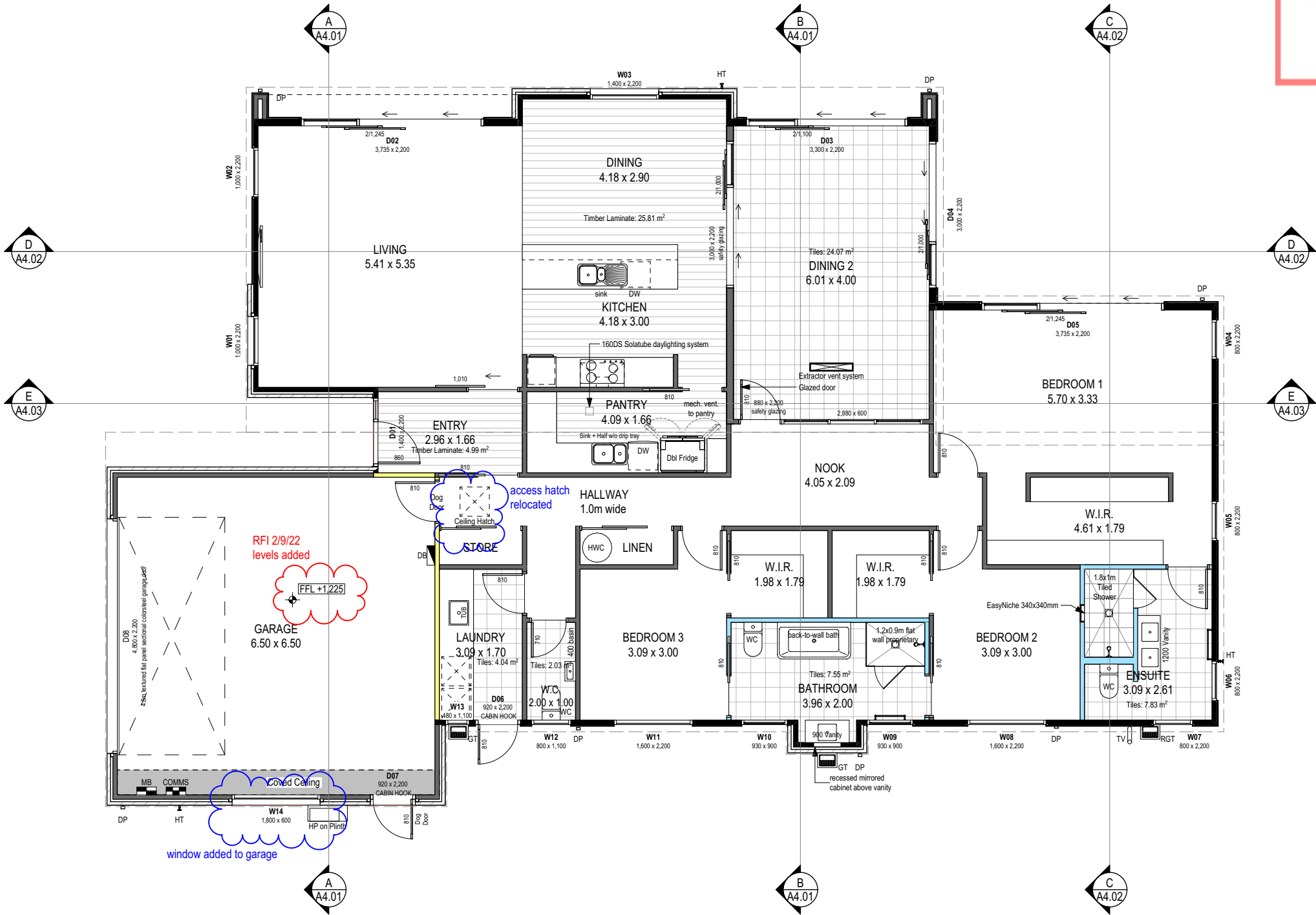


GENERAL NOTES

Ground Floor Perimeter	83,040.0 mm	over Foundation
Ground Floor Area	246.57 m ²	over Framing
Ground Floor Area	250.59 m ²	over Foundation
Roof Pitch	12°	
Eaves Width	150mm	
Gable Width	150mm	
Height To Underside of Truss	2455mm	
Lintel Height	2200mm	
Soffit Height	2380mm	
Soffit Type	Flat & Raking	
Internal Door Leaf Height	Standard	
Linings	GIB	
Ceiling Battens	35mm metal ceiling battens @ 400mm crs, direct fix	
Wall Cladding Materials	70 series brick veneer on 50mm cavity James Hardie Linea Oblique weatherboard, 200mm profile, vertical, on 20mm cavity	
Roofing Materials	Five-rib	
Ceiling Vents:	Bathroom & Ensuite to vent directly to exterior Laundry Room/Area to vent directly to exterior Range Hood to exit through roof	
Smoke Alarms:	Required within 3m of all sleeping areas, change in level & entry/exits as per NZS 4514 & BRANZ Bulletin No 606	
ENGINEERING:	Brick lintel over garage door	
Extras:	Plumbed fridge Induction hob - 900mm Single dishdrawer to pantry Solatube to pantry Ducted heat pumps in bedrooms, lounge, living & hall Under tile heating in bathroom & ensuite Glazed door to hall Easy Niche 340wx340hx80d Barn Door Dog door x 2 Above vanity recessed mirror cabinet in bathroom Hollow core doors to robes, linen & store	

GENERAL NOTES:

- Glazing and glazed openings to comply with NZS 4223.3:2016 Glazing in buildings - Part 3: Human impact safety requirements, NZS 4211:2008: Specification for performance of windows, and New Zealand Building Code Clauses: F2 Hazardous Building Materials, & F4:Safety from Falling.
- All hard floor finishes to comply with NZBC D1/AS Table 2. Floor tiles to be non-slip & have a slip coefficient value of 0.35 - 0.65 for grit finished ceramic tiles.
- Impervious floor finishes to within 1.5m radius of sanitary fixtures/fittings
- Timber laminate to wet areas to be Godfrey Hirst 'Amor Classic' water resistant laminate, with moisture barrier
- Waterstop to impervious flooring at doorways
- Hot water pipes to be sized according to NZBC G12 & NZS4305:1996.
- Mains pressure: 15mm dia. allows 12m max. pipe length. Pipe length beyond this must be lagged.
- Satin enamel wall finish to bathroom, ensuite & those walls adjacent to sinks etc. in kitchen & laundry.
- Impervious Lining to be used above basins/ tubs



KEY	
Meter Board	
Distribution Board	
Comms Panel	
BC0426/22.02	
Gully Trap	
Hose Tap	
Downpipe	
External Heat Pump	

<div><div>© Mike Greer Homes NZ Ltd (03) 354 0166 0800 mikegreer Tower 2, 7 Deans Avenue, Addington, Christchurch 8011 www.mikegreerhomes.co.nz</div></div>	JOB TITLE: MIKE GREER HOMES For Kelvin & Sharon Inch		DRAWING TITLE: Floor Plan		LEGAL DESCRIPTION: LOT: 7DP: TBC Meadowlands Green Meadowlands Ashburton		LEGAL NOTES: 1. Subject to council approval 2. All measurements to be confirmed on site by the contractor prior to the commencement of work © 2022 Mike Greer Homes NZ Limited. All rights reserved. No part of this work covered by copyright may be reproduced or copied in any form or by any means without the written permission of Mike Greer Homes NZ Limited		DATE OF ISSUE: 08.12.21	DESIGNER: NM		SCALE: 1:100	SHEET: A2.01
	AMENDMENT DATE: 22.11.22		TECHNICIAN: CM		VERSION: V10		CODE: 1		JOB # M0470				
	BASE PLAN: CT5499												

GENERAL NOTES:

Ground Floor Area over Framing:	246.57 m²
Insulation:	R2.6 Exterior walls (+ interior garage walls) R3.6 Ceiling (excluding garage)
Stud Heights: In High wind zone.	
2455mm to underside of truss.	90x45mm SG8 @ 600mm crs max. 140x45mm SG8 @ 600mm crs max
Dwangs:	Unless noted - All Dwangs @ 800mm crs
Dwangs by Wall Cladding Type:	Vertical Oblique Weatherboards to have Dwangs @ 600crs
Framing to Tiled Walls:	All tiled walls to have dwangs @ 600mm crs, studs at 400mm crs max.
Lintels:	
Window lintel height:	2200mm
Internal door leaf height:	Standard, unless noted otherwise
General Notes:	All exterior window & door lintels by truss manufacturer Internal non-loadbearing walls to be SG8 graded. All dimensions to be confirmed on site.

Sizing of timber plates	
Bottom Plate	45mm thick, width to match stud. SG8, H1.2, Pinus Radiata
Top Plate	45mm thick, width to match stud. Additional top plate 35mm thick, 90mm wide if 90mm wall, 140mm wide if 140mm wall. SG8, H1.2, Pinus Radiata

FIXING SCHEDULE:

Joint:	Fixing:
Exterior Bottom plate to concrete floor:	Pryda Bottom Plate Anchors with 75x4mm dia. concrete nails adjacent to anchor 70mm min from edge of slab. as per manufacturers specifications. @ 900mm crs. max as per NZS3604:2011. Refer to bracing plan for additional hold down fixings.
Interior bottom plate to concrete floor:	75 x 3.8mm shot fired fastenings with 16mm washers @ 600mm crs, within 150mm each end of plate. Refer to bracing plan for additional hold down fixings.
Stud to Top plate:	2/90 x 3.15 end nails + 2/wire dogs (Or Alternative 4.7kN Fixings). As per Table 8.18 NZS3604:2011
Stud to Bottom plate:	Hand Driven 2/100 x 3.75mm end nails Power Driven 2/90 x 3.15mm end nails Hand Driven 2/100 x 3.75mm end nails Power Driven 2/90 x 3.15mm end nails
Dwang to stud:	Hand Driven 4/60 x 2.8mm nails each side Power Driven 4/60 x 2.8mm nails each side
Fish plate to Straightened stud:	Hand Driven 4/75 x 3.15mm nails Power Driven 4/75 x 3.06mm nails
Half Joint in top Plate:	Hand Driven 2/100 x 3.75mm nails Power Driven 3/90 x 3.15mm nails
Standard soffit stringer to stud:	Hand Driven 2/100 x 3.75mm @ 500mm crs Power Driven 3/90 x 3.15mm @ 500mm crs
Double top plate to top plate:	

Lintel to trimming Stud:
As Per Lumberlok Lintel Fixing Schedule (See Schedule at Rear of Drawing Set)

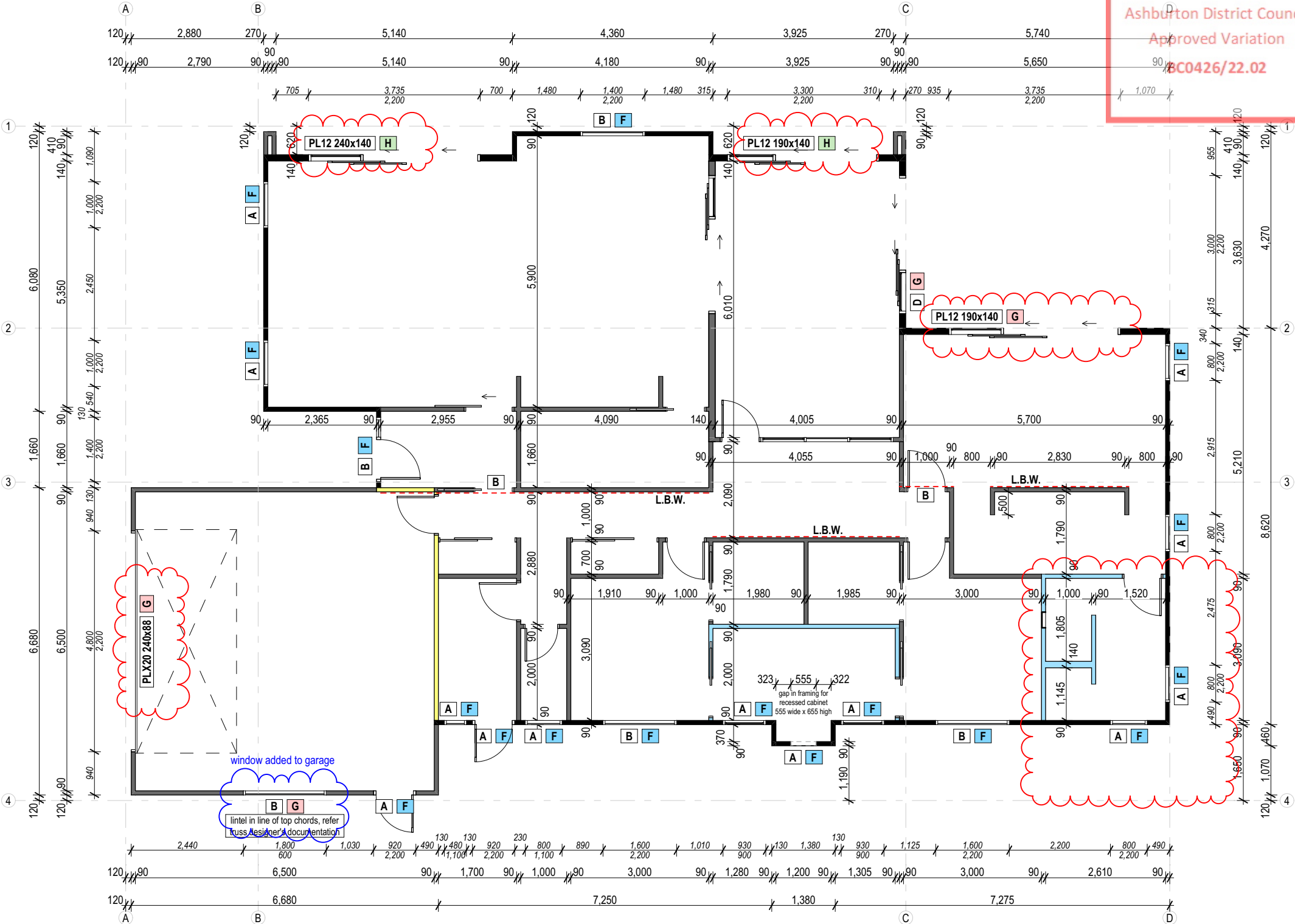
Sill trimmer to trimming stud for:
As Per Lumberlok Lintel Fixing Schedule (See Schedule at Rear of Drawing Set)

Trimming studs together at openings, studs & blocking at wall intersections:
As Per Lumberlok Lintel Fixing Schedule (See Schedule at Rear of Drawing Set)

Trimming Stud to Doubling Stud immediately under lintels:
As Per Lumberlok Lintel Fixing Schedule (See Schedule at Rear of Drawing Set)

SCHEDULE OF FRAMING TIMBERS - GRADING AND TREATMENT

Wall framing		Roof framing	
Exterior walls & lintels	SG8, H1.2, Pinus radiata	Roof trusses - typical	SG8, H1.2, Pinus radiata
Interior walls (loadbearing)	SG8, H1.2, Pinus radiata	Gable end truss	SG8, H1.2, Pinus radiata
Interior walls (non-loadbearing)	SG8, H1.2, Pinus radiata	Coved or attic trusses	SG8, H1.2, Pinus radiata
		Purlins	SG8, H1.2, Pinus radiata
		Valley boards	SG8, H3.2, Pinus radiata
Cavity battens:		Windows	
Dry Cavity	SG8, H3.2, Pinus radiata	Framing and reveals	Dressed, H3.1, Pinus radiata
Wet Cavity	SG8, H3.2, Pinus radiata		



Lintel Sizes as per truss design, truss design to take precedence over these drawings.	Fixings as per Lumberlok Lintel Fixing Schedule. Refer Lumberlok Schedule attached.
A 2/90x45mm SG8	E 1.4 kN
B 150x90 Hy90	F 4.0 kN
C 200x90 Hy90	G 7.5 kN
D 240x90 Hy90	H 13.5 kN
E 300x90 Hy90	

KEY
Indicates insulated external wall (R2.6 batts)
Indicates non-insulated wall
Indicates insulated internal wall (R2.6 batts)
Indicates wet area wall lining to internal wall
L.B.W. = Load Bearing Wall

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RFI 2/9/22
lintels updated to match truss design
Ensuite windows moved

BRACING NOTES:

Where exterior ply bracing elements are used & not continued the entire length of the wall, allow to pack out the rest of the cavity battens to achieve an even straight-through cavity for the selected cladding.

Refer to supporting documents for IPL Bracing Ply fixing requirements. Treatment to be a minimum of H3.2.

Reading the Bracing Plan:

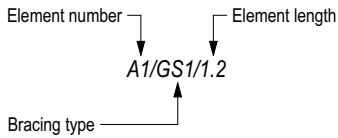
- GS1-N

0.4m min. length.
Any 10mm or 13mm GIB Standard Plasterboard fixed to one side only
- BL1-H

0.4m min. length.
10mm or 13mm GIB Braceline fixed to one side only
Framing hold downs
- BLP-H

0.4m min. length.
10mm or 13mm GIB Braceline fixed internally
plus 7mm structural plywood manufactured to AS/NZS 2269.0:2012 externally
Framing hold downs
- IPL1

0.4m min. length.
7mm DD IPL Bracing Ply fixed externally
Framing hold downs



Openings in Bracing Elements (as per GIB EzyBrace System)

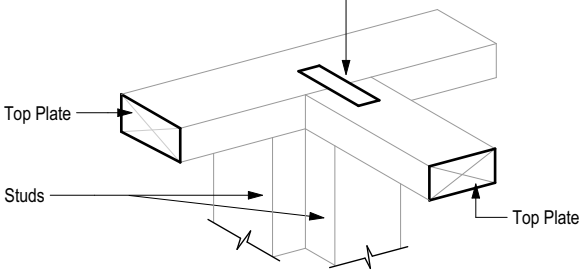
Small openings

Small openings (e.g. power outlets) of 90 x 90mm or less may be placed no closer than 90mm to the edge of the braced element. A block may need to be provided alongside the perimeter stud.

Large openings

Openings above 90 x 90mm such as switch boards, recessed cabinets and TV's etc. should be placed outside of the bracing element or locate bracing on the other side of the wall framing.

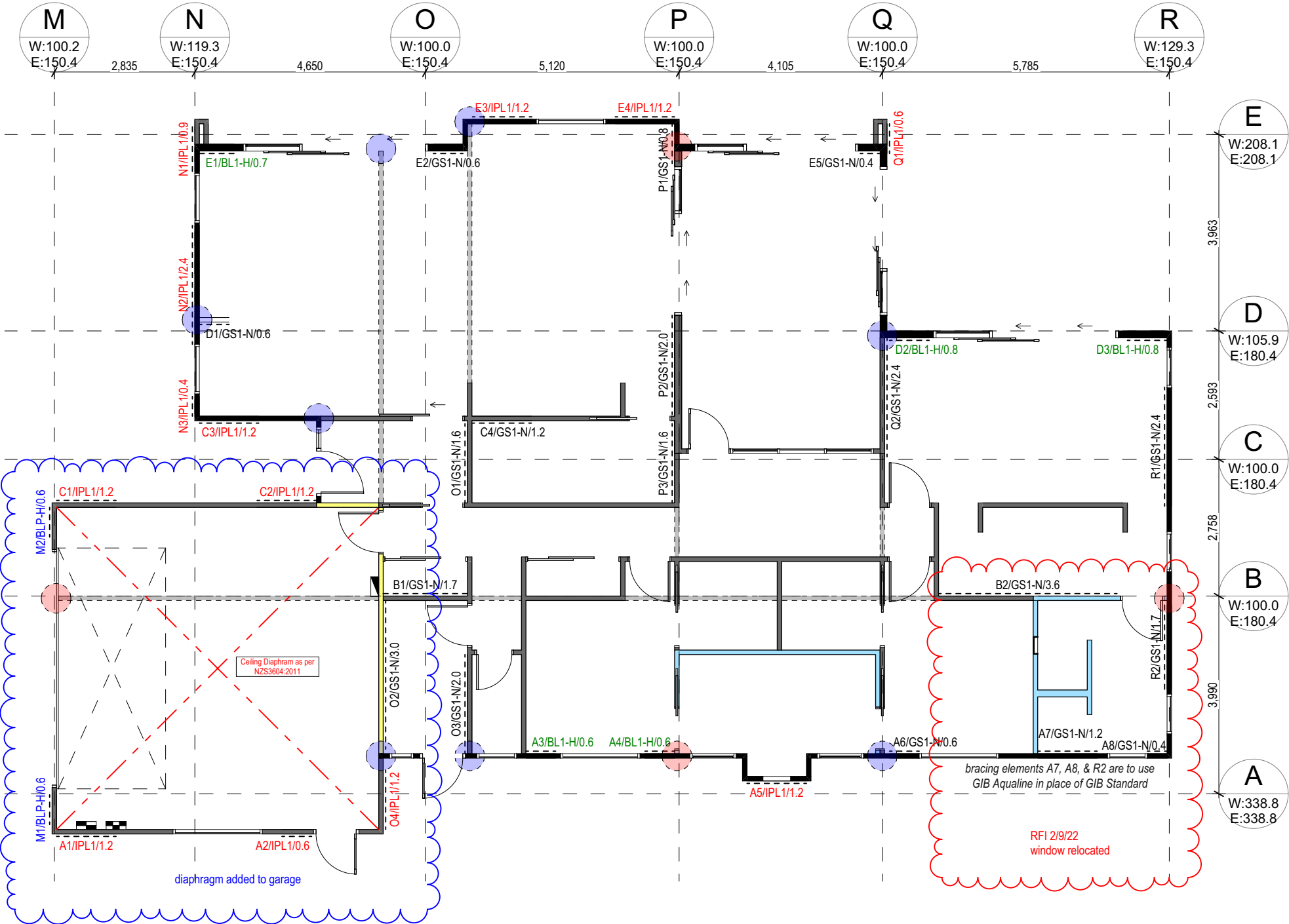
6/30 x 3.15mm nails per side achieving 6 kN.
3/30 x 3.15mm nails per side achieving 3 kN.

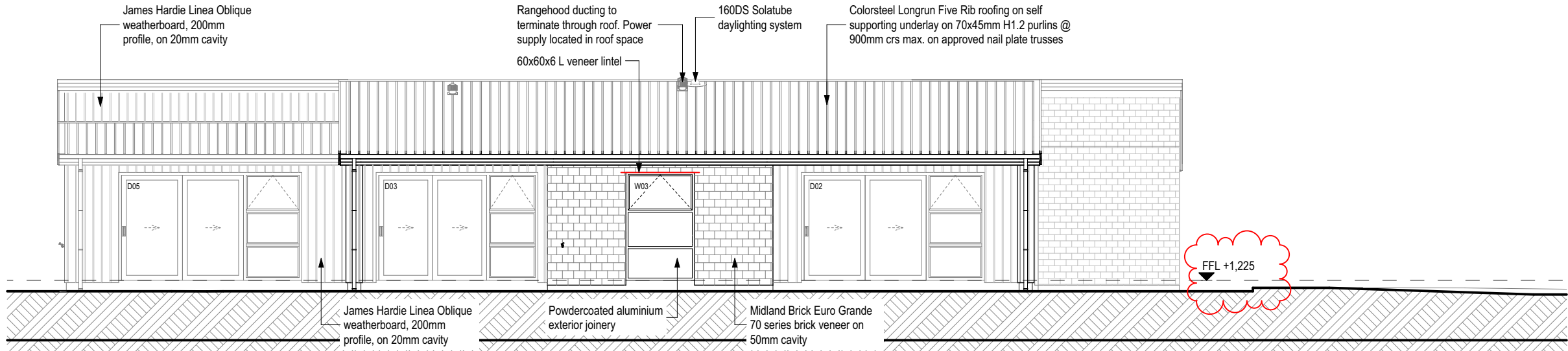


CONNECTING TOP PLATES TO EXTERNAL WALLS - WALLS CONTAINING BRACING

Note: "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;
shown as:
- (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;
shown as:
- (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."

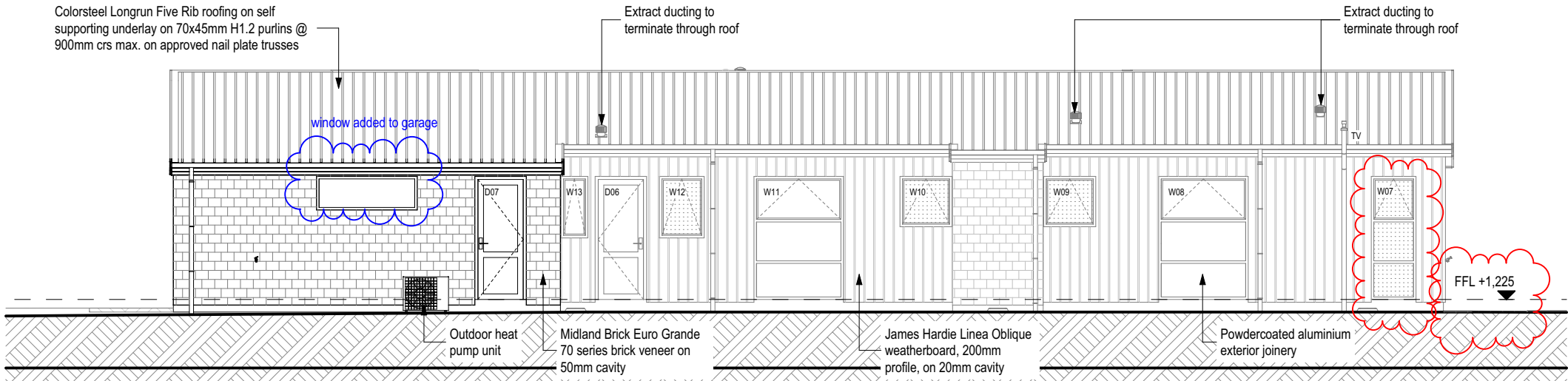




BUILDING ENVELOPE RISK MATRIX		
North Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Very high risk	5
Eaves width	High risk	2
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		9

North Elevation
SCALE 1:100 @A3

RFI 2/9/22
levels added



BUILDING ENVELOPE RISK MATRIX		
South Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Medium risk	1
Eaves width	High risk	2
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		5

South Elevation
SCALE 1:100 @A3

RFI 2/9/22
levels added
window relocated

GLAZING NOTES:
Glazing and glazed openings to comply with NZS 4223.3:2016 Glazing in buildings - Part 3: Human impact safety requirements, NZS 4211:2008: Specification for performance of windows and New Zealand Building Code Clauses: F2 Hazardous Building Materials & F4: Safety from Falling.

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					AMENDMENT DATE: 22.11.22	TECHNICIAN: CM	BASE PLAN: CT5499	
					VERSION: V10	CODE: 1	JOB # M0470	

GENERAL NOTE

- Sizes shown are rough opening sizes and & leaf sizes.
- Client to confirm window & door style & finishes.
- Confirm all opening sizes onsite prior to installation
- Refer to ground floor plan for accurate opening location.

-Joinery: -All exterior window and doors to be colorsteel powdercoated aluminium framed with double glazing and dressed timber reveals unless noted otherwise. Refer to specification for full details.

- Internal Door Leaf Height: - Standard.
- Internal Door Leaf Width: - Typically 810mm (unless noted on plan).
- Garage Door: - Typically 710/810mm (wet areas).
- Lintels: - Colorsteel sectional.
- Safety Glazing (SG): - Refer to the Truss Design for lintel sizes.
- Obscure Glazing (OB): - As indicated on Door & Window Schedule
- Restrictor Stays (RS): - To Bathroom, WC and Ensuite
- Restrictor Stays (RS): - As indicated on Door & Window Schedule

NOTE:
All doors & sliders are taken from **External Elevation**.
All windows are taken from **External Elevation**.

Floor Plan takes precedence over Window Schedule - Refer to Floor plan & Elevations for opening direction.

Glazing and glazed openings to comply with NZS 4223.3:2016 Glazing in buildings - Part 3: Human impact safety requirements, NZS 4211:2008: Specification for performance of windows and New Zealand Building Code Clauses: F2 Hazardous Building Materials & F4: Safety from Falling.

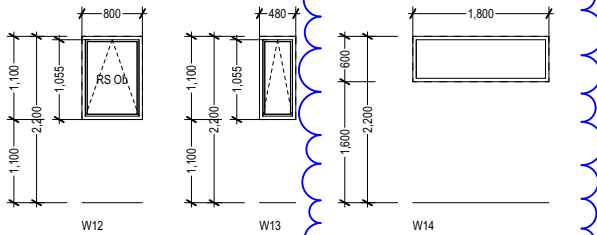
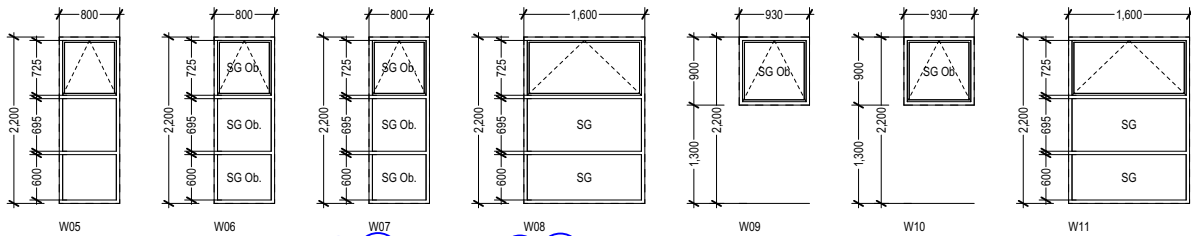
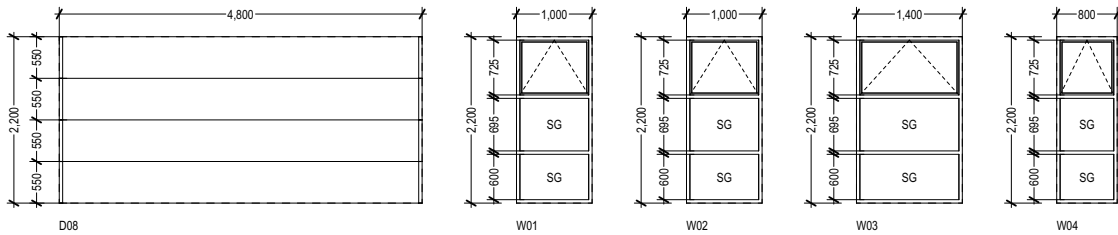
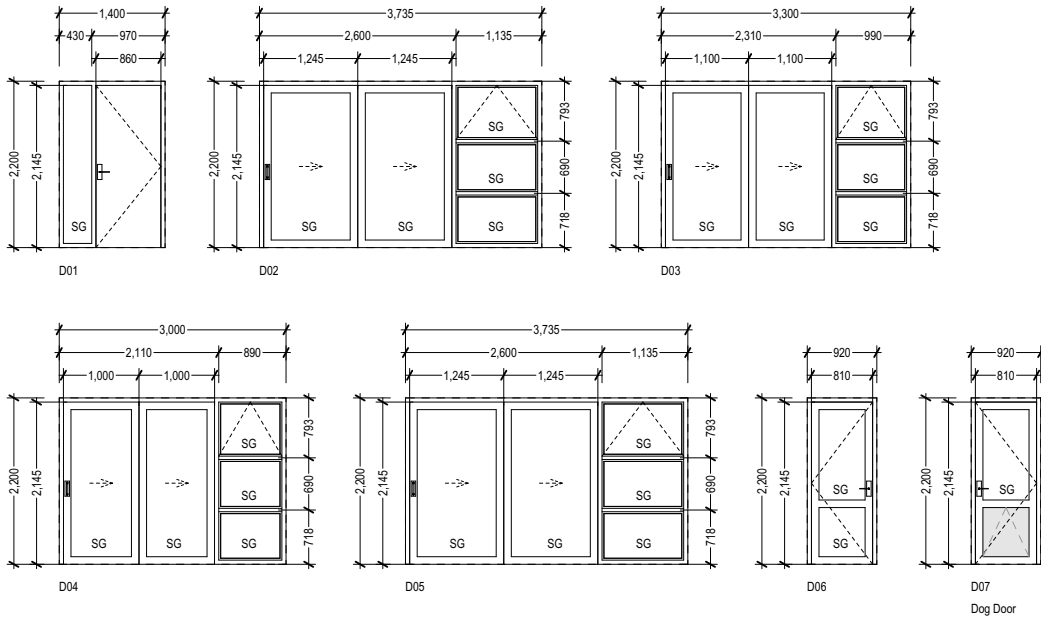
STANDARD GLAZING UNITS USED.

All Double Glazed Units
Comply with Table C1, NZS 4218:2009 & meet 0.26 (m². °C/W)

Standard Unit
4mm Glass / 12mm Air Gap / 4mm Glass

Slider Unit
5mm Glass / 8mm Air Gap / 5mm Glass

Safety Panel
4mm Toughened / 8mm Air Gap / 6.38mm Laminate



window added to garage

NZBC H1 COMPLIANCE - CALCULATION METHOD
Building Elements: Construction R Values

Roof R3.35
Colorsteel trapezoidal roofing on underlay. Timber purlins, on trusses at 900mm crs. 10mm GIB standard lining on metal battens at 400mm crs, with R3.6 insulation over ceiling battens

Wall Type 1 R2.16
Linea Oblique cladding on 20mm cavity. 90x45mm framing, with studs at 600mm crs, dwangs at 600mm crs. Building wrap to exterior, R2.6 insulation, and 10mm GIB standard internal lining.

Wall Type 2 R2.54
Linea Oblique cladding on 20mm cavity. 140x45mm framing, with studs at 600mm crs, dwangs at 600mm crs. Building wrap to exterior, R2.6 insulation, and 10mm GIB standard internal lining.

Wall Type 3 R2.10
70mm brick veneer on 40mm min cavity. 90x45mm framing, with studs at 600mm crs, dwangs at 800mm crs. Building wrap to exterior, R2.6 insulation, and 10mm GIB standard internal lining.


Wall Type 4 R2.18
Internal wall to garage, 90x45mm framing, with studs at 600mm crs, dwangs at 800mm crs. R2.6 insulation, with 10mm GIB to each side

Floor R1.60
Concrete slab on ground, perimeter ratio 3.0

Glazing R0.26
Aluminium joinery with double glazing

PROPOSED BUILDING											
=	$\frac{\text{roof area}}{\text{r-value}}$	+	$\frac{\text{wall area}}{\text{r-value}}$	+	$\frac{\text{floor area}}{\text{r-value}}$	+	$\frac{\text{glazing area}}{\text{r-value}}$	+	$\frac{\text{door area}}{\text{r-value}}$	+	$\frac{\text{skylight area}}{\text{r-value}}$
=	60.34	+	42.22	+	126.34	+	223.88	+	9.08	+	0.00
=	461.85										

REFERENCE BUILDING (OPENING AREA >30% OF WALL AREA) CLIMATE ZONE 3											
=	roof area + skylight area		+	wall area + door area		+	floor area	+	30% of total wall area	+	glazing area - 30% of total wall area
	3.3			2			1.3		0.26		0.4
=	202.14		+	96.73		+	202.14	+	46.48	+	11.73
	3.3			2			1.3		0.26		0.4
=	473.21		is HL _{proposed} less than HL _{reference} ?			YES		GLAZING %:		37.57%	

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					AMENDMENT DATE: 22.11.22	TECHNICIAN: CM	BASE PLAN: CT5499	
						VERSION: V10	CODE: 1	

Ashburton District Council
Approved Variation
BC0426/22.02



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Ashburton District Council
Approved Variation
BC0426/22.02

www.mitek.nz.co.nz

Printed: 13:18:26 30 May 2022

MiTek 20/20 Engineering 4.7.346.0

PRODUCER STATEMENT for MiTek 20/20[®] TRUSS DESIGN - Version 4.7

ISSUED BY: **MiTek New Zealand Limited**

TO: **VIP Frames & Trusses**

IN RESPECT OF: **MiTek[®] Truss Designs**

This producer statement covers the MiTek 20/20[®] truss design and the structural performance of the GANG-NAIL[®] connector plate for the job reference **100725** and may be used by a Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

The MiTek 20/20[®] truss design program has been developed by MiTek New Zealand Limited for the design of MiTek[®] timber roof, floor and attic trusses in New Zealand. The truss designs computed by MiTek 20/20[®] are prepared using sound and widely accepted engineering principles, and in accordance with compliance documents of the New Zealand Building Code and Verification Method B1/VM1; and internationally accepted standard ANSI/TPI 1 - 2002 as an alternative solution, to satisfy the requirements of Clause B1 of the New Zealand Building Code.

On behalf of MiTek New Zealand Limited, and subject to:

- i) All proprietary products meeting their performance specification requirements
- ii) The provision of adequate roof bracing and overall building stability
- iii) Correct selection and placement of GANG-NAIL connector plates
- iv) Correct input of Truss Design Data as shown in the Fabricator Design Statement for this job
- v) The design being undertaken by the accredited fabricator under the terms of the software licence
- vi) Timber is graded to the requirements of NZS 3603:1993
- vii) Minimum timber treatment for these MiTek[®] trusses shall be in accordance with B2/AS1 Table 1A and the relevant sections of NZS 3602:2003

I believe on reasonable grounds that the trusses, if constructed in accordance with the MiTek 20/20[®] truss design and shop drawings, will comply with the relevant provisions of the New Zealand Building Code.

MiTek New Zealand Limited holds a current policy of Professional Indemnity Insurance no less than \$500,000.

On behalf of MiTek New Zealand Limited,

Date: Monday, 30 May 2022

In Ling Ng, BE (Hons), CPEng, IntPE, MIPENZ (ID: 146585)
TECHNICAL SERVICES MANAGER, MiTek New Zealand Limited

Job: 100725	Client: Mike Greer Mid Canterbury	Site: New House
Description: Building Consent No.: MiTek 20/20 Engineering 4.7.346.0	Phone:	Lot 7 Meadowlands Green Meadowlands, Ashburton
MiTek New Zealand Limited		Phone: Ashburton District Council Approved: 13/18/26/30 May 2022 BC0426/22.02

MITEK FABRICATOR DESIGN STATEMENT

This statement is issued by MiTek accredited fabricator **VIP Frames & Trusses**, being licensed to use the MiTek 20/20® software, to the client listed above and may be used by the Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

MiTek 20/20® TRUSS DESIGN DATA

The MiTek 20/20® computer design for this job is based on the following design parameters entered into the program. The Fabricator shall ensure that these job details are current and relevant to the project for the design of the MiTek® trusses.

Job Details		Importance Level :	2	Design Working Life :	50 years
Roof Truss		Pitch:	12.000 deg	Nominal Overhang:	150 mm
Timber Group:	~MSGx45 H1.2	Ceiling		Wind	
Material:	Longrun Iron	Material:	Standard	Area:	High (44.0 m/s)
Dead Load:	0.210 kPa	Dead Load:	0.200 kPa	Pressure Coeff:	Cpe = varies; Cpi = -0.30, 0.20
Restraints:	900 mm centres	Restraints:	400 mm centres	Snow	
Live Load:	Qur = 0.250 kPa	Live Load:	Qc = 1.400 kN	Location:	at 100 m
	Qc = 1.100 kN			Open Ground Load:	0.900 kPa
				Basic Roof Load:	0.605 kPa

The minimum timber treatment for these MiTek® trusses shall be in accordance with B2/AS1 Table 1A and the relevant sections of NZS 3602:2003. The timber for these MiTek® trusses shall be graded to the requirements of NZS 3603:1993. Proprietary fixings and timber connectors shall be selected in accordance with NZS3604:2011 Section 4 - Durability.

MiTek® Truss List

Legend: * = detail only, ? = input only, ✕ = failed design, Ø = non certified, Unmarked trusses = designed successfully, LB = lateral bracing required
GB = gable brace required

Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)
GE1	1D	6080	-12.000	900	S5	7	5060	12.000	810	S14	3D	6680	12.000	720
GE2	1D	5150	12.000	900	S6	1D	6680	12.000	900	S15	1D	6680	12.000	706
GE3	1D	3470	12.000	900	S7	1	7830	12.000	900	S16	1D	6590	12.000	706
GE4	1D	6080	12.000	900	S8	3	7830	12.000	885	T1	4	3470	12.000	900
GE5	1D	7830	12.000	900	S9	5	7830	12.000	885	T2	3	3470	12.000	752
S1	2	4430	12.000	900	S10	4	8920	12.000	885	T3	4	5150	12.000	900
S2	1	4430	12.000	900	S11	2	6080	-12.000	818 LB	T4	3	5150	12.000	752
S3	1	3970	12.000	900	S12	2D	6680	12.000	818					
S4	1	3970	12.000	810	S13	1	5990	12.000	900					

Total quantity : 55

The computer design input has been carried out by:

Signed: 

Date: ...Monday, 30 May 2022....

Name of Detailer: Standard

Qualifications and Title: Detailer

On behalf of: VIP Frames & Trusses

Document Set ID: 679110

Version: 1, Version Date: 03/11/2023

Job: 100725

Client: Mike Greer Mid Canterbury
Phone:Site: New House
Lot 7 Meadowlands Green
Meadowlands, AshburtonDescription:
Building Consent No.:
MiTek 20/20 Engineering 4.7.346.0Phone: Ashburton District Council
Approved: 11/47:34 18 May 2022
BC0426/22.02

MiTek New Zealand Limited

**TRUSS FIXING SELECTION REPORT - Characteristic
Loads**

Fixings are selected from the LUMBERLOK Brochure 08/2014 (Timber Connectors Characteristic Loadings Data)

MiTek® Truss List

Legend: * = detail only, ? = input only, ✕ = failed design, Ø = non certified, Unmarked trusses = designed successfully

Truss	Qty	Span (mm)	Joint	Down (kN)	Uplift (kN)	Bearing	----- Fixing ----- Qty Selected
GE1	1D	6080	N	3.865	1.918	Wide	No fixing selected
			O	1.121	1.663	Wide	No fixing selected
			P	1.480	0.649	Wide	No fixing selected
			Q	1.170	0.641	Wide	No fixing selected
			R	1.233	0.646	Wide	No fixing selected
			S	1.182	0.625	Wide	No fixing selected
			T	1.362	0.719	Wide	No fixing selected
			U	0.626	0.325	Wide	No fixing selected
			W	2.567	1.368	Wide	No fixing selected
			L	1.297	0.388	Wide	No fixing selected
			U	3.709	1.822	Wide	No fixing selected
GE2	1D	5150	M	0.966	0.155	Wide	No fixing selected
			T	1.050	1.493	Wide	No fixing selected
			S	1.473	0.627	Wide	No fixing selected
			R	1.173	0.646	Wide	No fixing selected
			Q	1.217	0.638	Wide	No fixing selected
			P	1.253	0.662	Wide	No fixing selected
			O	1.062	0.556	Wide	No fixing selected
			N	1.696	1.055	Wide	No fixing selected
			L	0.862	0.068	Wide	No fixing selected
			B	1.057	0.341	Wide	No fixing selected
			K	1.546	0.814	Wide	No fixing selected
GE3	1D	3470	J	1.184	0.628	Wide	No fixing selected
			I	0.976	0.508	Wide	No fixing selected
			H	1.931	1.035	Wide	No fixing selected
			W	3.722	1.815	Wide	No fixing selected
			B	2.443	0.861	Wide	No fixing selected
GE4	1D	6080	V	1.047	1.487	Wide	No fixing selected
			T	1.470	0.628	Wide	No fixing selected
			S	1.173	0.645	Wide	No fixing selected
			R	1.228	0.645	Wide	No fixing selected
			Q	1.203	0.630	Wide	No fixing selected
			P	1.273	0.700	Wide	No fixing selected
			O	0.994	0.403	Wide	No fixing selected
			N	1.824	1.259	Wide	No fixing selected
			Q	0.758	0.137	Wide	No fixing selected
			R	0.915	0.603	Wide	No fixing selected
			S	0.827	0.134	Wide	No fixing selected
GE5	1D	7830	T	1.039	0.704	Wide	No fixing selected
			U	0.936	0.636	Wide	No fixing selected
			V	0.954	0.643	Wide	No fixing selected
			W	0.951	0.642	Wide	No fixing selected
			X	0.951	0.642	Wide	No fixing selected
			Y	0.960	0.644	Wide	No fixing selected
			Z	0.989	0.635	Wide	No fixing selected
			AA	1.103	0.674	Wide	No fixing selected
			AC	0.866	0.513	Wide	No fixing selected
			AD	1.768	1.003	Wide	No fixing selected
			O	1.009	0.258	Wide	No fixing selected
			F	4.752	2.272	Cross	2 Pair of Wire Dog Staples
			I	4.859	2.031	Butt	2 JH 47x90
			F	4.752	2.272	Cross	1 Pair of Wire Dog Staples
			I	4.859	2.031	Butt	1 JH 47x90
S2	1	4430	E	4.285	2.042	Cross	1 Pair of Wire Dog Staples
S3	1	3970	G	4.392	1.793	Butt	1 JH 47x90
			E	3.857	1.838	Cross	1 Pair of Wire Dog Staples
S4	1	3970	G	3.952	1.613	Butt	1 JH 47x90
			F	3.817	2.356	Cross	7 Pair of Wire Dog Staples
S5	7	5060	J	3.974	2.095	Cross	7 Pair of Wire Dog Staples
			A	6.694	3.375	Cross	1 CT400
S6	1D	6680	N	8.735	3.229	Cross	1 CT400
			O	4.524	1.885	Cross	1 Pair of Wire Dog Staples
S7	1	7830	J	1.971	2.595	Wide	No fixing selected
			K	11.429	7.152	Wide	No fixing selected
			J	6.120	3.391	Cross	3 CT400
S8	3	7830	O	7.174	4.093	Cross	3 CT400
			H	6.555	3.651	Cross	5 CT400
S9	5D	7830	F	6.753	3.934	Cross	5 CT400
			I	6.920	3.999	Cross	4 CT400
S10	4D	8920	N	7.954	4.206	Cross	4 CT400
S11	2	6080	I	6.861	2.418	Cross	2 Pair of Wire Dog Staples
			M	6.230	2.960	Cross	2 Pair of Wire Dog Staples
S12	2D	6680	A	6.084	3.068	Cross	2 Pair of Wire Dog Staples
			N	7.947	2.930	Cross	2 Pair of Wire Dog Staples
S13	1	5990	L	5.183	2.284	Butt	1 JH 47x90
			H	8.454	2.562	Cross	1 Pair of Wire Dog Staples

VIP Frames & Trusses

Job:100725

Client:Mike Greer Mid Canterbury

Site:New House

Description:Building Consent No.:MiTek 20/20 Engineering 4.7.346.0

Phone:

Lot 7 Meadowlands GreenMeadowlands, Ashburton

Phone:

Ashburton District Council

Approved

BC0426/22.02

Phone:

147.34.18

May 2022

MiTek New Zealand Limited

Truss	Qty	Span (mm)	Joint	Down (kN)	Uplift (kN)	Bearing	----- Fixing -----	
							Qty	Selected
S14	3D	6680	A	5.355	2.701	Cross	3	Pair of Wire Dog Staples
			J	6.995	2.578	Cross	3	Pair of Wire Dog Staples
S15	1D	6680	A	5.319	2.663	Cross	1	Pair of Wire Dog Staples
			I	5.690	2.442	Cross	1	Pair of Wire Dog Staples
S16	1D	6590	H	5.613	2.410	Butt	1	Pair of MultiGrips
			A	5.247	2.627	Cross	1	Pair of Wire Dog Staples
T1	1	5150	H	5.368	2.618	Cross	1	Pair of Wire Dog Staples
			K	7.195	2.454	Cross	1	Pair of Wire Dog Staples
T2	6	5150	H	4.772	2.327	Cross	6	Pair of Wire Dog Staples
			K	6.396	2.182	Cross	6	Pair of Wire Dog Staples
T3	7	3470	B	3.359	1.584	Cross	7	Pair of Wire Dog Staples
			F	3.356	1.429	Butt	7	JH 47x90

Fixing List

Qty	Selected Fixing
59	Pair of Wire Dog Staples
13	JH 47x90
26	CT400
1	Pair of MultiGrips
51	No fixing selected

Note:

1) Fixings have been selected based on loading only. Please check that selected fixings are practical for each situation and that appropriate nailing can be applied on site.

2) Fixings are selected from the LUMBERLOK Brochure 08/2014 (Timber Connectors Characteristic Loadings Data) with down and uplift characteristic loads of at least the values shown for each joint.



Christchurch

Date: 30 May 2022

Fabricator: VIP Frames & Trusses

Job Name: Lot 7 Meadowlands Green, Meadowlands
New House
Mike Greer Mid Canterbury

Building Consent No: _____
(Provided by relevant Consenting Authority at time of Consent application)

We have been engaged to provide the trusses and frames for the above project.
To allow completion of the consent application we have supplied the following information.

- (a) Truss Layout and Producer Statement.
- (b) Any slab thickening requirements detailed.
- (c) All truss loaded lintels that are either inside or outside the requirements of NZS3604:2011.
- (d) All roof bracing details as required by NZS3604:2011.

On advice from the building project owner, the structure will be designed under the following parameters:

Wind Zone	<u>High</u>	Altitude	<u>100m</u>
		Snow (Open Ground Load)	<u>.900kPa</u>
Roof Material	<u>Longrun</u>	Snow (Basic Roof Load)	<u>.605kPa</u>

Treatment Definition:

External Walls -	H1.2 Treated
Internals Walls -	H1.2 Treated
Trusses -	H1.2 Treated

We can advise that the following will be provided at the time of truss manufacture to both the building owner and your office:

- (1) A full 'as-built' layout and Producer Statement.
- (2) Specific Truss/Truss fixings done as per NZS3604:2011, Clause 10.2.2.6.1
- (3) Specific top plate to stud fixings that comply with NZS3604:2011, Table 8.18
- (4) Specific lintel Fixings outside NZS3604:2011.

It should be noted that the details provided have been designed to comply with the Building Code and the relevant standards. Any increase above these standards is only at the preference and request of the building owner.

Acknowledgement of this letter, along with the Building Consent number, is required by our company as soon as possible.

Council Contacts:

Consents Officer: _____
Email #: _____
Phone: _____

Please forward to:

VIP Frames & Trusses
65-67 Wickham Street
Ph (03) 389-8200

PROLAM SUMMARY

30 May 2022

100725

Lot 7 Meadowlands Green, Meadowlands

1. Lintel Supporting Roof and Ceiling

a) Living

PL12H1-250150

(Non-visual)

Lintel Span	3.7 m	Building Type	House
Roof Span	7.2 m	Wind Zone	High
Eaves Width	0.2 m	Snow Zone	N4
Roof Pitch	12.0 °	Site Elevation	100
		Wet in Service	No
		Roof Type	Light (0.25 kPa)
		Ceiling Type	Standard (0.15 kPa)
Member Depth	240 mm	Capacity Ratio	2.7
Member Width	140 mm	Rigidity Ratio	2.3
Residual Deflection	<1 mm	Critical Load Combination	1.2G + Su + psi_cQ
Absolute Deflection	5.2 mm	Support Reaction	8.3 kN
Uplift Restraint Required	6.9 kN		

Notes Residual deflection is long term deflection below horizontal after pre-camber, absolute deflection is maximum beam movement.

b) Bedroom 1

PL12H1-200150

(Non-visual)

Lintel Span	3.8 m	Building Type	House
Roof Span	3.5 m	Wind Zone	High
Eaves Width	0.2 m	Snow Zone	N4
Roof Pitch	12.0 °	Site Elevation	100
		Wet in Service	No
		Roof Type	Light (0.25 kPa)
		Ceiling Type	Standard (0.15 kPa)
Member Depth	190 mm	Capacity Ratio	3.1
Member Width	140 mm	Rigidity Ratio	2
Residual Deflection	<1 mm	Critical Load Combination	1.2G + Su + psi_cQ
Absolute Deflection	5.9 mm	Support Reaction	4.5 kN
Uplift Restraint Required	3.5 kN		

Notes Residual deflection is long term deflection below horizontal after pre-camber, absolute deflection is maximum beam movement.

c) Covered Area

PL12H1-200150

(Non-visual)

Lintel Span	3.3 m	Building Type	House
Roof Span	3.5 m	Wind Zone	High
Eaves Width	0.2 m	Snow Zone	N4
Roof Pitch	12.0 °	Site Elevation	100
		Wet in Service	No
		Roof Type	Light (0.25 kPa)
		Ceiling Type	Standard (0.15 kPa)
Member Depth	190 mm	Capacity Ratio	4.1
Member Width	140 mm	Rigidity Ratio	3.5
Residual Deflection	<1 mm	Critical Load Combination	1.2G + Su + psi_cQ
Absolute Deflection	3.4 mm	Support Reaction	3.9 kN
Uplift Restraint Required	3.1 kN		

Notes Residual deflection is long term deflection below horizontal after pre-camber, absolute deflection is maximum beam movement.

d) Garage Door

PLX20H1-250100

(Non-visual)

Lintel Span	4.8 m	Building Type	House
Roof Span	0.9 m	Wind Zone	High
Eaves Width	0.2 m	Snow Zone	N4
Roof Pitch	12.0 °	Site Elevation	100
		Wet in Service	No
		Roof Type	Light (0.25 kPa)
		Ceiling Type	Standard (0.15 kPa)
Member Depth	240 mm	Capacity Ratio	5.7
Member Width	88 mm	Rigidity Ratio	5.4
Residual Deflection	<1 mm	Critical Load Combination	1.2G + 1.5Qp
Absolute Deflection	2.2 mm	Support Reaction	2.0 kN
Uplift Restraint Required	1.2 kN		

Notes Residual deflection is long term deflection below horizontal after pre-camber, absolute deflection is maximum beam movement. Composite member (includes timber and steel).

PRODUCER STATEMENT



Tasman Consulting Engineers Limited has been engaged by Prowood Limited to provide design services as used for the Prolam on-line calculator.

This producer statement covers the design of the member(s) as above for the input parameters shown utilising the Prowood products listed (substitution is not permitted). The design has been carried out using sound and widely accepted engineering principles to the requirements of AS/NZS1170:2002, NZS3603:1993 and with reference to NZS3604:2011.

I believe on reasonable grounds that the above design will meet the requirements of clause B1/VM1 of the New Zealand Building Code Documents.



24 January 2022 (2.0.11)

David King

ME(civil) CMEngNZ CPEng(no 145511) IntPE(NZ)

For Tasman Consulting Engineers, PO Box 3631, Richmond, NELSON 7050



LINTEL FIXING SCHEDULE

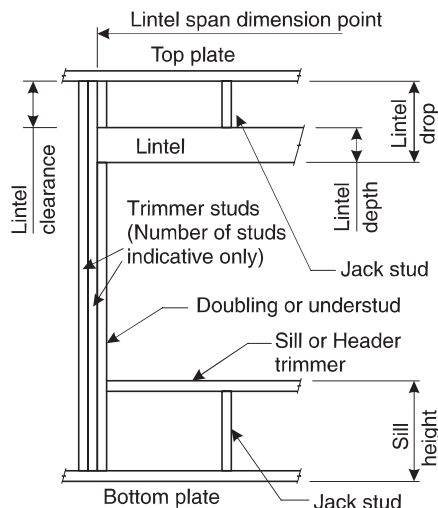
ALTERNATIVE TO TABLE 8.14 & FIGURE 8.12

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

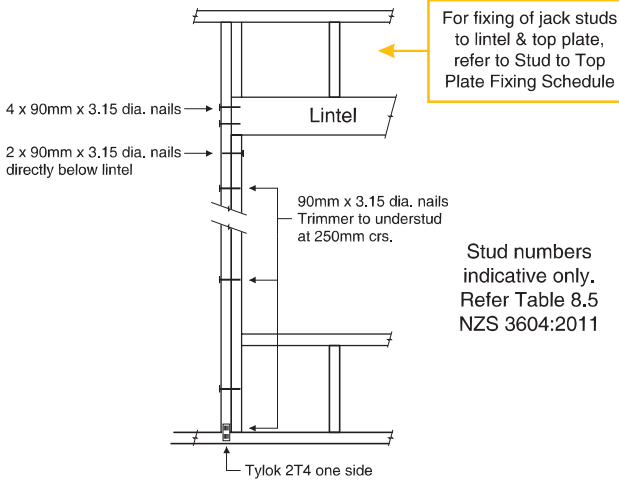
NOTES:

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

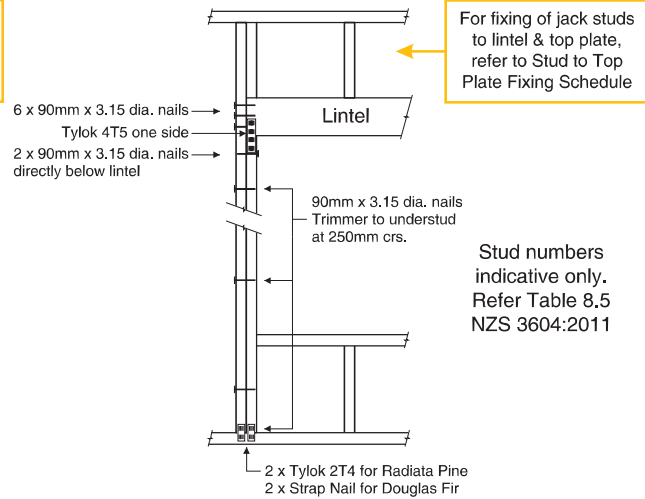
Lintel Span (m)	Loaded Dimension (m) (See Fig. 1.3 NZS 3604:2011)	Light Roof Wind Zone					Heavy Roof Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
1.0	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	F	F	F	G	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
1.2	2.0	E	E	F	F	F	E	E	E	F	F
	3.0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

LINTEL FIXING OPTIONS

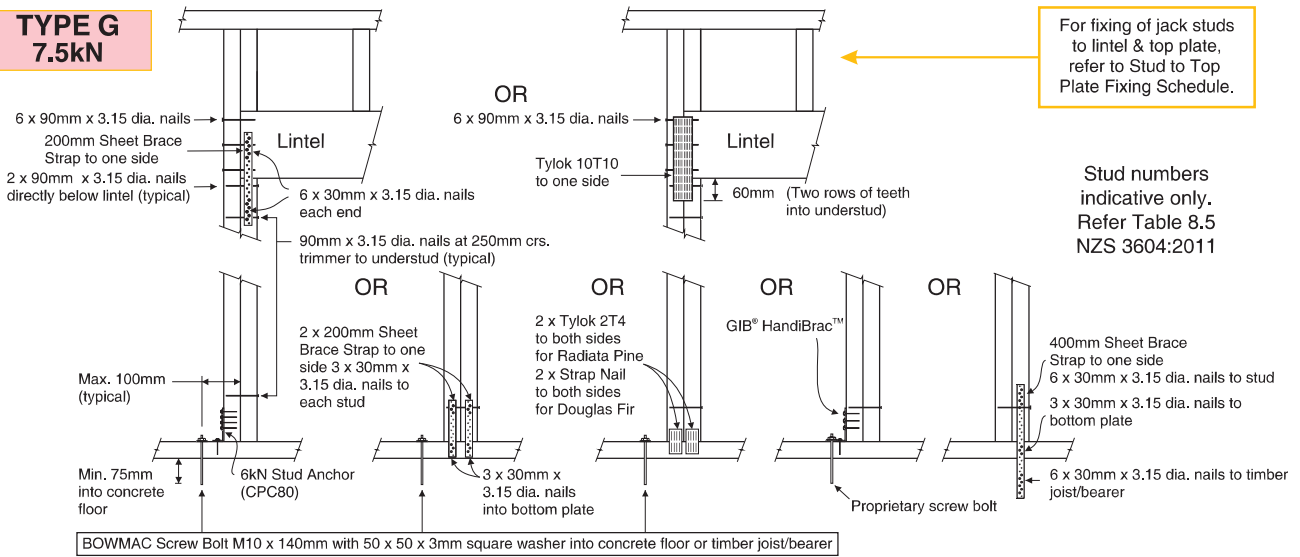
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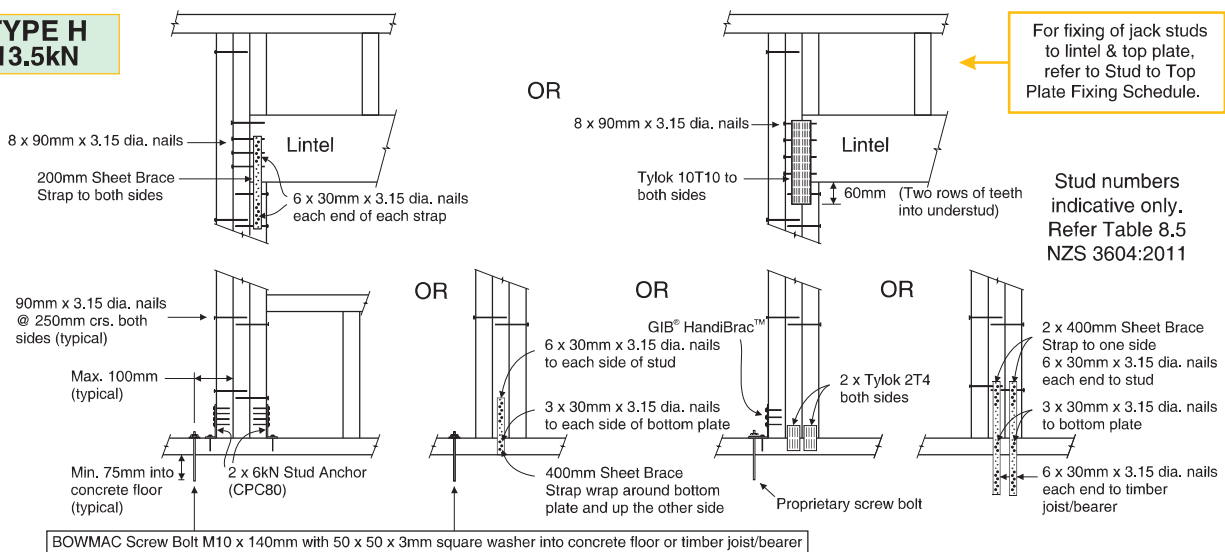
TYPE F 4.0kN



TYPE G 7.5kN



TYPE H 13.5kN

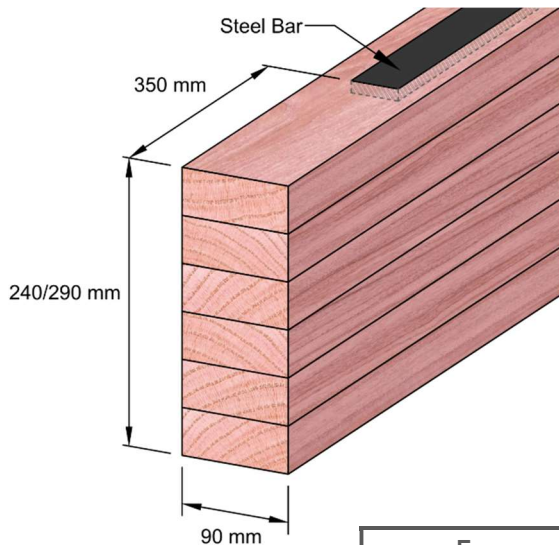


Prolam PLX20™



Prolam®
Engineered Laminated Timber

Ashburton District Council
Approved Variation
BC0426/22.02



The Prolam PLX20 is an innovative structural laminated beam being the ideal choice for garage door lintels. Manufactured from radiata pine, with steel inserts in the top and bottom laminates, PLX20's have superior spanning capabilities.

It is the responsibility of the designer to establish hold down fixing's accordance with NZS3604:2012 or an alternative fixing.

	E Lower bound Modulus of Elasticity GPa	f'_b Bending MPa	f'_s Shear MPa	f'_c Compression parallel to grain MPa	f'_t Tension MPa	G Modulus of Rigidity MPa
PLX20-250100	20	40	3.7	18	4	480
PLX20-300100	21	45	3.7	18	4	480

Product Details

Code	Size
PLX20-250100	240x90x5.4
PLX20-300100	290x90x5.4

Treatment: H1.2

Grade: Non-Visual

Applications: Lintels and Rafters

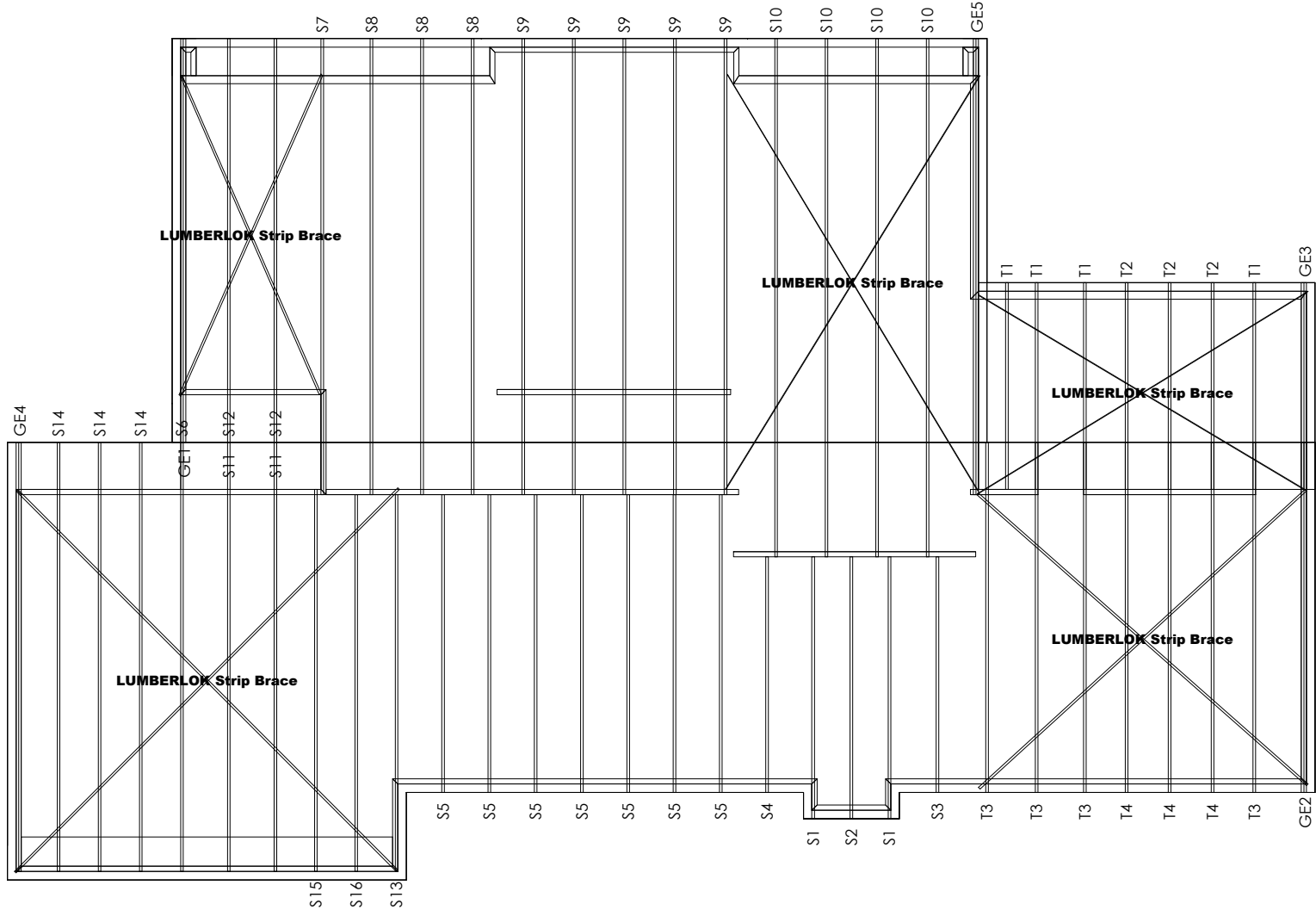
Key Features and Benefits

- Light weight
- Labour Savings – quicker to install
- Span further with smaller member
- Competitively priced
- Easy to Specify using Prolam Specifier specifier.prolamnz.com

Note: PLX20 have been signed off by Tasman Consulting engineers and independently tested by Scion Research in Rotorua.

For further information and technical support please contact our team on
03 526 7436 or info@prowoodnz.com

Roof Bracing Layout



VIP
Framer & Trusses
Ashburton District Council

Approved Variation
BC0428
Buckley
Auckland

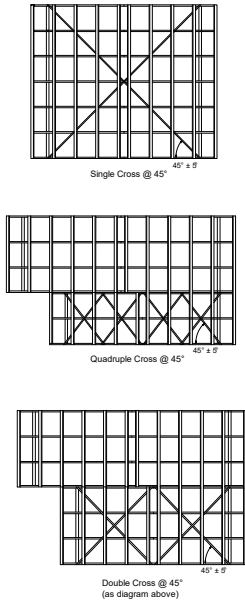
65 Wickham St,
PO Box 19-765
Christchurch

91 Adams Drive,
Buckley,
Auckland

0800 PRENAIL
(0800 7736245)

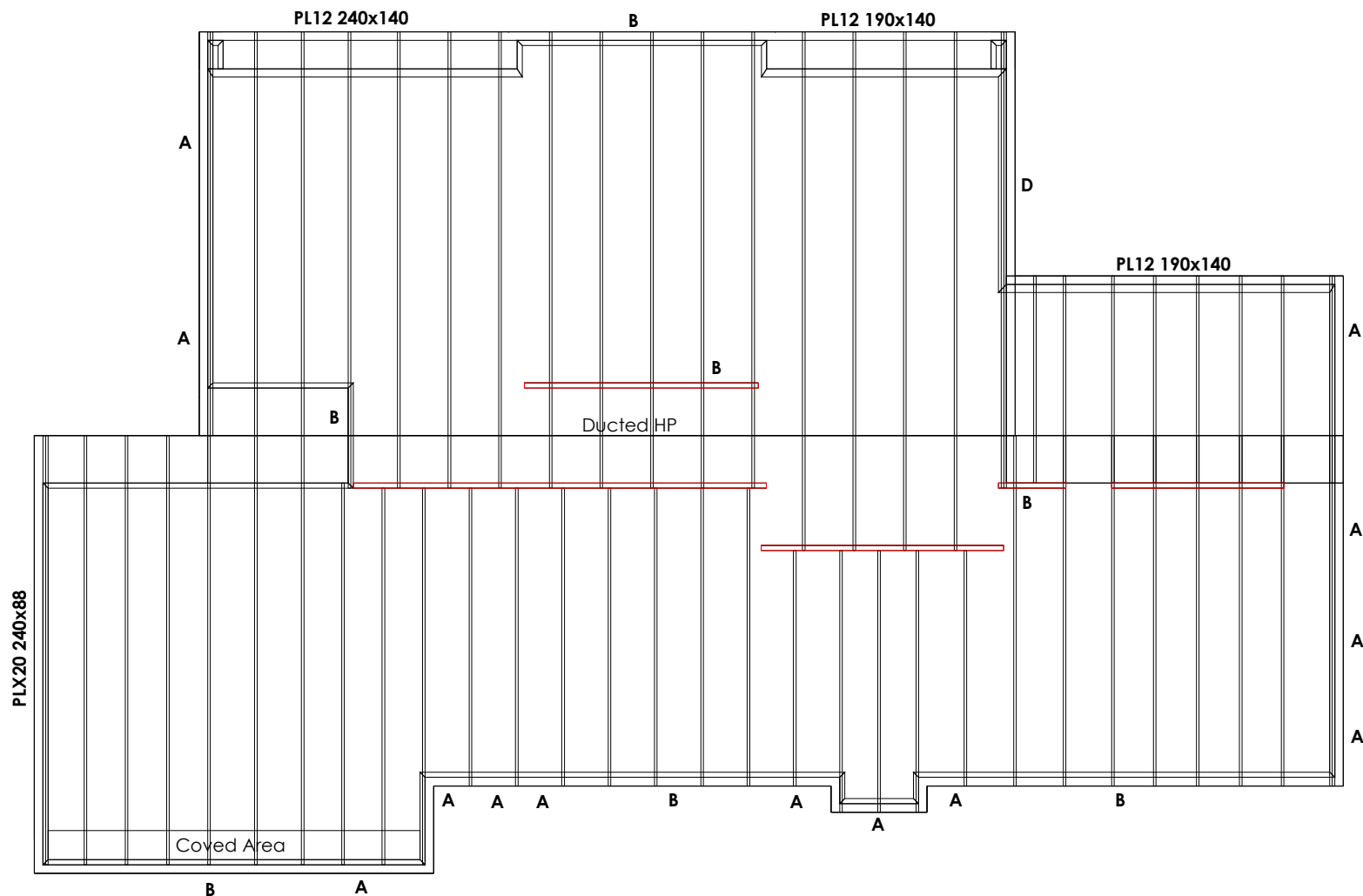
JOB No 100725	
Client: Mike Greer Mid Canterbury	
Job Name: New House	
Address: Lot 7 Meadowlands Green Meadowlands, Ashburton	
Pitch: 12.000	
Roof Material: Longrun Iron	
Soffit Overhang: 150	
Wind Area: High	
Snow Load: 0.605	
Trusses And Rafters At 900 Centres Unless Stated Otherwise	
DRAWN BY	Standard
DATE	16 May,2022
PAGE	1 of

Roof Bracing Details



NOTES:
Refer to:
Lumberlok roof bracing brochure
07/2006

Lintel Sizes & Slab Thickening Layout



= Internal load bearing wall (Individual point loads of trusses under 8kN)

All walls shown are considered load bearing

Architect / Engineer to confirm all top floor loads are transferred to foundation / slab below
All Other lintels / beams by architect / engineer

Architect to ensure there is enough space / height for lintels allocated or advise otherwise
Fabricating Detailer MUST confirm lintel min size or bigger at detailing stage based off consented plans before detailing for fabrication
Fabricating Detailer MUST confirm lintel Fixings min size or bigger at detailing stage based off consented plans before detailing for fabrication
No allowance for heat pump units / Any type of air conditioning units or ducting in roof space - Architect MUST advise if required

VIP Framers & Trusses
Ashburton District Council

Approved Variation
65 Wickham St. 91 Adams Drive,
PO Box 19-765 BC0428 Pukekohe,
Christchurch Auckland

0800 PRENAIL
(0800 7736245)

JOB No **100725**

Client: Mike Greer Mid Canterbury
Job Name: New House
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Meadowlands, Ashburton

Pitch: 12.000
Roof Material: Longrun Iron
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Wind Area: High
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Trusses And Rafters At 900 Centres
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DRAWN BY Standard

DATE 16 May,2022 PAGE 1 of

These lintels have been sized as per the GANGLAM and FLITCH BEAM selection manuals as provided by MiTek NZ Ltd.

HYSPAN lintels have been sized as per the HYSPAN selection charts.

Unless otherwise stated all lintels are as per NZS3604 2011

LINTEL	SIZE	
A	2/90x45	MSG8
B	150x90	Hy90
C	200x90	Hy90
D	240x90	Hy90
E	300x90	Hy90
F		

Slab Thickening Details

