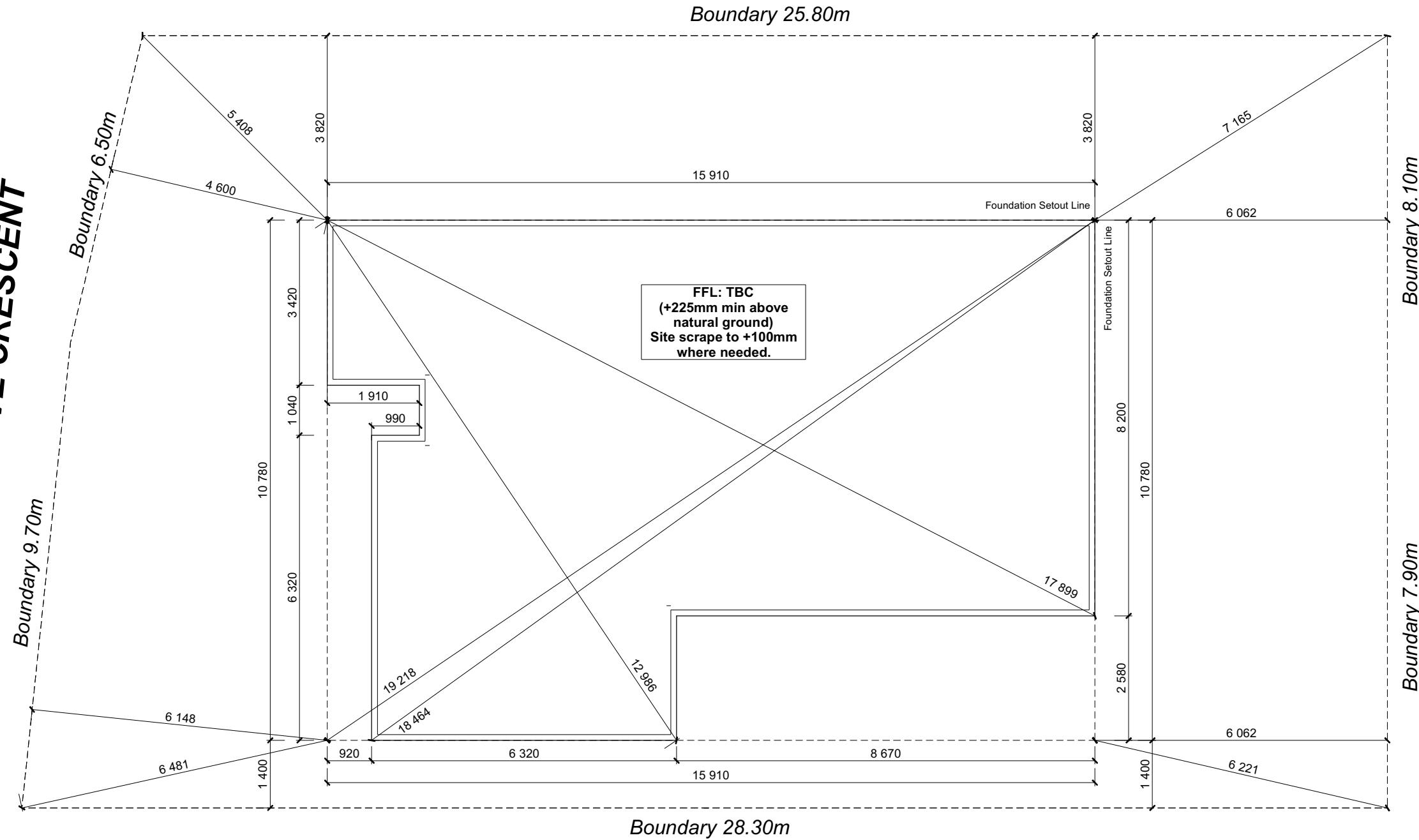
Job Number:
141275
Original Plan:
'Rifleman 142'
Sheet Name:
ROOF PLAN
Sales: D Ryan Drawn: J Rana QS: T de la Lama Print Date: 13/12/2021 Scale: 1:100 @ A3

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.: **8**
of 23 sheets

APPLEGROVE CRESCENT



All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275

Original Plan:
'Rifleman 142'

Sheet Name:
SETOUT DIMENSIONS

Sales: D Ryan	Drawn: J Rana	QS: T de la Lama	Print Date: 26/04/2022	Scale: 1:100 @ A3
------------------	------------------	---------------------	---------------------------	----------------------

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.: **9**
of 23 sheets

SET OUT PLAN NOTES

All dimensions over foundation face. Allow (120mm rebate) 70mm veneer & 50mm cavity, Brick to overhang foundation face by 0-20mm max as per NZBC E2/AS1. All reinforcing is to be Ductility Class E, in accordance with NZS 4671. All concrete to comply with NZS3604:2011 Section 4 Durability Clause 4.5.2.

These foundations are design to the findings and recommendations in the site specific Geotech report.

FOUNDATION PLAN NOTES

All dimensions over foundation face. Allow (120mm rebate) 70mm veneer & 50mm cavity. Brick to overhang foundation face by 0-20mm max as per NZBC E2/AS1.

W/C location indicated on plan has assumed a 140mm offset from internal frame line, please consult manufacturer's documentation to confirm offset.

Contractor to consult manufacturer's documentation to determine the correct location for all wastes positioned through floor slabs.

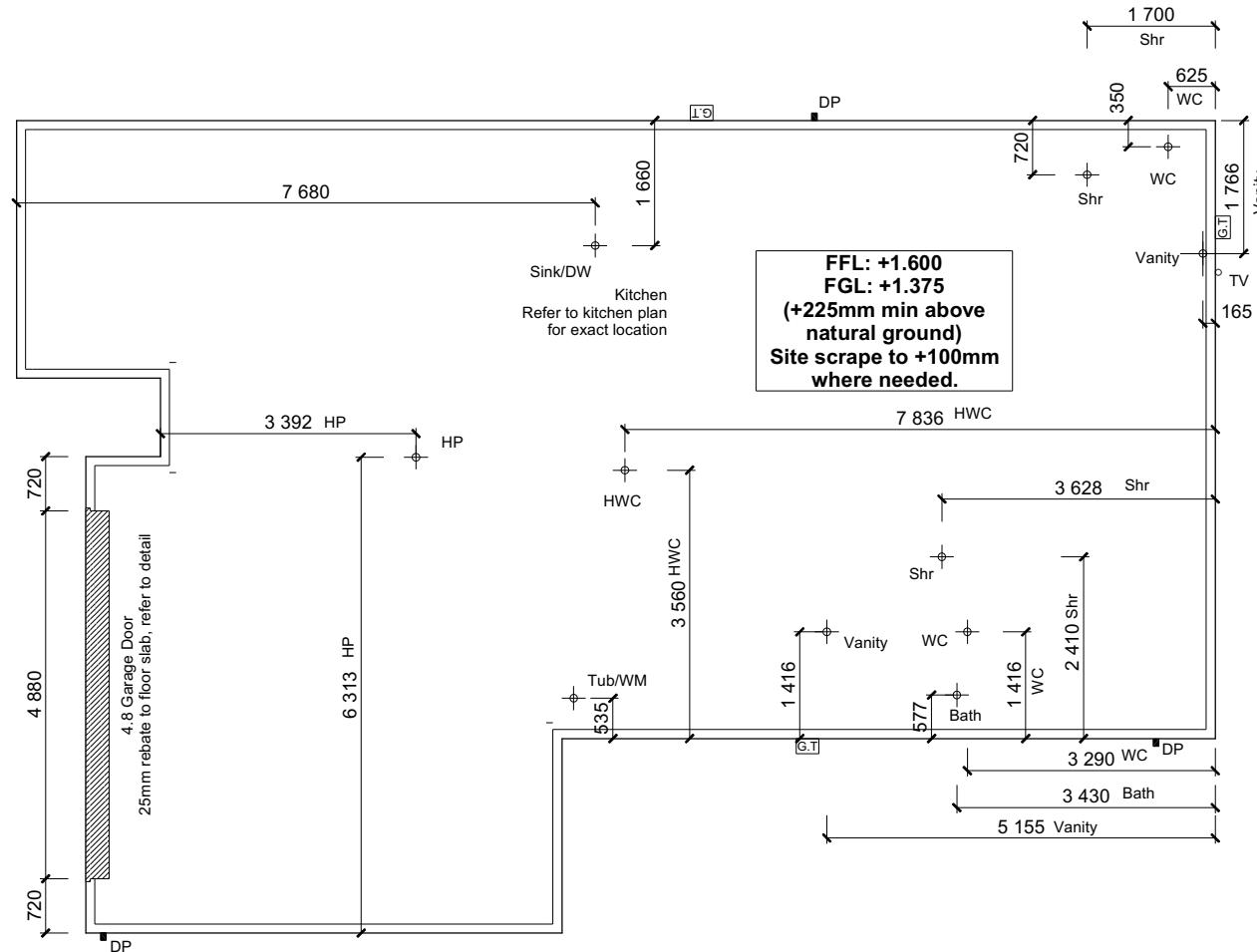
Earth bar to be bonded to the reinforcing mesh

Refer to Truss design for exact location of slab thickening

All reinforcing is to be Ductility Class E, in accordance with NZS 4671.

All concrete to comply with NZS3604:2011 Section 4 Durability Clause 4.5.2.

These foundations are designed to the findings and recommendations in the site specific Geotech report.



All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

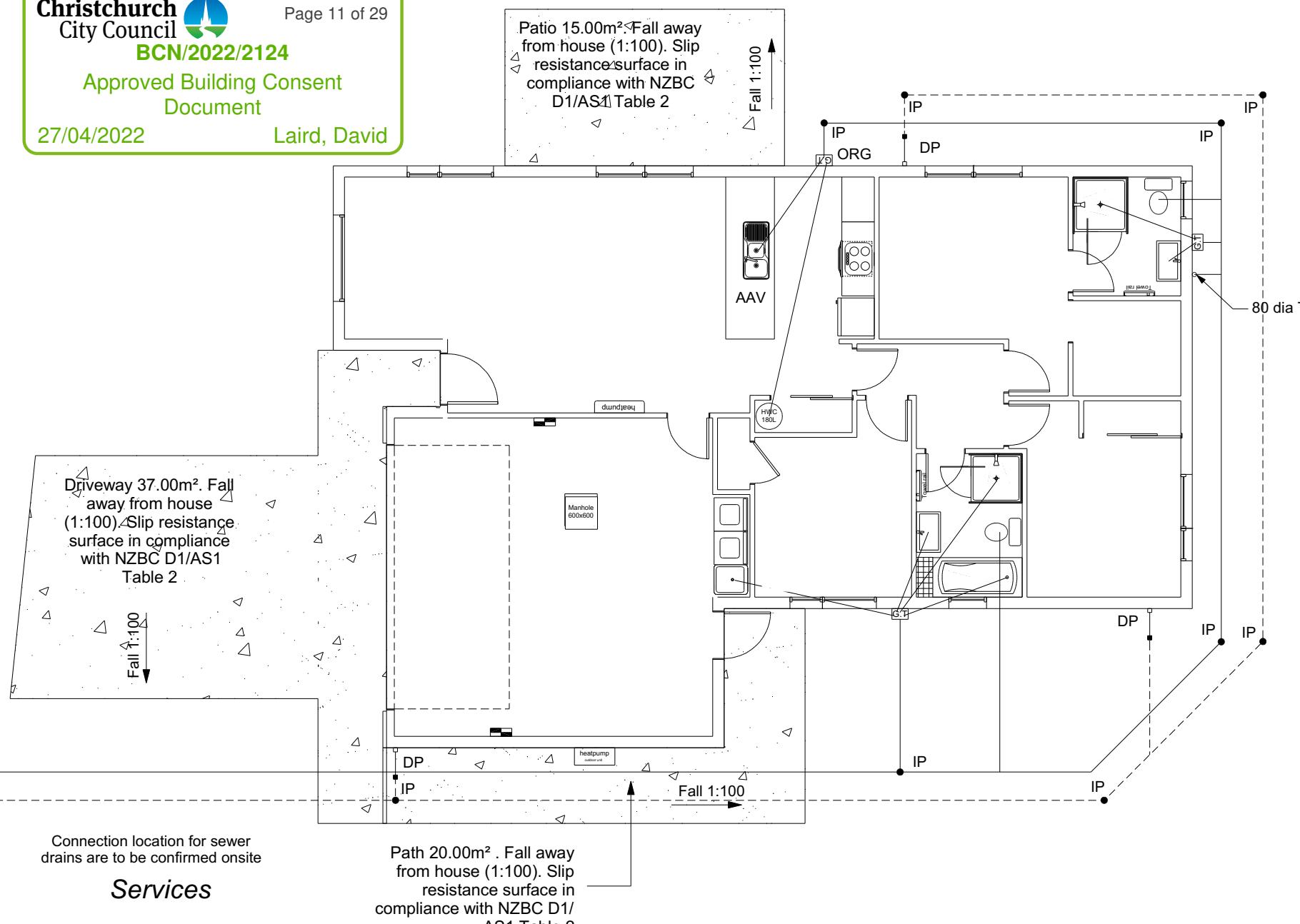
Job Number:
141275 Original Plan:
'Rifleman 142' Sheet Name:
FOUNDATION PLAN
Sales: D Ryan Drawn: J Rana QS: T de la Lama Print Date: 13/12/2021 Scale: 1:100 @ A3

CONSENT PLANS

Sheet No.:
10
of 23 sheets

**Approved Building Consent
Document**

27/04/2022 Laird, David



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

Plumbing Schedule	NZBC G13/ AS1
Kitchen	Ø50mm @1:40 (3 discharge units)
Sink:	Ø40mm @ 1:40 (1 discharge units per basin)
Bathrooms	Ø40mm @ 1:40 (2 discharge units)
Vanity:	Ø40mm @ 1:40 (4 discharge units)
Shower:	Ø40mm @ 1:40 (4 discharge units)
Bath:	Ø100mm @1:40 (4 discharge units)
WC:	Ø40mm @1:40 (5 discharge units)
Laundry Sink:	NZBC G13/ AS1
Drainage Schedule	
Main Foulwater	
Vented Drain	Ø100mm @1:60
Stormwater Drain	Ø100mm @1:60 (1:120max)
Terminal Vent	Ø80mm
Vent	Ø50mm
Heatpump	Drain over GT
ORG	Overflow Relief Gully

Plumbing Schedule

Stormwater DN100mm uPVC
Sewer Drain DN100mm uPVC

Downpipe

Gully Trap

Overflow Relief Gully

Terminal Vent

Air Admittance Valve

Inspection Point

Main Foulwater

Vented Drain

Stormwater Drain

Terminal Vent

Vent

Heatpump

ORG

Ø100mm @1:60

Ø100mm @1:60 (1:120max)

Ø80mm

Ø50mm

Drain over GT

Overflow Relief Gully

Notes:
All plumbing and drainage to comply with NZBC G13/AS1.
ORG to be positioned so the top of gully dish is no less than 150mm below overflow level of lowest fixture.
Sewer & Stormwater to connect to existing connections.
All drains passing through concrete, provide sleeve or wrap in durable and flexible to allow for expansion and contraction. (as per G13/AS2 5.8.1)

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275

Original Plan:
'Rifleman 142'

Sheet Name:
DRAINAGE PLAN

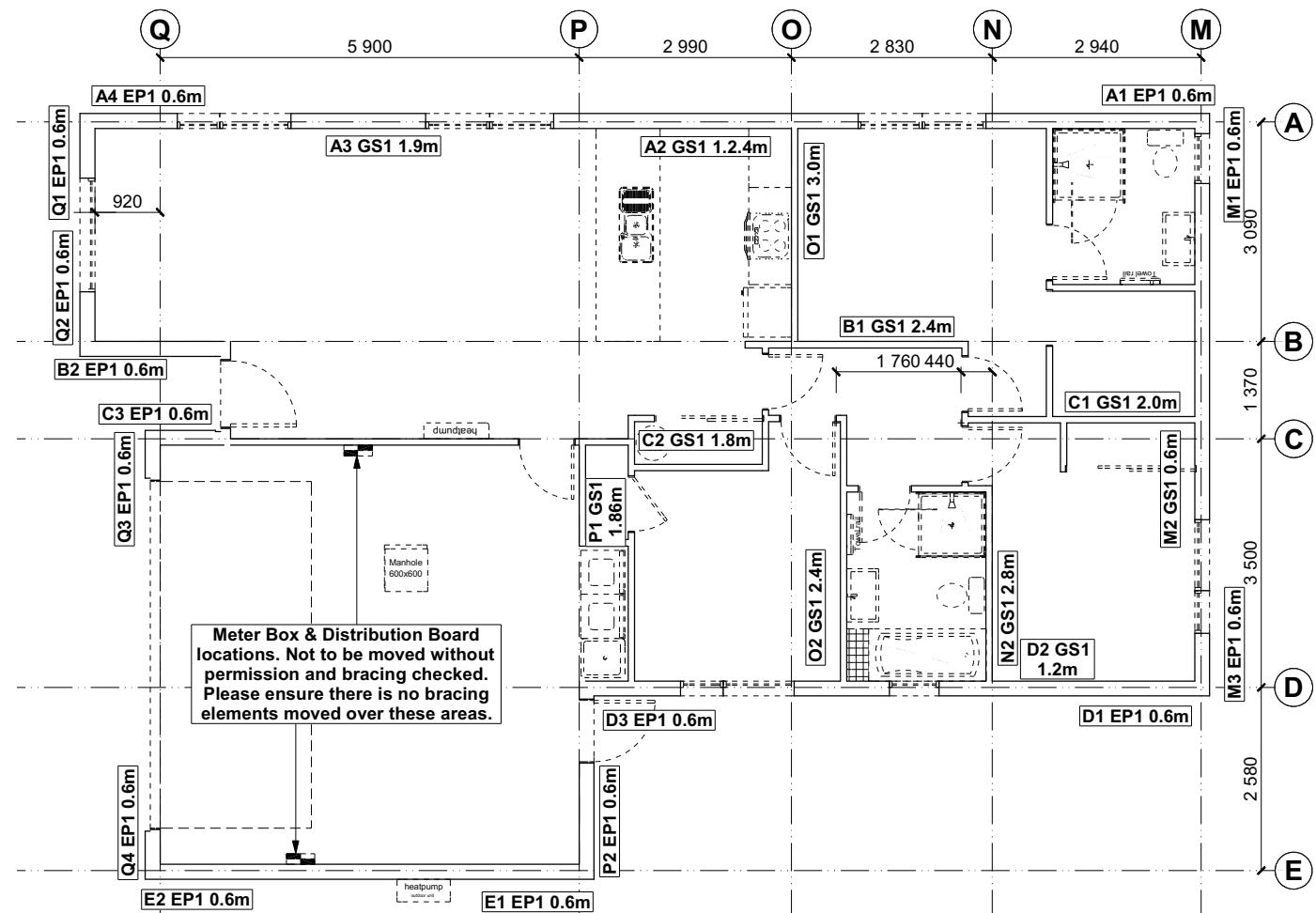
Sales: D Ryan Drawn: J Rana QS: T de la Lama Print Date: 13/12/2021 Scale: 1:100 @ A3

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.: **11**

of 23 sheets



8.7.3.4

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

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

BRACING PLAN NOTES
Wall bracing designed in accordance with NZS 3604:2011 & GIB Ezybrace system
Refer to attached calculations.

Bracing Designed to:
Wind: High
Earthquake: 2

BRACING LEGEND

A	Brace Line Label
1m	Brace Length
GS1	Brace Type
EP1	Brace Number

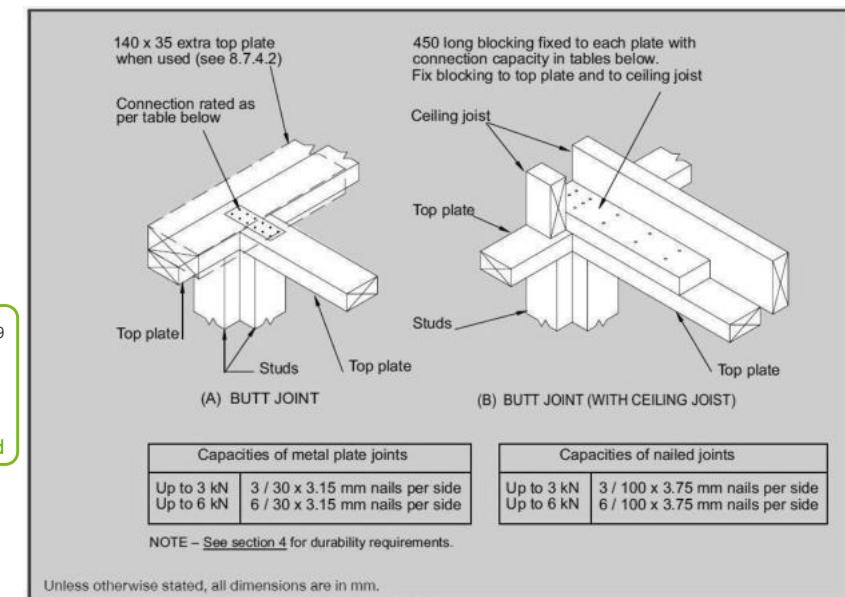


Figure 8.16 – Connecting top plates to external walls at right angles – Walls containing bracing (see 8.7.3.4)

Single Level Along Resistance Sheet

Job Name: Brown

		Wind	EQ							
		Demand								
		535	1008							
		Achieved								
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	1206	1143
a	1	0.60		2.4	EP1 0.6	Ecopy®	57	63	225%	113%
	2	1.90		2.4	GS1-N	GIB®	131	114		
	3	2.40		2.4	GS1-N	GIB®	166	144		
	4	0.60		2.4	EP1 0.6	Ecopy®	57	63		
b	1	2.40		2.4	GS1-N	GIB®	166	144	411 OK	384 OK
	2	0.60		2.4	EP1 0.6	Ecopy®	57	63		
c	1	2.00		2.4	GS1-N	GIB®	138	120	223 OK	207 OK
	2	1.80		2.4	GS1-N	GIB®	124	108		
d	1	0.60		2.4	EP1 0.6	Ecopy®	57	63	262 OK	228 OK
	2	1.20		2.4	GS1-N	GIB®	83	72		
	3	0.60		2.4	EP1 0.6	Ecopy®	57	63		
e	1	0.60		2.4	EP1 0.6	Ecopy®	57	63	197 OK	198 OK
	2	0.60		2.4	EP1 0.6	Ecopy®	57	63		
							114 OK	126 OK		

Single Level Across Resistance Sheet

Job Name: Brown

		Wind	EQ							
		Demand								
		743	1008							
		Achieved								
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	1105	1052
m	1	0.60		2.4	EP1 0.6	Ecopy®	57	63	149%	104%
	2	0.60		2.4	GS1-N	GIB®	34	35		
	3	0.60		2.4	EP1 0.6	Ecopy®	57	63		
n	1	2.80		2.4	GS1-N	GIB®	193	168	148 OK	161 OK
o	1	3.00		2.4	GS1-N	GIB®	207	180		
	2	2.40		2.4	GS1-N	GIB®	166	144		
p	1	1.86		2.4	GS1-N	GIB®	128	112	373 OK	324 OK
	2	0.60		2.4	GS1-N	GIB®	34	35		
q	1	0.60		2.4	EP1 0.6	Ecopy®	57	63	163 OK	147 OK
	2	0.60		2.4	EP1 0.6	Ecopy®	57	63		
	3	0.60		2.4	EP1 0.6	Ecopy®	57	63		
	4	0.60		2.4	EP1 0.6	Ecopy®	57	63	228 OK	252 OK

All dimensions are to be checked and confirmed prior to any construction

Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

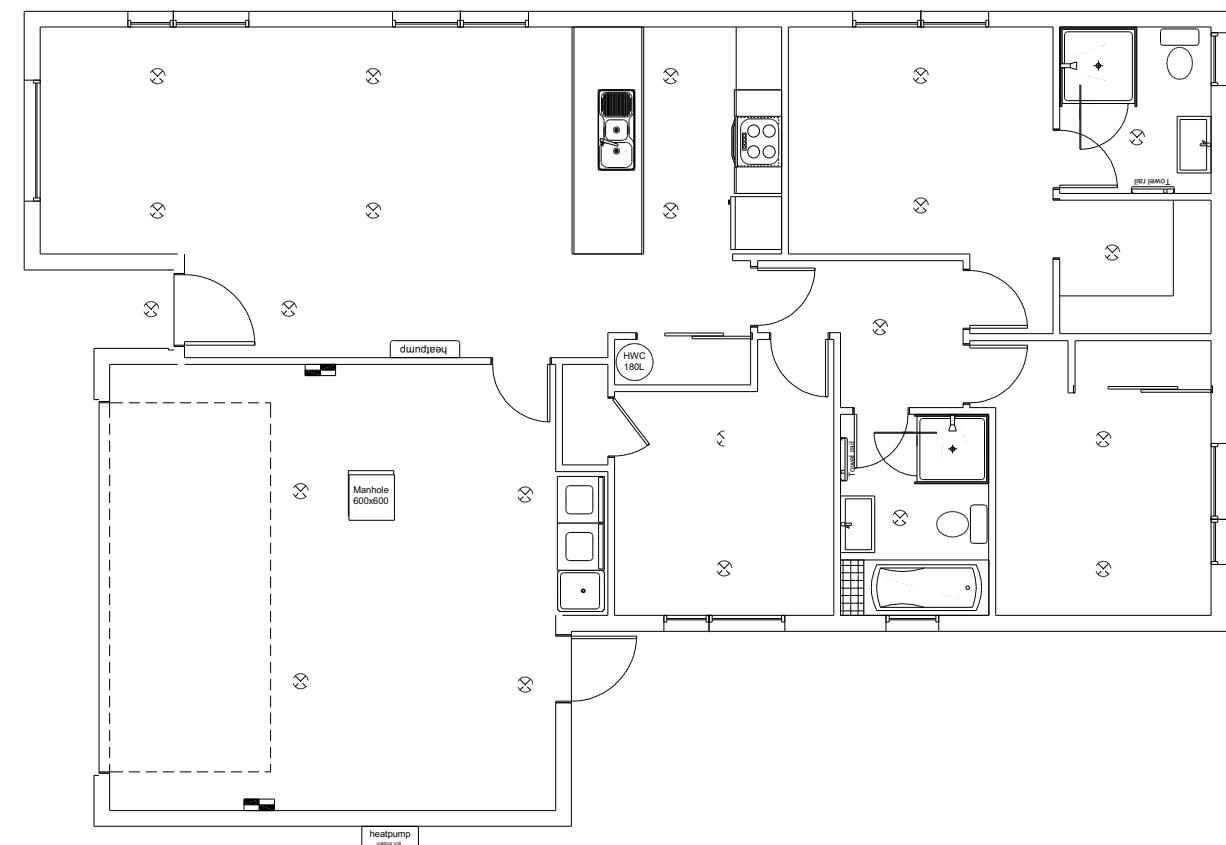
Job Number: **141275**
Original Plan: **'Rifleman 142'**
Sheet Name: **BRACING PLAN**
Sales: D Ryan Drawn: J Rana QS: T de la Llama Print Date: 13/12/2021 Scale: 1:100 @ A3

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.: **12**
of 23 sheets

CA Approved Down Lights
Layout shown is indicative only.
Final layout to be confirmed
between owner and electrician.
Refer to electrical section in the
specifications for additional info.



LEGEND	
Refer to Electrical Section in Specification for further details	
○	Ceiling Pan
⊗	CA Approved Down Light
⊖	Exterior Bulkhead Light
⊕	Exterior Wall Light
—	Fluorescent Double
↶	Light Switch
↷	Two Way Light Switch
⤠	Single Power Socket
⤢	Double Power Socket
⤤	Outside Waterproof Plug
▼	Telephone/Data Outlet
[TV]	TV Jack
[SKY]	Sky Connection
■	Bathroom Heater
■	Bathroom Extractor/Light

Electrical Plan is indicative only and is to be
confirmed onsite with electrician and client

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275 Original Plan:
'Rifleman 142' Sheet Name:
LIGHTING PLAN
Sales: D Ryan Drawn: J Rana QS: T de la Lama Print Date: 13/12/2021 Scale: 1:100 @ A3

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.:
13

of 23 sheets

LINTEL FIXING SCHEDULE

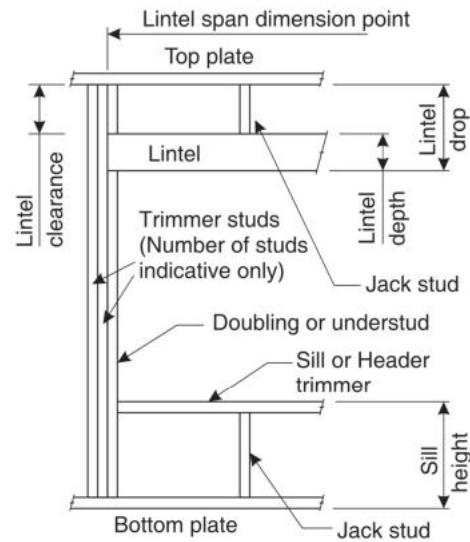
ALTERNATIVE TO TABLE 8.14 & FIGURE 8.12

NZS 3604:2011

NOTE:

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

DEFINITIONS



Lintel Supporting Girder Trusses:

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

Notes:

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

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

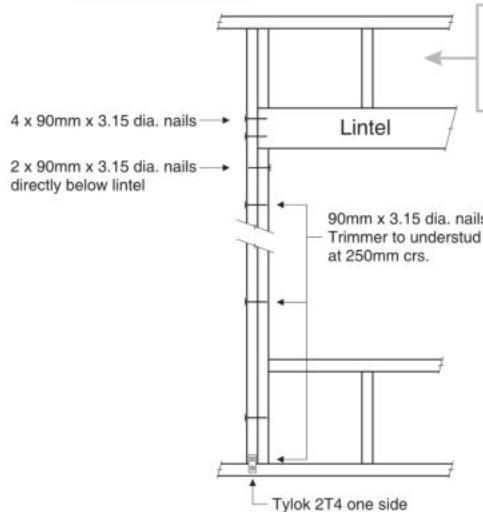
These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

SELECTION CHART FOR LINTEL FIXING

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

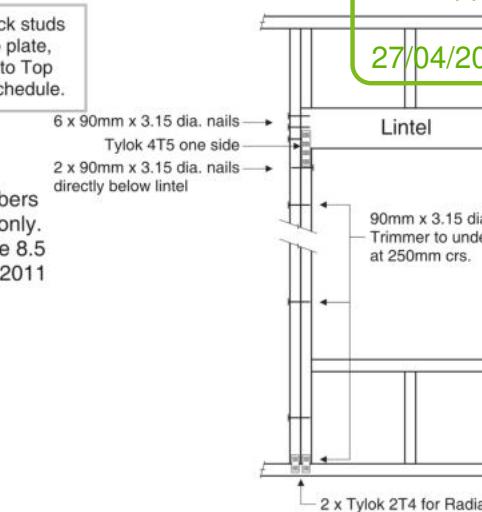
LINTEL FIXING OPTIONS

TYPE E 1.4 kN



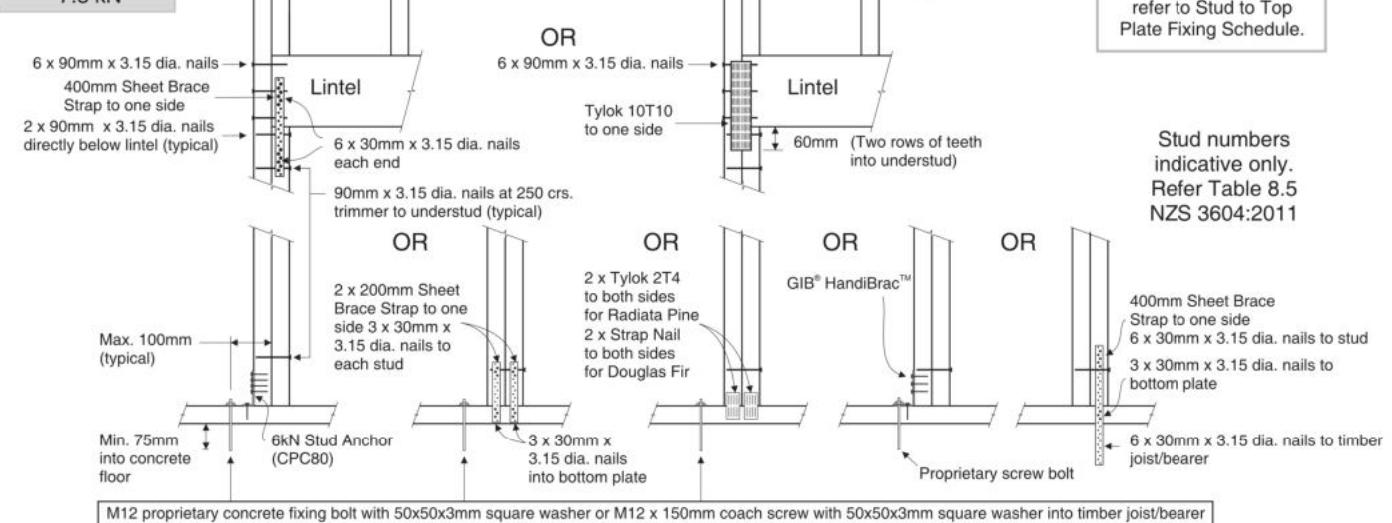
For fixing of jack studs to lintel & top plate, refer to Stud to Top Plate Fixing Schedule.
Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

TYPE F 4.0 kN

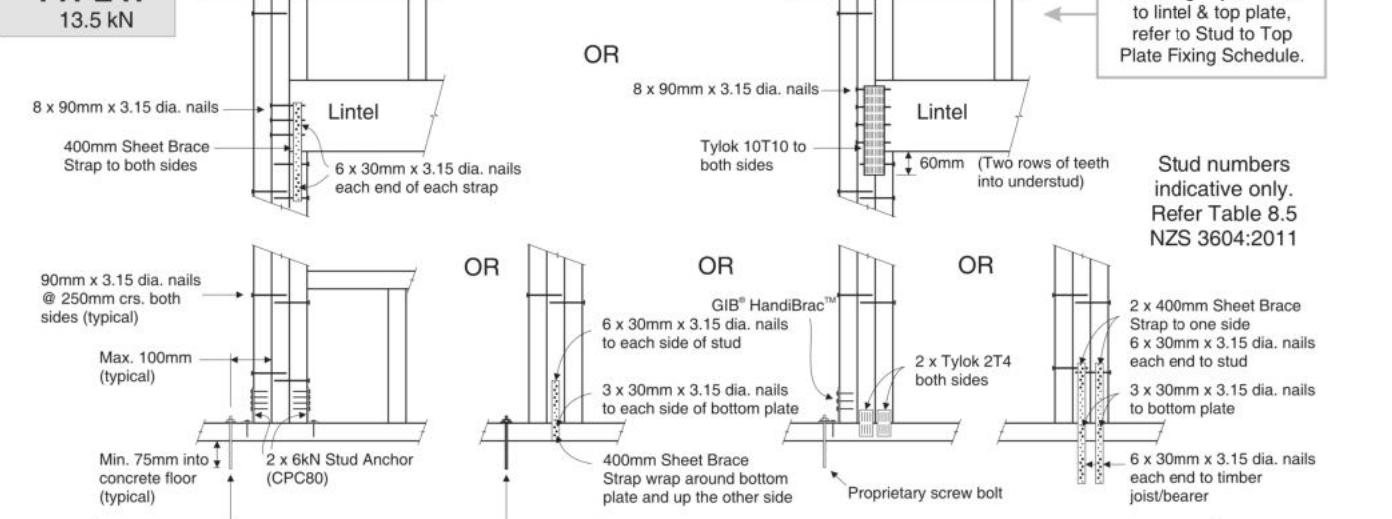


For fixing of jack studs to lintel & top plate, refer to Stud to Top Plate Fixing Schedule.
Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

TYPE G 7.5 kN



TYPE H 13.5 kN



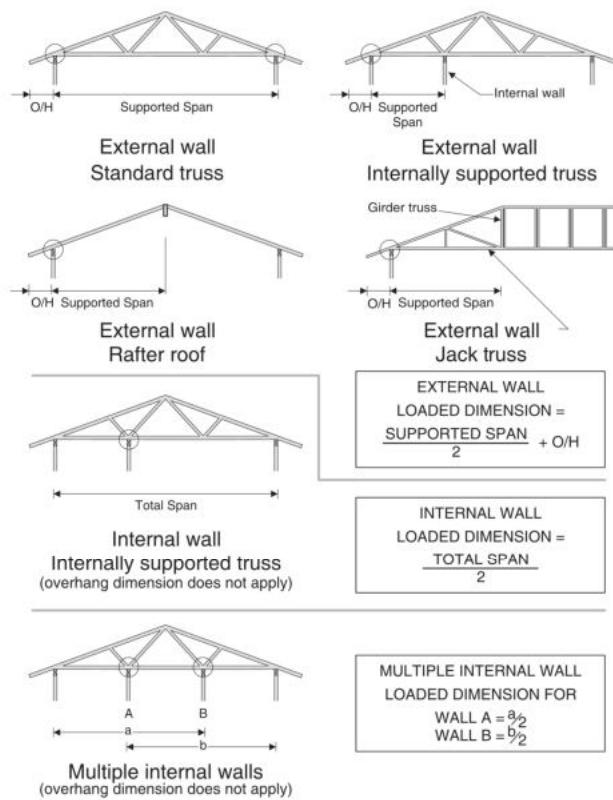
STUD TO TOP PLATE FIXING SCHEDULE

ALTERNATIVE TO TABLE 8.18 NZS 3604:2011

NOTE:

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

LOADED DIMENSION DEFINITION



FIXING SELECTION CHART

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

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

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

All dimensions are to be checked and confirmed prior to any construction

Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

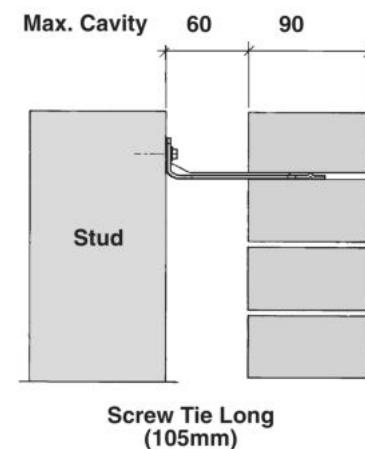
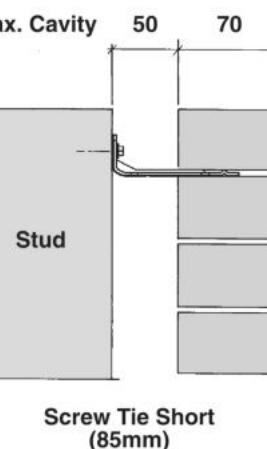
Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275 Original Plan:
'Rifleman 142' Sheet Name:
FRAMING DETAILS
Sales: D Ryan Drawn: J Rana QS: T de la Lama Print Date: 13/12/2021 Scale: NTS @ A3

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.: **15**
of 23 sheets



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

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

Also available in Stainless Steel Grade 316 for Zone D.

SCREW TIES FOR BRICK VENEER FIXING

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

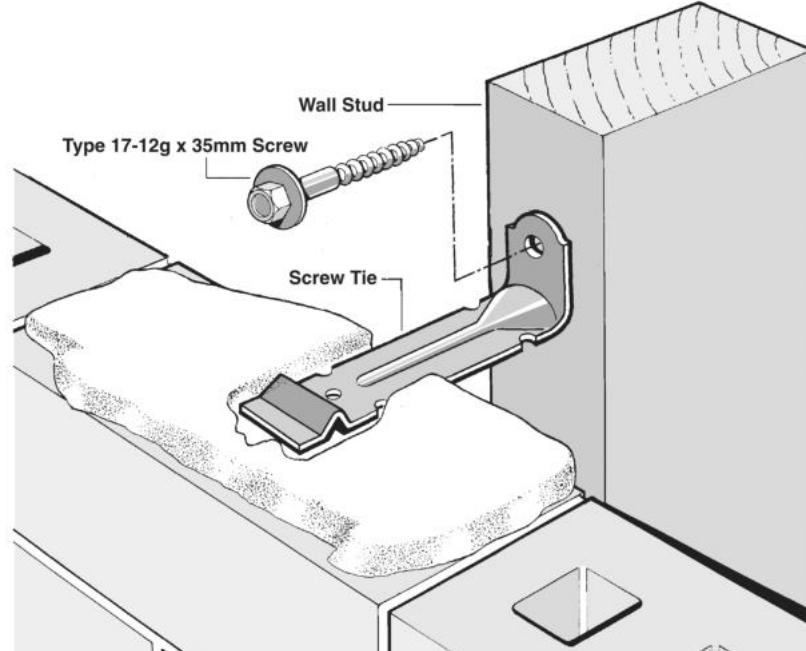
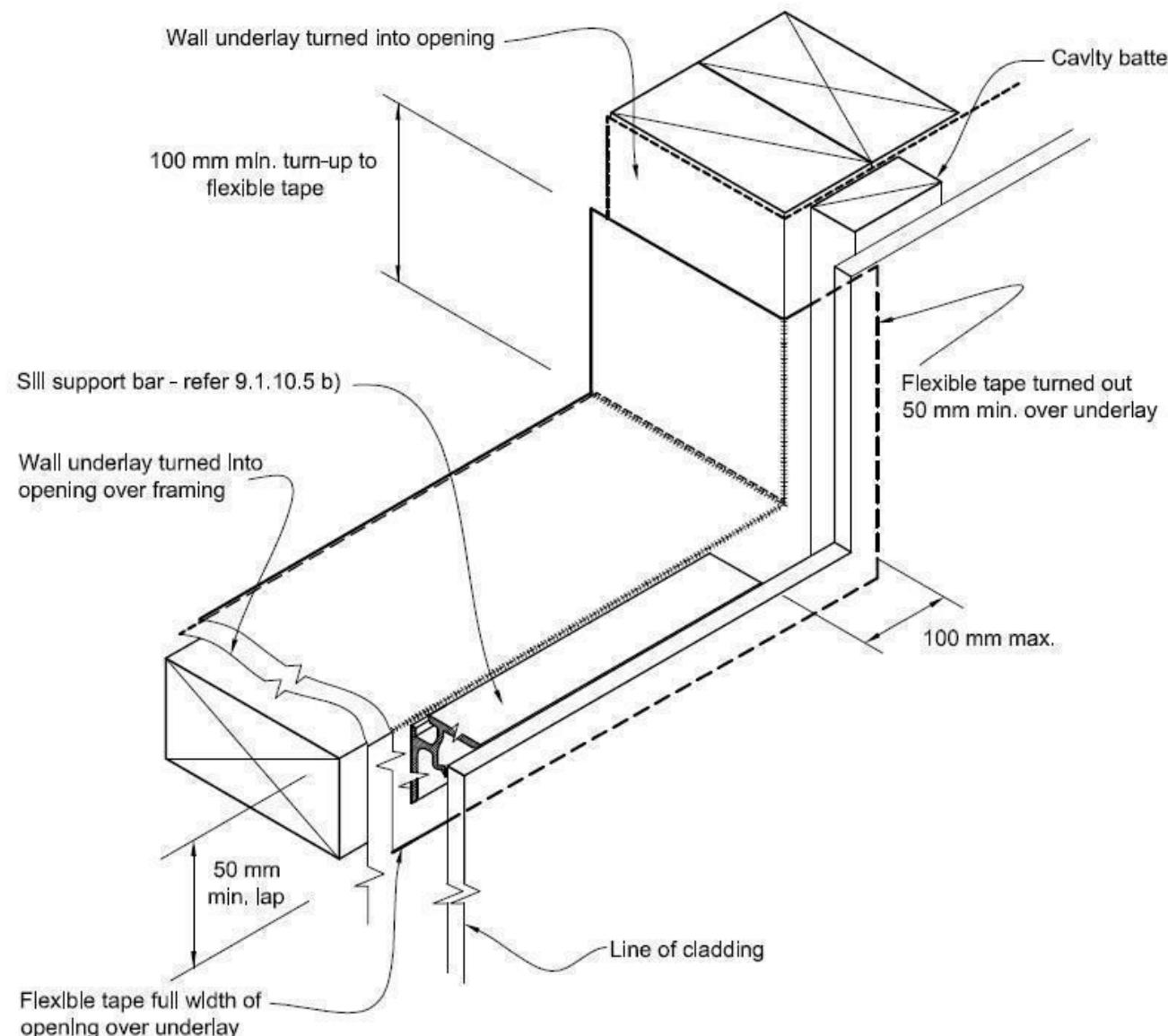


Figure 72B: General window and door opening with drainage cavity
Paragraphs 9.1.5, 9.1.9.3, 9.1.10.2, Figures 73C, 76, 85, 86, 91, 99, 116 and 128

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



Where windows extend to soffit, flashing tape is to be fixed prior to ribbon board being fixed to framing.

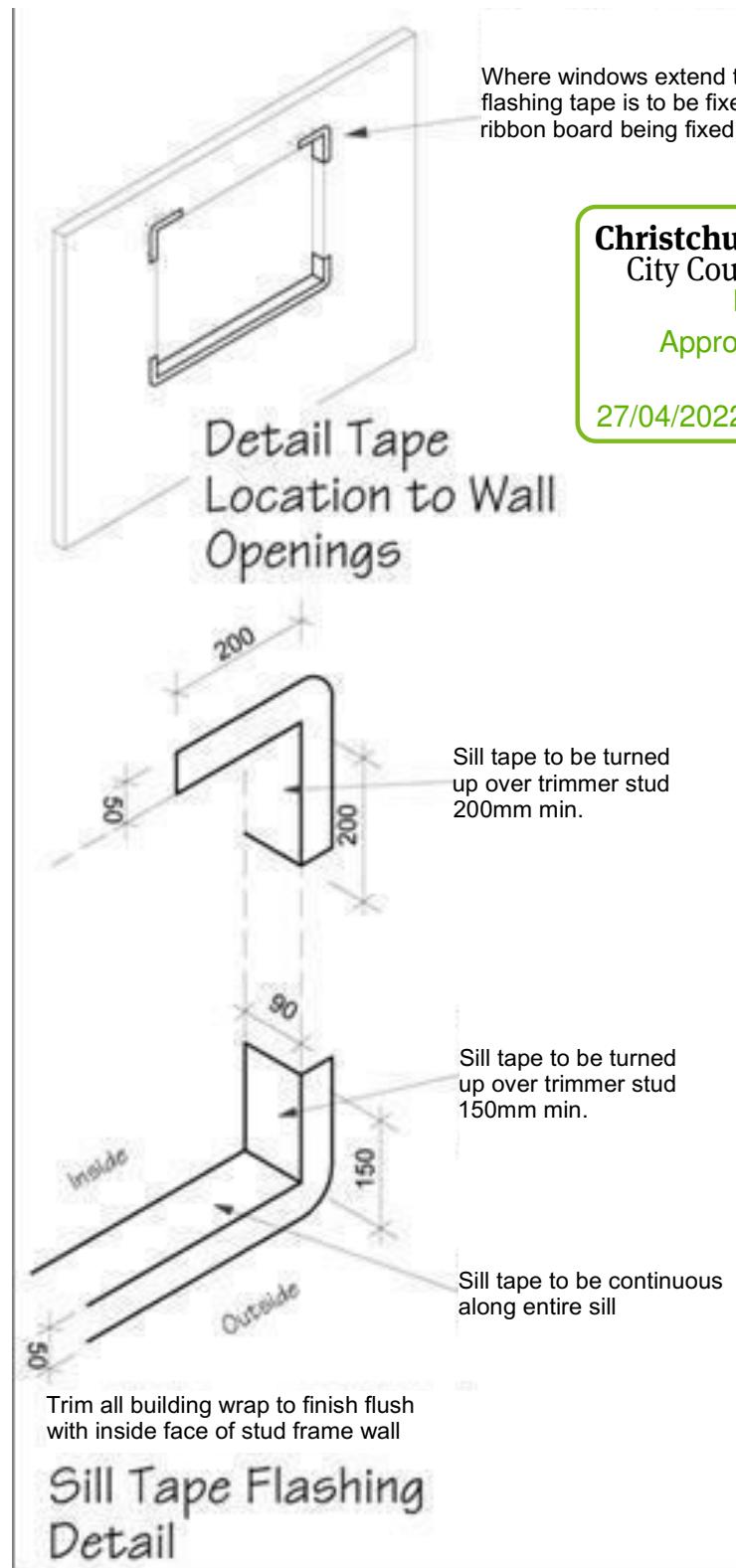
Christchurch City Council
BCN/2022/2124

Approved Building Consent Document

27/04/2022

Page 16 of 29

Laird, David



All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275

Original Plan:
'Rifleman 142'

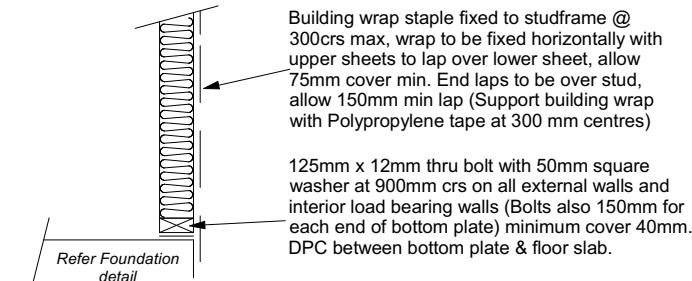
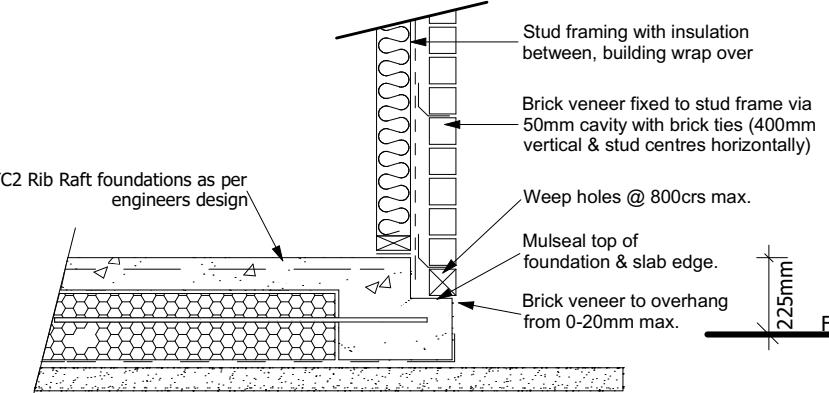
Sheet Name:
CONSTRUCTION DETAILS

Sales: D Ryan Drawn: J Rana QS: T de la Llama Print Date: 13/12/2021 Scale: As Shown @ A3

CONSENT PLANS

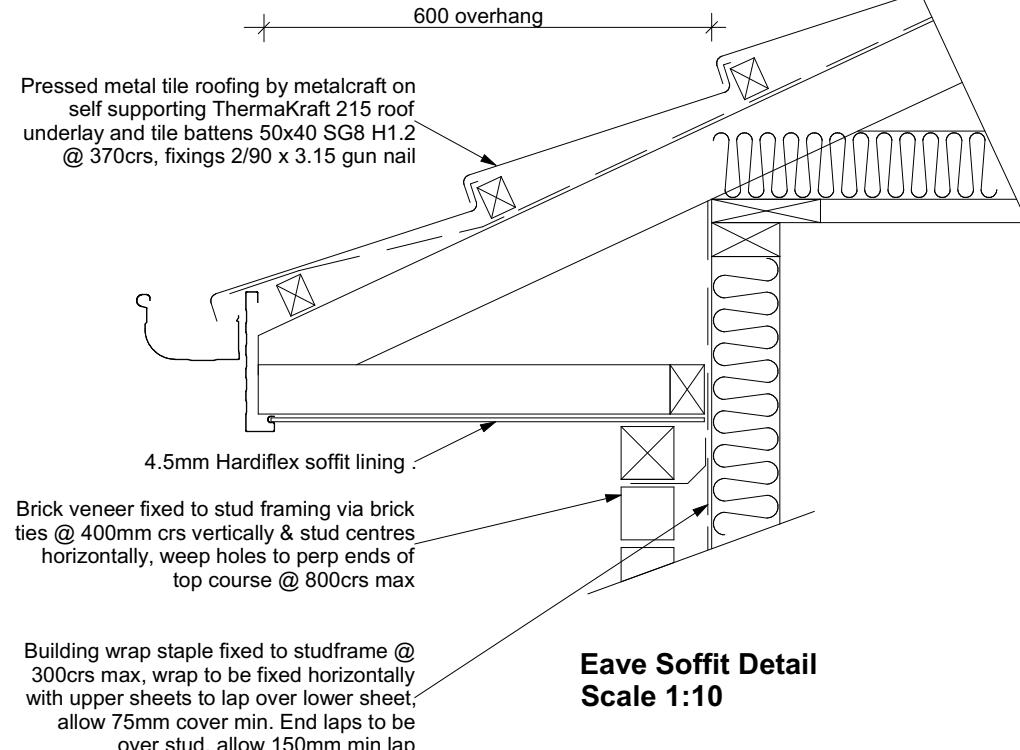
No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.:
16
of 23 sheets

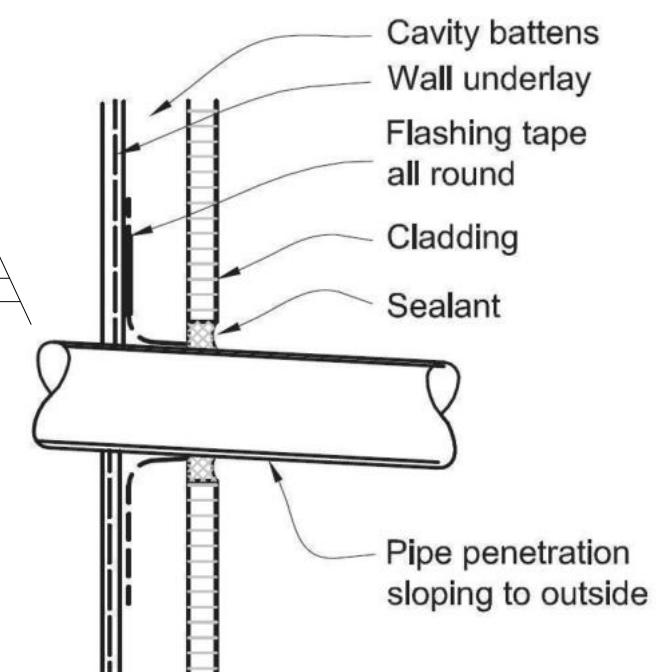


Stud framing to slab
Scale 1:20

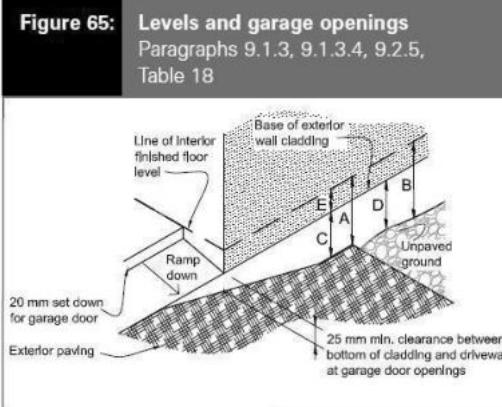
Brick Veneer Foundation
Scale 1:20



Eave Soffit Detail
Scale 1:10

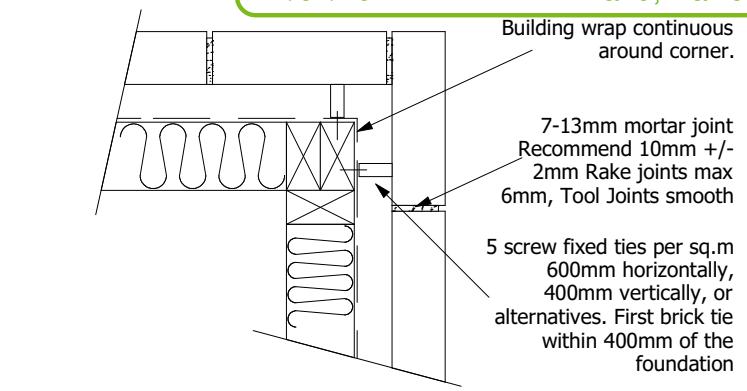


(a) CAVITY WITH FLASHING TAPE

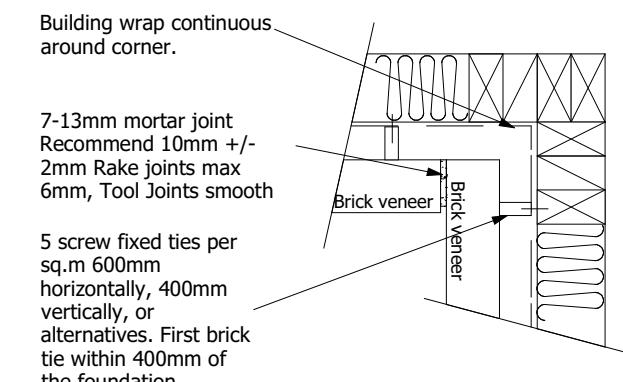


Minimum clearances (mm)	Masonry veneer		Other claddings		
	A	B	A	B	C
Concrete slab	100	150	150	225	100 175 50
Timber floor Refer Note 1)			100	175	502)

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



Brick Veneer External Corner Detail
scale 1:5



Brick Veneer Internal Corner Detail
scale 1:5

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275

Original Plan:
'Rifleman 142'

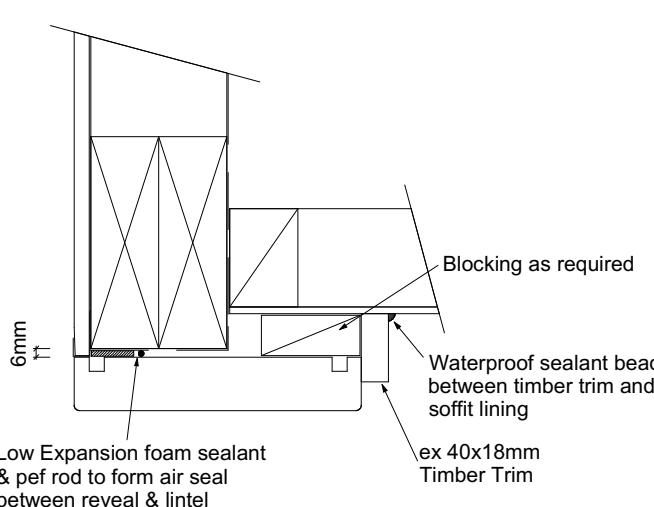
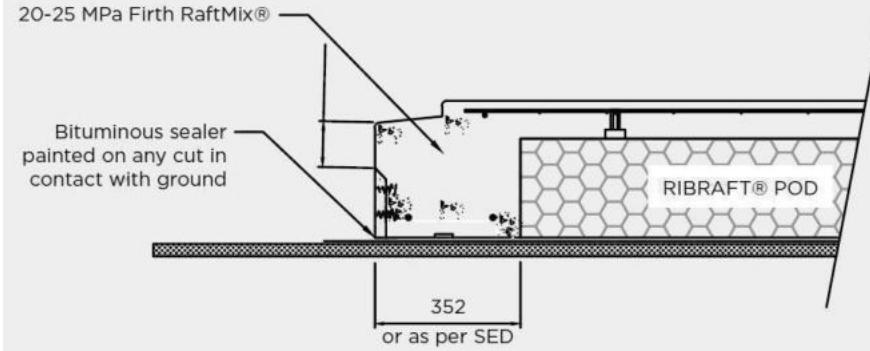
Sheet Name:
CONSTRUCTION DETAILS

CONSENT PLANS

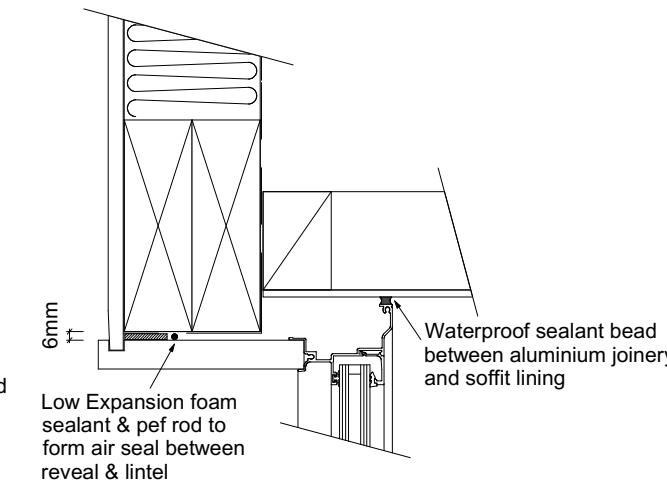
No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.:
17
of 23 sheets

GARAGE DOOR STOP CONSTRUCTION DETAIL



Garage Door Head to Soffit Detail
Scale 1:5



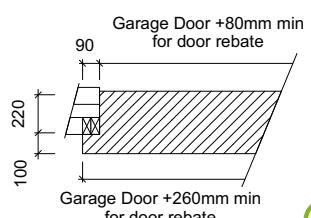
Window Head to Soffit Detail
Scale 1:5

9.1.10.8 Attachments for windows and doors

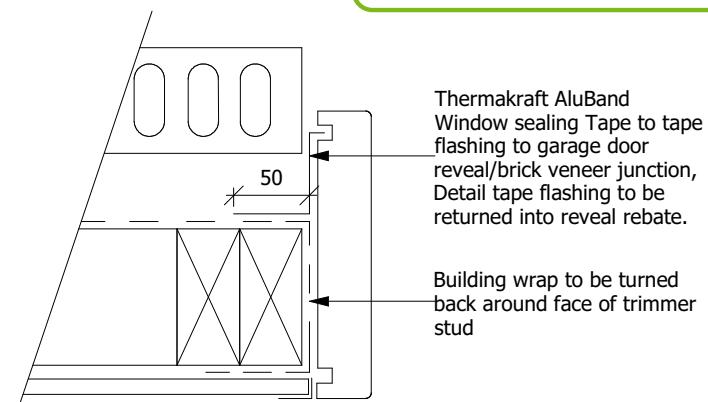
Install windows and doors using pairs of minimum 75 x 3.15 galvanised jolt head nails or 8 gauge x 65 mm stainless steel screws, through reveals into surrounding framing at:

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

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

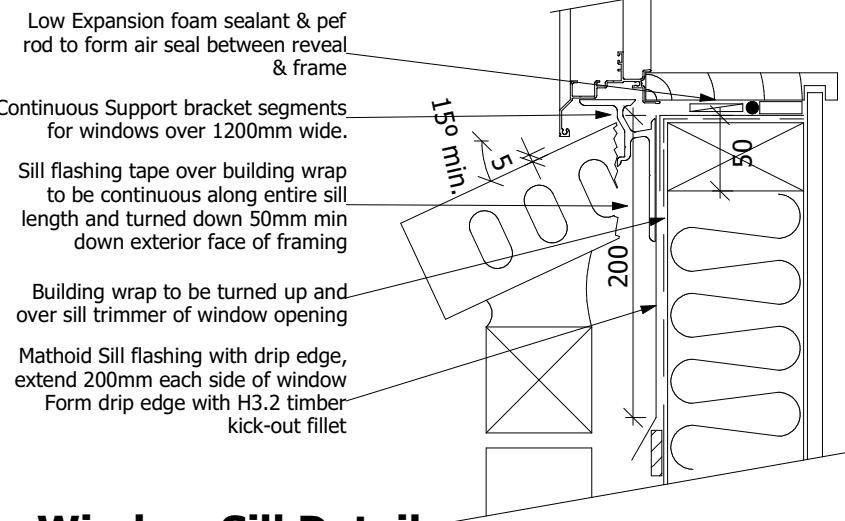


Christchurch City Council BCN/2022/2124
Approved Building Consent Document
27/04/2022 Laird, David



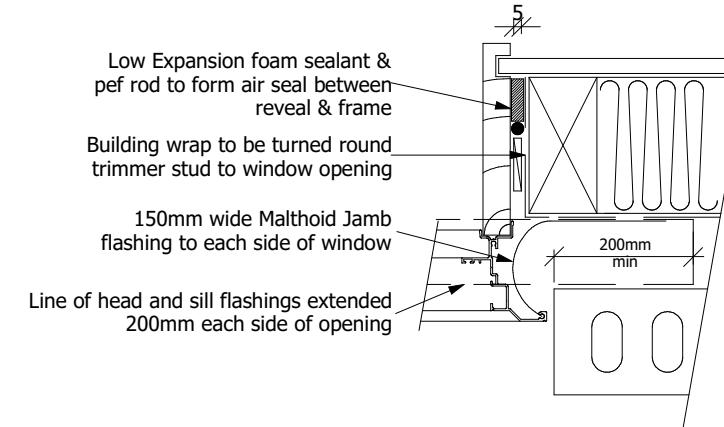
Garage Door Jamb Detail

scale 1:5



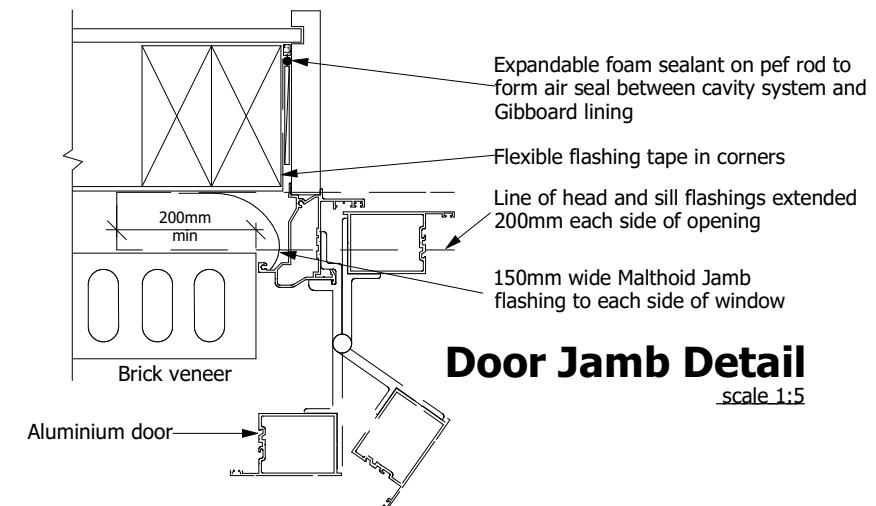
Window Sill Detail

scale 1:5



Window Jamb Detail

scale 1:5



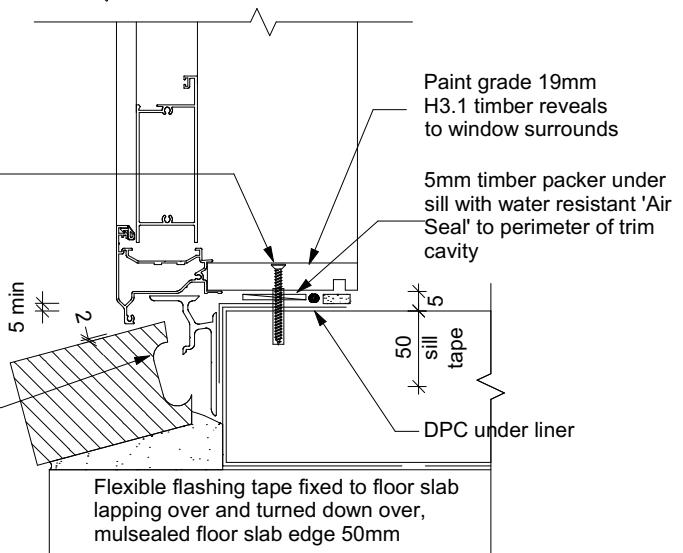
Door Jamb Detail

scale 1:5

50mm screw fixing to window sill, no more than 150mm from all corners and then 450crs spacings, allow for extra fixings at mullions, transoms & door strikers, all screws driven below sill surface and filled and sanded prior to painting

Continuous ventilated support bar fixed to sill plate with 50mm screws, top face of bar to be fitted level & 5mm min above sill plate

Coat bricks, if flat, with waterproofing agent



Door Sill to Slab Detail

scale 1:50

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275

Original Plan:
'Rifleman 142'

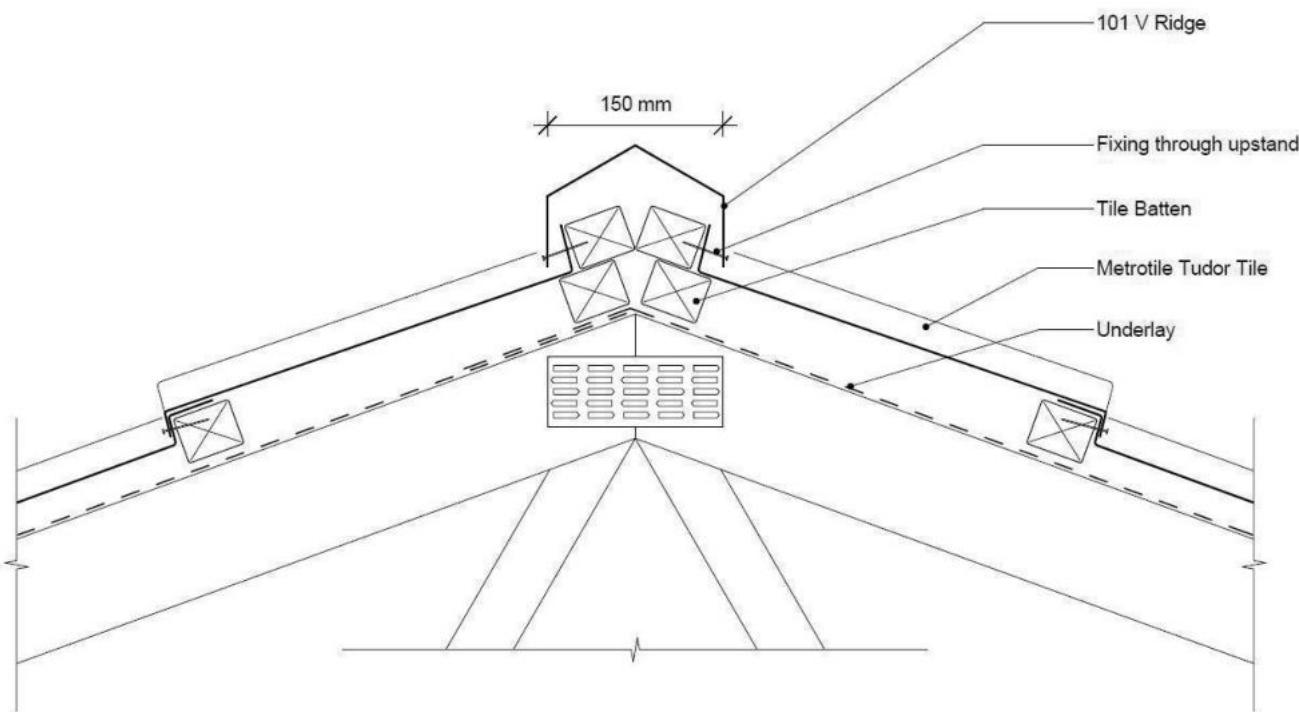
Sheet Name:
CONSTRUCTION DETAILS

CONSENT PLANS

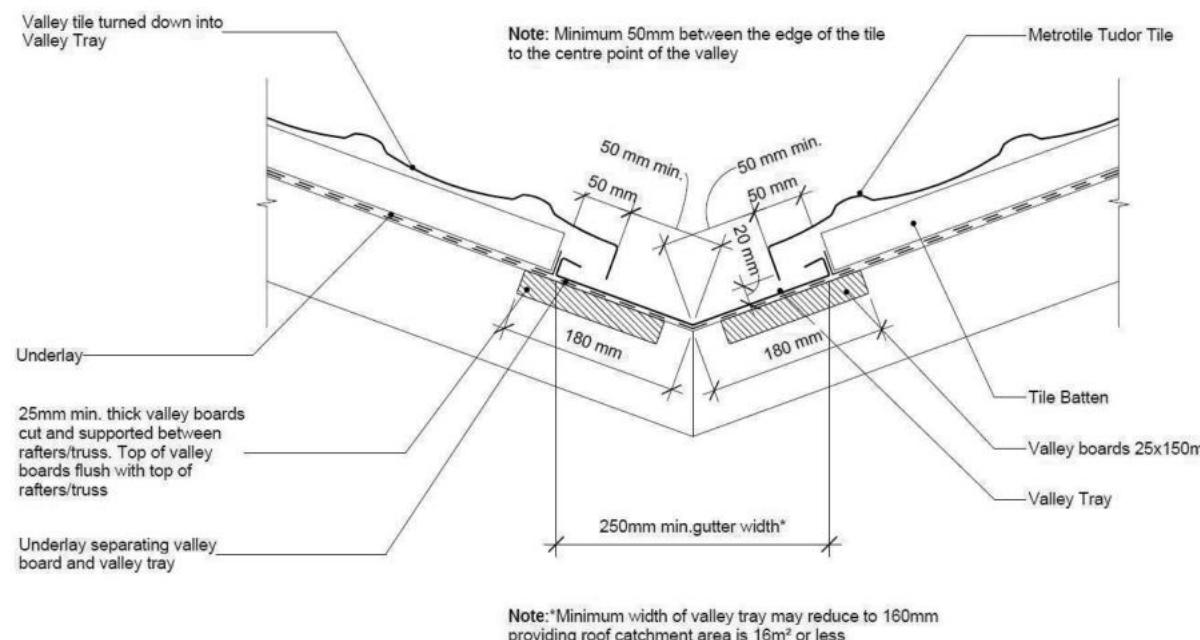
No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.:
18

of 23 sheets



Metal Tile Angle Ridge Detail
Scale NTS



Metal Tile Valley Detail
Scale NTS

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275

Original Plan:
'Rifleman 142'

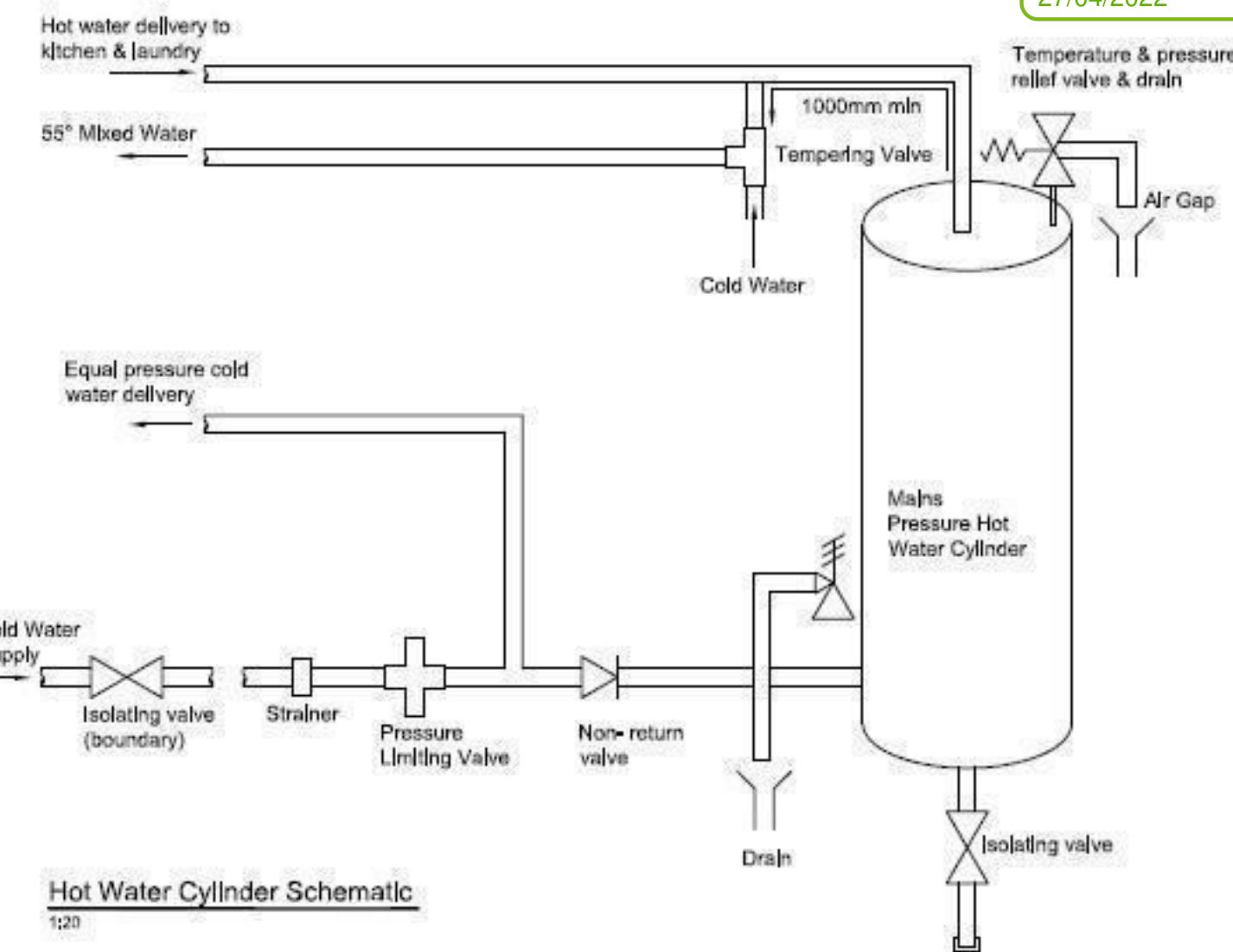
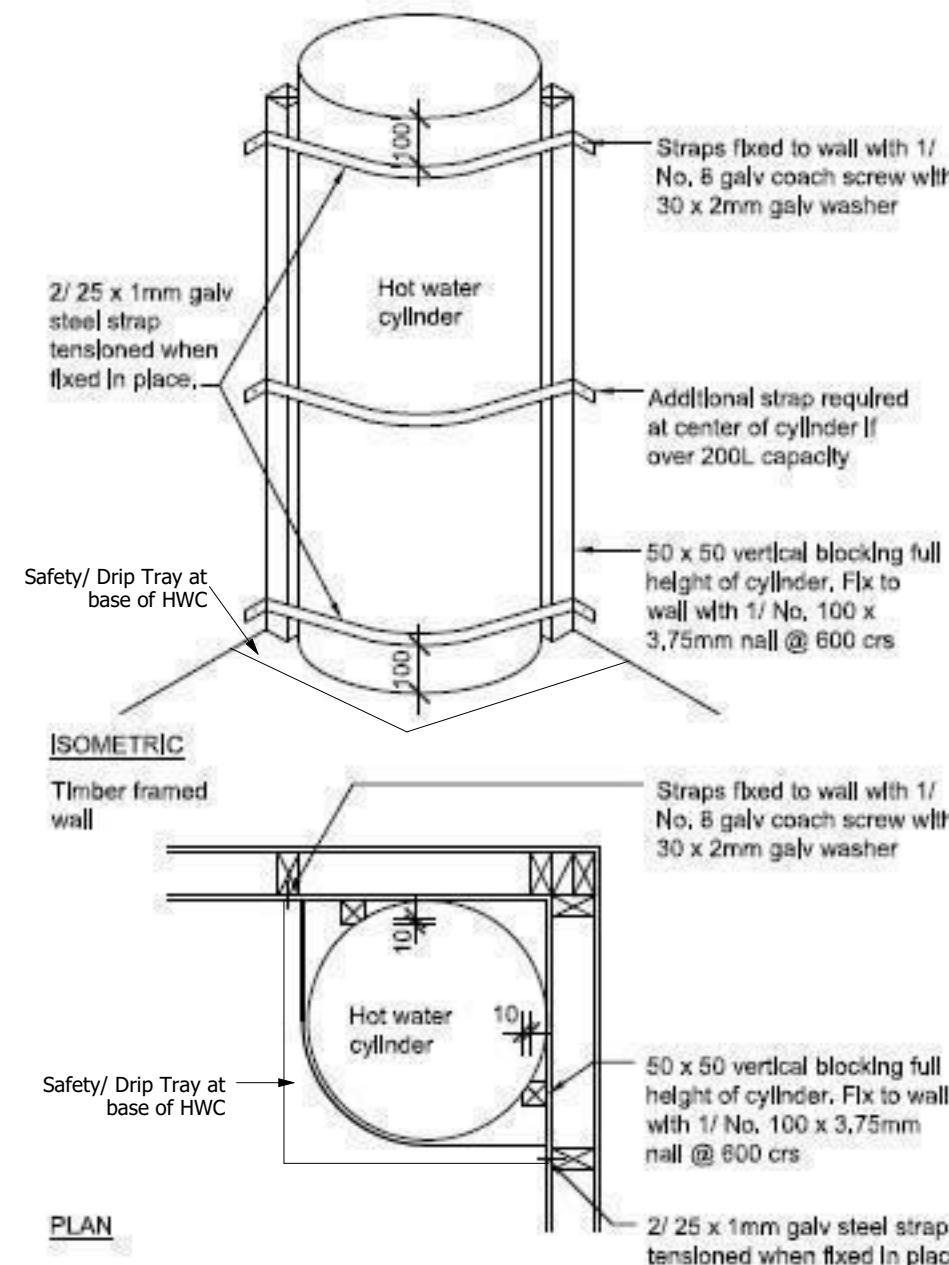
Sheet Name:
CONSTRUCTION DETAILS

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.:
19

of 23 sheets



All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275

Original Plan:
'Rifleman 142'

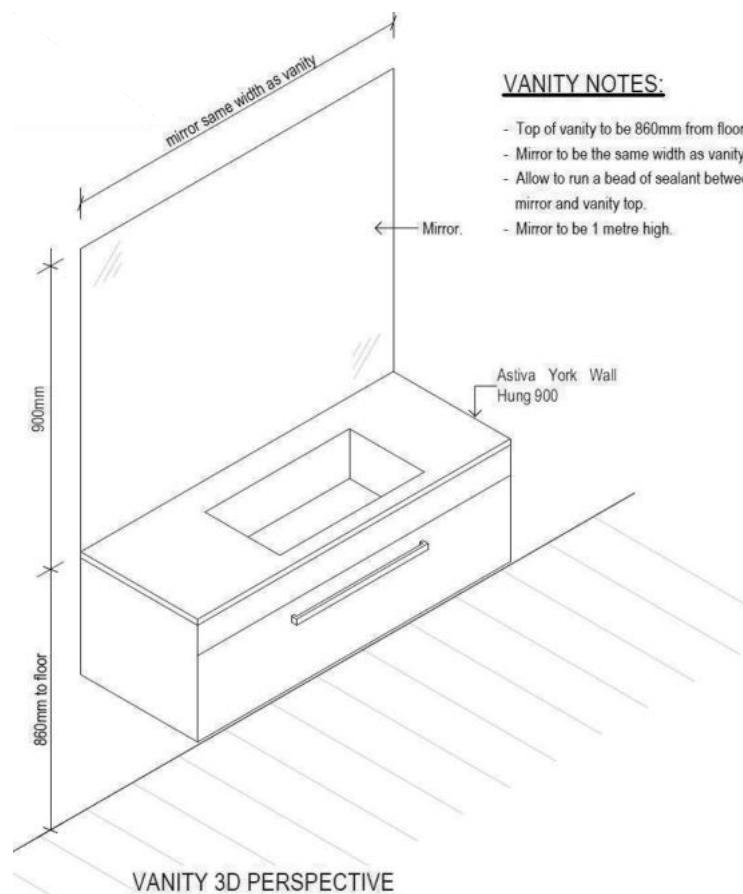
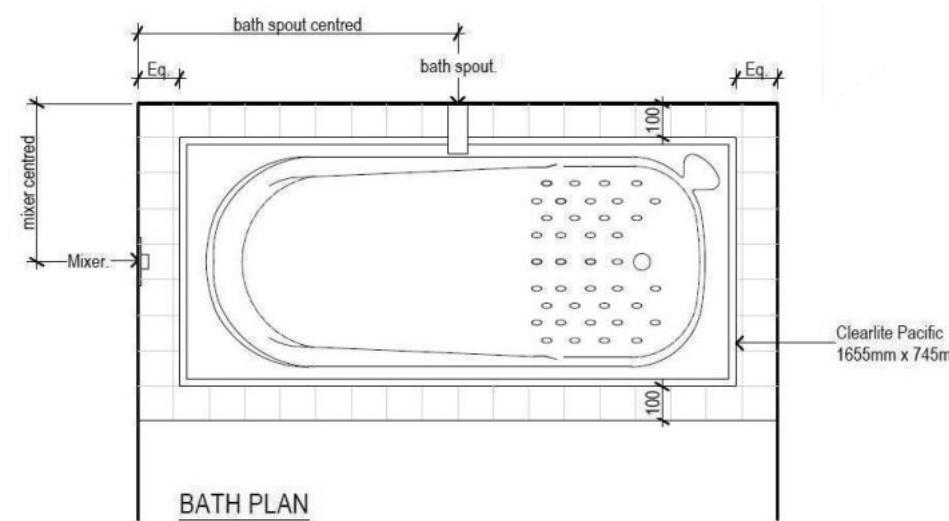
Sheet Name:
CONSTRUCTION DETAILS

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

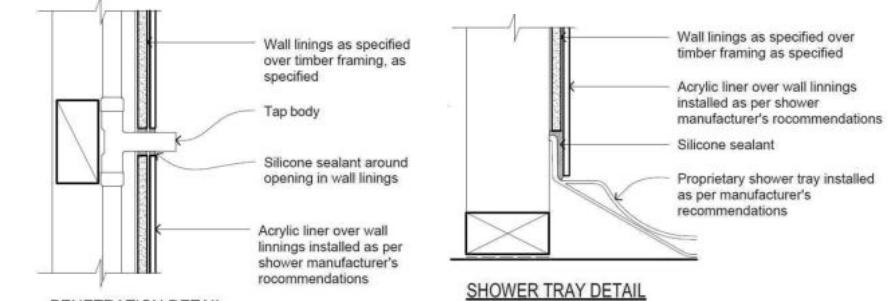
Sheet No.:
20

of 23 sheets

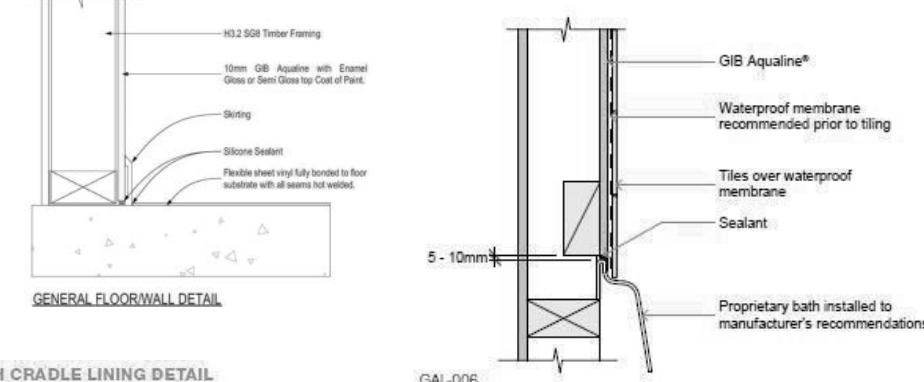


VANITY NOTES:

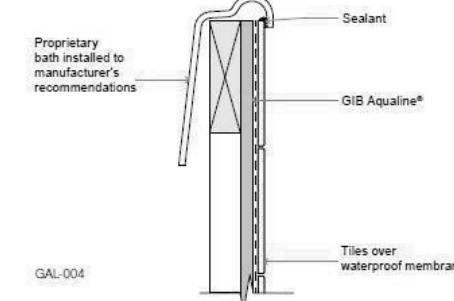
- Top of vanity to be 860mm from floor.
- Mirror to be the same width as vanity.
- Allow to run a bead of sealant between mirror and vanity top.
- Mirror to be 1 metre high.



BATH LINING JUNCTION



BATH CRADLE LINING DETAIL



All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275
Original Plan:
'Rifleman 142'
Sheet Name:
BATHROOM DETAILS
Sales: D Ryan Drawn: J Rana QS: T de la Lama Print Date: 13/12/2021 Scale: NTS @ A3

CONSENT PLANS

No.	Date:	Reason:
1	BC ISSUE	17.11.21

Sheet No.: **21**
of 23 sheets

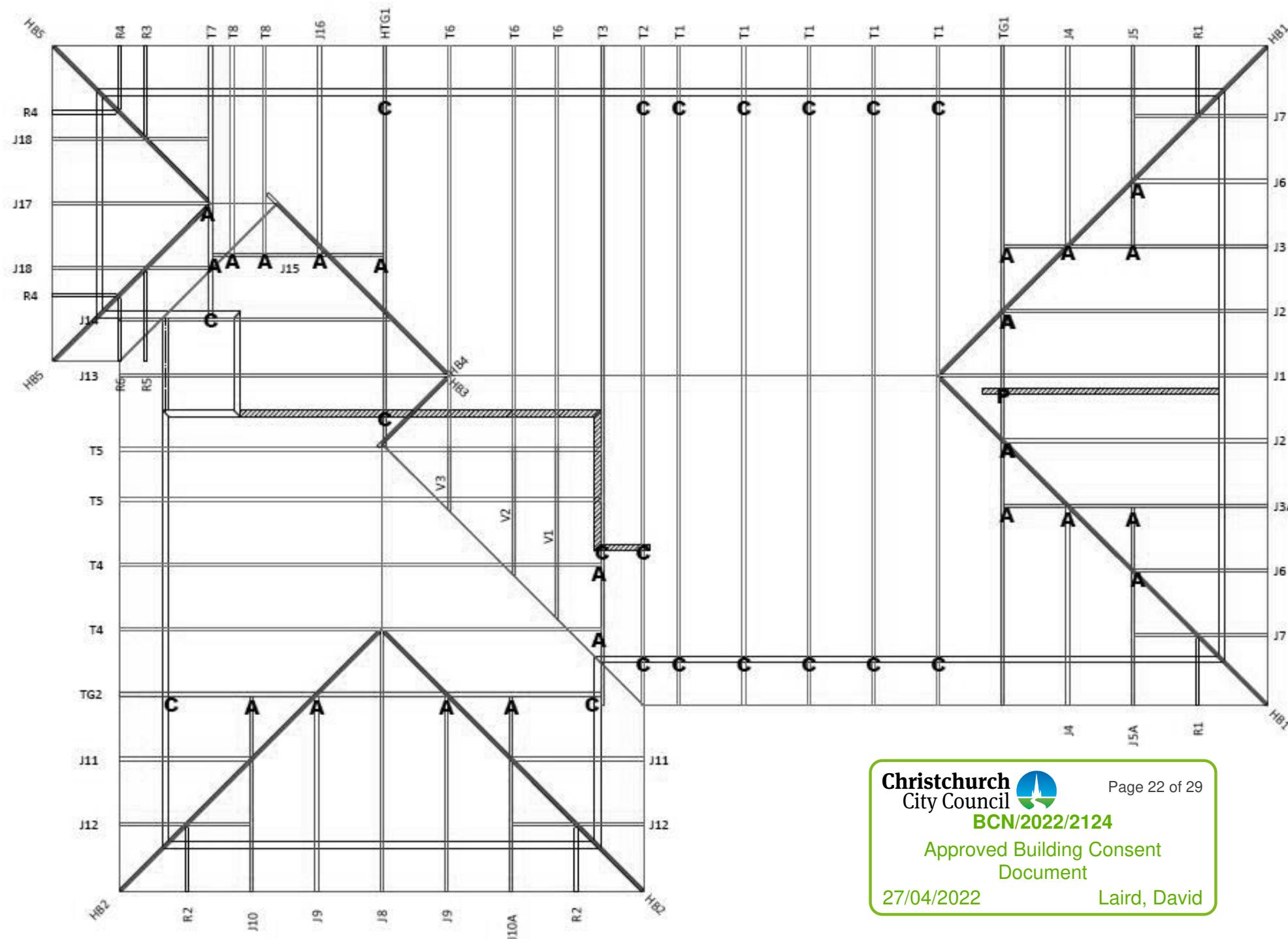
BUILDABLE CONSENT LAYOUT



For valley/saddle truss fixing unless stated otherwise use a pair of wire 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

Your Building Partner



PLEASE NOTE: 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.

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443

P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:	Original Plan:	Sheet Name:
141275	'Rifleman 142'	TRUSS DESIGN
Sales: D Ryan	Drawn: J Rana	QS: T de la Llama
		Print Date: 13/12/2021 Scale: NTS @ 1

CONSENT PLANS

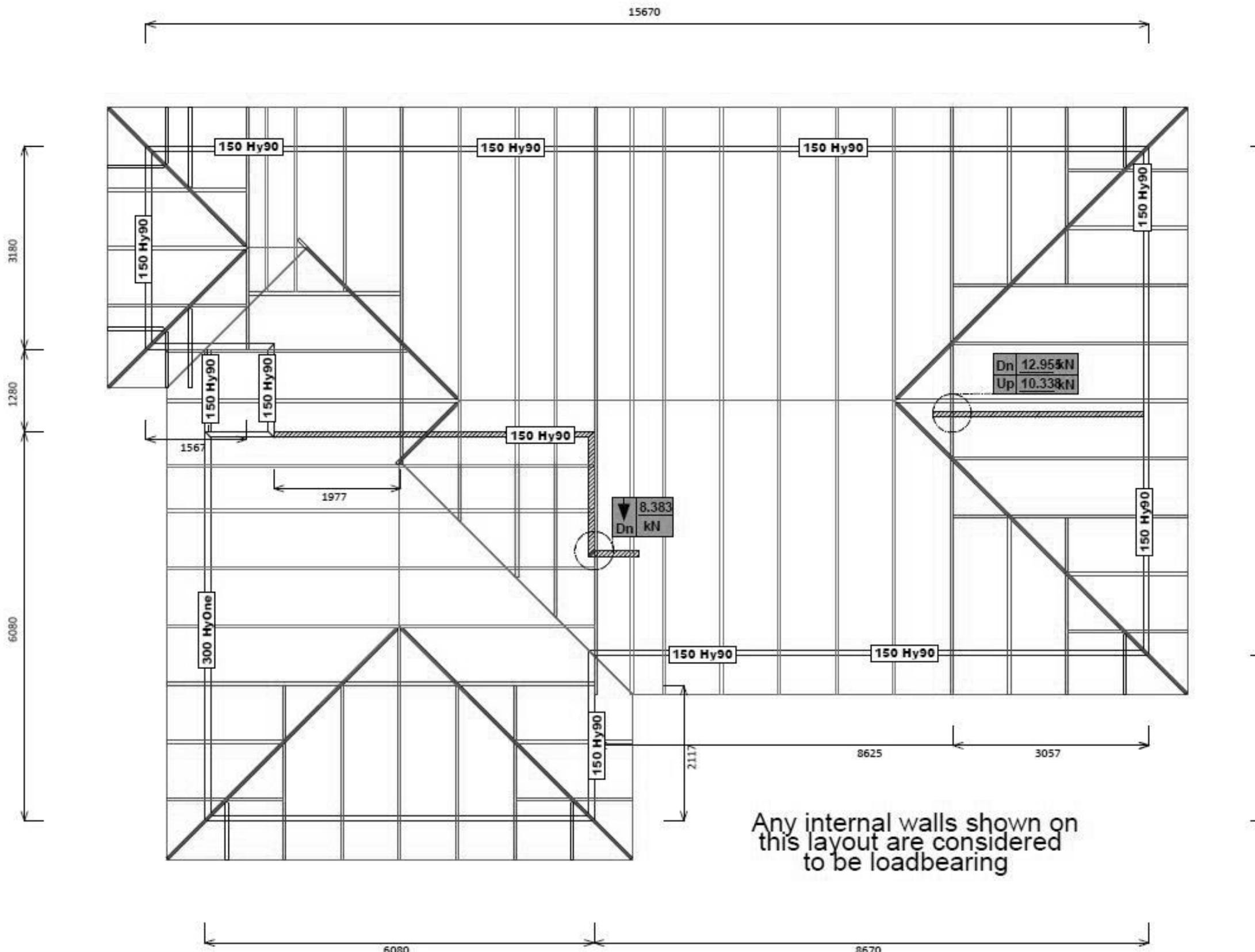
Sheet No.:
22

BUILDABLE CONSENT LAYOUT

CARTERS

Your
Building Partner
Christchurch
City Council
BCN/2022/2124

Page 23 of 29



Any internal walls shown on
this layout are considered
to be loadbearing

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

All dimensions are to be checked and confirmed prior to any construction
Plans are to be read in conjunction with Specifications and all supporting documentation



TKR Homes Ltd.
31 Watts Road, Sockburn
PO BOX 11 351
Christchurch 8443
P: +64 3 342 7788

These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.

Nutbrown Family Trust
Lot 14 Belfast Subdivision,
Christchurch

Job Number:
141275

Original Plan:
'Rifleman 142'

Sheet Name:
TRUSS DESIGN

Sales: D Ryan	Drawn: J Rana	QS: T de la Lama	Print Date: 13/12/2021	Scale: NTS @ A3
---------------	---------------	------------------	------------------------	-----------------

CONSENT PLANS				
No.	Date:	Reason:		
1	BC ISSUE	17.11.21		

Sheet No.:
23

of 23 sheets





Proposed New Dwelling

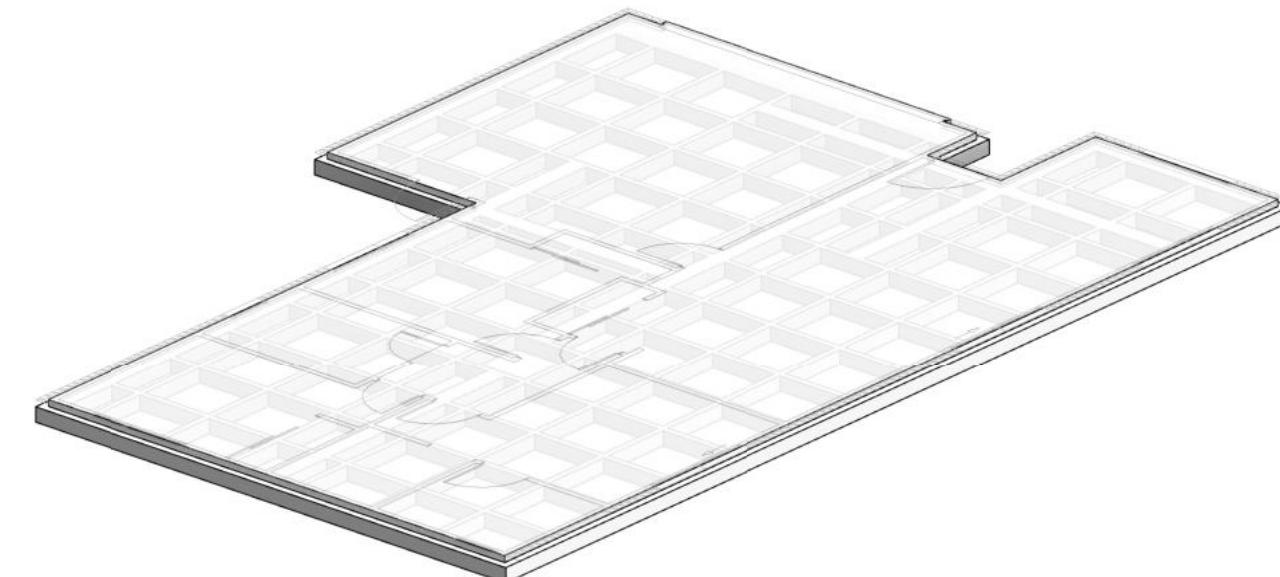
Lot 14 Belfast Development, Christchurch

RIBRAFT DRAWINGS

File Number 21008.213

Sheet No.	Rev	Date Issued	Sheet Title	Issue Register
S1	-	2021-11-11	General Notes	
S2	-	2021-11-11	RibRaft Foundation Plan	
S3	-	2021-11-11	Typical Foundation Sections	
S4	-	2021-11-11	Typical Foundation Sections	
S5	-	2021-11-11	Typical Services Penetration Details	

Date Description
2021-11-11 Issued for Consent



Disclaimer: All reports, advice, drawings and other deliverables of any kind provided by the consultant ("advice") are, unless agreed otherwise in writing by the consultant, prepared exclusively for the client's use for the purposes stated in the scope of services in relation to the project. Unless the consultant's prior written consent has been obtained, the client shall not use or rely on the advice (in whole or part) for any other purpose or disclose any of the advice to a third party. The consultant shall have no liability if any of the advice is used or relied on by the client for any unauthorised purpose or by any unauthorised third party.

A U C K L A N D - P H: (0 9) 3 7 7 7 9 5 5 ■ C H R I S T C H U R C H - P H: (0 3) 3 6 6 7 9 5 5 ■ N E L S O N - P H: (0 3) 3 6 6 7 9 5 5 ■ Q U E E N S T O W N - P H: (0 3) 3 6 6 7 9 5 5 ■ E - M A I L: O F F I C E @ E N G C O . N Z ■ W W W. E N G C O . N Z ■

GENERAL

- These drawings are not to be used for construction until the plan (sheet S2) is signed by the main contractor.
- Do not scale. Refer any discrepancies to the Architect.
- These drawings are to be read in conjunction with the Architects drawings.
- The builder shall be responsible for any damage to works during construction.
- The sand blinding layer shall be 20mm min. & 50mm max. to aid levelling & to prevent rocking of pods.
- Vapour barrier to be 0.25mm (250 micron) polythene complying with NZS 4229 / NZS 3604 .
- Finished ground level adjacent to slab to be protected from wind, water erosion and undermining.

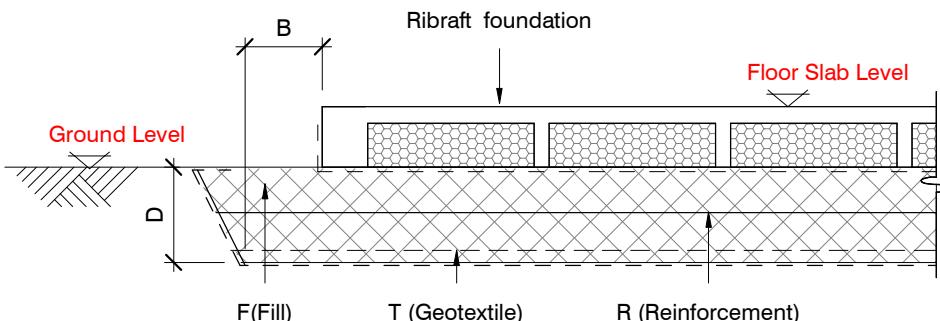
FOUNDATIONS

- For assumed allowable bearing capacity refer to calculations/installer guide. Unless otherwise noted in documentation.
- If there is any doubt about the integrity of the material on which the slab is to be founded - Supervising Engineer must be notified immediately.

GEOTECHNICAL REFERENCE:

Refer: Engeo report - Lot 14
Ref. No: 19120.000.001_14
Dated: 4 November 2021

Geotech is Lot specific

**INSPECTIONS**

Inform ENGCO consulting 48 hours in advance of any inspections required for code compliance certification.
Contact ENGCO - Ph. 03 366 7955 & quote ENGCO Ref. No. 21008.2013

INSPECTIONS REQUIRED

- Confirm bearing at excavation - by others
- Contractor to supply (4) N.D> Tests at finished compacted surface - if depth of fill is greater than 400mm.
- Pre-pour of slab - by ENGCO

BUILDING PLATFORM TABLE:	
B	500mm
D	Remove organic topsoil across building platform, approximately 300mm b.g.l
T	N/A
R	N/A
F	AP 40/AP65 fill. - 95% Dry Density. Compact in 200mm layers (max.)

Refer Architectural drawings for Finished Floor Level

CONCRETE

- All workmanship & materials to conform to NZS 3109, NZS 4210 & local authority regulations.
- Minimum covers to reinforcement:
 - Exposed to earth - 75mm.
 - Protected by vapour barrier - 50mm.
 - Not exposed to weather except for a brief period during construction - 25mm.
- No holes or chases other than those specified are to be made in the slab without the approval of Engco.
- All concrete shall have 20mm nominal maximum aggregate size & 120mm slump & shall comply with NZS 3109.
- All concrete to be mechanically vibrated & carefully worked around the reinforcement & into the corners of the formwork.
- Ribraft make-up to be

100mm Floor Slab - 220mm pods
(25MPa TC2 Dramix 4D 80/60 Fibre mix Concrete)
G500 E SE62 Ductile mesh on 65mm chairs.

The design Fibre mix shall be supplied so that the residual flexural tensile stresses $f_{r,1}$ & $f_{r,4,k}$ shall be 1.5 MPa & 1.0 MPa respectively.

REINFORCEMENT

- All reinforcing shall be New Zealand sourced and conform to AS/NZS 4671:2001 in grade 300 or grade 500E.
- All bends to be made cold without fracture.
- All reinforcing shall be deformed type unless otherwise stated.
- Grade 500E deformed bars shall be designated 'H', Grade 300 deformed bars shall be designated 'D' and Grade 300 round bars shall be designated 'R'.
- Minimum bar splice 720mm. (or unless otherwise noted).
- All reinforcement to be fixed & tied where necessary in its specified position.
- Welding of reinforcing is not permitted.
- Spacers:
 - Edge at 1200mm crs. (one on edge & two on corners, typically).
 - Internal one on each side of pod (typically).
- All mesh shall comply with AS/NZS 4671 & shall conform with elongation requirements exceeding 10%.
- All mesh shall lap a minimum of 250mm (end extensions not included in lap length).

Christchurch
City Council

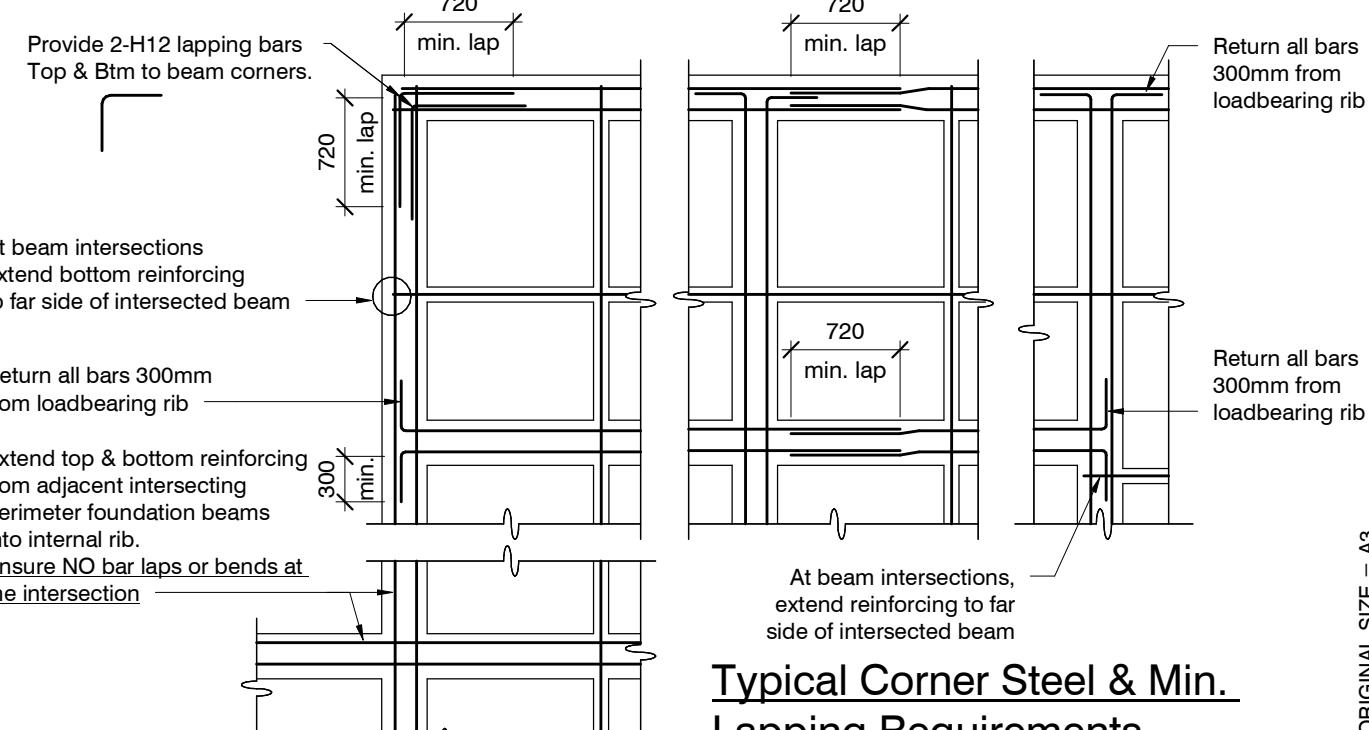
BCN/2022/2124

Approved Building Consent
Document

27/04/2022

Laird, David

Page 25 of 29



Typical Corner Steel & Min. Lapping Requirements

N.T.S.

revisions	-	2021-11-11	Issued for Consent

COPYRIGHT: THE ENGINEERING COMPANY LTD. All rights reserved

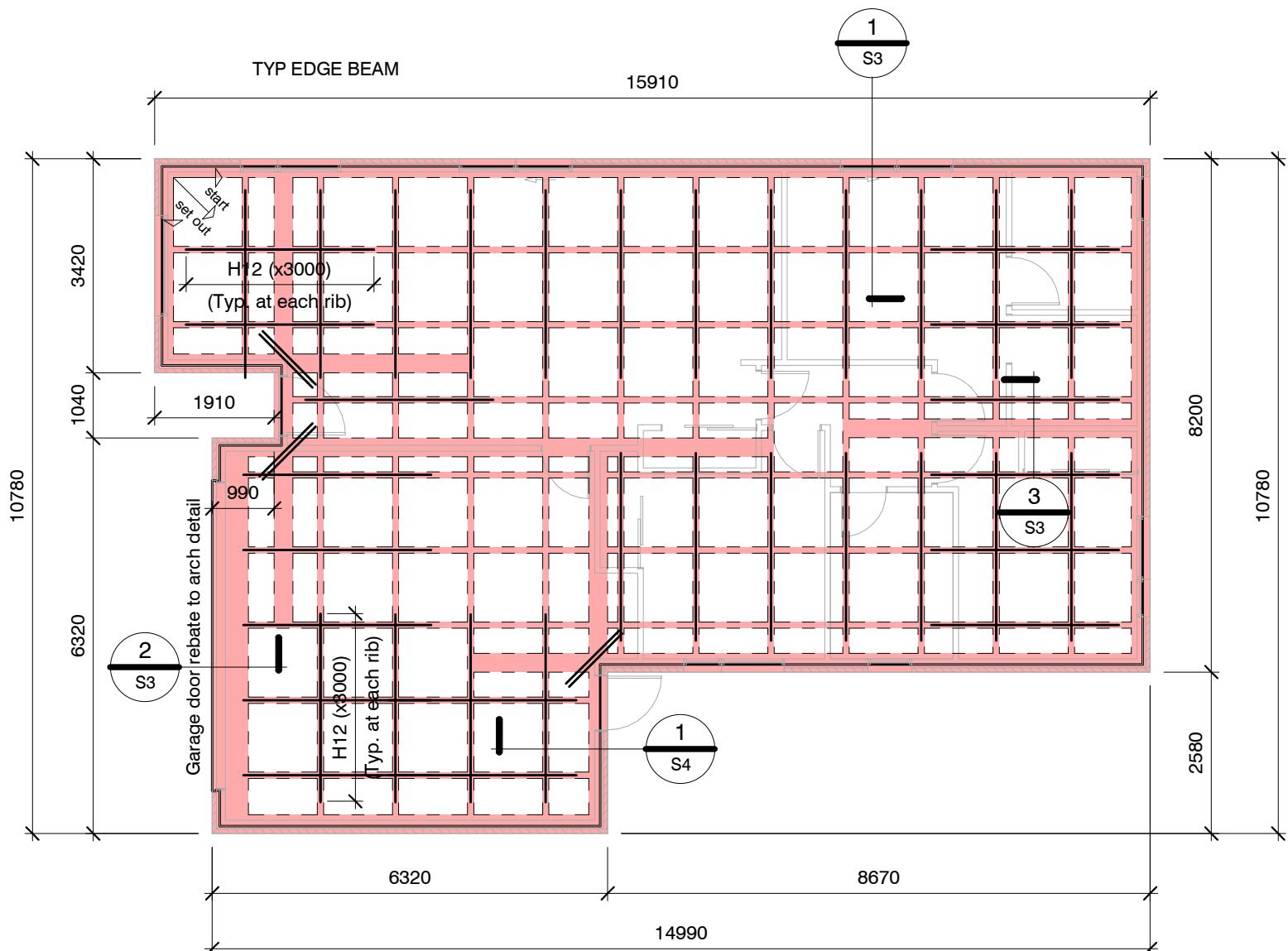


Proposed New Dwelling

Lot 14 Belfast Development, Christchurch

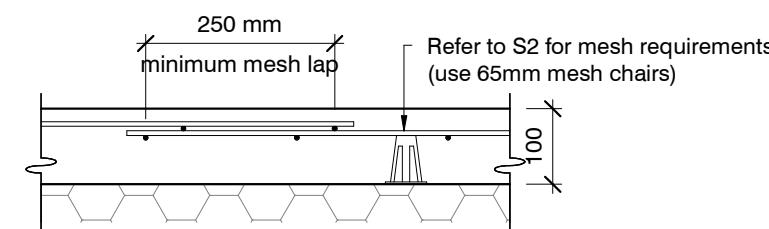
General Notes

design	JFR	file	21008.213
drawn	LB	dwg	S1
appvd	MC	rev.	-
date	2021-11-10		



RIBRAFT FOUNDATION PLAN

1 : 100



TYPICAL MESH LAP & CHAIR REQUIREMENTS

1:10

COPYRIGHT: THE ENGINEERING COMPANY LTD. All rights reserved



Proposed New Dwelling
Lot 14 Belfast Development, Christchurch

RibRaft Foundation Plan

revisions

-	2021-11-11	Issued for Consent

design JFR
drawn LB
appvd MC
date 2021-11-10

file 21008.213
dwg S2
rev. -

GENERAL NOTES:

Locations shown of internal floor beam thickenings are indicative only. It shall be the responsibility of the Contractor to ensure that they are located centrally under the load bearing walls to which they pertain.

Under no circumstance should pipework for services be run longitudinally in 100mm ribs. Similarly they should not be run along perimeter foundations nor internal floor beam thickenings

Vertical or horizontal penetrations through the foundation edge beam or floor beam thickenings must be made through the middle third of the member. Vertical penetrations should not be made through 100 mm ribs.

Refer to Architects drawings for floor slab, set downs, steps, rebates, holding down bolts, cast-in componentry and the like.

KEY:

(2) H12 (x1200)
at 200 crs.

1100 x 1100 pod
(typ.)

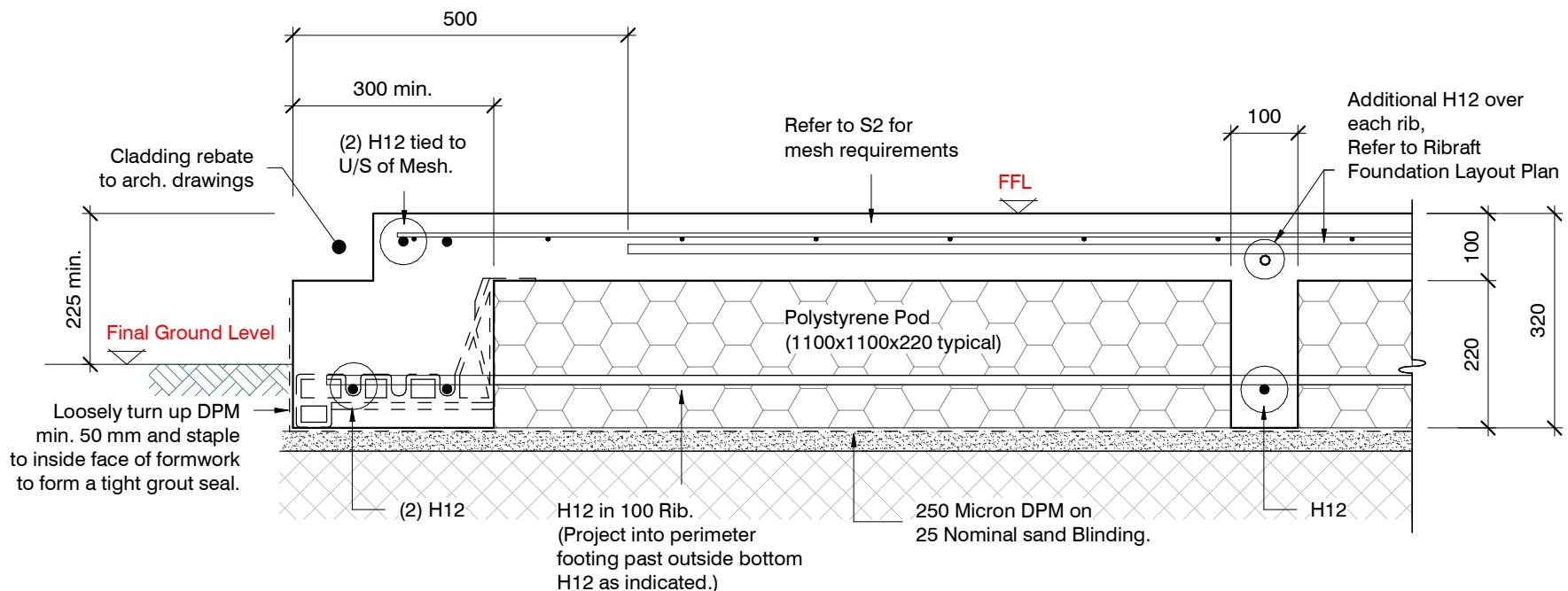
100mm Floor Slab - 220mm pods
(25MPa TC2 Dramix 4D 80/60 Fibre mix Concrete)
G500 E SE62 Ductile mesh on 65mm chairs.

The design Fibre mix shall be supplied so that the residual flexural tensile stresses $f_{r,1}$ & $f_{r4,K}$ shall be 1.5 MPa & 1.0 MPa respectively.

Mesh to lap minimum 250mm,
excluding end extensions.

* 50mm shower rebate,
maintain min. slab thickness
Trim perimeter with H12.
extending 750mm past (typ.)
(or 300mm return)
Refer to Architects drawings
for setout dimensions

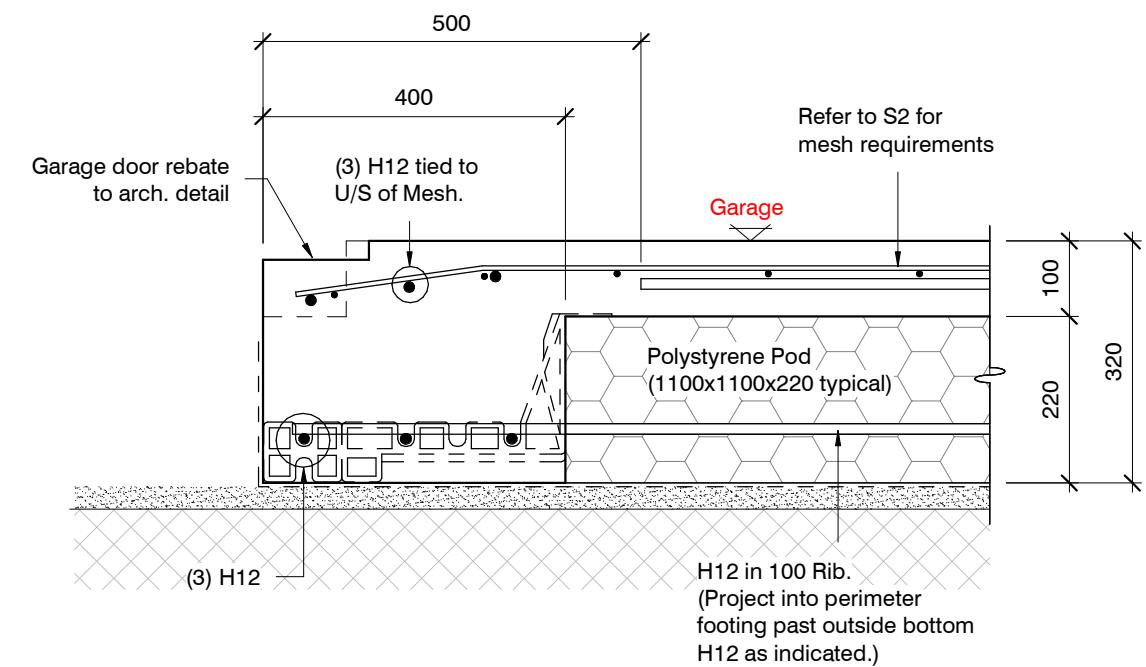
ORIGINAL SIZE = A3



SECTION 1 TYPICAL 300 WIDE EDGE BEAM

1 : 10

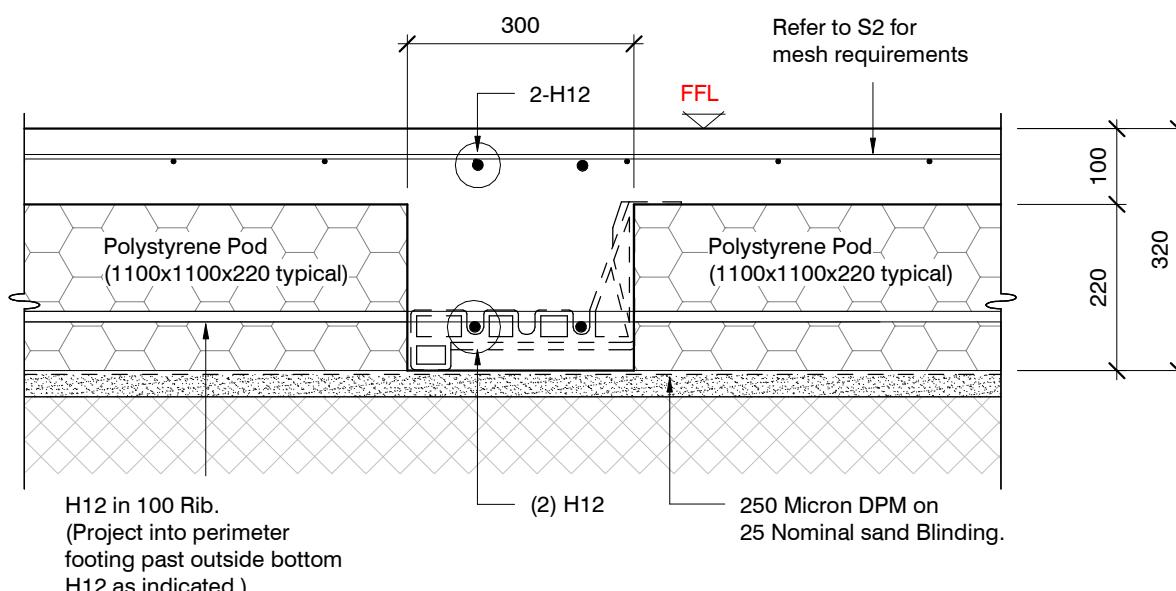
S2



SECTION 2 GARAGE DOOR REBATE

1 : 10

S2



SECTION 3 TYPICAL 300 WIDE INTERNAL BEAM

1 : 10

S2

Christchurch City Council BCN/2022/2124
Approved Building Consent Document
27/04/2022 Laird, David

ORIGINAL SIZE = A3



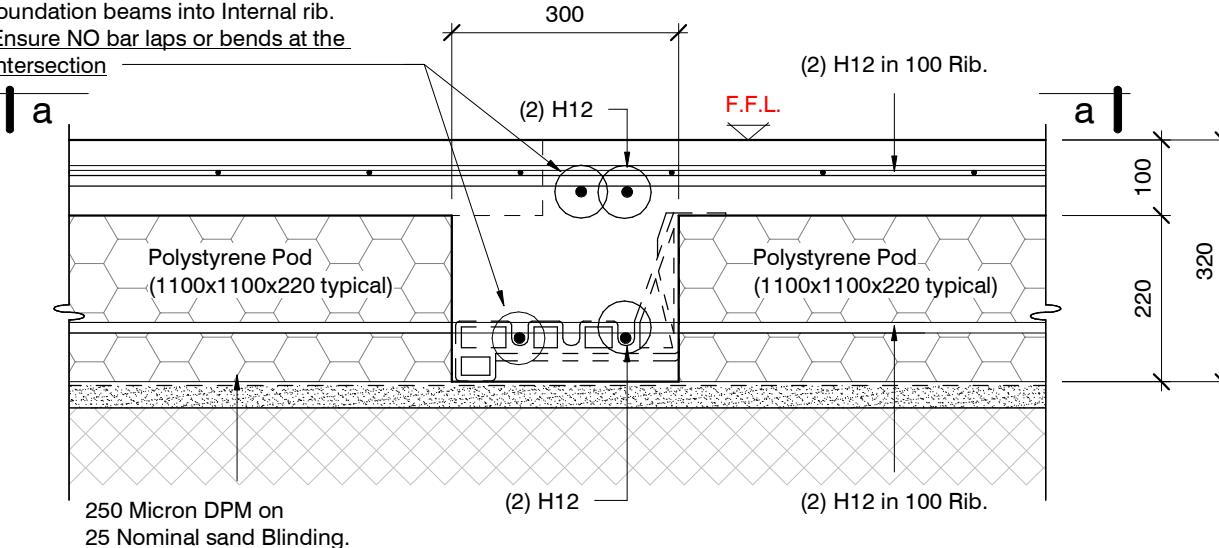
Proposed New Dwelling
Lot 14 Belfast Development, Christchurch

Typical Foundation Sections

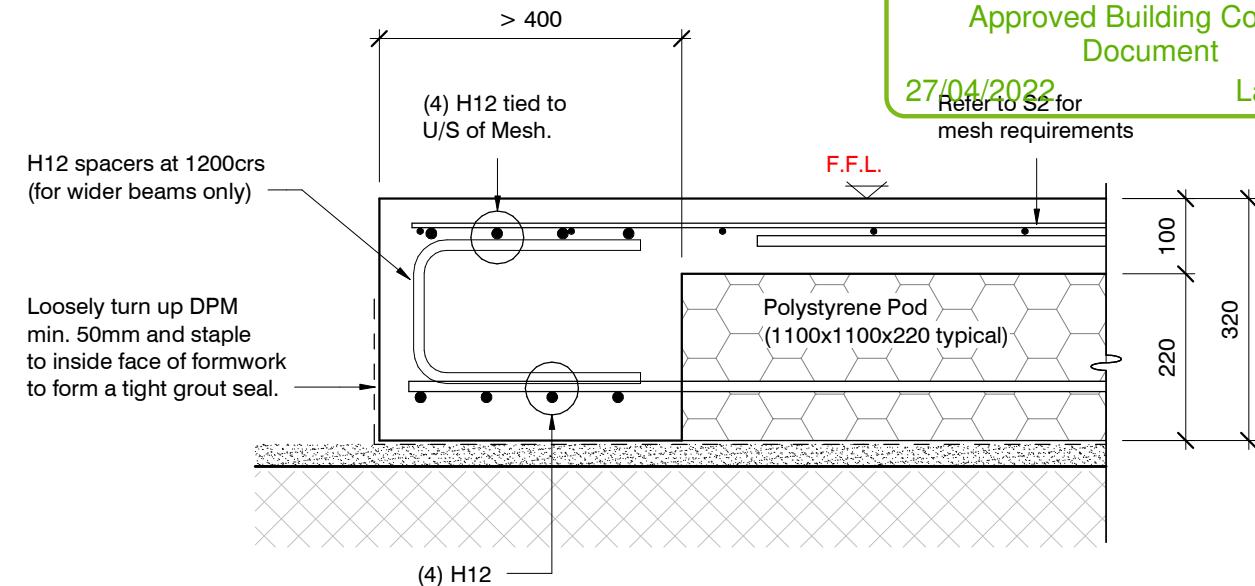
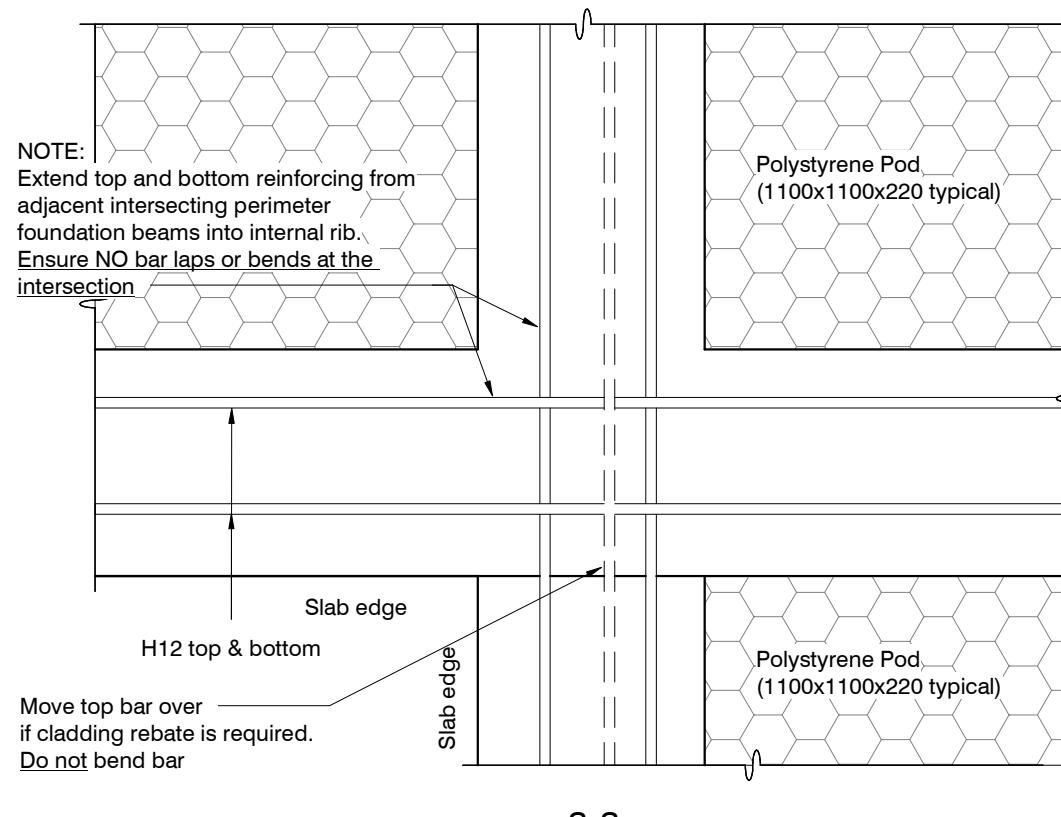
revisions	-	2021-11-11	Issued for Consent

design	JFR	file	21008.213
drawn	LB		
appvd	MC		
date	2021-11-10		

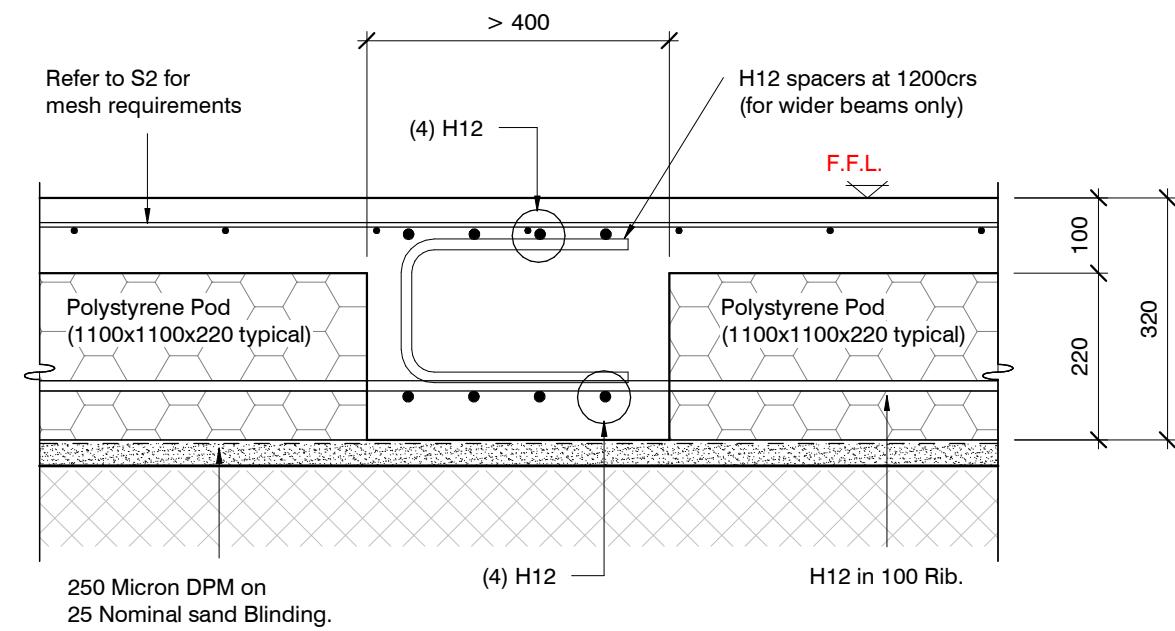
NOTE:
Extend top and bottom reinforcing from adjacent intersecting perimeter foundation beams into Internal rib.
Ensure NO bar laps or bends at the intersection



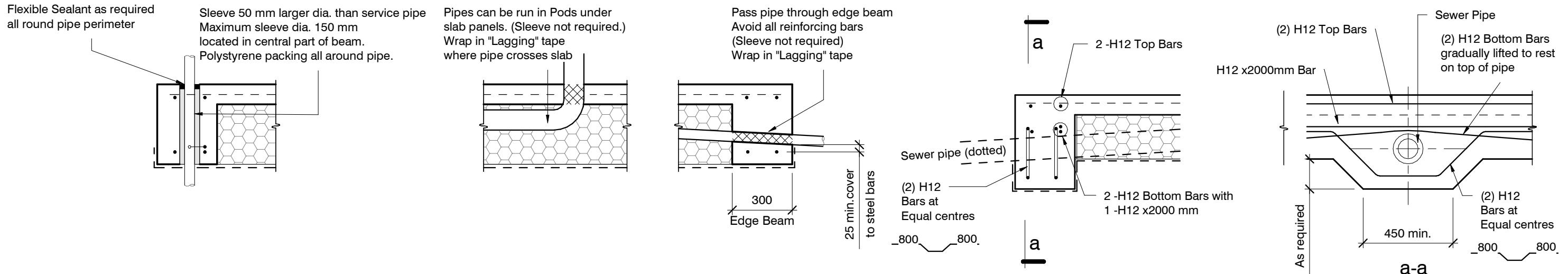
SECTION 1 TYPICAL 300 WIDE INTERNAL BEAM
1 : 10 S2



EDGE BEAM > 400mm IN WIDTH
1:10
if required



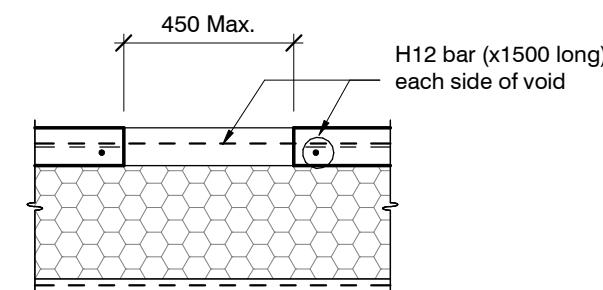
INTERNAL BEAM > 400mm IN WIDTH
1:10
if required



SLAB SERVICES PENETRATION DETAIL

PIPE NOTE:
No separation required where pipes are fully contained within slab.
Sleeve all drains that pass through the base of the slab.

PENETRATIONS NOTE:
Where penetrations through Floor Slab exceed 450 mm Square, Crack Control Bars will be required.



LARGE SLAB PENETRATION DETAIL

TYPICAL SECTION LOCALISED DEEPENING OF FOUNDATION BEAM TO ACCOMMODATE TOILET WASTE PIPE

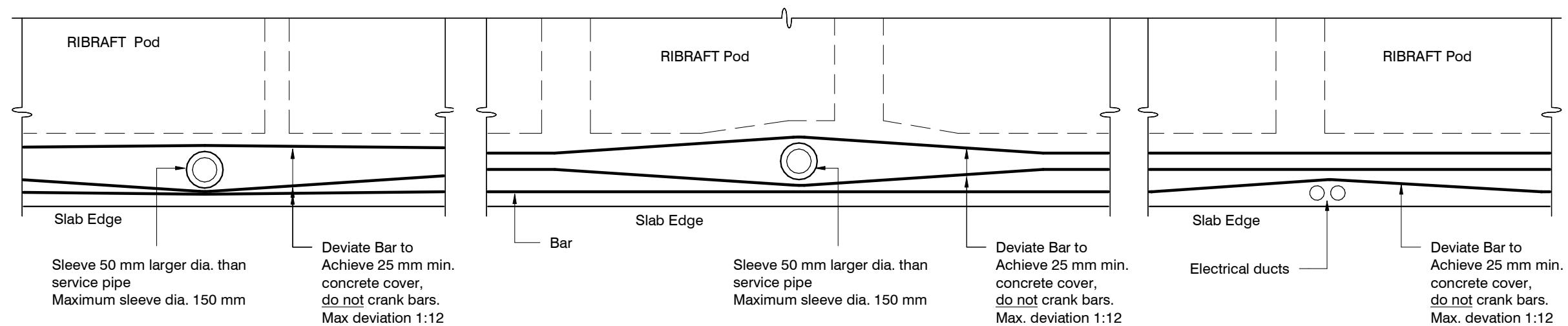
Christchurch City Council
BCN/2022/2124

Page 29 of 29

Approved Building Consent Document

27/04/2022

Laird, David



ORIGINAL SIZE = A3

FOUNDATION SERVICES PENETRATION DETAILING.

Services shall not run along ribs or edge beams.

revisions	-	2021-11-11	Issued for Consent

COPYRIGHT: THE ENGINEERING COMPANY LTD. All rights reserved



Proposed New Dwelling
Lot 14 Belfast Development, Christchurch

Typical Services Penetration Details

design	JFR	file	21008.213
drawn	LB		
appvd	MC		
date	2021-11-10	rev.	-