

Sheet 1: **Cover Sheet** Sheet 2: Site Plan Sheet 3: Floor Plan Sheet 4: **Elevations** Sheet 5: Elevations Sheet 6: **Cross Sections** Roof Plan Sheet 7: Sheet 8: **Set Out Dimensions** Sheet 9: Foundation Plan Drainage Plan Sheet 10: Sheet 11: Bracing Plan Sheet 12: Lighting Plan Sheet 13: Framing Details Framing Details Sheet 14: 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 Truss Design Sheet 23:

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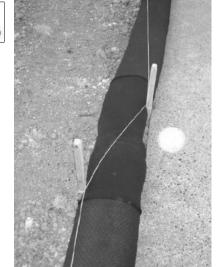
Elley & McLean Lot 108 Belfast Subdivision, Christchurch

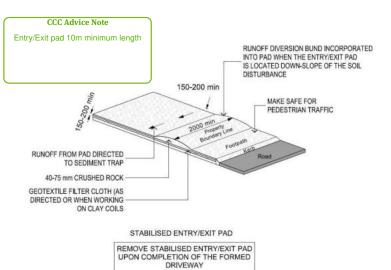
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Silt sock joined using a sleeve and pegged and secured using bailing twine with 1 m overlapping joint (Source: Erosion Control Ltd)





SITE INFORMATION

Site Area 465.00² Floor Area (VENEER): 141.76m² Site Coverage 30 48%

Wind Earthquake Exposure

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

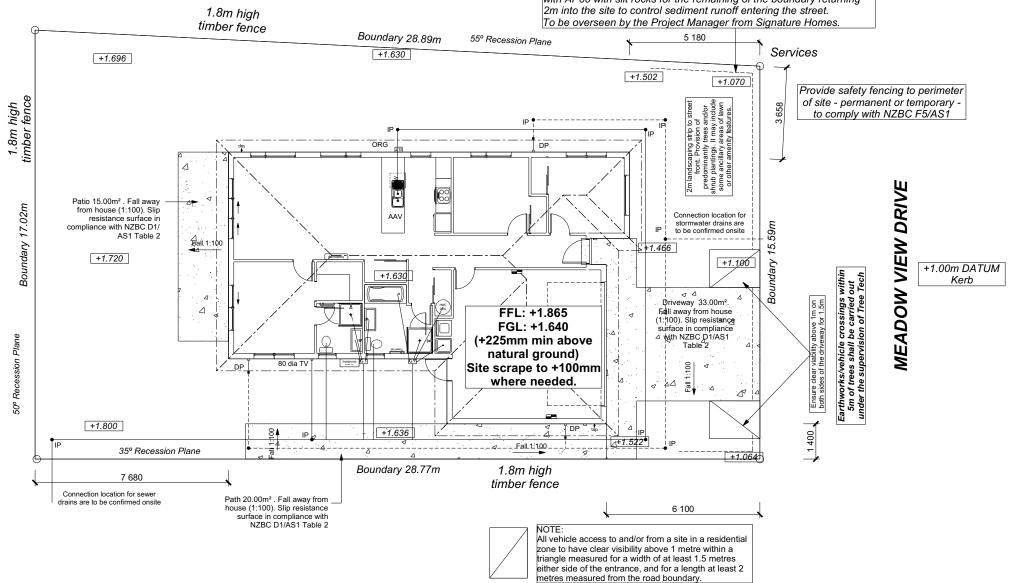
Sewer Drain DN100mm uPVC Downpipe Gully Trap

GT ORG TV Overflow Relief Gully Terminal Vent AAV Air Admittance Valve Inspection Point

Sediment Control Measures:

. 225mm Silt rocks 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 AP60 with silt rocks for the remaining of the boundary returning 2m into the site to control sediment runoff entering the street.



DRAWING NOTES

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of 23 sheets

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Payne, Wendy

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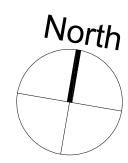
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S.Liu

CONSENT PLANS BC ISSUE 19.11.2021









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

DWELLING AREAS

Framing Area: 135.27m² (Perimeter: 53.60m) Veneer Area: 141.76m² (Perimeter: 54.56m) Roof Area: 168.91m² (Perimeter: 57.220m)

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

FLOOR FINISHES Carpet & Vinyl

KITCHEN HOB

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



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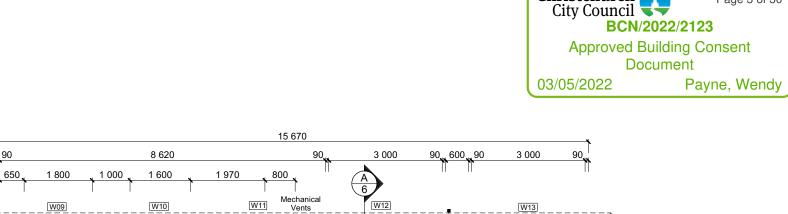
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Refer to attached Specifications for further information

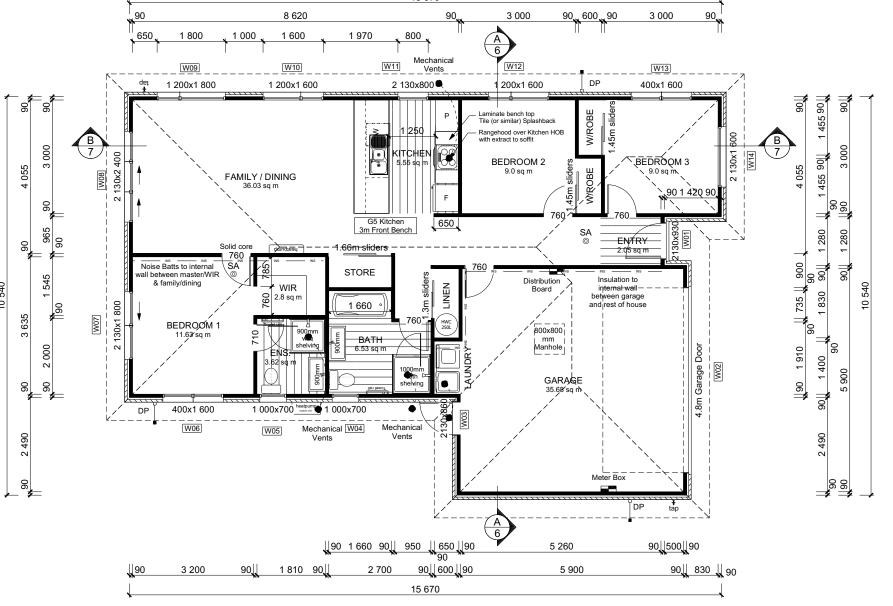
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ROOF & WALL CLADDINGS
Roof: 25° Pressed Metal Tiles
Walls: 70 Series Brick Veneer
with a 50mm cavity

ELEVATION LEGEND

Safety Stays Safety Glass MB Meter Box TV Terminal Vent

ELEVATION NOTES

Gutter: Coloured Steel Quad Gutter Fascia: Coloured Steel185 Fascia Downpipes : Colorsteel Rectangular 75x55mn 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

ELEVATION A

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

ELEVATION A

RISK

Medium Low

Low

SCORE

RISK CRITERIA

Number of Stories

Roof Wall Junction

Eaves Width Building Envelope

Decks & Balconies
Total

Wind Zone

ELEVATION B

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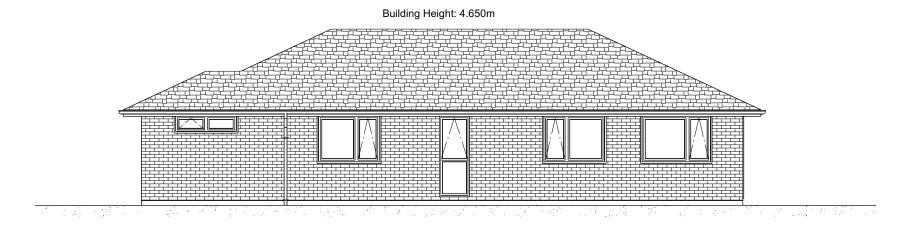
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ROOF & WALL CLADDINGS
Roof: 25° Pressed Metal Tiles
Walls: 70 Series Brick Veneer
with a 50mm cavity

ELEVATION LEGEND

Safety Stays Safety Glass MB Meter Box Terminal Vent TV

ELEVATION NOTES

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

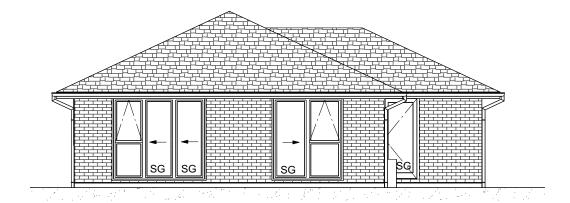
Joinery: Double glazed aluminum

All egress points to have a maximum step down of 190mm.

Access 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

ELEVATION C





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

BUILDING ENVELOPE RISK MATRIX

ELEVATION C

RISK

Medium Low

Low

SCORE

RISK CRITERIA

Number of Stories

Roof Wall Junction

Eaves Width Building Envelope

Decks & Balconies
Total

Wind Zone

ELEVATION D

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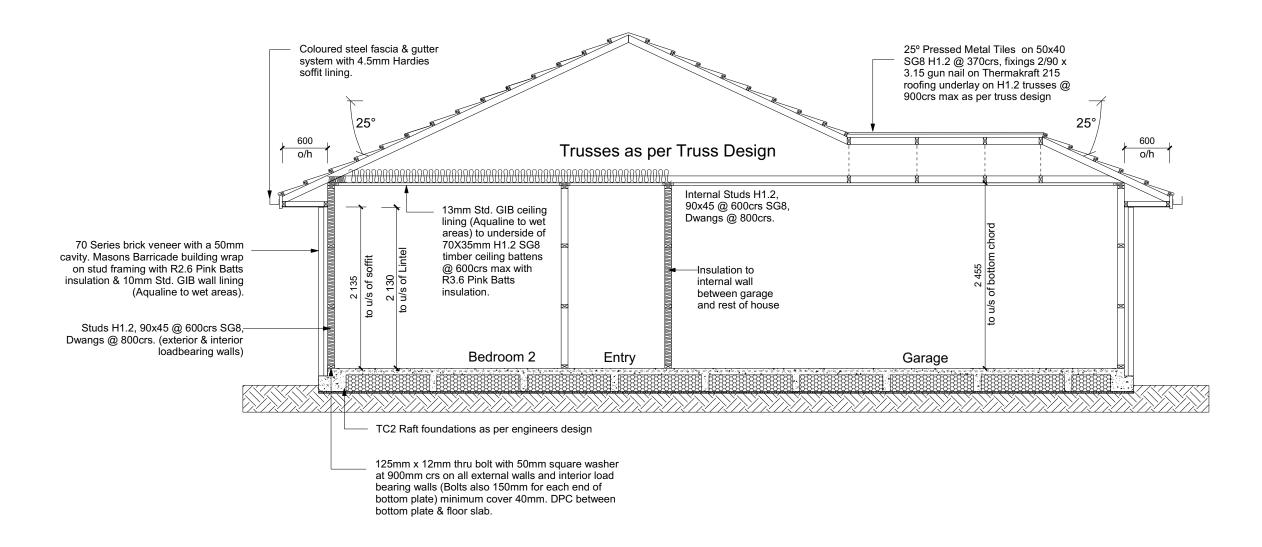
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CROSS SECTION A-A

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Local Authority bylaws. **CONSENT PLANS** Sheet No.: 6

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

with a 50mm cavity

ROOF & WALL CLADDINGS Roof: 25° Pressed Metal Tiles Walls: 70 Series Brick Veneer

CROSS SECTION NOTES

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

DRAWING NOTES

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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.

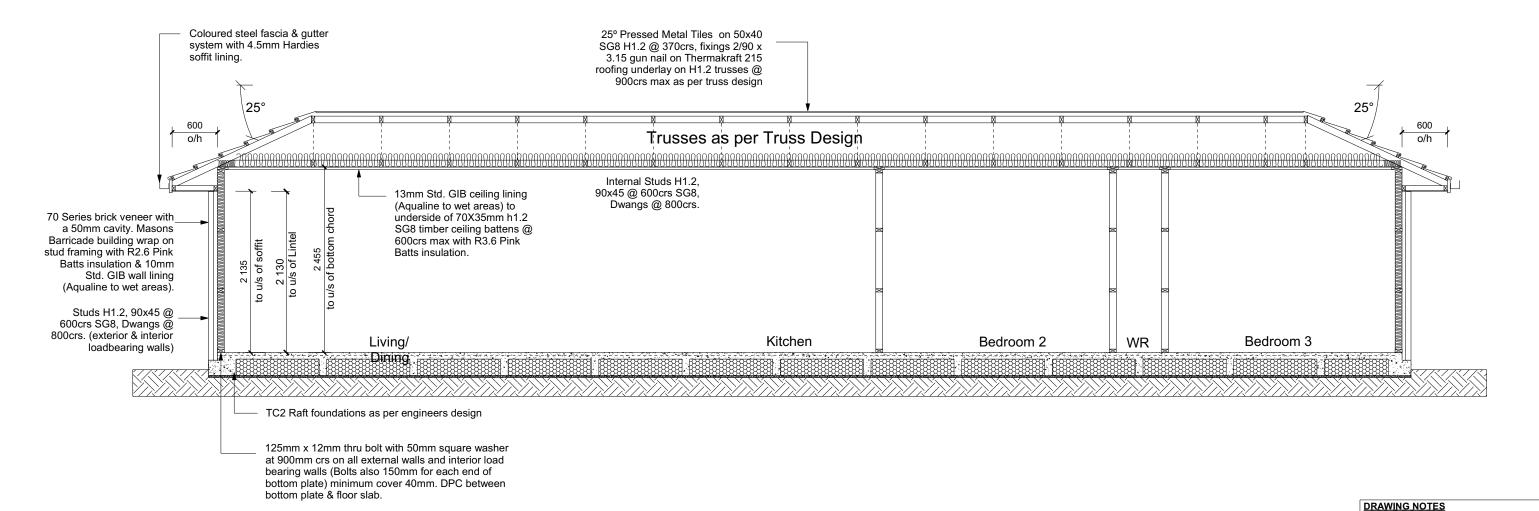
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Fixings shall comply with NZS 3604:2011 Section 4 Durability Tables 4.1-4.3 Unless stated otherwise, timber members on drawings are to be a minimum of SG8 strength graded as per NZS3604:2011.

INSULATION

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



CROSS SECTION B-B

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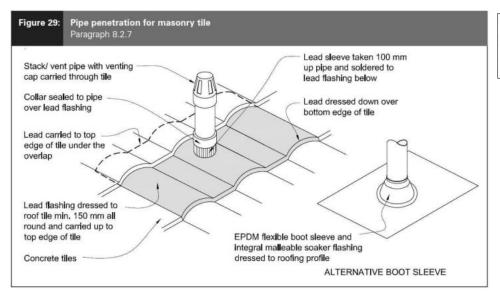
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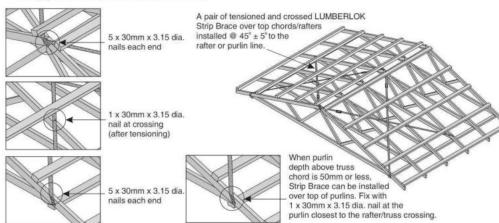
Refer to attached Specifications for further



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 PLAN NOTES

ROOF CLADDING

Roofing:

Tile Battens:

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

25° Pressed Metal Tiles

50x40 SG8 H1.2 @ 370crs,

fixings 2/90 x 3.15 gun nail

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

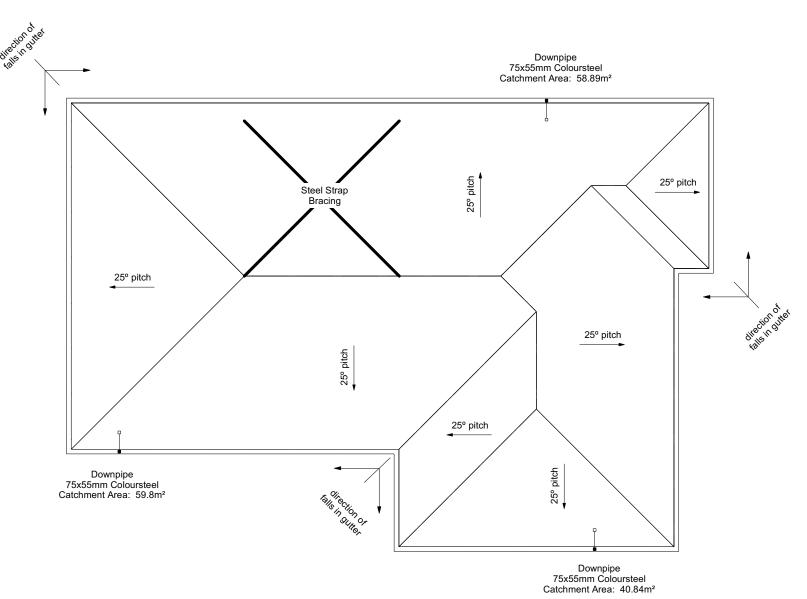
Downpipes: 75x55 Rectangle Colorsteel As per NZBC E1/AS1 Table 5 75x55 down pipes can collect up to 60m² of 0-25° roof plan area.

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

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



Metal Tile Penetration Detail Scale NTS



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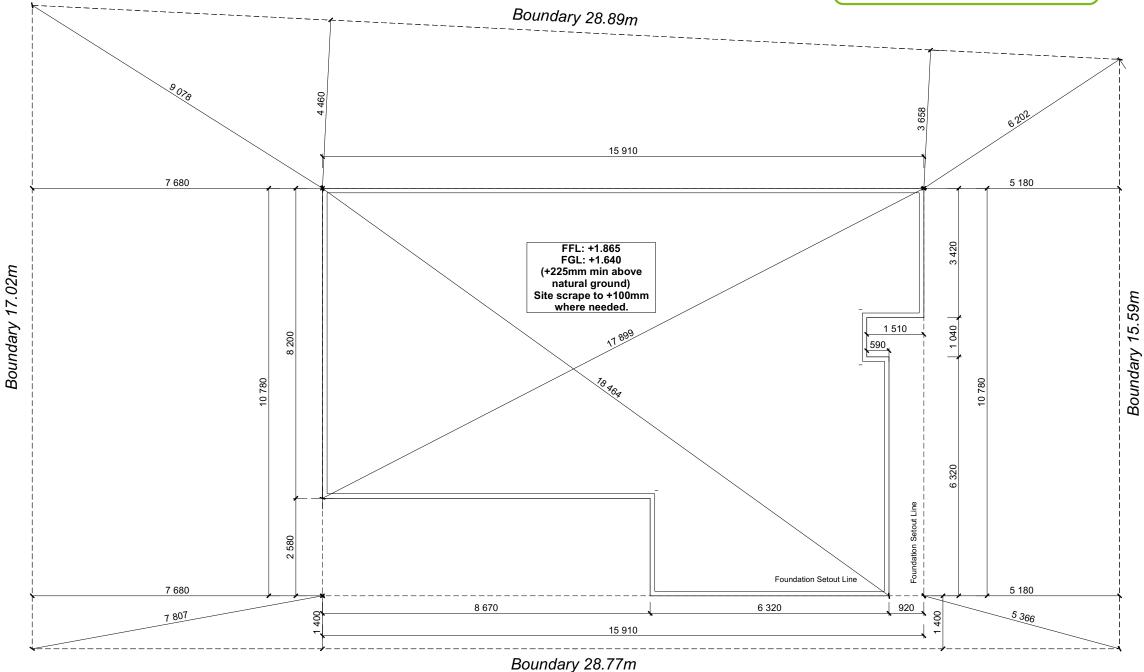
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FOUNDATION PLAN NOTES

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

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.

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CONSENT PLANS

MEADOW VIEW DRIVE

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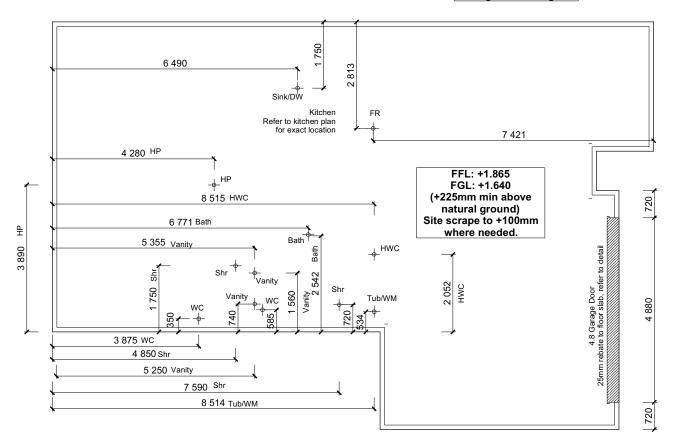
SET OUT PLAN NOTES

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.

United Steel [Wireplus] SE62Plus to entire slab

TC2 Foundation as per Engineers Design



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SETOUT DIMENSIONS

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

NZBC G13/ AS1 Plumbing Schedule Kitchen Ø50mm @1:40 Sink: (3 discharge units) Bathrooms Ø40mm @ 1:40 Ø40mm @1:40 Ø40mm @1:40 Ø100mm @1:40 Ø40mm @1:40 NZBC G13/ AS1 Vanity: (1 discharge units per basin) (2 discharge units) (4 discharge units) (4 discharge units) (5 discharge units) Shower: Bath: WC: Laundry Sink: Drainage Schedule Main Foulwater Ø100mm @1:60 Ø100mm @1:60 (1:120max)

Stormwater Drain Terminal Vent Ø80mm Ø50mm

Vent Heatpump ORG Drain over GT Overflow Relief Gully

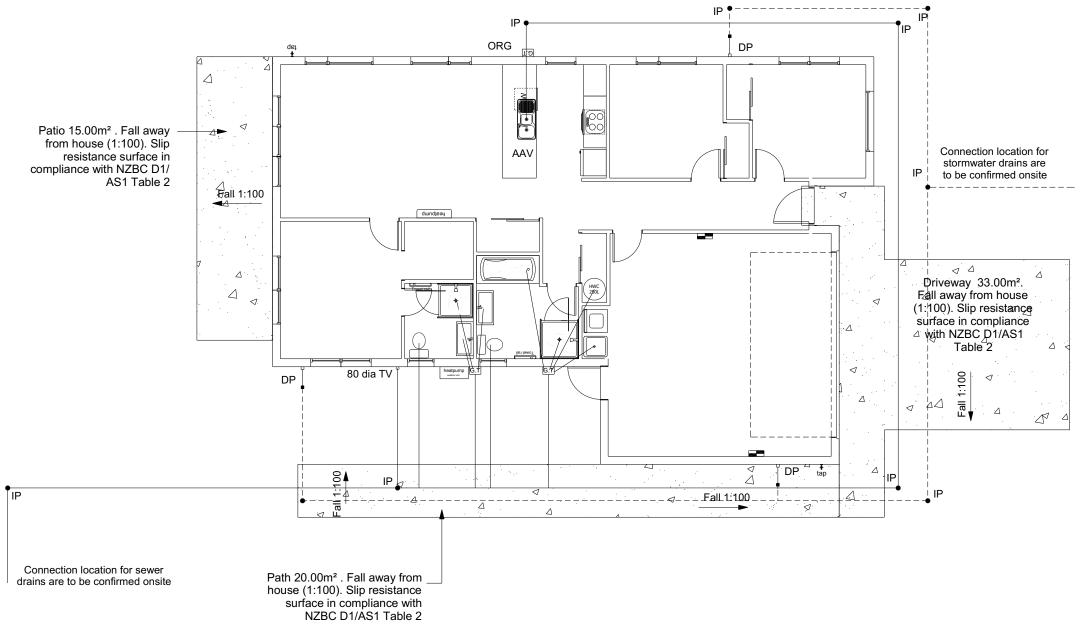
Notes: All plumbing and drainage to comply with NZBC G13/AS1.

Vented Drain

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)



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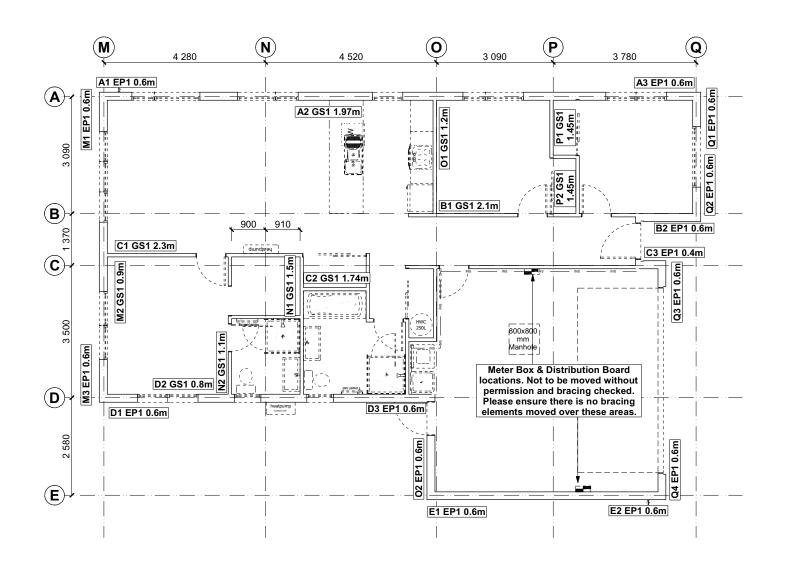
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8.7.3.4

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;
- (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;
- 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 Brace Length Brace Type Brace Number

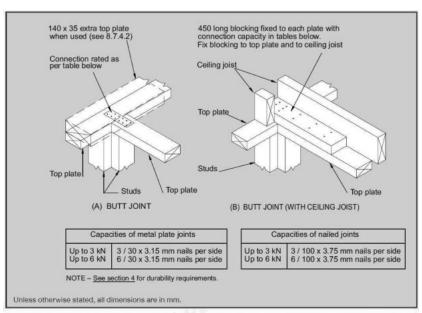


Figure 8.16 - Connecting top plates to external walls at right angles - Walls containing bracing (see 8.7.3.4)

Single Level Along Resistance Sheet

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									535	869
									Achi	eved
Line	Element	Length	Angle	Stud Ht.	Туре	Supplier	Wind	EQ	1007	975
		(m)	(degrees)	(m)			(BUs)	(BUs)	188%	112%
	1	0.60		2.4	EP1 0.6	Ecoply®	57	63		
	2	1.97		2.4	GS1-N	GIB®	136	118		
a	3	0.60		2.4	EP1 0.6	Ecoply®	57	63		
									250 OK	244 OK
	1	2.10		2.4	GS1-N	GIB®	145	126		
b	2	0.60		2.4	EP1 0.6	Ecoply®	57	63		
									202 OK	189 OK
	1	2.30		2.4	GS1-N	GIB®	159	138		
c	2	1.74		2.4	GS1-N	GIB®	120	104		
			20 20						279 OK	242 OK
	1	0.60		2.4	EP1 0.6	Ecoply®	57	63		
d	2	0.80		2.4	GS1-N	GIB®	49	47		
u	3	0.60		2.4	EP1 0.6	Ecoply®	57	63		
	4								163 OK	173 OK
	1	0.60		2.4	EP1 0.6	Ecoply®	57	63		
е	2	0.60		2.4	EP1 0.6	Ecoply®	57	63		
			- 22						114 OK	126 OK

Single Level Across Resistance Sheet

OD N	ame: Elley	& NICLean							Wind	EQ
								1	Den	nand
								l	743	869
									Achi	eved
ine	Element	Length	Angle	Stud Ht.	Type	Supplier	Wind	EQ	906	926
		(m)	(degrees)	(m)		1170-2200	(BUs)	(BUs)	122%	107%
	1	0.60		2.4	EP1 0.6	Ecoply®	57	63		
	2	0.90		2.4	GS1-N	GIB®	57	53		
m	3	0.60		2.4	EP1 0.6	Ecoply®	57	63		-
									171 OK	179 OK
	1	1.15	1	2.4	GS1-N	GIB®	78	69		
n	2	1.10		2.4	GS1-N	GIB®	74	66		
						7.00			152 OK	135 OK
	1	1.20		2.4	GS1-N	GIB®	83	72		
0	2	0.60	8 8	2.4	EP1 0.6	Ecoply®	57	63		
								7	140 OK	135 OK
	1	1.45		2.4	EP1 0.4	Ecoply®	116	138		
p	2	1.45		2.4	GS1-N	GIB®	100	87		
	0								216 OK	225 OK
	1	0.60		2.4	EP1 0.6	Ecoply®	57	63		
	2	0.60		2.4	EP1 0.6	Ecoply®	57	63		
q	3	0.60		2.4	EP1 0.6	Ecoply®	57	63		
	4	0.60		2.4	EP1 0.6	Ecoply®	57	63		10
	Č.			_					228 OK	252 OK

D Ryan

Christchurch
City Council
BCN/2022/2123
Approved Building Consent
Document
03/05/2022
Payne, Wendy

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



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Elley & McLean Lot 108 Belfast Subdivision, Christchurch

Job Numb	er:	0	riginal Plan:	
121201		'Rifl	eman 142'	
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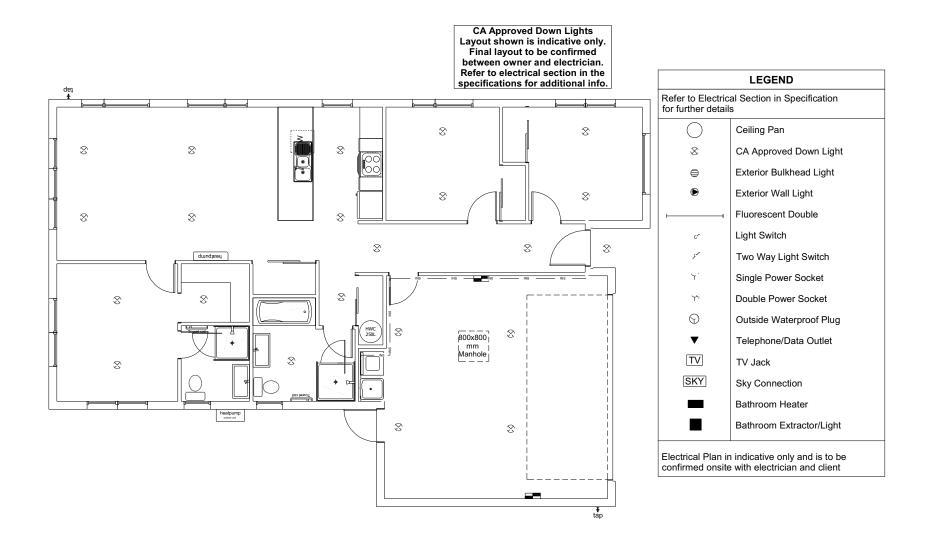
Sheet	Name:	
BRACIN	G PLAN	1
		_

1:100

19/04/2022

Sheet No.:

12
of 23 sheets



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Elley & McLean Lot 108 Belfast Subdivision, Christchurch

Job Numb	er:	0	riginal Plan:	
1212	01	'Rifl	eman 142'	L
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J Rana

D Ryan

Sheet Name:

LIGHTING PLAN

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19/04/2022

Sheet No.:

13

of 23 sheets

LINTEL FIXING SCHEDULE

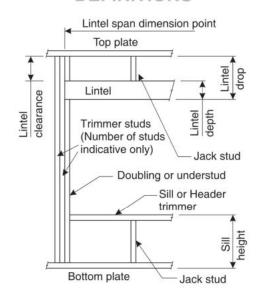
Christchurch City Council ALTERNATIVE TO TABLE 8.14 & FIGURE 8.12 CN/2022/2123

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	Ligh	nt Roc	Heav	y Ro	of	
Tributary	Wine	d Zon	Wind Zone			
Area	L, M, H	VH	EH	L, M, H	VH	EH
8.6 m ²	G	G	Н	G	G	Н
11.6 m ²	G	Н	Н	G	G	Н
12.1 m ²	G	Н	Н	G	Н	Н
15.3 m ²	Н	Н	-	G	Н	Н
19.1 m ²	Н		-	G	Н	-
20.9 m ²	Н	-	-	Н	Н	-
21.8 m ²	Н	-	-	Н	-	-
34.3 m ²		-		Н		-

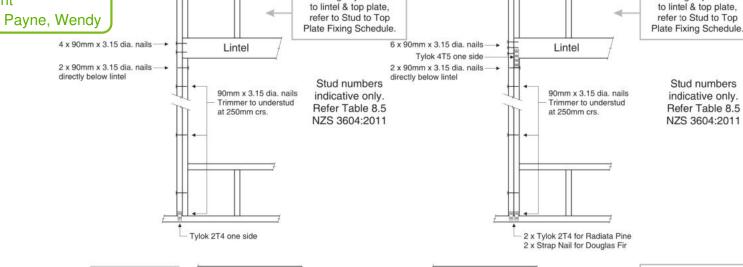
Notes:

- 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

03/05/2022 SELECTION CHART FOR

LINTEL FIXING

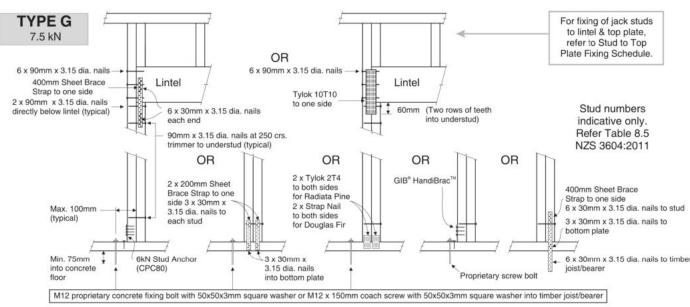
Lintel	Loaded			ght R					ıvy F		
Span	Dimension (See Fig. 1.3		Wi	nd Z	one			Wir	nd Zo	one	
	NZS 3604:2011)	L	M	Н	VH	EH	L	M	Н	VH	EH
0.7	2.0	Е	E	E	E	F	E	E	E	E	E
	3.0	Е	E	E	F	F	E	E	E	E	F
	4.0	E	E	F	F	F	E	E	E	F	F
	5.0	Е	F	F	F	G	E	E	F	F	F
	6.0	E	F	F	G	G	E	E	F	F	G
0.9	2.0	Е	E	E	F	F	E	E	E	E	F
	3.0	Е	E	F	F	F	E	E	E	F	F
	4.0	E	E	F	F	F	E	E	F	F	F
	5.0	Е	F	F	F	G	E	E	F	F	F
	6.0	E	F	F	G	G	E	E	F	F	G
1.0	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	F	F	F	G	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
4.0	6.0	E	F	F	G	G	E	E	F	F	G
1.2	2.0	E	E	F	F	E	E	E	E	F	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0 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
1.5	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	Н	Ē	E	F	G	G
	6.0	F	F	G	Н	н	Ē	E	F	G	Н
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	Н	E	E	F	G	G
	5.0	F	F	G	Н	Н	Ē	Ē	F	G	Н
	6.0	F	G	G	Н	Н	Ē	F	G	Н	Н
2.4	2.0	Е	F	F	G	G	E	Е	F	F	G
	3.0	F	F	G	G	Н	Ε	E	F	G	G
	4.0	F	F	G	Н	Н	Ε	Е	F	G	Н
	5.0	F	G	G	Н	Н	E	F	G	Н	Н
	6.0	F	G	Н	Н	-	E	F	G	Н	Н
3.0	2.0	Е	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	Н	Н	E	E	F	G	Н
	4.0	F	G	G	Н	Н	E	F	G	Н	Н
	5.0	F	G	Н	Н	-	E	F	G	Н	Н
	6.0	F	G	Н	-		E	F	G	Н	-
3.6	2.0	F	F	G	G	Н	E	E	F	G	G
	3.0	F	F	G	Н	Н	E	F	G	G	Н
	4.0	F	G	Н	Н	-	E	F	G	Н	Н
	5.0	F	G	Н	-	0	E	F	G	Н	-
4.0	6.0	G	Н	Н			E	F	H	-	
4.2	2.0	F	F	G	G	Н	E	E	F	G	G
	3.0	F	G	H	Н	្រំ	E	F	G	Н	Н
	4.0 5.0		Н	Н	-	0	E	F	Н	H	
	6.0	G	Н	-	-	-	E	F	Н		-
4.5	2.0	F	F	G	Н	Н	E	E	F	G	Н
7.0	3.0	F	G	Н	Н	-	E	F	G	Н	Н
	3.4	F	G	Н	Н	- 2	E	F	G	Н	-
	4.0	F	G	Н	-	0	E	F	G	Н	
	5.0	G	Н	-		-	E	F	Н	-	-
	6.0	G	Н	-	-	0	E	F	Н	-	
4.8	2.0	F	F	G	Н	Н	E	E	F	G	Н
7.0	3.0	F	G	Н	Н	-	E	F	G	Н	Н
	3.2	F	G	Н	Н	-	F	F	G	Н	-
	4.0	F	G	Н	-	0	E	F	Н	Н	
	5.0	G	Н	-		2	E	F	Н	-	
	0.0	G	н	2	120	2	E	F	н	2	_

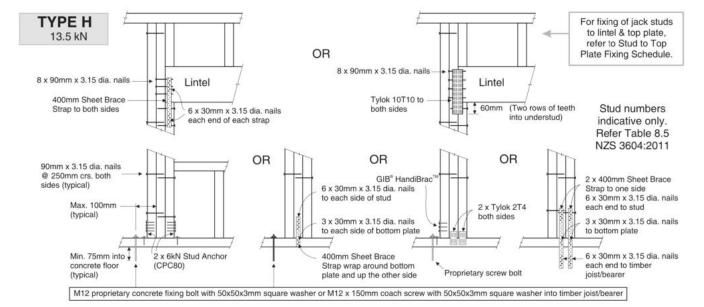


For fixing of jack studs

TYPE F 4.0 kN

For fixing of jack studs





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Elley & McLean Lot 108 Belfast Subdivision, Christchurch

Page 14 of 30

Approved Building Consent

Document

TYPE E

1.4 kN

NTEL FIXING OPTIONS

Job Numb	er:	Original Plan:	Sheet	Name:			C	ONSENT PLANS	Sheet No.:
121201		'Rifleman 142'	FRAMING DETAILS		No.	Date: BC ISSUE	Reason: 19.11.2021	14	
Sales: D Ryan	Drawn: J Rana	QS: S.Liu	Print Date: 19/04/2022	Scale: NTS	@ A3				of 23 sheets

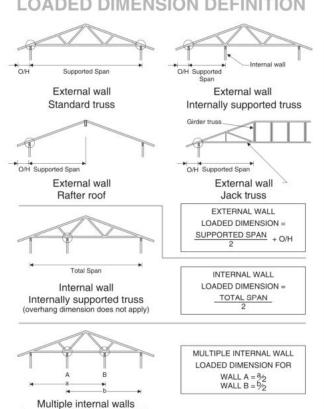
STUD TO TOP PLATE FIXING SCHEDULE

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 kl
- 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.)

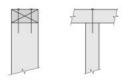
Wind Zones L, M, H, VH, EH, as per NZS 3604:2011

	d Dimens ud Cent	sion (m) res			ht R						Roof one	
300mm	400mm	600mm	L	M	Н	VH	EΗ	L	M	Н	VH	EH
3.0	2.3	1.5	Α	Α	В	В	В	Α	Α	В	В	В
4.0	3.0	2.0	Α	Α	В	В	В	Α	Α	В	В	В
5.0	3.8	2.5	Α	В	В	В	В	Α	Α	В	В	В
6.0	4.5	3.0	Α	В	В	В	В	Α	Α	В	В	В
7.0	5.3	3.5	Α	В	В	В	В	Α	Α	В	В	В
8.0	6.0	4.0	Α	В	В	В	В	Α	Α	В	В	В
9.0	6.8	4.5	В	В	В	В	В	Α	Α	В	В	В
10.0	7.5	5.0	В	В	В	В	В	Α	Α	В	В	В
11.0	8.3	5.5	В	В	В	В	В	Α	Α	В	В	В
12.0	9.0	6.0	В	В	В	В	В	Α	Α	В	В	В

FIXING OPTIONS

FIXING TYPE A 0.7 kN

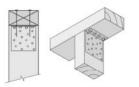
2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.



FIXING TYPE B 4.7 kN

CHOOSE ANY OF THE 3 OPTIONS BELOW

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







2 x 90mm x 3.15 dia. plain steel

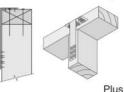
wire nails driven vertically into stud.

LUMBERLOK 6kN Stud Anchor (CPC80)

2 x LUMBERLOK

Recommended for internal wall options to avoid lining issues

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



LUMBERLOK Stud Strap (one face only) Christchurch City Council Page 15 of 30 BCN/2022/2123 Approved Building Consent Document 03/05/2022 Payne, Wend

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.

* 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.

90 SERIES BRICK

60

Screw Tie Long

(105mm)

Max. Cavity

Stud

* Nail hole for Oamaru Stone.

Screw Tie Short

(85mm)

70 SERIES BRICK

Max. Cavity 50

Stud

* Angled neck encourages increased tie embedment in mortar.

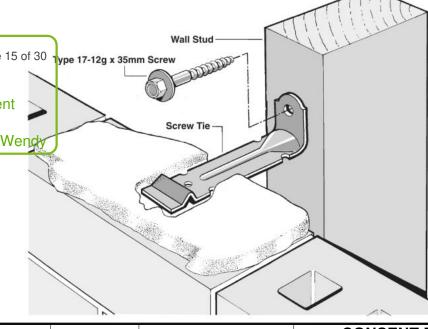
Material: 1.2mm NZCC-SD Hot Dip Galvanised Steel
Screws: Type 17-12g x 35mm Hex Head Hot Dip Galvanised Screws
Packaging: 250 ties per box including screws

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



sions are to be check and confirmed prior to any construction

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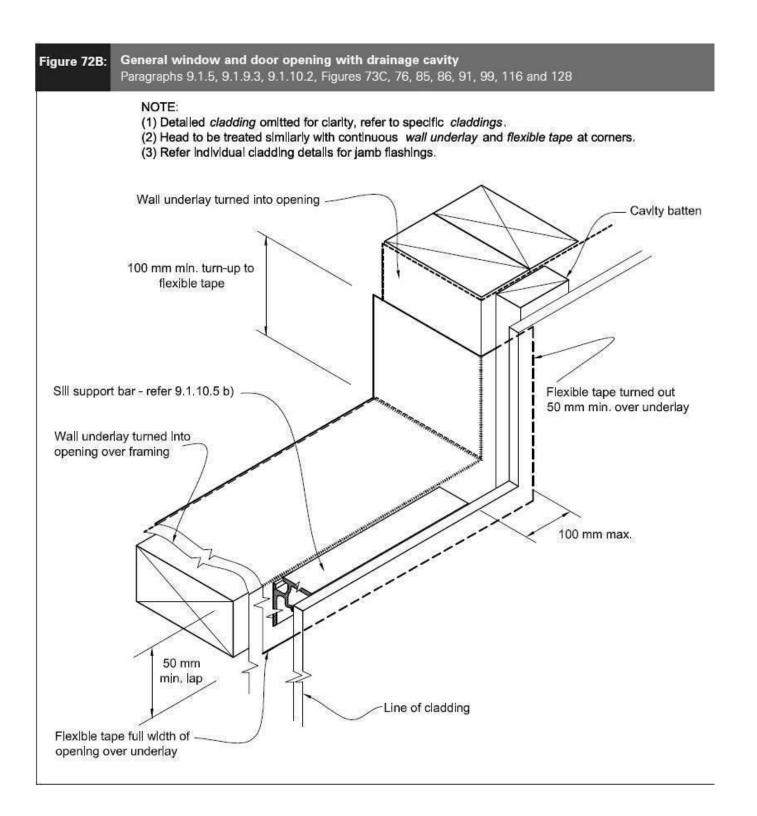
TKR Homes Ltd. 31 Watts Road, Sockburn PO BOX 11 351 Christchurch 8443

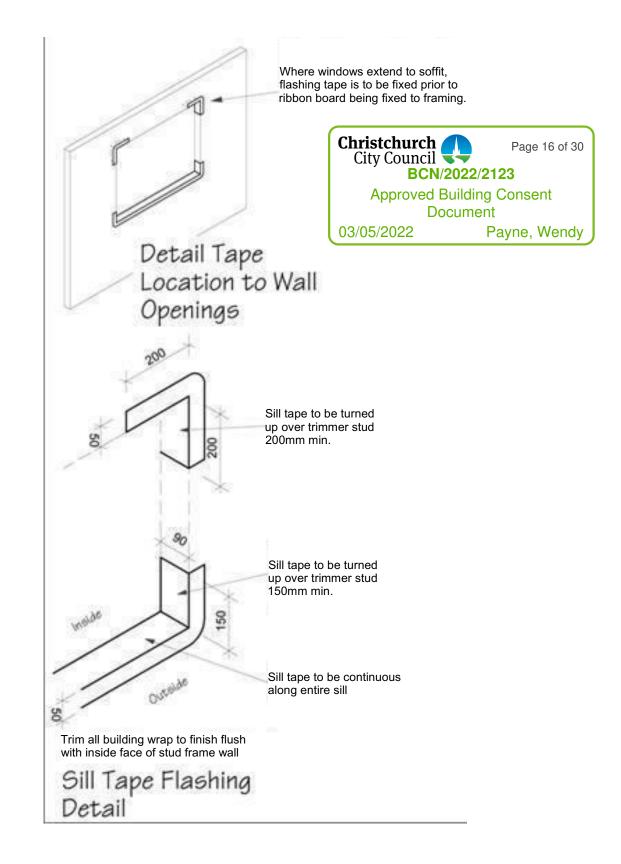
P: +64 3 342 7788

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Elley & McLean Lot 108 Belfast Subdivision, Christchurch

		.,,		•			213		
Job Numb	er:	Original Plan:	Sheet	Name:		C	ONSENT PLANS	Sheet No.:	
12120	n 1	'Rifleman 142'	FRAMING	DETAILS	No.	Date:	Reason:		
1212	י ט		1 IVAIIIII	DETAILO	1	BC ISSUE	19.11.2021	= 15	
Sales:	Drawn:	QS:	Print Date:	Scale:					
D Ryan	J Rana	S.Liu	19/04/2022	NTS @ A3				of 23 sheets	3





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Elley & McLean Lot 108 Belfast Subdivision, Christchurch

Job Nu	ımber:	O	riginal Plan:	1	Sheet Name:
121201		'Rifleman 142'			STRUCTION ETAILS
				_	,
ales:	Drawn:		QS:	Print Date:	Scale:

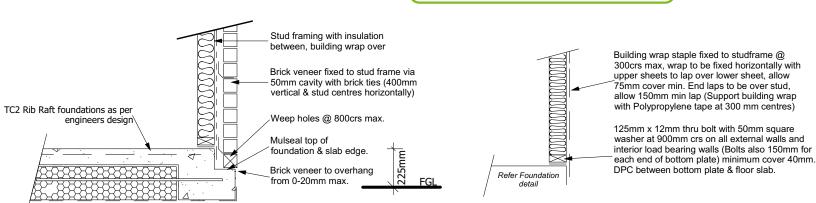
19/04/2022

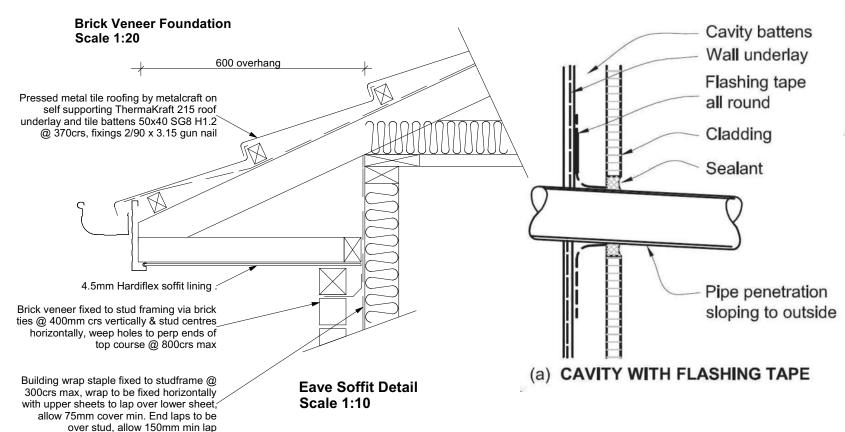
As Shown @ A3

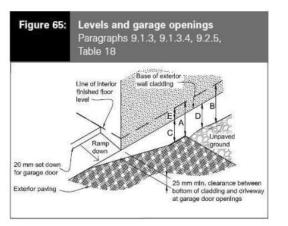
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	Reason:	0.
16	SUE 19.11.2021	
of 23 sheet		

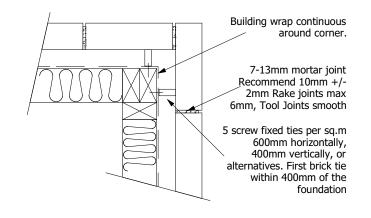
Stud framing to slab

Scale 1:20



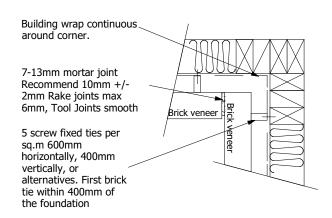








Brick Veneer External Corner Detail



Brick Veneer Internal Corner Detail

scale 1:

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

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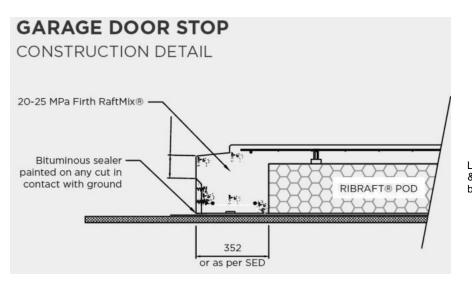
P: +64 3 342 7788

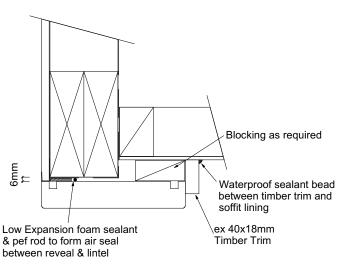
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Elley & McLean Lot 108 Belfast Subdivision, Christchurch

Job Numb		riginal Plan: eman 142'	CONSTI	t Name: RUCTION AILS
Sales: D Ryan	Drawn: J Rana	QS: S.Liu	Print Date: 19/04/2022	Scale: As Shown @ A3

	C	ONSENT PLANS	Sheet No
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			47
1	BC ISSUE	19.11.2021	= 1 /
			of 23 she
	1	1	0. 20 00





Garage Door Head to Soffit Scale 1:5

Waterproof sealant bead between aluminium joinery and soffit lining Low Expansion foam sealant & pef rod to form air seal between reveal & lintel

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:

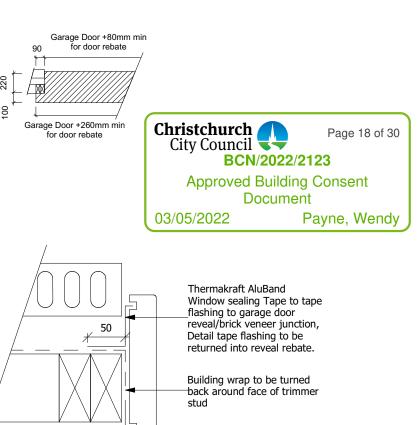
- a) Maximum 450 mm centres along sills, jambs and heads, and
- b) Maximum 150 mm from reveal ends.

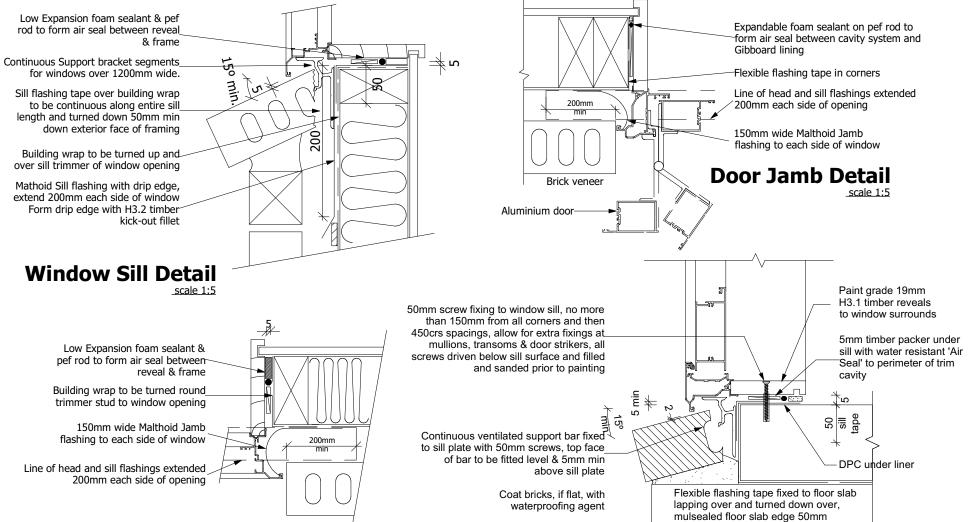
Install packers between reveals and *framing* at all fixing points, except between head reveals and lintels.

Sheet No.

18

of 23 sheets





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

Garage Door Jamb Detail



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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.

Elley & McLean Lot 108 Belfast Subdivision, Christchurch

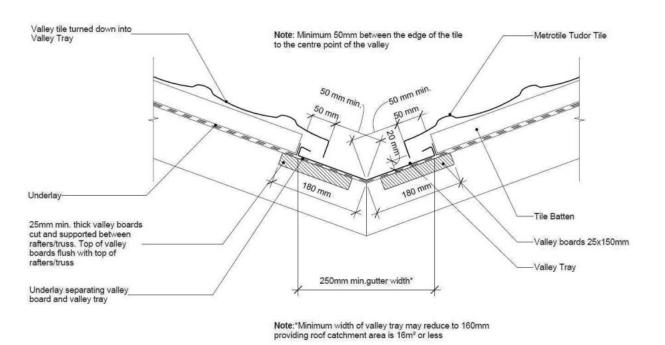
Window Jamb Detail

Job Numb	oer:	0	riginal Plan:	Shee	t Name:		С	ONSENT PLANS
1212	01	'Rifl	eman 142'	CONST	RUCTION	No.	Date:	Reason:
1212	U I			DETAILS		1	BC ISSUE	19.11.2021
Sales:	Drawn:		QS:	Print Date:	Scale:			
D Ryan	J Rana		S.Liu	19/04/2022	As Shown @ A3			

Metrotile Tudor Tile

-Underlay





Metal Tile Valley Detail Scale NTS

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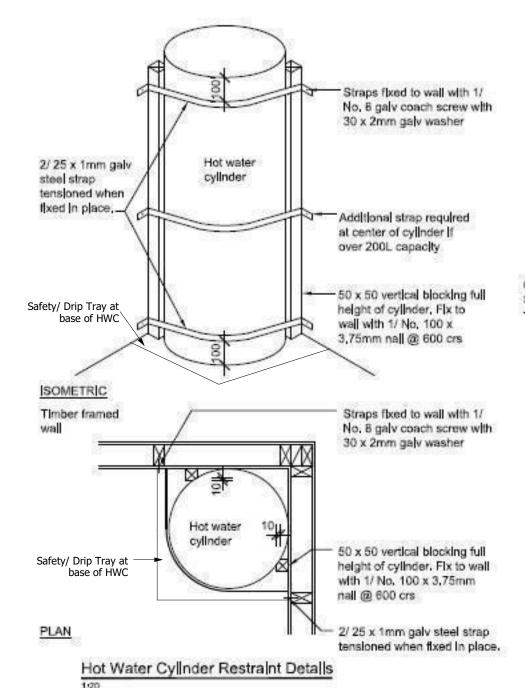
Job Number:		0	riginal Plan:	Sheet Name:		
121201		'Rifl	eman 142'	CONSTR	RUCTION AILS	
les:	Drawn:		QS:	Print Date:	Scale:	

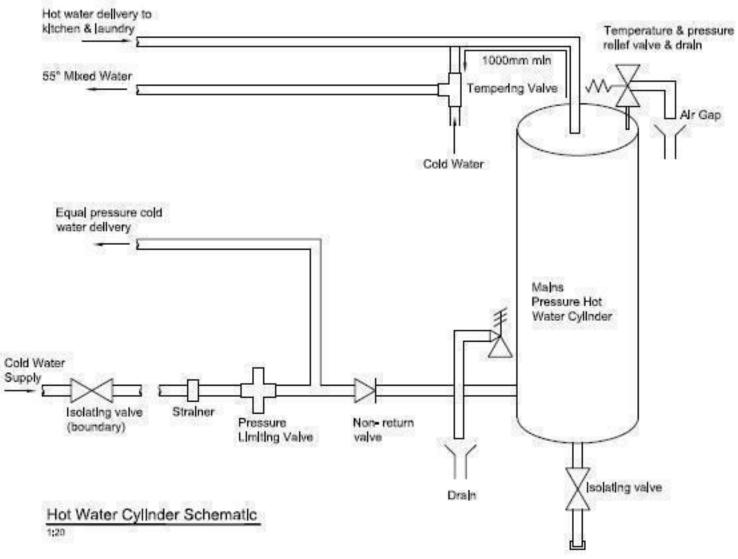
19/04/2022

S.Liu

J Rana







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

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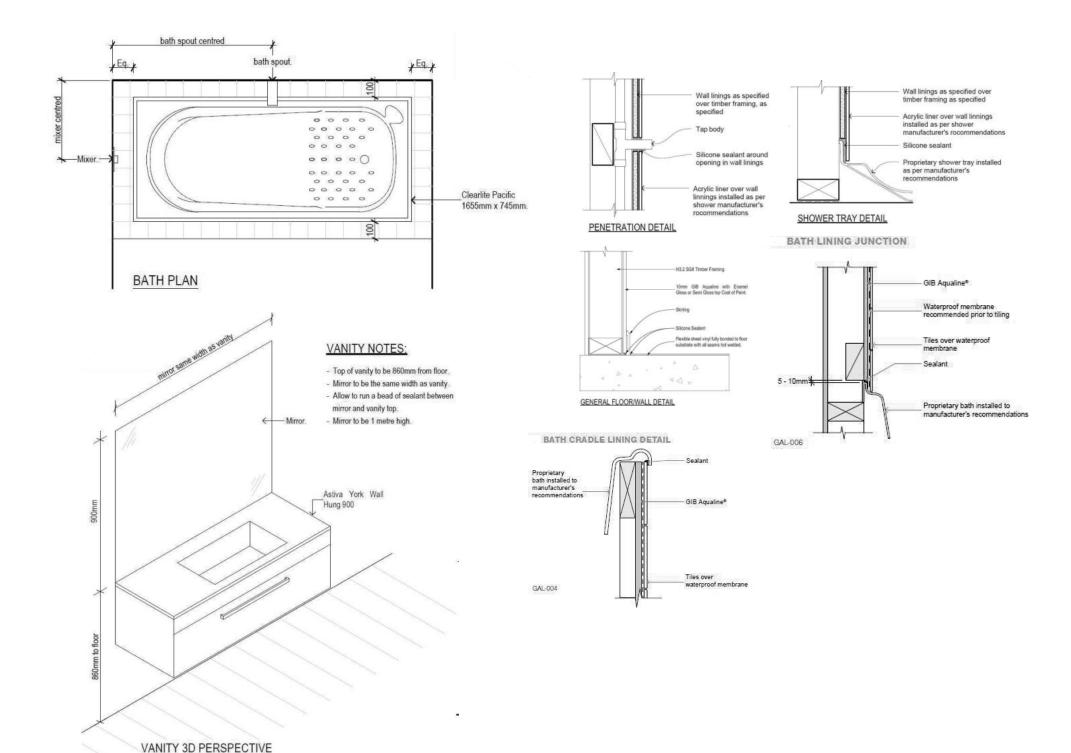
P: +64 3 342 7788

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Job Number: 121201		Original Plan: 'Rifleman 142'		Sheet Name: CONSTRUCTION DETAILS		
	Sales: Drawn: D Ryan J Rana			QS: S.Liu	Print Date: 19/04/2022	Scale: As Shown @ A3

C	ONSENT PLANS	Sheet No.:
Date:	Reason:	
		20
BC ISSUE	19.11.2021	20
		of 23 sheets



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Elley & McLean Lot 108 Belfast Subdivision, Christchurch

Job Number:		0	riginal Plan:	Sheet Name		
121201		'Rifl	eman 142'	BATHROO	M D	
Sales:	Drawn:		QS:	Print Date:	Scale	

19/04/2022

NTS @ A3

S.Liu

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

Building Partner

Carters National Support Office

Site: Lot 108 Belfast Subdivision

JOB No 351170C1 Client: TKR Homes Limited Job: Elley-McLean

Belfast

Pitch: 25.0deg Roof Type: Metal Tiles Overhang: 600mm

Wind Area: High Roof Snow: 0.441kPa

Christchurch

Ceiling Restraint Centres:600mm Trusses and rafters at 900mm

with the Architectural plans.

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

K = 6kN Strap L = Multigrip (single)

P = 16kN Pack Q = 9kN Pack

V = 16kN Uplift W= 24kN Uplift

X = 25kN Uplift

Y = 35kN Uplift

Z = 45kN Uplift

2/90x3.15dla skew nalls.

M = Multigrips (pair)

S = CPC 40 Single Cleat

T = CPC 40 Short (pair)

U = CPC 80 Single Cleat

J = 2x6kN Strap (12kN Total)

N = Nailon Plate (240x110x1)

Unless otherwise indicated, all specified truss fixings are to use L/Lok product nall 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

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.

DRAWN Bruce Barrow

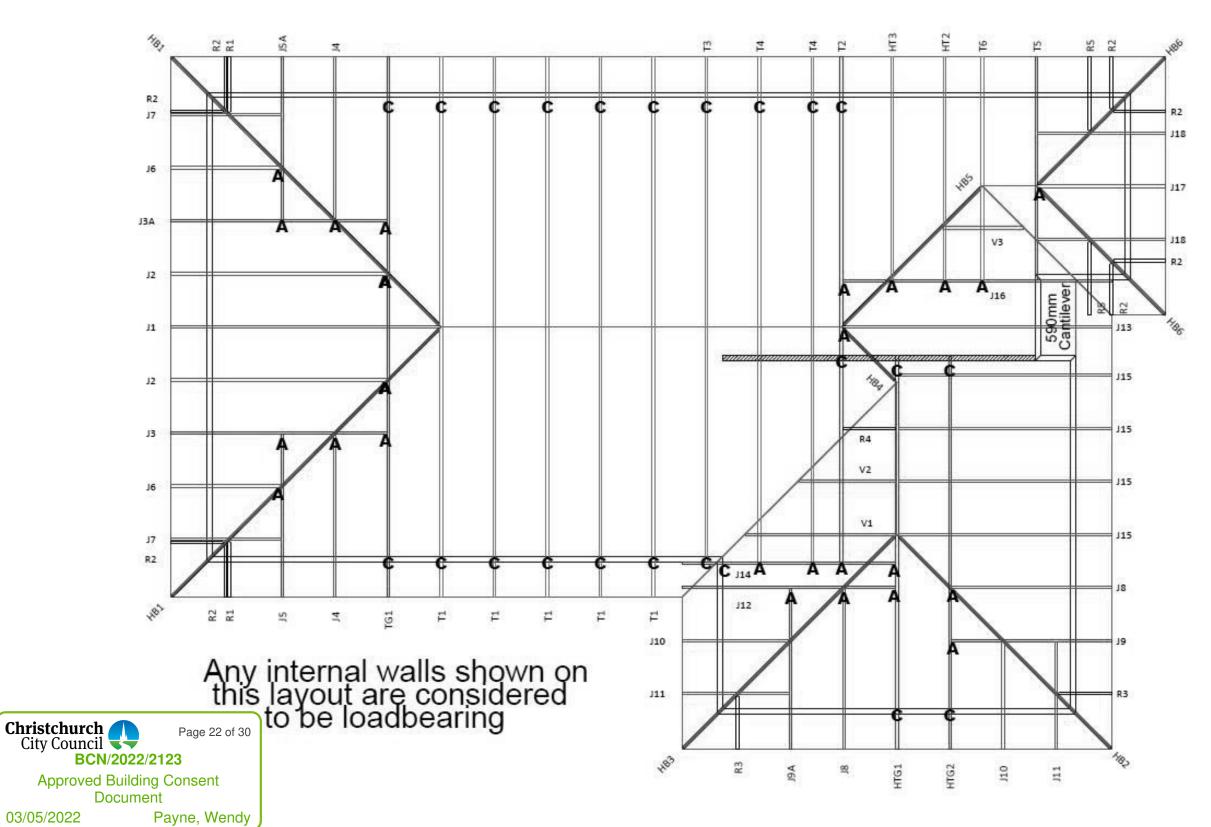
FIXINGS

max centres unless stated otherwise. This layout is to be read in conjunction

17 Aug, 2021

CARTERS

0800 Carters



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

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

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



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Elley & McLean Lot 108 Belfast Subdivision, Christchurch

Original Plan: 'Rifleman 142' 121201

J Rana

D Rvan

Sheet Name:

19/04/2022

TRUSS DESIGN Print Date

NTS

CONSENT PLANS

BC ISSUE 19.11.2021

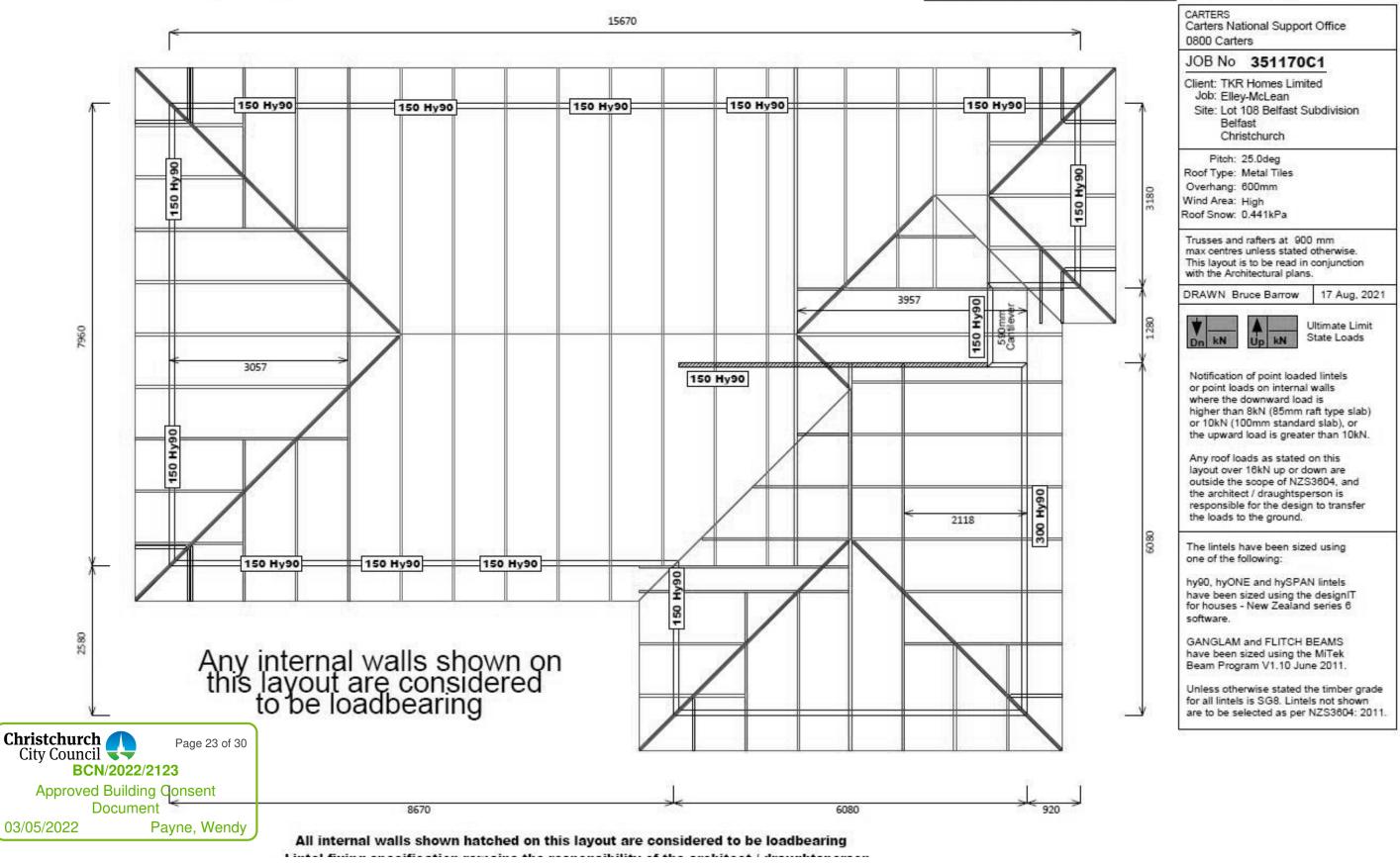
Truss Layout

Sheet No. 22 of 23 sheets

03/05/2022

BUILDABLE CONSENT LAYOUT





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Job Numb	er:	0	riginal Plan:		
12120)1 'Rif		leman 142'		
	_		00	_	

S.Liu

J Rana

D Ryan

Sheet Name: TRUSS DESIGN Print Date

19/04/2022

NTS

CONSENT PLANS BC ISSUE 19.11.2021

Sheet No. 23 of 23 sheets

ELLEY & McLEAN HOUSE



Christchurch City Council

BCN/2022/2123

Page 24 of 30

Lot 108 Belfast Subdivision

RIBRAFT DRAWINGS

File Number 21008.210

Sheet No.	Rev	Date Issued	Sheet Title		
S1	-	16/11/2021	General Notes		Issue Register
S2	-	16/11/2021	RibRaft Layout Foundation Plan	5.	5
S3	-	16/11/2021	Typical Foundation Sections	Date	Description
S4	-	16/11/2021	Typical Foundation Sections		
S5	-	16/11/2021	Typical Foundation Sections	16/11/0001	For Concept
S6	-	16/11/2021	Typical Services Penetration Details	16/11/2021	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.

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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 <u>immediately</u>.

GEOTECHNICAL REFERENCE:

Refer: Report by ENGEO titled "Lot Specific Geotechnical Report"

Ref. No: 19120.000.001_64 Dated: 3rd November 2021

Confirm Ultimate Bearing Capacity after site stripping >200kPa

Ground Level Figure Slab Level F(Fill) T (Geotextile) R (Reinforcement)

BUILDING PLATFORM

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 ENGEO.
- 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 TABLE:
В	500mm
D	Scrape to remove organic topsoil, approximately 300mm b.g.l.
Т	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 <u>not</u> permitted.
- Spacers:

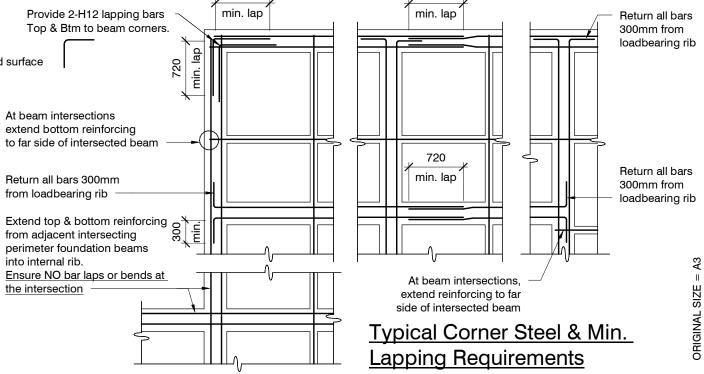
720

- 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%.

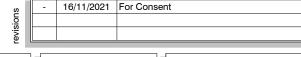
 All mesh shall lap a minimum of 250mm (end extensions not included in lap length).



/05/2022 Payne, Wendy



N.T.S.



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Lot 108 Belfast Subdivision

General Notes

design	E. Jorgensen	^{file} 21008.2	10
drawn appvd date	M. Cusiel 16/11/2021	dwg S1	rev.

■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) 4 4 2 4 2 5 5 ■ E - M A I L: O F F I C E © E N G C O . C O . N Z ■ W W W. E N G C O . C O . N Z ■

GENERAL NOTES:

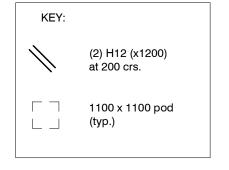
Page 26 of 30

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.



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.

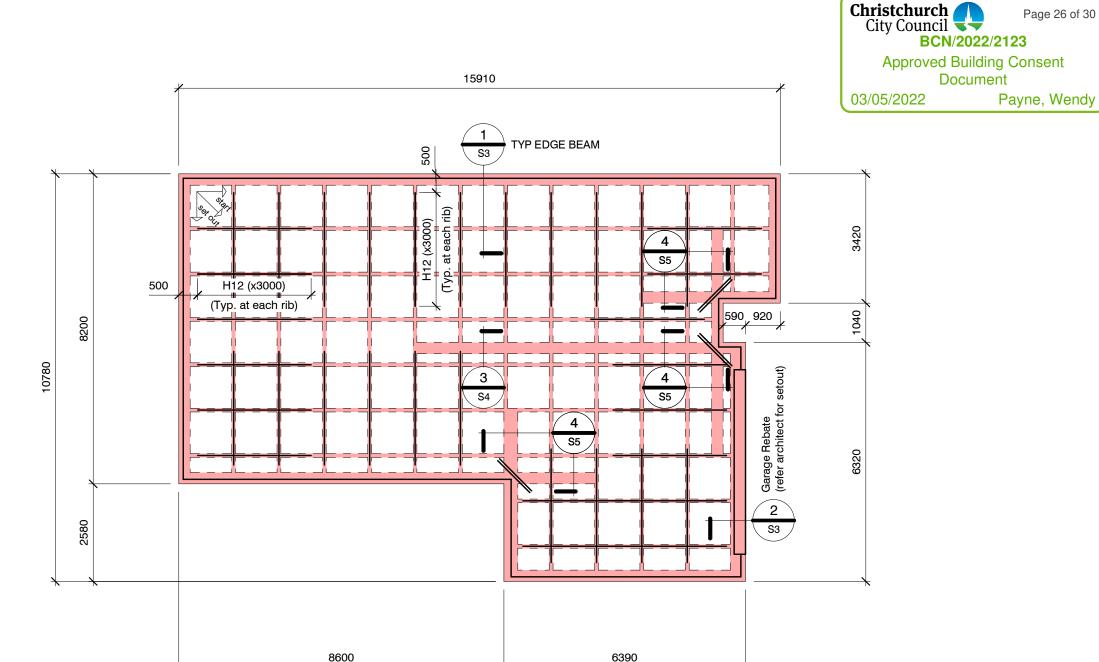
All Mesh shall lap a minimum of 250mm (end of extensions not included.

16/11/2021 For Consent

RibRaft Layout Foundation Plan

C. Andrews M. Cusiel appvd 16/11/2021 date

21008.210 S2



RIBRAFT FOUNDATION LAYOUT PLAN

Confirm all dimension with Architects drawings

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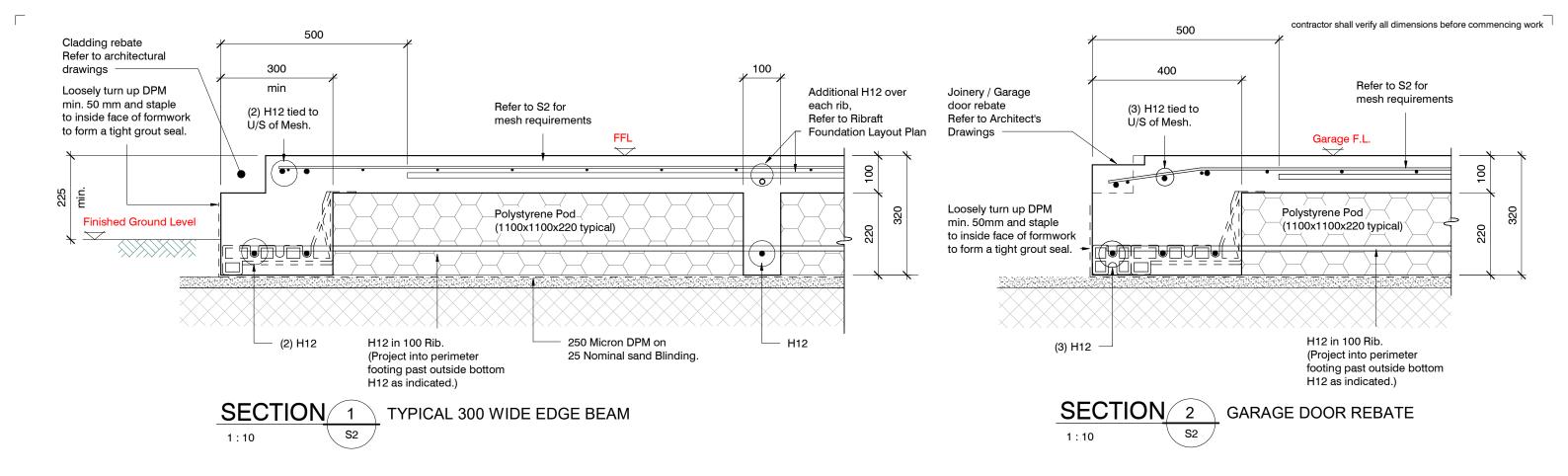


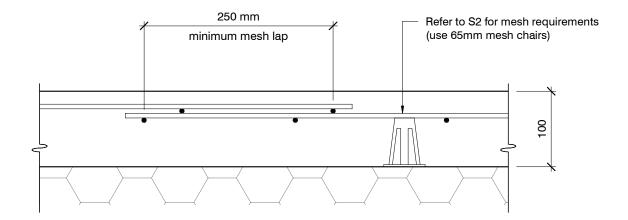


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Lot 108 Belfast Subdivision

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TYPICAL MESH LAP & CHAIR REQUIREMENTS

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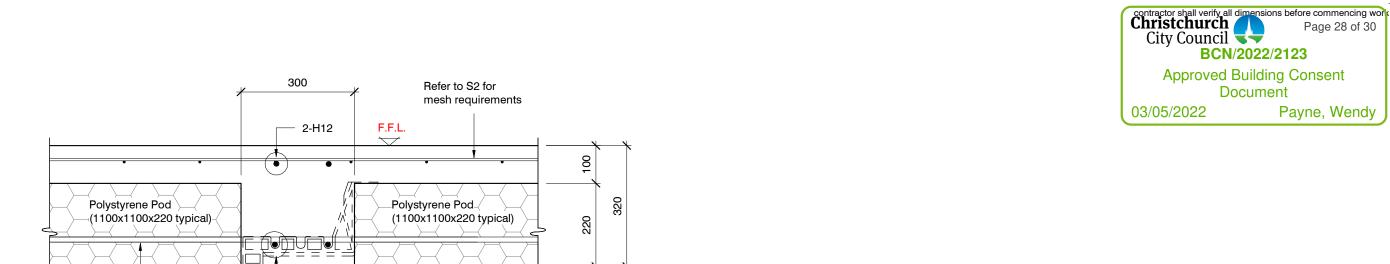
Lot 108 Belfast Subdivision

Typical Foundation Sections

21008.210 C. Andrews M. Cusiel appvd **S**3 16/11/2021 date

16/11/2021 For Consent

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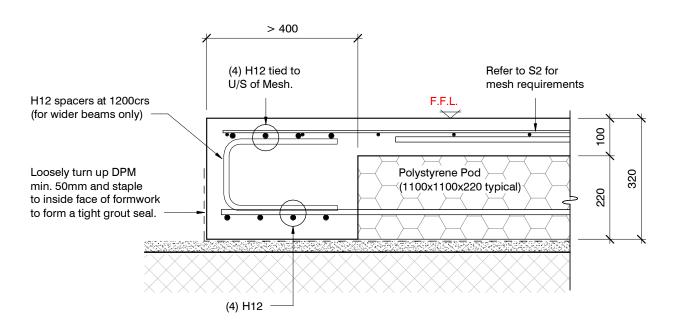


SECTION 3 TYPICAL 300 WIDE INTERNAL BEAM 1:10

(2) H12

250 Micron DPM on

25 Nominal sand Blinding.

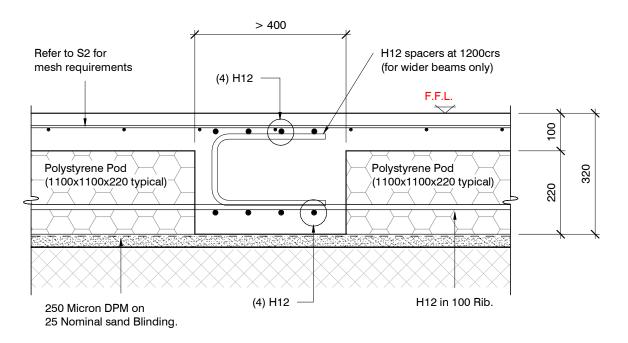


H12 in 100 Rib.

(Project into perimeter footing past outside bottom

H12 as indicated.)





INTERNAL BEAM > 400mm IN WIDTH

if required

16/11/2021 For Consent

Consulting Engineers

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Lot 108 Belfast Subdivision

Typical Foundation Sections

21008.210 C. Andrews M. Cusiel **S4** 16/11/2021

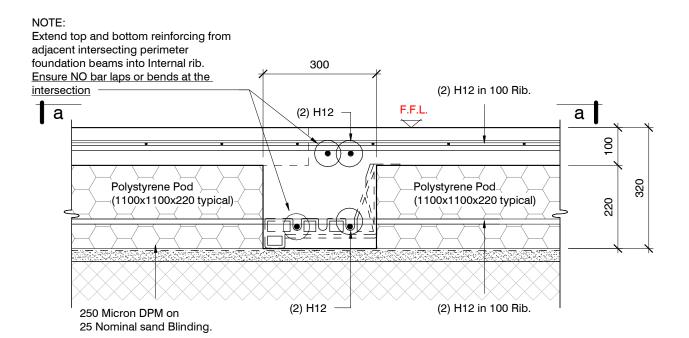
BCN/2022/2123

Document

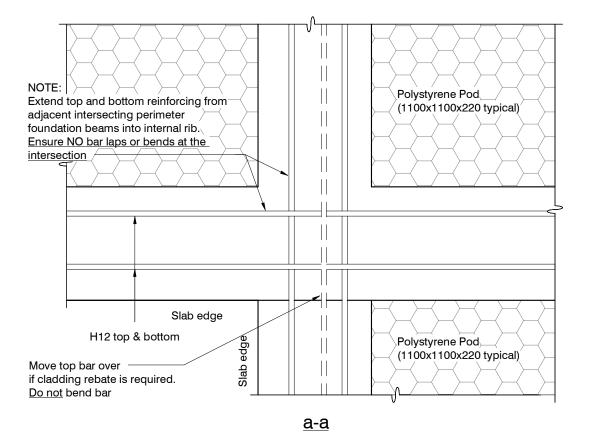
Payne, Wendy

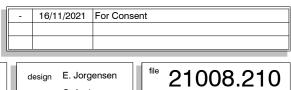
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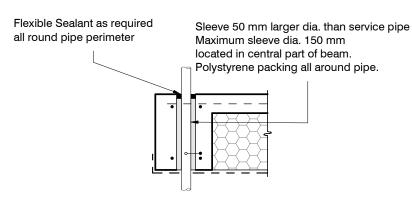
Lot 108 Belfast Subdivision

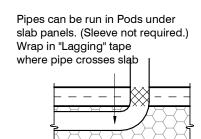
Typical Foundation Sections

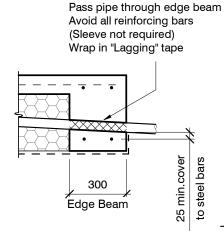
lesign	E. Jorgensen	1 file 2100
Irawn	C. Andrews	
ıppvd	M. Cusiel	dwg
late	16/11/2021	S5

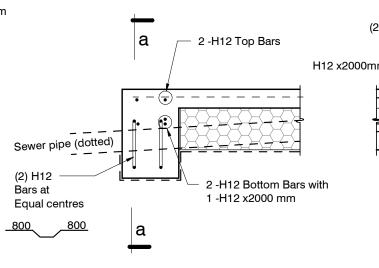
ORIGINAL SIZE =

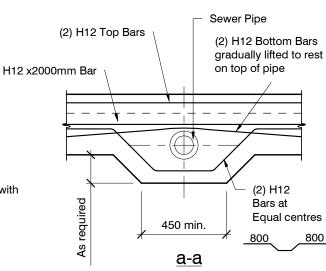
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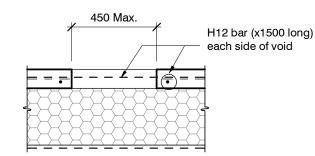
SLAB SERVICES PENETRATION DETAIL

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.



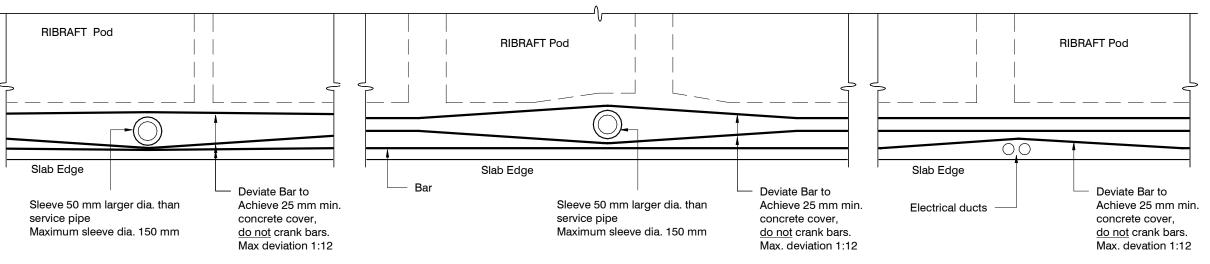
LARGE SLAB PENETRATION DETAIL

TYPICAL SECTION

LOCALISED DEEPENING OF FOUNDATION BEAM

TO ACCOMMODATE TOILET WASTE PIPE





Do not cut longitudinal reinforcement bars.

FOUNDATION SERVICES PENETRATION DETAILING.

Services shall not run along ribs or edge beams

ENGCO
Consulting Engineers

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ELLEY & McLEAN HOUSE

Lot 108 Belfast Subdivision

Typical Services
Penetration Details

-	16/1	1/2021	For Con	sent				
				, ,				
	design E. Jorgensen				1 1008.210			
				. 1 000	J.Z	. 1 0		
diawii ciraia			dwg				rev.	
	appvd	M. Cus	iel			CG		
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