

Job: 18-419N

Client: Mike Greer Homes NC
Phone:Site: N2113
42 Watkins Drive
Highgate
RangioraDescription: N2113
Building Consent No.:
MiTek 20/20 Engineering 4.7.184.0

Phone:

Printed: 13:15:46 27 Apr 2018

MiTek New Zealand Limited.

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

Timber Group: ~MSGx45 H1.2

Pitch: 28.000 deg

Nominal Overhang: 600 mm

Roof

Material: Galv Iron .5mm

Material: Rondo screwed to BC

Wind

Dead Load: 0.210 kPa

Dead Load: 0.200 kPa

Area: High (44.0 m/s)

Restraints: 900 mm centres

Restraints: 600 mm centres

Pressure Coeff: Cpe = varies; Cpi = -0.30, 0.20

Live Load: Qur = 0.250 kPa

Live Load: Qc = 1.400 kN

Snow

Location: Christchurch (N4) at 100 m

Open Ground Load: 0.900 kPa

Basic Roof Load: 0.403 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, Txx = 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)
*FR01	1	3380	28.000	900	J23	1	2492	28.000	900	S9	3	5270	28.000	803
*FR02	1	5395	28.000	900	J24	1	2492	28.000	900	S10	1	5270	28.000	803
GE1	1	2180	28.000	900	J25	1	1592	28.000	900	S11	1	4870	28.000	803
GE2	1	4195	28.000	900	J26	1	1592	28.000	900	S12	2	4870	28.000	803
*H1	1	2098	20.605	900	J27	1	2332	28.000	900	S13	1	2180	28.000	900
*H2	2	2368	20.605	900	J28	1	2332	28.000	900	S14	1	4195	28.000	797
*H3	2	6140	20.605	900	J29	1	1432	28.000	900	S15	3	4195	28.000	797
*H4	2	5447	20.605	900	J30	1	1432	28.000	900	S16	1	4195	28.000	797
*H5	1	5624	20.605	900	J31	1	2332	28.000	900	S17	1	4890	28.000	615
*H6	1	1822	20.605	900	J32	1	1432	28.000	900	S18	1	2770	28.000	615
*H7	1	2366	20.605	900	J33	1	1432	28.000	900	S19	1	4710	28.000	900
*H8	2	4125	20.605	900	*OR1	8	1305	0.000	523	S20	3	4710	28.000	802
J1	1	2857	28.000	900	*OR2	10	1202	0.000	684	S21	4	4710	28.000	802
J2	1	2857	28.000	900	*R1	1	1670	28.000	900	T1	1	5270	28.000	900
J3	1	2857	28.000	900	*R2	1	913	28.000	900	T2	1	7560	28.000	900
J4	1	2857	28.000	900	*R3	6	913	28.000	900	T3	1	4890	28.000	900
J5	1	1957	28.000	900	*R4	1	1670	28.000	900	T4	1	4710	28.000	900
J6	1	1957	28.000	900	*R5	6	913	28.000	900	*T5	1D	2302	0.000	900
J7	1	2857	28.000	900	*R6	1	1180	28.000	900	V1	1	1078	28.000	900
J8	1	1957	28.000	900	*R7	1	1180	28.000	900	V2	1	1755	28.000	900
J9	1	1957	28.000	900	*R8	1	1305	28.000	900	V3	1	2433	28.000	900
J10	1	3267	28.000	900	*R9	1	772	-28.000	900	V4	1	1345	28.000	900
J11	1	3267	28.000	900	*R14	1	1145	28.000	900	V5	1	2245	28.000	900
J12	1	2367	28.000	900	*R15	1	1145	28.000	900	V6	1	890	28.000	900
J13	1	2367	28.000	900	*R16	1	913	28.000	900	V7	1	762	28.000	900
J14	1	1467	28.000	900	*R17	1	771	-28.000	900	V8	1	1573	28.000	900
J15	1	1467	28.000	900	S1	2	5270	28.000	900	V9	1	2188	28.000	900
J16	1	3267	28.000	900	S2	1	6580	28.000	900	V10	1	1638	28.000	900
J17	1	2367	28.000	900	S3	1	6580	28.000	892	V11	1	1023	28.000	900
J18	1	2367	28.000	900	S4	2	6580	28.000	892	*V12	1	722	28.000	900
J19	1	1467	28.000	900	S5	1	6580	28.000	892	V13	1	1175	28.000	900
J20	1	1467	28.000	900	S6	3	5270	28.000	678	V14	1	2075	28.000	900
J21	1	2492	28.000	900	S7	1	4890	28.000	900	V15	1	1100	28.000	900
J22	1	2492	28.000	900	S8	1	4710	28.000	900					

Total quantity : 145

The computer design input has been carried out by:

Signed: 

Date: ...Friday, 27 April 2018....

Name of Detailer: Lloyd Harwood

Qualifications and Title: Detailer

On behalf of:

VIP Frames & Trusses



MiTek New Zealand Limited

Correspondence from : **AUCKLAND**
40 Neales Road, East Tamaki 2013
PO Box 58-014, Botany 2163
Phone: 09 274 7109
Fax: 09 274 7100

CHRISTCHURCH
14 Pilkington Way, Wigram 8042
PO Box 8387, Riccarton 8440
Phone: 03 348 8691
Fax: 03 348 0314

www.mitekznz.co.nz

MiTek 20/20 Engineering 4.7.184.0

Printed: 13:15:46 27 Apr 2018

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 **18-419N** 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 Clauses B1 and B2 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,

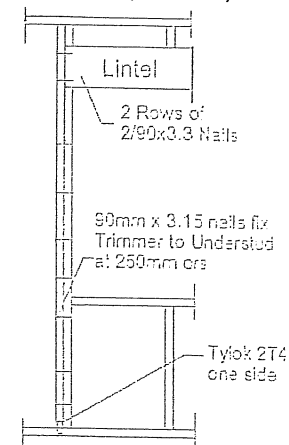
Date: Friday, 27 April 2018

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

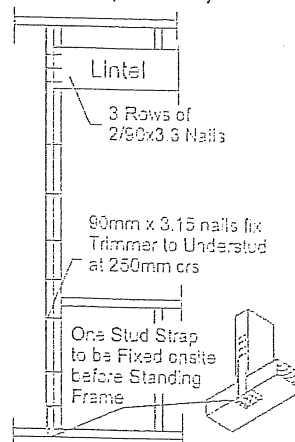
AS BUILT DESIGN
BCN170237

Lintel Fixings

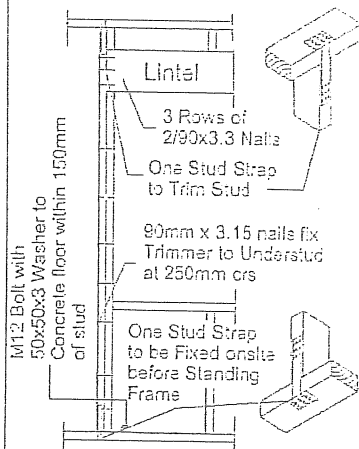
Type E (1.4kN)



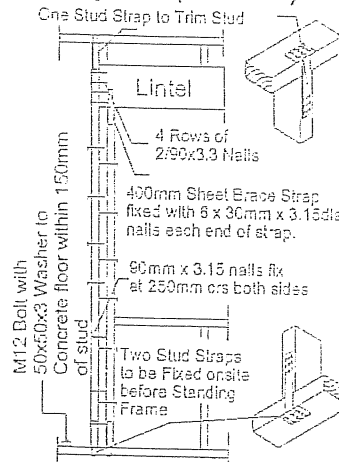
Type F (4.0kN)



Type G (7.5kN)



Type H (13.5kN)

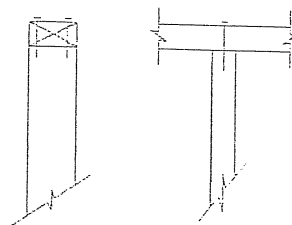


Note, Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011
For fixing of Jack Studs to lintel and top plate refer to "Stud to Top Plate Fixing Schedule"

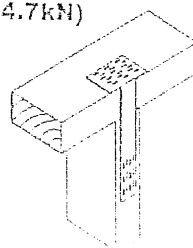
Top Plate Fixings

Fixing Type A (0.7kN)

2/90x3.33 Plain Steel Wirenails
Driven Vertically Into Stud



Fixing Type B (4.7kN)



GANG NAIL Stud Strap
Design Capacity 6.1 kN
AS1720.1-1997

Truss Fixing Layout

**VALLEY TRUSS = 2/90x3.15 SKEW NAILS +
2 WIRE DOGS UNLESS STATED OTHERWISE
MULTI-PLY NAILING (TOP CHORD = 1 row
@ 180 ctrs, BOTTOM CHORD = 1 row @
280 ctrs, WEBS = 1 row @ 140 ctrs)**

ASBUILT TRUSS BC170237

RECEIVED 18 APR 2018

VIP
FRAMES
&
TRUSSES

200 Maces Road
PO Box 35-193 Christchurch
Ph (03) 389 8200

JOB No 18-419N

Client: Mike Greer Homes NC
Job Name: N2113
Address: 42 Watkins Drive
Highgate

Pitch: 28.000
Roof Material: Galv Iron .5mm
Soffit Overhang: 600mm
Wind Area: High
Snow Load: 0.403

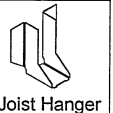
Trusses And Rafters At 900 Centres
Unless Stated Otherwise

DRAWN BY Nick Buckley

DATE 13 Apr, 2018 **PAGE** 1 of

FIXINGS

A=47x90 JH
B=47x120 JH
D=47x190 JH
E=95x165 JH



Joist Hanger

C=2xCT200's
M=Multigrips
N=Nail On Plate
L=Pair CPC 40
P=Pair CPC 80

CT 200



Multi Grips



Nail on plate



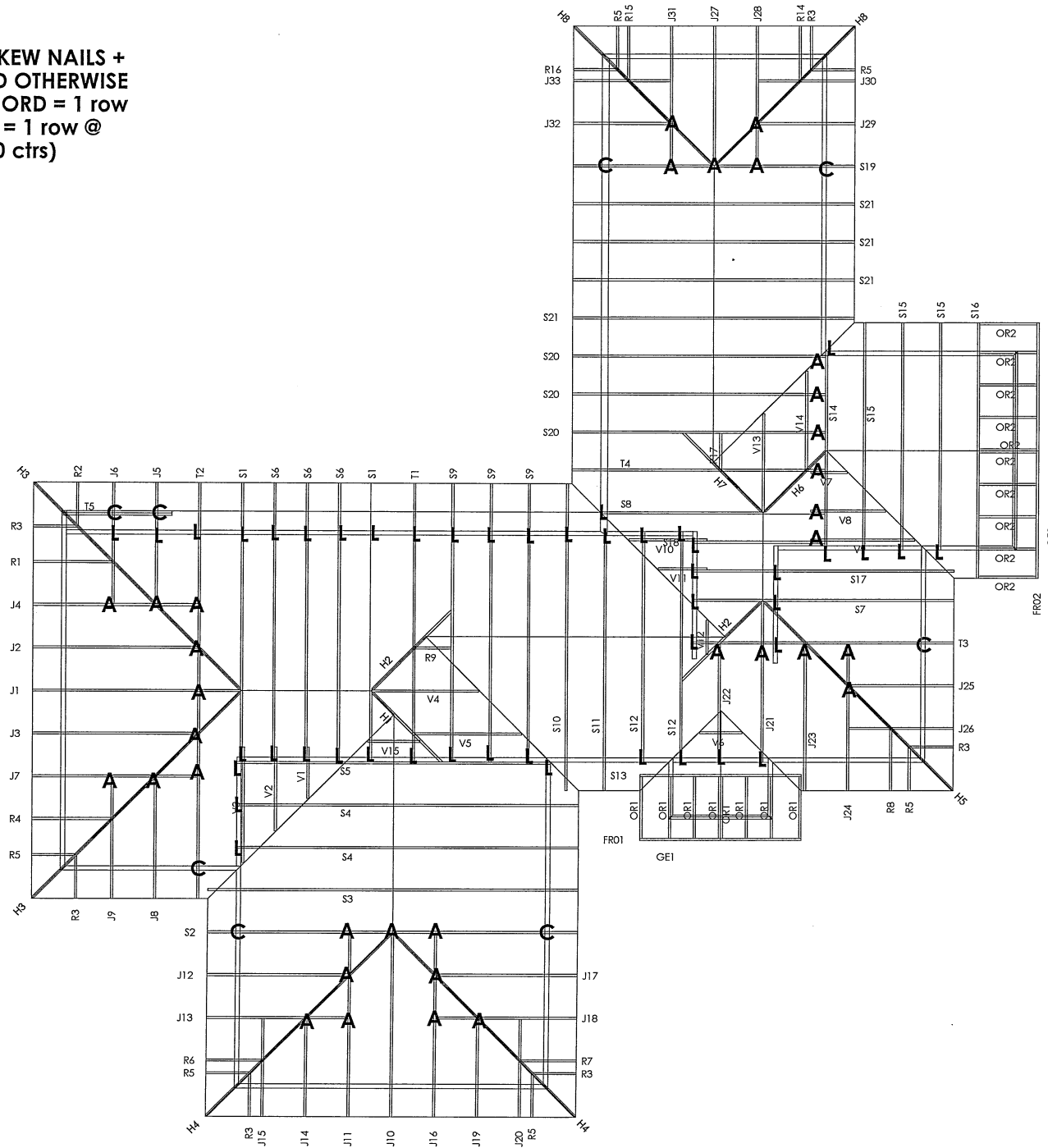
CPC

NOTE

Please contact VIP Frames and Trusses Ltd
for any queries regarding this layout or if any
on site remedial work is required.

No modifications to Roof Trusses or Wall Frames
are to be undertaken without first obtaining
written authority from VIP Frames and Trusses Ltd.

AS BUILT DESIGN
BCN170237



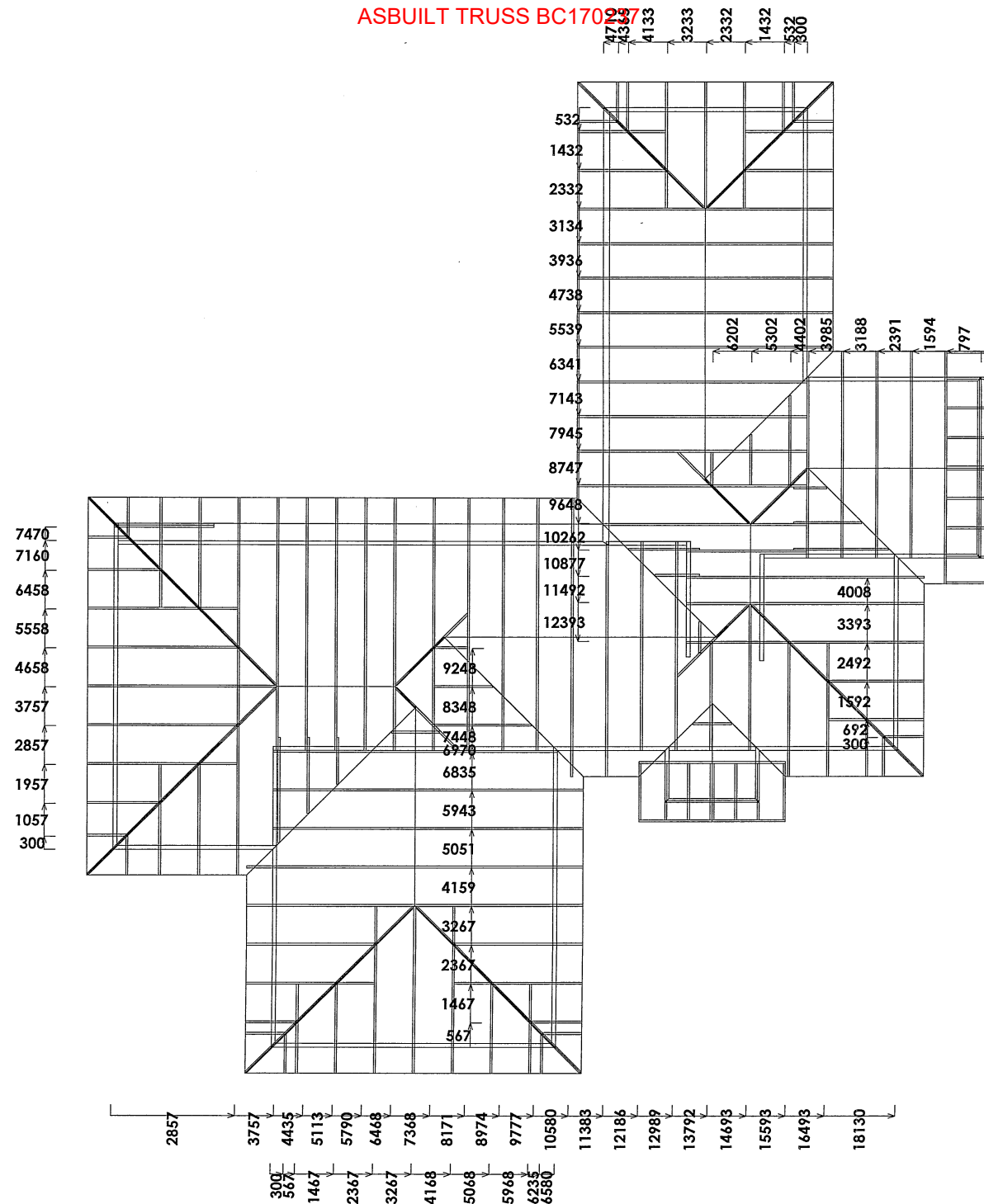
ASBUILT TRUSS BC170237

RECEIVED 10/05/2018

VIP FRAMES & TRUSSES

JOB No **18-419N**

DATE 13 Apr,2018	PAGE 1 of
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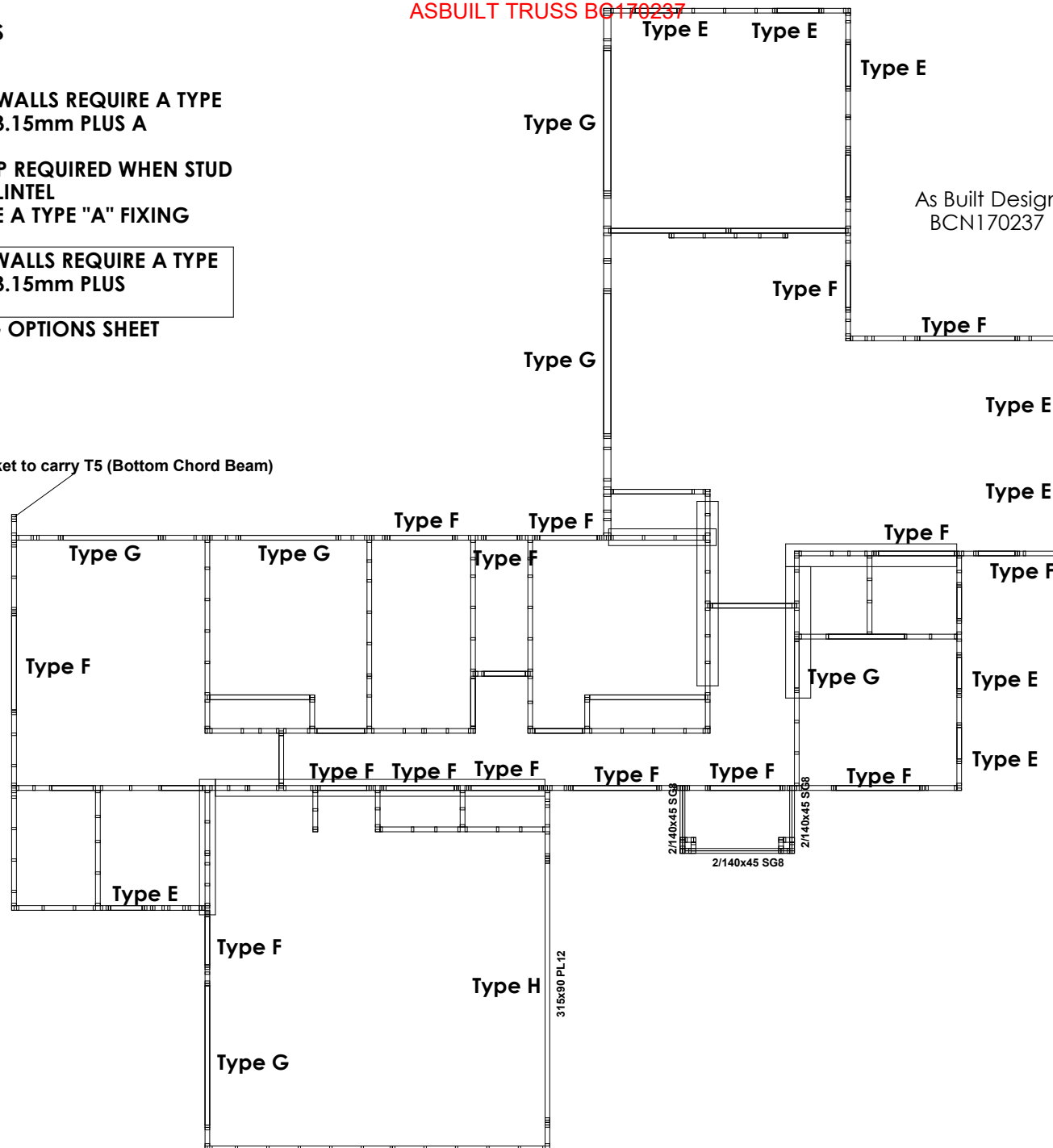


STUD TO TOP PLATE FIXINGS

EXTERNAL LOAD BEARING WALLS REQUIRE A TYPE
"B" FIXING (4.7kN) = 2/90x3.15mm PLUS A
GANG NAIL STUD STRAP
200mm SHEET BRACE STRAP REQUIRED WHEN STUD
STRAP DOESN'T FIX TO THE LINTEL
GABLE END WALLS REQUIRE A TYPE "A" FIXING
(0.7kN) = 2/90x3.15mm

INTERNAL LOAD BEARING WALLS REQUIRE A TYPE
"B" FIXING (4.7kN) = 2/90x3.15mm PLUS
2/CPC40 ONLY
REFER TO THE LINTEL FIXING OPTIONS SHEET
FOR FIXING DETAILS

Beam pocket to carry T5 (Bottom Chord Beam)



As Built Design
BCN170237



200 Maces Road
PO Box 35-193 Christchurch
Ph (03) 389 8200

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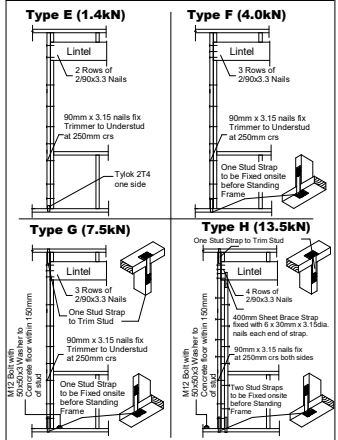
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Roof Material: Galv Iron .5mm
Soffit Overhang: 600mm
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Snow Load: 0.403

Trusses And Rafters At 900 Centres
Unless Stated Otherwise

DRAWN BY Nick Buckley

DATE 13 Apr, 2018 PAGE 1 of

Lintel Fixings

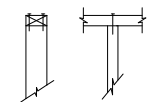


Note: Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011
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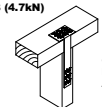
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