



WHANGANUI
DISTRICT COUNCIL
Te Kaunihera a Rohe o Whanganui

IMPORTANT NOTE

These documents are required to be onsite for all inspections and must be a complete and full copy of the WDC stamped “Approved” documents.

Failure to have a full and legible set of documents may result in a terminated inspection. A terminated inspection will incur additional charges.



INSPECTION RECORD

This record, together with the Building Consent and approved plans, is to remain on the construction site at all times.

Project Location	TO BOOK AN INSPECTION PLEASE PHONE WDC BUILDING CONTROL	BCon21/0171
160 Cornfoot St WHANGANUI	ON 349 0001 AND QUOTE THE FOLLOWING APPLICATION NUMBER:	
Description of Work	Removing a wall, & doorway, adding a beam & walls.	
Applicant	Design Lines 2000 Ltd 167 Mount View Road, Bastia Hill, Whanganui 4500	

SUMMARY OF CONDITIONS

Building Consent Number BCon21/0171

PIM Conditions

Code	Condition
	All work on the project must comply with the requirements of the NZ Building Code.
	A PIM only document is not an approval to build. A Building Consent is required before building work commences.
	W.D.C will follow up on building work not completed within two years of building consent issue.
	A Building Consent lapses and is of no effect if the building work has not been started within 12 months of the date of issue.
	If the building is public premises it may not be occupied until either a code compliance certificate or certificate for public use has been issued.
	Please note [Electrical, and Gasfitting subtrades do not form part of the building consent inspection process. However, Council is required to receive 'Energy Certificates' from both of these trades before issue of a Code Compliance Certificate].

Building Consent Information

Code	Information

Your project's inspections are listed on the next page...



Please Note: A minimum of 48 hours notice is required for the booking of an inspection. The inspection record sheet and accompanying building consent documentation must be on site for use by the inspector at the time of the inspection.

All inspections are to be carried out by BCA Building Inspectors unless prior arrangements have been made by the BCA to have an approved qualified person inspect specific items (eg. Engineer). Inspections shall be carried out in accordance with the attached schedule of inspection types. It is the owner's responsibility to ensure all necessary inspections are carried out as required. Please contact WDC if you are unsure what requires inspection – do not cover or enclose any building work without inspection.

Note: Further inspections may incur additional cost at time of Code Compliance Certificate issue.

Inspections Record For Building Consent Number BCon21/0171								
<i>Inspection</i>	<i>When to Request</i>	<i>Date</i>	<i>Inspector</i>	<i>Complies with Code</i>	<i>Reinspect</i>	<i>Notes</i>		
BUILDING PRELINE INSPECTION	Before Internal linings are fixed.					At building preline please have the one GS1 bracing unit ready to fix while inspector is there to avoid another inspection and charge.		
FINAL BUILDING AND PLUMBING COMBINED INSPECTION	On Completion					On completion please supply: - The completed CCC application form. - LBP memo from builder for the Restricted Building Work (RBW) - All energy certs		



BUILDING CONSENT NUMBER BCon21/0171

Section 51, Building Act 2004

The building:

Street address of building:	Legal description of land where building is located:
160 Cornfoot St WHANGANUI	LOT 415 DP 3060 0.0795 Ha
Building name:	Location of building within site/block number:
Level/unit number:	

The owner:

Name of Owner:	
Mr GR Davis	
Mailing address:	Street Address/registered Office:
222 Somme Parade Aramoho Whanganui 4500	222 Somme Parade Aramoho Whanganui 4500

Phone numbers:

Landline:	045288559	Mobile:	0274288559
Daytime:	0272367855	After hours:	
Facsimile number:			
Email address:		Website:	

First point of contact for communications with the building consent authority:

Contact Person:	
Design Lines 2000 Ltd	
Mailing address:	Street Address/registered Office:
167 Mount View Road, Bastia Hill, Whanganui 4500	167 Mount View Road, Bastia Hill, Whanganui 4500

Phone number:

Landline:		Mobile:	0274578390
Daytime:	063438101	After hours:	
Facsimile number:	063438111		
Email address:		Website:	

Building Work

The following building work is authorised by this consent

Project
Removing a wall, & doorway, adding a beam & walls.

101 Guyton Street
P O Box 637, Whanganui
Phone: (06) 349 0001
Fax: (06) 349 0000
Email: wdc@whanganui.govt.nz
Web: www.whanganui.govt.nz



**WHANGANUI
DISTRICT COUNCIL**
Te Kaunihera a Rohe o Whanganui

<i>Intended Use</i>	<i>Intended Life</i>
Single Detached Residential	50+ Years
<i>Estimated Value (\$)</i>	
\$30000.00	

This building consent is issued under section 51 of the Building Act 2004. This building consent does not relieve the owner of the building (or proposed building) of any duty of responsibility under any other Act relating to or affecting the building (or proposed building). This building consent also does not permit the construction, alteration, demolition, or removal of the building (or proposed building) if that construction, alteration, demolition or removal would be in breach of any other Act.



CONDITIONS OF BUILDING CONSENT NUMBER BCon21/0171

Section 51, Building Act 2004

This Building Consent is issued Subject to the following conditions:

Building Act 2004, Section 90:

Inspections by Building Consent Authorities

Agents authorised by the building consent authority for the purposes of this section are entitled, at all times during normal working hours or while building work is being done, to inspect

- (a) land on which building work is being or is proposed to be carried out; and
- (b) building work that has been or is being carried out on or off the building site; and
- (c) any building.

Compliance Schedule:

A compliance schedule (CS) is not required for this building.

#Attachments

- ‡Copies of the following documents are attached to this building consent:
- ‡Project information memorandum number BCon21/0171
- ‡Inspection record
- ‡Informative notes

Signed for and on behalf of the Whanganui District Council

GJ Hoobin
Building Control Manager

Date: 20 April, 2021

101 Guyton Street
P O Box 637, Whanganui
Phone: (06) 349 0001
Fax: (06) 349 0000
Email: wdc@whanganui.govt.nz
Web: www.whanganui.govt.nz



**WHANGANUI
DISTRICT COUNCIL**
Te Kaunihera a Rohe o Whanganui

BUILDING CONSENT NUMBER BCon21/0171

Informative notes:

- The Building Consent, conditions, inspection sheet, and approved plans must be kept on site at all times until completion of the project.
- Failure to request inspections will risk the non-issuing of a code compliance certificate and the structure may be deemed non-complying.
- Any inspection time required over and above that allowed may incur a further charge.
- Under Section 52, a building consent lapses and is of no effect if the building work to which it relates is not commenced within 12 months after the date of issue.
- Under Section 93, if the owner has not made application within 24 months, the BCA (Building Control Authority), must decide whether or not to issue a CCC (Code Compliance Certificate).

101 Guyton Street
P O Box 637, Whanganui
Phone: (06) 349 0001
Fax: (06) 349 0000
Email: wdc@whanganui.govt.nz
Web: www.whanganui.govt.nz



WHANGANUI
DISTRICT COUNCIL
Te Kaunihera a Rohe o Whanganui

PROJECT INFORMATION MEMORANDUM NUMBER BCon21/0171

Section 35, Building Act 2004

Design Lines 2000 Ltd
167 Mount View Road
Bastia Hill
Whanganui 4500

<i>Project Location</i>	<i>Assessment Number/Legal Description</i>
160 Cornfoot St WHANGANUI	LOT 415 DP 3060 0.0795 Ha
<i>Category</i>	<i>Description of Work</i>
Adds/Alts to Private Residential - \$20001-\$50000	Removing a wall, & doorway, adding a beam & walls.
<i>Intended Life</i>	<i>Estimated Value (\$)</i>
50+ Years	30000.00

This Project Information Memorandum is confirmation that the proposed work may be undertaken, subject to the provisions of the Building Act 2004 and any requirements of the Building Consent (number BCon21/0171), which has been granted.

This Project Information Memorandum is subject to the following conditions:

- **All work on the project must comply with the requirements of the NZ Building Code.**

Signed for and on behalf of the Whanganui District Council

GJ Hoobin
Building Control Manager

Date: 20 April 2021



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy




R.W. Muir
Registrar-General
of Land

Identifier **WN299/38**
Land Registration District **Wellington**
Date Issued **12 March 1923**
Prior References
WN289/212

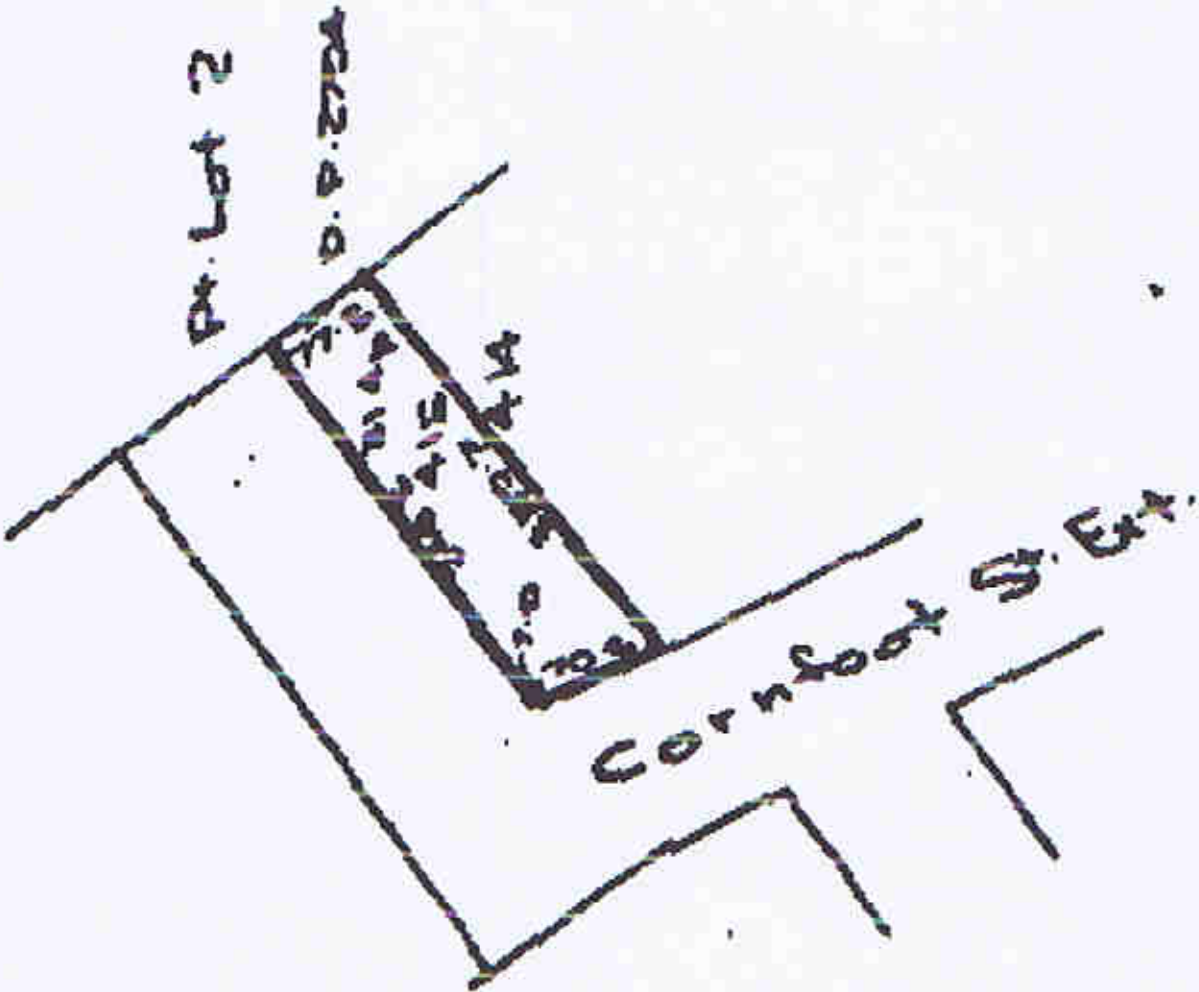
Estate Fee Simple
Area 794 square metres more or less
Legal Description Lot 415 Deposited Plan 3060
Registered Owners
Garuth Robert Davis

Interests
11466890.4 Mortgage to Bank of New Zealand - 19.6.2019 at 11:40 am

RECEIVED 7/04/2021

Identifier

WN299/38



RECEIVED 7/04/2021



Re: 160 Cornfoot

From: "Gareth" <garethrdavis@hotmail.com>
To: "Jim Richardson" <jim.r@gmx.com>
Date: Apr 1, 2021 10:25:26 AM

Hi Jim,

Please take this email as authorisation to act as my agent with Whanganui District Council in respect to 160 Cornfoot St consents.

Please get a Cert of Title for documentation for Council.

Kind Rgds,
 G.

From: Jim Richardson <jim.r@gmx.com>
Sent: 19 March 2021 05:40
To: Gareth <garethrdavis@hotmail.com>
Subject: Re: 160 Cornfoot

Thanks Gareth,
 I will get a Cert of Title, unless you have one less than 3 months old, from subdivision docs.
 Regards,
 jim

Sent: Friday, March 19, 2021 at 4:41 PM
From: "Gareth" <garethrdavis@hotmail.com>
To: "Jim Richardson" <jim.r@gmx.com>
Subject: Re: 160 Cornfoot

Hi Jim,

Please take this email as authorisation to act as my agent with Whanganui District Council in respect to 160 Cornfoot St consents.

Unfortunately, I threw out all the paper rate demands. Can I send through something else?

Kind Rgds,
 G.

From: Jim Richardson <jim.r@gmx.com>
Sent: 19 March 2021 00:04
To: Gareth <garethrdavis@hotmail.com>
Subject: Re: 160 Cornfoot

Thanks Gareth,

RECEIVED 7/04/2021

Memorandum from licensed building practitioner: Certificate of design work



Easy, accurate building compliance

Section 45 and section 30C, Building Act 2004

THE BUILDING	
Street address: 160 Cornfoot St	
Suburb: Castlecliff	
Town/City: Whanganui	Postcode: 4500

THE OWNER(S)	
Name: Gareth Davis	
Mailing address: 222 Somme Pde, Whanganui	
Suburb: Aramoho	PO Box/Private Bag:
Town/City: Whanganui	Postcode:
Phone number: 027 236 7855	Email Address: garethrdavis@hotmail.com

BASIS FOR PROVIDING THIS MEMORANDUM
Sole designer of all of the RBW design outlined in this memorandum – I carried out all of the RBW design work myself – no other person will be providing any additional memoranda for the project.

IDENTIFICATION OF DESIGN WORK THAT IS RESTRICTED BUILDING WORK (RBW)
I Jim Richardson carried out or supervised the restricted building work recorded on this form.

RECEIVED 7/04/2021

PRIMARY STRUCTURE				
Design work that is RBW	Description of RBW	Carried out or supervised	Reference to plans and specifications	
Tick ☒ if included	If appropriate, provide details of the RBW	Tick whether you carried out this design work or supervised someone else carrying out this design work	If appropriate, specify references	
Walls ☒	Timber framed walls: ☒ NZS 3804:2011	☒ Carried out ☒ Supervised		
Columns and Beams ☒	Timber: ☒ designIT System	☒ Carried out ☒ Supervised		
Bracing ☒	Bracing systems: ☒ Gib EasyBrace	☒ Carried out ☒ Supervised		

EXTERNAL MOISTURE MANAGEMENT SYSTEMS				
Design work that is RBW	Description of RBW	Carried out or supervised	Reference to plans and specifications	
Tick ☒ if included	If appropriate, provide details of the RBW	Tick whether you carried out this design work or supervised someone else carrying out this design work	If appropriate, specify references	
Ventilation System ☒	Other: Manrose fan to Bathroom & Extractor for stove.	☒ Carried out ☒ Supervised		
Wall Cladding or Wall Cladding Systems ☒	Sheet cladding: ☒ E2/AS1	☒ Carried out ☒ Supervised		
Waterproofing ☒		☒ Carried out ☒ Supervised		

RECEIVED 7/04/2021

FIRE SAFETY SYSTEMS C1 - C6			
Design work that is RBW	Description of RBW	Carried out or supervised	Reference to plans and specifications
Tick ☒ If included	If appropriate, provide details of the RBW	Tick whether you carried out this design work or supervised someone else carrying out this design work	If appropriate, specify references
Emergency warning systems (F7) ☒	Alarm: ☒ NZS 4512:2010	☒ Carried out ☒ Supervised	

ISSUED BY	
Name and contact details of the licensed building practitioner who is licensed to carry out or supervise design work that is restricted building work.	
Name: Jim Richardson	LBP or Registration number: 112960
The practitioner is a: ☒ Design LBP	
Street address: 167 Mt View Road,	
Suburb: Whanganui	
Town/City: Whanganui	Postcode: 4500

DECLARATION	
I Jim Richardson LBP, state that I have applied the skill and care reasonably required of a competent design professional in carrying out or supervising the Restricted Building Work (RBW) described in this form, and that based on this, I also state that the RBW: • Complies with the building code, or • Complies with the building code subject to any waiver or modification of the building code recorded on this form.	
Signature: Jim Richardson 	Date: 01/04/2021

RECEIVED 7/04/2021

CONTENTS OF DOCUMENT PACKAGE.

BUILDING CONSENT SET.

A4 SIZE

- SHEET 1 – SCOPE OF WORKS/SPECIFICATIONS
- SHEET 2 – NEW FLOOR PLAN
- SHEET 3 – KEY PLAN – BRACING, BEAM & DRAINAGE
- SHEET 4 – EXISTING PLAN
- SHEET 5 - DETAILS

WEATHERTIGHTNESS MATRIX

- E2 DETAILS (3 pages)
- BRACING INFO (6 pages)
- DESIGN IT INFO (3 pages)
- SHOWER DETAILS (2 pages)
- HI INFO

Design Lines
2000 Limited

JIM RICHARDSON

Architectural Designer Phone 0274 578 390
Licensed Building Practitioner, Design 2.

HOUSE ADDITION,
160 CORNFOOT STREET,
WHANGANUI.

COVER SHEET

SHEET 0

RECEIVED 7/04/2021

SCOPE OF WORKS

This document must be read in conjunction with, and form part of the Contract Drawings, Please read carefully!

Bcon21/0171 - WDC Approved Plans - 20/04/2021

- Open up Kitchen & Dining area, to create a larger, open living space/Dining Room. Remove walls & double sided fireplace & replace with a beam & bracing, as shown.
- Close in the existing Entry Porch & include in an enlarged Bathroom/Laundry.
- Upgrade with a new Kitchen, with a Ranchslider to the rear yard, for access, under bond beam.
- Install a wall to divide of Bed 3 from the Front Door. There are 4 opening casement sashes here for ventilation.
- The Wind Zone is considered High. There is no increase in the size of the house, so no Site Coverage or HRP issues.

SPECIFICATIONS:

1. All work shall be to:

- NZ Building Code, NZS 3604:2011 & subsequent amendments.
 - B1 for Structure, B2 for Durability, E2 for External Moisture, E3 for Internal Moisture, F2 for Hazardous building materials, F7 for Warning Systems (in house), G4 for Ventilation, G9 for Electricity, G12 for Water Supplies, G13 for Sanitary Plumbing (AS1 for Sanity plumbing, AS2 for Drainage & AS3 - AS/NZS 3500), & H1 for Energy Efficiency.
 - Manufacturers written instructions, & the enclosed drawings and specifications.
 - NZS 3910:2003 (Conditions of Contract) where applicable, and good trade practice.
 - All Glazing shall be to NZS 4223:Part 3 for Human Contact. Ie Toughened glass to shower screens & low windows.
 - Check all dimensions on site prior to fabrication. Install shall mean supply and fix. Make good all surfaces on completion of work, and to match existing. The Owner has written a comprehensive fittings list for the builder. Please refer to this!
 - All painting to Resene or Dulux 1 line specs.
2. The Risk Matrix is 2. Make good the concrete block structure, with a suitable paint finish.
 3. Remove redundant walls & brick fireplace. Make good the existing floor, ceiling & roof.
 4. Frame the new walls with 90 x 45 H1.2 GS8 framing at 600mm crs with dwangs at 0.8M crs, for 2.4M high stud under the existing roof framing.
 5. Make good the existing floor in the Kitchen/Dining area.
 6. Make good the ceilings. Stop to a level 4 finish, seal & paint.
 7. An H1 evaluation is included. Where walls or ceiling access is available, insulation will be upgraded to R2.8 & R3.2 respectively, as a minimum. Underfloor insulation will be upgraded to R2.6 Snugfloor, where accessible.
 8. Bolt or screw the new bottom plates to the floor joists, with 12mm galv bolts at 900mm crs. Fix double studs under each beam or lintel, & secure with nail on strap top & bottom. Ensure adequate support is under beam support, internally in house, & add extra piles if necessary.
 9. Hot water is supplied from a controlled Gas Infinity unit. The plumbing fittings generally connect to existing connections.
 10. Install a 50mm PVC Bath waste to the gulley trap, at a fall of 1 in 40. Extend existing plumbing system with Polybutylene piping with crimped joints as necessary. Add all necessary valves.
 11. Fit 150mm Manrose fan in Bathroom/Laundry area, venting through the ceiling to the soffit. Fit extract hood in Kitchen, venting out as above, under the soffit.
 12. Ensure a smoke detector is within 3M of each sleeping space, within the house.
 13. All painting shall be to Resene 1 line specs or similar Dulux Spec.

Design Lines
2000 Limited

JIM RICHARDSON

Architectural Designer Phone 0274 578 390
Licensed Building Practitioner, Design 2.

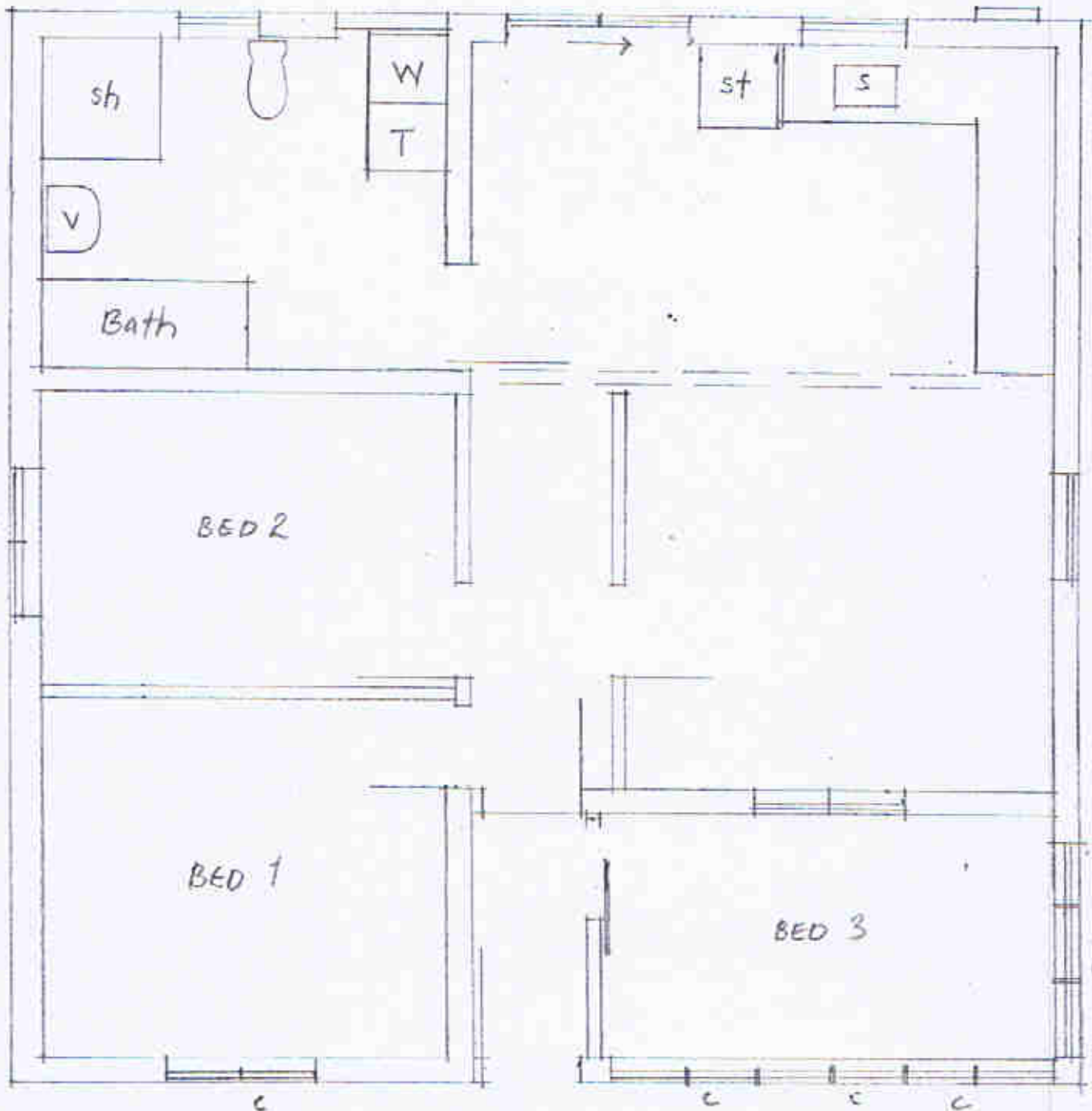
**ALTERATIONS,
160 CORNFOT STREET,
WHANGANUI.**

SPECIFICATION

SHEET 1

RECEIVED 20/04/2021

Infinity



RECEIVED 7/04/2021

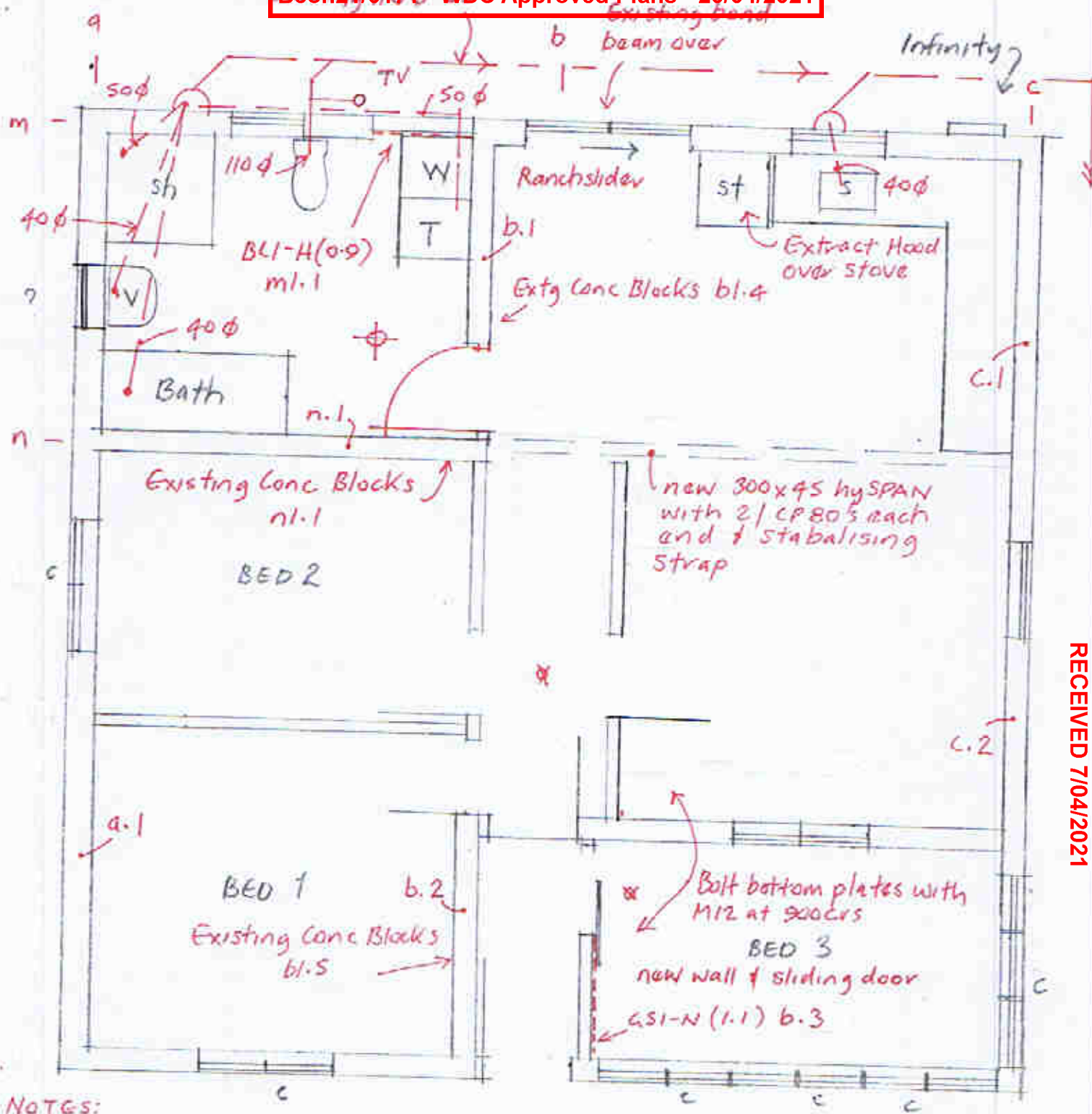
Design Lines
2000 LIMITED

JIM RICHARDSON

Architectural Designer Phone 0274 578 390
Licensed Building Practitioner, Design 2

160 CORNFoot ST
WHANGANUI

SHEET 2



NOTES:

All wastes existing or new PVC, at 1 in 40 fall

⌘ = Smoke Alarm

⊕ = Extract Fan

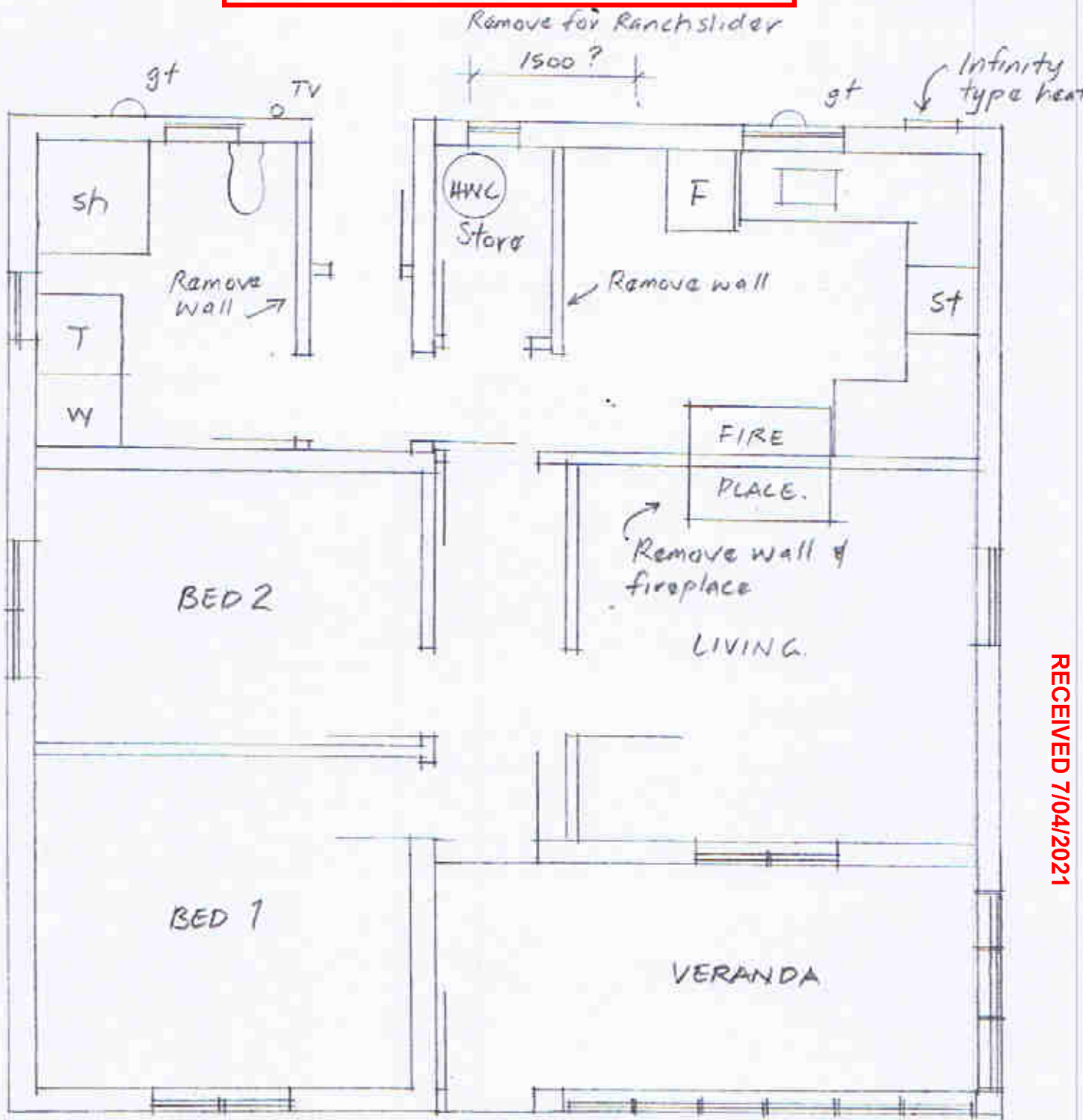
NEW PLAN 1:50

KEY PLAN 1:100

160 CORNFoot ST
WHANGANUI

SHEET 3

RECEIVED 7/04/2021



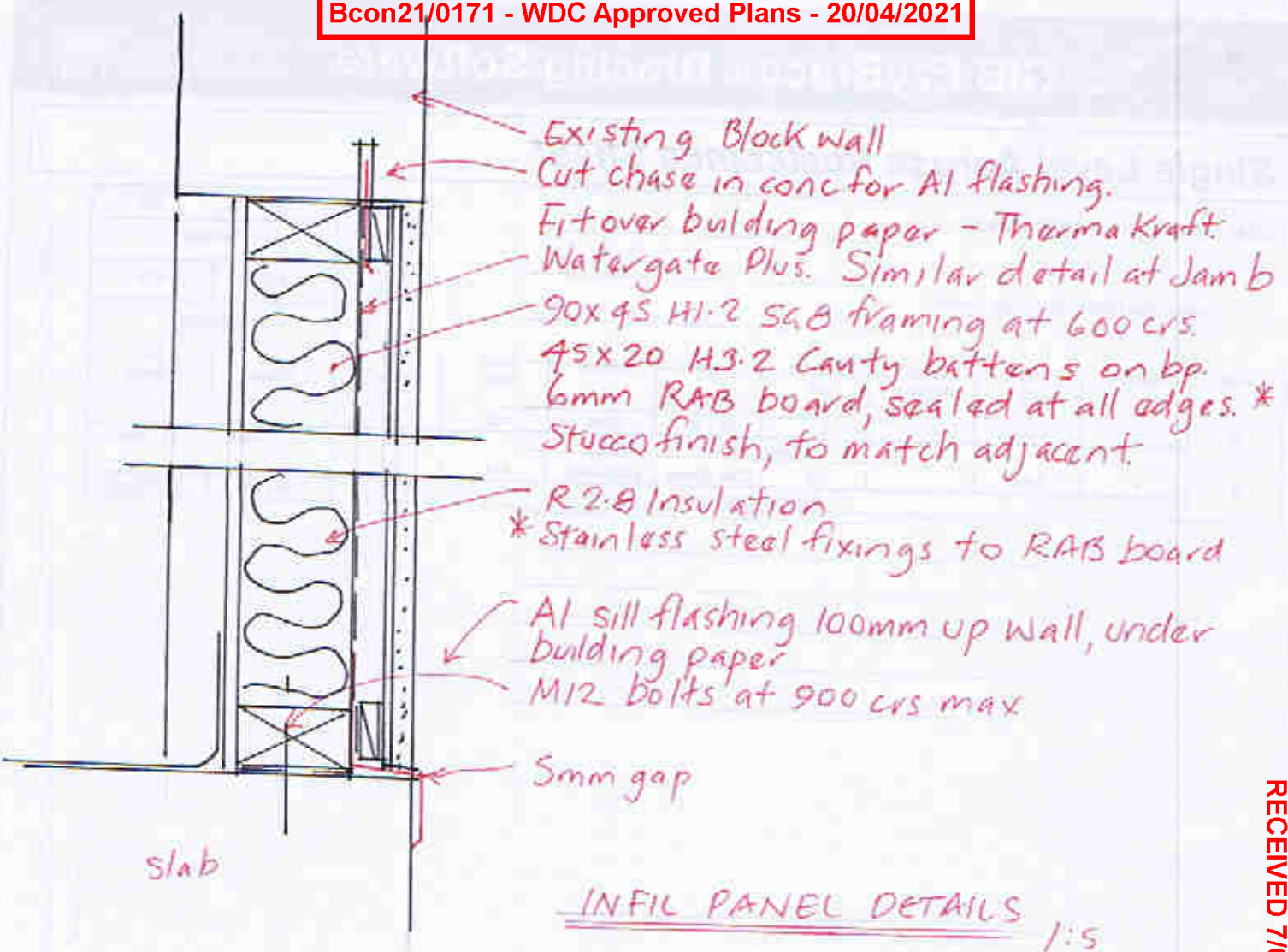
RECEIVED 7/04/2021

EXISTING PLAN 1:50

JLR 1.9.21

160 CORNFOT ST
WHANGANUI

SHEET 4



RECEIVED 7/04/2021

160 CORNFOT ST

SHEET 5



External Moisture Risk Matrix

Project Name / Facade ID: 160 Cornfoot St, Whanganui

Wall type:

- ☐ Parapet or enclosed balustrade
☒ Other

Risk Scores		Low	Medium	High	Very High
A. Wind Zone:		☐ Low = 0	☐ Medium = 0	☒ High = 1	☐ Very High = 2 ☐ Extra High = 2
B. Number of Storeys:	+	☒ Low = 0	☐ Medium = 1	☐ High = 2	☐ Very High = 4
C. Roof/Wall Intersection Design:	+	☒ Low = 0	☐ Medium = 1	☐ High = 3	☐ Very High = 5
D. Eaves Width:	+	☐ Low = 0	☒ Medium = 1	☐ High = 2	☐ Very High = 5
E. Envelope Complexity:	+	☒ Low = 0	☐ Medium = 1	☐ High = 3	☐ Very High = 6
F. Deck Design:	+	☒ Low = 0	☐ Medium = 2	☐ High = 4	☐ Very High = 6

Total Risk Score: **2**

low risk 0 up to 6	medium risk 7 up to 12	high risk 13 up to 20	very high risk over 20
-----------------------	---------------------------	--------------------------	---------------------------

this wall

Display Results Table

Download Results Table (HTML)

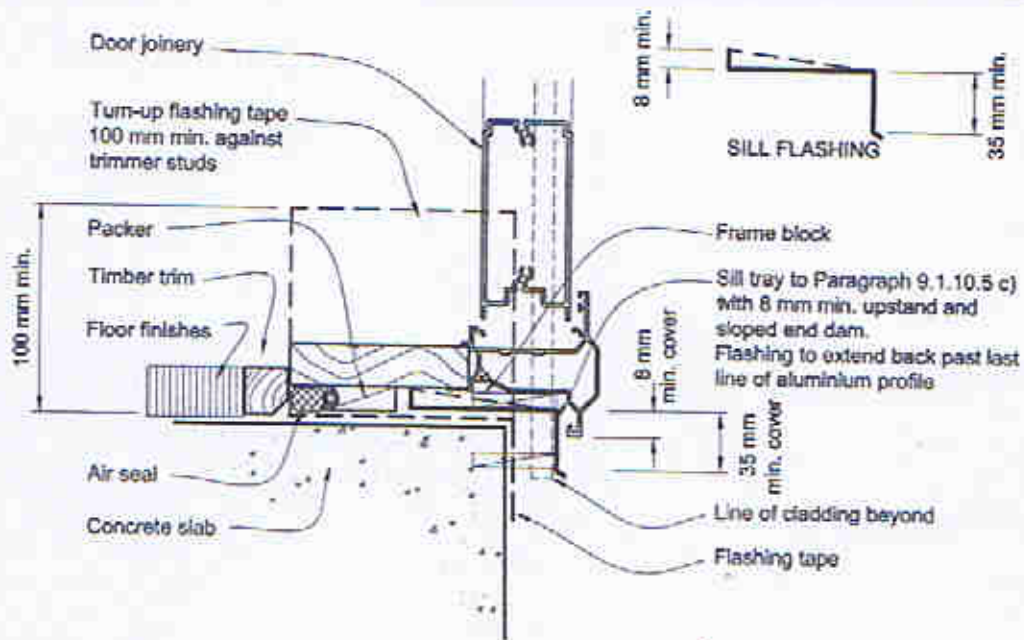
This wall can use any of the wall cladding types which have a green tick ☒. Claddings with red crosses ☒ are not permitted under the Acceptable Solution E2/AS1.

Direct fixed to framing	Over nominal 20 mm drained cavity
☒ Timber weatherboard - all types ☒ Timber weatherboard - bevel backed ☒ Fibre cement weatherboards ☒ Vertical profiled metal - corrugated and symmetrical trapezoidal ☒ Vertical profiled metal - corrugated only ☒ Vertical timber board and batten ☒ Fibre cement sheet jointed finish (except stucco over fibre cement backing) ☒ Plywood sheet ☒ EIFS	☒ Masonry veneer ☒ Stucco ☒ Horizontal profiled metal - corrugated and trapezoidal only ☒ Rusticated weatherboards ☒ Fibre cement weatherboards ☒ Fibre cement sheet - flush finish ☒ Fibre cement sheet - jointed finish ☒ Plywood sheet ☒ EIFS ☒ Bevel backed weatherboards

This table is based on Table 3 of E2/AS1. The claddings which have not received a green tick should not be used in this situation.

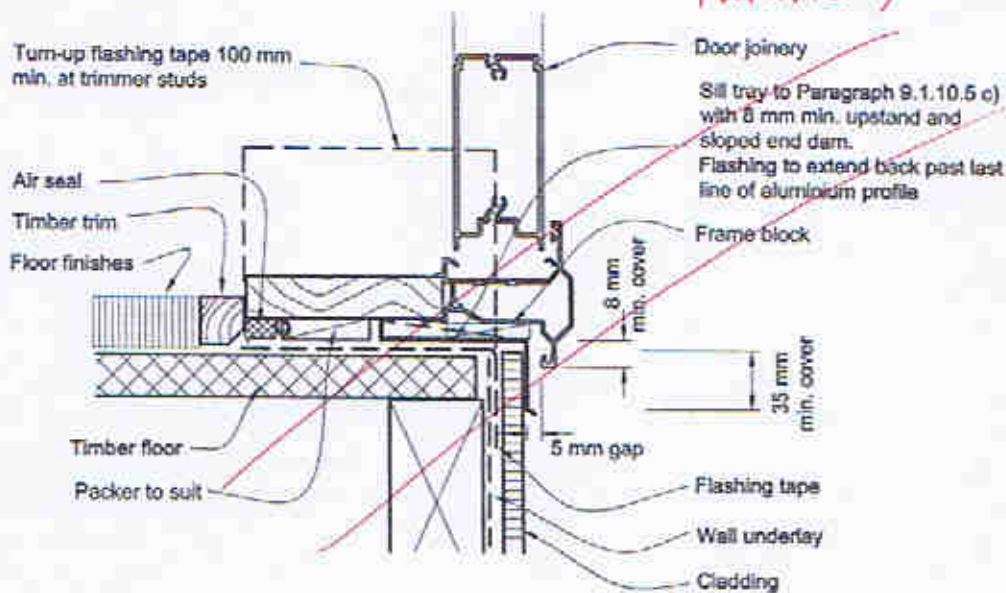
RECEIVED 7/04/2021

Figure 17D: Door sills for direct fix
Paragraph 9.1.10.5, Figures 81, 82, 83, 84, 90, 95 and 175



(a) CONCRETE SLAB

(Concrete Foundation at Penmeter)



(b) TIMBER FLOOR

Amend 3
Aug 2011

RECEIVED 7/04/2021

COMMENT:

Sloped heads require specifically designed kick-out flashings at bottom edges of head flashings.

Where width outlined in Paragraph 9.1.10.1 are beyond the limits for sill and head trimmer framing in NZS 3604 specific engineering design of the framing is required.

Certain aluminium joinery sections and installation requirements may not be able to meet the details of this Acceptable Solution, especially in regard to window facing cover, sill support, window fixing, and sill flashing requirements. The window details in these cases require specific design.

Amend 5
Aug 2011

9.1.10.2 Treatment of opening

- Treatment of the window openings for *direct fixed wall claddings* shall be as shown in Figure 72A.
- For *direct fixed claddings*, windows and doors shall have a 5 mm stand-off of the flange to the *cladding* to allow for air intrusion to the trim cavity for pressure equalisation. Note that this gap is sealed or trimmed down the jambs, but left open along the sill.
- Window openings for *wall claddings over drained cavities* shall be as shown in Figure 72B. Note there shall be no *sill flashing*.
- For *cavity fixed claddings*, windows and doors shall finish against the *cladding*, except for flat fibre cement and ply *claddings* that require a 5 mm stand-off to allow for sealant weather seals between facings and *cladding* – eg, Figure 116.
- Materials for *flashings* shall be selected from Paragraph 4.0, Table 7, and Table 20.

9.1.10.3 Window and door heads

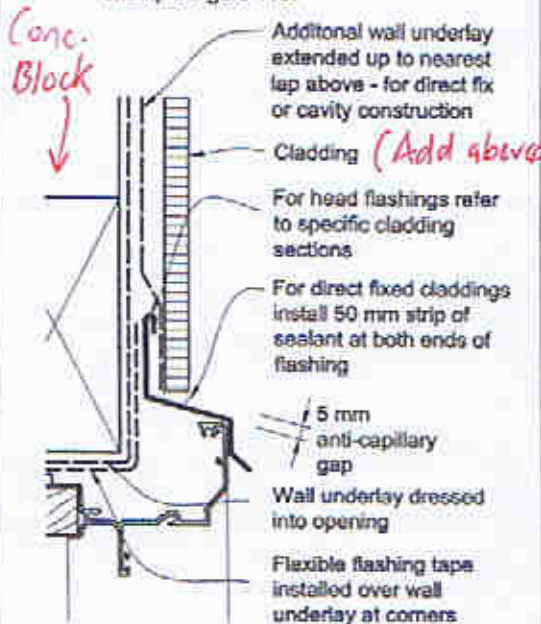
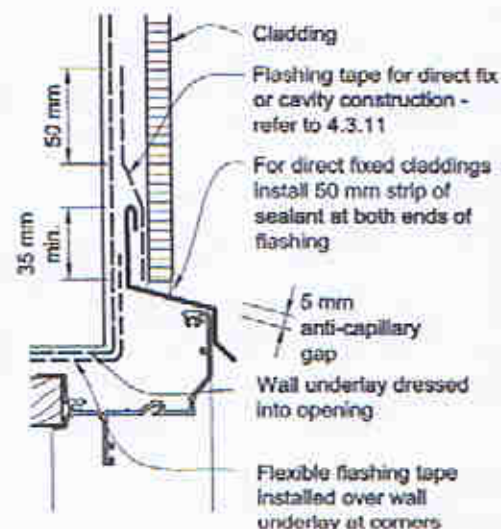
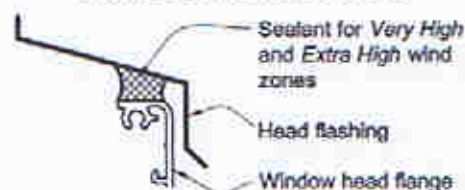
Windows and doors shall include head flashings, finished to the *wall underlay* as shown in Figure 71, by either using *flexible flashing tape*, or lapping an additional layer of *wall underlay* over the upstand. The additional *wall underlay* shall extend to the top of the wall, or to the nearest lap above, and be lapped under the top layer.

Amend 5
Aug 2011

Figure 71: General sealing of head flashing

Paragraphs 9.1.7, 9.1.10.3 and 9.1.10.4

NOTE: May also use wall underlay lapped over flashing upstand in lieu of flexible flashing tape. Refer cladding window details, for example Figure 115.

**(a) METAL HEAD FLASHING - WITH ADDITIONAL UNDERLAY OPTION****(b) METAL HEAD FLASHING WITH FLASHING TAPE OPTION****(c) METAL HEAD FLASHING SEALANT FOR VERY HIGH AND EXTRA HIGH WIND ZONES**

Amend 5
Aug 2011

RECEIVED 7/04/2021

9.1.10.7 Closed cell foam tape

Compressible foam tape shown behind window facings and cladding joints shall be closed cell PVC foam, with:

- Hardness 55-60 to ASTM D2240 Scale OO,
- Grade VE-43 to ASTM D1667,
- Compression set of 20% maximum to ASTM D1667, and
- UV weathering in UV Weatherometer for 1500 light hours to ASTM G154 or ASTM G155 with no visible deterioration in appearance.

9.1.10.8 Attachments for windows and doors

Install windows and doors using pairs of minimum 75 x 3.15 galvanised joist head nails or 8 gauge x 65 mm stainless steel screws, through reveals into surrounding framing at:

- Maximum 450 mm centres along sills, jambs and heads, and
- Maximum 150 mm from reveal ends.

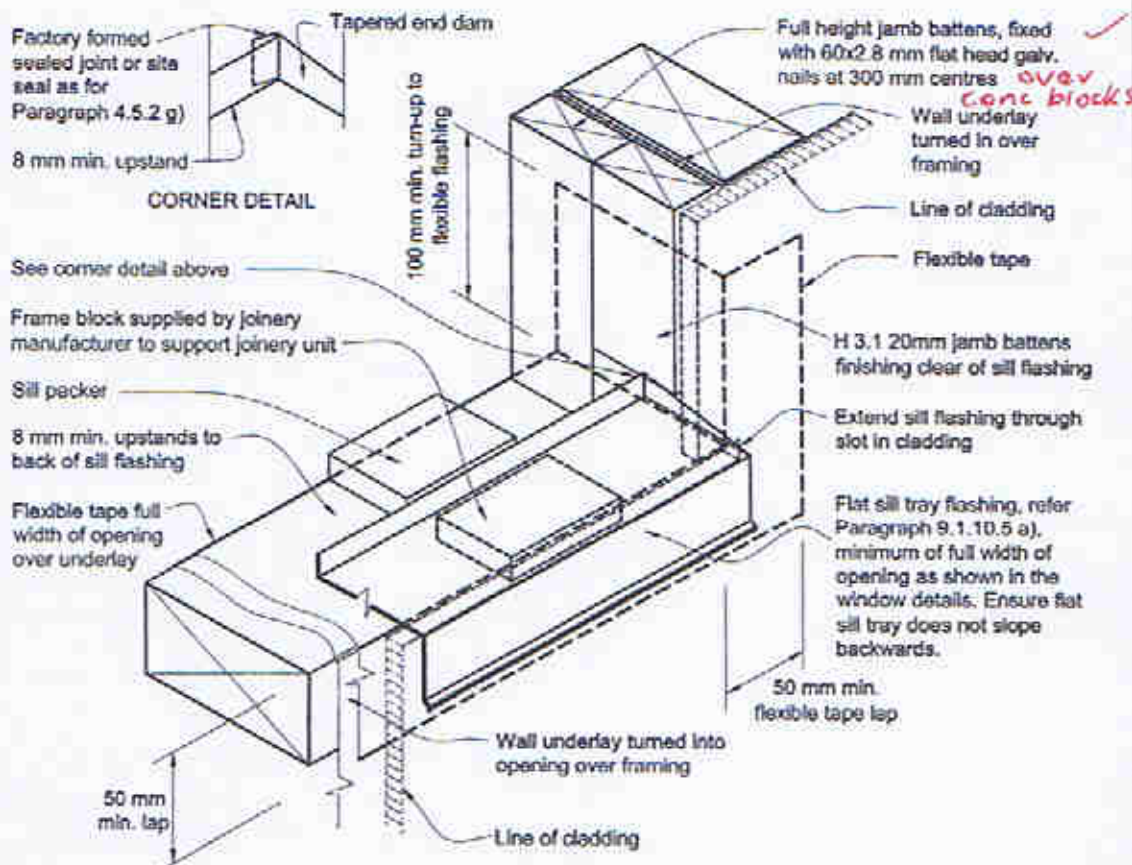
Install packers between reveals and framing at all fixing points, except between head reveals and lintels.

Amend 5
Aug 2011

Figure 72A: General window and door opening for direct fixed
Paragraphs 9.1 & 9.1.10.2; Figures B1, B2, B3, B4, B5, B6 and F16

NOTE:

- Detailed cladding omitted for clarity, refer to specific claddings.
- Sill flashing shall extend back past the condensation channel of the window.
- Head to be treated similarly with continuous building underlay and flexible tape at corners.
- Refer individual cladding details for jamb flashings and sill tray return requirements



Errata 2
Dec 2011

RECEIVED 7/04/2021

Amend 5
Aug 2011

GIB EzyBrace® Bracing Software



Demand Calculation Sheet

Job Details

Name:	Gareth Davis
Street and Number:	160 Cornfoot St
Lot and DP Number	
City/Town/District	Whanganui
Designer	Jim Richardson
Company	Design Lines 2000 Ltd
Date	1.4.21

Building Specification

Number of Storeys	1
Floor Loading	2 kPa
Foundation Type	Subfloor
Subfloor Cladding Weight	Light
	Single
Cladding Weight	Light
Roof Weight	Light
Room in Roof Space	No
Roof Pitch (degrees)	22.5
Roof Height above Eaves (m)	1.6
Building Height to Apex (m)	4.3
Ground to Lower Floor (m)	0.5
Average Stud Height (m)	2.4
Building Length (m)	8.8
Building Width (m)	8.8
Building Plan Area (m²)	78

Building Location

Wind Zone = High

Earthquake Zone 2

Soil Type:

D & E (Deep to Very Soft)

Annual Prob. of Exceedance:

1 in 500 (Default)

Bracing Units required for Wind

	Along	Across
Single Level	373	317
Subfloor Level	865	601

Bracing Units required for Earthquake

	Along & Across
Single Level	618
Subfloor Level	785

RECEIVED 7/04/2021

GIB EzyBrace® Bracing Software



Single Level Along Resistance Sheet

Job Name: Gareth Davis

Timber Floor Limit of 120 BU's/m Applied

									Wind	EQ
									Demand	
									373	818
									Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht (m)	Type	Supplier	Wind BU's	EQ BU's	682 177%	654 106%
a	1	3.80		2.4	Conc Blocks	Block Wall	160	160		
	External Length =						8.8		160 OK	160 OK
b	1	2.00		2.4	Conc Blocks	Block Wall	84	84		
	2	2.40		2.4	Conc Blocks	Block Wall	101	101		
	3	1.10		2.4	GS1-N	GIB®	74	66		
	External Length =						8.8		259 OK	251 OK
c	1	3.70		2.4	Conc Blocks	Block Wall	155	155		
	2	2.10		2.4	Conc Blocks	Block Wall	88	88		
	External Length =						8.8		244 OK	244 OK

RECEIVED 7/04/2021

GIB EzyBrace® Bracing Software



Single Level Across Resistance Sheet

Job Name: Gareth Davis

Timber Floor Limit of 120 BU/m Applied

Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind BUs	EQ BUs	Wind	EQ
									Demand	
m	1	0.90		2.4	BL1-H	GIB®	102	92	317	618
	External Length = 8.8									
									253 Check	243 Check
n	1	3.60		2.4	Conc Blocks	Block Wall	151	151		
	External Length = 8.8								102 Check	92 Check
									151 OK	151 Check

RECEIVED 7/04/2021

GIB EzyBrace® Bracing Software



Custom Wall Elements

Supplier	System	Min. Length m	Wind BUs/m	EQ BUs/m
150 x 25 brace	Let in brace	2.4	40	40
90 x 45 brace	cut between	2.4	40	40
strap brace	nail on strap	2.4	60	60
Dogleg Brace	Dog Leg	06	15	15
Lath	& plaster	2.4	30	30
200 x 10 Horiz	sarking	2.4	20	20
140 x 20 Bevel	B B weatherbd	2.4	5	5
3mm Hardbd	Hardboard	1.2	25	25
Horiz Corr	Horiz Corr	2.4	35	35
Vert Corr	Vert Corr	2.4	25	25
Block Wall	Conc Blocks	2	42	42
Old Gib	Old Gib	1.2	15	15
Old Gib 2	Old Gib-2 sides	1.2	40	40

Custom Subfloor Elements

Supplier	System	Min. Length m	Wind BUs or BUs/m	EQ BUs or BUs/m

RECEIVED 7/04/2021



GIB EzyBrace® Systems specification GS1-N

Specification code	Minimum length (m)	Lining requirement
GS1-N	0.4	Any 10mm or 13mm GIB® Standard plasterboard to one side only

WALL FRAMING

Wall framing to comply with;

- NZBC B1 – Structure B1/AS1 Clause 3 Timber (NZS 3604:2011).
- NZBC B2 – Durability B2/AS1 Clause 3.2 Timber (NZS 3602).

Framing dimensions and height as determined by NZS 3604:2011 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING

Timber floor

Pairs of hand driven 100 x 3.75mm nails at 600mm centres, or three power driven 90 x 3.15mm nails at 600mm centres.

Concrete floor

Internal Wall Bracing Lines: In accordance with the requirements of NZS 3604:2011 for internal wall plate fixing or 75 x 3.8mm shot fired fasteners with 16mm discs spaced at 150mm and 300mm from end studs and 600mm centres thereafter.

External Wall Bracing Lines: In accordance with the requirements of NZS 3604:2011 for external wall bottom plate fixing.

WALL LINING

- Any 10mm or 13mm GIB® plasterboard lining.
- Sheets can be fixed vertically or horizontally.
- Sheet joints shall be touch fitted.
- Use full length sheets where possible.

PERMITTED ALTERNATIVES

For permitted GIB® plasterboard alternatives refer to p. 5 in GIB EzyBrace® Systems literature.

FASTENING THE LINING

Fasteners

32mm x 6g GIB® Grabber® High Thread Screws, 32mm x 7g GIB® Grabber® Dual Thread Screws or 30mm GIB® Nails. If using the GIBFix® Angle use only 32mm x 7g GIB® Grabber® Dual Thread Screws.

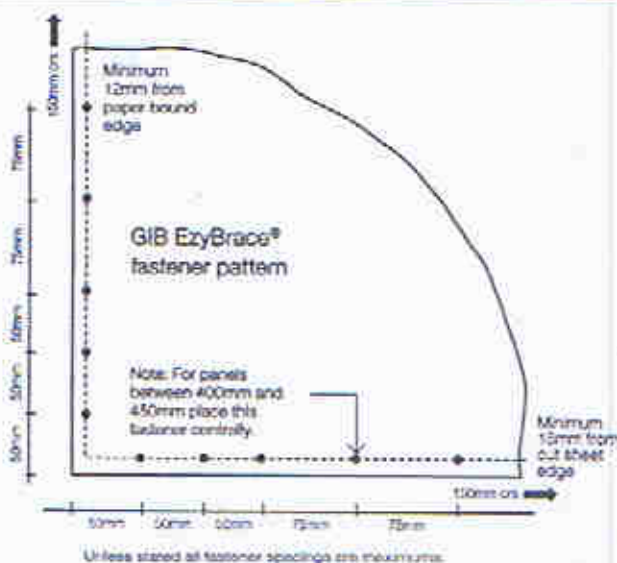
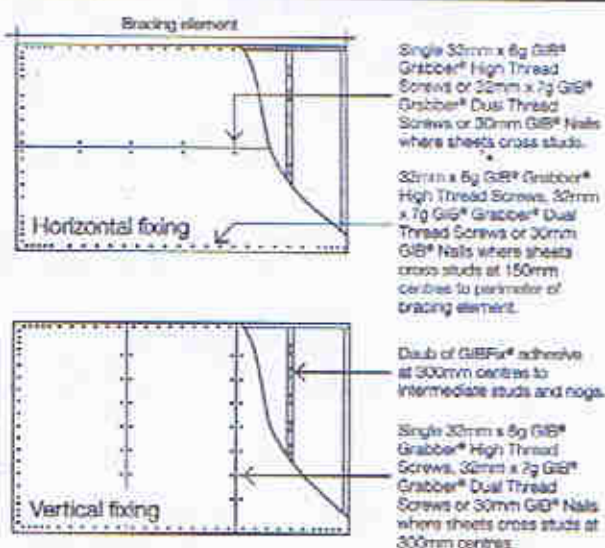
Fastener centres

50,100,150, 225, 300mm maximum from each corner and 150mm thereafter around the perimeter of the bracing element. For vertically fixed sheets place fasteners at 300mm maximum centres to intermediate sheet joints. For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud. Use daubs of GIBFix® adhesive at 300mm maximum centres to intermediate studs. Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

JOINTING

Joint strength is important in delivering bracing system performance. All fastener heads stopped and all sheet joints GIB® Joint Tape reinforced and stopped in accordance with the GIB® Site Guide.

RECEIVED 7/04/2021



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This specification sheet is issued in conjunction with the publication GIB EzyBrace® Systems



GIB EzyBrace® Systems specification BL1-H

Specification code	Minimum length (m)	Lining requirement	Other requirements
BL1-H	0.4	10mm or 13mm GIB Braceline® to one side only	Hold downs

WALL FRAMING

Wall framing to comply with:

- NZBC B1 – Structure B1/AS1 Clause 3 Timber (NZS 3604:2011).
- NZBC B2 – Durability B2/AS1 Clause 3.2 Timber (NZS 3602).

Framing dimensions and height as determined by NZS 3604:2011 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING

Timber floor

Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB EzyBrace® Systems or GIB® Site Guide.

Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or Three power driven 90 x 3.15mm nails at 600mm centres.

Concrete floor

Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB EzyBrace® Systems or GIB® Site Guide. Within the length of the bracing element bottom plates are to be fixed in accordance with the requirements of NZS 3604:2011.

WALL LINING

- A layer of 10mm or 13mm GIB Braceline®
- Sheets can be fixed vertically or horizontally.
- Sheet joints shall be touch fitted.
- Use full length sheets where possible.

PERMITTED ALTERNATIVES

For permitted GIB® plasterboard alternatives refer to p. 5 in GIB EzyBrace® Systems literature.

FASTENING THE LINING

Fasteners

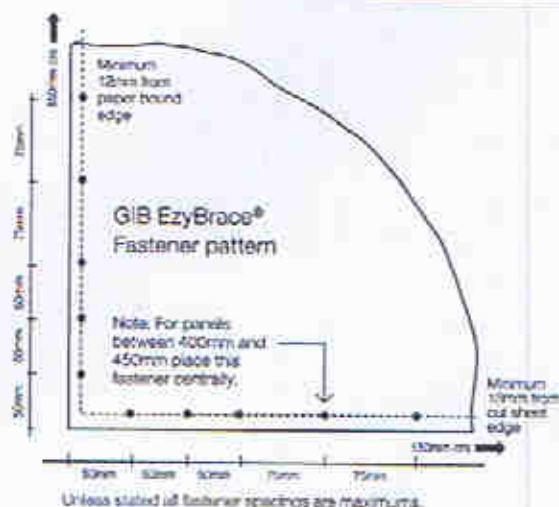
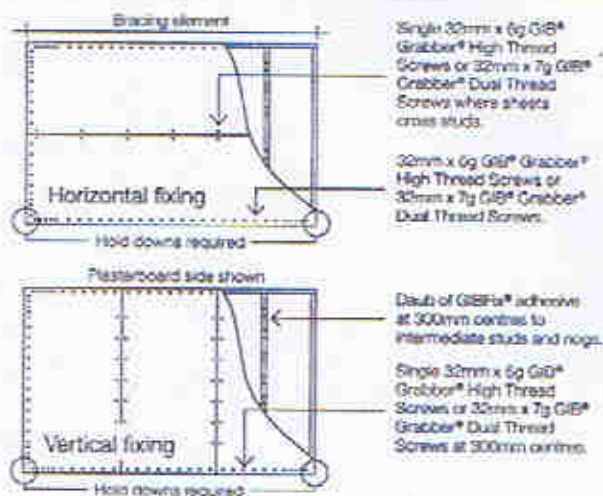
32mm x 6g GIB® Grabber® High Thread Screws or 32mm x 7g GIB® Grabber® Dual Thread Screws. If using the GIBFix® Framing System or if fastening through GIBFix® Angles use only 32mm x 7g GIB® Grabber® Dual Thread Screws.

Fastener centres

50,100,150, 225, 300mm from maximum each corner and 150mm thereafter around the perimeter of the bracing element. For vertically fixed sheets place fasteners at 300mm maximum centres to the sheet joint. For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud. Use daubs of GIBFix® adhesive at 300mm maximum centres to intermediate studs. Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

JOINTING

Joint strength is important in delivering bracing system performance. All fastener heads stopped and all sheet joints GIB® Joint Tape reinforced and stopped in accordance with the GIB® Site Guide.



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This specification sheet is issued in conjunction with the publication GIB EzyBrace® Systems.

DESIGN CERTIFICATE

Technical basis for structural design methodology contained in designIT for houses - New Zealand

designIT for houses, New Zealand has been developed by experienced timber engineers to assist designers in selecting appropriate sizes of structural laminated veneer lumber products manufactured by Carter Holt Harvey LVL Limited (including hySPAN, hy90, hyONE and hyJOIST) and other generic stress grades of timber, to be used as structural elements for the construction of buildings that fall within the scope of NZS 3604.

The design methodology used for the software complies with the loading and general design requirements contained within AS/NZS 1170 and with timber structural design in accordance with NZS 3603:1993 including Amendment 4 (Verification method B1/VM1, 6.1).

designIT relies on the accurate input of span and loading information by the user. Where accurate inputs are submitted the product and/or stress grade and the size given will comply with the structural requirements of the New Zealand Building Code (NZBC), provided the installation is in accordance with the installation requirements provided by designIT and/or in product literature and/or NZS 3604, or specific engineering design, as appropriate.

Futurebuild LVL and SG6 components, when used and treated to the required treatment levels prescribed in NZS 3602 and NZS 3604, as modified by Acceptable Solution B2/AS1, will comply with the requirements of the NZBC (Acceptable Solution B2/AS1, 3.2).

References:

1. NZS 3603:1993 Timber Structures Standard.
2. NZS 3604:2011 Timber-framed buildings.
3. AS/NZS 1170:2002 Structural design actions, Parts 0 and 1.
4. AS/NZS 1170:2011 Structural design actions, Part 2: Wind actions.
5. AS/NZS 1170:2003 Structural design actions, Part 3: Snow and ice actions.
6. AS 1720.1:2010 Timber structures. Part 1: Design methods.
7. AS 1720.3:2016 Timber structures. Part 3: Design criteria for timber-framed residential buildings.

This Design Certificate, and any associated warranty/certification, is void where there has been substitution of alternate products not detailed within the Member Specification.

Version date: 3 February 2021

For further information or advice contact:

Carter Holt Harvey LVL Limited,
173 Captain Springs Road, Onehunga, Auckland
Telephone: 0800 808 131
Email: designit@futurebuild.co.nz
Web: <https://futurebuild.co.nz/>

Specifier details:

Specifier:	Jim Richardson
Business name:	Design Lines 2000 Ltd
Email:	jim.r@gmx.com

Project & site details:

Project:	160 Cornfoot St
Site address:	Whanganui
Design wind zone	High
Snow loading	Design snow zone: N0

MEMBER DESIGN DETAILS

Member 1

- | | |
|--------------------------------|-------------------------------------|
| 1) Member code and description | RB1 - Bressumer |
| 2) Date prepared | 27 March 2021 |
| 3) Serviceability criteria | AS 1720.1: 2010 and AS 1720.3: 2016 |

RECEIVED 7/04/2021

4) Design inputs

Span	5.0 m - single span
Roof load width 'RLW'	2.5 m
Roof type and mass	Light roof and ceiling - 40 kg/m ²

5) Member specification

Size, stress grade/product	Use 300 x 45 hySPAN
Material type	Structural Laminated Veneer Lumber to AS/NZS 4357

6) Serviceability

Load case	Limit ¹ on average deflection ²	Estimated average deflection ³	Rigidity ratio ⁴
Long term load - $G + \Psi_L Q^*$	16.7 mm	14.7 mm (long term)	1.1
Live load - $\Psi_S Q$	20.0 mm	3.8 mm	5.3
Live load - $\Psi_S Q$	20.0 mm	2.1 mm	9.3
Wind load - W_s	33.3 mm	11.4 mm	2.9

*Critical serviceability load case

See 'Notes for interpretation of serviceability data' at the end of this report

7) Reactions

Load case	k_1^1	Limit States Design Reaction ^{2,3}
1.35G	0.80	-4.1
1.2G + 1.5Q	0.80	-8.1
1.2G + W_u + $\Psi_c Q$	1.00	-8.2
0.9G + W_u	1.00	4.5

8) Installation requirements

- Provide at least 30 mm bearing at end supports

Notes for interpretation of serviceability data

- 'average deflection' is an engineering concept based upon a notional estimated load, notional member rigidity and, in some cases, an approximate model of material response to environmental conditions. These parameters are, 'standardised' in AS 1170 and AS 1720.
- Deflection is the flexural response to load 'out-of-level' measurements of installations are not necessarily deflections and can incorporate 'initial out-of-straightness', whether intended or not. Furthermore, loads can be higher/lower than the notional estimate and in any comparison with measured levels, material variability needs to also be considered. AS 1720 gives the following basis for estimation of upper bound deflections for various materials.

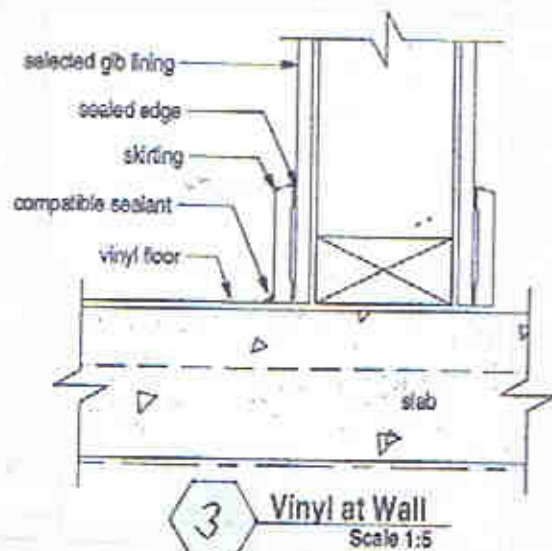
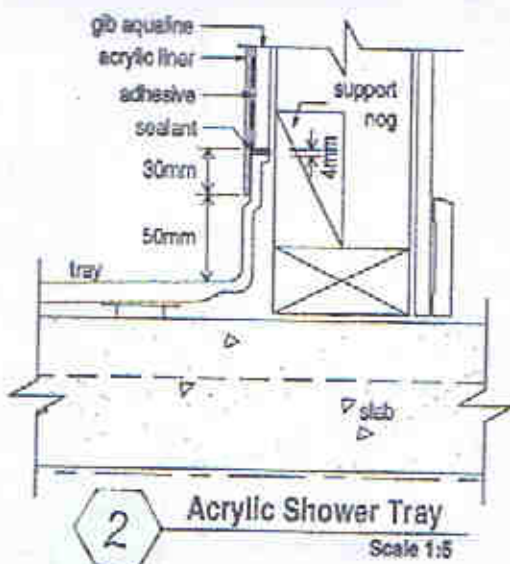
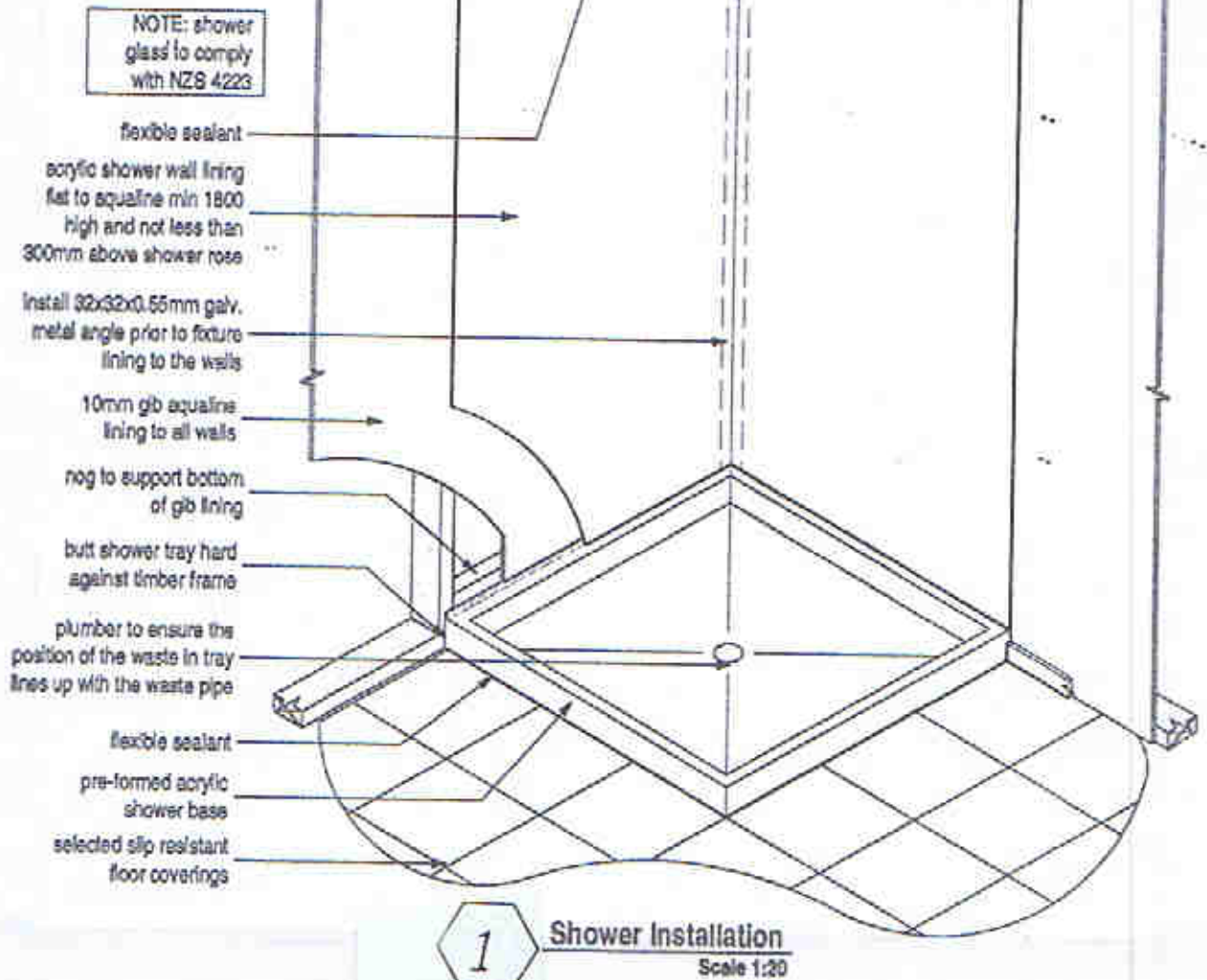
No 1 Framing - visually graded to NZS 3631	Average +100%
SG grades - mechanically graded to AS/NZS 1748	Average +43%
GL grades for glulam to AS 1328	Average +33%
LVL to AS/NZS 4357 (includes hySPAN and hyJOIST)	Average +18%

As can be seen, comparison of the 'average deflection' for different materials, even if calculated on the same basis, does not give the whole picture!

- The limits referred are those specified in AS 1720.3 for the stated load case.
- 'Rigidity ratio' expresses the rigidity of the specified beam relative to the rigidity of a notional beam just meeting the serviceability requirements detailed.

Notes for interpretation of reaction data

- Duration of load factor ' k_1 ' for strength as per NZS 3603:1993
- Negative (-) reactions relate to the 'gravity' or 'downwards' force on the support
- Positive reactions relate to the 'upwards' forces or 'tie-down' requirement on the support
- End reaction includes allowance for overhang/cantilever where one has been designed



PROPRIETARY SHOWER DETAILS

Easy Clean™ Trap

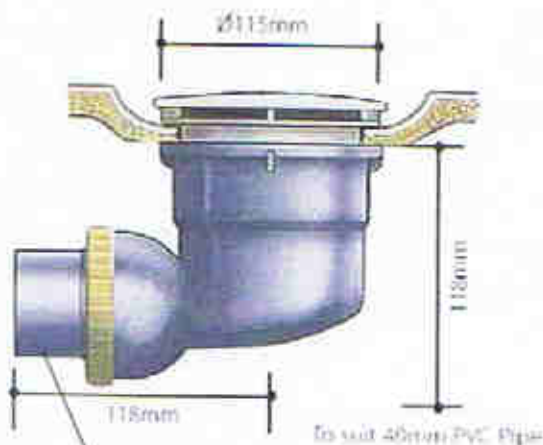
The lid and basket can be quickly removed, cleaned and clicked back into place. Complies with AS2887. Ideal for the Englefield Quick-Fit shower tray and has a water flow capacity of 52 litres/min.



Colour/Finish	White or Chrome waste lid
Size	40mm
Features	Removable Lid for easy cleaning Hard-wearing materials.

Product Code	Chrome	White
Easy Clean Trap	A0025-CP	A0025-C
Easy Clean Tie Trap	A0031-CP	A0031-C

Note *The Easy Clean Trap in Chrome is included with a complete shower enclosure purchase unless stated otherwise.



MINIMUM CONTINUOUS FALL OF 1.5° (25mm PER METRE)
FOR WASTE OUTLET PIPE TO ENSURE DRAINAGE.
AVOID BENDS OR RESTRICTIONS FOR 1.5 METRES FROM
TRAP OUTLET.

All measurements shown are in millimetres.
Sizes are approximate.
1163723-A04-B Dec 2012



Trusted in New Zealand Since 1982

New Zealand
133 Diane Drive, Glenfield, Auckland, New Zealand
PO Box 100-146 NSMC, Auckland, 0745
Ph: 0800 100 382 Fax: 0800 66 44 88
www.engagefield.co.nz

RECEIVED 7/04/2021

H1 Compliance Details**NZS4218:2004 Schedule Method Compliance**

The use of the Schedule Method is permitted.

In order to comply the R-values for all the construction elements must be the same or larger than the permitted minimum R-values. This design complies with the NZS4218:2004 Schedule Method.

Non-Solid Construction			
	Permitted Minimum	Proposed Minimum	
Floor:	1.3	R1.5	✓
Non-solid Walls:	1.9	2.4	✓
Glazing in Non-solid Walls:	0.26	0.26	✓
Roof:	2.9	3.2	✓
Skylights:	0.26		✓

If multiple solid wall types levels are used the table shows the requirements for the corresponding walls and windows in them. For solid timber and for other solid constructions two options are shown for each. But the components of these options can not be mixed, i.e. it is not permitted to use the solid timber wall R-value from option 1 and the solid timber window R-value from option 2.

RECEIVED 7/04/2021



FORM 7

CODE COMPLIANCE CERTIFICATE NUMBER BCon21/0171

Section 95(3), Building Act 2004

Mr GR Davis
222 Somme Parade
Aramoho
Whanganui 4500

**Building Consent
No:** BCon21/0171

Issue Date: 16/05/2023

The building:

Street address of building:	Legal description of land where building is located:
160 Cornfoot St WHANGANUI	LOT 415 DP 3060 0.0795 Ha
Building name:	Location of building within site/block number:
Level/unit number:	Current, lawfully established, use: [include number of occupants per level and per use if more than 1]
	Single Detached Residential
Year first constructed:	
1923	

The owner:

Name of Owner:	
Mr GR Davis	
Mailing address:	Street Address/registered Office:
222 Somme Parade Aramoho Whanganui 4500	222 Somme Parade Aramoho Whanganui 4500

Phone numbers:

Landline:	045288559	Mobile:	0274288559
Daytime:	0272367855	After hours:	
Facsimile number:			
Email address:		Website:	

First point of contact for communications with the building consent authority:

Contact Person:	
Design Lines 2000 Ltd	
Mailing address:	Street Address/registered Office:
167 Mount View Road, Bastia Hill, Whanganui 4500	167 Mount View Road, Bastia Hill, Whanganui 4500

Phone number:

Landline:		Mobile:	0274578390
Daytime:	063438101	After hours:	
Facsimile number:			
Email address:		Website:	

Building Work

Building consent number:	Issued by:
BCon21/0171	Whanganui District Council
Type of Work	
Single Detached Residential	
Description of Work	
Removing a wall, & doorway, adding a beam & walls.	
Intended Life	Estimated Value
Indefinite but not less than 50 years.	\$30000.00

Code compliance:

The building consent authority named below is satisfied, on reasonable grounds that the building work complies with the building consent.

*Compliance schedule

There are no specified systems in this building.

This is a final Code Compliance Certificate issued in respect of all of the building work under the above Building Consent.

Signed for and on behalf of the Whanganui District Council:



GJ Hoobin
Building Control Manager