

Building Consent Approval Process

Owners Name T Greig

Location Address 15 Nairnui Street

Valuation Number 1349009800

		Rec' Date	Action Date	Signed	Target
A Owner or owners agent submits plans & specs		27/2/06	27/2/06	B. Q	
Application logged onto NCS system	Start Clock	✓	✓	B. Q	
Building consent number	060066				
Due Date	24/3/06				
Print letter and stop clock					4 hrs
B Records staff find/make up building file		✓	✓	B. Q	4 hrs
C Planning Check					

	Resource Consent	Processing Times					
<u>Permitted</u> <i>AS</i>			Date	Time	Date	Time	Total
	Vicki		27/2/06	10mins			
	Alina		27/2	10 mins			
	Graham		19/4	15 min			
	WDC		7-3-06	20min			
	Asset Mge						
OK TO ISSUE ^{Gu}						Total	
						@\$	
						Cost	

		Rec' Date	Action Date	Signed	Target
D To Wanganui					
E Check Value Re: BRANZ & DBH Levy					
Check Building					
Check Plumbing					
Check Structural					
Check Fire Regs					
Check Drainage from file					
Other					
Print Letter and Phone to Stop Clock	Date 20/3/06				Return to RDC
Print Conditions and Inspections					Return to RDC
F Quick check of Inspections by RDC Building Officer					4 hrs
G Issue Consent					4 hrs
H Building Officer to Sign and Forward to Applicant					

COMMENTS IF ANY TO BE ATTACHED UNDER SPERATE REPORT

JOB: T Greig - BC 060066

Cl- 27 Moana Street ZONE: Rural Settlement

VALUE: \$ 40,000 STATUS: FR CONFIDENTIAL: _____

PIM Conditions

- 26 All services to be connected to local authority requirements.
- 27 All services as per local authority requirements.
- 28 All services to existing systems.
- 29 A "Section C72" Certificate has been registered with Land Information New Zealand (property subject to inundation)
- 30 New septic tank as per the Manawatu Wanganui Regional Council General Authorisation for Septic Tank Discharge
- 31 Section 75(2) Building Act 2004 relates to building work over 2 lots (boundary) etc

PIM Conditions

Standard Conditions

- 29 24 Hours Notice: When work commences.
- 32 24 Hours Notice: Prior to pouring foundations.
- 30 24 Hours Notice: Prior to pouring concrete floors.
- 33 24 Hours Notice: Prior to lining buildings.
- 31 24 Hours Notice : Prior to covering of drains.
- 34 24 Hours Notice: When works completed.
- 01 Stormwater as per NZBC to approved outfall.
- 04 All works as per NZS 3604:1999.
- 05 Contractors Names and addresses required before works commence.
- 06 All works as per structural engineers details.
- 07 All works as per the New Zealand Building Code.
- 08 All works as per the Building Act 2004.
- 10 All works strictly in accordance with plans and specifications.
- 12 A letter accepting responsibility for all damage to footpath and berm area required.
- 14 Foundation to have adequate bearing on original ground.
- 15 Effluent discharge as per Horizons requirements.
- 17 Floor height above ground to be as per Horizons recommendations.
- 19 Adequate access for people with disabilities as per New Zealand Building Code is required.
- 20 Effluent discharge consent from Horizon is required.
- 21 Stormwater water and sewer services are available to the property for connection, please contact Mr James Torrie Asset Engineer at the Council Office telephone 06-327-0099..
- 23 No works to the berm or footpath area without prior arrangement from the Rangitikei District Council Asset Manager Mr Barry Strichen or Permission from GHD Consultants, please contact Mr Roger Coles on telephone 06-327-4360.

- 25 Make and model of woodburner required.
- 35 Heater to be attached to fireplace as per the Building Act 2004 and NZS 7421:1990.
- 36 Heater to be installed strictly to Manufacturer's installation instructions.
- 37 Heater and hearth slab to be attached to floor as per the Building Act 2004 and NZS 7421:1990.
- 18 No works to commence until resource consent is issued. Section 35 Certificate attached.
- 03 Note: Consent issued as per the attached inspections.
- 40 All services to be disconnected and sealed to RDC requirements.
- 41 All debris to be removed and site left in clean and tidy condition.
- 44 As per attached it is now a requirement to fit smoke alarms in all dwellings when internal alteration consents are issued, this includes fires.

Non Standard Conditions

Inspections Sheet

- | | |
|---|--|
| <input checked="" type="checkbox"/> 01 SITING | <input checked="" type="checkbox"/> 21 PRELINE |
| <input checked="" type="checkbox"/> 02 PILE | <input checked="" type="checkbox"/> 29 POSTLINE |
| <input type="checkbox"/> 03 REINFORCING | <input type="checkbox"/> 18 EXTERNAL SERVICES |
| <input type="checkbox"/> 05 CONCRETE SLAB PRE POUR | <input type="checkbox"/> 30 CAVITY |
| <input type="checkbox"/> 28 FOUNDATION | <input checked="" type="checkbox"/> 19 EXTERNAL CLADDING |
| <input type="checkbox"/> 06 FLOOR HEIGHT | <input checked="" type="checkbox"/> 23 DRAINAGE |
| <input type="checkbox"/> 08 P & D SUB FLOOR | <input type="checkbox"/> 27 BLOCK FILL |
| <input checked="" type="checkbox"/> 04 SUB FLOOR FRAMING | <input type="checkbox"/> 25 TANK INSTALLATION |
| <input checked="" type="checkbox"/> 09 WALL & ROOF FRAMING | <input type="checkbox"/> 24 TANK REMOVAL |
| <input checked="" type="checkbox"/> 10 STRUCTURAL CONNECTIONS | <input type="checkbox"/> 26 FIRE LININGS |
| <input type="checkbox"/> 17 INTERNAL SERVICES | <input checked="" type="checkbox"/> 22 LOG FIRE |
| <input type="checkbox"/> 13 PRODUCER STATEMENT | <input checked="" type="checkbox"/> 20 FINAL INSPECTION |

PIM Notes (when printing building consent)

- Information identifying relevant special features of land.
- Information about the land of building concerned notified to the Council by any statutory organisation having the power to classify land or buildings.
- Details of relevant utility systems.
- Details of authorisations which have been granted.
- Details of authorisations which must be obtained before consent issued.
- Details of authorisations which have been refused.

OKAY TO ISSUE

AUTHORISED OFFICER..... *G.C. Wait* **DATE**..... *19.1.4.06*



CARTERS

MANUFACTURING

95 Wilson St
Wanganui
Ph (06) 348 1750

JOB No WN60519

Client: Versatile Buildings
Job Name: Greig Additions
Address: 15 Wainui St
Turakina Beach

Pitch: 7.4
Roof Material: Longrun iron
Soffit Overhang: 600 mm
Wind Area: High
Snow Load: 0 kPa

Trusses And Rafters At 900 Centres
Unless Stated Otherwise.

This layout is to be read in conjunction
with the Architectural plans.

DRAWN BY GEOFF

DATE 24/5/06

PAGE 1 of 2

FIXINGS

A=47x90 JH
B=47x120 JH
D=47x190 JH



Joist Hanger

C=CT200
M=Multigrips
N=Nail On Plate
**P=16kn truss
to top plate
fixing**

CT 200



Multi Grips



Nail on plate

All other truss fixings
must have two wire dogs
Unless indicated as above



CPC

NOTE

Please contact your local CARTERS
Manufacturing Branch 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 CARTERS Manufacturing.



See Page 2 for Dimensions,
Lintel Statement and
Roof Truss Bracing

BUILDING CONSENT – TRACKING

1349009800

Address	15 Wainui 8					
Consent #	D60066					
Owner	T Greig					
Date Received	2.3.06					
Date Returned	8.3.06					
Department	Date	Time	Date	Time	Approved	Sub Total
Administration	2.3.06	10				10
Building	8.3.06	20				20
Plumbing						
Planning						
Other						
Total Time Taken						30 minutes

Office Use Only:

Charge \$90 per hour plus GST

\$..... 45.00

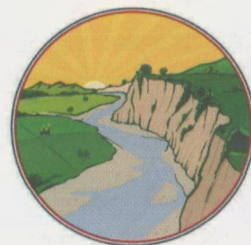
Rangitikei District Council
46 High Street
Private Bag 1102, Marton

Telephone (06) 327 0099
Facsimile (06) 327 6970

info@rangitikei.govt.nz
www.rangitikei.govt.nz

Rangitikei

UNSPOILT...



AMENDMENT APPLICATION FORM

OWNER	
Name: J. Coney	Original Consent No: 060066
Address: Turahua Beach	Scope of Work of Amendment Confirm Joist Size 150x50 Delete N/A Data
CONTACT	
Name: Versatile Buildings Wanganui	Builder: Versatile
Address: P.O. Box 7230 Wanganui	Plumber/Drainlayer:
Phone: 3433466	Applicant's Signature:
Fax:	
FOR OFFICE USE ONLY	PROJECT LOCATION
Received: 3 April 06	Street Address: Turahua Beach
Application Fee: 70.00	
Receipt No: 251595	
Application No:	

Amendments are charged on a time cost basis.

The Conditions of Building Consent No: 060066 are hereby amended under Consent No: _____ to alter the construction of the building as described in the documents submitted.

Any conditions attached by Council Officer to this amended consent form part of this approval.

Approved for issue:

SIGNATURE:

RANGITIKEI DISTRICT COUNCIL

TAX INVOICE/RECEIPT

GST No. 51-668-596

HIGH STREET, MARTON

Received with thanks by 1/01
Rangitikei District Council

3-04-06 12:27 Receipt no.251595

DR BC060066
Buildings Versatile 70.00-
Versatile Buildings::27 Moana Street:Wa
CO ASB WANGANUI
Versatile Buildings 70.00

BUILDING CONSENT – TRACKING

49/09800

Address	0555 811		
Consent #	15 Wainui 31		
Owner	Craig		
Date Received	18.11.05		
Date Returned	27.11.05		

Department	Date	Time	Date	Time	Approved	Sub Total
Administration	18.11.05	10				10
Building	23.11.05	15				15
Plumbing						
Planning						
Other						
Total Time Taken						25 minutes

Office Use Only:

Charge \$90 per hour plus GST

\$..... 37.80



VERSATILE
BUILDINGS

Versatile Buildings Wanganui 2003 Ltd
27 Moana Street
PO Box 7230
Wanganui, New Zealand
Phone (06) 343 3466
Fax (06) 343 3489
wanganui@versatile.co.nz

With Compliments

As per phone conversation, here is the balance
for T. Greig, 15 Wainui St, R011, Turakina Beach
house extension application.

RECEIVED

[Handwritten signature]

27 FEB 2006

To:

[Handwritten signature]

File:

GARAGES HOMES **D** SLEEPOUTS FARM BUILDINGS GARDEN SHEDS CARPORTS

Rangitikei District Council
Rates Account Enquiry - 2005/06

[Prev](#)[Transactions](#) [Debt Management](#)[Next](#)

GREIG TREVOR ALLAN
 GREIG JULIE ELIZABETH
 15 WAINUI STREET
 R D 11
 WANGANUI

Valuation No: 1349009800**Post Code:** 5001**Old Owner:** CHERITON EC**Sale Date:** 20/08/04**Sale Price:** \$ 58,000

PROPERTY DESCRIPTION (Other Property Links)

Location: (GIS) 15 WAINUI STREET, KOITIATA**Legal Desc:** LOT 39 DP 26255 BLK I KOITIATA SD**Cert of Title:** 37B/58**Ward:** 3**Region:** 8**Zone:** 9C**Use:** 97**Category:** RD6C**TORAS:** 111000**Change Dates:** RatePayer:27/05/05, Maint:27/05/05**Change Reason:** Correct address**Chg Source:** TLA

VALUATIONS

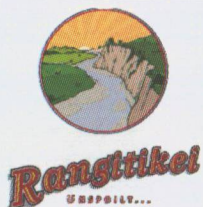
CURRENT**NEW****Area (Ha):** 0.0822**Land Value:** \$ 14,000**Improvements:** \$ 26,000

(BACH OBS OI)

Capital Value: \$ 40,000**Valuation Date:** 1/09/03**Land Value:** \$ 56,000**Improvements:** \$ 45,000**Capital Value:** \$ 101,000**Valuation Date:** 1/09/05

RATES for Current Year - 2005/06 (Next Year - 2006/07)

Type	Description (Basis)	Factor	Estimated Amt
003:	Uniform Annual General - - (SU)	1.00	\$ 235.00
004:	General Rate - - (C)	40000.00	\$ 6.30
016:	Community Services - Rural (C)	40000.00	\$ 4.10
017:	Community Services - District (C)	40000.00	\$ 15.50
021:	Roading - Southern (C)	40000.00	\$ 76.10
025:	Solid Waste - District (SU)	1.00	\$ 79.00
Total Rates Levied			\$ 416.00
(GST on Rates Levied)			\$ 46.22
Rates Last Year			\$ 415.45



Rangitikei District Council provides this information as a representation of the reticulation services where their location is known. All reasonable efforts are taken to ensure the accuracy of this information, but confirmation on site is recommended before initiating any work
 Date Printed : 27/02/2006 15:02



2006 Rangitikei District Council
 Digital Data derived from the
 Core Records System (CRS)
 Land Information New Zealand (LINZ)
 CROWN COPYRIGHT RESERVED
 Orthophotography flown 2004
 Terralink International Ltd and
 Rangitikei District Council
 Projection NZTM

Rangitikei District Council
Private Bag 1102
MARTON

Attention: Graham Wait/Vicki Hodds

Dear Sir/Madam

The following building consent has been received and processed as requested.

BC 060066 Received: 2.3.06 Processing Completed

Approved: Yes/No Further Information Required: Yes/No

Building:

Plumbing and Drainage:

Structural:

Approval Conditions:

PIM Comments:

Office Use Only

Processing Costs: Building 20 m² P & D

Structural

Administration Costs:

Tolls and ancillary costs:

Total Fee (Incl GST)

Att. Croham



March 20, 2006

Rangitikei District Council

re confirmation of drawing details: Greig Turekina Beach

- #1 All floor joist are to be 150 x 50 in size.
- #2 Any detail of a concrete floor does not apply to this building consent and should be crossed out

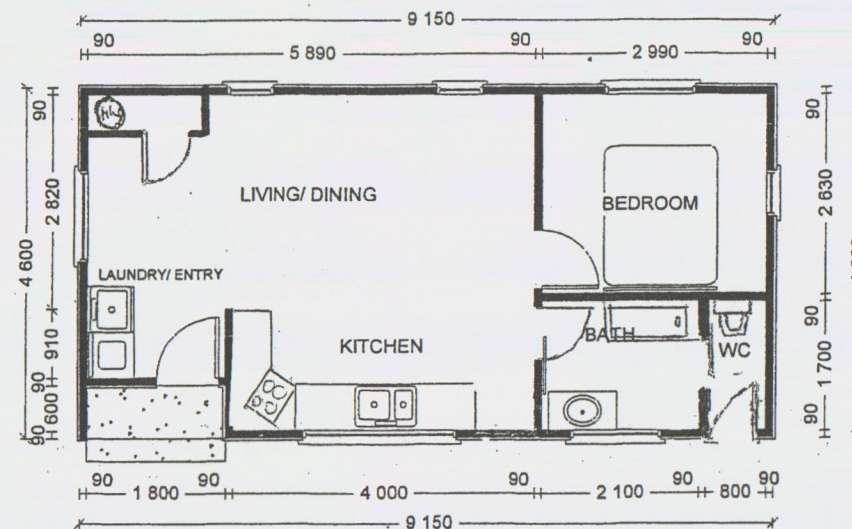
Sincerely,

Luke Warner
Sale Consultant



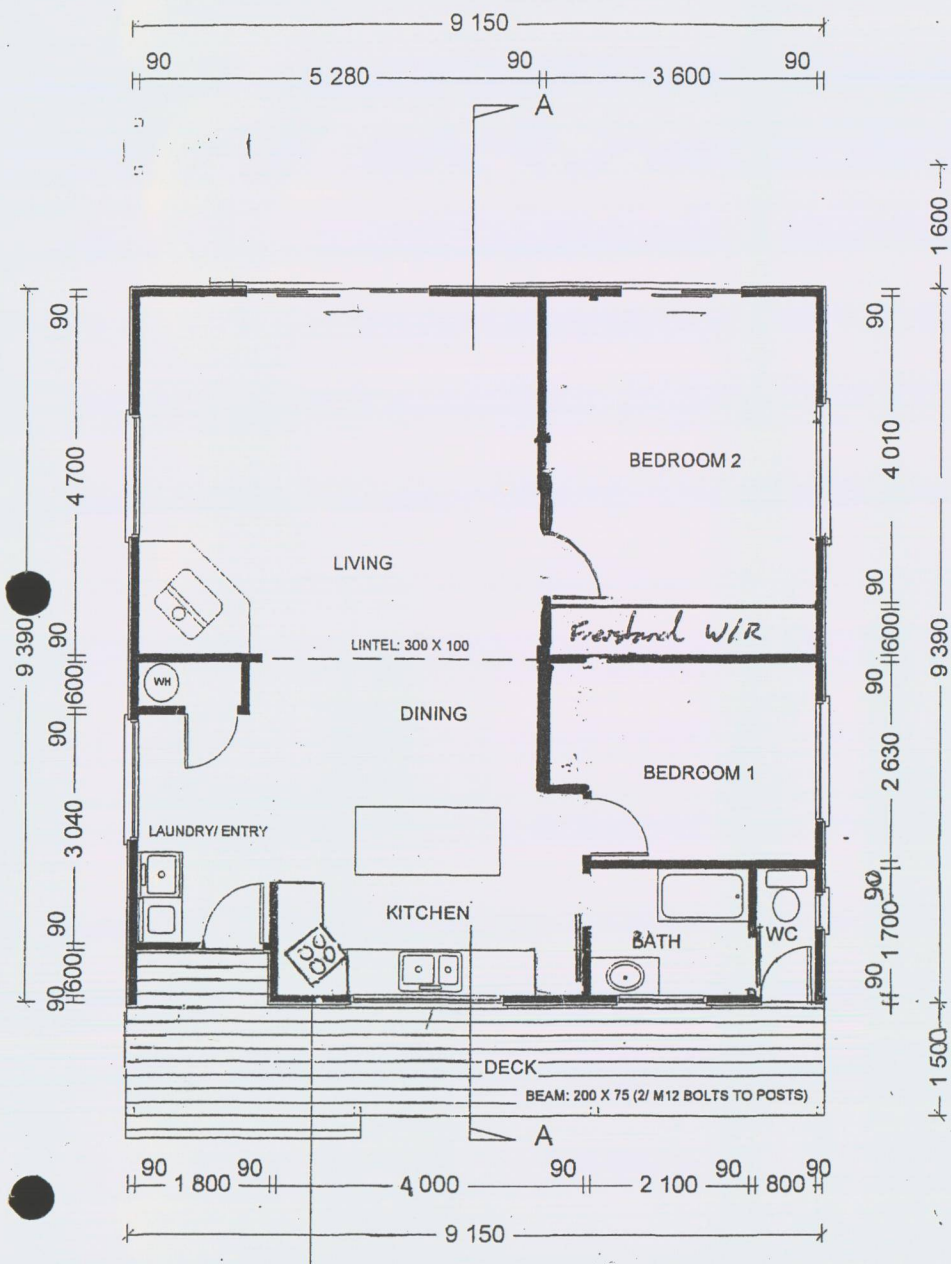
ELEVATIONS

FLOOR PLAN

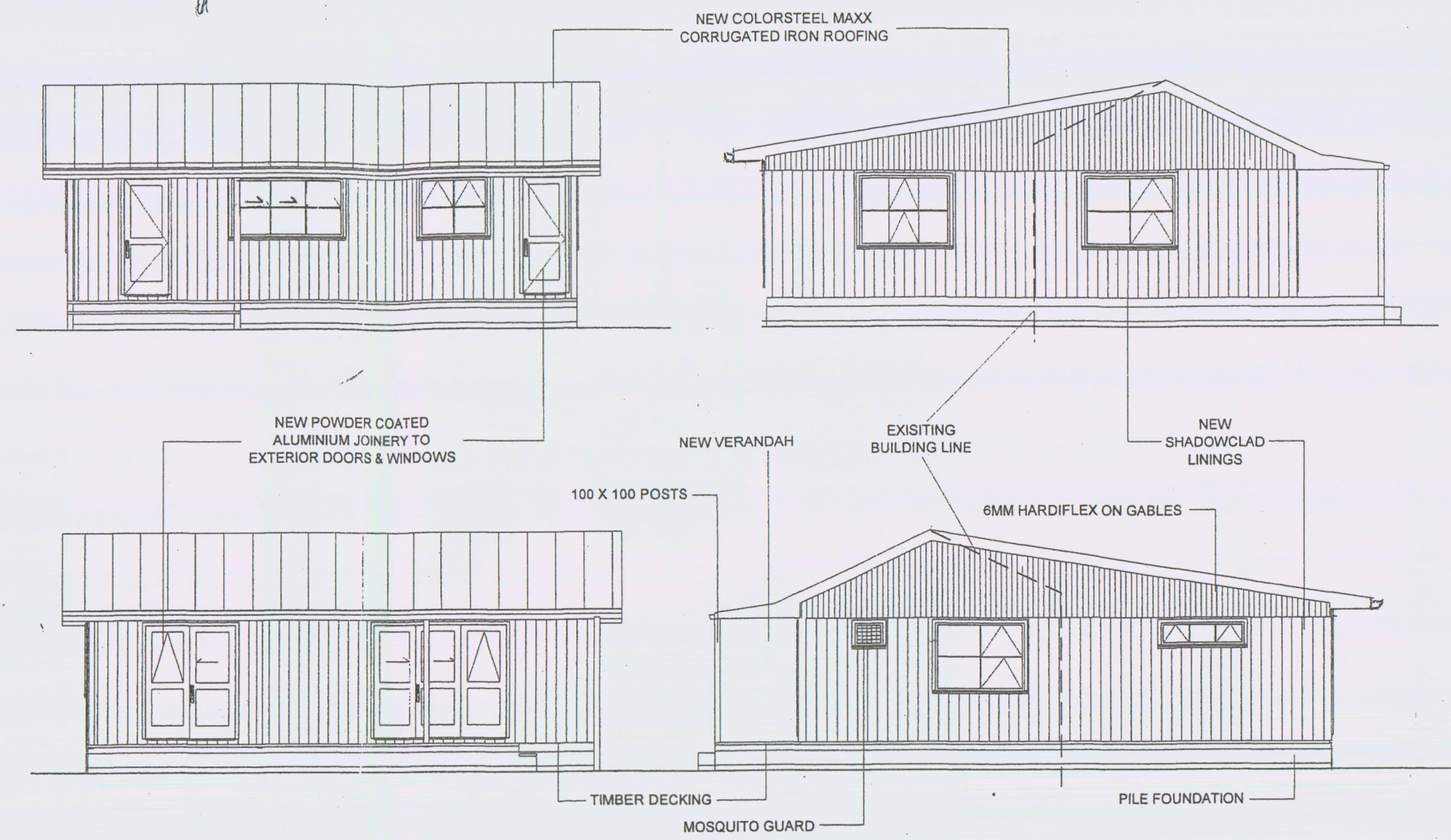


EXISTING HOUSE
SCALE 1:100

NOTE: REMOVE EXISTING ROOFING,
CLADDING AND WINDOWS



FLOOR PLAN



ELEVATIONS

PROPOSED HOUSE
SCALE 1:100

GREIG HOUSE ADDITION
LOT 39 DP 26255; 15 WAINUI ST. TURAKINA BEACH

VERSATILE BUILDINGS
WANGANUI 2003 LTD.
PHONE: (06) 343-3488
FAX: (06) 343-3489

DATE: 14 JUNE 2005
REVISIONS

COLORSTEEL MAXX LONGRUN CORRUGATED IRON ROOF;
BUILDING PAPER; 100 X 50 PURLINS ON FLAT @ 1000 CRS

PROPOSED PREFABRICATED
TRUSSES @ 900 CRS

9° 25°

EXISTING FRAMED
ROOF

8°

13MM ULTRALINE GIB CEILING ON RONDO
BATTENS @ 600 CRS; R1.8 INSULATION

300 X 100 LINTEL

PVC GUTTER ON PP FASCIA BOARD
200 X 50 BEAM
AS PER DETAIL

10MM GIB LINING; 90 X 45 H1.2 FRAMING; R1.8
INSULATION BATTES; SHADOWCLAD TO EXTERIOR

2450

100 X 4 CRAFTERS
4.5MM HARDIFLEX SOFFIT

20MM HD PARTICLEBOARD; ALUMINIUM FOIL SHEET;
160 X 50 FLOOR JOIST @ 450 CRS; 125 X 75 BEARERS
130

FFL 0.000

POWDER-COATED ALUMINIUM JOINERY
TO EXTERIOR DOORS & WINDOWS
SHADOWCLAD TO EXTERIOR ON
EXISTING FRAMING. NEW 1.8 BATTES

FL -50

100 X 100 H3 POST @ 3050 CRS

GL -550

200 X 50 H3.2
STRINGER

125 X 125 SQ TIMBER PILES
IN CONCRETE FOOTINGS

125 X 50 H3.2
STRINGER

200 X 50 H3.2
STRINGER

90 X 35 DECKING; 150 X 50 FLOOR
JOIST; 125 X 75 BEARERS TO DECK

NOTE: USE STAINLESS STEEL PLATES AND
FIXINGS TO SUBFLOOR AND CLADDING

CROSS SECTION A-A
SCALE 1:50

GREIG HOUSE ADDITION
LOT 39 DP 26255; 15 WAINUI ST. TURAKINA BEACH

VERSATILE BUILDINGS
WANGANUI 2003 LTD.
PHONE: (06) 343-3466
FAX: (06) 343-3489

DATE: 14 JUNE 2005
REVISIONS

3

P 2515

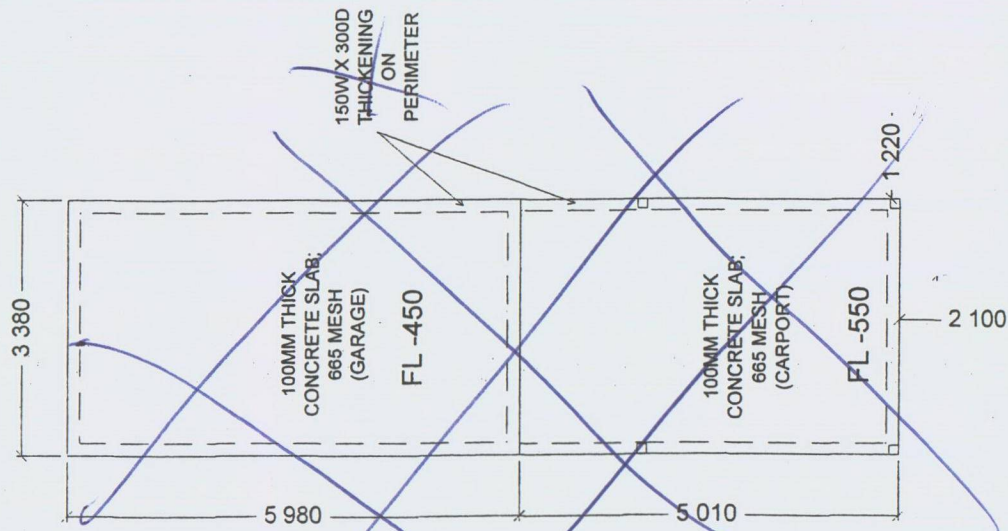
GREIG HOUSE ADDITION
 LOT 39 DP 26255; 15 WAINUI ST. TURAKINA BEACH

VERSATILE BUILDINGS
 WANGANUI 2003 LTD.
 PHONE: (06) 343-3466
 FAX: (06) 343-3489

DATE: 14 JUNE 2005
 REVISIONS

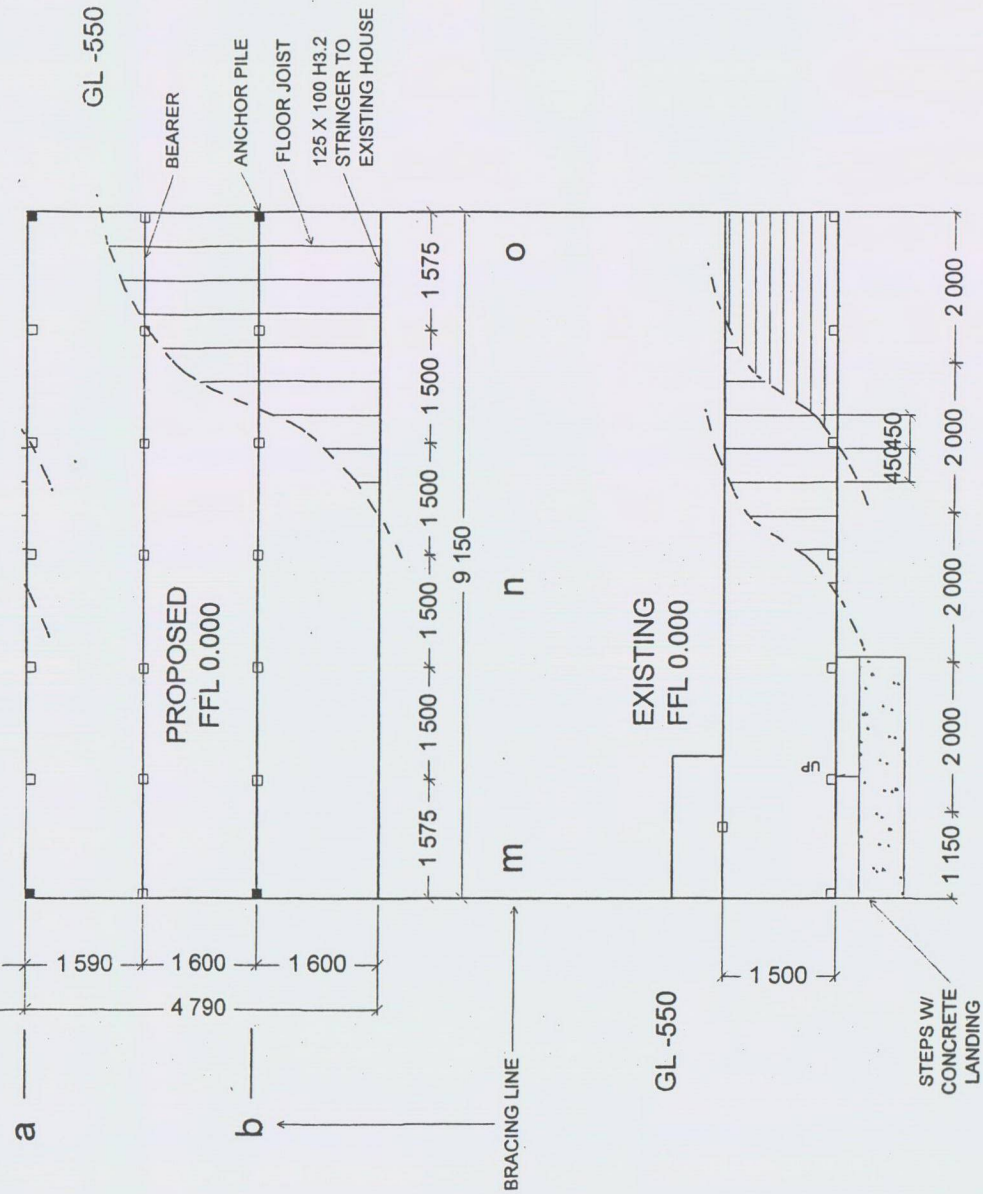
4

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GL -550

HOUSE:	FLOOR JOIST: 130 100 X 50 H3.2 @450 CRS
	BEARER: 125 X 75 H3.2
	PILE: 125 X 125 H5 @1500 CRS
	FOOTING: 300SQ X 350D (CONCRETE) - ORDINAF
	350SQ X 900D (CONCRETE) - ANCHOR
DECK:	FLOOR JOIST: 130 125 X 50 H3.2 @450 CRS
	BEARER: 125 X 75 H3.2
	PILE: 125 X 125 H5 @1600 CRS
	FOOTING: 200SQ X 350D (CONCRETE)
DECK POST:	SIZE: 100 X 100 H3
CARPORT POST:	SIZE: 100 X 100 H3.2 (BOWMAC-B135 BRACKET TO SLAB)



PROPOSED FOUNDATION PLAN
 SCALE 1:100

EXISTING SHED 6.0 X 3.7M

8800

BOUNDARY

NEW ADDITION

NEW ADDITION

EXISTING RWT

DOWNPIPES:
GARAGE: 63MM DIA PVC
HOUSE: 74MM DIA PVC

EXISTING SHED 6.0 X 3.7M

GL -550

SS DRAINAGE: 100DIA UPVC 1:100 FALL

FFL 0.000

LIVING

FFL 0.000

FL -50

GL -550

17500

BOUNDARY

PROPOSED SITE PLAN & DRAINAGE
SCALE 1:100

DP

DP

6000

7100

340

3400

GARAGE

FL -450

NEW CARPORT

FL -550

3600

DP

BEDROOM 2

BEDROOM 1

CONNECT TO EXISTING GT

DP

GREIG HOUSE ADDITION
LOT 39 DP 26255; 15 WAINUI ST. TURAKINA BEACH

VERSATILE BUILDINGS
WANGANUI 2003 LTD.
PHONE: (06) 343-3466
FAX: (06) 343-3469

DATE: 14 JUNE 2005
REVISIONS

6
P 2515

Gib® Wall Bracing Calculation Sheet B single storey V56A

Along Wall or Bracing Line	Bracing Elements provided					Wind	Earthq.		
	1	2	3	4	5	6	7	8W	9EQ
Line Label	Minimum BUs Req/Ach	Bracing Element No.	Supplier	Bracing Type	Element Length L (m)	Element Height H (m)	BUs Achieved	BUs Achieved	
A	93	1	Gib®	BR5	1.5	2.4	173	128	
		2	Plywood	SP2	1.5	2.4	128	128	
		3							
line totals		4							
W	300	5							
EQ	255	6							
B	70	1	Gib®	Gib2b	2.4	2.4	192	168	
		2							
		3							
line totals		4							
W	192	5							
EQ	168	6							
C	93	1	Gib®	BR5	1.4	2.4	161	119	
		2	Plywood	SP2	0.9	2.4	77	77	
		3							
line totals		4							
W	238	5							
EQ	196	6							
D	enter	1							
		2							
		3							
line totals		4							
W		5							
EQ		6							
E	enter	1							
		2							
		3							
line totals		4							
W		5							
EQ		6							

						Wind	Earthq.
Totals Achieved						730	619
						OK	OK
Totals Required (from Sheet A)						586	567

Gib® Wall Bracing Calculation Sheet A single storey V56A

Job Details

Name: Greig House
 Street and Number: 15 Wainui St
 Lot and DP Number: Lot 39 DP 26255
 City/Town/District: Turakina Beach
 Designer and date: 9-Jun-05
 Company Name:

Building Specification

Location of Storey	single
Floor Loading	2 kPa
Foundation Type	subfloor
Building Height to Apex (m)	5
Roof Height above Eaves (m)	2
Stud Height (m)	2.4
Cladding Weight (top or single)	light
Cladding Weight (lower)	light
Cladding Weight (subfloor)	light
Room in Roof Space	no
Roof Pitch (degrees)	0-25
Roof Weight	light
Building Length (m)	9.39
Building Width (m)	9.15
Gross Building Plan Area (m ²)	84.6

not applicable (single storey building)

Building Location

Wind Zone: High
 Region: R1
 Terrain: Coastal
 Exposure: Exposed
 Topography: Gentle

Earthquake Zone: A
 Enter at least 'moderate' in a Lee Zone

Bracing Units required for Wind

per m	subfloor	walls	100	64 BUs/m
W along			92	54 BUs/m
W across				
Totals	subfloor	walls	915	586 BUs
W along			864	507 BUs
W across				

Bracing Units required for Earthquake

E	subfloor	walls	9.4	6.7 BUs/m ²
per m ²	subfloor	walls	795	567 BUs
Totals	subfloor	walls	795	567 BUs
E along				
E across				

Gib® Bracing Systems (1999)

For details see Gib® Bracing Systems, 1999 and appropriate manufacturer's literature

Supplier	System	Minimum Length (m)	BUs W/m	BUs EQ/m
	none			
Gib®	Gib1a	1.8	55	50
Gib®	Gib1b	2.4	75	50
Gib®	Gib2a	1.8	75	60
Gib®	Gib2b	2.4	80	70
Gib®	Gib3	1.2	65	60
Gib®	Gib10	1.8	65	60
Gib®	Gib11	1.2	65	65
Gib®	UL1	1.2	70	60
Gib®	UL2	1.2	100	85
Gib®	BR1a	1.8	70	60
Gib®	BR1b	2.4	90	75
Gib®	BR2a	1.8	75	60
Gib®	BR2b	2.4	85	60
Gib®	BR3a	1.8	60	45
Gib®	BR3b	2.4	95	65
Gib®	BR4	0.9	100	85
Gib®	BR5	1.2	115	85
Gib®	BR6	1.2	150	110
Gib®	BR7	0.9	145	145
Gib®	BR8	0.9	120	95
Gib®	BR9	0.6	110	95
Plywood	SP2	0.6	85	85
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			
Custom	Custom			

Gib® Wall Bracing Calculation Sheet B single storey V56A

Across	Bracing Elements provided					Wind	Earthq.		
Wall or Bracing Line	1	2	3	4	5	6	7	8W	9EQ
Line Label	Minimum BUs Req/Ach	Bracing Element No.	Supplier	Bracing Type	Element Length L (m)	Element Height H (m)	BUs Achieved	BUs Achieved	BUs Achieved
M	91	1	Gib®	BR5	1.4	2.4	161	119	
		2	Gib®	BR4	1	2.4	100	85	
		3							
<i>line totals</i>		4							
W	261	5							
EQ	204	6							
N	70	1	Gib®	Gib1b	3.6	2.4	270	180	
		2							
		3							
<i>line totals</i>		4							
W	270	5							
EQ	180	6							
O	91	1	Plywood	SP2	0.7	2.4	60	60	
		2	Plywood	SP2	1.5	2.4	128	128	
		3	Plywood	SP2	1	2.4	85	85	
<i>line totals</i>		4							
W	272	5							
EQ	272	6							
P	enter	1							
		2							
		3							
<i>line totals</i>		4							
W		5							
EQ		6							
Q	enter	1							
		2							
		3							
<i>line totals</i>		4							
W		5							
EQ		6							
							Wind	Earthq.	
Totals Achieved							803	656	
							OK	OK	
Totals Required (from Sheet A)							507	567	

Gib® Subfloor Bracing Calculation Sheet B single storey V56A

Across		Bracing Elements provided				Wind	Earthq.	
Bracing Line	1	2	3	4	5	6	8W	9EQ
Line Label	Minimum BUs Req/Ach	Bracing Element No.	Supplier	Bracing Type	Number or Length L (m)	BUs Achieved	BUs Achieved	BUs Achieved
m	line totals	1	NZS3604	anchor pile	2	320	240	
W	320	2						
EQ	240	3						
n	line totals	1	NZS3604	anchor pile	2	320	240	
W	320	2						
EQ	240	3						
o	line totals	1	NZS3604	anchor pile	2	320	240	
W	320	2						
EQ	240	3						
p	line totals	1						
W		2						
EQ		3						
q	line totals	1						
W		2						
EQ		3						
r	line totals	1						
W		2						
EQ		3						
s	line totals	1						
W		2						
EQ		3						
t	line totals	1						
W		2						
EQ		3						
u	line totals	1						
W		2						
EQ		3						
v	line totals	1						
W		2						
EQ		3						

Wind Earthq.

Totals Achieved						960	720
-----------------	--	--	--	--	--	-----	-----

OK OK

Totals Required (from Sheet A)						837	414
--------------------------------	--	--	--	--	--	-----	-----

Gib® Subfloor Bracing Calculation Sheet B single storey V56A

Along		Bracing Elements provided				Wind	Earthq.	
Bracing Line	1	2	3	4	5	6	8W	9EQ
Line Label	Minimum BUs Req/Ach	Bracing Element No.	Supplier	Bracing Type	Number or Length L (m)	BUs Achieved	BUs Achieved	BUs Achieved
a	line totals	1	NZS3604	anchor pile	3	480	360	
W	480	2						
EQ	360	3						
b	line totals	1	NZS3604	anchor pile	3	480	360	
W	480	2						
EQ	360	3						
c	line totals	1						
W		2						
EQ		3						
d	line totals	1						
W		2						
EQ		3						
e	line totals	1						
W		2						
EQ		3						
f	line totals	1						
W		2						
EQ		3						
g	line totals	1						
W		2						
EQ		3						
h	line totals	1						
W		2						
EQ		3						
i	line totals	1						
W		2						
EQ		3						
j	line totals	1						
W		2						
EQ		3						

Wind Earthq.

Totals Achieved						960	720
-----------------	--	--	--	--	--	-----	-----

OK OK

Totals Required (from Sheet A)						480	414
--------------------------------	--	--	--	--	--	-----	-----

FREESTANDING SPEC SHEET

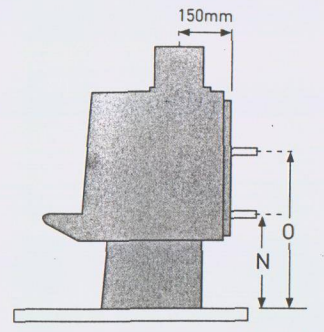
Clearance Reductions

AS/NZS 2918:2001 allows for a reduction in minimum clearances as detailed in tables 3.1 and 3.2 of the standard which your Metro retailer will be able to advise you on. Pioneer has also tested certain model Metros with "side extensions" fitted to the Pioneer double flue mounted shield, to achieve a reduction in clearances, details are:

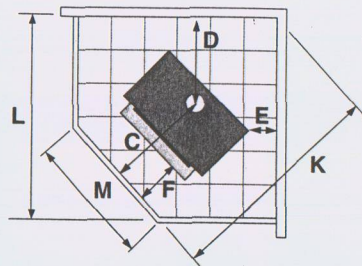
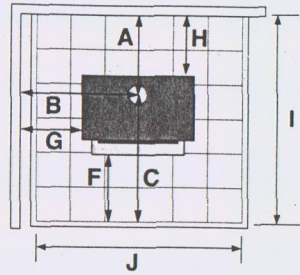
- The LTD Pioneer Ped and LTD Pioneer Trad installed with a "Pioneer double flue mounted shield with side extensions fitted" can have side clearances B and G reduced by 80mm if installed into an alcove which does not project forward on the Metro.
- The ECO Aspire Ped, ECO Xtreme Ped and ECO Aspire Trad installed with a "Pioneer double flue mounted shield with side extensions fitted" reduces minimum corner clearance E from 170mm to 110mm. In this situation use the LTD Metro equivalent for measurements E, D, K & L. (i.e. use LTD Aspire Ped chart for ECO Aspire Ped for E, D, K & L).
- The LTD Wee Rad, LTD Pioneer Ped and LTD Pioneer Trad rear clearance (H) and overall floor protector depth (I) can reduce by 50mm providing a wetback is not fitted and therefore maintenance access is not required.

Model to be used.

Model	WIDTH	DEPTH	HEIGHT
ECO & LTD Wee Rad	607	530	665
ECO & LTD Rad	750	575	745
LTD Mega Rad	750	675	745
ECO & LTD Pioneer Ped	590	530	665
ECO & LTD Xtreme Ped	670	575	715
ECO & LTD Aspire Ped	670	575	715
LTD Mega Ped	670	675	715
ECO Tiny Trad	490	530	665
ECO & LTD Pioneer Trad	590	530	665
ECO & LTD Aspire Trad	670	575	715



Both wetback connections are 140mm left of the flue centre, facing the Metro/wall.



Metro Installation Clearances & Specifications

Minimum clearances shown are in mm, with a Pioneer double flue mounted shield fitted. Metro woodfires are tested to comply with AS/NZS2918:2001 if installed as detailed below.

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
ECO Wee Rad	260	525	580	385	80	200	220	110	840	825	1125	950	425	295	485
ECO Rad (DV)	250	575	625	435	80	200	200	100	875	905	1240	1065	505	338	528
ECO Pioneer Ped	260	595	580	385	85	200	300	110	840	825	1120	950	425	295	485
ECO Xtreme Ped (DV)	230	585	625	495	170	200	250	80	855	905	1325	1120	505	325	515
ECO Aspire Ped (DV)	230	585	625	495	170	200	250	80	855	905	1325	1120	505	325	515
ECO Tiny Trad	210	430	580	290	25	200	185	60	790	650	990	875	250	295	485
ECO Pioneer Trad	260	595	580	385	85	200	300	110	840	825	1120	950	425	295	485
ECO Aspire Trad (DV)	230	585	625	495	170	200	250	80	855	905	1325	1120	505	325	515
LTD Wee Rad	250	555	580	400	80	200	250	100*	830*	825	1145	950	425	295	485
LTD Rad	250	575	625	455	80	200	200	100	875	905	1265	1065	505	353	543
LTD Mega Rad	270	675	725	500	125	200	300	120	995	905	1425	1175	505	353	543
LTD Pioneer Ped	250	595	580	400	85	200	300	100*	830*	825	1145	950	425	295	485
LTD Xtreme Ped	250	575	625	455	110	200	240	100	875	905	1265	1065	505	340	530
LTD Aspire Ped	250	575	625	455	110	200	240	100	875	905	1265	1065	505	340	530
LTD Mega Ped	270	610	725	465	130	200	275	120	995	905	1400	1140	505	340	530
LTD Pioneer Trad	250	595	580	400	85	200	300	100*	830*	825	1145	950	425	295	485
LTD Xtreme Trad	250	575	625	455	110	200	240	100	875	905	1265	1065	505	340	530
LTD Aspire Trad	250	575	625	455	110	200	240	100	875	905	1265	1065	505	340	530

Floor Protectors

Freestanding Metro woodfires do not require an insulating floor protector, as they are tested and comply with the minimum floor protector requirements of AS/NZS 2918:2001. Note:

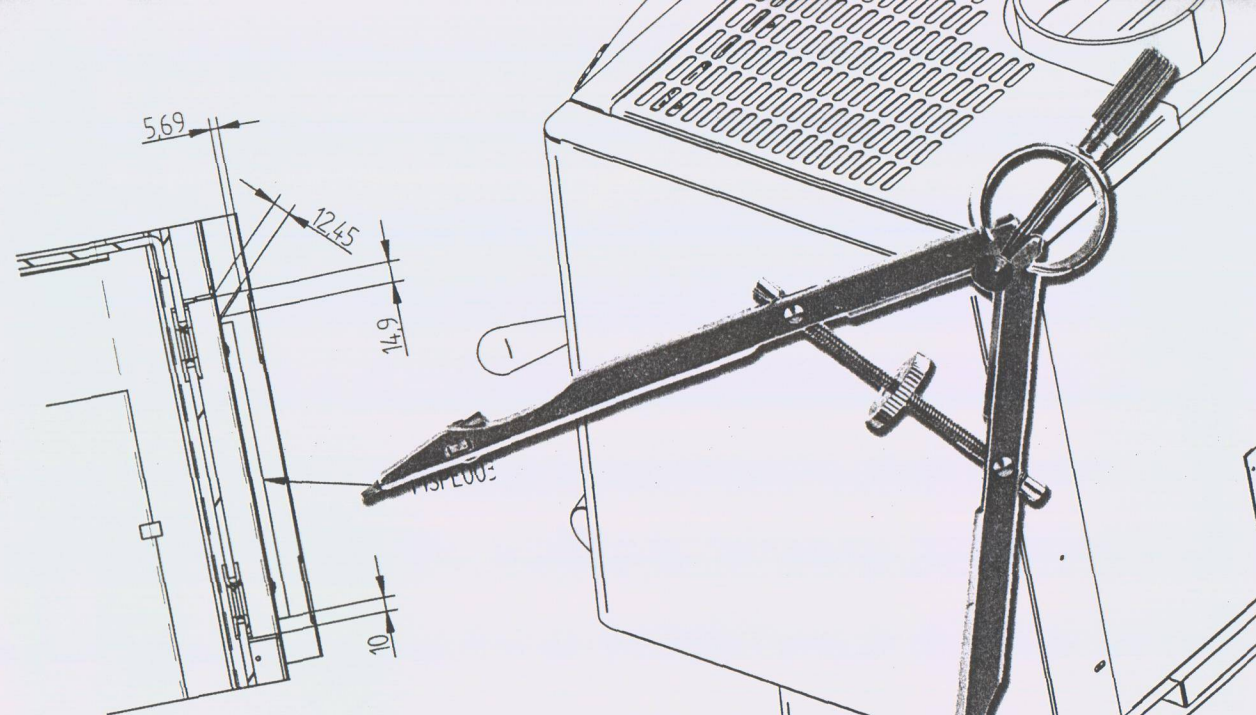
- The minimum floor protector sizes are specified in the clearance chart above.
- A floor protector can include ceramic tiles with grouted joints, a sheet of toughened glass, panel steel or any other non combustible material laid directly onto a wooden floor.
- If being installed onto a concrete or non combustible floor, no floor protector is required.

Flue Systems

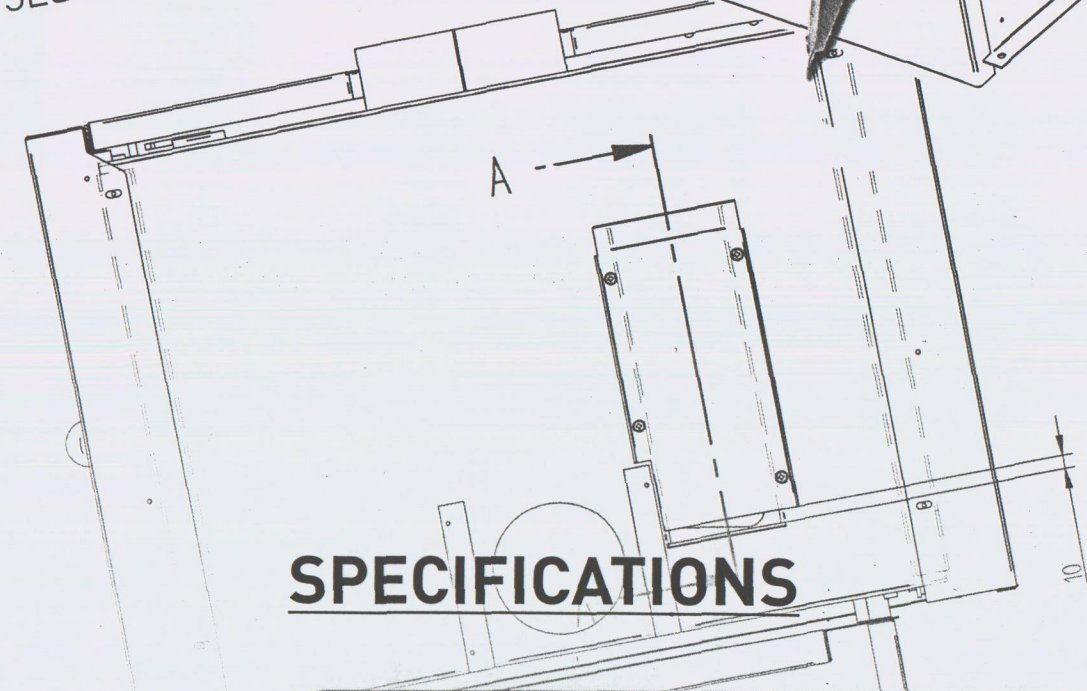
All Metro freestanding woodfires should be installed with the energy efficient Metro ECO Flue System which comes complete with detailed installation instructions. All Metro ECO Flue Systems include Metro's vertical discharge cowl which improves draft and performance.

PIONEER
MANUFACTURING LIMITED
P.O. Box 11, Inglewood
New Zealand
Phone 06-756 6520
Fax 06-756 6540
Email info@metrofires.co.nz
Website www.metrofires.co.nz

2006 Technical Bulletin



SECTION A-A



SPECIFICATIONS

National Environmental Standards	Page A
Direct Vent ECO Metros	Page A
Insert Specifications	Page B
Freestanding Specifications	Page C

METRO

NATIONAL ENVIRONMENTAL STANDARDS

National Environmental Standards came into effect throughout New Zealand on the 1st September 2005, imposing a minimum 65% efficiency and maximum 1.5gm emission requirements on all woodfires installed on properties with a land area of less than two hectares. Properties of two hectares or more are exempt from this National Environmental Standard. In practical terms this effectively creates two distinct woodfire markets, and as a consequence Metro are manufacturing a range of product for each;

ECO METROS – Designed for properties less than two hectares, ECO Metro woodfires surpass the requirements of the National Environmental Standard with all ECO Metro woodfires achieving emission levels of under 1 gram. Utilising technically advanced combustion technology ECO Metros have a more complex firebox design which operate at higher combustion temperatures, but offer shorter burn times than their LTD Metro equivalents.

LTD METROS – Designed for properties two hectares or more, LTD Metros offer a larger model range at very competitive prices, while retaining features like overnight burning and genuine wetbacks while still meeting internationally accepted efficiency and emission standards.

Note – Environment Canterbury have imposed emission requirements for Christchurch of 1gram/65% which is more stringent and takes precedence over the new national standard, while some other councils within New Zealand have imposed or are considering adopting bylaws relating to environmental issues. If you are in doubt talk to your local Metro retailer. All ECO and LTD Metros are detailed below detailing their tested emission and efficiency ratings.

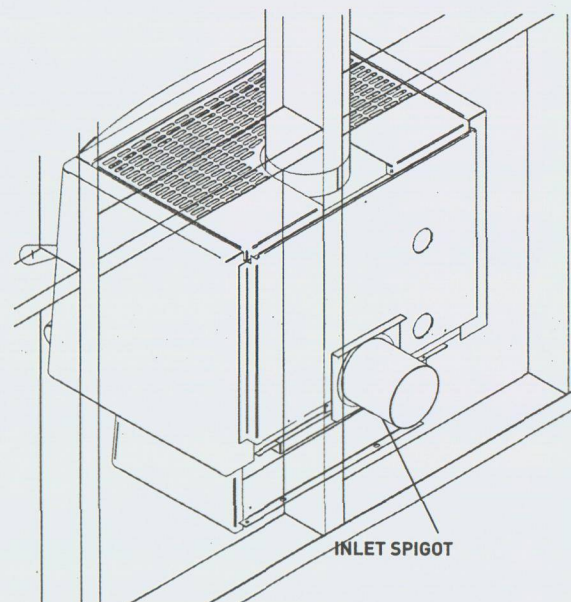
ECO Models	Emissions	Efficiency	LTD Models	Emissions	Efficiency
ECO Wee Rad	0.88gms	71%	LTD Wee Rad	2.3gms	71%
ECO Rad (DV)	0.89gms	68.2%	LTD Rad	3.3gms	63%
			LTD Mega Rad	2.0gms	65.6%
ECO Pioneer Ped	0.88gms	70.4%	LTD Pioneer Ped	2.3gms	71%
ECO Xtreme Ped (DV)	0.86gms	69.4%	LTD Xtreme Ped	3.3gms	63%
ECO Aspire Ped (DV)	0.65gms	70.4%	LTD Aspire Ped	3.3gms	63%
			LTD Mega Ped	2.0gms	65.6%
			LTD Pioneer R/Outlet	2.3gms	71%
ECO Tiny Trad	0.72gms	78%	LTD Pioneer Trad	2.3gms	71%
ECO Pioneer Trad	0.88gms	70.4%	LTD Xtreme Trad	3.3gms	63%
ECO Aspire Trad (DV)	0.65gms	70.4%	LTD Aspire Trad	3.3gms	63%
ECO Insert	0.91gms	65%	LTD Compact Insert	2.3gms	58%
			LTD Hi Output Insert	2.3gms	58%

DIRECT VENT ECO METROS

New to the Metro range for 2006 are the larger ECO Metros which incorporate the very latest Direct Vent (DV) technology. These "DV" Metros offer two significant advantages;

- All air consumed during combustion enters the appliance near the bottom/rear of the firebox, this enables both the primary and secondary air supply to be pre-heated to very high temperatures before entering the firebox. This air supply is ducted over the rear face of the firebox, then through preheating tubes fitted into the firebox's secondary burn chamber, resulting in emission and efficiency levels detailed in the chart above, that were previously unattainable.
- Metros with the "DV" technology also offer the option of connecting the air supply to outside the home. Laboratory testing confirms a typical woodfire producing 10kW's of heat at 67% efficiency consumes 8.4 litres of air per second burning fuel with a 17% moisture content, equating to around one "roomful" of air every hour. By connecting the air supply to outside the home the Metro consumes air drawn in from outside the home rather than using the heated air from within the home, saving fuel and further increasing the overall efficiency of the Metro.

There are three Direct Vent kits available – DV WALL KIT ducts through an outside wall, DV FLOOR KIT ducts through the floor directly behind the Metro and the DV CEILING KIT ducts into the wall cavity and up into the ceiling cavity.



A

INSERT SPEC SHEET

Pre Installation

Metro fireplace inserts are tested to/comply with AS/NZS 2918:2001 incorporating appendix "E" when installed in accordance with the installation and operation manual supplied with every Metro woodfire. Prior to installing your Metro fireplace insert into a masonry chimney, it is important that certain clearances and other requirements are complied with as detailed below :-

Chimney – The masonry chimney must be swept and checked for: -

- Cracks and general overall condition, with repairs carried out if necessary by a suitably qualified person.
- Cavity dimensions to ensure the fireplace insert will fit, it is usually necessary to remove the fire bricks from the lower masonry chimney cavity.
- The base of the masonry chimney cavity on which the Metro fireplace insert will rest must be level, if it is not, it should be levelled using mortar.
- If an ash removal door exists in the base of the chimney it should be sealed shut to prevent air entering the cavity.

Mantle – If a timber or combustible mantleshelf exists above the fireplace insert opening, it should be a minimum distance above the top of the Metro's fascia, minimum distances are:-

- Metro LTD Hi Output fireplace insert = 460mm
- Metro LTD Compact fireplace insert = 400mm
- Metro ECO fireplace insert = 270mm

If less than the above minimum specified, a deflector or heat shield will be required to be fitted under the mantle.

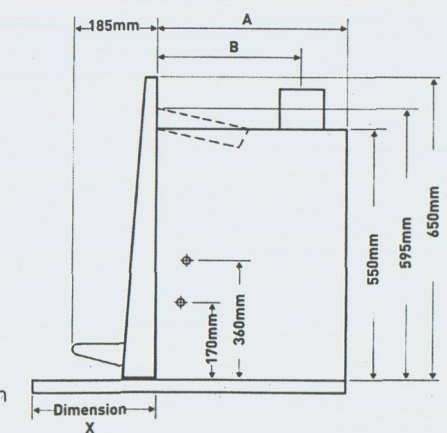
Floor Protector Requirements

Metro fireplace inserts are designed to be installed direct onto a concrete base. An insulated floor protector is required to project in front of the Metro and must extend a minimum of 200mm to each side of the door opening making the minimum floor protector width 825mm. The minimum floor protector projection forward of the Metro is dependant on the height of the fireplace insert above the combustible floor. The following schedule of floor protector projections is measured from behind the Metro fascia being the total floor protector depth as shown in the diagram below. Note, the heights specified above the combustible floor can be achieved by the thickness of the floor protector, raising the fireplace insert or a combination of these two.

Dimension X	0mm	10mm	15mm	20mm	25mm	30mm	35mm	40mm	41mm	45mm	50mm+
LTD Compact	439mm	439mm	425mm	417mm	403mm	392mm	381mm	367mm	N/A	356mm	350mm
LTD Hi Output	455mm	455mm	455mm	436mm	424mm	408mm	396mm	366mm	350mm	350mm	350mm
ECO	Only 300mm minimum projection is required irrespective of the height of the floor protector.										

Fascia Model	Base width	Body Width
LTD & ECO Trend Fascia	810mm	810mm
LTD & ECO Trad Fascia	900mm	810mm

Firebox Model	A	B	Width
LTD Compact	410mm	315mm	560mm
LTD Hi Output	500mm	405mm	560mm
ECO	500mm	405mm	560mm



Flue Systems

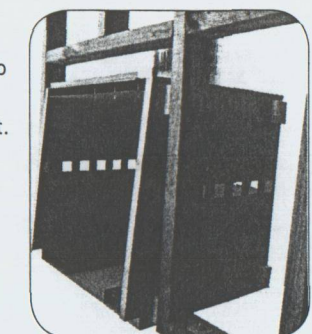
All Metro woodfires should be installed with the Metro ECO Flue System which comes complete with detailed installation instructions. All Metro ECO Flue Systems include Metro's vertical discharge cowl which improves draft and performance.

Vented Zero Clearance Cabinet

The function of the Metro "Vented Zero Clearance Cabinet (VZCC) is to enable the Metro LTD Hi Output and ECO Insert Fireplace to be installed into a timber framed wall. The VZCC therefore replaces the more traditional masonry chimney at a fraction of the cost. Detailed instructions for the VZCC are available from your Metro retailer.

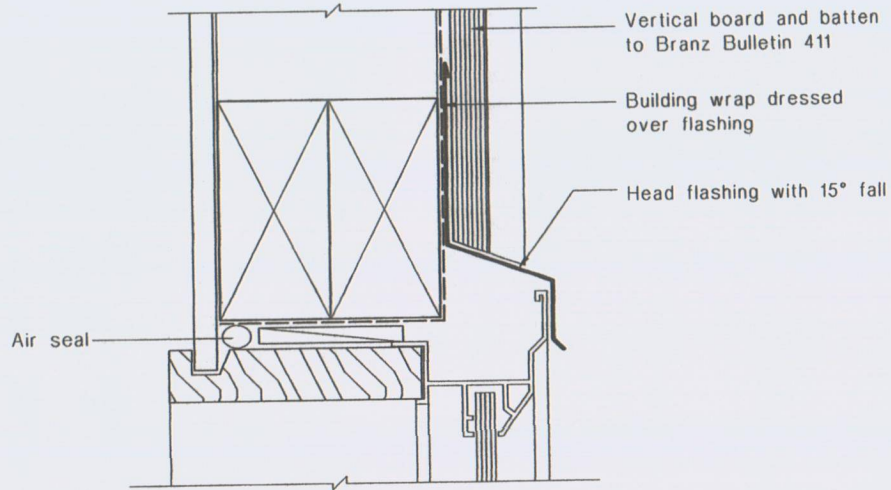
The wall opening cavity size required:

Width of opening	Height of opening	Depth of opening
- 700mm suggested	- 685mm suggested	- 575mm minimum
- 800mm maximum	- 690mm maximum	
- 690mm minimum	- 685mm minimum	

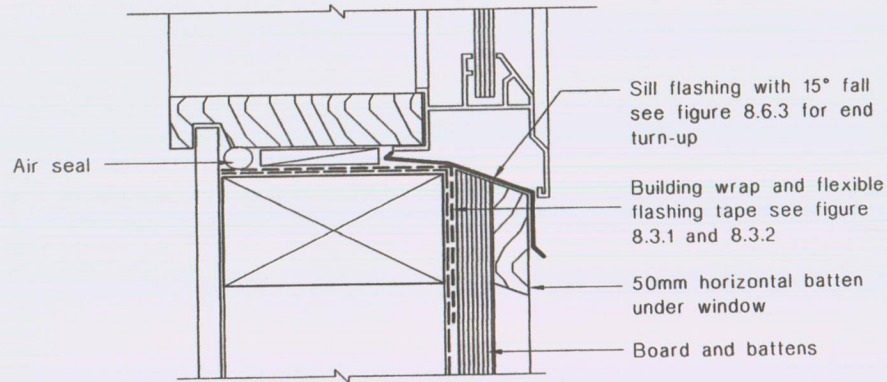


B

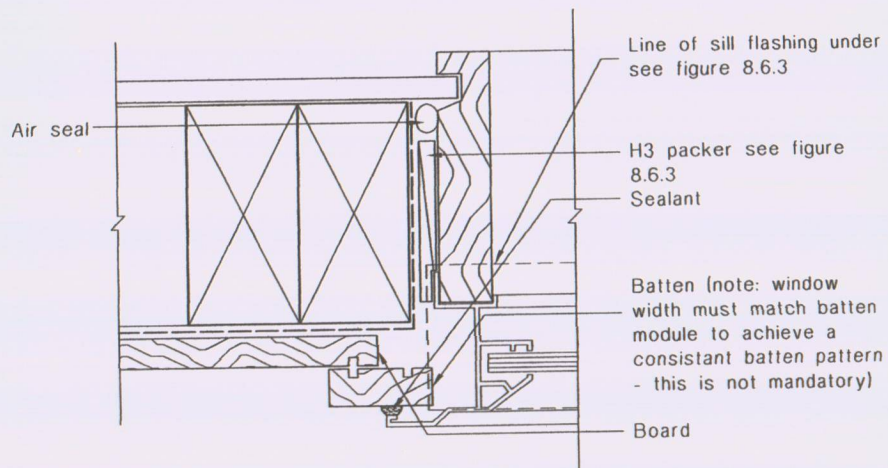
Figure 8.9.15-17:



8.9.15: Window head vertical board and batten without cavity



8.9.16: Window sill - vertical board and batten - without cavity



8.9.17: Window jamb vertical board and batten without cavity

Figure 8.6.3

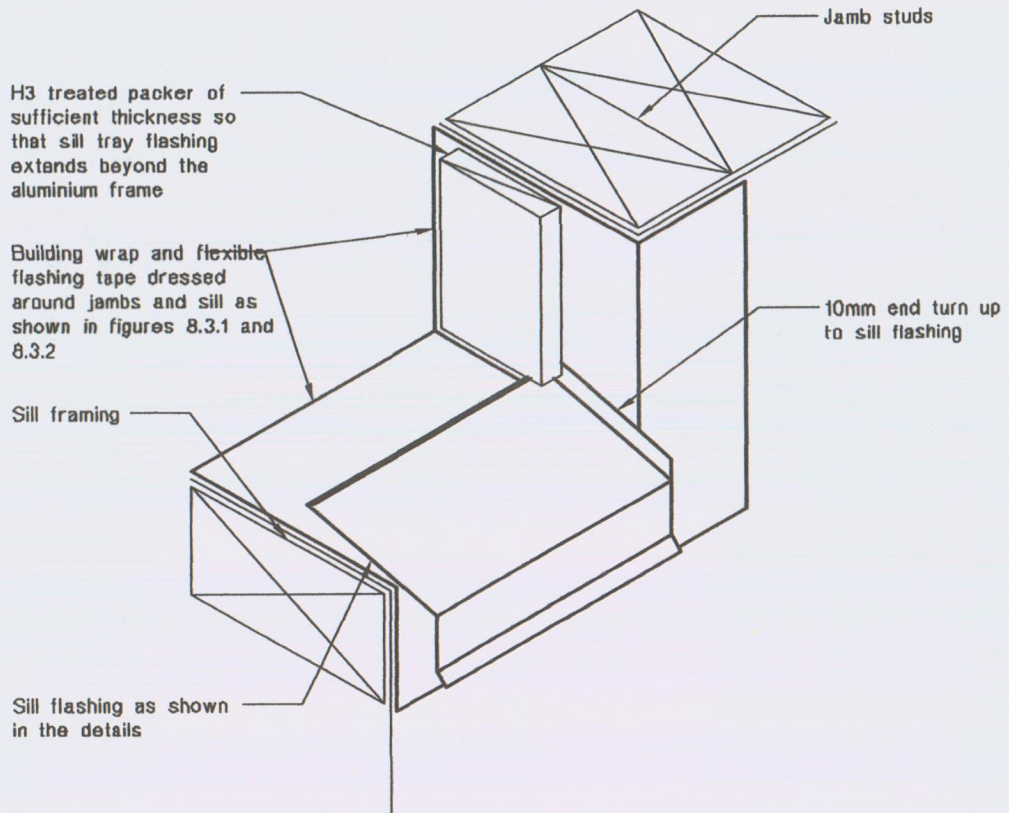


Figure 8.6.3: Sill flashing turn up

Figure 5: Typical detailing for expansion gaps

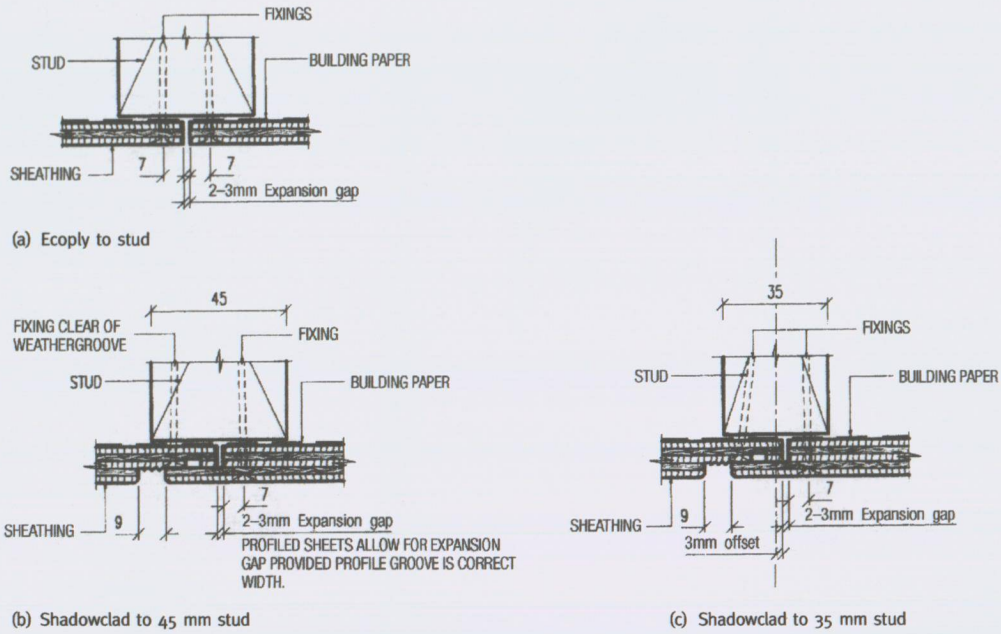


Figure 6: Type 2 strap fixings to each stud of plywood sheet braces for timber

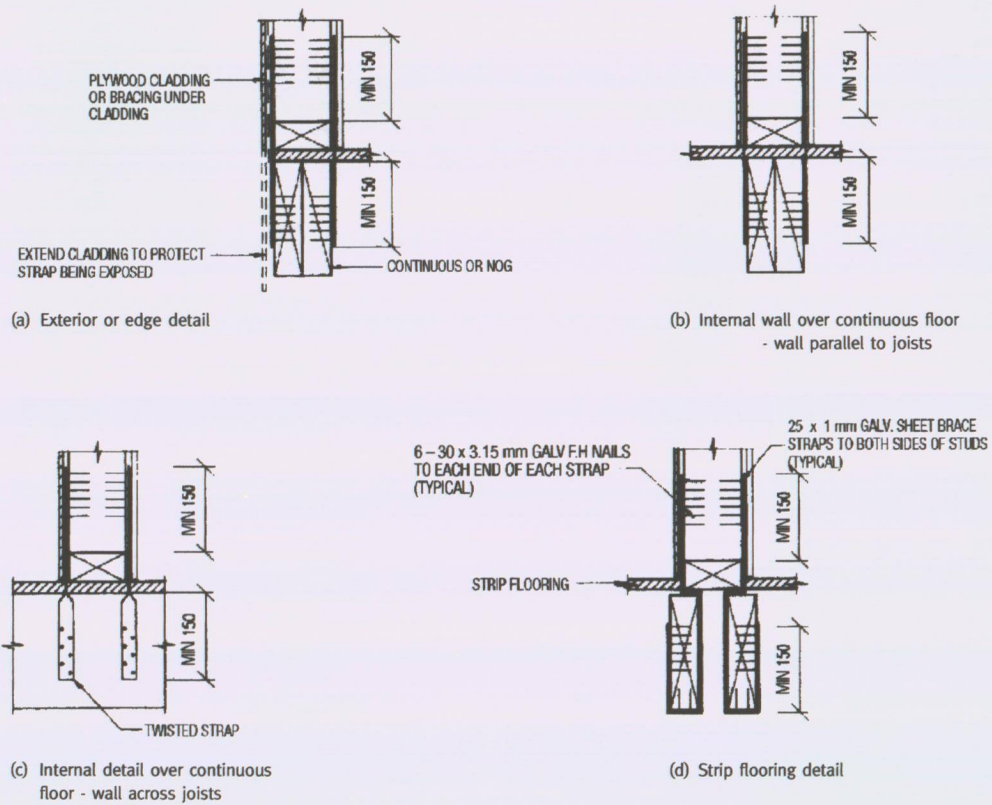
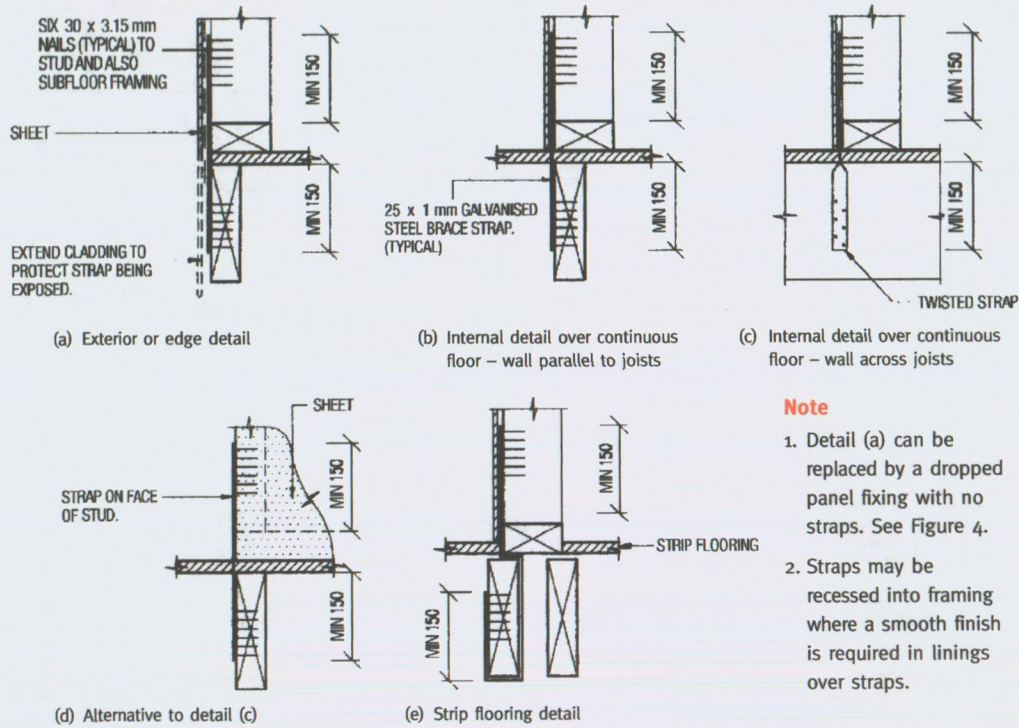


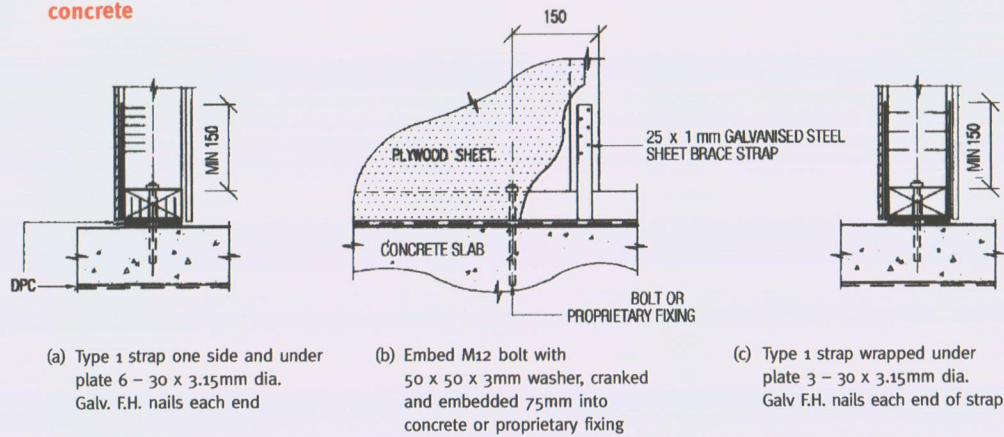
Figure 1: Type 1 strap fixings to each end stud of plywood sheet braces for timber ground floor and upper storey



Note

1. Detail (a) can be replaced by a dropped panel fixing with no straps. See Figure 4.
2. Straps may be recessed into framing where a smooth finish is required in linings over straps.

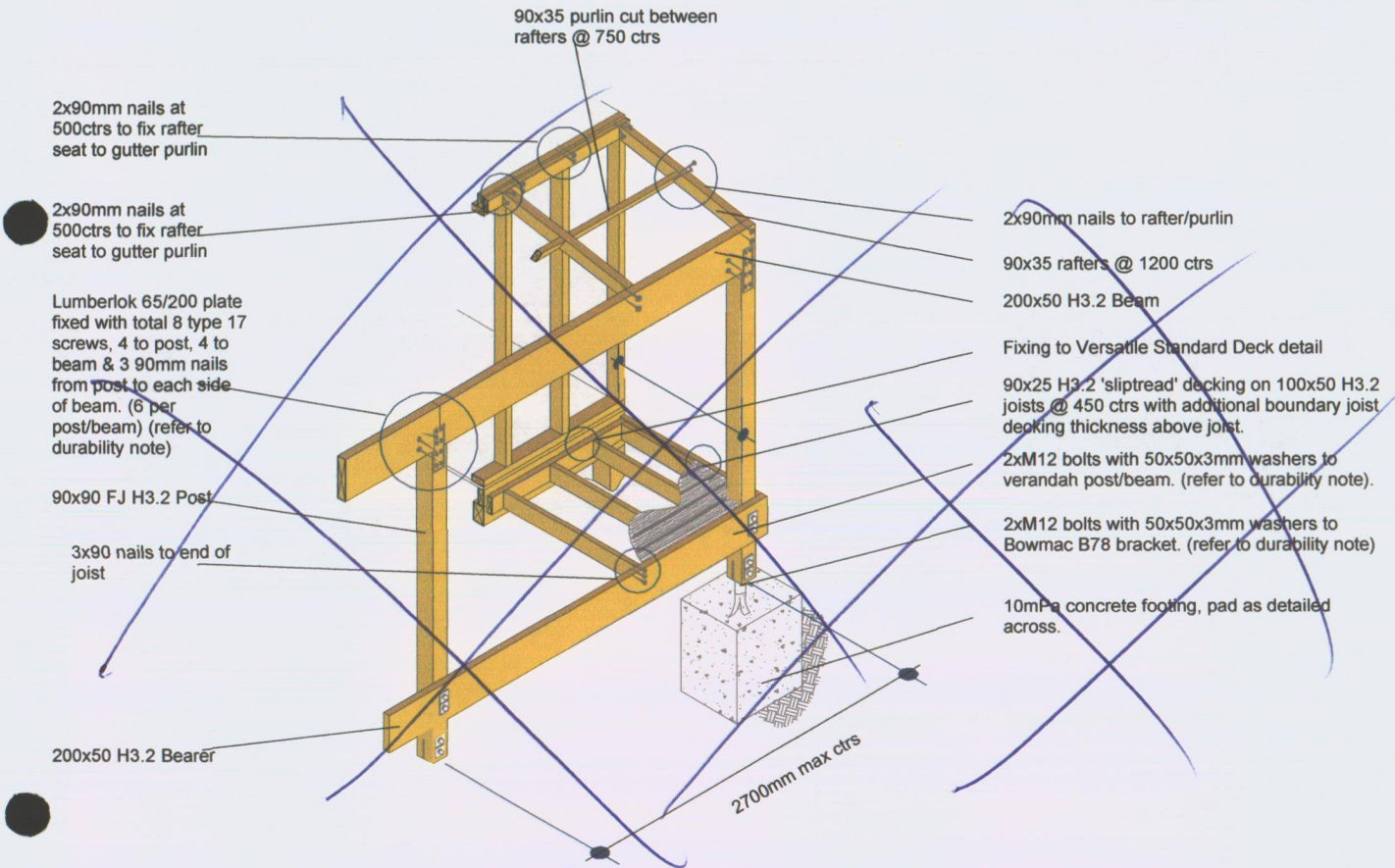
Figure 2: Type 1 strap fixings and capacities to each end stud of braced panels on concrete



VB2000

VERANDAHS & DECKS

As per Plan



VERANDAH FOOTING DETAILS

Wind Zone	CONCRETE VOLUME m ³	FOOTING WxDxH
HIGH	0.05m ³	300x300x600

Fastener Durability Note

The LUMBERLOK® 65/200 plate and the Bowmac B78 bracket to be hot dip galvanized unless used in a sea spray zone as defined by NZS3604:1999, where they are to be Stainless Steel Type 304 grade

Timber Treatment

200x50 beam & Joists and all other exposed beams & rafters - H3.2
 Posts to be minimum H3.1
 All other timbers H1.2



MiTek New Zealand Ltd.

HOME OF GANG-NAIL® BUILDING SYSTEMS



VERSATILE®
BUILDINGS

EXCAVATION

SECTION 1

PRELIMINARY 1

1.1 Scope See Site Plan for extent of work

1.2 Setting out Check all dimensions on Site.

CLEARING OF SITE 2

Remove all vegetation trees and roots within area to be covered by the building, verandah and porches. .

EXCAVATION 3.

3.1 Concrete Floor n/a

3.2 Timber Floor Excavate for piles to a minimum depth and width shown on the drawings or to solid bearing. Bottom of holes shall be square not rounded and sides of holes shall be perpendicular.

FILL UNDER CONCRETE FLOORS 4.

n/a

BACKFILLING 5.

Backfill with excavated material, in 100mm compacted layers, to foundation walls, verandah piles and service trenches.

SURPLUS SPOIL 6.

No excavated materials shall be removed from site.

CONCRETE

SECTION 2

PRELIMINARY 1.

1.1 Standards Workmanship and materials shall comply with NZS 3109.

1.2 Inspection At least 24 hours notice shall be given to the Territorial Authority before pouring, to allow for inspection of the excavation. No concrete shall be poured before approval.

MATERIALS 2.

2.1 Concrete All concrete shall be Ordinary Grade 17.5 MPa complying to NZS109.

2.2 Reinforcing n/a

FORMWORK 3.

Specifications

n/a

FOUNDATION WALLS 4.

n/a

CONCRETE FLOORS 5.

n/a

VERANDAH 6

n/a

TIMBER PILES 7

Embed timber piles in concrete with a minimum concrete footing under toe of pile in compliance with NZS 3604. Piles cut on site shall have the cut above ground level. This cut shall be coated with "Ensele", or similar product approved by the Timber Preservation Authority. All timber piles shall be plumb and true.

HOLD DOWN BOLTS 8

n/a

BRICKLAYER

SECTION 3

PRELIMINARY 1

n/a

ALUMINIUM JOINERY

SECTION 4

PRELIMINARY 1

1.1. Scope

Supply aluminium windows and doors of size shown on Elevations.

1.2 Standards

All windows shall comply with NZS 4211 Performance of Windows, and NZS 3504 Aluminium Windows.

FINISH 2

Aluminium shall be powder coated with paint grade reveals.

GLAZING 3

Shall be in accordance with NZBC acceptable solution B1/AS1 Clause 7.1 (NZS 4223). Glass shall be 5mm float glass to all windows with selected obscure glass to W.C. and bathroom, selected colonial bars with fly screens to all relevant windows and doors. Glass to doors shall be 6mm safety glass.

CARPENTRY

Specifications

SECTION 5

PRELIMINARY 1

- 1.1. Standards Workmanship and materials shall comply with NZS 3604, the NZBC and all relevant N.Z. Standards.
- 1.2 Protection All finished or partly finished work shall be protected from surface injury or damage from exposure to the weather or any other cause.

MATERIALS 2

- 2.1 Timber All timber shall comply with N.Z.S 3602 and shall be treated in accordance with the Timber Preservation Authority specifications.
- 2.2. Fasteners Nails, screws and other fixings shall be stainless steel for exterior work. Nails generally shall penetrate the second or holding timber at least half their length.
- For fixing type and quantity, see NZS 3604 Appendix A

DAMP PROOF COURSE 3

Where timber is in contact with concrete the timber shall be separated from the concrete with a 2 ply bituminous felt d.p.c. A bituminous damp proof course shall be placed on top of timber piles when they are cut off less than 300mm to the ground.

SCHEDULE OF TIMBERS 4

Location	Species	Grade	Treatment
Wall framing	Pinus Radiata	No.1	H.1.2 (boron)
Trusses	Pinus Radiata	No.1 (air dried)	H 1.2 (boron)
Purlins/ Clg battens	Pinus Radiata	No.1	H. 1.2
Floor joists	Pinus Radiata	No.1	H 1.2
Bearers	Pinus Radiata	No.1	H.3.2
Verandah beams & rafters	Pinus Radiata	No. 1	H.3.2
Verandah Posts	Pinus Radiata(laminated)	No. 1	H.3.2
Verandah Deck	Pinus Radiata	No.1	H.3.2

FLOOR FRAMING 5

- 5.1 Bearers Level tops of piles and securely fix ^{125 x 75} ~~2/150 x 50~~ bearers to piles with either 4/100 x 4.0 S.S jolt head nails or two S.S. wire dogs plus two 100 x 40 S.S jolt head nails. Fixings to anchor piles an cantilever piles shall be 12KN and 6KN respectively as detailed on the drawings.
- 5.2 Floor joists Gauge ¹⁵⁰ ~~150~~ x 50 joists at 600 crs over bearers to uniform level. Fix ¹⁵⁰ ~~150~~ x 50 boundary joist down either side of the building. Provide full depth blocking at centres shown or under joints in flooring. Fix joists as in NZS 3604: Appendix A, except over anchor and cantilever piles fix with proprietary fixings as detailed on the drawings.
- 5.3 Manhole Existing in Place

FLOORING 6

Specifications

6.1 Particle Board Lay 21 mm high density particle board flooring over joists with all joints staggered. Fix to manufacturers recommendations. Nails shall be skewed to help prevent squeaking. Fixings shall finish just below surface of flooring to allow for sanding.

6.2 Manhole cover Existing in place

WALL FRAMING 7

7.1 Exterior Framing Shall be 90 x 45 MSG H1.2 F5 studs at 600crs with two rows of dwangs equally spaced. Top and bottom plates shall be 90 x 45 MSG H1.2 F5 with top plates joined over studs and at intersecting walls with nail plates. Fix bottom plates to concrete floors with bolts or dowels into slab (see Section 6) Fix 150 x 40 ceiling plate.

7.2 Internal Framing Shall be 90 x 45 MSG H1.2 F4 studs at 600 crs with two rows of dwangs equally spaced. Join top plates as for exterior framing.

7.3 Bracing Shall be galvanised angle bracing or braceline gibraltar board in accordance with the bracing schedule and to satisfy all requirements of the NZBC. Fix bracing to manufacturers recommendations at the wall position shown on the bracing schedule.

ROOF FRAMING 8

8.1 Trusses Trusses shall be 9-25 degree pitch spaced at approximately 900mm crs and fabricated as shown on the drawing by registered truss manufacturer. Standard trusses shown are designed for a 0.50 KPa snow load. Refer Gangnail 500 series booklet for higher snow loads. Fix trusses as detailed on the truss sheet.

8.2 Purlins Shall be 100 x 50 on flat at 1.0m max. crs.

8.3 Soffit Fix 75 x 50 or 75 x 40 sprockets to end of truss overhand to form 600 wide soffit. Fix 200 x 50 false fascia to end of truss overhang. Fix 4.5 mm hardiflex soffit.

8.4 Bracing Shall be Lumberlok galv-steel strap brace (25 x 1.2mm) fixed in accordance with manufacturers specifications. Tension brace in each plane of roof.

8.5 Fascia Shall be 200 x 25 R/S H3.2 fixed at 900mm crs.

VERANDAH 9

Frame up verandah as shown on the drawings. Set 100 x 50 rafters into rebates in 100 x 50 rafter seat or joist hangers and 200 x 50 verandah beam. Rafters shall be set to 8 degrees pitch. Laminated posts shall be ex 100 x 100 at 3.050m maximum crs supported on S.S post brackets embedded in 300 x 300 x 300 concrete footings. Rebate top of post round beam and fix with S.S bolts.

Lay 4.5mm hardiflex over rafters and slot edge of sheet into rebate in beam; fix with S.S clouts.

Fix 100 x 50 purlins as shown.

ROOFING 10.

10.1 Building Paper Lay building paper over superfilm lashing (lashing 450 crs vertically and 300 crs horizontally) or galv. netting in accordance with NZBC E2/AS1 Clause 1.3. Building paper shall be breather type to NZS 2295 run parallel to ridge and lapped 150mm over lower sheet. Provide adequate lap of building paper into gutters.

10.2 Gutters Shall be of Marley P.V.C design as laid out as per plan

Specifications

10.3 Roofing Iron

- a) **Material:** Shall be Profile "Six Rib" 0.4 B.M.T., G.550, ZM275 colorsteel G.2 Longrun roofing fixed with spiral shanked nails with colour matched heads with neoprene seals.
- b) **Installation:** Lay sheets with laps away from the prevailing wind. Lap bottom edge of sheet 50mm over fascia. Fix roofing through every rib to gutter purlin. Nail through sheet laps to every purlin. Fix each rib to each alternative purlin, except no two adjacent ribs (except laps) shall be nailed to the same purlin. All cutting of roofing shall be by shears or nibblers. Cutting discs will not be permitted.
Installers should wear clean soft soled shoes when walking on roof and should take all reasonable care to ensure the surface film of the roofing is not scratched. After completion of the roof wash down the entire surface with hose and soft bristled broom to remove all fixing debris and swarf. Ensure all fixing debris and swarf is washed out of gutters.
- c) **Limitations and Maintenance:** Profile 'Six Rib' colorsteel roofing will perform to the requirements of sub clause B2.3 of the New Zealand Building Code, Clause B.2 Durability if installed and maintained as herein specified and in accordance with the recommendations of New Zealand Steels Colorsteel G.2 Information Bulletin.
- d) To ensure compliance with the durability requirement of the NZBC, house owners should adhere to the following maintenance procedures. The whole of the roof surface including all associated flashings shall be washed down with a hose and soft bristled broom, at least twice a year, to remove any surface deposits that have built up. At the same time clean gutters and remove any debris which may lead to ponding or flooding.

10.4 Barges Shall be Profile roll formed colorsteel G.2 barges clipped over metal retaining angle and nailed through top face into each purlin with spiral shanked roof nails. Colour to match roofing iron.

10.5 Ridging Shall be colorsteel maxx G.2 ali edged ridging with 100mm laps between sections. Lap lengths away from prevailing wind and fix with spiral shank roof nails through every roof rib into top purlin. Colour to match roofing iron.

10.6 Ridge Caps n/a.

VERANDAH DECK 11

Fix 200 x 50 beam to face of posts. Cut n 100 x 50 joists at 600 crs between boundary floor joist and beam. Fix with s.s100 x 4.0 s.s jolt head nails. Fix 100 x 40 timber decking with arrissed edges with 75 x 3.15 s.s jolt head nails.

EXTERIOR WALL COVERINGS 12

12.1 Building Paper Cover all exterior wall framing with building paper complying with NZBC E2/AS1 clause 2.4. Fix Building paper horizontally with 75mm minimum laps that shed water. Securely fix to top and bottom plates and studs.

12.2 Shadow clad

a) **Material:** 12mm Shadow clad grooved plywood LOSP H3

b) **Installation:** As per manufactures instructions

12.3 n/a

12.4 Brick Veneer: n/a

INSULATION 13

13.1 General Install insulation in accordance with NZBC acceptable solution H1/AS1

Specifications

13.2 Foil Insulation Drape double-sided perforated aluminium foil over floor joists with 100mm dish at mid-span between joists. Tightly butt insulation against blocking.

13.3 Ceiling Insulation Insulate whole of ceiling area with a 100mm thick layer (R2.6) of Pink Batts insulation.

13.4 Wall Insulation Insulate all exterior framing with friction fit R2.2 fibreglass batts to form a complete envelope.

INTERIOR LININGS 14

14.1 General All linings shall be carried to floor level and behind all fittings. The moisture content of the framing shall be as specified by the manufacturer before fixing any linings.

14.2 Gibraltar Board Line all walls and ceilings with 10mm gibraltar board stopped to suit a paint grade finish. Fix sheets to manufacturers recommendations with 30 x 2.5 Gib clouts hit just below the surface of the board (without rupturing the face paper or core). Fix ceiling sheets across ceiling battens in a staggered pattern. Fix wall sheets horizontally.

14.3 Skirtings Shall be customwood 40 x 10mm bull nose skirting to all wall and floor junctions including the inside of all cupboards and wardrobes.

CUPBOARDS AND FITTINGS 15

15.1 Wardrobes Shall be Freestanding

15.2 Cylinder
Cupboard n/a

15.3 Kitchen Existing

15.4 Vanity existing

15.5 Laundry Tub
& Cabinet existing

INTERIOR DOORS 16

Shall be paint grade flush panel hung on 1.5 prs of butts in rebated frames.

PLUMBING

SECTION 6

DOWN PIPES 8.

Supply and fit pvc downpipes to droppers in gutter. Fix each downpipe with two brackets per downpipe.

DRAINAGE

SECTION 7

n/a

Specifications

Provide all necessary bends, junctions, inspection fittings etc.

Bed easy bends in concrete below downpipe entries. Fit grating and cover plate cut round downpipe. Finish bends as specified for gullies.

Connect to stormwater drain, side channel or soakpit as shown on the Site Plan.

ELECTRICAL

SECTION 8

PRELIMINARY 1.

- | | |
|---------------|---|
| 1.1 Standards | The whole of the electrical installation shall be in strict accordance with the Electrical Wiring Regulations and all amendments. |
| 1.2 Scope | The supply and wiring up of all fittings as scheduled and the connection to the Local Supply Authority Mains is included in this Contract, except that a P.C. sum of \$ has been allowed for the mains connection. This also includes Telecom connection from street to dwelling. Refer also to item 4.2. |

MATERIALS 2

- | | |
|--------------------|--|
| 2.1 Cables | Cables and flexibles shall be 250v grade T.P.S. to comply with NZS 6401. |
| 2.2 Light switches | Shall be 10 amp, all insulated P.D.L. micro-gap type or equivalent, mounted 1200 mm above floor. Supply and wire up light switches as per attached plans. |
| 2.3 Power Points | All wall plugs shall be 230v 10 amp 3 pin flush type mounted 300mm above floor or 225mm above bench tops. Mount plugs for washing machine and refrigerator 1200 mm above floor. Supply and wire up power points and Telecom telephone jack points as per attached plans. |
| 2.4 Lights | Interior lights shall be P.D.L. or similar approved white batten-holder complete with conical shade unless specified otherwise. Supply and wire up interior lights as per attached plans.

Provide and wire up two exterior lights as per attached plans. |

METER BOX 4.

- | | |
|------------------|---|
| 4.1 Meter box | n/a |
| 4.2 Boundary Box | No allowance has been made for a boundary box if required by the local power authority. |

FINISHING

SECTION 9

- | | |
|-----------------------------|--|
| 1.1 Painting and decorating | The standard painting and decorating provided is paint to walls, wardrobes and HWC cupboard doors (not interior of HWC) in colours chosen from a standard range. |
|-----------------------------|--|

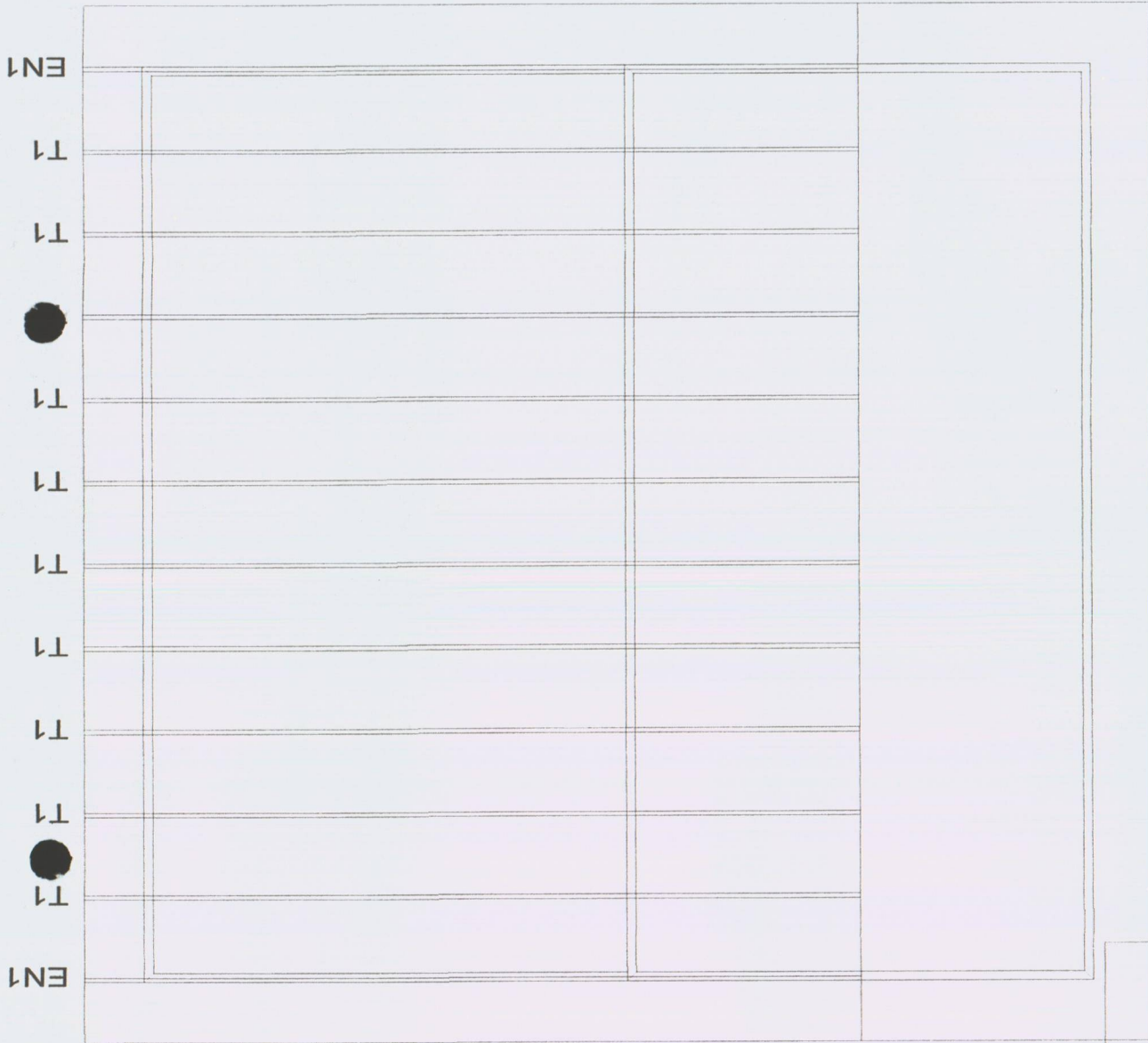
Specifications

1.2 Carpet and Vinyl

Standard

Specifications

PRELIMINARY TRUSS LAYOUT



G-PEPS Manufacturing

35 Wilson St
P.O. Box 57
Wanganui
Telephone: (06) 348 1750
Fax: Fo: (06) 348 1769

Customer
Grey Additions
15 Wainui St
Turakina Beach

Job: GPE16

File Location: C:\PEPS\06\GPE16
Scale: 1 : 67 | Date: 26/07/14 | Drawn By: Adm

