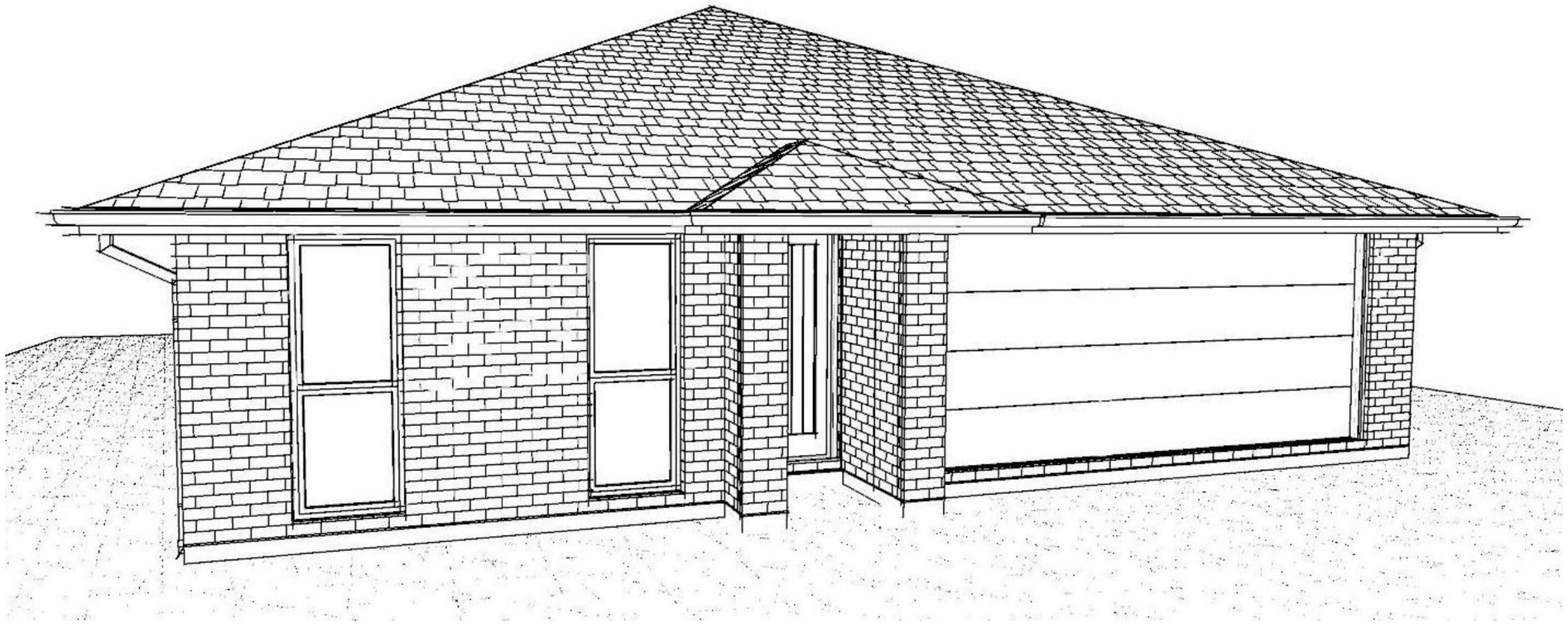


Contents:

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

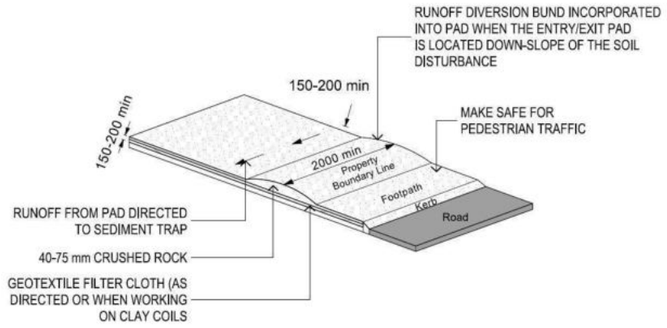
Job Number:	Original Plan:	Sheet Name:	Sheet No.:
141538	***Dove***	**COVER PAGE**	**1**

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**@ A3**

CONSENT PLANS

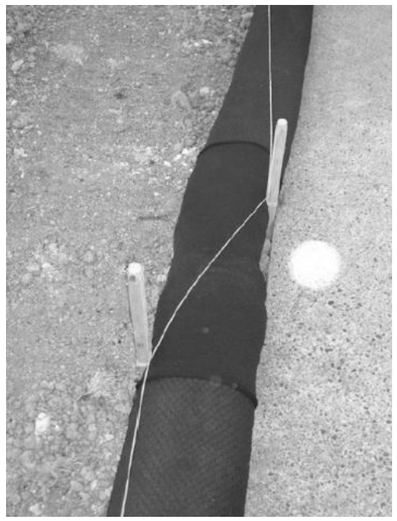
No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

of 21 sheets



STABILISED ENTRY/EXIT PAD

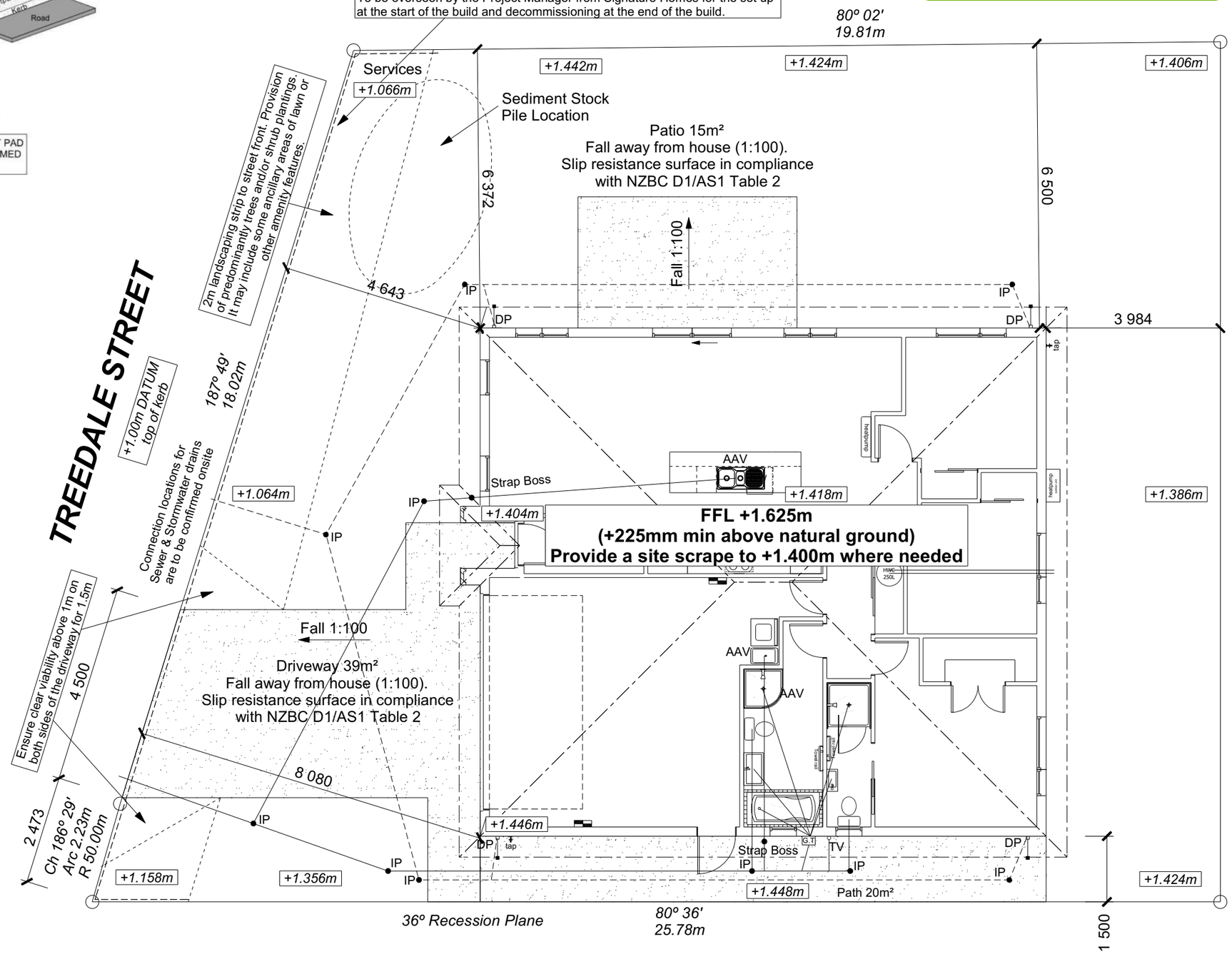
REMOVE STABILISED ENTRY/EXIT PAD UPON COMPLETION OF THE FORMED DRIVEWAY



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

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

Sediment Control Measures:
• 225mm Silt socks across the front of the boundary pegged down and returning 2m into the site.
• A stabilized entrance 200mm deep with bitumen cloth and backfilled with 40-75mm crushed rock with silt socks for the remaining of the boundary returning 2m into the site to control sediment runoff entering the street.
To be overseen by the Project Manager from Signature Homes for the set up at the start of the build and decommissioning at the end of the build.

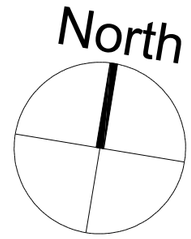


Christchurch City Council

BCN/2022/2118

Approved Building Consent Document

12/04/2022 Roh, Daniel



SITE INFORMATION

Site Area :	445m²
Floor Area (VENEER) :	149.64m²
Site Coverage :	33.62%

Wind	High
Earthquake	2
Exposure	C
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

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

Signature Homes YOUR HOME. YOUR WAY. Est. 1983

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

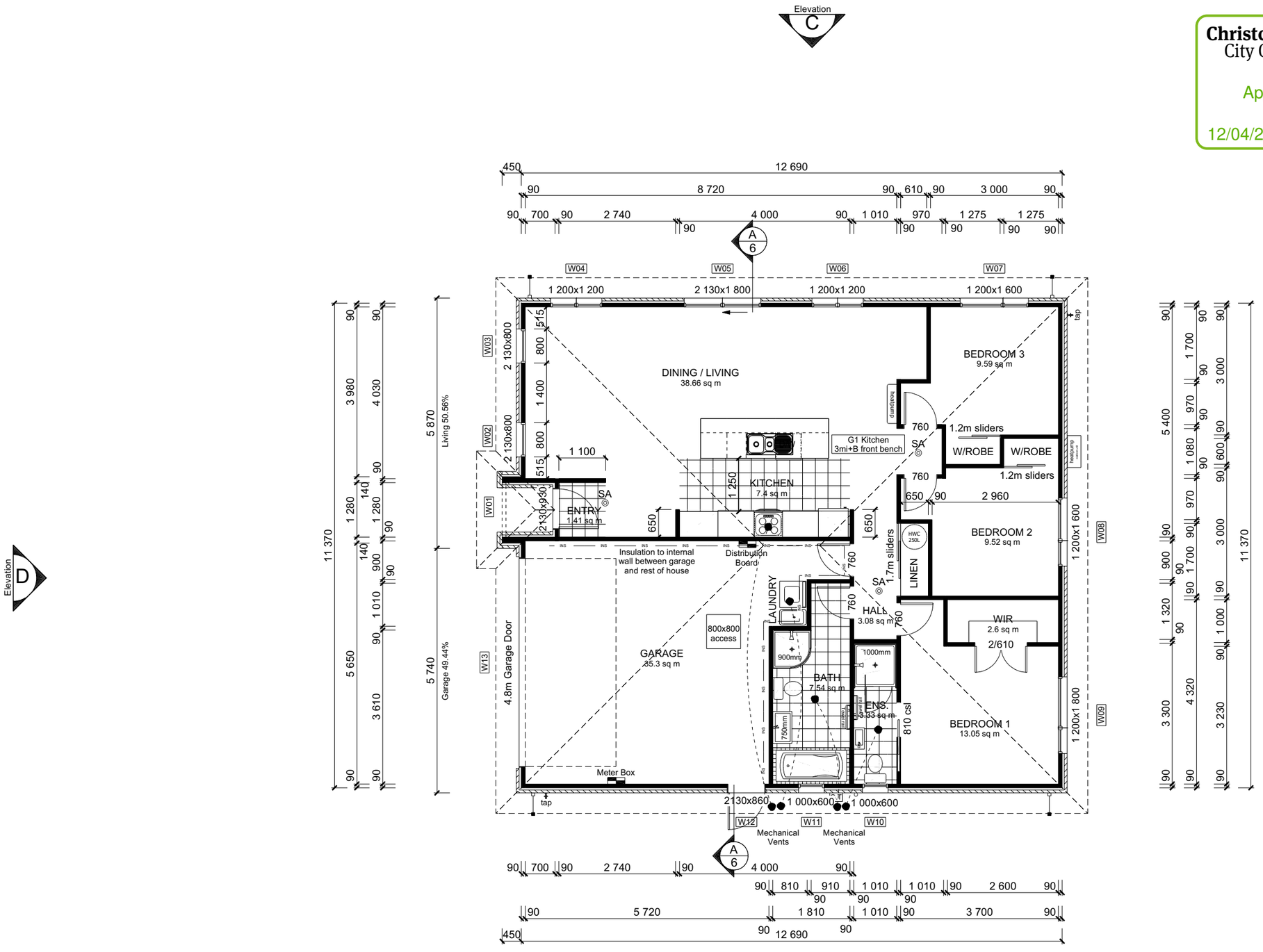
Job Number:	Original Plan:	Sheet Name:
141538	***Dove***	**SITE PLAN**

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**12/04/2022**	**1:100 @ A3**

CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

Sheet No.: **2** of 27 sheets



ROOF & WALL CLADDINGS

Roof : 25º Pressed Metal Tiles
Walls : 70 Series Brick Veneer with a 50mm cavity

DWELLING AREAS

Framing Area: 143.40m² (Perimeter: 51.50m)
Veneer Area: 149.64m² (Perimeter: 52.46m)
Roof Area: 175.88m² (Perimeter: 53.82m)

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
Laundering 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: 2400 mm
(2455mm to u/s of bottom chord)

FLOOR FINISHES
Carpet & Tiles

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 NZBC Acceptable Solutions, NZS 3604:2011 and Local Authority bylaws.

All dimensions are to be check 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

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:	Sheet No.:
141538	***Dove***	**FLOOR PLAN**	**3**

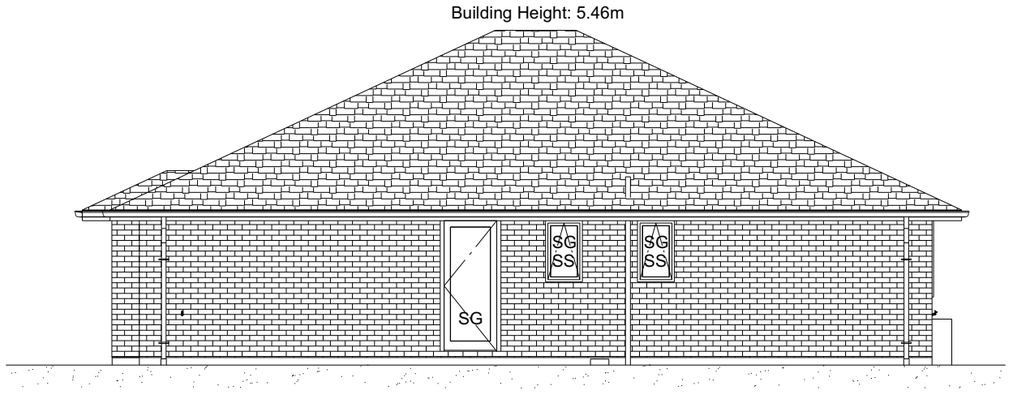
Sales:	Drawn:	QS:	Print Date:	Scale:	
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**1:100**	**@ A3**

CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

of 21 sheets

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	High	2
Building Envelope	Low	0
Decks & Balconies	Low	0
Total		3



ELEVATION A

ROOF & WALL CLADDINGS

Roof : 25º Pressed Metal Tiles
Walls : 70 Series Brick Veneer with a 50mm cavity

ELEVATION LEGEND

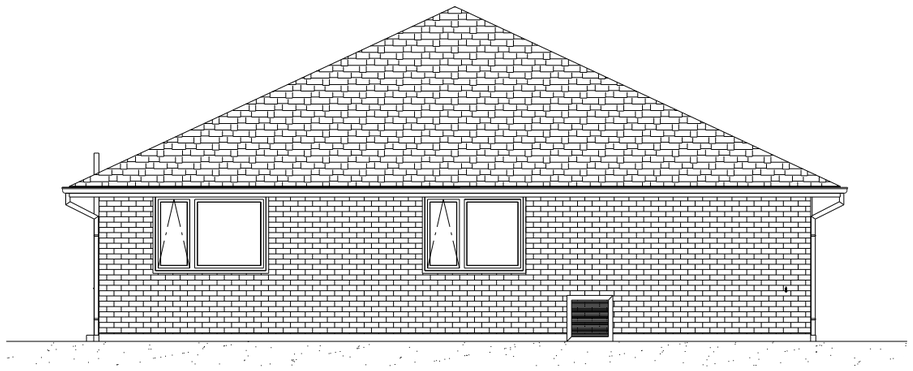
SS	Safety Stays
SG	Safety Glass
MB	Meter Box
TV	Terminal Vent

ELEVATION NOTES

Gutter : Coloured Steel Quad Gutter
Fascia : Coloured Steel185 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 routs to have slip resistance surface in compliance with NZBC D1/AS1 Table 2 and to have a 1:100 fall away from the building

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



ELEVATION B

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:
141538	***Dove***	**ELEVATIONS**

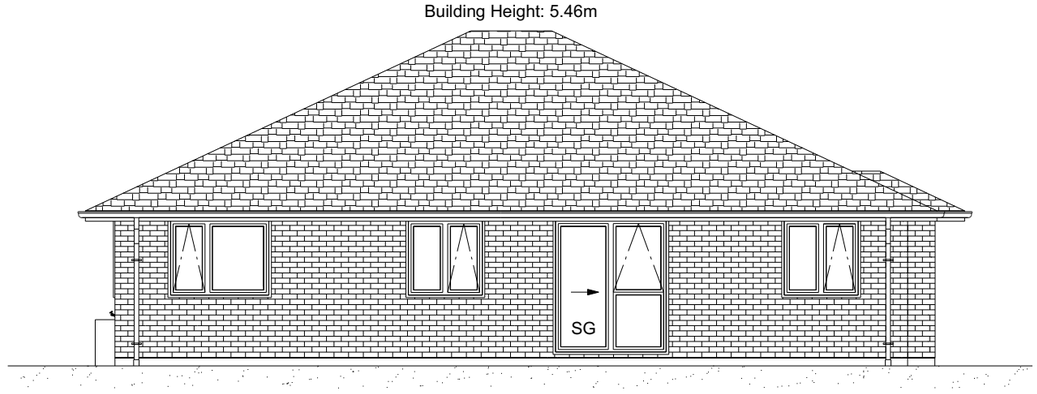
Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**1:100 @ A3**

CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

Sheet No.: **4** of 21 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

ROOF & WALL CLADDINGS

Roof : 25º Pressed Metal Tiles
Walls : 70 Series Brick Veneer with a 50mm cavity

ELEVATION LEGEND

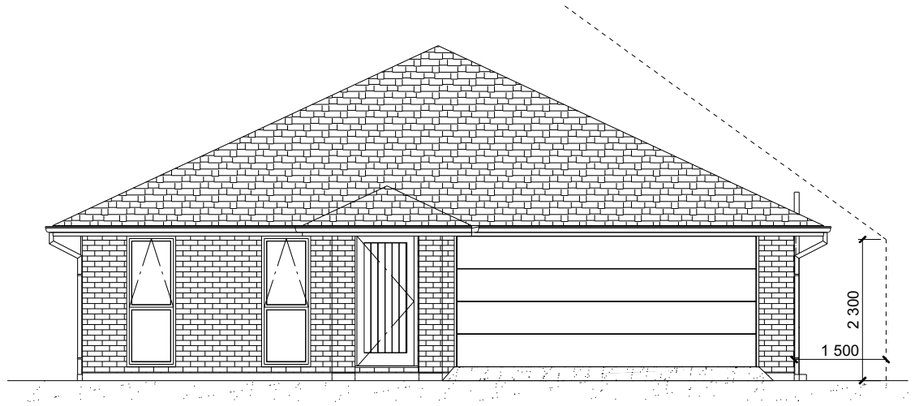
SS	Safety Stays
SG	Safety Glass
MB	Meter Box
TV	Terminal Vent

ELEVATION NOTES

Gutter : Coloured Steel Quad Gutter
Fascia : Coloured Steel185 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 routs to have slip resistance surface in compliance with NZBC D1/AS1 Table 2 and to have a 1:100 fall away from the building

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:
141538	***Dove***	**ELEVATIONS**

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**1:100 @ A3**

CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

Sheet No.: **5** of 21 sheets

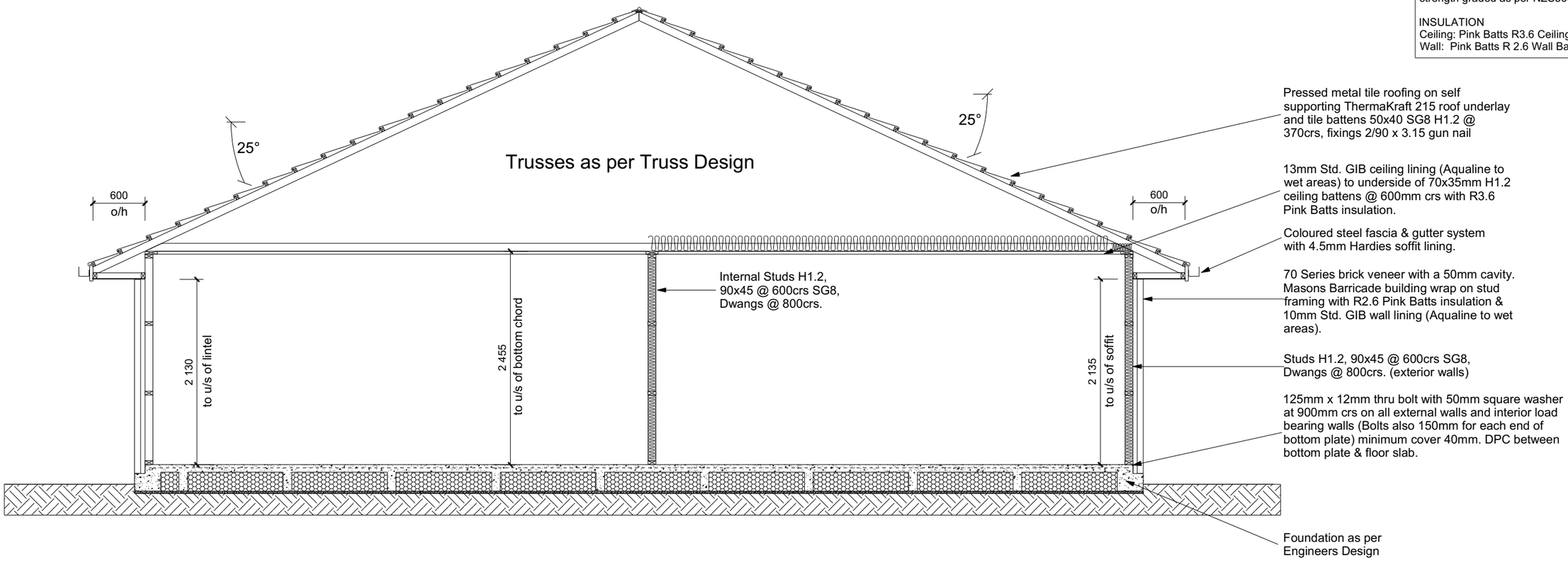
ROOF & WALL CLADDINGS

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 contract 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

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:
141538	***Dove***	**CROSS SECTIONS**

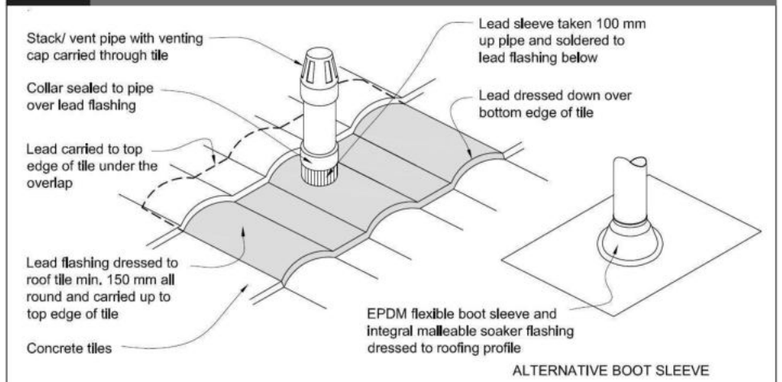
Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**1:50 @ A3**

CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

Sheet No.: **6** of 21 sheets

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.

ROOF CLADDING

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

ROOF PLAN NOTES

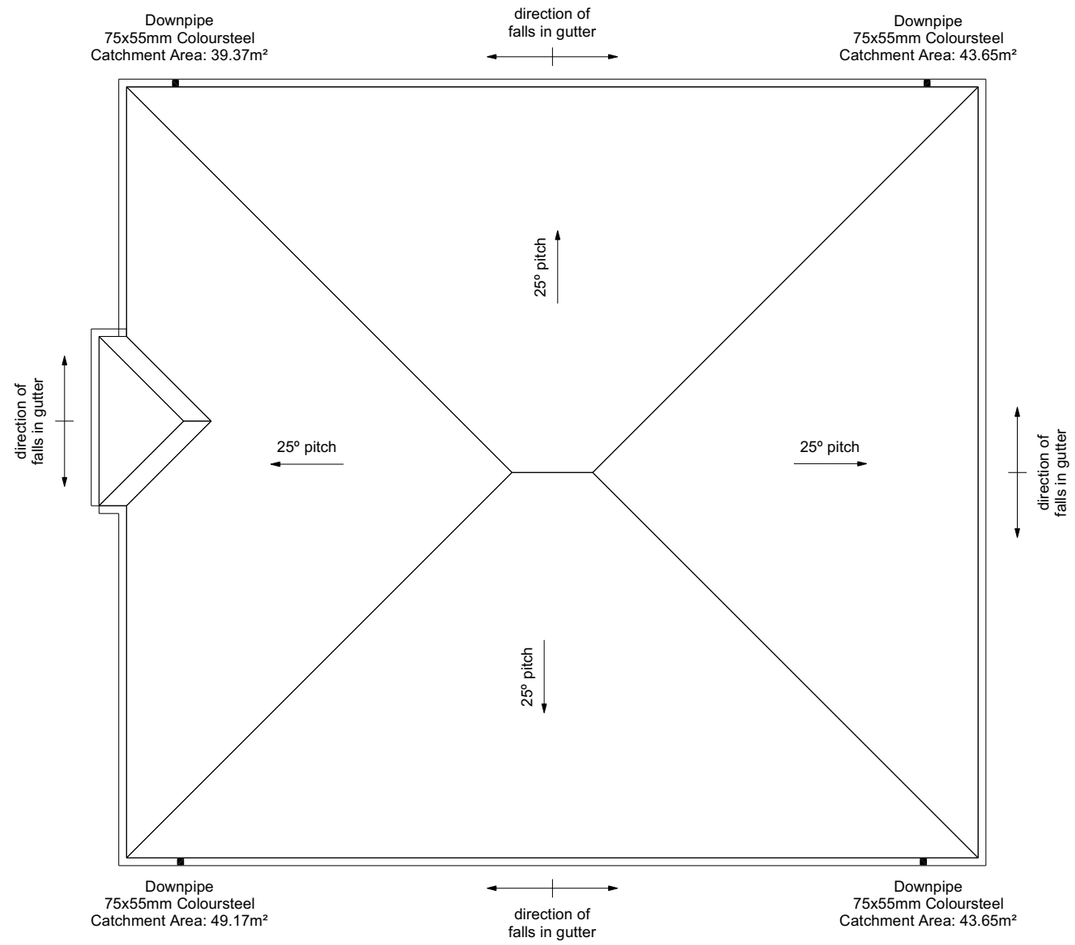
Gutter: Coloured Steel Quad Gutter
Fascia: Coloured Steel 185 Fascia
Downpipes: Colorsteel Rectangular 75x55mm
Soffits: Hardiflex 4.5mm

Underlay: Thermakraft 215 roof underlay

Downpipes: 75x55 Rectangle Colorsteel
As per NZBC E1/AS1 Table 5 75x55 down pipes can collect up to 60m² of 0-25º 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 0-25º roof plan area. Refer to the specifications for exact calculations.

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



All dimensions are to be check 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

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:	CONSENT PLANS	Sheet No.:
141538	***Dove***	**ROOF PLAN**		**7**

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**1:100 @ A3**

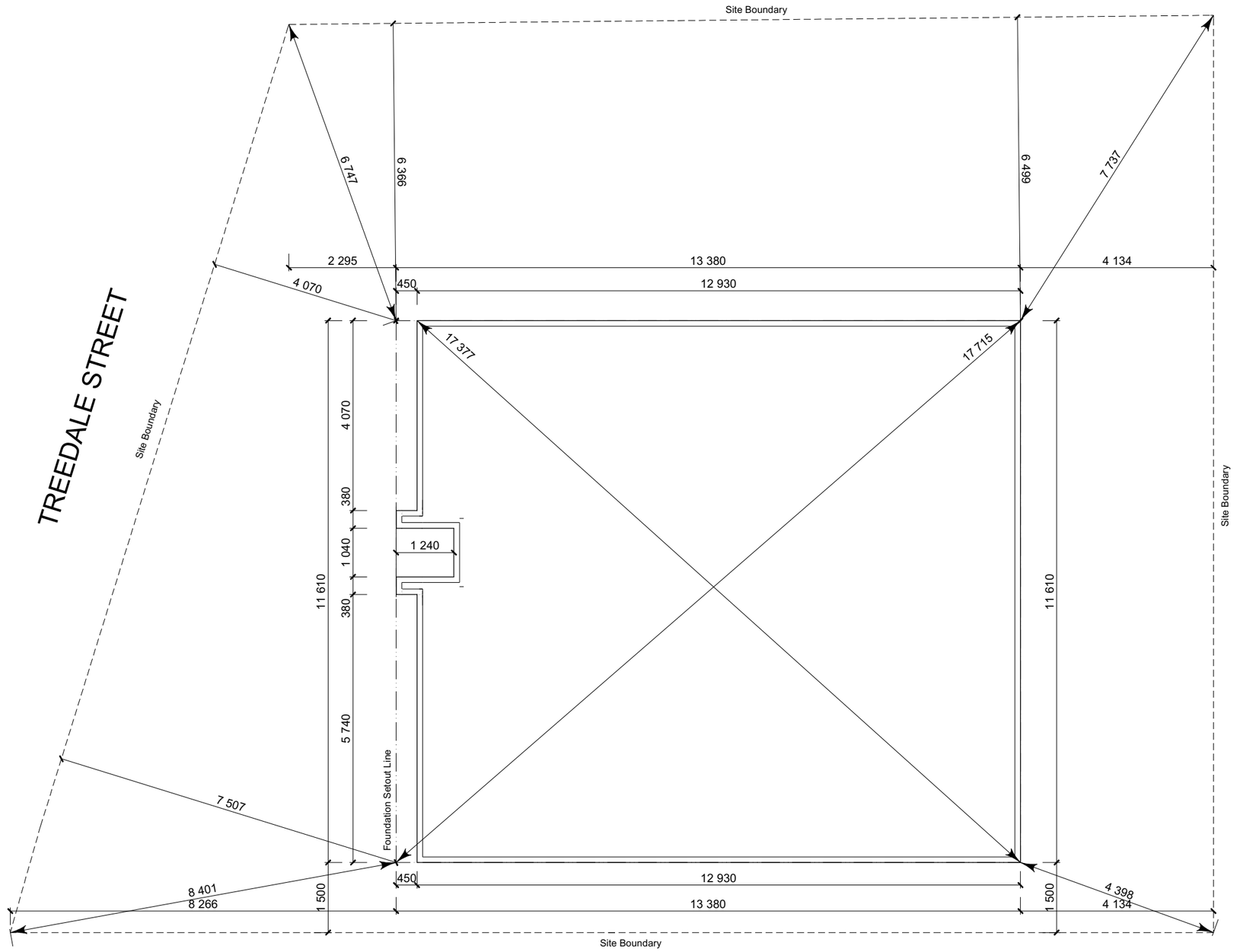
No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

of 21 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.



All dimensions are to be check 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

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:
141538	***Dove***	**SETOUT DIMENSIONS**

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**1:100 @ A3**

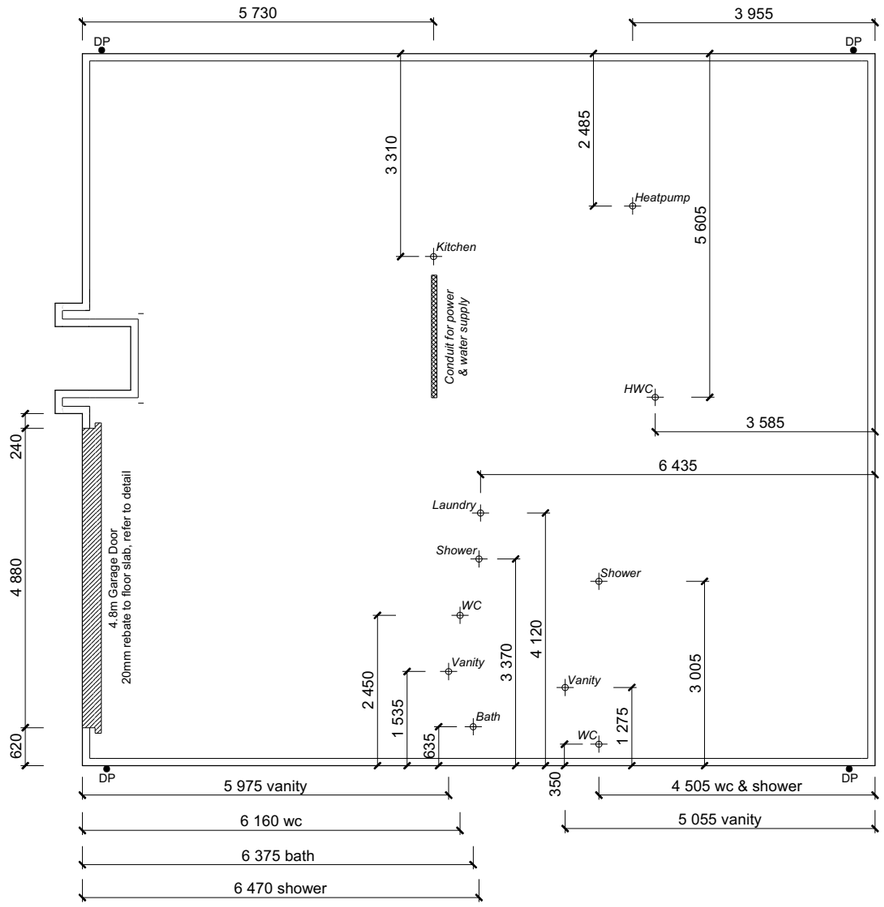
CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

Sheet No.: **8** of 21 sheets

FFL +1.625m
(+225mm min above natural ground)
Provide a site scrape to +1.400m where needed

Refer to Engineers Foundation Design



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 thickenings

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

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

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

Signature Homes Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:	CONSENT PLANS	Sheet No.:
141538	***Dove***	**FOUNDATION PLAN**		**9**

Sales:	Drawn:	QS:	Print Date:	Scale:	
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**1:100**	**@ A3**

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

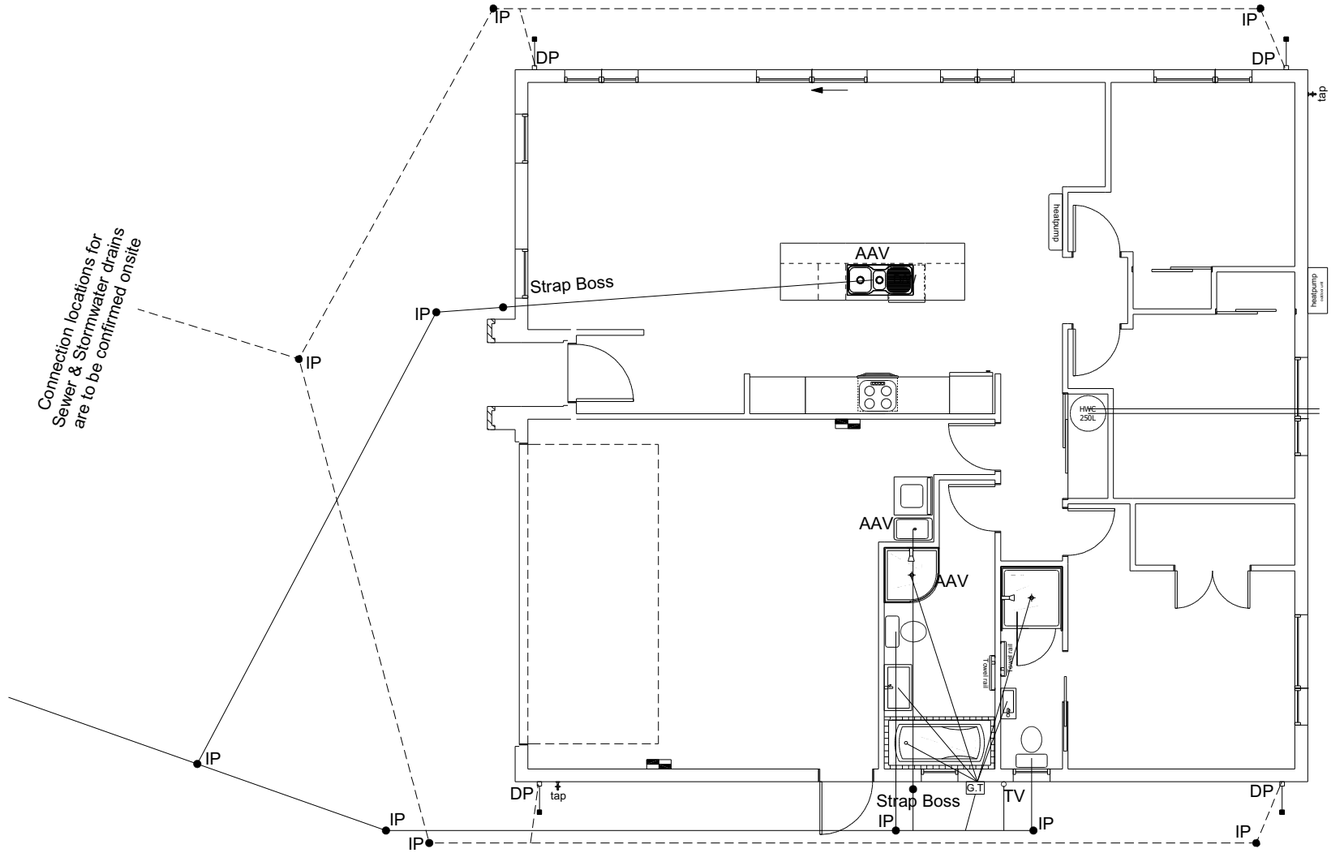
of 21 sheets

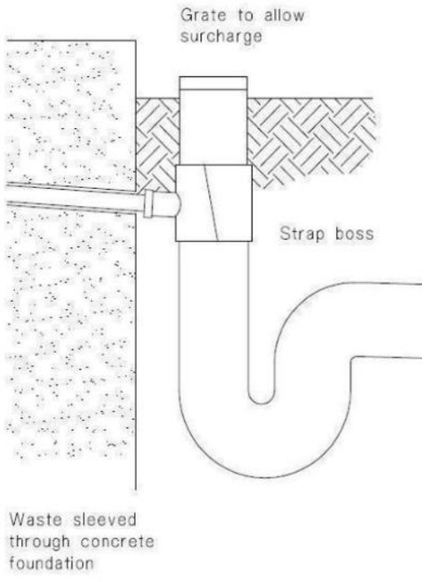
Plumbing Schedule	NZBC G13	
Kitchen		
Sink:	Ø50mm @1:40	(3 discharge units)
Bathrooms		
Vanity:	Ø40mm @ 1:40	(1 discharge units per basin)
Shower:	Ø40mm @1:40	(2 discharge units)
Bath:	Ø40mm @1:40	(4 discharge units)
WC:	Ø100mm @1:40	(4 discharge units)
Laundry Sink:	Ø40mm @1:30	(5 discharge units)
Drainage Schedule	NZBC G13	
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	
Hot water Cylinder	min 20mm Drain over GT	

Notes:
All plumbing and drainage to comply with NZBC G13.
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)
HWC: Safe tray to HWC with 50mm overflow drain to exterior to comply with G12/AS1.

DRAINAGE LEGEND

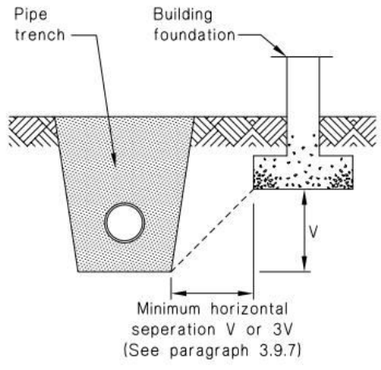
- - - - - - - - -	Stormwater DN100mm uPVC
———————	Sewer Drain DN100mm uPVC
DP	Downpipe
GT	Gully Trap
ORG	Overflow Relief Gully
TV	Terminal Vent
AAV	Air Admittance Valve
IP	Inspection Point





c) Strap boss to riser

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



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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

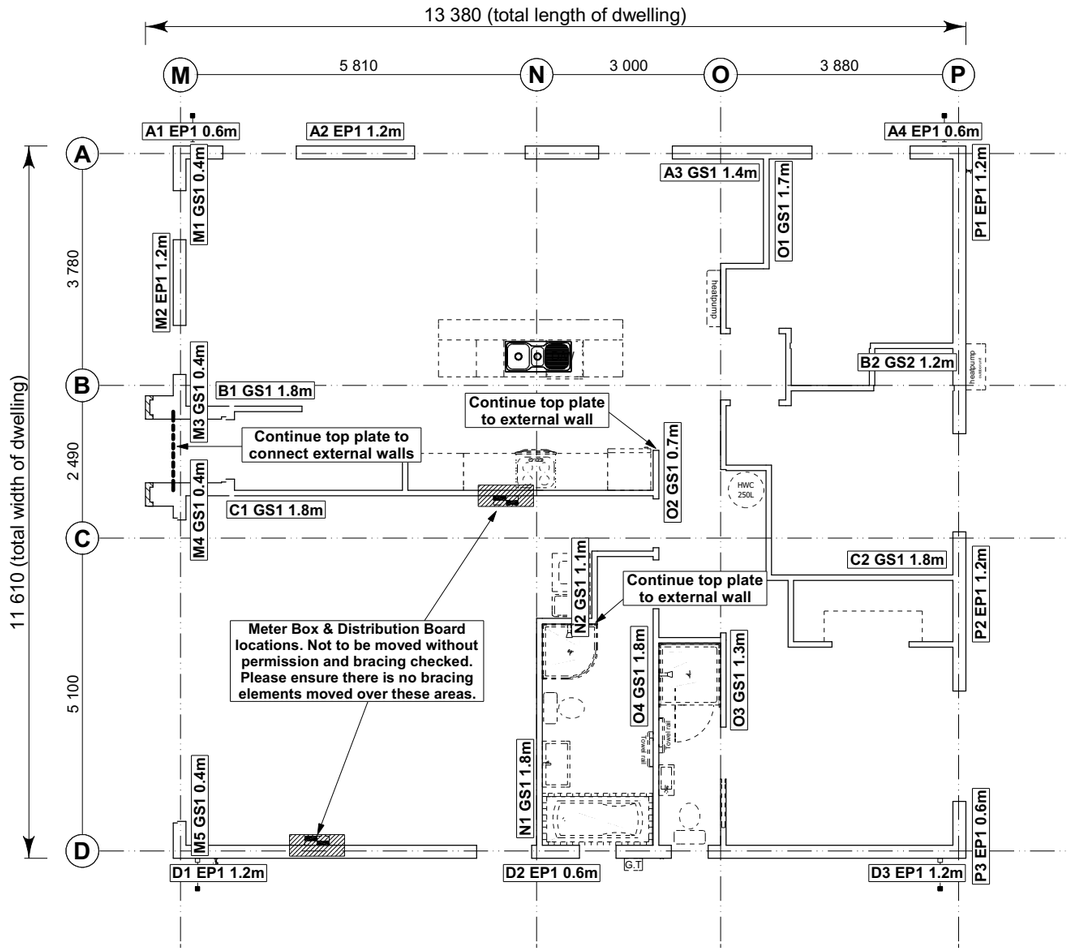
P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:	CONSENT PLANS	Sheet No.:
141538	***Dove***	**DRAINAGE PLAN**	No. 1 — Date: 08-12-2021 — Reason: Initial Consent Plans	**10**

Sales:	Drawn:	QS:	Print Date:	Scale:	
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**1:100**	**@ A3**

of 21 sheets



Single Level Along Resistance Sheet

Job Name: Steve & Catherine Bridge Family Trust

							Wind	EQ
							Demand	
							682	902
							Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	1190 174%	1186 132%
A	1	0.60		2.4	EP1 0.6	Ecoply®	57	63		
	2	1.20		2.4	EP1 1.2	Ecoply®	144	162		
	3	1.40		2.4	GS1-N	GIB®	97	84		
	4	0.60		2.4	EP1 0.6	Ecoply®	57	63		
									355 OK	372 OK
B	1	1.80		2.4	GS1-N	GIB®	124	108		
	2	1.20		2.4	GS2-N	GIB®	118	103		
									242 OK	211 OK
C	1	1.80		2.4	GS1-N	GIB®	124	108		
	2	1.80		2.4	GS1-N	GIB®	124	108		
									248 OK	216 OK
D	1	1.20		2.4	EP1 1.2	Ecoply®	144	162		
	2	0.60		2.4	EP1 0.6	Ecoply®	57	63		
	3	1.20		2.4	EP1 1.2	Ecoply®	144	162		
									345 OK	387 OK

Single Level Across Resistance Sheet

Job Name: Steve & Catherine Bridge Family Trust

							Wind	EQ
							Demand	
							897	902
							Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	1144 128%	1145 127%
M	1	0.40		2.4	GS1-N	GIB®	21	23		
	2	1.20		2.4	EP1 1.2	Ecoply®	144	162		
	3	0.40		2.4	GS1-N	GIB®	21	23		
	4	0.40		2.4	GS1-N	GIB®	21	23		
	5	0.40		2.4	GS1-N	GIB®	21	23		
									229 OK	255 OK
N	1	1.80		2.4	GS1-N	GIB®	124	108		
	2	1.10		2.4	GS1-N	GIB®	74	66		
									198 OK	174 OK
O	1	1.70		2.4	GS1-N	GIB®	117	102		
	2	0.70		2.4	GS1-N	GIB®	41	41		
	3	1.30		2.4	GS1-N	GIB®	90	78		
	4	1.80		2.4	GS1-N	GIB®	124	108		
									373 OK	329 OK
P	1	1.20		2.4	EP1 1.2	Ecoply®	144	162		
	2	1.20		2.4	EP1 1.2	Ecoply®	144	162		
	3	0.60		2.4	EP1 0.6	Ecoply®	57	63		
									345 OK	387 OK

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:

(a) 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*;

(b) For each *wall* containing *wall bracing elements* with a total *bracing capacity* of not more than 250 *bracing units*: to at least 2 *external walls* by fixings as shown in figure 8.16 each of 6 kN *capacity*;

(c) 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*.

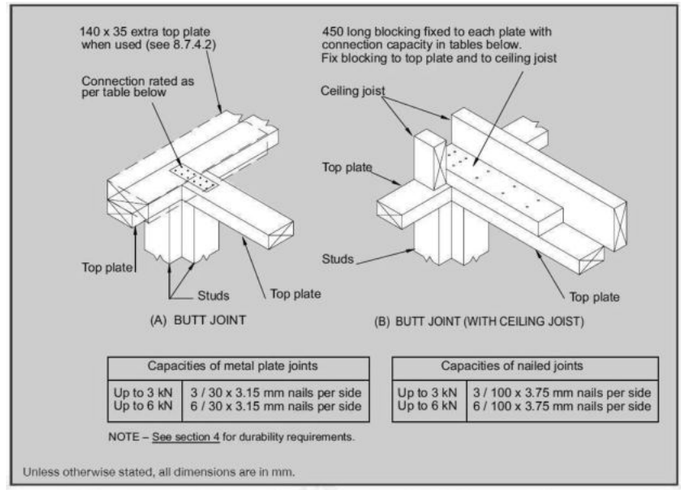
BRACING PLAN NOTES

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
A1 GS1 1.1m
← Brace Length
← Brace Type
← Brace Number



Capacities of metal plate joints	
Up to 3 kN	3 / 30 x 3.15 mm nails per side
Up to 6 kN	6 / 30 x 3.15 mm nails per side

Capacities of nailed joints	
Up to 3 kN	3 / 100 x 3.75 mm nails per side
Up to 6 kN	6 / 100 x 3.75 mm nails per side

NOTE – See section 4 for durability requirements.

Unless otherwise stated, all dimensions are in mm.

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

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

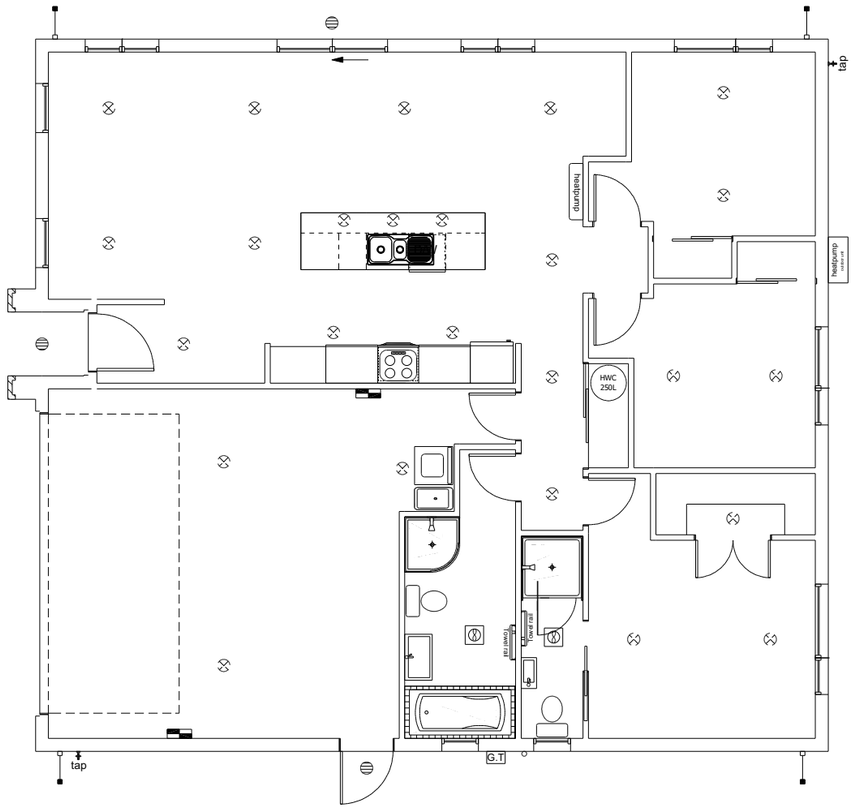
The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:		
141538	***Dove***	**BRACING PLAN**		
Sales: **D Ryan**	Drawn: **M Glynn**	QS: **W Xian**	Print Date: **21/12/2021**	Scale: **1:100 @ A3**

CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

Sheet No.: **11** of 21 sheets



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 in indicative only and is to be confirmed onsite with electrician and client	

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:	CONSENT PLANS	Sheet No.:
141538	***Dove***	**LIGHTING PLAN**		**12**

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**1:100 @ A3**

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

of 21 sheets

LUMBERLOK®

01/2017

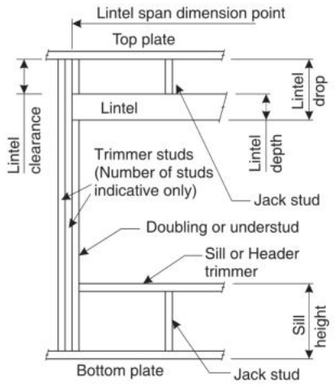
LINTEL FIXING SCHEDULE

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 0.20kPa.
- ★ 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 Wind Zone			Heavy Roof Wind Zone		
	L, M, H	VH	EH	L, M, H	VH	EH
8.6m²	G	G	H	G	G	H
11.6m²	G	H	H	G	G	H
12.1m²	G	H	H	G	H	H
15.3m²	H	H	-	G	H	H
19.1m²	H	-	-	G	H	-
20.9m²	H	-	-	H	H	-
21.8m²	H	-	-	H	-	-
34.3m²	-	-	-	H	-	-

NOTES:

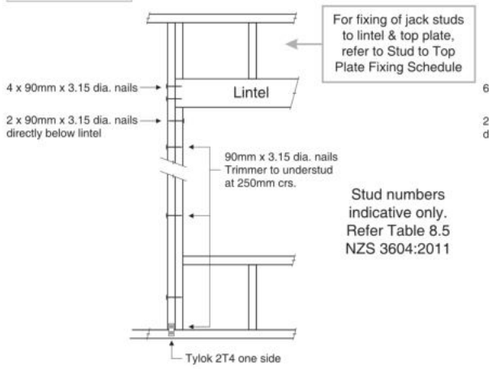
1. Roof Tributary Area = approx. 1/2 x (Total roof area on girder and rafter trusses supported by lintel)
2. Assumed girder truss is at mid-span or middle third span of lintel
3. Use similar fixings for both ends of lintel
4. All other cases require specific engineering design

Lintel Span (m)	Loaded Dimension (m) (See Fig. 1.3 NZS 3604:2011)	Light Roof Wind Zone					Heavy Roof Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
1.0	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	F	F	F	G	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
1.2	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	F	F	G	G	H	E	E	F	G	G
1.5	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	F	F	F	G	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	F	F	G	G	H	E	E	F	G	G
	6.0	F	F	G	H	H	E	E	F	G	H
2.0	2.0	E	F	F	F	G	E	E	F	F	F
	3.0	E	F	F	G	G	E	E	F	F	G
	4.0	F	F	G	G	H	E	E	F	G	G
	5.0	F	F	G	H	H	E	E	F	G	H
	6.0	F	G	G	H	H	E	F	G	H	H
2.4	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	G	H	E	E	F	G	G
	4.0	F	F	G	H	H	E	E	F	G	H
	5.0	F	G	G	H	H	E	F	G	H	H
	6.0	F	G	H	H	-	E	F	G	H	H
3.0	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	G	H	H	E	F	G	H	H
	5.0	F	G	H	H	-	E	F	G	H	H
	6.0	F	G	H	-	-	E	F	G	H	-
3.6	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	F	G	H	H	E	F	G	G	H
	4.0	F	G	H	H	-	E	F	G	H	H
	5.0	F	G	H	-	-	E	F	G	H	-
	6.0	G	H	H	-	-	E	F	H	-	-
4.2	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	H	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
4.5	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.4	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
4.8	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.2	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
5.1	2.0	F	F	G	H	H	E	F	G	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.5	F	G	H	-	-	E	F	G	H	-
	4.0	G	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	G	H	-	-
5.4	2.0	F	F	G	H	H	E	F	G	G	H
	2.8	F	G	H	H	-	E	F	G	H	H
	3.0	F	G	H	-	-	E	F	G	H	-
	4.0	G	H	H	-	-	E	F	H	-	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	G	H	-	-

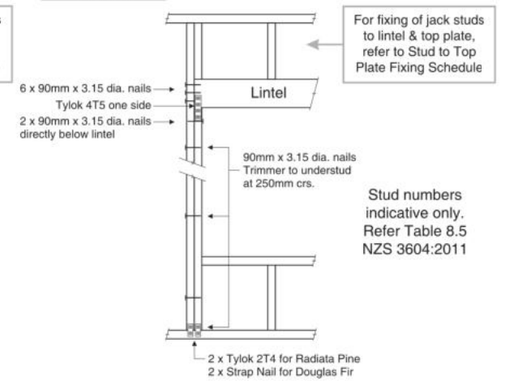
LINTEL FIXING OPTIONS

LUMBERLOK®

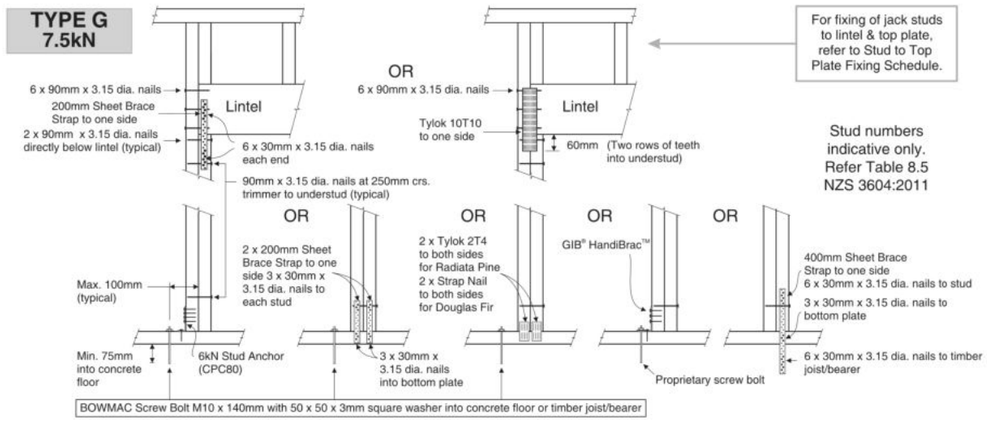
TYPE E 1.4kN



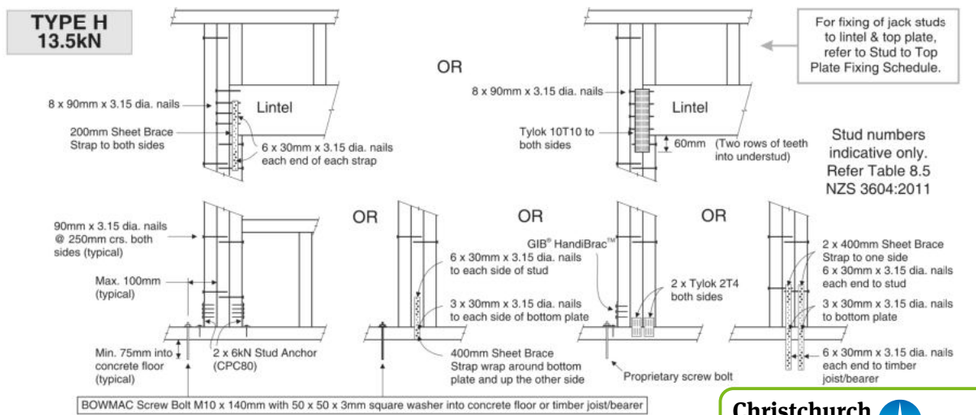
TYPE F 4.0kN



TYPE G 7.5kN



TYPE H 13.5kN



Christchurch City Council

BCN/2022/2118

Approved Building Consent Document

12/04/2022 Roh, Daniel

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:
141538	***Dove***	**FRAMING DETAILS**

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**NTS @ A3**

CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

Sheet No.: **13** of 21 sheets

LUMBERLOK®

08/2017

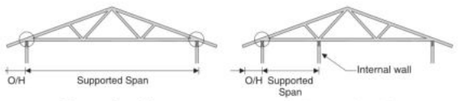
STUD TO TOP PLATE FIXING SCHEDULE

ALTERNATIVE TO TABLE 8.18 NZS 3604:2011

NOTE:

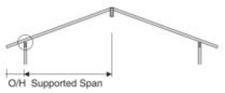
- ★ All fixings are designed to resist vertical loads only. Dead loads include the roof weight and standard ceiling weight of 0.20kPa.
- ★ Refer to Table 8.19 NZS 3604:2011 for nailing schedule to resist lateral loads.
- ★ These fixings assume the correct choice of rafter/truss to top plate connections have been made.
- ★ For gable end walls where the adjacent rafter/truss is located within 1200mm and with a maximum verge overhang of 750mm, select stud to top plate fixing using a loaded dimension of 1.5m.
- ★ 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

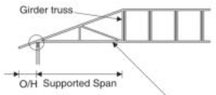


External wall
Standard truss

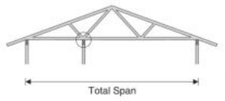
External wall
Internally supported truss



External wall
Rafter roof



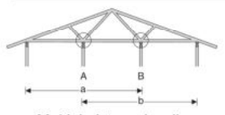
External wall
Jack truss



Internal wall
Internally supported truss
(overhang dimension does not apply)

EXTERNAL WALL
LOADED DIMENSION =
SUPPORTED SPAN / 2 + O/H

INTERNAL WALL
LOADED DIMENSION =
TOTAL SPAN / 2



Multiple internal walls
(overhang dimension does not apply)

MULTIPLE INTERNAL WALL
LOADED DIMENSION FOR
WALL A = a/2
WALL B = b/2

FIXING SELECTION CHART

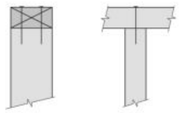
(Suitable for walls supporting roof members at 600, 900 or 1200mm crs.)
Wind Zones L, M, H, VH, EH, as per NZS 3604:2011

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

FIXING OPTIONS

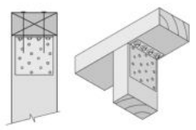
FIXING TYPE A 0.7kN

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



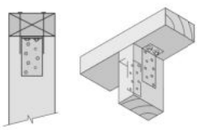
FIXING TYPE B 4.7kN — **CHOOSE ANY OF THE 3 OPTIONS BELOW**

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



Plus
LUMBERLOK
6kN Stud Anchor
(CPC80)

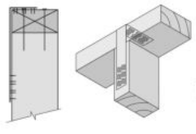
2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



Plus
2 x LUMBERLOK
CPC40

Recommended for internal wall options to avoid lining issues

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



Plus
LUMBERLOK
Stud Strap
(one face only)

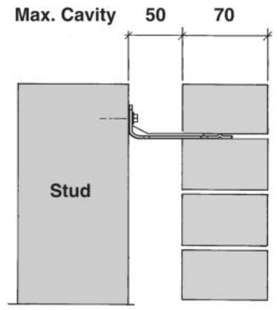
NOTE:
To calculate the number of B type fixings required, divide the wall length by the stud centres, add 1 to this figure and locate this number of fixings as evenly as possible along the wall length. This figure includes the start and end studs in each wall length.

SCAN FOR INSTALLATION VIDEO

https://vimeo.com/117353604

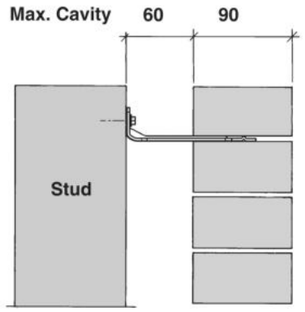
Christchurch City Council
BCN/2022/2118
Approved Building Consent Document
12/04/2022 Roh, Daniel

70 SERIES BRICK



Screw Tie Short (85mm)

90 SERIES BRICK



Screw Tie Long (105mm)

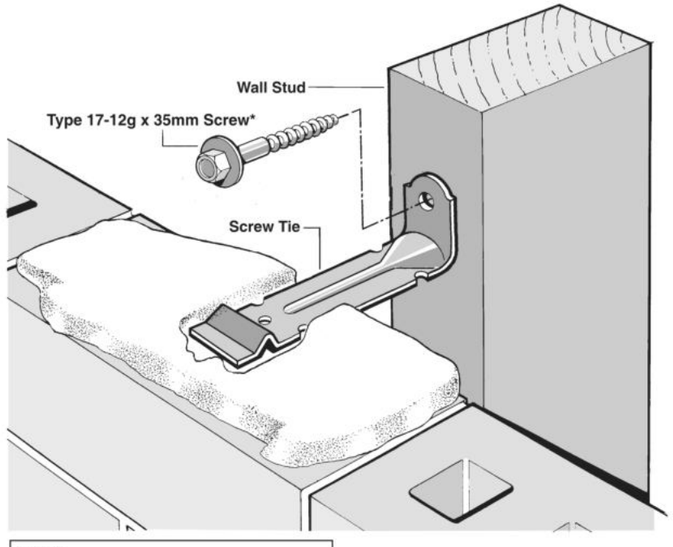
- ★ All brick work must be constructed in accordance with NZS 4210:2001 Masonry Construction:Materials and Workmanship. Screw Ties must be applied accordingly and are not to be hammered into timber framing.
- ★ Water shedding shoulder prevents transfer of the moisture from tie to building.
- ★ Nail hole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



***NOTE:**
Use longer screws for fixing through Rigid Air Barrier (RAB). Maintain 35mm embedment in studs.

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

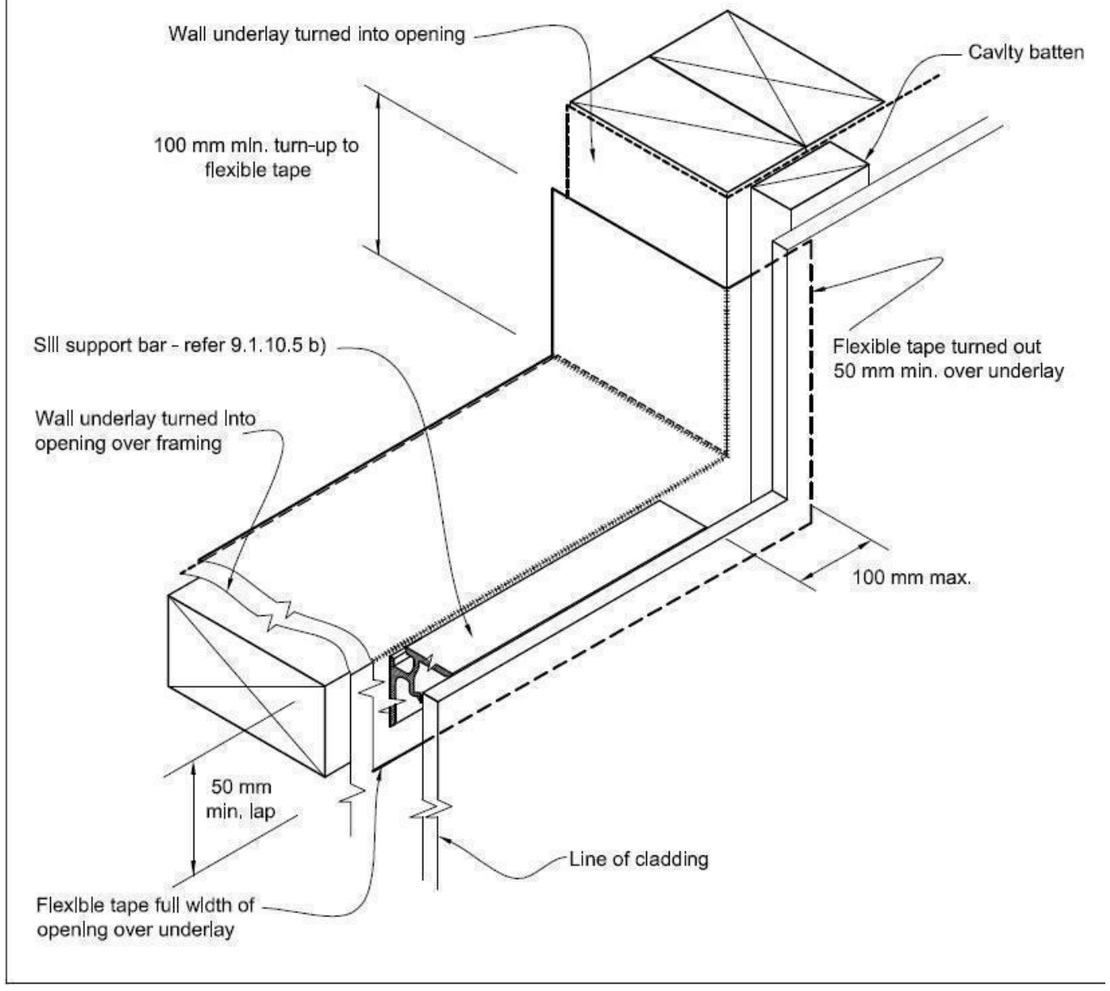
Job Number:	Original Plan:	Sheet Name:	CONSENT PLANS	Sheet No.:
141538	***Dove***	**FRAMING DETAILS**		**14**

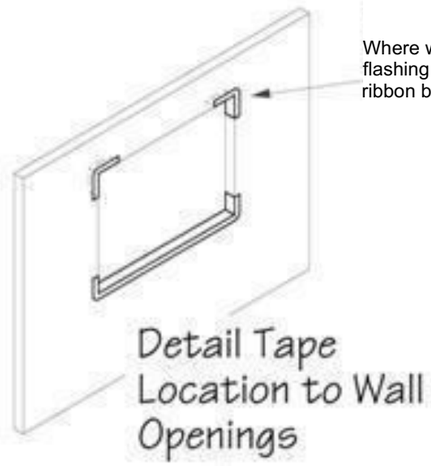
Sales:	Drawn:	QS:	Print Date:	Scale:		
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**NTS**	**@ A3**	**of 21 sheets**

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

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

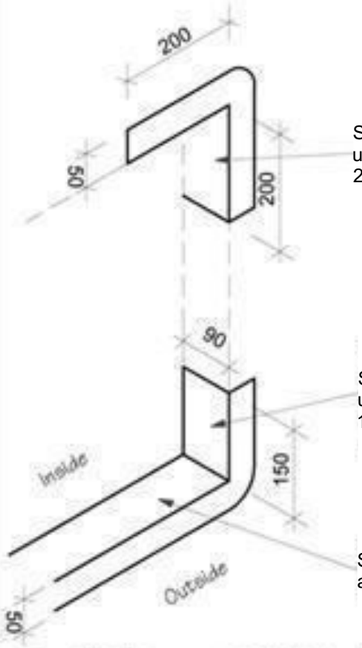
NOTE:
(1) Detailed *cladding* omitted for clarity, refer to specific *claddings*.
(2) Head to be treated similarly with continuous *wall underlay* and *flexible tape* at corners.
(3) Refer individual cladding details for jamb flashings.





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

Detail Tape Location to Wall Openings



Sill tape to be turned up over trimmer stud 200mm min.

Sill tape to be turned up over trimmer stud 150mm min.

Sill tape to be continuous along entire sill

Trim all building wrap to finish flush with inside face of stud frame wall

Sill Tape Flashing Detail

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

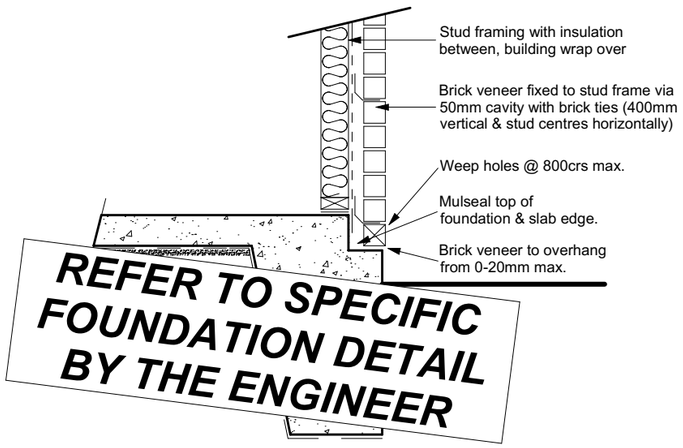
Job Number:	Original Plan:	Sheet Name:	Sheet No.:
141538	***Dove***	**CONSTRUCTION DETAILS**	**15**

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**As Shown @ A3**

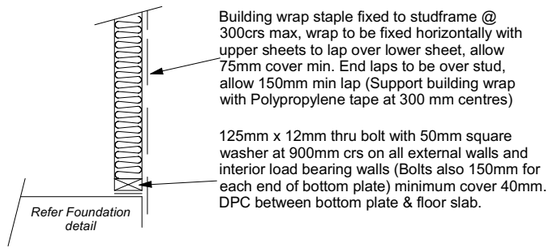
CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

of 21 sheets



Brick Veneer Foundation
Scale 1:20



Stud framing to slab
Scale 1:20

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

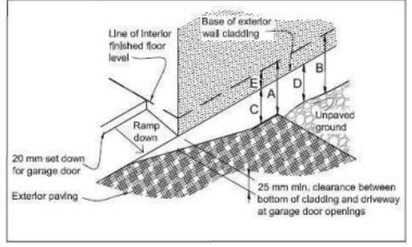
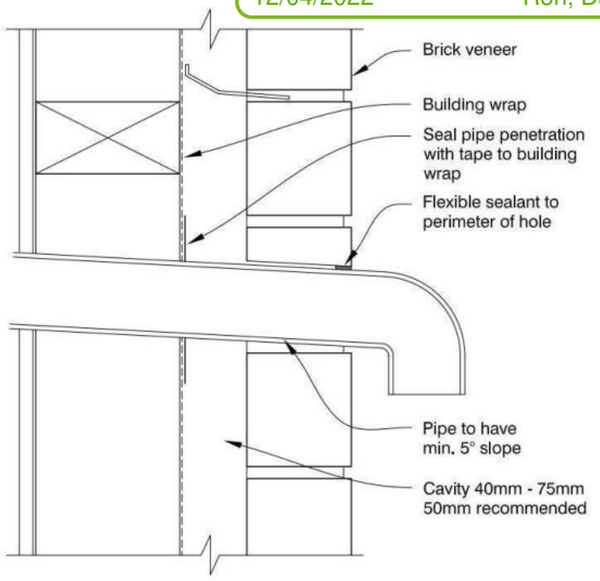
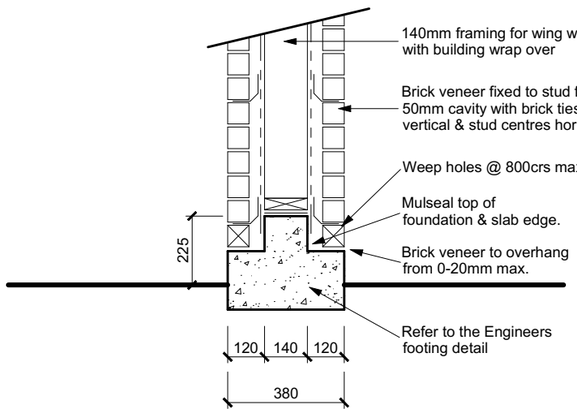


Table 18: Minimum clearances
Paragraphs 9.1.3, 9.1.3.1, 9.1.3.2, 9.1.3.3, 9.1.3.4, 9.1.3.5 and 9.2.7

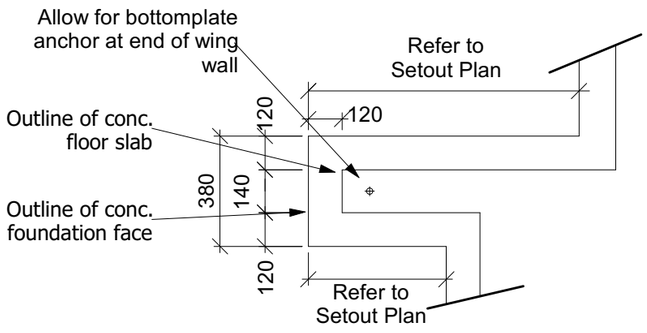
Minimum clearances (mm)	Masonry veneer		Other claddings				
	A	B	A	B	C	D	E
Concrete slab	100	150	150	225	100	175	50
Timber floor Refer Note 1)					100	175	502)

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

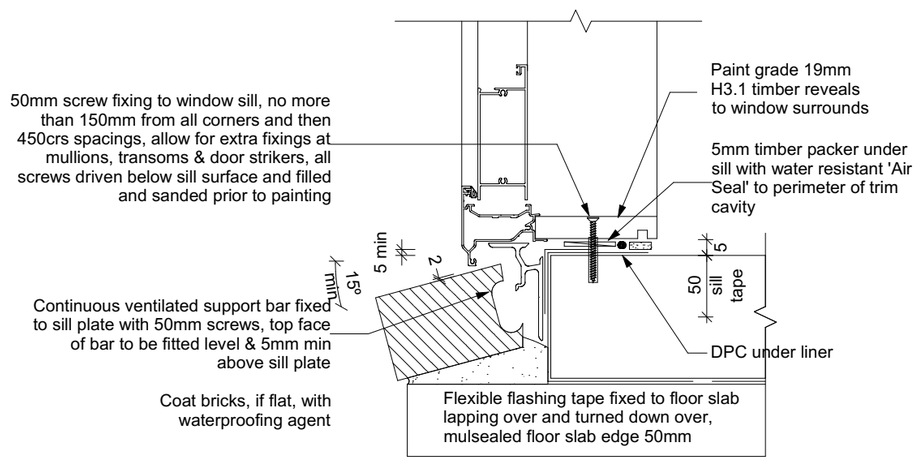




Wing Wall Foundation
Scale 1:20



Wing Wall Foundation Detail
scale 1:20



Door Sill to Slab Detail
Scale 1:20

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

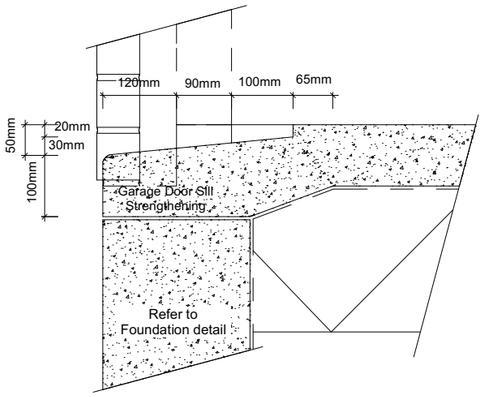
The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:	Sheet No.:
141538	***Dove***	**CONSTRUCTION DETAILS**	**16** of 21 sheets

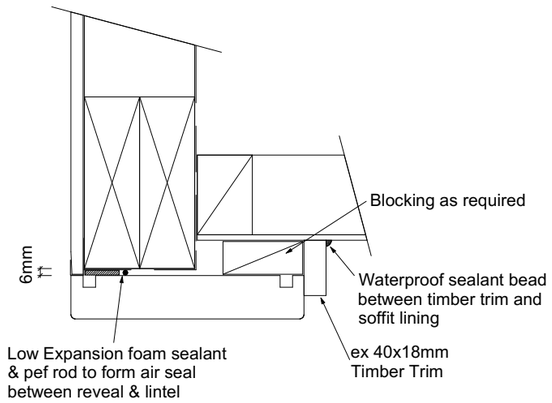
Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**As Shown @ A3**

CONSENT PLANS

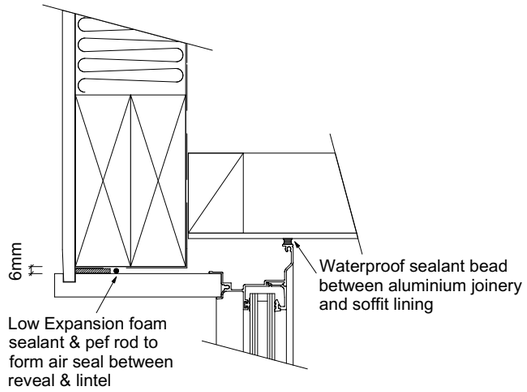
No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans



Garage Door Rebate Details
Scale 1:10



Garage Door Head to Soffit
Scale 1:5



Window Head to Soffit Detail
Scale 1:5

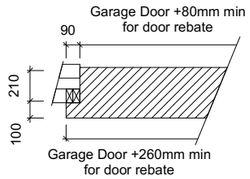
9.1.10.8 Attachments for windows and doors

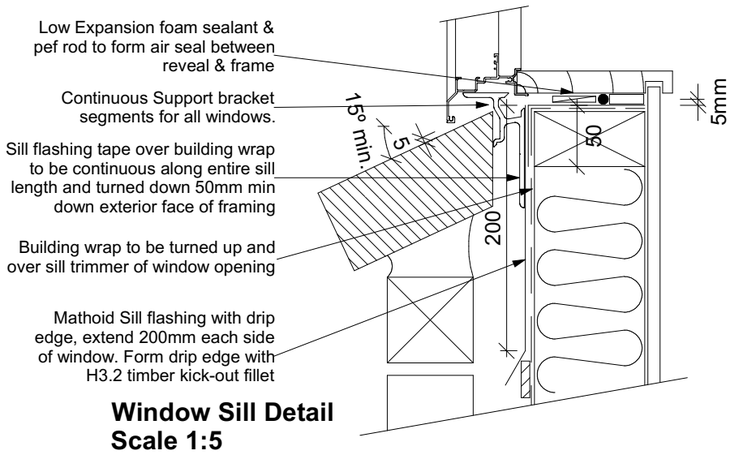
Install windows and doors using pairs of minimum 75 x 3.15 galvanised jolt head nails or 8 gauge x 65 mm stainless steel screws, through reveals into surrounding *framing* at:

a) Maximum 450 mm centres along sills, jambs and heads, and

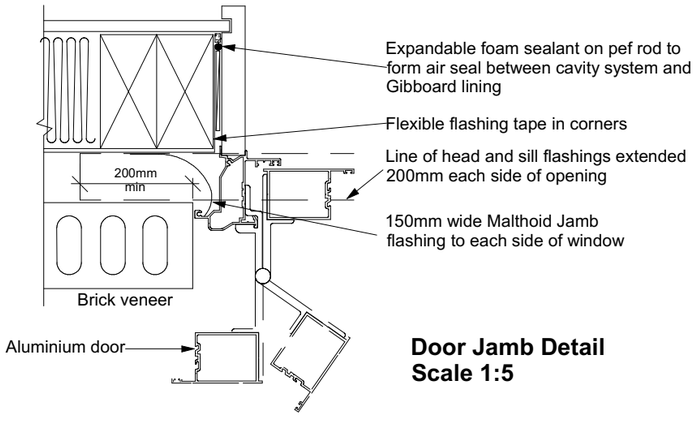
b) Maximum 150 mm from reveal ends.

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

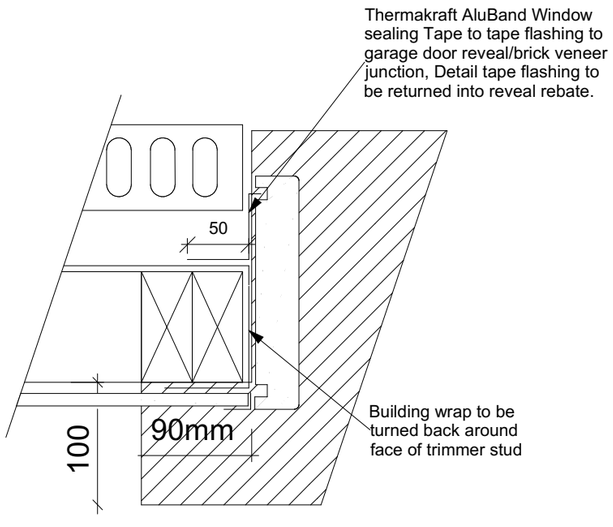




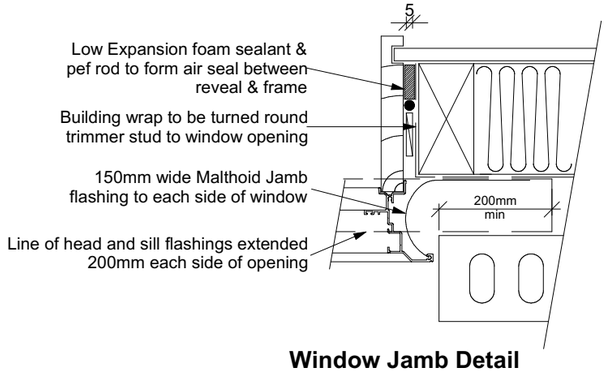
Window Sill Detail
Scale 1:5



Door Jamb Detail
Scale 1:5



Garage Door Jamb Detail
Scale 1:5



Window Jamb Detail
Scale 1:5

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

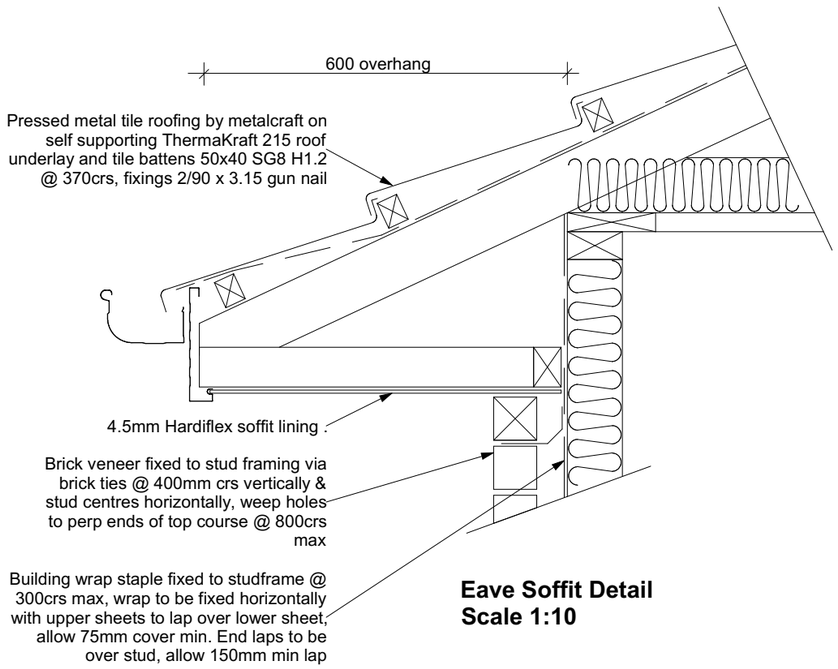
Job Number:	Original Plan:	Sheet Name:	CONSTRUCTION DETAILS
141538	*Dove*		

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	M Glynn	W Xian	21/12/2021	As Shown @ A3

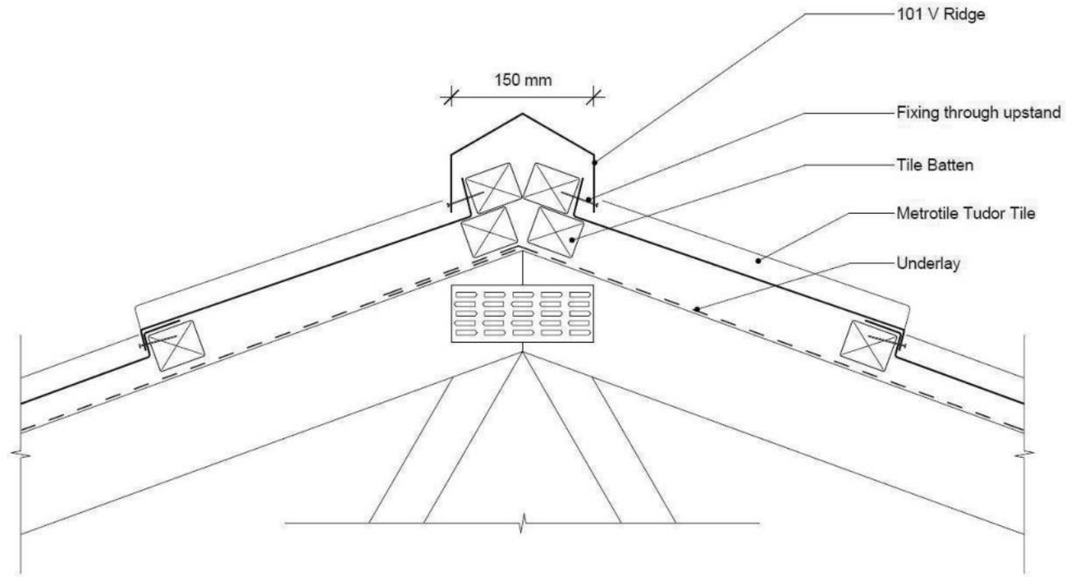
CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

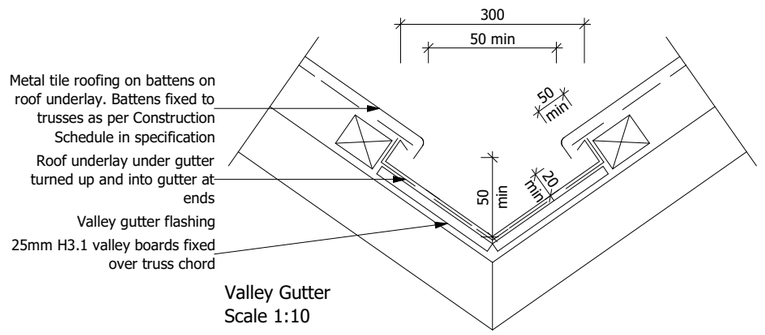
Sheet No.: **17** of 21 sheets



Eave Soffit Detail
Scale 1:10



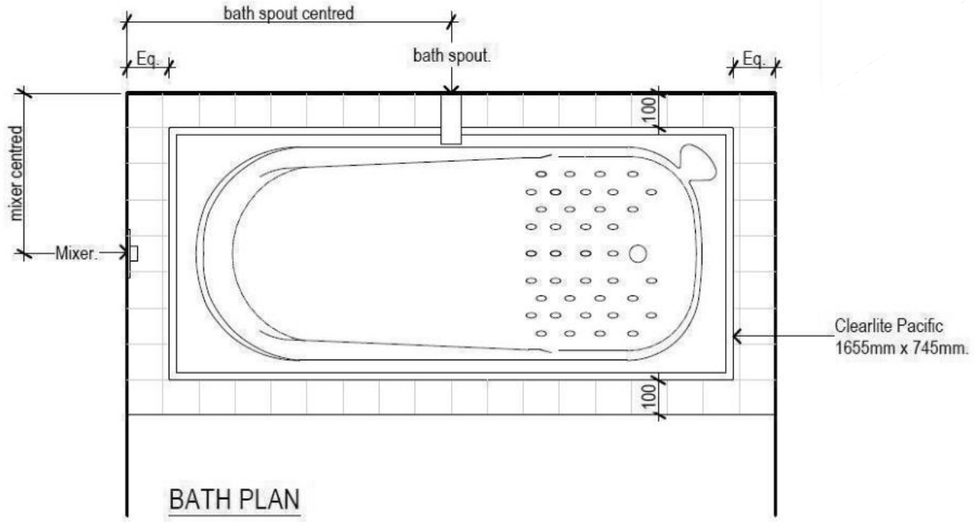
Metal Tile Angle Ridge Detail
Scale NTS



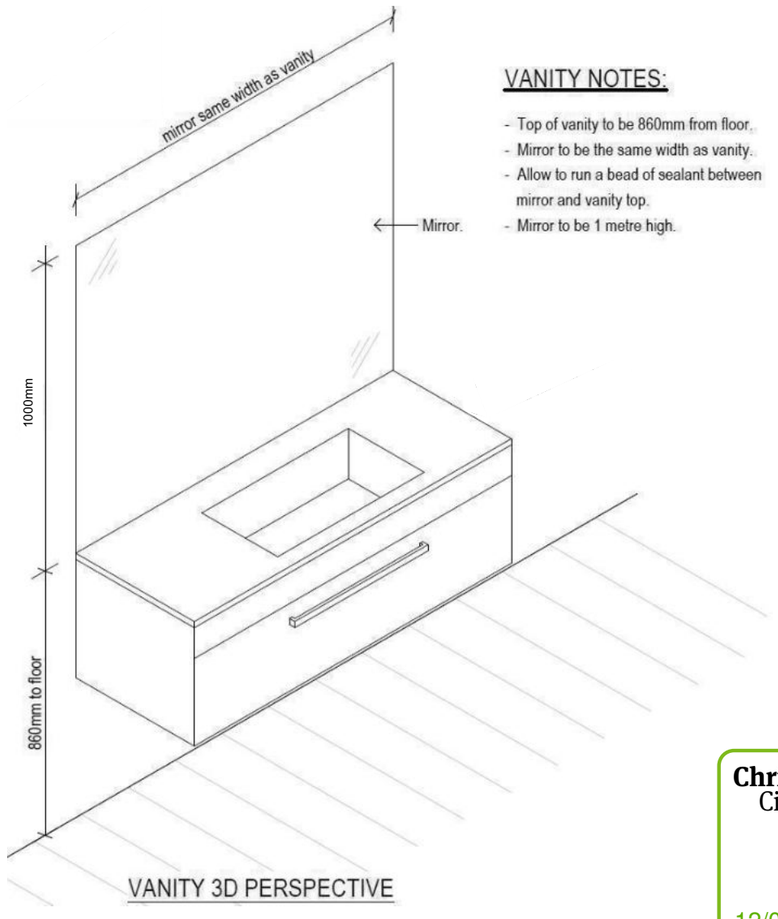
Valley Gutter
Scale 1:10

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

Signature Homes YOUR HOME. YOUR WAY.	**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 it 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.	The Steve & Catherine Bridge Family Trust Lot 21 Belfast Development Belfast, Christchurch	Job Number: **141538** Sales: **D Ryan** Drawn: **M Glynn** QS: **W Xian**	Original Plan: ***Dove*** Print Date: **21/12/2021** Scale: **As Shown @ A3**	Sheet Name: **CONSTRUCTION DETAILS**	**CONSENT PLANS** No. 1 — Date: 08-12-2021 — Reason: Initial Consent Plans	Sheet No.: **18** **of 21 sheets**



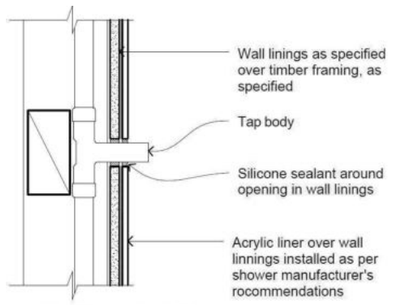
BATH PLAN



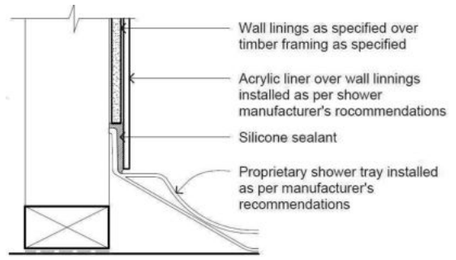
VANITY 3D PERSPECTIVE

VANITY NOTES:

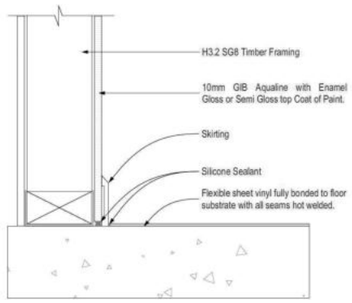
- Top of vanity to be 860mm from floor.
- Mirror to be the same width as vanity.
- Allow to run a bead of sealant between mirror and vanity top.
- Mirror to be 1 metre high.



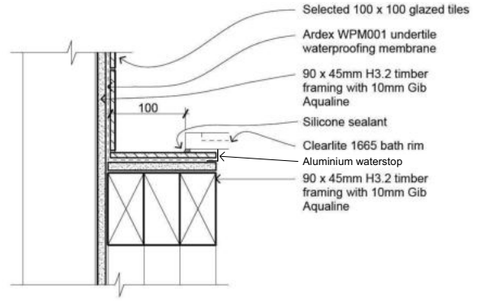
PENETRATION DETAIL



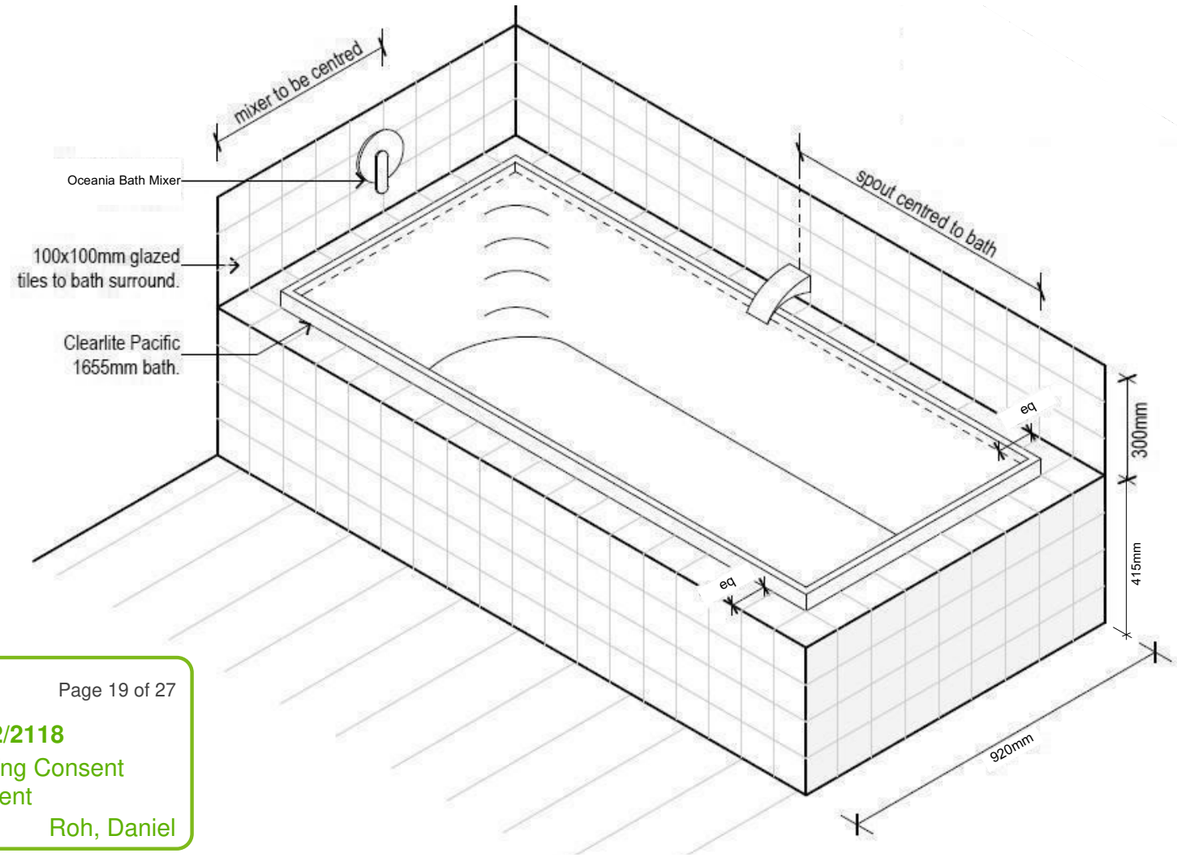
SHOWER TRAY DETAIL



GENERAL FLOOR/WALL DETAIL



BATH/WALL JUNCTION



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

Signature Homes Est. 1983 YOUR HOME. YOUR WAY.

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

P: +64 3 342 7788

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:	CONSENT PLANS	Sheet No.:
141538	***Dove***	**BATHROOM DETAILS**		**19**

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**NTS @ A3**

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

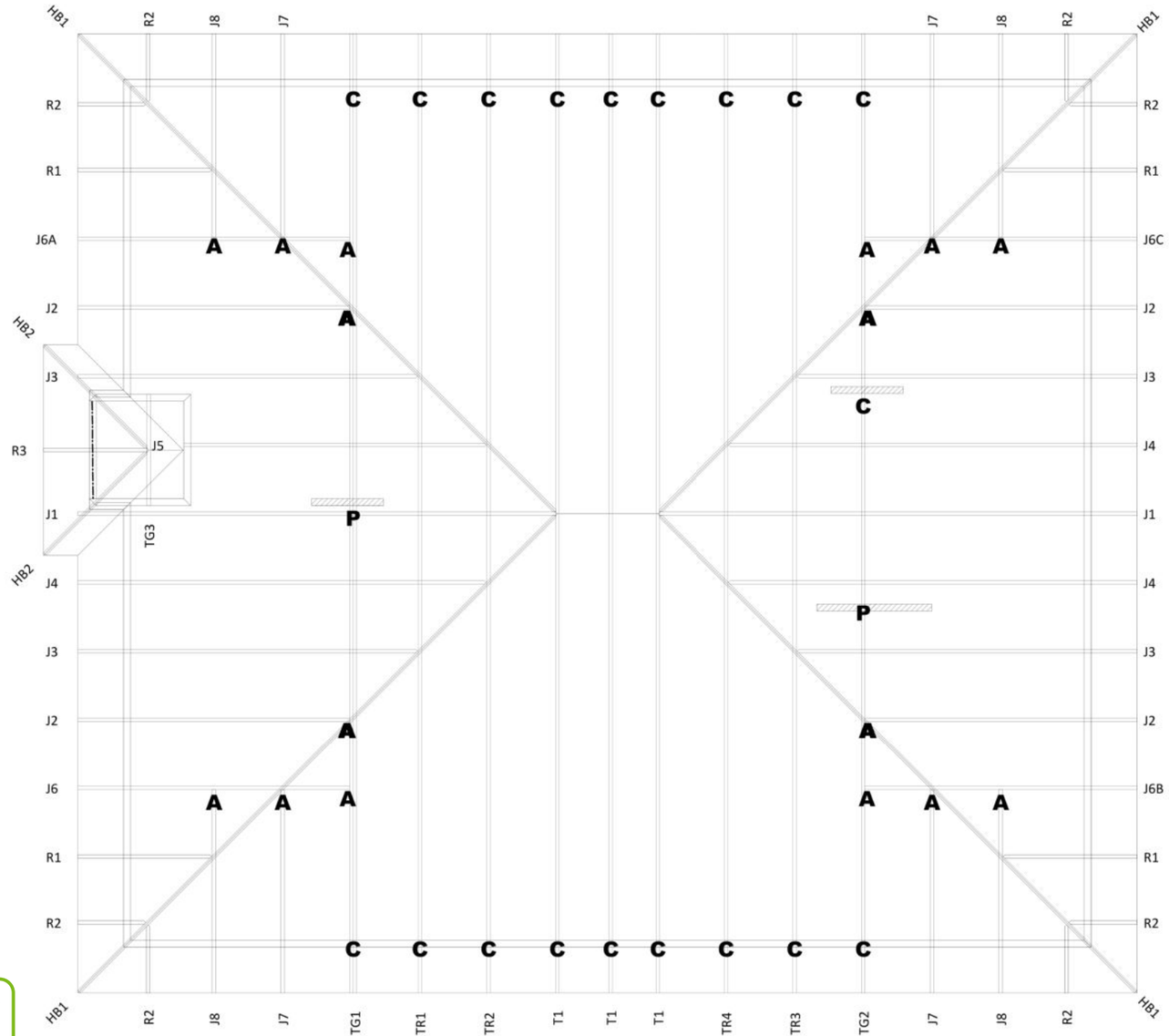
of 21 sheets

BUILDABLE CONSENT LAYOUT

FTMA NEW ZEALAND

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



CARTERS
Carters National Support Office
0800 Carters

JOB No **351827C1**

Client: TKR Homes Limited | T/A Signature H
Job: Bridge
Site: Lot 21 Belfast Development
Belfast

Pitch: 25.0deg
Roof Type: Metal Tiles
Overhang: 600mm
Wind Area: High
Roof Snow: 0.441kPa
Ceiling Restraint Centres:600mm

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

DRAWN Rebecca Lofroth | 27 Aug,2021

FIXINGS

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

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

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

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

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

Truss Layout

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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 it 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.

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:
141538	***Dove***	**TRUSS DESIGN**

Sales:	Drawn:	QS:	Print Date:	Scale:
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**NTS @ A3**

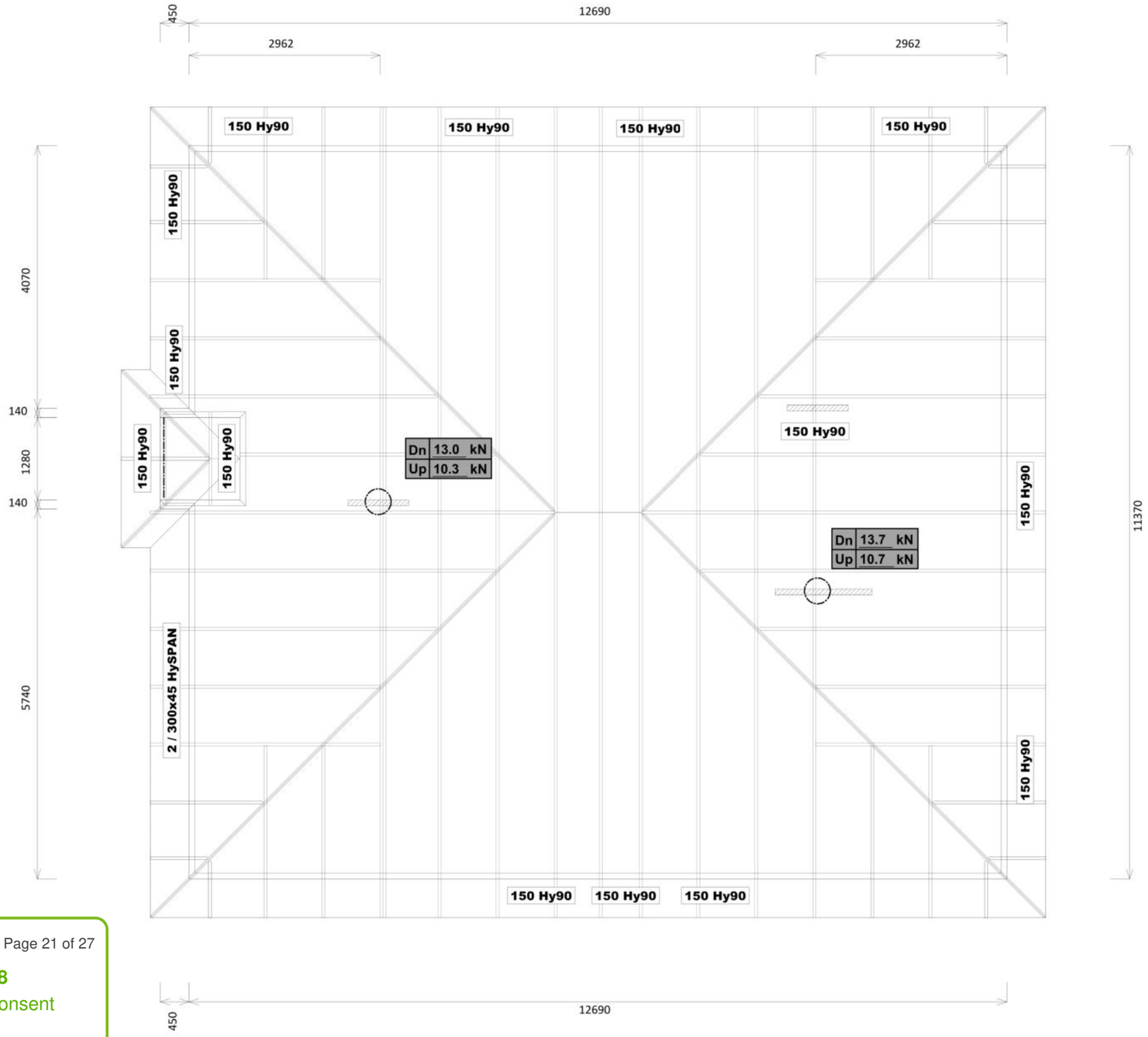
CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

Sheet No.: **20** of 21 sheets

BUILDABLE CONSENT LAYOUT

CARTERS Your Building Partner



CARTERS
Carters National Support Office
0800 Carters

JOB No **351827C1**

Client: TKR Homes Limited | T/A Signature H
Job: Bridge
Site: Lot 21 Belfast Development
Belfast

Pitch: 25.0deg
Roof Type: Metal Tiles
Overhang: 600mm
Wind Area: High
Roof Snow: 0.441kPa

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

DRAWN Rebecca Lofroth | 27 Aug,2021

Dn kN | Up kN — Ultimate Limit State Loads

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

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

If no loads are shown, no thickening is required.

The lintels have been sized using one of the following:

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

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

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

FTMA NEW ZEALAND

Christchurch City Council
BCN/2022/2118
Approved Building Consent Document
12/04/2022 Roh, Daniel

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

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

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 it 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.

The Steve & Catherine Bridge Family Trust
Lot 21
Belfast Development
Belfast, Christchurch

Job Number:	Original Plan:	Sheet Name:	Sheet No.:
141538	***Dove***	**TRUSS DESIGN**	**21**

Sales:	Drawn:	QS:	Print Date:	Scale:		
D Ryan	**M Glynn**	**W Xian**	**21/12/2021**	**NTS**	**@ A3**	**of 21 sheets**

CONSENT PLANS

No.	Date:	Reason:
1	08-12-2021	Initial Consent Plans

Proposed New Dwelling

ENGCO Consulting Engineers

Lot 21 Belfast Subdivision, Christchurch

RIBRAFT DRAWINGS

File Number 21008.218

Sheet No.	Rev	Date Issued	Sheet Title
S1	-	24/11/2021	General Notes
S2	-	24/11/2021	RibRaft Foundation Plan
S3	-	24/11/2021	Typical Foundation Sections
S4	-	24/11/2021	Typical Foundation Sections
S5	-	24/11/2021	Typical Services Penetration Details

Issue Register

Date	Description
24/11/2021	For Consent

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 - Lot Specific Geotechnical Report
Ref. No: 19120.000.001_21
Dated: 4-Nov-21

Confirm Ultimate Bearing Capacity after site stripping > 200 kPa

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

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

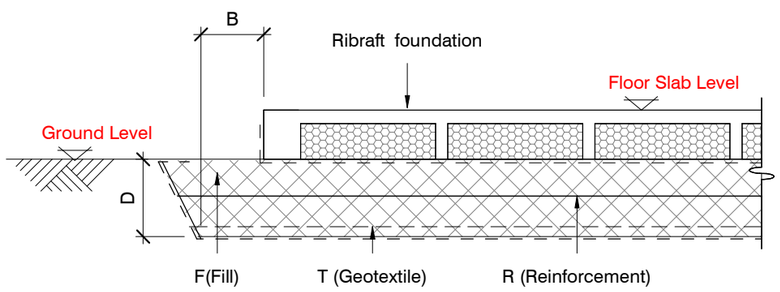
The design Fibre mix shall be supplied so that the residual flexural tensile stresses $f_{R,1}$ & $f_{R4,K}$ shall be 1.5 MPa & 1.0 MPa respectively.

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.

INSPECTIONS REQUIRED

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



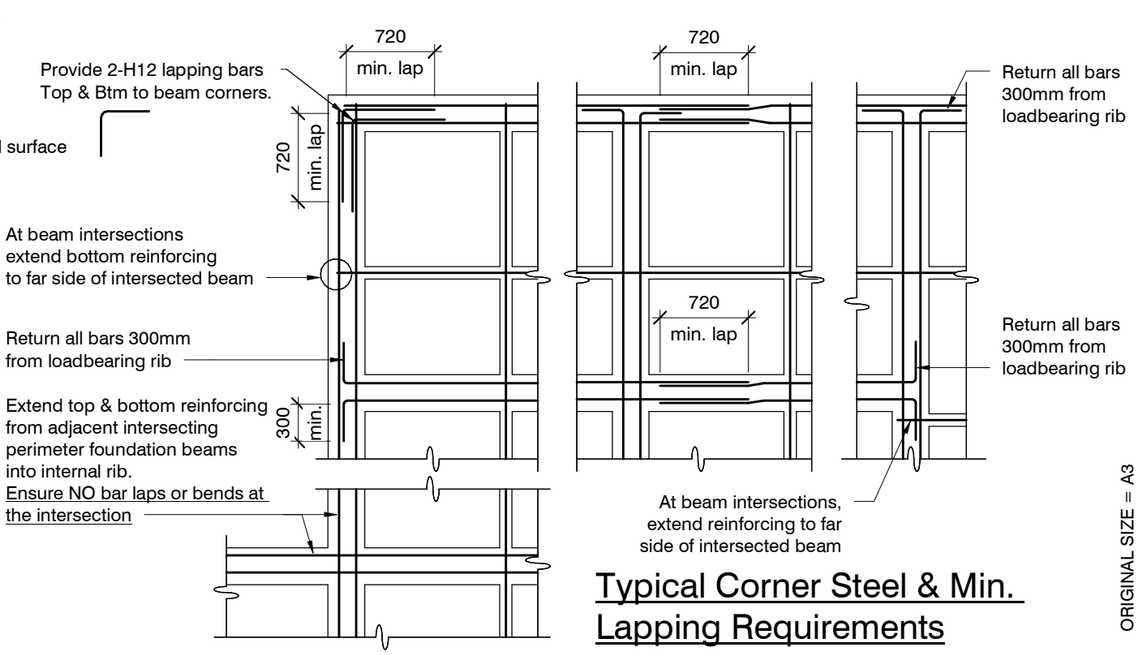
BUILDING PLATFORM

BUILDING PLATFORM TABLE:	
B	500mm
D	350mm approx. (remove all top soil and organics)
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

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 otherwide noted).
- All reinforcement to be fixed & tied where necessary in its specified position.
- Welding of steel is not permitted.
- Spacers:
  - Edge at 1200mm ctrs (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).



Typical Corner Steel & Min. Lapping Requirements

N.T.S.

ORIGINAL SIZE = A3

revisions			
	-	24/11/2021	For Consent

ENGCO Consulting Engineers

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

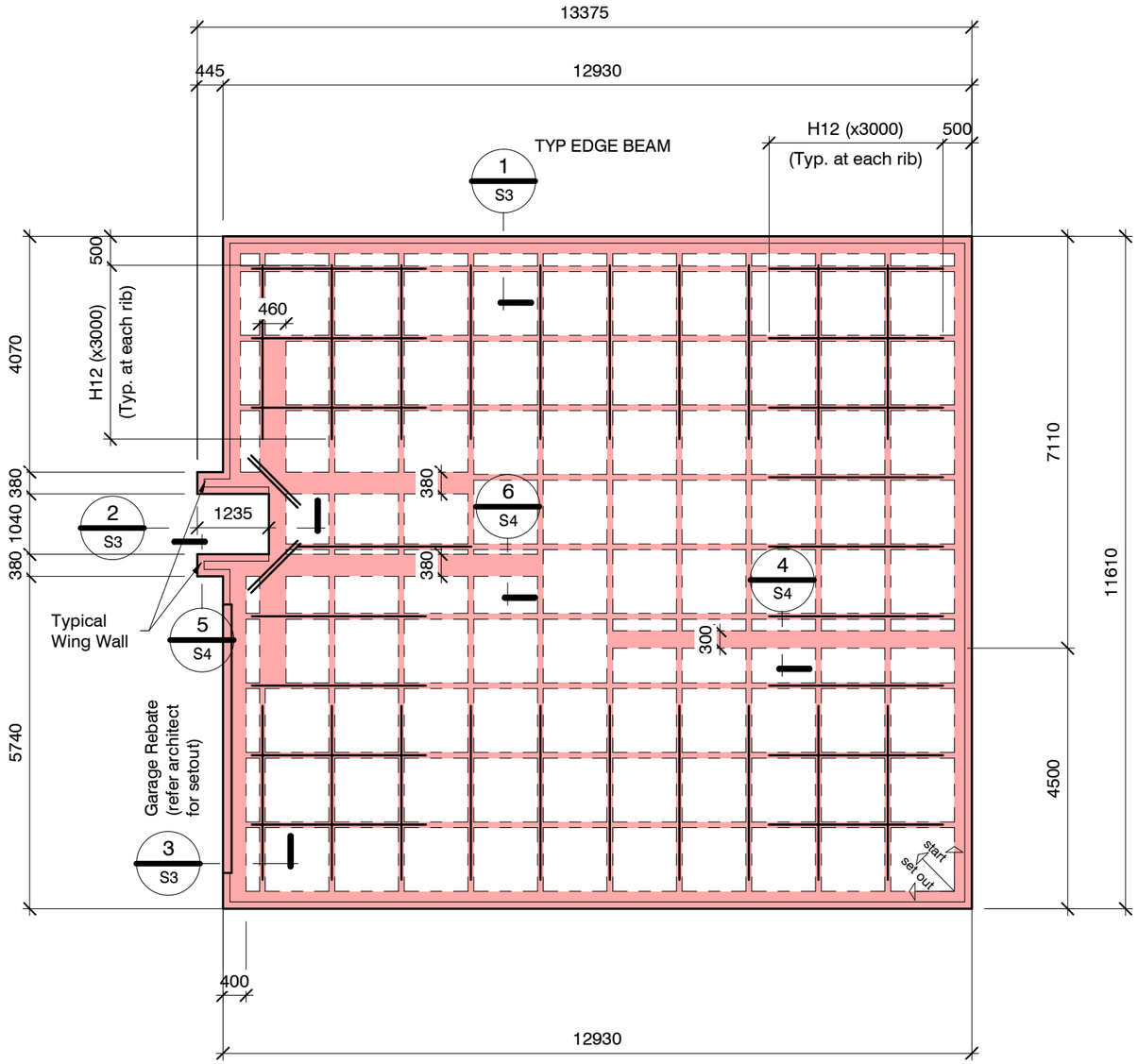
Proposed New Dwelling
Lot 21 Belfast Subdivision, Christchurch

General Notes

design	K. Zareei
drawn	R. Maia
appvd	M. Cusiel
date	24/11/2021

file 21008.218
dwg S1
rev. -

contractor shall verify all dimensions before commencing work



RIBRAFT FOUNDATION PLAN

1 : 100

Confirm all dimension with Architects drawings

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.)

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

All Mesh shall lap a minimum of 250mm (end of extensions not included.

ORIGINAL SIZE = A3

revisions

-	24/11/2021	For Consent

ENGCO Consulting Engineers

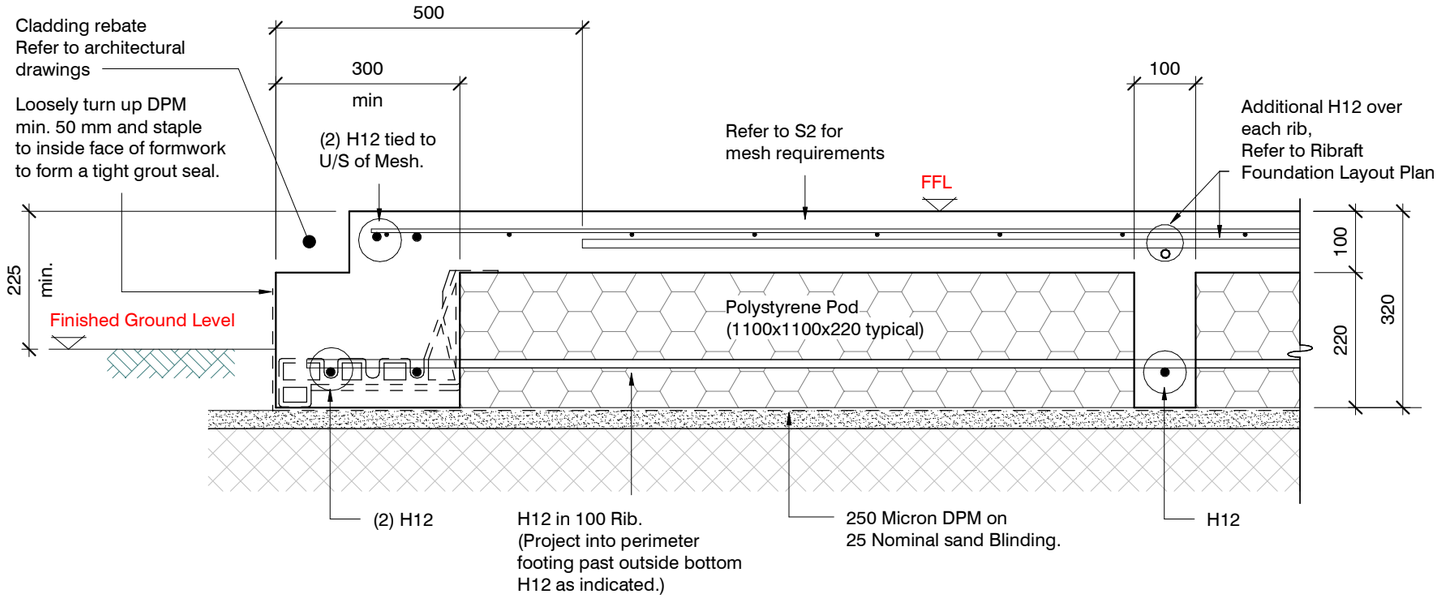
Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

Proposed New Dwelling
Lot 21 Belfast Subdivision, Christchurch

RibRaft Foundation Plan

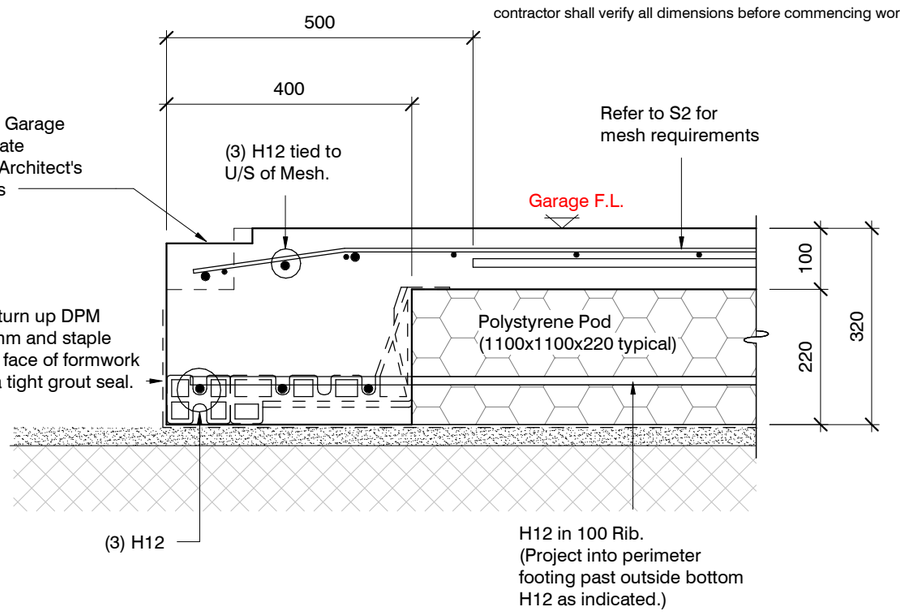
design K. Zareei
drawn R. Maia
appvd M. Cusiel
date 24/11/2021

file 21008.218
dwg S2
rev. -



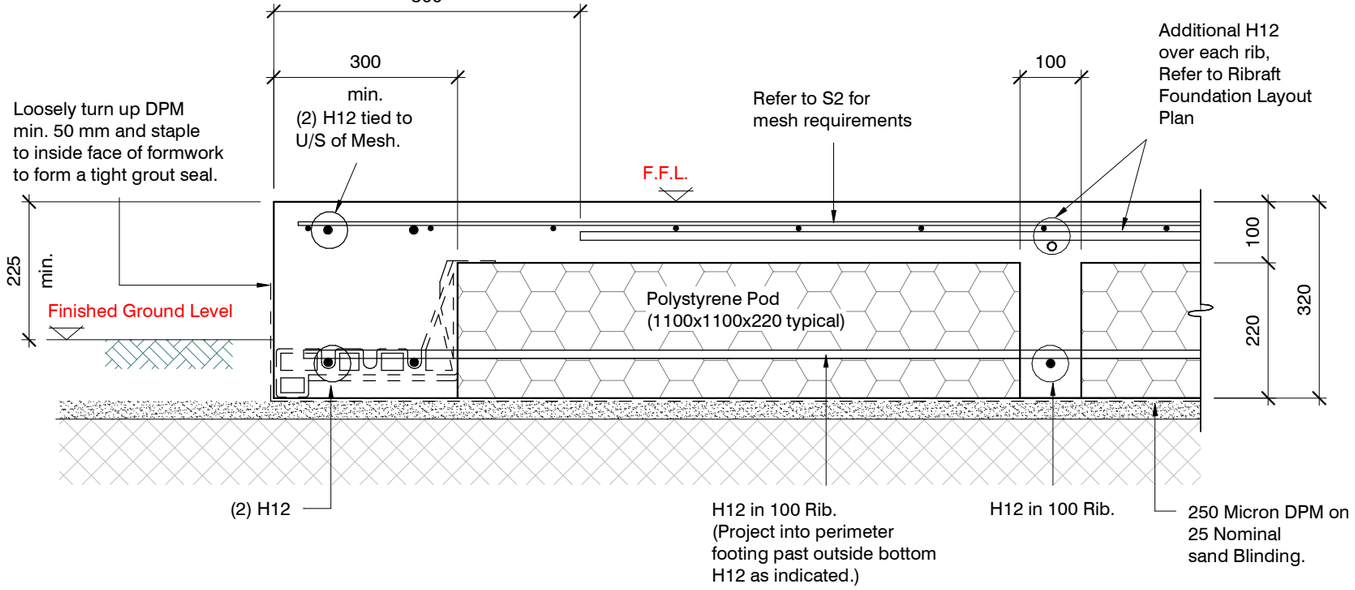
SECTION 1 / S2 — TYPICAL 300 WIDE EDGE BEAM

1 : 10



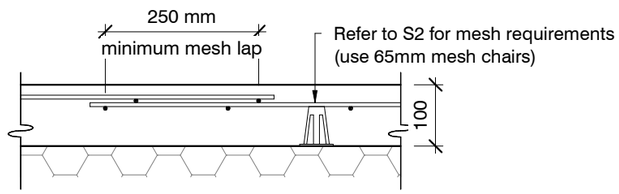
SECTION 3 / S2 — GARAGE DOOR REBATE

1 : 10



SECTION 2 / S2 — TYPICAL 300 WIDE EDGE BEAM

1 : 10



TYPICAL MESH LAP & CHAIR REQUIREMENTS

1:10

ORIGINAL SIZE = A3

Christchurch City Council

Page 25 of 27

BCN/2022/2118

Approved Building Consent Document

12/04/2022 Roh, Daniel

revisions

-	24/11/2021	For Consent

ENGCO Consulting Engineers

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

Proposed New Dwelling

Lot 21 Belfast Subdivision, Christchurch

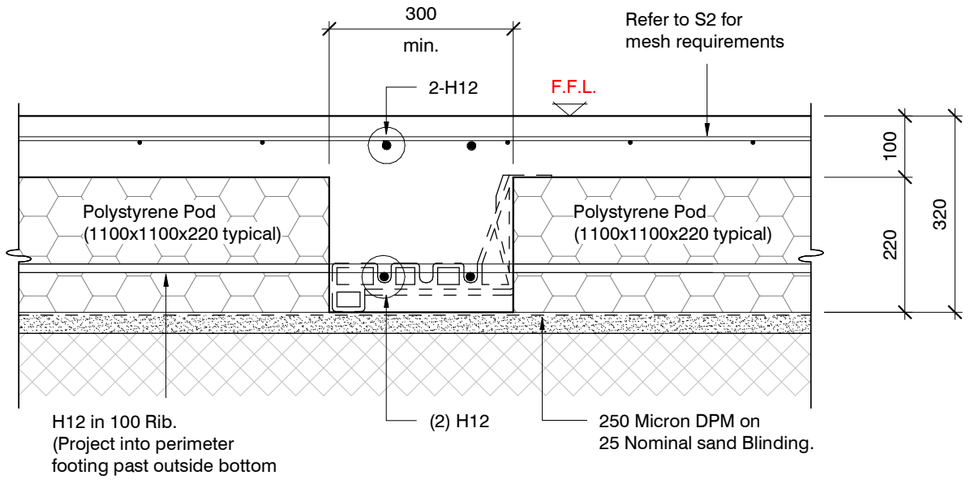
Typical Foundation Sections

design	K. Zareei
drawn	R. Maia
appvd	M. Cusiel
date	24/11/2021

file 21008.218

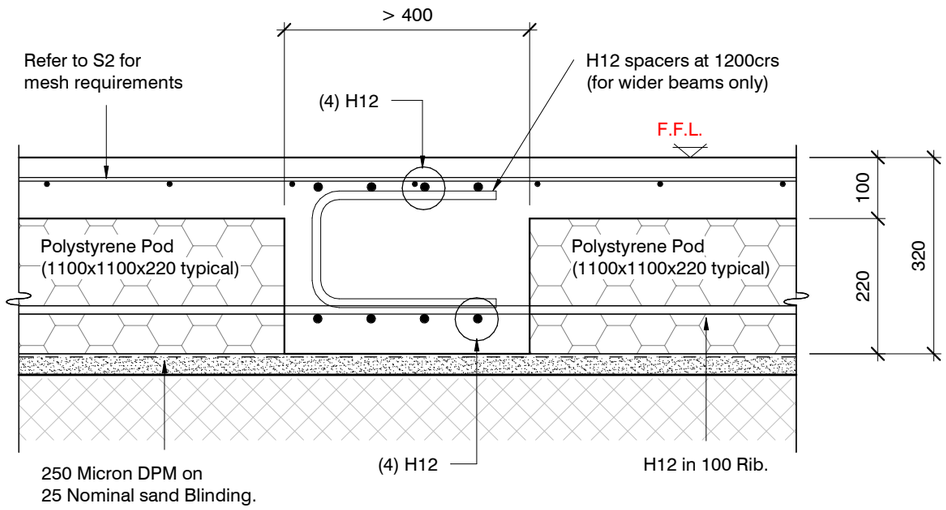
dwg S3

rev. -



SECTION 4 / S2 — TYPICAL 300 WIDE INTERNAL BEAM

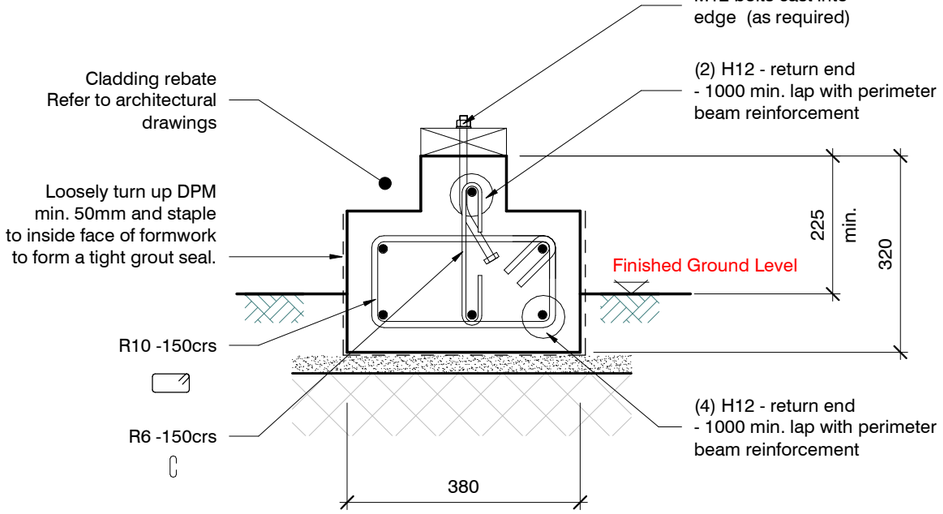
1 : 10



Note:
For every extra 150mm width add
(1) H12 top & bottom

SECTION 6 / S2 — TYPICAL MORE THAN 300 WIDE INTERNAL BEAM

1 : 10



SECTION 5 / S2 — TYPICAL 380 WIDE WING WALL

1 : 10

Christchurch City Council
Page 26 of 27
BCN/2022/2118
Approved Building Consent Document
12/04/2022 Roh, Daniel

ORIGINAL SIZE = A3

revisions			
	-	24/11/2021	For Consent

ENGCO Consulting Engineers

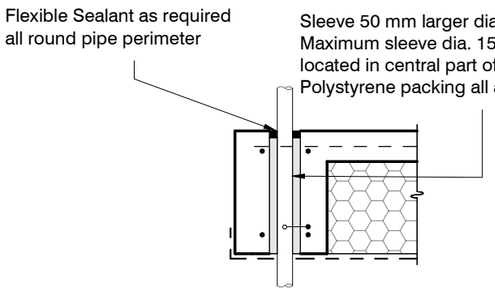
Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

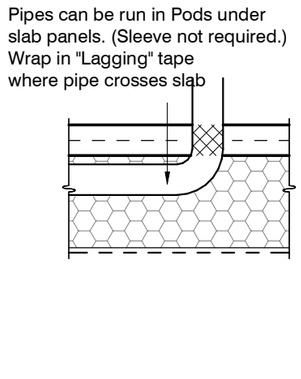
Proposed New Dwelling
Lot 21 Belfast Subdivision, Christchurch

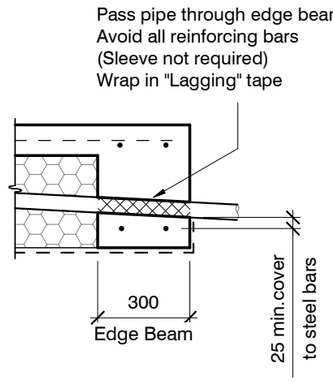
Typical Foundation Sections

design	K. Zareei
drawn	R. Maia
appvd	M. Cusiel
date	24/11/2021

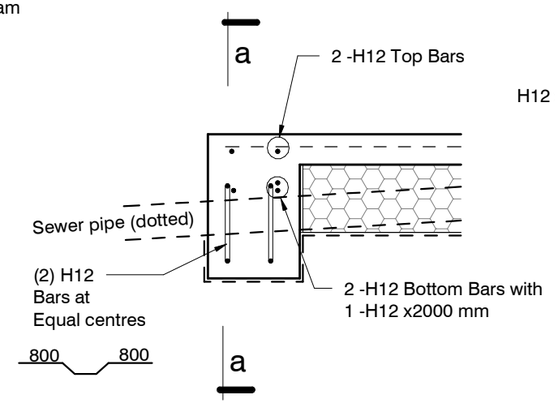
file 21008.218
dwg S4
rev. -

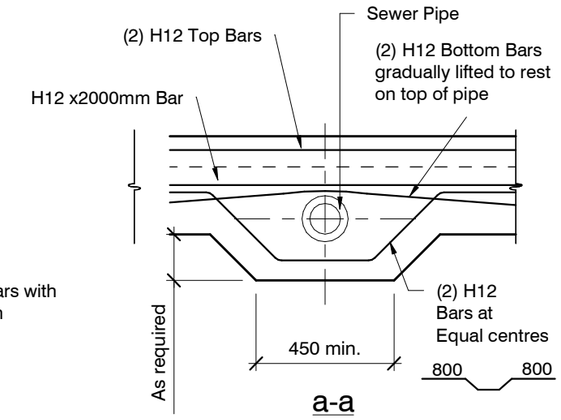






SLAB SERVICES PENETRATION DETAIL

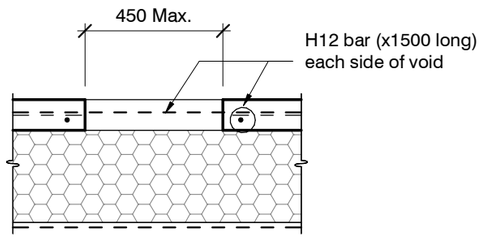




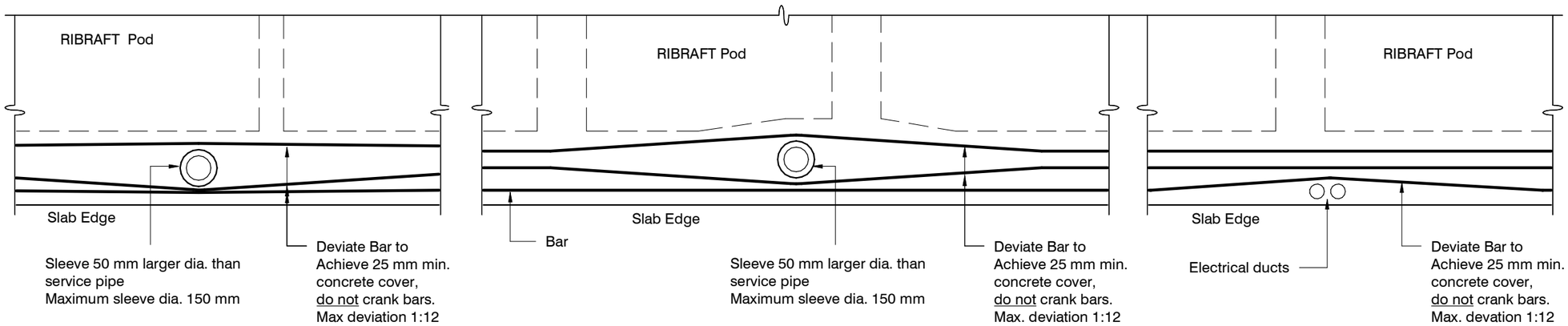
TYPICAL SECTION
LOCALISED DEEPENING OF FOUNDATION BEAM
TO ACCOMMODATE TOILET WASTE PIPE

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



Do not cut longitudinal reinforcement bars.

FOUNDATION SERVICES PENETRATION DETAILING.

Services shall not run along ribs or edge beams.

ORIGINAL SIZE = A3

revisions			
	-	24/11/2021	For Consent

ENGCO Consulting Engineers

Signature HOMES Est. 1983 YOUR HOME. YOUR WAY.

Proposed New Dwelling
Lot 21 Belfast Subdivision, Christchurch

Typical Services
Penetration Details

design	K. Zareei
drawn	R. Maia
appvd	M. Cusiel
date	24/11/2021

file 21008.218
dwg S5
rev. -

AUCKLAND - PH:(09) 3777955 ■ CHRISTCHURCH - PH: (03) 3667955 ■ NELSON - PH:(03) 3667955 ■ QUEENSTOWN - PH:(03) 4424255 ■ E-MAIL: OFFICE@ENGCO.CO.NZ ■ WWW.ENGCO.CO.NZ