



MiTek New Zealand Limited

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MiTek 20/20 Engineering 4.7.346.0

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

ISSUED BY: **MiTek New Zealand Limited**

TO: **CARTERS**

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 **389577M1** 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: Tuesday, 12 September 2023

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

Job: 389577M1

Client: Homes by Parklane Ltd.
Phone:Site: Bhutani Puri
Lot 128 24 Westmoor Blvd
SpringstonDescription:
Building Consent No.: BC230719
MiTek 20/20 Engineering 4.7.346.0

Phone:

Printed: 15.05.08 12 Sep 2023

MITEK FABRICATOR DESIGN STATEMENT

This statement is issued by MiTek accredited fabricator **CARTERS**, 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:	MSG8 DDP H1.2	Pitch:	25.000 deg	Nominal Overhang:	450 mm
Roof		Ceiling		Wind	
Material:	Longrun	Material:	Gib 13mm/Timber Battens	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:	600 mm centres	Snow	
Live Load:	Q _{ur} = 0.250 kPa	Live Load:	Q _c = 1.400 kN	Location:	Christchurch (N4) at 100 m
	Q _c = 1.100 kN			Open Ground Load:	0.900 kPa
				Basic Roof Load:	0.526 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)
*CN1	25	855	0.000	900	J3B	1	2852	25.000	900	*R5	1	936	25.000	900
EN1	2	6280	25.000	900	J3C	1	2852	25.000	900	T1	1	6935	25.000	900
*ET1	1	3180	25.000	900	J3D	1	2852	25.000	900	T2	1	7550	25.000	900
ET1A	1	3180	25.000	900	J4	3	1952	25.000	900	T3	1	6870	25.000	900
*FR1	2	4080	25.000	900	J4A	1	1952	25.000	900	T4	1	6935	25.000	550
GT1	1	6870	25.000	900	J4B	2	1952	25.000	900	T5	1	3590	25.000	900
GT2	1	7550	25.000	900	J5	1	3412	25.000	900	T5A	1	3680	25.000	900
GT3	1	6935	25.000	900	J6	1	2777	25.000	900	T6	2	3752	25.000	549
GT4	1	3180	25.000	750	J7	1	2512	25.000	900	T7	1	7550	25.000	475
GT5	1	6870	25.000	900	J8	1	1672	25.000	900	T8	6	6280	25.000	900
*HB1	2	5486	18.249	900	J9	1	3680	25.000	900	T9	4	3412	25.000	900
*HB2	3	5921	18.249	900	J9A	1	3680	25.000	900	T10	1	6870	25.000	535
*HB3	1	363	18.249	900	J10	2	2515	25.000	900	T11	1	2515	25.000	900
*HB4	1	3183	18.249	900	J10A	1	2515	25.000	900	T12	1	1672	25.000	511
*HB5	1	1187	18.249	900	J10B	1	2515	25.000	900	T14	1	620	25.000	900
*HB6	1	5440	18.249	900	J10C	1	2515	25.000	900	TG1	1	6935	25.000	900
*HB7	1	3616	18.249	900	J11	1	1615	25.000	900	TG2	1	7550	25.000	900
*HB8	1	2861	18.249	900	J11A	1	1615	25.000	900	TG3	1	6825	25.000	900
HTG1	1	2340	25.000	900	J12	1	1590	25.000	900	V1	1	1890	25.000	900
J1	1	2545	25.000	900	J12A	1	1590	25.000	900	V2	1	2413	25.000	900
J1A	1	2545	25.000	900	*OR1	14	1200	0.000	642	V3	1	1513	25.000	900
J1B	1	2545	25.000	900	*R1	1	1208	25.000	900	V4	1	613	25.000	900
J1C	1	2545	25.000	900	*R1A	1	1208	25.000	900	V5	1	5370	25.000	900
J1D	1	2545	25.000	900	*R2	7	763	25.000	900	V6	1	3570	25.000	900
J2	2	1645	25.000	900	*R2A	7	763	25.000	900	V7	1	1770	25.000	900
J2A	2	1645	25.000	900	*R3	2	1515	25.000	900	V8	1	2086	25.000	900
J3	3	2852	25.000	900	*R3A	1	1515	25.000	900	V9	1	1258	25.000	900
J3A	1	2852	25.000	900	*R4	1	1178	25.000	900	V10	1	2635	25.000	900

Total quantity : 156

The computer design input has been carried out by:

MiTek 20/20 Software Operator: Cody Barrow

MiTek Candidate Number and Qualifications:

Accredited Fabricator:

