



**LAW
SUE**

CONSULTANTS LIMITED
CONSULTING STRUCTURAL AND CIVIL ENGINEERS

P O BOX 56-468 MT EDEN
AUCKLAND 3

PHONE No. 0-9-302 2235
FAX No. 0-9-302 2236

JOB NAME:

17 ELSIE BRIDGE.

PAGE No:

26

SECTION:

Lintel

JOB No:

18208

DESIGNED:

DATE:

5/98

CHECKED:

Lintel over Master Bed span 1.8m.

loads

$$P_1 = \left(\frac{0.4}{6.30} + 0.25 \right) 0.7 \times 2.3 = 1.15 \text{ kN} @ 0.2m.$$

$$P_2 = 1.15 + \frac{4}{2} \times \frac{3.2}{2} \left(\frac{1}{4} \right) = 2.6 @ 0.9m$$

$$P_3 = 1.15 @ 1.6m.$$

Bending

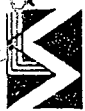
$$M = 1.15 \times 0.2 + \frac{2.6 \times 1.8}{4}$$

$$= 1.4 \text{ kNm}$$

ML 2/200490

Lintel over
Master Bed
span 1.8m

2/200490



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PHONE No. 0-9-302 2235
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JOB NAME:

17 Elsie Drive.

PAGE No:

27

SECTION:

lintels

JOB No:

18203

DESIGNED:

DATE:

5/98.

CHECKED:

Lintel over upper lounge span 1.8m

loads.

$$\text{Roof} = \frac{4.1}{2} \times \frac{1}{2} () = 6.6 \text{ kN} \quad \text{e } 1.0 \text{ m.}$$

$$= 0.9 \times 0.9 () = 0.6 \quad \text{e } 0.2 \text{ m.}$$

Banding

$$M = \frac{6.6 \times 1 \times 0.9}{1.8} + \frac{0.6 \times 0.2 \times 1.6}{1.8}$$

$$= 3.04 \text{ kNm.}$$

use Z/250x50

Lintel over
upper lounge

span 1.8m.

Z/250x50 oh

Z/100x50 posts.

Job: P491-TF

Client: B ENGLAND

Site: 17 ELSIE DR

Phone:

WAIUKU

Description:

Phone:

MiTek 2000 2.100 g6c

Gang Nail Group Ltd.

Wed Dec 16 07:36:13 1998

PRODUCER STATEMENT
MiTek 2000(tm) ROOF TRUSS DESIGN

Certification of Mitek 2000(tm) Design Program

The MiTek 2000(tm) roof truss design program has been developed by Gang-Nail Group Ltd for the design of Gang-Nail timber roof trusses in New Zealand. The truss designs computed by this program are prepared using sound and widely accepted engineering principles, and in accordance with NZS 4203, NZS 3603 and NZS 3604 as verification methods and acceptable solutions of the approved documents issued by the Building Industry Authority to satisfy the requirements of Clause B1:Structure of the Building Regulations 1992. This computer design for the proposed building complies with the relevant provisions of the NZ Building Code. This is subject to all proprietary products meeting their performance specification requirements, the provision of adequate bracing, fixings and the correct input of design data carried out by suitably trained personnel.

Summary of MiTek 2000(tm) Design Data and Output

The MiTek 2000(tm) computer design output for this job titled and located at the site identified on the top of this page is based on the following parameters entered into the program. The owner must ensure that the following job details below are current and relevant to the project before fabrication and erection of the Gang-Nail trusses.

Job Details

Roof Pitch:	30.00 deg	Timber Inventory:	RP_No.1.Fr.x50	Building Wind Zone:	Medium
Roof Material:	Metal Tiles	Ceiling Material:	Standard	Design Wind Speed:	37.0 m/s
TC Dead Load:	0.210 kPa	BC Dead Load:	0.200 kPa	Pressure Coefficient:	Cpe = -0.9
TC Restraints:	400 mm centres	BC Restraints:	400 mm centres		Cpi = 0.3
Roof Live Load:	Lu = 0.250 kPa	Truss Spacing:	900 mm		
	Lc = 1.0 kN	Standard Overhang:	200 mm		

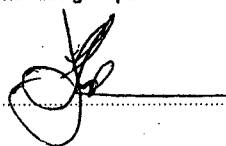
These trusses must be fabricated and erected in accordance with the Gang-Nail manual. Proper erection bracing must be installed to hold the components true and plumb and in a safe condition until permanent bracing is fixed. All permanent bracing and fixing must be installed before any loads are applied. The specifications for timber shall be as shown on the output. The timber shall be standard gauged and treated to the requirements of NZMP 3640.

Truss List

Legend: *: detail only, ? : input only, Fx: failed design, Unmarked trusses: designed successfully

Truss	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Span (mm)	Pitch (deg)	Spacing (mm)
CJ03	2307	30.00	900	CT04	4210	30.00	639	J04	1529	30.00	900
CJ06	3220	30.00	900	CT05	3220	30.00	795	J04A	1529	30.00	900
CJ06A	3220	30.00	900	ET01	2454	30.00	639	J05	2217	30.00	900
CJ06B	3220	30.00	900	J01	3117	30.00	900	J07	2442	30.00	900
CJ06C	3220	30.00	900	J01A	3117	30.00	900	J09	1542	30.00	900
CJ06D	3220	30.00	900	J01B	3117	30.00	900	T01	8505	30.00	900
CJ08	2320	30.00	900	J01C	3117	30.00	900	TG01	8505	30.00	900
CJ10	3220	30.00	900	J01D	3117	30.00	900	TG02	8505	30.00	900
CT03	4210	30.00	639	J02	2429	30.00	900	TR01	8505	30.00	900
CT03A	4210	30.00	639	J02A	2429	30.00	900	TR02	8505	30.00	900

The computer design input has been carried out by:

Signed: 

Date: 31/8/98

Name of Computer Operator:

John Sullivan

Qualifications and Title:

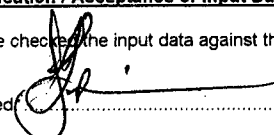
PRECUT MANAGER

Company:

Counties Timber and Hardware Ltd

Verification / Acceptance of Input Data:

I have checked the input data against the construction drawings and specifications and verify that they are correct and suitable for this job.

Signed: 

Date: 16/12/98

Name:

Company: COUNTIES TIMBER & HARDWARE

**PRODUCER STATEMENT**

Installation of Solar Water Heating System

Council: AUCKLAND CITY

Building Consent No:

Producer Statement issued by: SOLARMASTER LTD ONEHUNGAAddress of Installer: 35 ANGLE ST ONEHUNGAContact Ph Installer: 634 0358Product and Model No: 280L "COMBO" HWC S/N 6419
C/W "SOLAR MAX" PUMPED SOLAR SYSTEM S/N 498Supplier of Product: SOLARMASTER LTDScope of Work: INSTALL TWO OFF 2.4x1.2 COLLECTOR PANELS
TO 280L HWC

Registered Plumber (if applicable) Reg. No:

Registered Electrician (if applicable) Reg. No:

Address of installation: 17 ELSI DRIVE WAIKUKUOwner of property - Installation: BEVAN ENGLAND

Property Lot No: DP

The system has been installed such that the requirements of the NZ Building Code have been met. Plumbing work has been installed to meet the requirements of AS/NZS 3500.4

Registered Plumber (Signature) Date:

The solar water heating system described above has been installed on a dwelling on the named property according to the Code of Practice for Manufacture and Installation of Solar Water Heating Systems in New Zealand and the requirements of the building consent.

The system has been located as shown on the drawings provided with the building consent application. A check has been made by a suitably qualified person to ensure that the system is located over suitably sound load bearing walls and strengthening of roof framing has been undertaken according to the guidelines provided by the system supplier and meets the requirements of Approved Document B1 of the NZ Building Code.

The installation has been undertaken in terms of manuals and instructions from the Product supplier who is a Solar Industries Association Accredited Supplier.

I certify that I have been appropriately trained in the installation of the named product by the Product supplier and operated under that supplier's accreditation. As an independent solar water heating system installer I am covered by a professional indemnity insurance Policy to a current value of \$ 1,000,000.

Installer (Signature) [Signature] Date: 1/02/2012