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Project Details

Complete only if you have **not** applied separately for a project information memorandum.

A project involves the following matters, tick each as applicable, and attach relevant information in duplicate.

- A ☐ Location in relation to legal boundaries and external dimensions of new relocated, or altered buildings (site plan with elevations, topography, drawn to scale).
- B ☐ Details of any known or potential erosion, avulsion, falling debris, filled ground subsidence, slippage, alluvion, inundation, hazardous contaminants on or near the site.
- C ☐ Provisions to be made for vehicular access, including parking (to be shown on site plan).
- D ☐ Provisions to be in building over or adjacent to any road or public place.
- E ☐ Provisions to be made for disposing of storm water and wastewater (to be shown on site plan).
- F ☐ Precautions to be taken where building work is to take place over existing drains or sewers or in close proximity to wells or water mains.
- G ☐ New connections to public utilities, ie water supply, storm water system, wastewater system.
- H ☐ Provisions to be made in any demolition work for the protection of the public suppression of dust, suppression of noise, disposal of debris and disconnection from public utilities.
- I ☐ Details of any cultural or heritage significance of the building or building site, including whether its on a marae, or waahi tapu.
- J ☐ Copy or reference to, of any resource consent or planning approval for this project.
- K ☐ Details of volume of Proposed Excavations; include volumes for site preparation, basement and driveway.

Building Details

This application is accompanied by (tick each applicable, attach relevant documents in duplicate).

- A ☐ The drawings, specifications, and other documents according to which the building is proposed to be constructed to comply with the provisions of the new Zealand Building Code, with supporting documents, if any, including:
- B ☐ Building Certificates.
- C ☐ Producer Statements.
- D ☐ Reference to accreditation certificates issued by the Building Industry Authority.
- E ☐ Reference to determinations issued by the Building Industry Authority.



Application For A Building Consent

Section 33, Building Act 1991

Part A - General Detail

Owner

Contact (if not owner)

Name: <u>Tim Rordan</u>	Name:
Address: <u>190 MANCHESTER STREET</u> <u>FEILDING</u>	Address:
Telephone: <u>323-1092</u>	Telephone:
Fax: <u>025 544974</u>	Fax:

Project Location

Address: <u>LOT 2 WILLHART COURT.</u>	
Valuation No: <u>14091/24700</u>	Property ID: <u>5652 ' 11088</u>
Lot No: <u>2</u>	DP No: <u>74557</u>
Area: <u>325 m²</u>	Section:
Block:	SD:

Project

Description of Work: <u>BUILD DWELLING</u>		Building Use: <u>DWELLING</u>
Intended Use: <u>DWELLING</u>		Estimated Value: <u>\$100,000</u>
New Building ☒	Intended Life: ☒	
Alteration ☐	Indefinite, but not less than 50 years	
Relocation ☐	or specified as _____ years	
Demolition ☐	Floor Area: <u>112.891 m²</u>	

- ☐ Being Stage _____ of an intended _____ Stages
- ☐ Application for consent only, project information number _____
- ☒ Application for consent and project information memorandum
- ☐ Application for PIM only.

Signed by or on behalf of the Owner

Name: Tim Rordan Signature: [Signature]

Date: 2/11/98 Application No: _____

Part B

Designer(s)	
Name:	Ph No:.....
Address:	

Builder	
Name:	Ph No:.....
Address:	

Drainlayer	
Name:	Ph No:.....
Address:	

Plumber	
Name:	Ph No:.....
Address:	

Gasfitter	
Name:	Ph No:.....
Address:	

Electrician	
Name:	Ph No:.....
Address:	

Building Certifier	
Name:	Reg No:.....
Address:	
Ph No:	Fax No:.....
Certifying:	

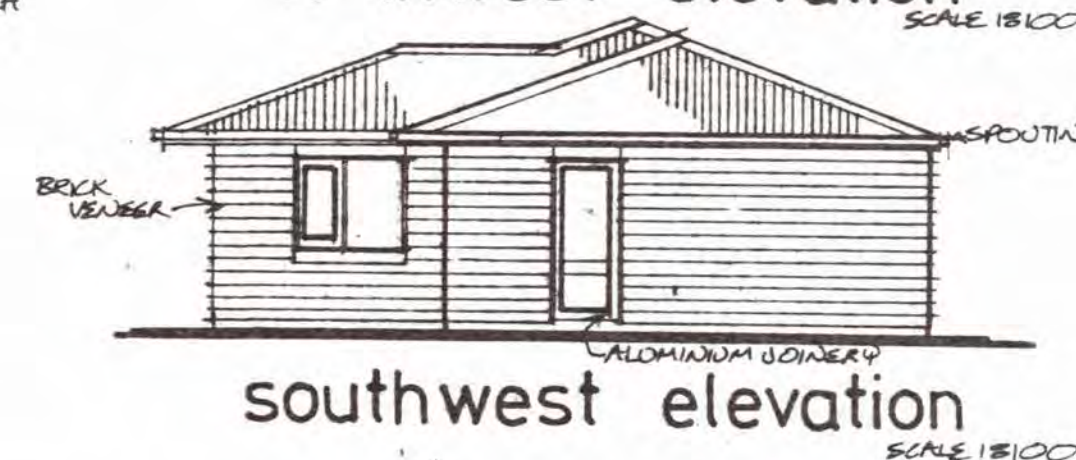
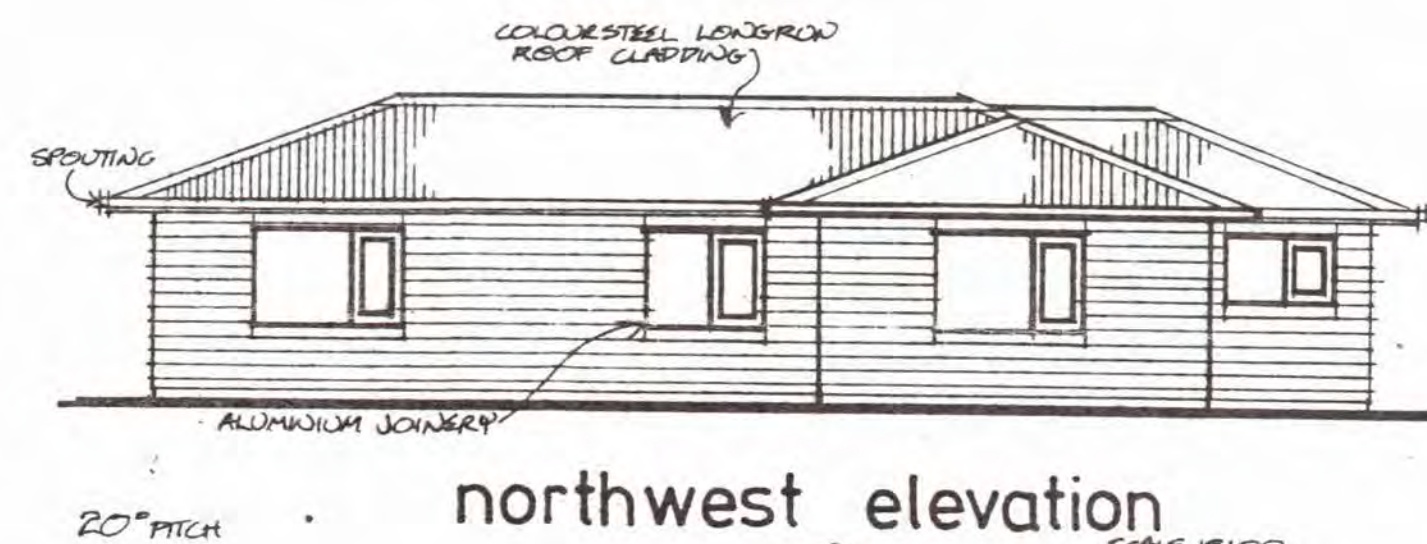
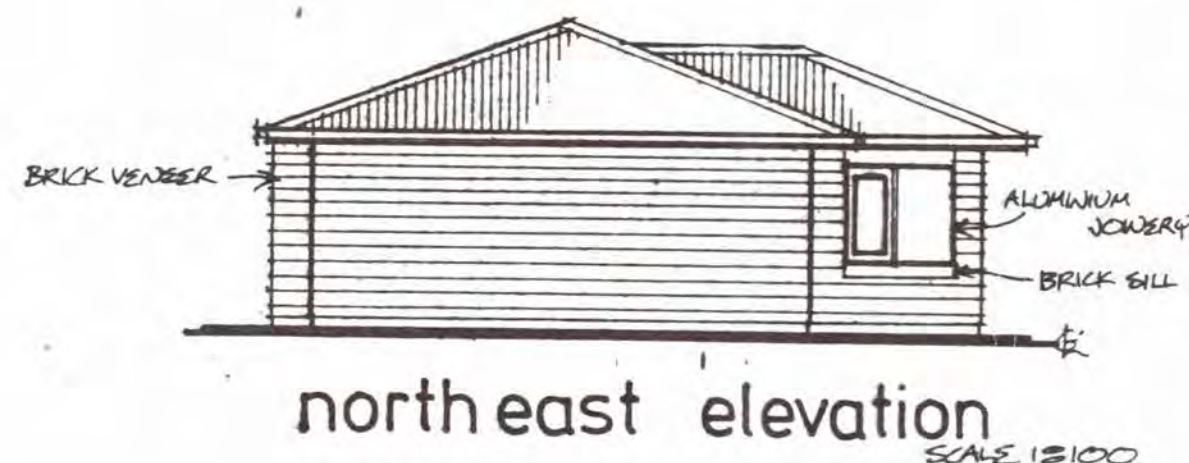
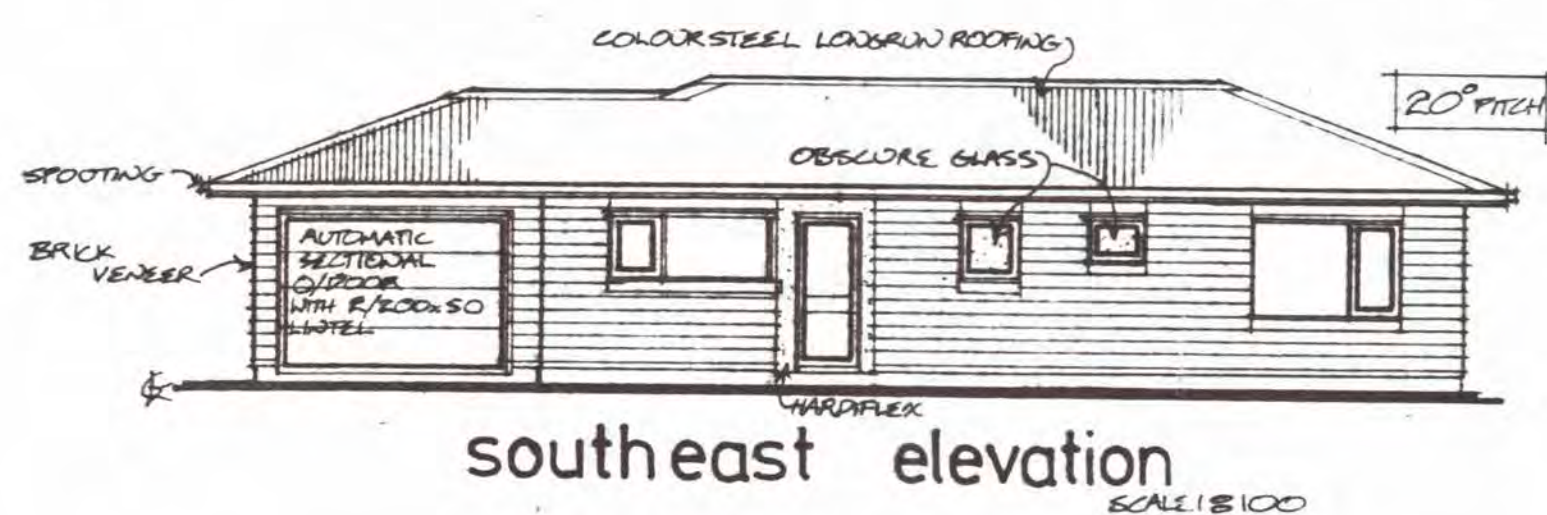
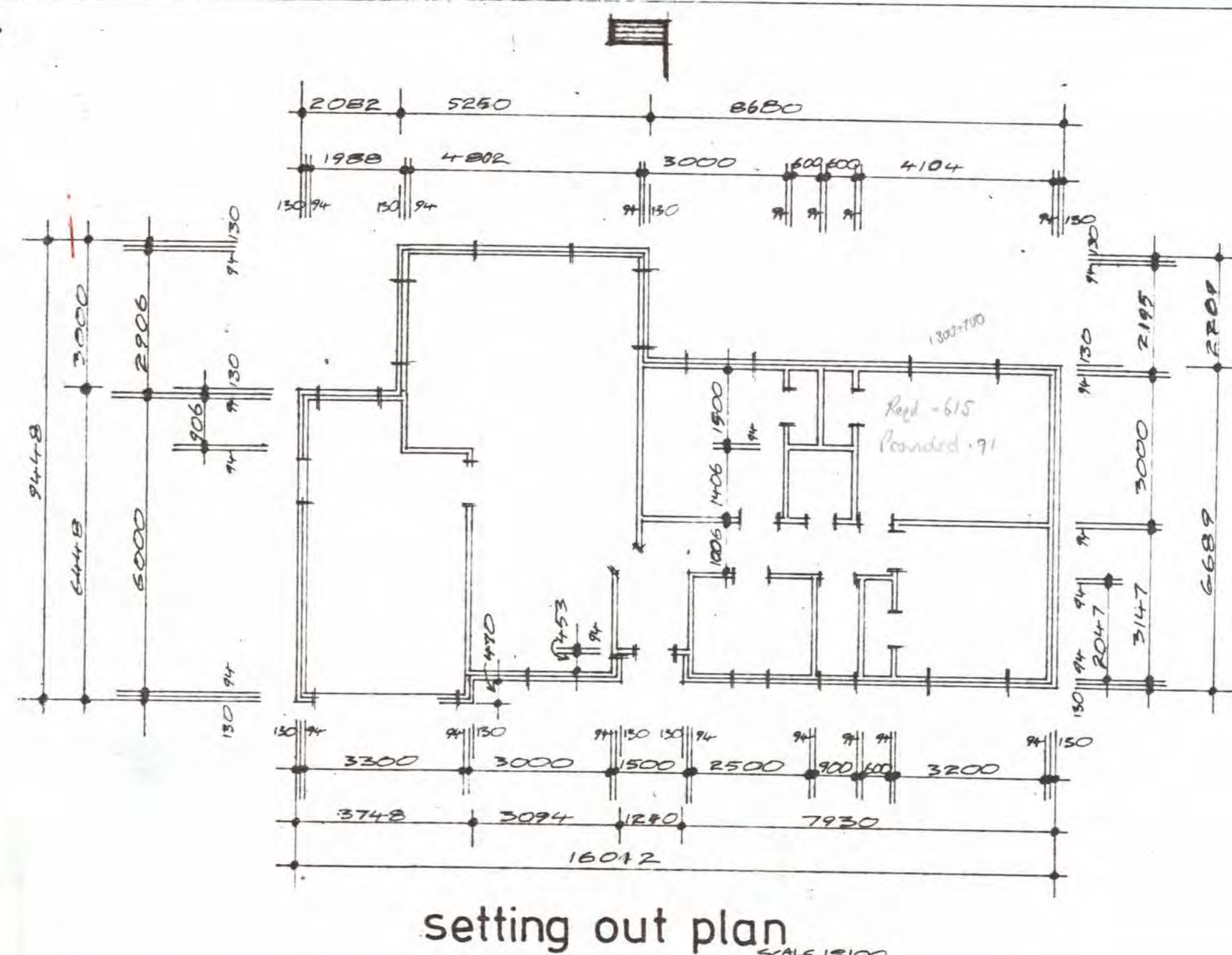
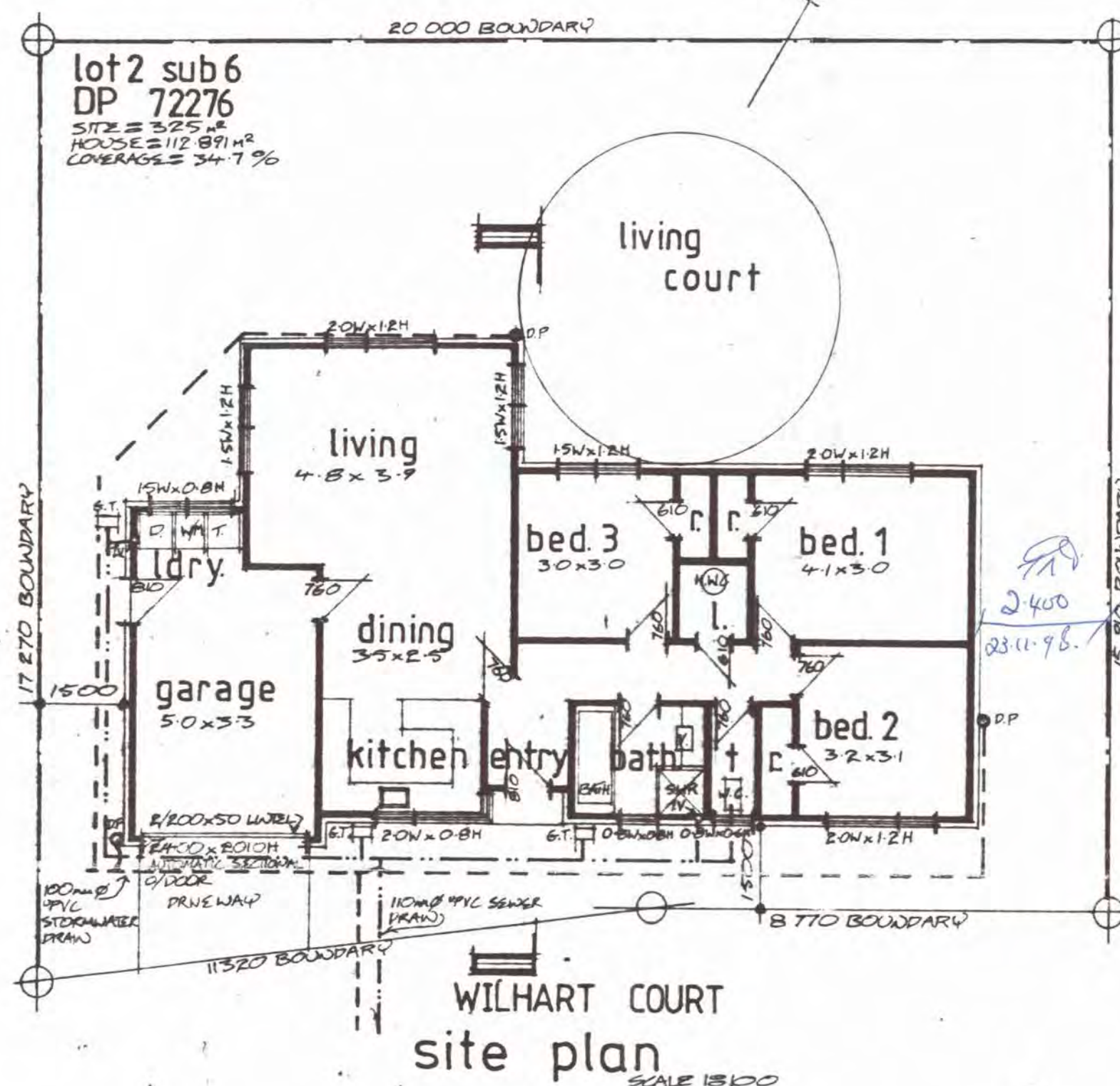
For Office Use Only

Fees Payable On Application

Building Consent	810.00
Motor Vehicle Crossing	
BRANZ Levy	100.00
BIA	65.00
Land Use Consent	
Reserves Contribution	
Street Deposit	
Water Connection	
Sewer Connection	
Storm Water Connection	
Total Amount Payable	\$ 975.00
Receipt Number	14722
Received	2-11-98

Amended Details Received

	To:	Details	From:
☐	Planning		
☐	Health		
☐	Water		
☐	Drainage		
☐	Plumbing & Drainage		
☐	Building		
☐	Structural		



ARCHITECTURAL DRAUGHTING PRACTICE LTD

house, WILHART COURT, Feilding

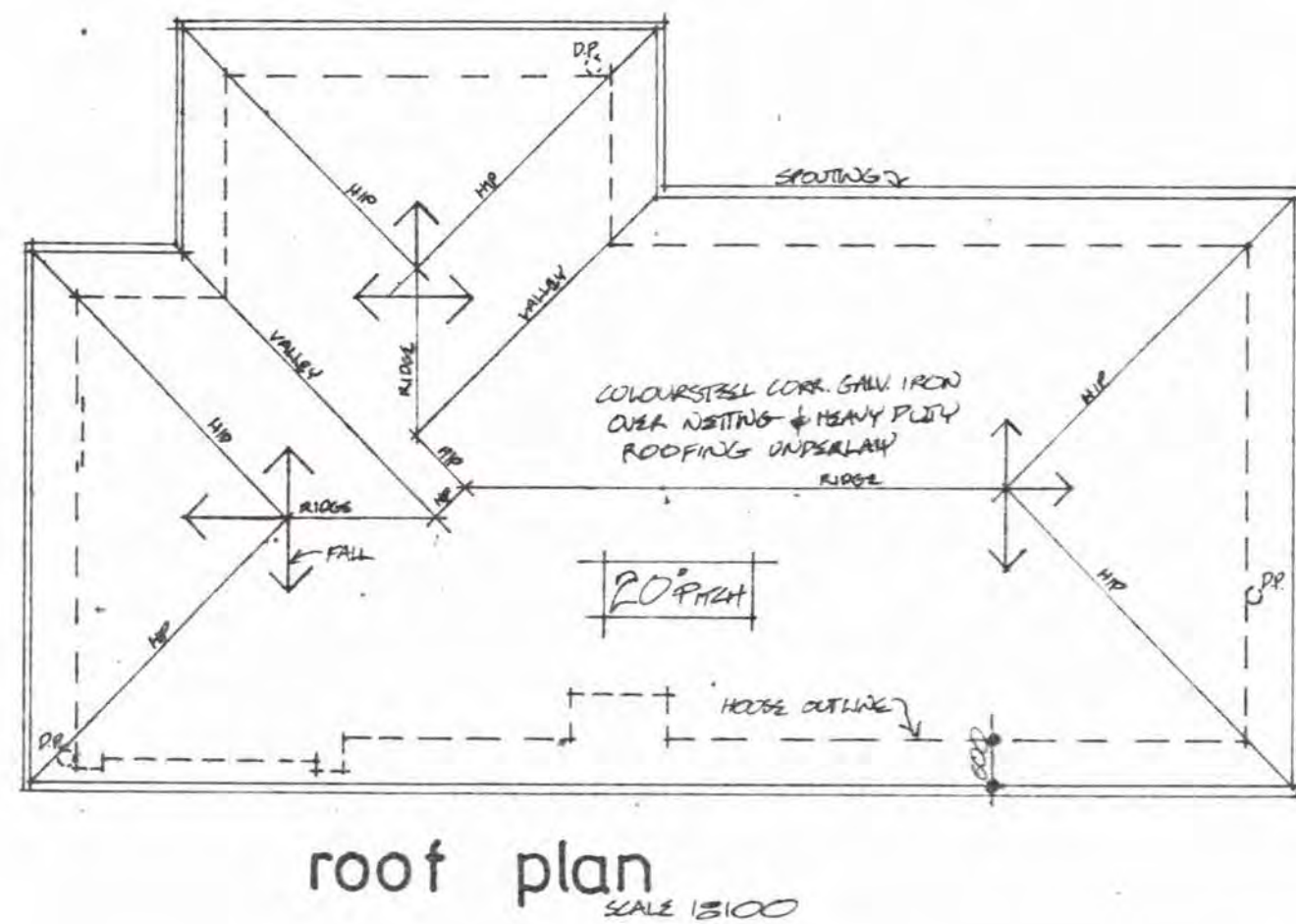
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Scale 1:500

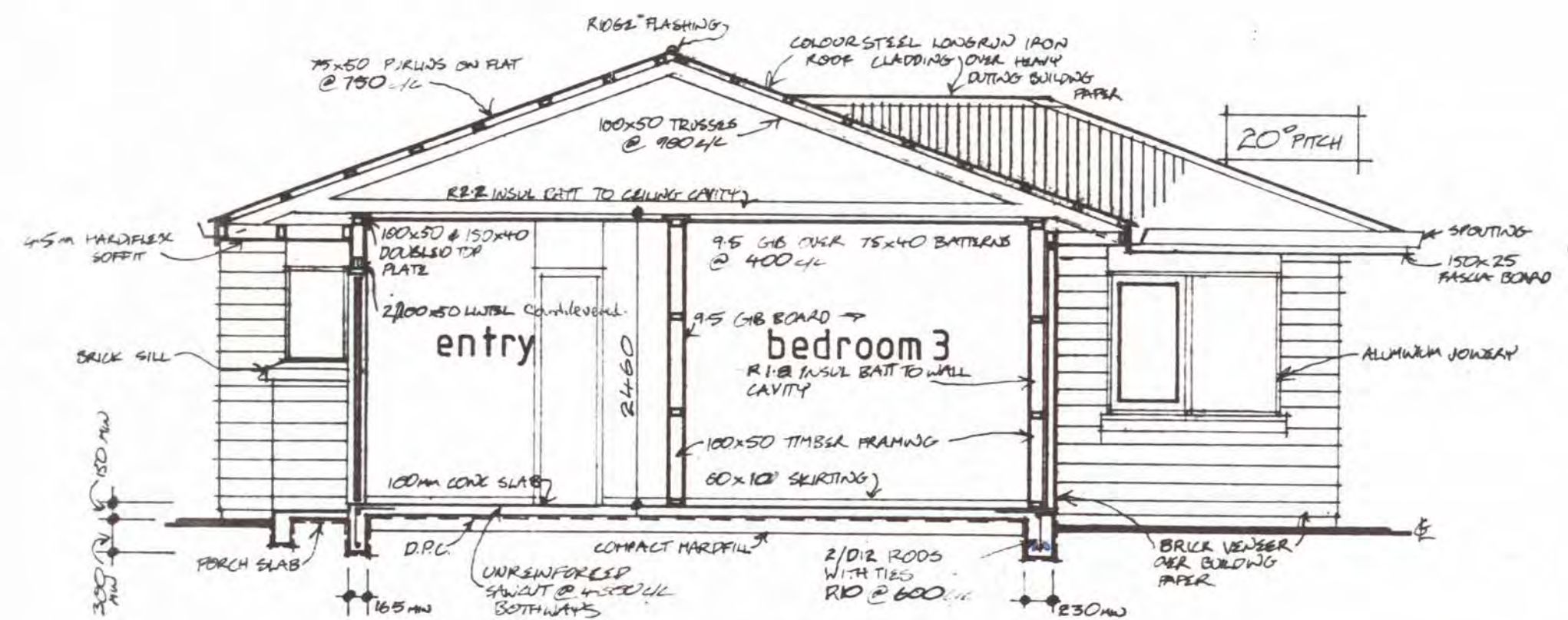
Date OCT 98

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5.11.98
Manawatu District Council
107283/1.



NOTE 3 CANTILEVER TRUSSES OVER GARAGE TO BE SPICED LARGER.



Foundation as inspected
23.11.98



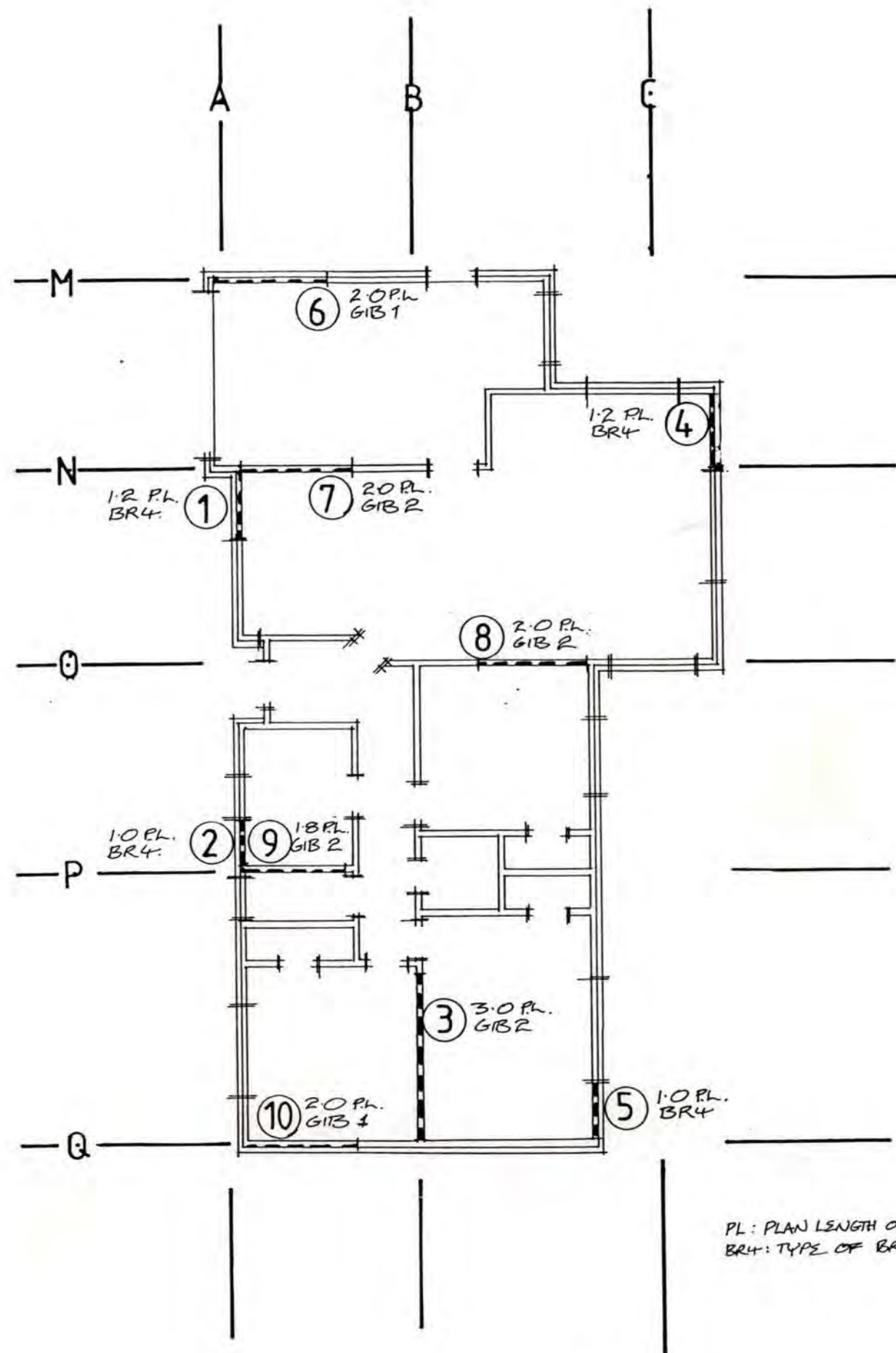
RIORDAN
ARCHITECTURAL DRAUGHTING PRACTICE LTD

house, WILHART COURT, Feilding
104 Cuba Street Palmerston North Phone 357-0103

Scale 1:100
1:250

Date OCT 98

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PL: PLAN LENGTH OF BRACING
BR4: TYPE OF BRACING.

bracing plan
SCALE 1:8100

RIORDAN

Please Photocopy

Wall Bracing Calculation Sheet B

Along

Wall or Bracing Line		Bracing Elements Provided			Wind		Earthquake	
1	2	3	4	5	6 W	7 W	6 E	7 E
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m E	BUs Achieved (BU/m x L) E
A	160.4	1	BR4	1.2	/	/	85	102
		2	"	1.0			"	85
B	70	3	GIB2	3.0			70	210
C	160.4	4	BR4	1.2			85	102
		5	"	1.0			"	85
D								
E								
Totals Achieved					W	/	E	584
From Sheet A Totals Required					W	311.78	E	519.29
Wreq/Ereq =					0.6			

*If Wreq/Ereq is 1 or less complete E column only
If Wreq/Ereq is 1.5 or more complete W column only
Otherwise complete both W and E

Across

Wall or Bracing Line		Bracing Elements Provided			Wind		Earthquake	
1	2	3	4	5	6 W	7 W	6 E	7 E
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m E	BUs Achieved (BU/m x L) E
M	94.48	6	GIB1	2.0	/	/	50	100
N	70	7	GIB2	2.0			60	120
O	70	8	GIB2	2.0			60	120
P	70	9	GIB2	1.8			60	108
Q	94.48	10	GIB1	2.0			50	100
Totals Achieved					W	/	E	548
From Sheet A Totals Required					W	449.18	E	519.29
Wreq/Ereq =					0.9			



INDEX

0.00	GENERAL
1.00	PRELIMINARY AND GENERAL
3.00	EXCAVATOR
4.00	CONCRETOR
8.00	CARPENTER
9.00	JOINER
10.00	BRICKLAYER
11.00	SOLID PLASTERER
12.00	ROOFER
13.00	PLUMBING AND DRAINLAYER
14.00	ELECTRICIAN
15.00	PAINTER AND PAPER HANGER

Tenders close at 104 Cuba Street at 4.00pm on

Tenders shall state approximate starting date and estimated length of contract.

All plans and specifications not returned shall be charged for.


5.10.98
 Manawatu District Council
107883/1.

0.01 GENERAL

Specification of work to be done and the materials to be used in the construction as per the Drawings.

The Specification is to be read in conjunction with the accompanying drawings and any other drawings which may be issued during the currency of the contract.

Any items in this Specifications and not shown on the drawings and vice versa shall be equally binding as though included in both.

0.02 VARIATIONS

Any additions, omissions or variations to the contract shall be authorised in writing and an agreed price stated before additional work is commenced.

0.03 FORM OF CONTRACT

The contractor shall provide a form of contract which is to be completed by all parties before the commencement of any work on the site.

0.04 SETTING OUT OF WORK.

The Contractor will be responsible for establishing the true Boundaries of the Site.

Boundary dimensions are to be checked at the time of setting out and any variations which occur shall be brought to the notice of the Owners before any further setting out takes place.

The Contractor will be required to make good at his own expense any error which may occur in the setting out of the work.

Figured dimensions are to be taken in preference to scale and must be checked by the Contractor to avoid the occurrence of error. Architectural Draughting Practice Ltd. will accept no responsibility for any errors that occur after work has commenced.

0.05 CONTRACT DOCUMENTS.

The Accompanying Drawings.

This Specification.

N.Z.S.S. No 1900 - All chapters as applicable.

N.Z.S. No 3604 - Code of Practice for light timber Framed Buildings.

N.Z.S. 4223 Code of Practice for Glazing.

The New Zealand Building Code.

The appropriate NEW ZEALAND STANDARDS.

PRELIMINARY & GENERAL

1.01 PERMITS

The Owners shall arrange to obtain all consents to build etc., arrange all inspections and pay all fees as required by the local authorities.

The Contractor shall notify the Building Certifier when inspections are required.

1.02 PROTECTION OF WORK.

All parts of the work liable to injury and all adjoining property, trees etc., are to be protected until completion of the contract.

1.03 P.C. SUMS (NETT SUMS)

The P.C. Sums quoted in this specification are nett and the contractor or sub-contractor concerned must add any cartage, fixing charges and profit he requires to all such items. All sums are exclusive of GST.

1.04 SITE

The site of the works is as shown on the site plan and the position will be pointed out to the tenderer, by the owner. Tenderers are advised to visit same and check the extent of work before submitting tender.

1.05 BY-LAWS

The whole of the work in this contract is to be carried out in strict accordance with the Local Authorities Regulations, and the New Zealand Building Code.

1.06 EXTENT OF WORK

The Contract comprises the erection and completion in the soundness and most workmanlike manner of all the work shown or reasonably implied on the accompanying drawings and in accordance with this specification and the supply of all plant, tools, labour, materials, fixtures and fittings required for the due completion of the work.

1.07 INSURANCE

The Contractor shall at all times, keep the whole of the works fully covered by Insurance. Fire, Earthquake, Public Liability, Workers Compensation etc., insurance shall be maintained during the total period of the contract until the building is taken over by the Owner or to date of practical completion.

1.08 MAINTENANCE

The Contractors shall maintain the property for a period of 30 days after completion and any damage done arising during that time through faulty workmanship or materials shall be made good at the Contractors expense

1.09 COMPLETION.

On completion, all trades debris is to be removed from the site and the building left clean and ready for occupancy, with all services and mechanical parts in good working order

1.10 CONTINGENCIES

Allow the sum of \$-----for contingencies. The whole or any amount remaining unspent at the completion of the contract shall be credited to the Owners.

1.11 FLUCTUATIONS

Should there be fluctuations in the costs of labour and materials during the agreed contract period, the contract sum shall be adjusted in accordance with the conditions of the contract.

1.12 FINISHING

Should any tradesman consider the work of other trades or the condition of any surface is not in a satisfactory state to ensure a proper finish for his work thereon, he shall notify the Contractor and shall not proceed with any work until the necessary alteration or improvement has been made.

Failing such notice the trade concerned will not be relieved of any responsibility for a poor result due to such unsatisfactory conditions. The Contractor shall draw the attention of sub-contractors and all persons in his control to this clause. Everything throughout the works shall be done and finished in a first class manner by experienced and skilled craftsmen.

1.13 TEMPORARY SERVICES

The Contractor shall arrange for all temporary services, and pay all fees in connection therewith and remove same on completion of Contract. Sheds, toilet, power, water, access to the building site, scaffolding etc.

1.14 DRAWINGS AND SPECIFICATION

This specification is to be read in conjunction with the plans, working drawings and any other detailed drawing which may be issued.

All figured dimensions shall be taken in preference to those scaled.

All detailed drawings shall supersede those to smaller scale.

If any error or inconsistency should appear in or between the drawings and specifications, the specification shall take precedence and such differences are to be referred to the owner for interpretation.

EXCAVATOR

3.01 PRELIMINARY

Refer to the Conditions of contract and the Preliminary and General clauses of this specification which shall apply to this section of the work

3.02 SITE

Remove all vegetation, rubbish, noxious and organic matter from the area to be built over. Level area and remove existing soil to the required level under the floor area, as shown on the drawings. Note: See foundation plan for minimum floor level.

3.03 FOUNDATIONS GENERALLY

Excavate as required for all foundation footings to the depths and dimensions shown on the drawings, or as requested by Structural Engineer. Minimum depth for all foundation footings 300mm below ground level or to solid bearing.

3.04 UNSTABLE GROUND

If unstable ground is found in the excavations, the trenches must be excavated to a solid bottom before concrete is placed. An extra will be allowed for such work as authorised.

3.05 BACK FILLING

All spaces excavated and not occupied by concrete shall be back-filled with approved materials. Such materials shall be thoroughly consolidated by ramming.

3.06 INSPECTION

The Engineer or Building Certifier shall inspect the excavations prior to concreting or backfilling. All foundation excavations to be checked for bearing by an Engineer or Building Certifier before placing of reinforcing or pouring of concrete.

3.07 MAINTENANCE OF EXCAVATION

The contractor shall provide all necessary shoring, strutting and planking to secure and maintain the sides of the excavation where necessary.

3.08 SURPLUS SOIL

Deposit the surplus excavated soil on the site as directed by the Owners.

3.09 FILLING UNDER SLABS

Granular filling shall be rounded gravel, crushed rock or scoria with not more than 5% passing a 2.2mm sieve and 100% passing a 37.5mm sieve for depths exceeding 150mm. All compacted in layers of 100mm thick so that the total thickness is not less than 100mm nor more than 300mm. Over compacted granular base lay a smooth-surfaced blinding not less than 5mm thick, of coarse sand, a sand cement slurry, or alternatively heavyweight paper.

3.10 VAPOUR BARRIER

Under all ground floor slabs lay D.P.C. of sheet Garnite 0.25mm black polythene film or "Moiststop" turned up or down at all walls, pipes, etc., and sealed with 50mm wide pressure sensitive plastic tape to give complete seal. Lap all sheets 150mm and seal as above. Every precaution must be taken to prevent film from damage of any kind and any puncture must be repaired before concrete is poured.

CONCRETOR

4.01 PRELIMINARY

Refer to the Conditions of contract and the Preliminary and General clauses of this specification which shall apply to this section of the work.

4.02 CONCRETE

Concrete to be pre-mixed with a minimum specified compressive strength test of 17.5 mpa after 28 days standard cured and shall be to the Requirements of N.Z.S. 3109 and N.Z.S. 3124.

4.03 FORMWORK

Formwork shall be erected and braced in such a manner that the concrete shall finish to the dimensions shown or specified. The formwork is to be hosed out and kept wet before and while the concrete is being placed.

4.04 FOUNDATION FOOTINGS

Construct the various footings as detailed on the drawings and reinforce as shown.

CARPENTER

8.01 PRELIMINARY

Refer to Conditions of Contract and the Preliminary and General clauses of this specification which shall apply to this section of the work.

8.02 GENERAL

All Materials, Workmanship and Construction are to be to the requirements of N.Z.S. 3604:1990, THE NEW ZEALAND BUILDING CODE and the appropriate N.Z. STANDARDS.

8.03 MATERIALS SCHEDULE

MATERIALS	SIZE	GRADE	REMARK
Wall plates	100 x 50mm	No 1 RPBT	Bolted down
Top plates	100 x 50mm	"	Long lengths
Bottom Plates	100 x 50mm	"	"
Studs	100 x 50mm	"	At 600 max c/c
Floor joists	x mm		At crs
Trimmer studs	See table 6.6 NZS 3604		
Lintels	See table 6.7 NZS 3604		
Dwangs	100 x 50mm	No 1 RPBT	2 rows to walls
Bracing	100 x 25mm	"	Check in flush
Bracing	Pryde Metal angle brace		
Bracing sheet	9.5mm braceline internally		
Bracing sheet	7.5mm standard construction	plywood externally	
Ceiling joists	100 x 50mm	No 1 RPBT	at 480 c/c
Ceiling bracing	100 x 50mm	"	at 400 c/c diagonal
Ceiling runners	See table 10.5 NZS 3604		
Ceiling battens	75 x 40mm	Douglas fir	at 400 c/c
Rafters	100 x 50mm	No 1 RPBT	at 900 c/c
Valley rafters	See table 10.3 NZS 3604		
Ridges and hips	200 x 25mm	No 1 RPBT	
Underpurlins	See table 10.6 NZS 3604		
Roof struts	100 x 50mm	No 1 RPBT	at 1800 c/c
Roof struts	100 x 75mm	"	"
Collar ties	150 x 25mm	No 1 RPBT	at 1800 c/c

Strutting beams	See table 10.7 NZS 3604		
Eaves framing	100 x 40mm	No 1 RPBT	
Skirtings	60 x 10mm	Customwood	Boric treated
Scribers	Standard	Cedar	
Interior door Frames	ex 30mm customwood 12mm stops		
Door frames	ex 30mm	Customwood	Boric treated
Window liners	ex 25mm	Finger jointed pine	Tanalised
Cornices	Gibcove		
Cornices	20mm Square bead cupboards & wardrobes		
Shelves	ex 25mm	RP dressing grade	
Shelves Linen	100 x 25	RP dressing grade	
Exterior trim	mouldings as required	No 1 RPTT	
Interior trim	mouldings as required	"	DA Rimu
Beams Timber	as shown on the drawings		
Roof trusses	gangnail or similar approved		

Beams. See Engineers Calculations for sizes and designs.

8.04 CONSTRUCTION

All materials are to be the best of their respective kinds and grades, laid true to their various lines and levels and constructed in a proper tradesman like manner to make the whole of the works a sound construction in accordance with the Requirements of N.Z.S.3604:1990 and the N.Z. Building code, and appropriate NZ Standards.

8.05 TIMBER

All timber work abutting or resting on masonry units, concrete or brickwork is to be protected with a bitumen-fabric damp proof course.

8.06 POSTS

To be set into concrete pads or piles or fixed to galvanised steel support brackets at positions shown on the plans. Bolt fixings to be M12 dia.galvanised bolts.

8.07 BEAMS to be bolt fixed to brackets to top of posts. Steel beams to have a plate, for M12 bolt fixing to top of plates or top of posts.

8.08 WALL PLATES to be in long lengths. Fixed at not more than 300mm from the end of the timber at corners or 1400mm centres along wall for M12 bolts and 900mm centres for M10 dowels.

A m.12 bolt shall be installed at each end of all bracing elements to fix bottom plate to slab. Shot fired fasteners may be used to fix internal walls to slab on ground floors, excluding the bottom plates and end studs of bracing elements.

- 8.09 **PLATES** to be in long lengths. Bottom plates and wall plated to be butt jointed over continuous support, top plates to be halved jointed and fastened with 4n nail plates.
- 8.10 **STUDS** are to be set out to accommodate wall lining sheets and are to be held to the plates with two 100 x 3.75mm flat headed nails end nailed at each end.
Bowed studs can to be straightened with saw cut from one edge through to not further than centre line, wedges and the same width as the studs x 25mm thick 460mm long nailed to both sides of the stud.
- 8.11 **LINTELS** not exceeding 150mm deep to be checked for the full thickness of lintel, not less than 15mm or more than 20mm into solid trimmer studs.
Lintels not exceeding 250mm deep supported full thickness of the lintel with 40mm thick doubling studs.
Lintels not exceeding 300mm deep supported full thickness of the lintel with 50mm thick doubling studs.
All to the requirements of Fig. 6.7 and associated clauses of N.Z.S. 3604, 1990.
- 8.12 **DWANGS** shall be wall thickness x 50mm spaced in rows at 800mm max. centres, set out to accommodate the wall lining sheets, drilled or notched for ventilation and to be well nailed at each end to studs with 2 @ 100 x 3.75mm end nailed or 2 @ 75 x 3.15mm skewed nailed.
- 8.13 **BLOCK** between studs at corners and at intersections of walls at dwang positions.
- 8.14 **WALL FRAMES** are to be assembled, squared, braced and erected. The bottom plates are to be straightened and fastened down. The corners are to be plumbed both ways using a plumb bob and line.
The top plates are to be held straight with temporary bracing until the ceiling, roof framing and bracing has been completed.
- 8.15 **CEILING DWANGS** and **BATTENS** are to be set out to accommodate the ceiling lining sheets and the cornices. Around to perimeter of each room and in rows of 400mm centres for battens, 800mm centres for dwangs.
All to be fixed to true and level lines, left ready to take ceiling lining materials
- 8.16 **TRUSSED ROOF** to be Engineer designed. Allow to supply local authority with truss design and layout as per manufacturers design. See drawings for type and manufacture of roof trusses to be used. Trusses to be fixed plumb, fastened to top plates with 2 framing anchors and 2 @ 100 x 3.15mm skewed nails at each fixing stiffened with 100 x 50 runners and braced at each end of building. The trussed are to be positioned directly over studs or supporting dwangs on edge fixed between the studs directly under the top plate.
- 8.17 **GABLE VERGES** shall be framed up by extending purlins to cantilever or outriggers from last rafter to flying rafter with blocking along line of end support. Barge board to be fixed to end of purlin on fly rafter.
- 8.18 **EAVES RUNNER** or ribbon board to be nailed to studs on the outside of the wall frames. Eaves bearers to be nailed securely to each rafter overhang and to runner or ribbon board.

EXTERIOR FINISH.

- 8.19 All exterior joinery, timber linings or trim and all end grain joints are to be given a coat of **PRIMER** or **STAIN** prior to fixing.
- 8.20 **BEHIND** all **WALL LININGS** shown on the drawings fit a breather type building paper. **BUILDING PAPER** to be fixed to the exterior face of framing or sheet bracing material, run horizontally lapped not less than 75mm at joints with upper sheets lapped over lower sheets. Extend from top plate to underside of the bottom plate or bearers / wall plate.
- 8.21 **FIX HARDITEX** to walls at positions shown on the drawings. Fix in accordance with manufacturers specification.
- 8.22 **FASCIA** and **BARGE** to be fixed in position shown to level and straight lines.
- 8.23 **SOFFIT AND PORCH CEILINGS** to be lined with 4.5mm Hardiflex sheets with plastic jointer moulds.
- 8.24 **BUILD IN** the various **EXTERIOR JOINERY** frames as supplied under "Joiner". Fit sill trays, head capping and flashings, trims at sides with scribes and under the cill with a mould all as required.
- 8.25 **EXTERIOR DOORS** to be fitted on one and a half pairs of 100mm fixed pin butt Hinges.

INTERIOR FINISH

- 8.26 **INTERIOR WALL LININGS** generally to be 10mm GIBRALTAR BOARD sheets fixed with vertical joints and nailed with flat headed galvanised clouts, double nailed to studs and dwangs. Sheets to service rooms shall be Gib Aqualine board nail or screw fixed horizontally. Areas to be tiled shall be lined with Villaboard. All Gib board linings shall be fixed and finished in accordance with Winstones specification.
- 8.27 **ALL JOINTS, NAIL HOLES** and other imperfections to the gibraltar board sheets are to be stopped flush and left ready to receive paint finish. See painting specification.
- 8.28 **CEILING BATTENS.** Fix 75X40 battens to the underside of joists, rafters, or trusses etc. as shown on the drawings. Battens to be spaced for gib ULTRALINE ceiling linings and at 600mm. centres max.
- 8.29 **CEILINGS.** All ceilings unless otherwise specified to be lined with 10mm gib ULTRALINE sheets screw fixed in accordance with manufacturers specifications. All ceilings to be stopped with plaster with tapped joints and finished with stopping compound for a paint finish.
- 8.30 **CORNICES** to be GIB COVE fixed and finished to the manufacturers specifications.
- 8.31 **BUILDING IN FITTINGS:** Dwang for and build in the various fittings as supplied under "Plumber", "Joiner" etc. Trim around shower & bath with PVC moulding set in sealant. Fix all other associated finishing trim and mouldings as required.

- 8.32 **INTERIOR DOORS** are to be fitted with 1.1/2 pairs of 90mm AC or FB on loose pin butts.
- 8.33 **SKIRTINGS** to be scribed fitted at internal corners, external corners to be mitred.
- 8.34 **CUPBOARDS AND WARDROBES** to be fitted with one shelf ex. 300mm wide fixed 1750mm above the floor with a Pryde hanger rail in face edge of shelf
- 8.35 **LINEN, HOT WATER CUPBOARDS** to be shelved with slatted shelves ex. 100 x 25mm as directed. Allow for four rows of shelving.
- 8.36 **HARDWARE** .Allow to take delivery and fix hardware, including all door latches, handles, towel rails and toilet roll holders etc. Allow the P.C. sum of \$1400.00. for supply only.
- 8.37 **CEILING ACCESS.** Form ceiling access in garage.
- 8.38 **SWITCHBOARD RECESS.** Co-operate with the Electrician in the building in of a meter box and the building of a switch board recess lined with fire resisting material and trim around as required.
- 8.39 **FINISHING MOULDINGS.** Supply and fix the sundry internal finishing mouldings and trim as required.
- 8.40 **ATTEND OTHER TRADES.** Cut for, attend on, and make good after all trades and provide and fix all necessary blocks for securing the work of all other trades.
- 8.41 **FINISHING.** All internal finishing timbers shall be sanded to remove all machine marks and on completion shall be free from all hammer marks, splits and other defects.
- 8.42 **NAILS.** All nails in exposed work, interior and exterior, are to be punched.
- 8.43 **INSULATION.** Allow to supply and install to exterior walls and ceilings, fibreglass batts or Rockwool as detailed on the drawings. R 2.2 batts to ceilings and 1.8 batts to walls. Note: No insulation to the exterior walls of the garage is required, insulate only between garage and residence.
- 8.44 **JOINERY FITTINGS.** Allow to co-operate with the joiner on the installation of all joinery fittings. Dwang behind all fittings where tops meet walls and down sides of fittings, so that the fitting can be installed without any gaps between.
- 8.45 **BRACING.** Type and position of bracing to be as shown in bracing schedule and bracing plans.
- 8.46 Metal angle braces to be Pryda or similar, set to angle not greater than 55 deg. to the horizontal, from top plate to bottom plate for length of wall shown with sheet wall lining to Clause K2.2 on either one or both sides fixed as required by NZS 3604. 1990.
- 8.47 **GARAGE DOOR**

Allow to supply and install garage door of the type and size and at the position shown on the drawings. Door to be left properly adjusted and in an easy to operate condition. Allow to supply two remote controls.

8.48 Extract from NZS 3604, 1990.

K4.1 A wall bracing element complying with this clause (types 4 & 5 of Table K1) shall consist of a length of timber stud wall not less than 900mm long that has sheet bracing material fixed to one face in accordance with clauses K4.2 and K4.3 and that has its end studs connected to joists in accordance with clause K4.5 (see fig K1).

K4.2 Sheet bracing material shall:

- a) Be either:
 - (i) Plywood not less than 6mm thick three ply; or
 - (ii) Any other wood-based product not less than 4.5mm thick with a density not less than 880kg/m³; or
 - (iii) Any other wood-based product not less than 6mm thick with a density not less than 600kg/m³;
- b) Be fixed to framing members;
- c) Have fixings not less than 10mm from sheet edges

K4.3 Each sheet of sheet bracing material shall;

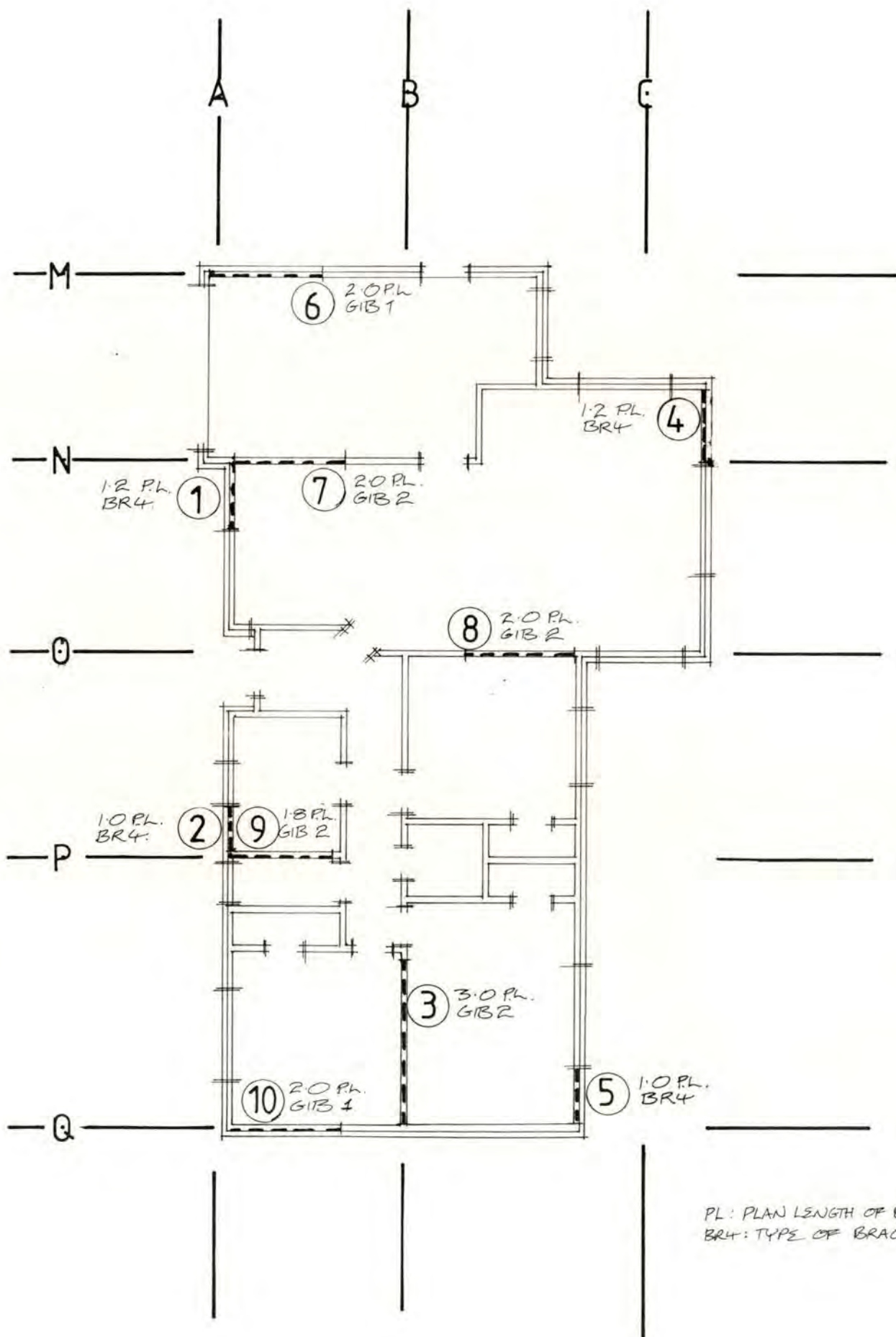
- a) Be not less than 900mm wide; horizontal measurement and with intermediate studs at vertical joints and as require by tables 6.4, 6.5, and 6.7.
- b) Run in a continuous length from top plate to bottom plate except that:
 - (i) Sheet bracing elements shall as far as practicable be constructed of full size sheets. Where pieces of sheet are needed to make up to total length of the bracing element, they shall be full wall length.

All vertical joints shall be made over studs and nailing of pieces of sheets shall be as for full sheets.
 - (ii) Where the bottom edges of sheets overlap the floor joists (to allow corner fixing against rotation) the tops to the sheets may be fixed to a 50 x 50mm ribbon board or a row of dwangs not more than 300mm below the top plate.

Sheets shall be fixed the same as to the top plate.

K4.4 The length of a wall bracing element complying with this clause shall be taken as the distance measured centre-to-centre between studs of that part of the wall that is entirely covered by the sheet bracing material and which are connected to joists as specified in Clause K4.5.

- K4.5** Each of the studs at the edges of a sheet of sheet bracing material shall be connected to a joist (including a boundary joist) as shown in fig K1 or by an alternative fixing of 6.0kN capacity in tension or compression along the line of the stud.
- K4.6** Studs, plates, and dwangs may be reduced in width not more than 10mm to accommodate sheet bracing material.



bracing plan
SCALE 1/8" = 1'-0"

RIORDAN

Please Photocopy

Wall Bracing Calculation Sheet A

Job Details

box 1

Name RIORDAN
 Street and Number WILHART COURT
 Lot and DP Number LOT 2 SUB 6 DP 72276
 City/Town/District FIELDING
 Location of Storey: single / upper of two / lower of two
 Building height to apex 3.9 m
 Roof height above eaves 1.7 m
 Stud height 2.4 m
 Average roof pitch 20°
 Building length BL = 16.042 m
 Building width BW = 9.448 m
 Root weight light / heavy
 Cladding weight light / heavy
 Room in roof space yes
 Gross Building
 Plan Area, GPA = 112.89 m²

Note: When the average roof pitch is over 25 degrees, use the eaves length and width to determine BL and BW.

Note: For heavy roofs use the roof plan at eaves level to determine GPA.

Wind Zone

box 2

Region: R1 0 / 1 Inland 0 / 1 Coastal 0 / 1 Exposure: Sheltered 0 / 1 Exposed 0 / 1 Topography: Gentle 0 / 1 Moderate 0 / 1 Extreme 0 / 1
 Total points 0
 Wind zone: Low (0) / Very high (3)
Medium (1) / Specific Design (4)
High (2)

Earthquake zone

box 3

From figure EQ1 select Earthquake Zone: A B C

BUs required Wind

box 4

From Table W1A/W1B
 W along = 33 BUs/m
 W across = 28 BUs/m
 Total wind load,
 W ALONG:
 W along x BW = 311.78 BUs
 W ACROSS
 W across x BL = 449.18 BUs

BUs required Earthquake

box 5

From Table EQ1
 E = 4.6 BUs/m²
 Note: For a room in the roof space use E+1
 Total earthquake load,
 EQ ALONG and EQ ACROSS:
 E x GPA BUs = 519.29 BUs

Please Photocopy

Wall Bracing Calculation Sheet B

Along

Wall or Bracing Line		Bracing Elements Provided			Wind		Earthquake		
1	2	3	4	5	6 W	7 W	6 E	7 E	
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m E	BUs Achieved (BU/m x L) E	
A	160.4	1	BR4	1.2			85	102	
		2	"	1.0	"		85		
B	70	3	GIB2	3.0	70		210		
C	160.4	4	BR4	1.2	85		102		
		5	"	1.0	"		85		
D									
E									
Totals Achieved					W			E	584
From Sheet A Totals Required					W		311.78	E	59.29
Wreq/Ereq = 0.6									

*If Wreq/Ereq is 1 or less complete E column only
If Wreq/Ereq is 1.5 or more complete W column only
Otherwise complete both W and E

Across

Wall or Bracing Line		Bracing Elements Provided			Wind		Earthquake	
1	2	3	4	5	6 W	7 W	6 E	7 E
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m E	BUs Achieved (BU/m x L) E
M	94.48	6	GIB1	2.0			50	100
N	70	7	GIB2	2.0	60		120	
O	70	8	GIB2	2.0	60		120	
P	70	9	GIB2	1.8	60		108	
Q	94.48	10	GIB1	2.0	50	100		
Totals Achieved					W		E	548
From Sheet A Totals Required					W	449.18	E	519.29
Wreq/Ereq = 0.9								

TO: -

ATTENTION: -

MESSAGE: -

window	floor area	min. vent	vent provided
lounge } dining } →	31.759	1.5880	2.52
kit/family	6.141	0.3071	0.56
bathroom	5.118	0.2559	0.56
laundry	1.801	0.0901	0.56
toilet	1.842	0.0921	0.48
bedroom 1	12.372	0.6186	0.84
bedroom 2	10.070	0.5035	0.84
bedroom 3	9.000	0.4500	0.84

Date: -

Total pages: -

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ARCHITECTURAL DRAUGHTING PRACTICE LTD

104 Cuba Street Palmerston North Phone 357-0103

Table 1: Standard 9.5mm Gib Board® wall systems

(see page 18 for fixing details)

NZS 3604 : 1990 Ratings in bracing
units per metre of element length

Type	Primary Bracing Element	Secondary Bracing Element	Wind	Earthquake
GIB 1	9.5mm Gib Board® lining on one face, not less than 1.8m long 1.8m and less than 2.4m 2.4m and longer	Diagonal Brace	55	50
		Diagonal Brace	75	50
GIB 2	9.5mm Gib Board® lining on both faces, not less than 1.8m long 1.8m and less than 2.4m 2.4m and longer	Diagonal Brace	75	60
		Diagonal Brace	80	70
GIB 3	9.5mm Gib Board® lining on both faces, not less than 1.2m in length	N/A	65	60

Table 2: Gib Braceline® wall systems

(see page 17 for fixing details)

NZS 3604 : 1990 Ratings in bracing
units per metre of element length

Type	Primary Bracing Element	Secondary Bracing Element	Wind	Earthquake
BR1	Gib Braceline® lining on one face 1.8m – 2.4m 2.4m and longer	Diagonal Brace	70	60
			90	75
BR2	Gib Braceline® lining on one face, vertically fixed 1.8m-2.4m 2.4m and longer	N/A	75	60
			85	60
BR3	Gib Braceline® lining on one face, horizontal fixing 1.8m-2.4m 2.4m and longer	N/A	60	45
			95	65

Table 3: Gib Braceline® sheet brace panels

(see page 16 for fixing details)

NZS 3604 : 1990 Ratings in bracing
units per metre of element length

Type	Primary Bracing Element	Secondary Bracing Element	Wind	Earthquake
BR4	Gib Braceline® lining on one face, not less than 0.9m long and a maximum of 1.2m in length	Metal strap of 6kN capacity fixed to both wall end studs	100	85
BR5	Gib Braceline® lining on one face, not less than 1.2m long and a maximum of 2.4m in length	Metal strap of 6kN capacity fixed to both wall end studs	115	85
BR6	Gib Braceline® lining on one face, 9.5mm Gib Board® on the other, not less than 1.2m long and a maximum of 2.4m in length	2 metal straps of 6kN capacity fixed to both ends of the wall or alternative 12kN capacity connection	150	110
BR7	Gib Braceline® lining on one face and 7.5mm ply on the other. Not less than 0.9m long and a maximum of 2.4m in length	Metal strap of 6kN capacity fixed to both wall end studs	145	145
BR8	Gib Braceline® lining on one face and 4.75mm Hardboard on the other. Not less than 0.9m long and a maximum of 2.4m in length	Metal strap of 6kN capacity fixed to both wall end studs	120	95

Gib Braceline® Wall Bracing System

Product Description

Gib Braceline® is a 9.5mm thick tapered edge high density internal lining for wall bracing applications including sheet bracing.

- Face paper coloured blue for easy identification
- Foil backed for vapour resistance and thermal insulation (optional)
- Recessed studs not required
- Gib Braceline® can be substituted for 9.5mm Gib Fyreliner® in fire rated walls
- Quick and easy to install

Sheet Sizes and Weight

Thickness	Width	Length
9.5mm	1200mm	2400
		2700
		3000

Maximum Weight
8.5 kg/m²

Fixing and Jointing

Gib Braceline® shall be fastened with 30mm x 2.5mm galvanised Gib Clouts®. The clouts shall be used in conjunction with 15mm galvanised steel washers in the locations specified overpage. Gib Clouts® should be driven at right angles to the lining so that they and the washers are finally seated in a slight dimple or recess.

Vertical Fixing

Insert clouts/washers at 150mm centres around the perimeter of the bracing element. Double nail Gib Clouts® (no washers) at 300mm centres to intermediate studs. Double nails to be 50-60mm apart.

Horizontal Fixing

Insert clouts/washers at 150mm centres around the perimeter of the bracing elements. Insert single nails (no washers) to each stud at the point where the horizontal joint crosses the stud and double nail (no washers) at 300mm centres to intermediate studs. Double nails to be 50-60mm apart.

Nogs

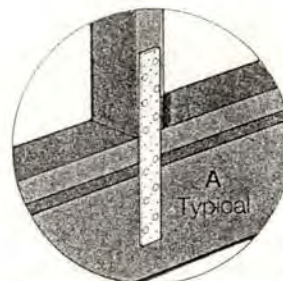
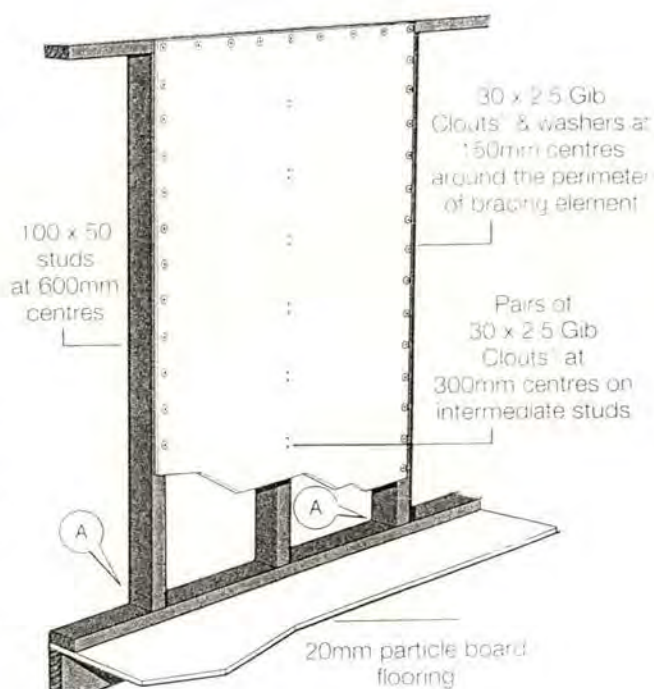
Wall bracing tests on Gib Braceline® and 9.5mm Gib Board® systems were undertaken without nogs. Nogs are not considered to add to the bracing performance of the wall.

Timber Movement

Gib Braceline® sheets should be fixed leaving a 10mm gap at the floor line to allow for movement of framing members.

Jointing

All joints shall be tape reinforced and finished in accordance with the publications, "Gib Board® Fixing and Jointing Instructions" and "Gib Board® Stopping and Finishing Systems".



Metal strap in accordance with K4.5 NZS 3604 - 1990

Sheet Brace Panels (Table 3)

Plywood

7.5mm Standard Construction Plywood manufactured to NZS 3614 and AS 2269. Minimum grade: C-D. Minimum treatment level, untreated.

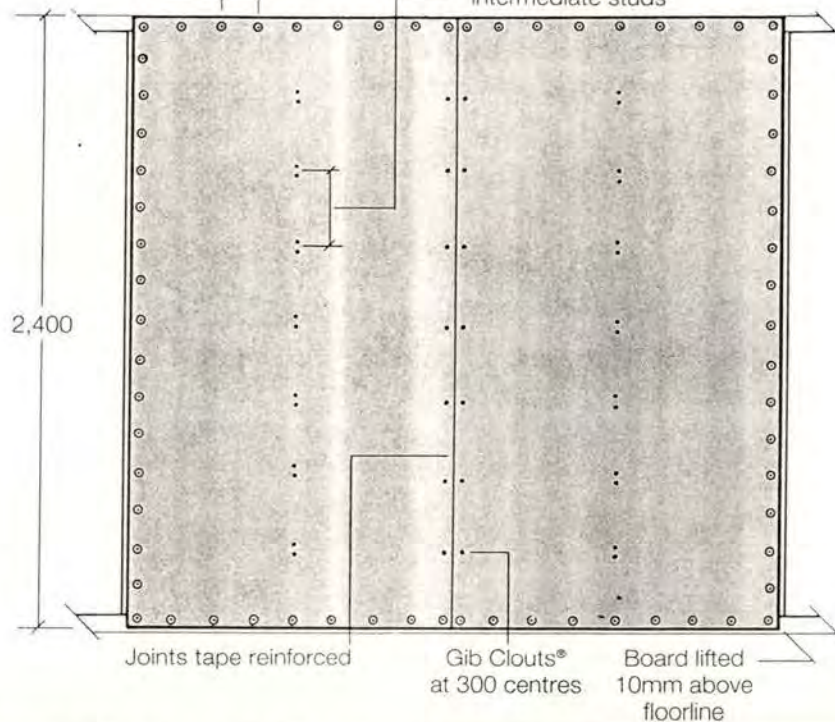
Hardboard

4.75mm Standard Hardboard or 4.75mm Oil Tempered Hardboard as manufactured by Fletcher Wood Panels Limited.

Vertical Fixing (Table 2)

30 x 2.5 Gib Clouts® & washers at 150mm centres around perimeter of bracing element

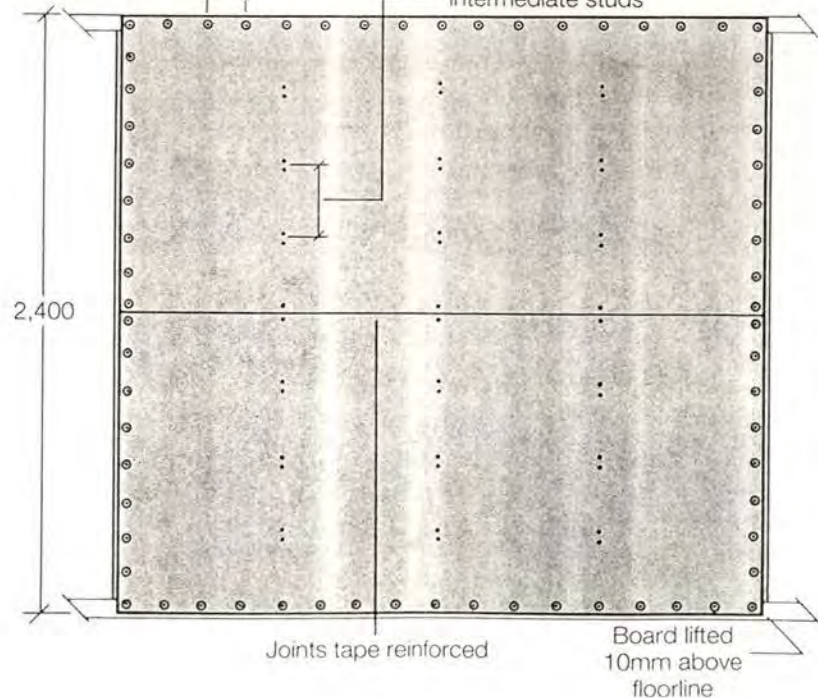
Pairs of 30 x 2.5 Gib Clouts® at 300mm centres on intermediate studs



Horizontal Fixing (Table 2)

30 x 2.5 Gib Clouts® & washers at 150mm centres around perimeter of bracing element

Pairs of 30 x 2.5 Gib Clouts® at 300mm centres on intermediate studs



Standard Gib Board® Wall Bracing System

Product Description

Standard Gib Board® is a 9.5mm thick tapered edge internal lining suitable for wall bracing applications.

- Foil backed for vapour resistance and thermal insulation (optional)

Fixing and Jointing

Standard 9.5mm Gibraltar Board® wall bracing systems shall be fastened with 30 x 2.5mm galvanised Gib Clouts®.

Vertical Fixing

Insert Gib Clouts® at 150mm centres around the perimeter of the bracing element. Nail sheet edges within the braced element at 300mm centres and double nail intermediate studs at 300mm centres. (See Fig.4)

As an alternative to nailing to intermediate studs, apply daubs of Gib Fix® adhesive at 300mm centres to intermediate studs.

Horizontal Fixing

Insert Gib Clouts® at 150mm centres around the perimeter of the bracing element. Insert single clouts to each stud at the point where the horizontal joint crosses the stud and double nail at 300mm centres to intermediate studs.

As an alternative to nailing to intermediate studs, apply daubs of Gib Fix® adhesive at 300mm centres to intermediate studs (See Fig. 4).

Nogs

Wall bracing tests on Gib Braceline and standard Gib Board® were undertaken with out nogs. Nogs are not considered to add to the bracing performance of the wall.

Timber Movement

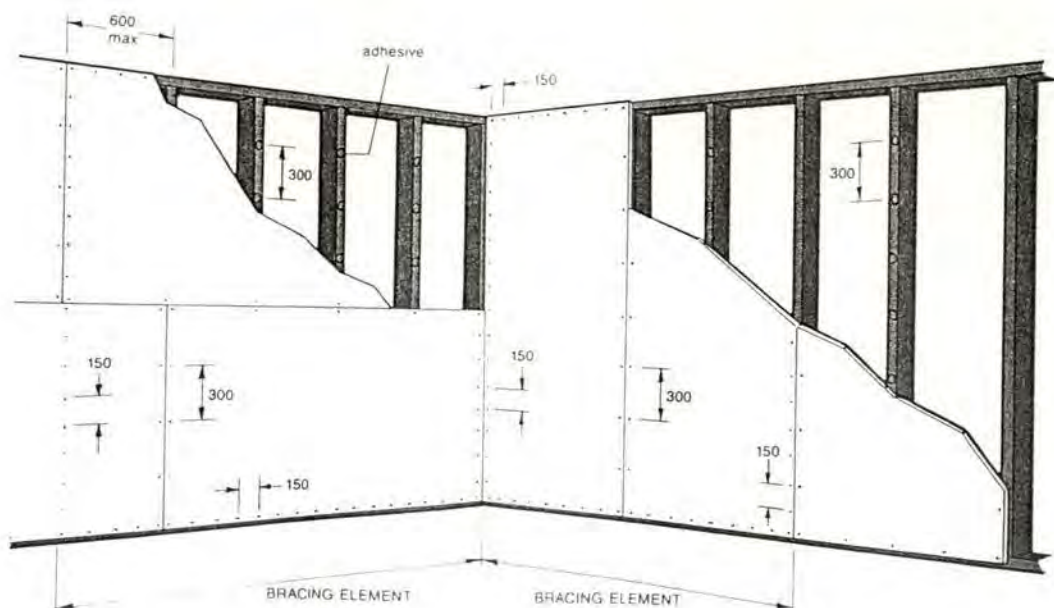
Gib Board® sheets should be fixed leaving a 10mm gap at the floor line to allow for movement of framing members.

Jointing

All joints shall be tape reinforced and finished in accordance with the publication "Gib Board® Fixing and Jointing Instructions" and "Gib Board® Stopping and Finishing Systems".

Sheet Size and Weight

Thickness	Width	Length
9.5mm	1200mm	2400
		2700
		3000
		3300
		3600
		3900
		4200
		4800
Maximum Weight		
6.8 kg/m		



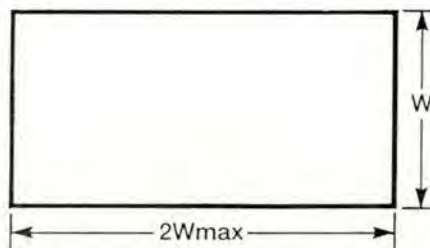
GIB BOARD®

Ceiling Diaphragms

Gib Board® ceiling diaphragms are strong and stiff horizontal bracing elements which effectively transfer loads over large distances. They may be used to space bracing lines further apart than 5 metres (single top plate), or 6 metres (double top plate).

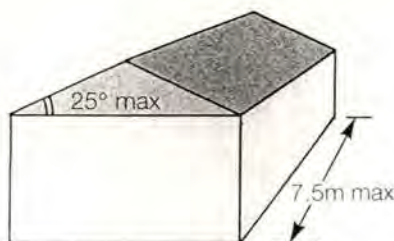
A ceiling diaphragm may be square or rectangular. Its length shall not exceed twice its width. The width being measured horizontally between supporting walls.

Ceiling diaphragms under light and heavy roofs are required to comply with Clauses 6.3.5.1 and 10.5.1.1 of NZS3604:1990.



Limitations for standard Gib Board® ceiling diaphragms

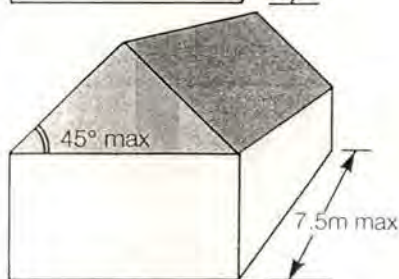
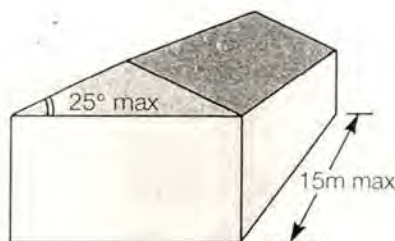
- Diaphragms in roofs not steeper than 25 degrees to the horizontal shall not exceed 7.5 metres in length.
- Standard Gib® fasteners at 150 mm centres shall be installed to boundary members around the entire perimeter of the diaphragm.



Standard Gib Board® ceiling diaphragms

Limitations for Gib Braceline® ceiling diaphragms

- Diaphragms in roofs not steeper than 25 degrees to the horizontal shall not exceed 15 metres in length.
- Diaphragms in roofs not steeper than 45 degrees to the horizontal shall not exceed 7.5 metres in length.
- Gib Braceline® nails and washers at 150 mm centres shall be installed to boundary members around the entire perimeter of the diaphragm.



Gib Braceline® ceiling diaphragms

General fixing requirements for Gib Board® ceiling diaphragms

- Linings shall be installed over the entire area of the diaphragm.
- Fastenings shall be no less than 12 mm from sheet edges.
- Sheets shall be supported by framing members (e.g., ceiling battens) spaced at no more than 450 mm centres.
- Sheets within the diaphragm area may be fastened and finished conventionally in accordance with Winstone Wallboards Ltd "Gib Board® Fixing and Jointing Instructions" and "Gib Board® Stopping and Finishing Systems". All joints shall be tape reinforced and stopped. It is recommended that sheet butt joints are formed off framing using Gib® back-blocking.
- Full width sheets with a length not less than 1800 mm shall be used at the ends of the diaphragm. In the middle third of the diaphragm the sheet width may be reduced to suit the buildings length.
- Openings are allowed within the middle third of the diaphragm's length and width, and shall be constructed in accordance with the requirements of section 12.3 of NZS3604. Fixing of sheet material to opening trimmers shall be at 150 mm centres. Neither opening dimension shall exceed a third of the diaphragm width. Larger openings, or openings in other locations, require specific engineering design.

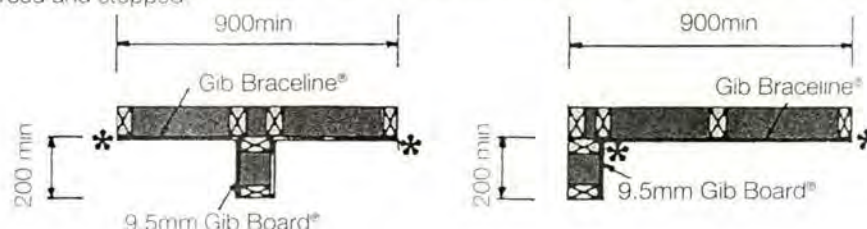
Gib Board® Wall Bracing Systems Construction Guide

(complies with NZS 3604 1990)

Specifications			
Type	Description	Additional Requirements	Nailing & Stopping
Gib 1	9.5mm Gib Board® on one face. Min. length 1800mm	Diagonal brace	Gib 1, 2 and 3 30 x 2.5 Gib Clouts® at 150mm ccs. around the perimeter of the bracing element and at 300mm ccs. to intermediate framing. Tape and stop all joints within the bracing element.
Gib 2	9.5mm Gib Boards® on both sides. Min. length 1800mm	Diagonal brace	
Gib 3	9.5mm Gib Boards® on both sides. Min. length 1200mm	No additional requirement	
BR 1	Gib Braceline® on one face. Min. length 1800mm	Diagonal brace	BR 1, 2, 3, 4, 5, 6, 7 and 8 30 x 2.5 Gib Clouts® fitted with Gib Braceline® washers at 150mm ccs. around the perimeter of the bracing element. Standard nailing to intermediate framing. Tape and stop all joints within the bracing element.
BR 2	Gib Braceline® vertical on one face. Min. length 1800mm	No additional requirement	
BR 3	Gib Braceline® horizontal on one face. Min. length 1800mm	No additional requirement.	
BR 4	Gib Braceline® on one face. Length 900 to 1200mm	6 kN end-stud fixings	
BR 5	Gib Braceline® on one face. Length 1200 to 2400mm	6 kN end-stud fixings	
BR 6	Gib Braceline® and Gib Board® on opp. sides. Length 1200 to 2400mm	12 kN end-stud fixings	
BR 7	Gib Braceline® on one face 7.5mm ply on other. Length 900 to 2400mm	6 kN end-stud fixings	
BR 8	Gib Braceline® on one face 4.75mm hardboard on other. Length 900 to 2400mm	6 kN end-stud fixings	

Guidelines for Intersecting Walls

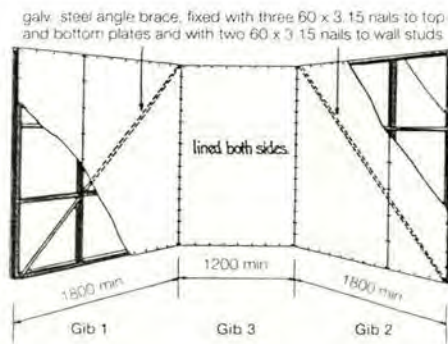
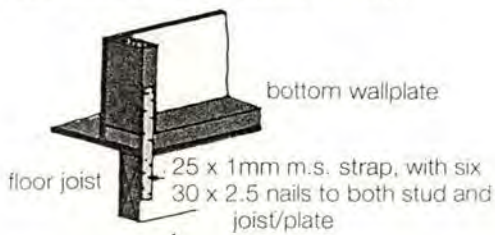
Types BR1 to BR8 may have standard 9.5mm Gib Board® intersecting walls with a min. length of 200mm. Gib Braceline® nails and washers are required around the perimeter of the bracing element (*). Intermediate vertical joints may be nailed with standard Gib Clouts® at 300mm ccs. and should be tape reinforced and stopped.



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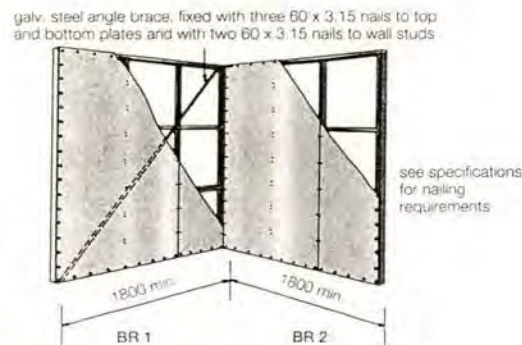
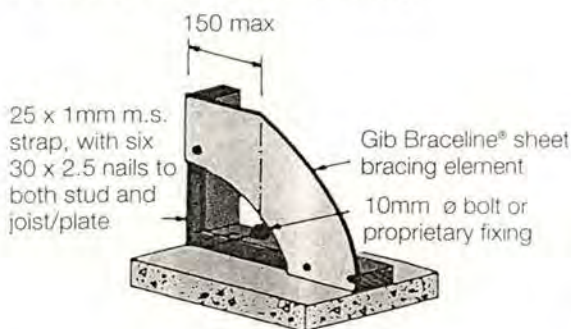
Detail 1

6kN connection to timber sub-floor
(both sides of stud strapped for 12kN)



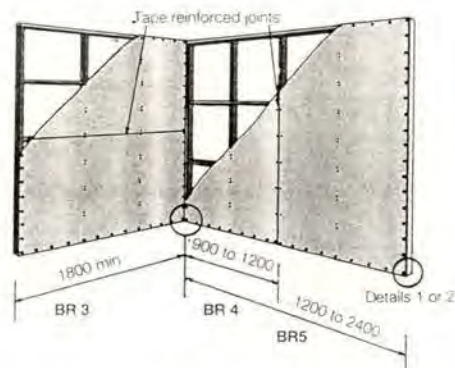
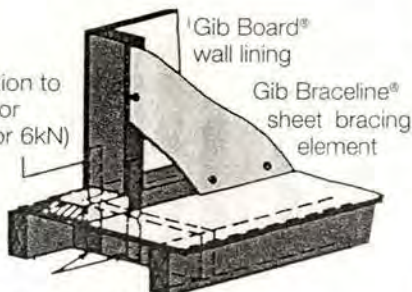
Detail 2

6kN connection to concrete (both sides
of stud strapped for 12kN connection)



Detail 3

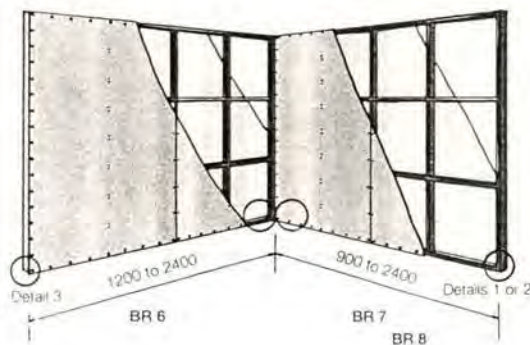
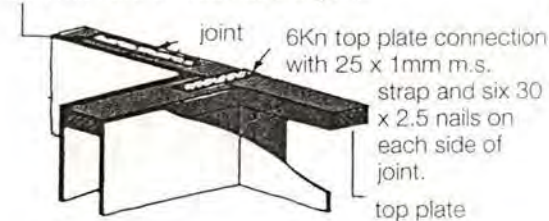
12kN connection to
timber sub-floor
(single strap for 6kN)



two 25 x 1mm m.s. straps, with six
30 x 2.5 nails to both stud and blocking
piece between floor joists

Top Plate Connections

3kN top plate connection, with
25 x 1mm m.s. strap and three
30 x 2.5 nails on each side of joint.



ADDITION TO: 'GIB BOARD® WALL BRACING SYSTEMS, 1992'

600 – 1200 mm WALL BRACING PANEL				
Type	Primary Bracing Requirements	Secondary Bracing Requirements	Bracing Unit rating per metre	
			Wind	Earthquake
BR9	Gib® Braceline on one face, min length 0.6m max length 1.2m	Metal strap of 6 kN capacity fixed to both wall end-studs	110	95
For wall heights other than 2.4 metres multiply the ratings by '2.4 / wall height', except that this factor shall not be greater than 1.33.				

Scope of Use

This bracing panel is an addition to Winstone Wallboards publication 'Gib® Board Wall Bracing Systems, 1992', and intended for use in buildings designed and constructed in accordance with NZS 3604:1990, 'Code of practice for Light Timber Frame Buildings not requiring specific design'.

Compliance with the NZBC

NZS 3604:1990 satisfies the requirements of the NZBC-B1 'Structure' and is listed in BS/AS1 section 4.0 Timber.

Under normal conditions of dry internal use Gib® Board Bracing Systems have a service life in excess of 50 years and satisfy the requirements of NZBC-B2 'Durability'.

Framing

100 x 50 mm No.1 framing constructed in accordance with the requirements of NZS 3604:1990.

Specific requirements include a double bottom plate, a single dwang at 800 mm above floor level, and dummy studs beside both end-studs below the level of the dwang.

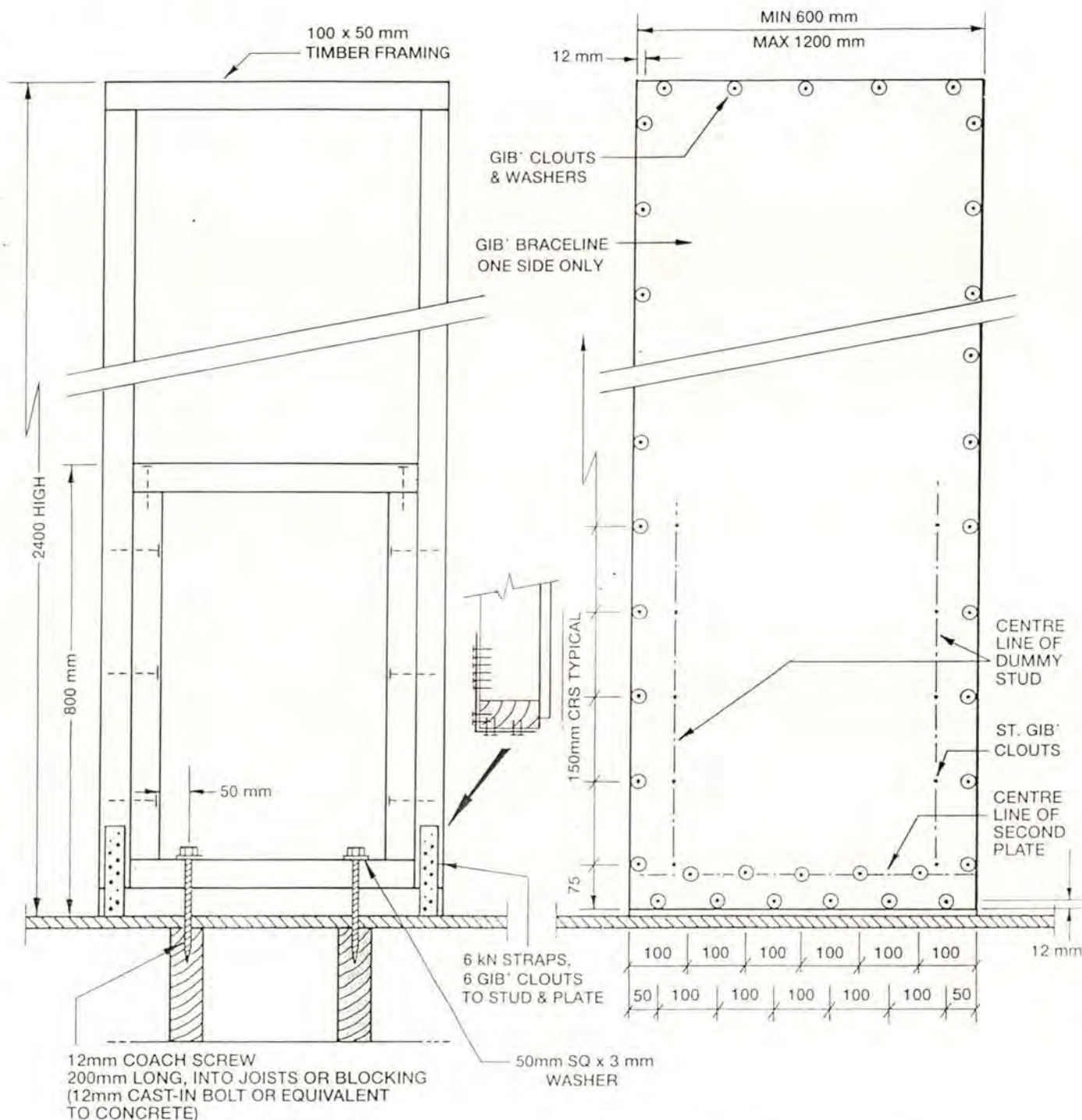
The end-studs must be fixed to the bottom plate by means of a strap with a minimum capacity of 6 kN (e.g., ex 25 x 1 mm galvanised steel strap). The bottom plate must be connected to the floor framing by means of a 12 mm coach screw with a 50 x 50 mm washer, or a fixing of equivalent strength.

Lining

Gib® Braceline on one face nailed typically at 150 mm around the perimeter of the bracing panel, and at 100 mm centres to both bottom plates with Gib® Clouts fitted with Braceline washers. Additional standard Gib® Clouts are used for fixing to the dummy studs.

Test Reference

BTL Test Report 230/1, 'Report on Bracing Rating of 0.6 m Long Braceline Wall with Special Base Fixings' June, 1993.



FRAMING REQUIREMENTS

LINING REQUIREMENTS



WINSTONE WALLBOARDS LTD

Auckland

P.O. Box 12 256 Penrose. Facsimile 0-9-634 3972.
Telephone 0-9-634 2184.

Lower Hutt

P.O. Box 36 024 Moera. Facsimile 0-4-568 7844.
Telephone 0-4-568 4293.

Christchurch

P.O. Box 1983 Christchurch. Facsimile 0-3-337 1014.
Telephone 0-3-332 3159.

PROPRIETOR			Primary Bracing Element	Secondary Bracing Element	Rating in bracing units per metre of element length		Basis for listing
NAME	PRODUCT	SPECIFICATION			Wind	Earthquake	
New Zealand Plywood Manuf. Association	7.5 mm Standard Construction Plywood	CP3	Plywood on one face. Length 0.6 - 1.2 m	Fixing as clause K4.5 or clause E13.2 (Fig E3)	88	83	BRANZ Appraisal Certificate No. 224 (1992)
New Zealand Plywood Manuf. Association	7.5 mm Standard Construction Plywood	CP4	Plywood on one face with 9.5 mm Standard Gibraltar Board* on the other. Length 0.6 - 1.2 m	Fixing as clause K4.5 or clause E13.2 (Fig E3)	97	95	BRANZ Appraisal Certificate No. 224 (1992)
New Zealand Plywood Manuf. Association	7.5 mm Standard Construction Plywood	CP5	Plywood on one face. Length 0.9 - 1.3 m	Fixing as clause K4.5 or clause E13.2 (Fig E3)	94	92	BRANZ Appraisal Certificate No. 224 (1992)
New Zealand Plywood Manuf. Association	7.5 mm Standard Construction Plywood	CP6	Plywood on one face with 9.5 mm Standard Gibraltar Board* on the other. Length 0.9 - 1.3 m	Fixing as clause K4.5 or clause E13.2 (Fig E3)	100	99	BRANZ Appraisal Certificate No. 224 (1992)
New Zealand Plywood Manuf. Association	7.5 mm Standard Construction Plywood	BR7	Plywood on one face with Braceline* on the other. Length 0.9 - 1.3 m	Fixing as clause K4.5 or clause E13.2 (Fig E3)	124	143	BRANZ Appraisal Certificate No. 224 (1992)
New Zealand Plywood Manuf. Association	7.5 mm Standard Construction Plywood	CP9	Plywood on one face. Length 1.3 - 3.6 m	Fixing as clause K4.5 or clause E13.2 (Fig E3)	103	96	BRANZ Appraisal Certificate No. 224 (1992)
New Zealand Plywood Manuf. Association	7.5 mm Standard Construction Plywood	CP10	Plywood on one face with 9.5 mm Standard Gibraltar Board* on the other. Length 1.3 - 3.6 m	Fixing as clause K4.5 or clause E13.2 (Fig E3)	142	122	BRANZ Appraisal Certificate No. 224 (1992)

* Product of Winstone Wallboards Limited

+ New Zealand Plywood Association Members: Carter Holt Harvey Timber, Fletcher Wood Panels Ltd, H. T. Plywood Ltd, IDI (West coast) Ltd

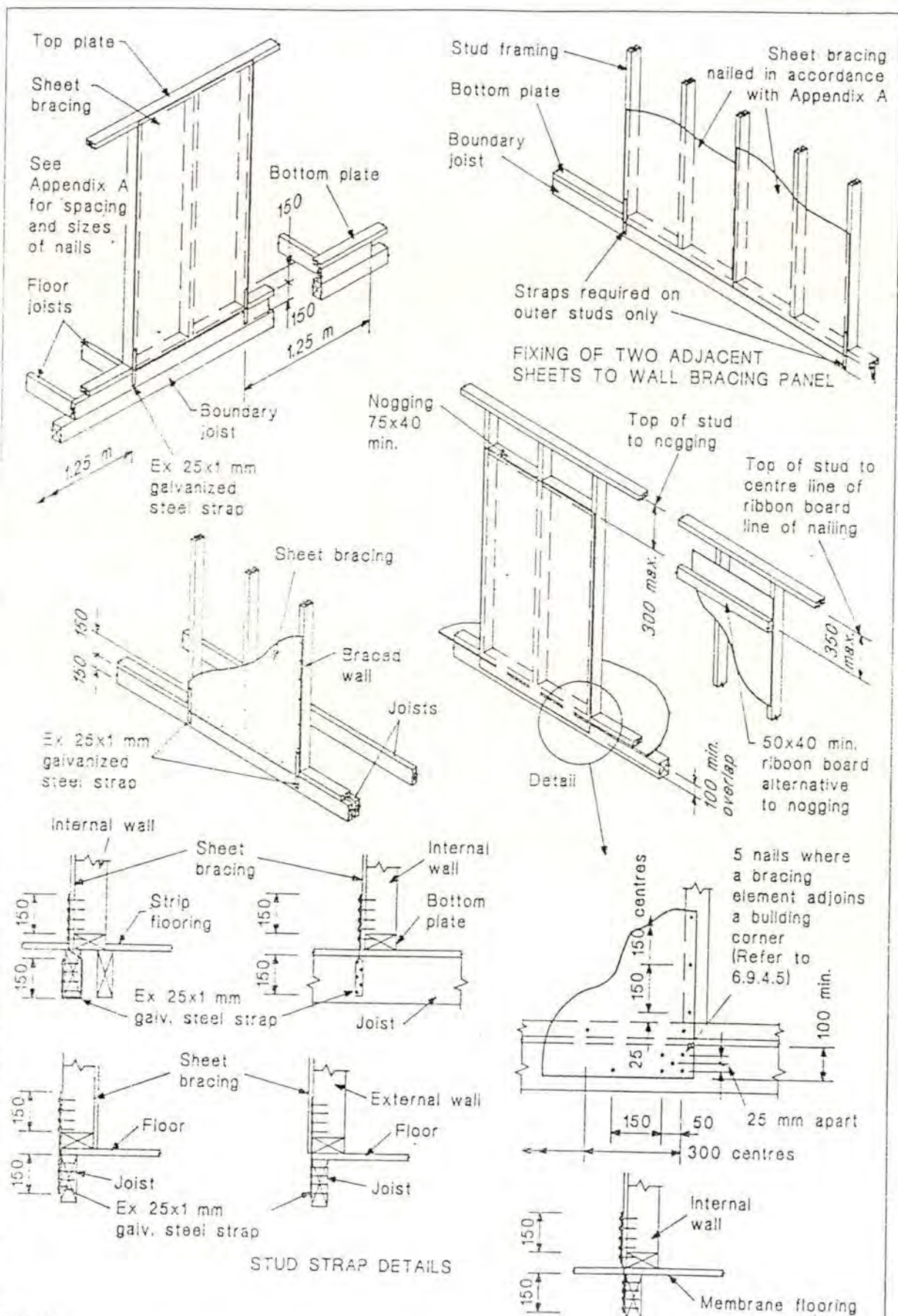


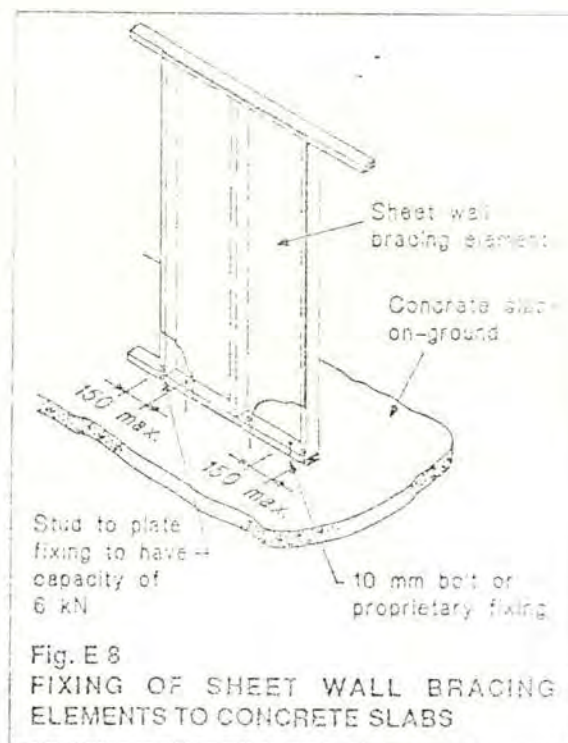
Fig. K1
SHEET BRACING WALL BRACING ELEMENTS

E13 Fixing of Timber to Concrete Floor

E13.1 Framing timbers shall be fixed to slab-on-ground floors as required by clause 4.5.1 (fixing of wall plates to foundation walls) provided that shot-fired fasteners may be used in accordance with clause E13.2

E13.2 Shot-fired fasteners may be used to fix internal walls to slab-on-ground floors, excluding the bottom plates and end studs of sheet bracing wall bracing elements which shall be fixed as shown in fig.E8 Where permitted, shot-fired fasteners shall:

- (a) Be of 4mm diameter and fitted with discs;
- (b) Be provided within 150mm of each end of the plate and at not more than 900mm centres elsewhere.



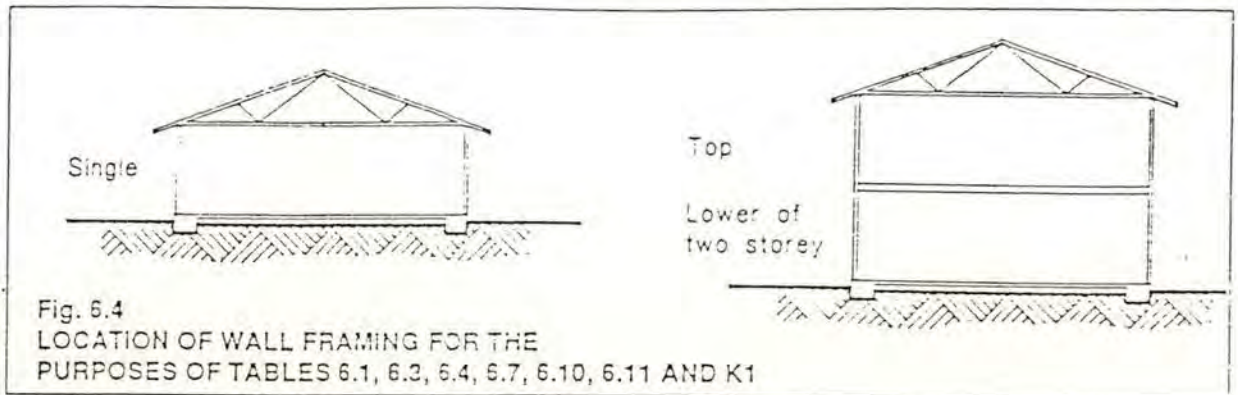


Table 6.3
STUDS IN LOADBEARING WALLS
1.5 kPa and 2.0 kPa floor loads

A Single or top storey - Light roof										
Wind exposure	Maximum span of member supported	Stud sizes for studs of maximum length (height) of								
		2.4 m			2.7 m			3.0 m		
		At a maximum stud spacing (mm) of:			At a maximum stud spacing (mm) of:			At a maximum stud spacing (mm) of:		
		400	450	600	400	450	600	400	450	600
Very high	6.0	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75
	9.0	100 x 50	100 x 50	100 x 50	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75
	12.0	100 x 50	100 x 50	100 x 50	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75
High	6.0	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 50	100 x 50	100 x 50	100 x 75
	9.0	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 75	100 x 50	100 x 75	100 x 75
	12.0	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 75	100 x 50	100 x 75	100 x 75
Medium	6.0	75 x 50	75 x 50	75 x 50	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50
	9.0	75 x 50	75 x 50	100 x 40	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50
	12.0	75 x 50	75 x 50	100 x 40	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50
Low and internal walls	6.0	75 x 50	75 x 50	75 x 50	75 x 50	75 x 50	75 x 50	75 x 50	100 x 40	100 x 40
	9.0	75 x 50	75 x 50	75 x 50	75 x 50	75 x 50	100 x 40	75 x 50	100 x 40	100 x 40
	12.0	75 x 50	75 x 50	75 x 50	75 x 50	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40
		3.6 m			4.2 m			4.8 m		
		At a maximum stud spacing (mm) of:			At a maximum stud spacing (mm) of:			At a maximum stud spacing (mm) of:		
		400	450	600	400	450	600	400	450	600
High	6.0	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75	150 x 75	-
	9.0	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75	150 x 75	-
	12.0	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75	150 x 75	-
Medium	6.0	100 x 75	100 x 75	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75
	9.0	100 x 75	100 x 75	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75
	12.0	100 x 75	100 x 75	100 x 100	150 x 50	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75
Low and internal walls	6.0	100 x 40	100 x 50	100 x 75	100 x 75	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75
	9.0	100 x 40	100 x 50	100 x 75	100 x 75	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75
	12.0	100 x 40	100 x 50	100 x 75	100 x 75	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75

* The greater of roof dimension S (see 6.4.3) or span of joists.

Table 6.3 (continued)
STUDS IN LOADBEARING WALLS

C Lower of two storey or subfloor beneath one storey										
Wind exposure	Maximum span of member supported*	Stud sizes for studs of maximum length (height) of:								
		2.4 m			2.7 m			3.0 m		
		At a maximum stud spacing (mm) of:			At a maximum stud spacing (mm) of:			At a maximum stud spacing (mm) of:		
		400	450	600	400	450	600	400	450	600
Very High	m	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm
	6.0	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75	150 x 50	150 x 50	150 x 75
	9.0	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75	150 x 50	150 x 50	150 x 75
High	6.0	100 x 40	100 x 40	100 x 50	100 x 50	100 x 50	100 x 75	100 x 50	100 x 75	100 x 75
	9.0	100 x 40	100 x 40	100 x 50	100 x 50	100 x 50	100 x 75	100 x 75	100 x 75	100 x 75
	12.0	100 x 40	100 x 40	100 x 50	100 x 50	100 x 50	100 x 75	100 x 75	100 x 75	100 x 75
Medium	6.0	75 x 50	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50
	9.0	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50	100 x 40	100 x 40	100 x 50
	12.0	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 75
Low and internal walls	6.0	75 x 50	75 x 50	100 x 40	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40
	9.0	75 x 50	75 x 50	100 x 40	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50
	12.0	75 x 50	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50
* The greater of roof dimension S (see 6.4.3) or span of joists.										
D Subfloor beneath two storey										
Wind exposure	Maximum span of member supported*	Stud sizes for studs of maximum length (height) of:								
		2.4 m			2.7 m			3.0 m		
		At a maximum stud spacing (mm) of:			At a maximum stud spacing (mm) of:			At a maximum stud spacing (mm) of:		
		400	450	600	400	450	600	400	450	600
Very High	m	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm
	6.0	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75	150 x 50	150 x 50	150 x 75
	9.0	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75	150 x 50	150 x 50	150 x 75
High	6.0	100 x 40	100 x 40	100 x 50	100 x 50	100 x 50	100 x 75	100 x 75	100 x 75	100 x 75
	9.0	100 x 40	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75	100 x 75	100 x 75	100 x 75
	12.0	100 x 40	100 x 50	100 x 75	100 x 50	100 x 75	100 x 75	100 x 75	100 x 75	100 x 100
Medium	6.0	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 75
	9.0	100 x 40	100 x 40	100 x 50	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 75
	12.0	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75
Low and internal walls	6.0	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50	100 x 40	100 x 40	100 x 50
	9.0	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 75
	12.0	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 75
Note – In table 6.3: 100 x 40 may be substituted for 75 x 50 125 x 40 may be substituted for 100 x 75 125 x 50 may be substituted for 100 x 100										
* The greater of roof dimension S (see 6.4.3) or span of joists.										

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Table 6.3 (continued)
STUDS IN LOADBEARING WALLS

B Single or top storey - heavy roof										
Wind exposure	Maximum span of member supported*	Stud sizes for studs of maximum length (height) of:								
		2.4 m			2.7 m			3.0 m		
		At a maximum stud spacing (mm) of:			At a maximum stud spacing (mm) of:			At a maximum stud spacing (mm) of:		
		400	480	600	400	480	600	400	480	600
	m	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm
Very High	6.0	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75	150 x 50	150 x 50	150 x 75
	9.0	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75	150 x 50	150 x 50	150 x 75
	12.0	100 x 50	100 x 50	100 x 75	100 x 50	100 x 50	100 x 75	150 x 50	150 x 50	150 x 75
High	6.0	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 75	100 x 50	100 x 75	100 x 75
	9.0	100 x 40	100 x 40	100 x 50	100 x 50	100 x 50	100 x 75	100 x 50	100 x 75	100 x 75
	12.0	100 x 40	100 x 40	100 x 50	100 x 50	100 x 50	100 x 75	100 x 75	100 x 75	100 x 75
Medium	6.0	75 x 50	75 x 50	100 x 40	100 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50
	9.0	75 x 50	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50
	12.0	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50	100 x 40	100 x 50	100 x 50
Low and internal walls	6.0	75 x 50	75 x 50	75 x 50	75 x 50	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40
	9.0	75 x 50	75 x 50	75 x 50	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40
	12.0	75 x 50	75 x 50	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 40	100 x 50
		3.6 m At a maximum stud spacing (mm) of:			4.2 m At a maximum stud spacing (mm) of:			4.8 m At a maximum stud spacing (mm) of:		
		400	480	600	400	480	600	400	480	600
	m	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm	mm x mm
High	6.0	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75	150 x 75	-
	9.0	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75	150 x 75	-
	12.0	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75	150 x 75	-
Medium	6.0	100 x 75	100 x 75	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75
	9.0	100 x 75	100 x 75	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75
	12.0	100 x 75	100 x 75	100 x 100	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75	150 x 75
Low and internal walls	6.0	100 x 40	100 x 50	100 x 75	100 x 75	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75
	9.0	100 x 50	100 x 50	100 x 75	100 x 75	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75
	12.0	100 x 50	100 x 50	100 x 75	100 x 75	100 x 100	150 x 50	150 x 50	150 x 50	150 x 75

* The greater of roof dimension S (see 6.4.2) or span of joists.

Quality Due to Condition of Original

Table 6.6
TRIMMING STUDS
1.5 kPa and 2.0 kPa floor loads

Maximum clear width of opening (span of lintel)	Thickness of other studs required if at 600 mm spacing	Thickness of trimming studs
m	mm	mm
A Single storey, top storey or non-loadbearing walls		
1.8	40	50
	50	50
	75	100
	100	125
3.0	40	50
	50	75
	75	100
	100	150
3.6	40	75
	50	100
	75	150
	100	200
B Any other location		
0.9	40	50
	50	75
	75	100
	100	150
1.8	40	75
	50	75
	75	125
	100	150
3.0	40	75
	50	100
	75	150
	100	200
3.6	40	100
	50	125
	75	175
	100	250

Table 6.4
STUDS OF NO. 2 FRAMING GRADE OR BUILDING GRADE IN LOADBEARING WALLS

Wind exposure	Maximum roof dimension S*	Stud size for maximum spacing of studs (mm) of:		
		400	480	600
Medium	m	mm x mm	mm x mm	mm x mm
	6.0	100 x 40	100 x 50	100 x 75†
	12.0	100 x 50	100 x 50	100 x 75
Low and internal walls	6.0	100 x 40	100 x 40	100 x 50
	12.0	100 x 40	100 x 40	100 x 50

* See 6.4.3. † 100 mm x 50 mm may be used for light roofs only.

Table 6.5
STUDS IN NON-LOADBEARING WALLS (REFER 6.5.1.4)

Wind exposure	Maximum length (height) of stud	Stud size for stud spacings (mm) of:		
		400	480	600
Low	m	mm x mm	mm x mm	mm x mm
	2.4	100 x 50	100 x 50	100 x 50
	2.7	100 x 50	100 x 50	100 x 50
	3.0	100 x 50	100 x 50	100 x 75
High	2.4	75 x 50	100 x 40	100 x 40
	2.7	100 x 40	100 x 50	100 x 50
	3.0	100 x 50	100 x 50	100 x 75
	3.3	100 x 75	100 x 75	100 x 100
	3.6	100 x 100	100 x 100	150 x 50
	3.9	150 x 50	150 x 50	150 x 50
	4.2	150 x 50	150 x 50	150 x 75
	4.8	150 x 75	150 x 75	150 x 100
Medium	2.4	75 x 50	75 x 50	75 x 50
	2.7	75 x 50	75 x 50	100 x 40
	3.0	100 x 40	100 x 40	100 x 50
	3.3	100 x 40	100 x 50	100 x 75
	3.6	100 x 75	100 x 75	100 x 100
	3.9	100 x 75	100 x 100	150 x 50
	4.2	100 x 100	150 x 50	150 x 50
	4.8	150 x 50	150 x 75	150 x 75
Low and internal walls	2.4	75 x 40	75 x 40	75 x 50
	2.7	75 x 40	75 x 40	75 x 50
	3.0	75 x 50	100 x 40	100 x 40
	3.3	100 x 40	100 x 50	100 x 50
	3.6	100 x 40	100 x 50	100 x 75
	3.9	100 x 75	100 x 75	100 x 100
	4.2	100 x 75	100 x 100	150 x 50
	4.8	150 x 50	150 x 50	150 x 75

Note – In table 6.5: 100 x 40 may be substituted for 75 x 50
125 x 40 may be substituted for 100 x 75
125 x 50 may be substituted for 100 x 100

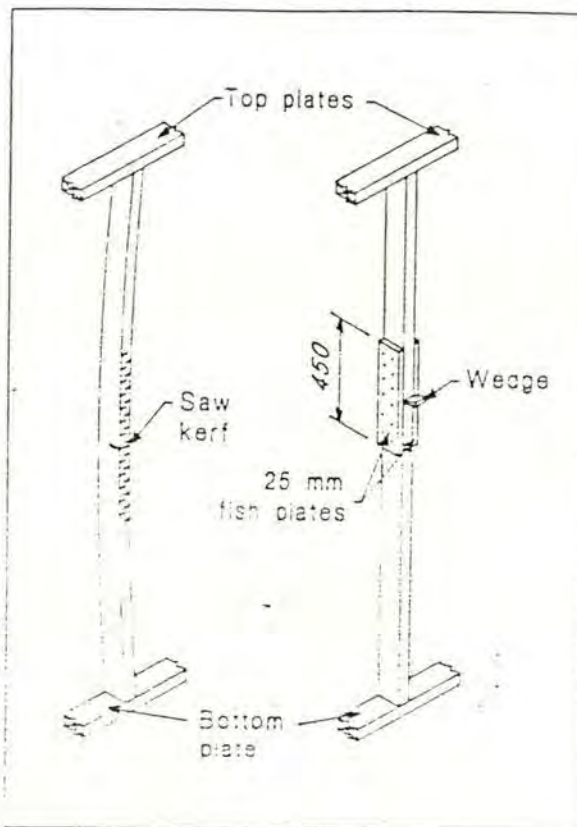
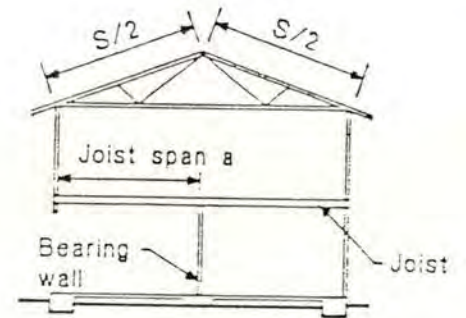
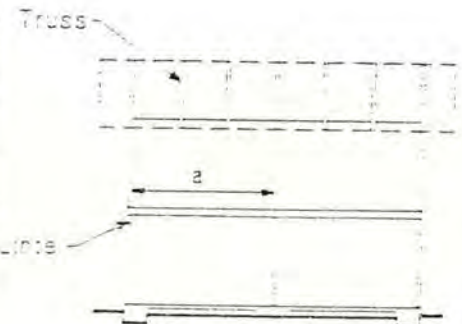


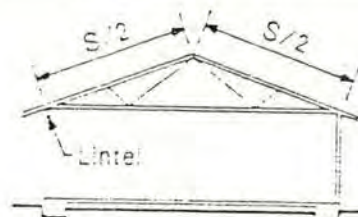
Fig. 6.6
STRAIGHTENING STUDS



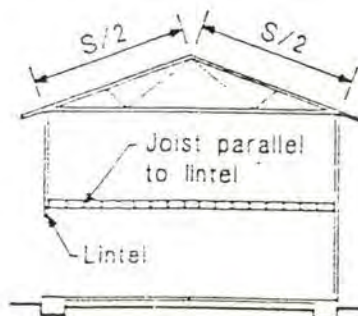
(C) Lintel supports roof,
floor joists and walls
(Greater of S or joist span a)



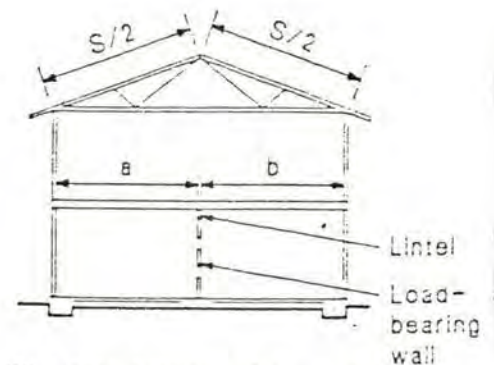
(D) Lintel supports wall and floor
(truss parallel to lintel)
(Span of joist = a)



(A) Lintel supports roof
(S for roof)



(B) Lintel supports roof and walls
(S for roof)



(E) Lintel supports floor only
(Span of joist = $a-b$)

Fig. 6.7
LINTEL LOADS FOR THE PURPOSES OF TABLE 6.8

Table 6.7
LINTELS
1.5 kPa and 2.0 kPa floor loads

Maximum clear width of opening (span of lintel)	Maximum span of member supported*†	Roof only or roof and walls only where lintel thickness (mm) is: (see fig. 6.7(A) and (B))			Depth of lintel supporting: Floor and walls only where lintel thickness (mm) is: (see fig. 6.7(D) and (E))			All other cases where lintel thickness (mm) is: (see fig. 6.7(C))		
		50	75	100	50	75	100	50	75	100
m	m	mm	mm	mm	mm	mm	mm	mm	mm	mm
A Light roof										
0.95	8.0	200	125	100	125	100	100	200	150	125
	12.0	200	150	125	125	125	100	200	200	150
1.25	8.0	200	150	125	150	125	125	200	200	150
	12.0	200	200	150	200	150	125	250	200	200
1.55	8.0	200	150	125	200	150	150	250	225	200
	12.0	200	200	150	200	200	200	300	250	200
1.85	8.0	200	200	150	225	200	200	300	250	200
	12.0	250	200	200	250	225	200	-	300	250
2.15	8.0	225	200	150	250	225	200	-	300	250
	12.0	250	225	200	300	250	225	-	-	300
2.45	8.0	250	200	150	300	250	225	-	-	300
	12.0	300	250	200	-	300	250	-	-	-
2.75	8.0	300	225	200	-	300	250	-	-	300
	12.0	-	300	225	-	-	300	-	-	-
3.05	8.0	-	250	200	-	-	300	-	-	-
	12.0	-	300	250	-	-	-	-	-	-
3.65	8.0	-	-	250	-	-	-	-	-	-
	12.0	-	-	300	-	-	-	-	-	-
* The greater of roof dimension S (see 6.4.3), span of joists, span of underpurlins, or span of strutting beams, as appropriate. † Refer to fig. 6.7 for lintel loads.										

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Table 6.7 (cont'd)
LINTELS
1.5 kPa and 2.0 kPa floor loads

Maximum clear width of opening (span of lintel)	Maximum span of member supported* †	Roof only or roof and walls only where lintel thickness (mm) is: (see fig. 6.7(A) and (B))			Depth of lintel supporting: Floor and walls only where lintel thickness (mm) is: (see fig. 6.7(D) and (E))			All other cases where lintel thickness (mm) is: (see fig. 6.7(C))		
		50	75	100	50	75	100	50	75	100
m	m	mm	mm	mm	mm	mm	mm	mm	mm	mm
B Heavy roof										
0.95	8.0	200	150	125	125	100	100	200	200	125
	12.0	200	200	125	125	125	100	225	200	150
1.25	8.0	200	200	125	150	125	125	225	200	150
	12.0	225	200	150	200	150	125	300	225	200
1.55	8.0	200	200	150	200	150	150	300	225	200
	12.0	250	200	200	200	200	200	-	300	225
1.85	8.0	250	200	200	225	200	200	-	300	225
	12.0	300	225	200	250	225	200	-	-	300
2.15	8.0	300	225	225	250	225	200	-	-	250
	12.0	-	300	225	300	250	225	-	-	300
2.45	8.0	300	250	225	300	250	225	-	-	300
	12.0	-	300	250	-	300	250	-	-	-
2.75	8.0	-	300	225	-	300	250	-	-	-
	12.0	-	-	-	-	-	-	-	-	-
3.05	8.0	-	-	250	-	-	300	-	-	-
	12.0	-	-	300	-	-	-	-	-	-
3.35	8.0	-	-	300	-	-	-	-	-	-
	12.0	-	-	-	-	-	-	-	-	-
* The greater of roof dimension S (see 6.4.3), span of joists, span of underpurlins, or span of strutting beams, as appropriate.										
† Refer to fig. 6.7 for lintel loads.										

Table 6.3
SILL AND HEAD TRIMMERS
See 6.6.2.1

Maximum clear width of opening	Thickness of sill and header trimmers	Maximum clear width of opening	Thickness of sill and header trimmers
m	mm	m	mm
2.0	40	3.0	75
2.4	50	3.6	100 (or two 50 mm)

JOINER

9.01 PRELIMINARY

Refer to the Conditions of contract and the Preliminary and General clauses of this specification which shall apply to this section of the work

9.02 TIMBER GRADES

Exterior Joinery	Aluminium
Interior door jambs	Customwood
Window Jamb liners	Tanalised pine finger jointed

All to be seasoned timber run to standard profiles.

9.03 WINDOWS ALUMINIUM

Aluminium windows to be of heavy gauge aluminium to comply with NZS 4211 to withstand direct wind pressure of 1100pa the sizes and types as indicated on the drawings and shall be powder coated to colour of Owners choice. Windows shall be delivered to the site, stored on edge and protected from breakage's, damage, plaster splashes etc. The windows are to be glazed with standard quality glass, with selected obscure glass to WC and bathroom windows as required with security glazing beads to all windows. Windows to be complete with 25mm jamb liners and to be installed to the manufacturer specifications.

9.04 ALUMINIUM DOORS

Aluminium door units to be of heavy gauge aluminium to comply with NZS 4211 to withstand direct wind pressure of 1100pa the sizes and types as indicated on the drawings and shall be powder coated to colour of Owners choice. Doors shall be delivered to the site, stored on edge and protected from breakage's, damage, plaster splashes etc. Doors to be installed as per manufactures instructions. The doors are to be glazed with standard weight glass for size of sheet. Doors to be complete with 30mm jamb liners and to be installed to the manufacturers specification.

9.05 GLAZING

All glass sizes, thicknesses and glazing to comply with the requirements of N.Z.S. 4223, and the NEW ZEALAND BUILDING CODE.

9.06 INTERIOR DOORS

Interior doors are to be flush type with veneer quality facing sheets and clashing strips to the closing edges. Sizes are to be standard. Sliding doors to be on "Sylon" or similar track of recommended size. Interior door jambs are to be 30mm grooved to take linings and with 12mm planted stops.

9.07 FITTINGS

Construct the various fittings as shown on the drawings.

9.08 KITCHEN

As designed.

Allow to construct all kitchen fittings including the following:

Sink bench to have textured finished formica veneered top with stainless steel bowls and draining tray.

All other bench tops shall be selected Formica with matching upstand and rimu edges.

All cabinets shall be veneered with Melteca.

Pantry to have Beauty board shelving.

Allow to install.

9.09 LAUNDRY TUB

Supplied by the plumber.

9.10 VANITY UNITS

Supplied by the Plumber.

9.11 SHOWER SCREEN

Supplied by the Plumber.

9.12 FRONT DOOR.

Allow to supply classical rimu timber entry door with sidelite.

9.13 CHECK SIZES

Joiner shall allow to CHECK ALL DIMENSIONS on the site before executing any of the work.

9.14 DELIVERY TO SITE

The Joiner shall allow to deliver in good order to the site all items of joinery. He shall co-operate with the main contractor who shall programme a mutually acceptable date for delivery.

BRICKLAYER

10.01 PRELIMINARY

Refer to the Conditions of contract and the Preliminary and General clauses of this specification which shall apply to this section of the work.

10.02 MATERIAL

Bricks are to be hard square Monier 70 series of owners choice delivered to the site in packets and free from chipped edges. The bricks are to be wetted before laying.

10.03 MORTAR

Mortar to consist of sand and cement with plasticiser all mixed according to the manufacturer's specifications. Colour shall be to suit and joints shall be raked.

10.04 LAYING

Construct the various veneer walls, as shown on the drawings.

10.05 CORNERS

All corners are to be plumbed both ways and the courses are to be level and straight. Perpenders are to be in alignment. Joints to be 10mm thick maximum weatherstruck on exposed faces. Allow to construct seismic control joints at all corners. Flash with light gauge galv. iron colour matched to veneer, seal with flexible sealant as per brickmaker specifications.

10.06 CILLS

Cills to be finished with tiles, colour to match. Tiles to have exposed edge rounded and to project 25mm beyond face of wall.

10.07 TIES

Build in galvanised ties spaced at not more than 500mm centres horizontally and every third course vertically.

10.08 CAVITY

Maintain a 40mm cavity to be kept clear of all mortar droppings and to be drained and ventilated.

10.09 OTHER TRADES

Co-operate with the carpenter in the building of all exterior joinery.

10.10 EQUAL APPROVED

The materials and / or fittings detailed within this specification are the minimum standard required.

SOLID PLASTERER

11.01 PRELIMINARY

Refer to the Conditions of contract and the Preliminary and General clauses of this specification which shall apply to this section of the work

11.02 MATERIALS

Cement to be ordinary Portland Cement, Sand to be clean river sand free from saline, vegetable or earthly matter. Plaster to consist of sand, cement and a liquid plasticiser if required, mixed according to the Manufacturer's Directions.

11.03 PLASTERING

Plaster porch floor, and steps to a smooth textured non slip finish, with falls to the outside, exposed edges to be rounded, cove up against walls and under door cills.

ROOFER

12.01 PRELIMINARY

Refer to conditions of contract and the Preliminary and General clauses of this specification which shall apply to this section of the work.

12.02 GENERAL

Refer to the drawings for the extent of the roofing to be used.

12.03 SCOPE OF WORK - COLORSTEEL CORRUGATED IRON

Roofing to be 0.55mm Galvanised Colorsteel Corrugated Iron in continuous lengths from ridge to gutters. All fixed in accordance with standard practice and as recommended in the manufactures specifications

12.04 The roof area is to be covered with **75mm x 1mm galvanised wire mesh** stretched taut and securely stapled to the purlins. Overlay with breather type **building paper**.

12.05 **Ridges and hips** to be covered with Longrun galvanised colorsteel lead edge ridging, of approved type.

12.06 **Fascia and Barges** to be Taylor or similar to match roofing

12.07 Supply and fix all **flashings, lead caps etc.**, to make the roof thoroughly watertight and birdproof. Allow to co-ordinate with other trades as required

12.08 **Roofing accessories** to be fixed in accordance with manufactures specifications.

PLUMBER & DRAINLAYER

13.01 PRELIMINARY

Refer to the Conditions of contract and the Preliminary and General clauses of this specification which shall apply to this section of the work.

13.02 The whole of the plumbing and drainlaying shall be done in strict accordance with the local authorities' by-laws and drains shall be laid by registered workmen only.

13.03 The plumbing contractor shall obtain all necessary permits for the work.

3.04 EXTERIOR WORK

Supply and fix all necessary flashing, lead caps, sill trays etc., in conjunction with the builder and the roofer to make a thoroughly watertight job.

13.05 DOWNPIPES.

Supply and fix 80 dia.PVC downpipes to all outlets provided in spoutings.

13.06 WATER SERVICES

Lay on cold water from main to hot water cylinder set up at position as shown on the drawings.

13.07 HOT WATER SYSTEM

On stand provided supply and install 180L mains pressure gas hot water cylinder complete. Run branches to showers, washing machine, tubs ,bath, kitchen sink, dishwasher and vanities.

13.08 HOT AND COLD WATER.

Lay on hot and cold water services to the various fittings shown on the drawings .Allow for 3 hose taps positioned as directed.

Hot water.

From cylinder lay on hot water services to bath ,kitchen sink, shower, vanity, dishwasher, washing machine and tubs. Hot water services shall be laid so as no fluctuations of pressure take place when shower is being used.

Cold water.

Take 12mm. branch pipes to all cold water fittings with separate lines to shower. Cold water shall be supplied to washing machine, tubs ,w.c. cistern, shower, vanity ,kitchen sink, dishwasher and bath.

13.09 FITTINGS

Set up the fitting as shown on the drawings and provide all regulation traps and wastes to discharge over gully to same. Traps and wastes may be plastic if approved.

BATH	Englefield Alpha 1670
VANITY	Aakronite
SINK	Supplied by joiner
W.C.	Caroma Trident White china washdown pedestal
CISTERN	Caroma Trident dual flush
TUB	Super tub
SHOWER ROSE	Methven Olympus 190 Slide Shower
TAPS	Methven Olympus exterior hose taps - brass
SHOWER MIXER UNIT	Methvens Olympus Ott Tru temp.
SHOWER	Englefield Valencia 900 x 900 safety glass door and sidelite.
DISHWASHER	By owner - Allow for brass stopcocks
WASTEMASTER	ISE Insinkerator 44

13.10 DRAINS STORMWATER.

Stormwater to be taken in uP.V.C.pipes from downpipes to local authority connections at boundary as shown on drawings.

13.11 DRAINS SEWER.

Sewer drain to be 110mm dia uPVC laid with even falls and easy bends from fittings to connections at boundary as shown on drawings.

13.12 DRAINS FITTINGS.

Provide and install all necessary Gully traps, terminal vents, back vents, cleaning eyes, inspection junctions and bends etc., as may be necessary to comply with the Local Authorities Regulations.

ELECTRICIAN

14.01 PRELIMINARY

Refer to the Conditions of contract and the Preliminary and General clauses of this specification which shall apply to this section of the work.

14.02 GENERAL

This contract includes the supply and installation of the electric wiring system complete. The whole of the work shall be carried out strictly in accordance with the local authorities' by laws and the electrical contractor is to obtain all permits from the supply authority and arrange for all inspection required.

14.03 SUPPLY

Arrange for mains supply to the building. Check the position of supply and conditions before tendering.

14.04 BOARDS

Provide and set up as required one meter board and case with all necessary equipment therein neatly labelled.

14.05 SWITCHBOARD

Provide and set up a switchboard panel with all necessary fuses, circuit breakers, switches and main switches properly mounted and hinged on one side.

14.06 LIGHTS & POWER POINTS

Allow to install the lights, switches, and power outlets, as scheduled below, all to be positioned by the Owners after the floor has been laid.

Fittings to be P.D.L. 600 Series.

Allow for the following:

- Interior downlights and switches
- Exterior lights and switches
- Interior ceiling lights switched
- Interior wall lights switched
- Spotlights on track system
- Security lights on motion sensor
- Power outlets double
- Power outlets single
- R.C.D. outlet

14.07 FITTINGS

Allow to install electric wall oven supplied by owner.
 Allow to install electric hobs supplied by owner.
 Allow to supply and install bathroom wall fan heaters.
 Allow to supply and install extract hood.
 Allow to connect up with all isolating switches as required.

14.08 EARTH

Earth all metal waste pipes and metal fittings as required by the regulations.

14.09 TV OUTLETS

Allow to install 3 TV Aerial sockets in position as directed by the owner.

14.10 EXTRACT HOOD

Allow to supply and install Classique Tiltahood extract hood 600 wide. Allow to connect up with all isolating switches as required.

14.11 DOOR CHIMES

Allow to supply and install door chimes at front door.

14.12 DISHWASHER

Allow to supply and install switch and connecting plug socket to dishwasher.

14.13 RCD OUTLET

Allow to provide and install safety power outlet positioned in ensuite bathroom, as directed by the owners.

14.14 SECURITY SYSTEM

Allow to supply and install monitored security system as directed. Allow PC Sum of \$1,800.00 for supply only.

14.15 CEILING LIGHTS

Allow to finish at ceiling level with batten holder and coolican shade where lights are to be provided by owner.

14.16 WALL LIGHTS

Allow to finish at walls with angle batten holder and coolican shade where lights are to be provided by owner.

14.17 TELEPHONES

Allow to co-operate with owner, and Telecom with installation of telephone wiring and jack points. Allow for points to following areas:

Kitchen

Bedroom 1

PAINTER AND PAPER HANGER.

15.01 PRELIMINARY

Refer to the Conditions of contract and the Preliminary and General clauses of this specification which shall apply to this section of the work

15.02 COLOUR SCHEME

Allow to liaise with owners as to colour scheme and submit to the owners for approval samples of colours chosen

All undercoats shall be tinted to match final topcoat colours.

15.03 PAINTS AND VARNISH

All materials shall be Dulux as manufactured by ICI Paints New Zealand Limited. All paints and varnish is to be delivered tot he job in new tins, unopened and currently usable

15.04 PREPARATION OF SURFACES

Subcontractor shall prepare all surfaces to be painted in accordance with Dulux Duspec Surface Preparation guideline manual

15.05 SPECIFICATION

EXTERIOR

Woodwork	Dulux Duspec Residential Specification No 61
Metalwork	Dulux Duspec Residential Specification No 63
Soffit lining	Dulux Duspec Residential Specification No 45
Plaster	Dulux Duspec Residential Specification No 45

INTERIOR

Walls and Ceilings, bedrooms,	Duspec 90
Walls and Ceilings,lounge,dining family room & hallways	Duspec 85
Walls and Ceilings, kitchen, bathrooms, laundry, toilets	Duspec 80
Trim - cupboards, shelving etc.	Duspec 61
Skirtings, door frames, windows frames,	Duspec 61
Doors	Duspec 96

15.06 GIBRALTAR BOARD WALL SURFACES

All surfaces shall be finished with paint finish. Surfaces shall be stopped to LEVEL 5 finish as recommended by WINSTONES WALLBOARDS LTD

15.07 COMPLETION

On completion, the residence is to be left clean and tidy, windows and other glasswork is to be cleaned. All trade debris is to be removed from the site and the building left clean and ready for occupancy

NZBC Clause E1 SURFACE WATER

This Clause is extracted from the New Zealand Building Code contained in the First Schedule of the Building Regulations 1992.

Provisions

OBJECTIVE

E1.1 The objective of this provision is to:

- (a) Safeguard people from injury or illness, and *other property* from damage, caused by *surface water*, and
- (b) Protect the *outfalls* of drainage systems.

FUNCTIONAL REQUIREMENT

E1.2 *Buildings* and *sitework* shall be constructed in a way that protects people and *other property* from the adverse effects of *surface water*.

PERFORMANCE

E1.3.1 Except as otherwise required under the Resource Management Act 1991 for the protection of other property, *surface water*, resulting from a storm having a 10 % probability of occurring annually and which is collected or concentrated by *buildings* or *sitework*, shall be disposed of in a way that avoids the likelihood of damage or nuisance to *other property*.

E1.3.2 *Surface water*, resulting from a storm having a 2 % probability of occurring annually, shall not enter *buildings*.

E1.3.3 Drainage systems for the disposal of *surface water* shall be constructed to:

- (a) Convey *surface water* to an appropriate *outfall* using gravity flow where possible,
- (b) Avoid the likelihood of blockages,
- (c) Avoid the likelihood of leakage, penetration by roots, or the entry of ground water where pipes or lined channels are used,
- (d) Provide reasonable access for maintenance and clearing blockages,

Building Industry Authority

Limits on application

Performance E1.3.2 shall apply only to *Housing*, *Communal Residential* and *Communal Non-residential buildings*.

SURFACE WATER

Provisions

- (e) Avoid the likelihood of damage to any *outfall*, in a manner acceptable to the *network utility operator*, and
- (f) Avoid the likelihood of damage from superimposed loads or normal ground movements.

NZBC Clause E1 SURFACE WATER

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Provisions

OBJECTIVE

E1.1 The objective of this provision is to:

- (a) Safeguard people from injury or illness, and *other property* from damage, caused by *surface water*, and
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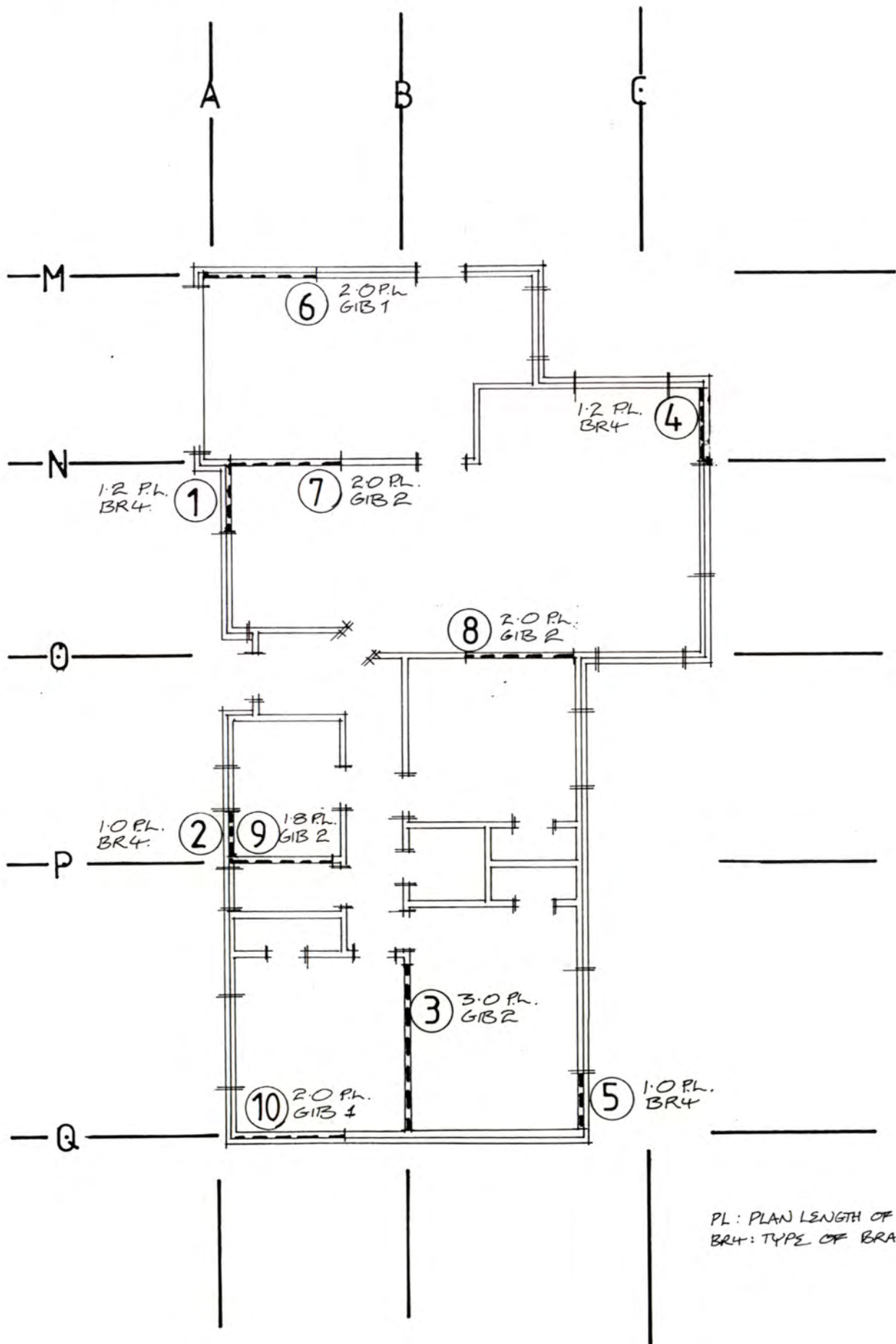
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Limits on application

Performance E1.3.2 shall apply only to *Housing*, *Communal Residential* and *Communal Non-residential buildings*.

Amd 3
Dec '95



bracing plan
SCALE 1:8100

RIORDAN

Wall Bracing Calculation Sheet B

Along

Wall or Bracing Line		Bracing Elements Provided			Wind		Earthquake	
1	2	3	4	5	6 W	7 W	6 E	7 E
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m E	BUs Achieved (BU/m x L) E
A	160.4	1	BR4	1.2			85	102
		2	"	1.0			"	85
B	70	3	GIB2	3.0			70	210
C	160.4	4	BR4	1.2			85	102
		5	"	1.0			"	85
D								
E								
Totals Achieved					W		E	584
From Sheet A Totals Required					W	311.78	E	59.29
Wreq/Ereq = 0.6								

*If Wreq/Ereq is 1 or less complete E column only
 If Wreq/Ereq is 1.5 or more complete W column only
 Otherwise complete both W and E

Across

Wall or Bracing Line		Bracing Elements Provided			Wind		Earthquake	
1	2	3	4	5	6 W	7 W	6 E	7 E
Line Label	Minimum BUs Required	Bracing Element No.	Bracing Type	Length Element (m) L	Rating BU/m W	BUs Achieved (BU/m x L) W	Rating BU/m E	BUs Achieved (BU/m x L) E
M	94.48	6	GIB1	2.0			50	100
N	70	7	GIB2	2.0			60	120
O	70	8	GIB2	2.0			60	120
P	70	9	GIB2	1.8			60	108
Q	94.48	10	GIB1	2.0			50	100
Totals Achieved					W		E	548
From Sheet A Totals Required					W	449.18	E	519.29
Wreq/Ereq = 0.9								

(see page 18 for fixing details)

NZS 3604 : 1990 Ratings in bracing units per metre of element length

Type	Primary Bracing Element	Secondary Bracing Element	Wind	Earthquake
GIB 1	9.5mm Gib Board® lining on one face, not less than 1.8m long 1.8m and less than 2.4m 2.4m and longer	Diagonal Brace Diagonal Brace	55 75	50 50
GIB 2	9.5mm Gib Board® lining on both faces, not less than 1.8m long 1.8m and less than 2.4m 2.4m and longer	Diagonal Brace Diagonal Brace	75 80	60 70
GIB 3	9.5mm Gib Board® lining on both faces, not less than 1.2m in length	N/A	65	60
BR1	Gib Braceline® lining on one face 1.8m – 2.4m 2.4m and longer	Diagonal Brace Diagonal Brace	70 90	60 75
BR2	Gib Braceline® lining on one face, vertically fixed 1.8m-2.4m 2.4m and longer	N/A	75 85	60 60
BR3	Gib Braceline® lining on one face, horizontal fixing 1.8m-2.4m 2.4m and longer	N/A	60 95	45 65

DEFINITION: A diagonal brace is a galvanised steel angle brace with the minimum dimensions of 19 x 19 x 1.0mm.

Table 3: Gib Braceline® sheet brace panels

(see page 16 for fixing details)

NZS 3604 : 1990 Ratings in bracing units per metre of element length

Type	Primary Bracing Element	Secondary Bracing Element	Wind	Earthquake
BR4	Gib Braceline® lining on one face, not less than 0.9m long and a maximum of 1.2m in length	Metal strap of 6kN capacity fixed to both wall end studs	100	85
BR5	Gib Braceline® lining on one face, not less than 1.2m long and a maximum of 2.4m in length	Metal strap of 6kN capacity fixed to both wall end studs	115	85
BR6	Gib Braceline® lining on one face, 9.5mm Standard Gib® on the other, (fixed as a braced wall) not less than 1.2m long and a maximum of 2.4m in length	2 metal straps of 6kN capacity fixed to both ends of the wall or alternative 12kN capacity connection	150	110
BR7	Gib Braceline® lining on one face and 7.5mm ply on the other. Not less than 0.9m long and a maximum of 2.4m in length	Metal strap of 6kN capacity fixed to both wall end studs	145	145
BR8	Gib Braceline® lining on one face and 4.75mm Hardboard on the other. Not less than 0.9m long and a maximum of 2.4m in length	Metal strap of 6kN capacity fixed to both wall end studs	120	95
BR9	Gib Braceline® on one face min length 0.6m max length 1.2m	Both wall end studs require a fixing of 6kN capacity to the floor framing	110	95

FOR WALL HEIGHTS OTHER THAN 2.4 METRES multiply the ratings by '2.4 / wall height', except that this factor shall not be greater than 1.33.

For example: A GIB 3 bracing element which is 2.7m high, has a Bracing Unit rating per metre of its length equal to,

$$(2.4 \text{ divided by } 2.7) \times 65 = 0.88 \times 65 = 57 \text{ BU/m (W)}$$

$$(2.4 \text{ divided by } 2.7) \times 60 = 0.88 \times 60 = 53 \text{ BU/m (EQ)}$$

If this wall was 2.1m high, the rating would be,

$$(2.4 \text{ divided by } 2.1) \times 65 = 1.14 \times 65 = 74 \text{ BU/m (W)}$$

$$(2.4 \text{ divided by } 2.1) \times 60 = 1.14 \times 60 = 68 \text{ BU/m (EQ)}$$



PLAN PROCESSING CHECKLIST (P) & INSPECTION RECORD SHEET (I)

Record Number

Riordan
107883/1

P	I	SITING	P	I	FRAMING & PRE-LINE Continued
		Planning requirements met			Point loading
		Boundaries verified			Strong backs
		Zoning			Point loads above lintels
					Moisture test
P	I	FOUNDATIONS			Bracing schedule & fixings
✓		Type Ring/Slab			Ceiling joists – Table 10.4
		Minimum floor height <i>150 noted on plan</i>			Ceiling battens – Table 12.1
		Excavation			Trusses by approved manufacturer/Rafters – Table 10.2
✓		Dimensions	✓		Puffins – Table 10.8
✓		Bearing capacity	✓		Nails/fixings to all above
		Ventilation			Roof bracing Building paper
		D.P.M			Under puffins
		Reinforcing – construction/joints			Struts – Table 10.7
✓		Sub slab plumbing & ducting			
		Fill material	P	I	INSULATION
		Bracing columns	✓		Batts – wall & ceilings
		Veranda posts			Wool – wall & ceilings
		Internal pads			Other – wall & ceilings
P	I	PILE FOUNDATIONS	P	I	ROOF CLADDING
		Footings			Heavy
		Bearing capacity	✓		Light
		Pile treatment & size			Flashings
		Sub floor bracing			Fixings to manufacturers specs
		Pile & bearer spacing			
		Pile fixings	P	I	WALL CLADDING
		Anchor piles	✓		Light/Heavy
		Canterlever piles			
		Bracing	P	I	WINDOWS
			✓		Ventilation area of opening
P	I	BEARERS			Safety Glass <i>Required in Bathroom</i>
		Size			Lighting area of windows
		Bearer & joist fixings			Flashings
P	I	JOISTS	P	I	GENERAL
		Joist fixings			Stairs – angle rises
		Joist blocking			Balustrades – height & fixings
		Insulation			Decking – treatment
		Ventilation			Verandah posts – footings & fixings
P	I	FRAMING & PRE-LINE	P	I	CHIMNEYS
		Timber sizes			Pumice
✓		Lintels (Table 6.7)			Brick
		Trimming studs			Metal
		Sill heads			

Robert/other/checklist & inspection sheet.doc

Manawatu District Council

135 Manchester Street
Private Bag 10-001
FEILDING
Phone (06) 323 0000
Fax (06) 323 8711

PROJECT INFORMATION MEMORANDUM

Section 31, Building Act 1991

P.I.M. No.	107883	Date Rec'd	3-Nov-1998	Date Act'd	9-Nov-1998
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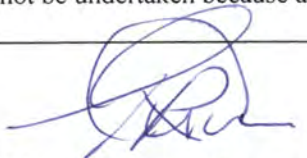
APPLICANT/CONTACT	PROJECT
Applicant Name: Riordan Timothy Lawrence Address: 190 Manchester St FEILDING Telephone No: 323-1092 Contact Name: Address: Contact Phone No: Contact Fax No:	Description of Project: DWELLING Proposed Use: DWELLING Intended Life: >50 years Project Classification: HOUSING (inclu. p/d) Project Types: New building (excl domestic extras). Number of Stages: 1 Producer Statement: does not exist Approximate Value: \$ 100000
PROPERTY	
Street Location: 190 Manchester St FEILDING Legal Description: LOT 1 DP 69638 LOT 6 DP 74557 - LOT 6 DP 74557 HAVING UNDIVIDED 1/6 SHARE IN LOT 7 DP 74557 BEING 400 SQ Valuation Roll No: 14091 24700	

This Project Information Memorandum includes all information known to this authority and is issued in accordance with the Building act 1991.

This project information memorandum is:

- ☒ Confirmation that the proposed building work may be undertaken, subject to the provisions of the Building Act 1991 and any requirements of the building consent
Not yet applied for ☐ No ☒ attached
☐ Notification that other authorisations must be obtained before a building consent will be issued.
☐ Notification that the proposed building work may not be undertaken because a necessary authorisation has been refused.

**Signed for and on behalf of the
Manawatu District Council**


Name Graeme Duncan

Position Building Officer

Date 9-Nov-1998

Time 09:00 am

PROPERTY MEMORANDA

The property is zoned Residential under the Feilding Borough Section of the District Plan.

District Plan status: Permitted activity.

The project complies with the requirements of the District Plan.

The building is to comply with the Building Act 1991, NZ BUILDING CODE 1992 and AMENDMENTS. ALL MATERIALS TO BE FIXED AS PER MANUFACTURERS INSTRUCTIONS.

There are no Environmental Health requirements.

There are no known General Bylaw Implications to this application

Plumbing and/or Drainage work is to comply with the N.Z Building Code 1992

Plumber to be nominated

Drainlayer to be nominated

OPERATIONS: Requirements as follows;

Wilhart Court is a private Right-of-Way. Future maintenance of pavement and services within the R.O.W. is the responsibility of the joint property owners.

The water & sewer laterals are located in the Right-of-Way.

For information regarding Power, Gas or Telecom services you are advised to contact the respective utility providers.

Manawatu District Council

135 Manchester Street
Private Bag 10-001
FEILDING
Phone (06) 323 0000
Fax (06) 323 8711

BUILDING CONSENT NO 107883/1

Section 35, Building Act 1991

Issued in accordance with Project Information Memorandum No 107883

APPLICANT/CONTACT	STAGE DETAILS
Applicant Name Riordan Timothy Lawrence Address 190 Manchester St FEILDING Telephone No 323-1092 Contact Name Address Contact Phone No Contact Fax No	Stage Number 1 Description of Stage DWELLING Building Type Dwelling (New) Detailed Use DWELLING Intended Life >50 years Stage Classification HOUSING (inclu. p/d) Stage Type New building (excl domestic extras). No of Units 1 No of Storeys 1 Floor Area 112 sq metres Designer Value of Stage \$ 100000
PROPERTY	
Street Location 190 Manchester St FEILDING Legal Description LOT 1 DP 69638 LOT 6 DP 74557 - LOT 6 DP 74557 HAVING UNDIVIDED 1/6 SHARE IN LOT 7 DP 74557 BEING 400 SQ Valuation Roll No 14091 24700	

This building permit is a consent under the Building Act 1991 to undertake building work in accordance with the attached plans and specifications so as to comply with the provisions of the Building Code. It does not affect any duty or responsibility under any other Act nor permit any breach of any other Act. This building consent is issued subject to any endorsements specified in the attached pages..... headed consent endorsements.....

Signed for and on behalf of the Manawatu District Council		
	Name Graeme Duncan	
Position Building Officer	Date 9-Nov-1998	Time 09:18 am

Inspection Record

DUNCAN	Application Number. 107883/1
---------------	--

Owners Name: Riordan
Site Address: 6 Willhart Court.
Project: Dwelling.

☒ Site Inspection	☐ Wall Framing Inspection
☒ Foundation	☐ Roof Framing Inspection
☐ Concrete Floor Slab	☐ Framing Inspection
☐ Sub Floor Framing	☐ Prelining (Moisture, Insulation) Insp.

☐ Subfloor Plumbing Inspection	☐ Fire Safety Inspection
☐ Subfloor Drainage Inspection	☐ System / Services Inspection.
☐ Drainage Effluent Inspection	
☐ Drainage (to NUO System)	☐ OTHER :
☐ Effluent disposal system	
☐ Plumbing & or Drainage Insp.	
☐ Preline Plumbing Inspection	

☐ REINSPECTION.	☐ FINAL INSPECTION
--	---

Date: 23.11.98.

Time: 3.00 PM.

Comments: Inspected Perimeter foundation. Good solid beam. Steel plate. Oh to pow. GRS.

Inspection Record

DUNCAN	Application Number. 107883/1
---------------	--

Owners Name: Riordan
Site Address: Willhart Ct
Project: New Dwelling.

☐ Site Inspection	☐ Wall Framing Inspection
☒ Foundation	☐ Roof Framing Inspection
☒ Concrete Floor Slab	☐ Framing Inspection
☐ Sub Floor Framing	☐ Prelining (Moisture, Insulation) Insp.

☐ Subfloor Plumbing Inspection	☐ Fire Safety Inspection
☐ Subfloor Drainage Inspection	☐ System / Services Inspection.
☐ Drainage Effluent Inspection	
☐ Drainage (to NUO System)	☐ OTHER :
☐ Effluent disposal system	
☐ Plumbing & or Drainage Insp.	
☐ Preline Plumbing Inspection	

☐ REINSPECTION.	☐ FINAL INSPECTION
--	---

Date: 25.11.98

Time: 9.15AM

Comments:
Inspected Slab preparation.
Ok to pour
9/2

Inspection Record

<u>Peter Hammond</u>	<u>Application Number</u>
----------------------	---------------------------

Owners Name: <u>J L Riordan</u>	
Site Address: <u>6 Millbrook Court</u>	<u>Seabrook</u>
Project: <u>New Dwelling</u>	

☐ Site Inspection	☐ Wall Framing Inspection
☒ Subfloor Drainage	☐ Roof Framing Inspection
☐ Concrete Floor Slab	☐ Framing Inspection
☐ Subfloor Framing Inspection	☐ Prelining (Moisture, insulation) Insp.

☐ Subfloor Plumbing Inspection	☐ Fire Safety Inspection
☐ Subfloor Drainage Inspection	☐ Systems/Services Inspection
☐ Drainage (to NUO System)	☐ Dangerous Goods
☐ Effluent disposal System	☐ Other
☐ Plumbing	
☐ Drainage	
☐ Preline Plumbing Inspection	

☐ REINSPECTION	☐ FINAL INSPECTION
---------------------------------------	---

Date:		Time:
-------	--	-------

Comments: <u>Inspect San & Sewer Waste Pipes & AWC</u>	
<u>Sludge Pipe</u>	

CATERED

C. J. Riordan

Inspection Record

DUNCAN	Application Number. 107883/1.
---------------	--------------------------------------

Owners Name: Riordan.
Site Address: 6 Willhart Court.
Project: Dwelling.

☐ Site Inspection	☒ Wall Framing Inspection
☐ Foundation	☒ Roof Framing Inspection
☐ Concrete Floor Slab	☒ Framing Inspection
☐ Sub Floor Framing	☒ Prelining (Moisture, Insulation) Insp.

☐ Subfloor Plumbing Inspection	☐ Fire Safety Inspection
☐ Subfloor Drainage Inspection	☐ System / Services Inspection.
☐ Drainage Effluent Inspection	
☐ Drainage (to NUO System)	OTHER :
☐ Effluent disposal system	
☐ Plumbing & or Drainage Insp.	
☐ Preline Plumbing Inspection	

☐ REINSPECTION.	☐ FINAL INSPECTION
--	---

Date: 14.12.98.	Time: 9.45AM.
-----------------	---------------

Comments: Pre line - MC to walls 12-15. Ceily battens 12-13. Baths in place. Bracing as per plan. Ok to line. GRS
--



Inspection Record

<u>Peter Hammond</u>	<u>Application Number</u> <u>107883</u>
----------------------	--

Owners Name: <u>J J Rurdan</u>
Site Address: <u>6 Wilthart Court (190 Manchester St.)</u>
Project: <u>New Dwelling</u>

☐ Site Inspection	☐ Wall Framing Inspection
☐ Subfloor Drainage	☐ Roof Framing Inspection
☐ Concrete Floor Slab	☐ Framing Inspection
☐ Subfloor Framing Inspection	☐ Prelining (Moisture, insulation) Insp.

☐ Subfloor Plumbing Inspection	☐ Fire Safety Inspection
☐ Subfloor Drainage Inspection	☐ Systems/Services Inspection
☐ Drainage (to NUO System)	☐ Dangerous Goods
☐ Effluent disposal System	☐ Other
☐ Plumbing	
☐ Drainage	
☒ Preline Plumbing Inspection	

☐ REINSPECTION	☐ FINAL INSPECTION
---------------------------------------	---

Date: <u>12/12/08</u>		Time: <u>10 - 30</u>
-----------------------	--	----------------------

Comments:	<u>Inspected Hot and Cold Water Services</u>
	<u>All Copper Pressure Test on</u>
	<u>OK All</u>

Inspection Record

<u>Peter Hammond</u>	<u>Application Number</u> <u>107883</u>
----------------------	--

Owners Name: <u>J L Riordan</u>
Site Address: <u>6 Wilford Court - 190 Manchester St</u>
Project: <u>New Dwelling</u>

☐ Site Inspection	☐ Wall Framing Inspection
☐ Subfloor Drainage	☐ Roof Framing Inspection
☐ Concrete Floor Slab	☐ Framing Inspection
☐ Subfloor Framing Inspection	☐ Prelining (Moisture, insulation) Insp.

☐ Subfloor Plumbing Inspection	☐ Fire Safety Inspection
☐ Subfloor Drainage Inspection	☐ Systems/Services Inspection
☐ Drainage (to NUO System)	☐ Dangerous Goods
☐ Effluent disposal System	☐ Other
☐ Plumbing	
☒ Drainage	
☐ Preline Plumbing Inspection	



☐ REINSPECTION	☐ FINAL INSPECTION
---------------------------------------	---

Date: <u>11/1/99</u>		Time: <u>11-00</u>
----------------------	--	--------------------

Comments: <u>Inspected S/P & S/W Drains</u>	<u>OK</u> <u>AD</u>

Inspection Record

<u>Graeme Duncan</u>	<u>Application Number</u> <u>107883/1</u>
----------------------	---

Owners Name: <u>Riordan.</u>
Site Address: <u>6 Millhart Court</u>
Project: <u>Dwell.</u>

☐ Site Inspection	☐ Wall Framing Inspection
☐ Subfloor Drainage	☐ Roof Framing Inspection
☐ Concrete Floor Slab	☐ Framing Inspection
☐ Subfloor Framing Inspection	☐ Prelining (Moisture, insulation) Insp.

☐ Subfloor Plumbing Inspection	☐ Fire Safety Inspection
☐ Subfloor Drainage Inspection	☐ Systems/Services Inspection
☐ Drainage (to NUO System)	☐ Dangerous Goods
☐ Effluent disposal System	☐ Other
☐ Plumbing	
☐ Drainage	
☐ Preline Plumbing Inspection	

☐ REINSPECTION	☒ FINAL INSPECTION
---------------------------------------	--

Date: <u>18.2.99.</u>		Time: <u>2.15 PM.</u>
-----------------------	--	-----------------------

Comments:
<u>Some items re Plumbing and Surface Water</u>
<u>to be addressed.</u>
<u>GR &</u>

Inspection Record

<u>Peter Hammond</u>	<u>Application Number.</u>
----------------------	----------------------------

107883

Owners Name: <u>J L Riordan</u>
Site Address: <u>6 Wilham Court 1190 Monckton Street</u>
Project: <u>New Dwelling</u>

Site Inspection	Wall Framing Inspection
Foundation	Roof Framing Inspection
Concrete Floor Slab	Framing Inspection
Sub Floor Framing	Prelining (Moisture, Insulation) Insp.

Subfloor Plumbing Inspection	Fire Safety Inspection
Subfloor Drainage Inspection	System / Services Inspection.
Drainage Effluent Inspection	-
Drainage (to NUO System)	OTHER :
Effluent disposal system	
Plumbing & or Drainage Insp.	
Preline Plumbing Inspection	

REINSPECTION.	✓ FINAL INSPECTION
---------------	--------------------

Date: 18/2/99

Time: 2.15



Comments:

Serial Inspection
Gully traps to be raised to 75" above F.G. level.
Surface water of Carport Area on West Boundary to
be addressed with Vib or Siph Drain as per
NZBC Clause E1 Surface Water (E1.2)

Issue Interim CCC *OK*

Conditions

All as above.

Inspection Record **ISSUE C.C.C.**

DUNCAN	Application Number. 107883/1.
---------------	---

Owners Name: Riordan.
Site Address: 6 Willbards Ct.
Project: Dweller.

Site Inspection	Wall Framing Inspection
Foundation	Roof Framing Inspection
Concrete Floor Slab	Framing Inspection
Sub Floor Framing	Prelining (Moisture, Insulation) Insp.

Subfloor Plumbing Inspection	Fire Safety Inspection
Subfloor Drainage Inspection	System / Services Inspection.
Drainage Effluent Inspection	
Drainage (to NUO System)	OTHER :
Effluent disposal system	
Plumbing & or Drainage Insp.	
Preline Plumbing Inspection	

REINSPECTION.	☒ FINAL INSPECTION
---------------	--

Date: 23.4.99.

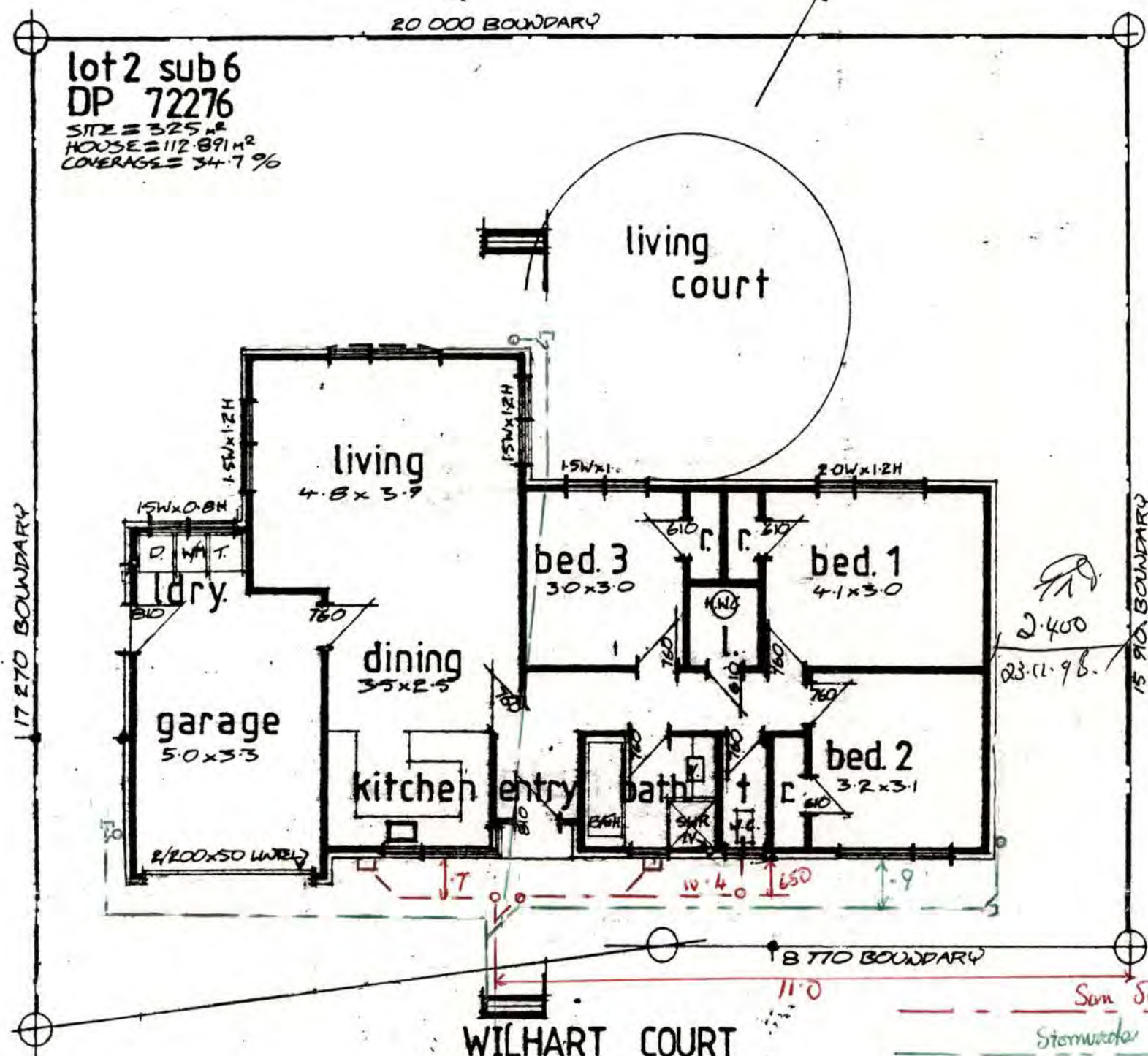
Time: 2.30 PM.

Comments:
All complete G.H.

ENTERED

ISSUE C.C.C.

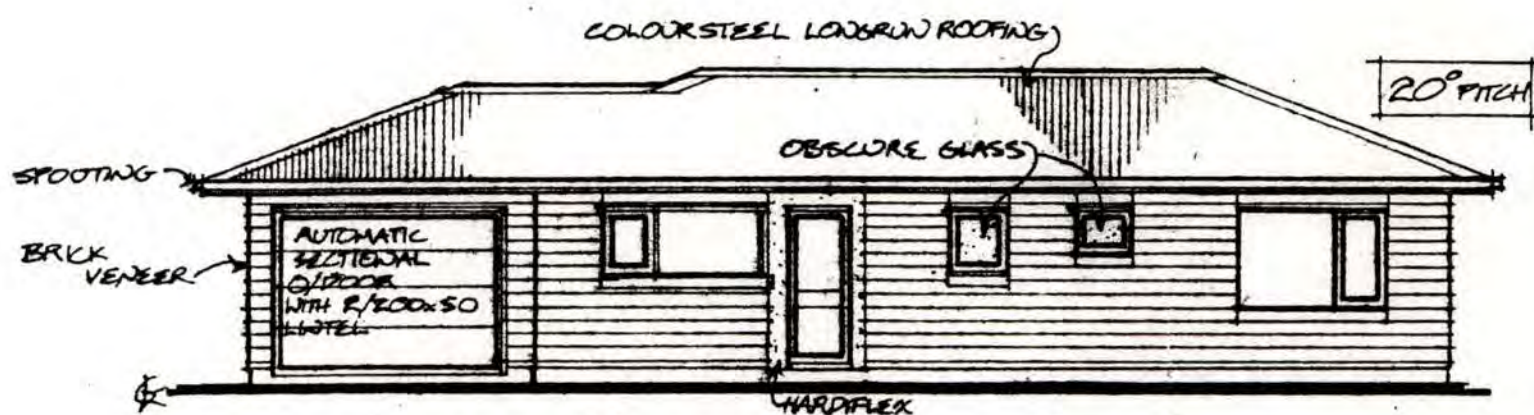
T.L. Riordan. 6 Wilhart Court. = 190 Manchester Street.
 L10 110.88 Val No 14091/24700



WILHART COURT
 site plan

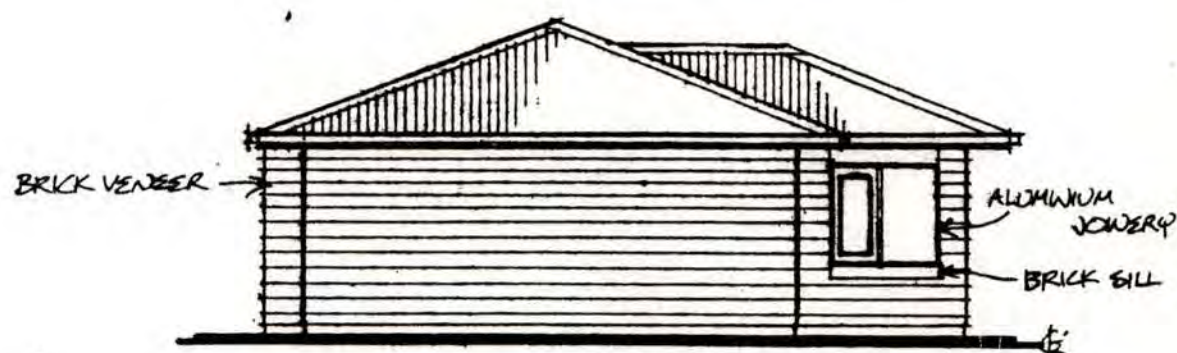
SCALE 1:300

Drainlayers Air Condition + Plumbing Palm Nth
 Inspected 11/1/99 + Drawn P.A. Hammond.



southeast elevation

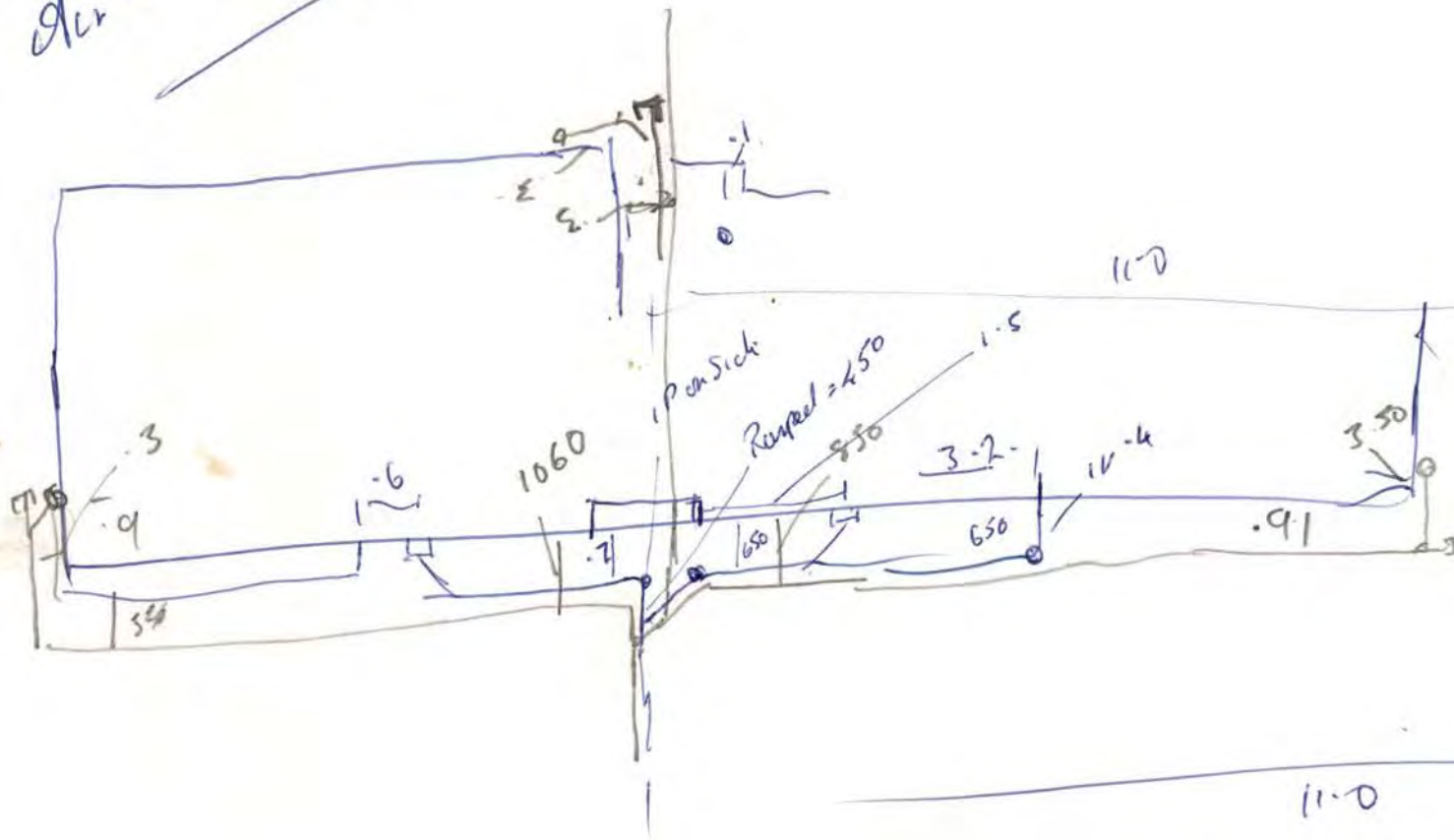
SCALE 1:300

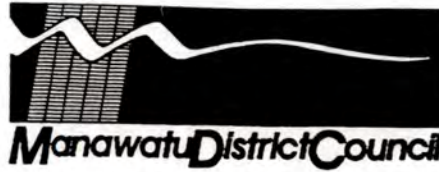


north east elevation

SCALE 1:300

Tim Borden
 Millheat Count
 11/1/99
 Air Cond. Plumbing





Advice Of Completion Of Building Work

Section 43(1), Building Act 1991 - Form 9

Under Building Consent No: _____

From (Owner):

Name: TIM RIORDAN

Mailing Address: 190 MANCHESTER ST

FEILDING

Building Officers:

[REDACTED]
Graeme Duncan

Warren Cummerfield

(Cross each applicable box and attach relevant comments.)

You are hereby advised that:

- ☐ All.
- ☐ Part only as specified in the attached particulars of the building work under the above building consent is believed to have been completed to the extent required by that building consent.

You are requested to issue:

- ☐ A final.
- ☐ An interim code compliance certificate accordingly (except where a code compliance certificate has been issued by a building certifier as stated below)

The attached particulars include:

- ☐ Building certificates.
- ☐ A code compliance certificate issued by a building certifier.
- ☐ Producer statements.

Signed by or for and on behalf of the owner:

Name: TIM RIORDAN

Position: OWNER

Date: 23 / 2 / 1999

INTERIM CODE COMPLIANCE CERTIFICATE

Issued in accordance with Section 43(3) of the Building Act 1991

APPLICANT/CONTACT	STAGE DETAILS
Applicant Name Riordan Timothy Lawrence Address 190 Manchester St FEILDING Telephone No 323-1092 Contact Name Address Contact Phone No Contact Fax N	Building Consent No 107883 Stage Number 1 Description of Stage DWELLING Building Type Dwelling (New) Detailed Use DWELLING Intended Life >50 Years Brief Desc HOUSING (inclu. p/d) Stage Type New building (excl domestic extras). No of Units 1 No of Storeys 1 Floor Area 112 Sq. Metres Designer Value of Stage 100000
PROPERTY	
Street Location 190 Manchester St FEILDING Legal Description LOT 1 DP 69638 LOT 6 DP 74557 - LOT 6 DP 74557 HAVING UNDIVIDED 1/6 SHARE IN LOT 7 DP 74557 BEING 400 SQ METRES- Valuation Roll No 14091 24700	

This is a final code compliance certificate issued in respect of all of the building work under the above consent. It is subject to any condition specified in the attached "**Conditions of Code Compliance Certificate**".

Signed for and on behalf of the Manawatu District Council	Name Jim Josephs
Position Environmental Services Manager	Date 04 MAR 1999 Tim 11:27

Conditions of Interim Code Compliance Certificate

Gulley traps to be raised to 75mm above F G Level. Surface water of concrete area on west boundary to be addressed with Nib or Dish drain as per NZBC Clause E1 surface water (E1.2)

MANAWATU DISTRICT COUNCIL BUILDING CONSENT APPLICATION

DISCIPLINE	SIGN & DATE	ENDORSEMENTS (prefix with discipline)	
		P I M	CONSENT
PLANNING	by 16927 Wendy 5-11-98		
OPERATIONS	125, 127, 129 137. 6-11-98		
BUILDING	5-11-98		
- site and subdivn - stability - fire safety - access - safety users - ventilation - dwg - lighting - dwg - food prep - dwg - moisture - structure - insulation			
PLUMBING	1126 187 5/11/98 186		
COMPLIANCE SCHEDULES			
GENERAL BY-LAWS	5-11-98		
HEALTH	5-11-98		
OTHERS	REG. COUNCIL		

C.C.C. ISSUED

Quality Due to Condition of Original

This is to advise that I called
 at 2-15 am/pm
 on 12-2-99
 Message Tim
 Please
 sign the White
 Form and drop
 into Council
 Reception Office
 Signed

Interim CCC issued.
 4-3-99

LAND ID No.

~~11088~~ 1424

VAL No.

14091-246/01

OWNER NAME

Riordan T L
 E.B. Z Ebray

ADDRESS (site)

6 William
~~195 Manchester~~
 Feilding

CONSENT No.

107883

PROJECT

Dwelling

LOCATION

P.I.M. ISSUED

CODE COMP. CERT.

CONSENT ISSUED

ADMINISTRATION

NOTES 1998 Dwg

L.P. G to 75mm
 CL.
 Plaster Soundat

LIM.

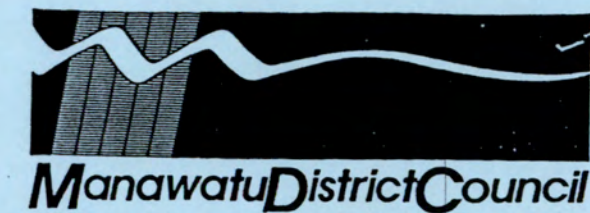
CODE COMPLIANCE CERTIFICATE

Issued in accordance with Section 43(3) of the Building Act 1991

APPLICANT/CONTACT		STAGE DETAILS	
Applicant Nam	Riordan Timothy Lawrence	Building Consent No	107883
Address	190 Manchester St FEILDING	Stage Number	1
		Description of Stage	DWELLING
Telephone No	323-1092	Building Type	Dwelling (New)
Contact Name		Detailed Use	DWELLING
Address		Intended Life	>50 Years
Contact Phone No		Brief Desc	HOUSING (inclu. p/d)
Contact Fax N		Stage Type	New building (excl domestic extras).
PROPERTY		No of Units	1
		No of Storeys	1
		Floor Area	112 Sq. Metres
		Designer	
		Value of Stage	100000
Street Location	190 Manchester St FEILDING		
Legal Description	LOT 1 DP 69638 LOT 6 DP 74557 - LOT 6 DP 74557 HAVING UNDIVIDED 1/6 SHARE IN LOT 7 DP 74557 BEING 400 SQ METRES-		
Valuation Roll No	14091 24700		

This is a final code compliance certificate issued in respect of all of the building work under the above consent. It is subject to any condition specified in the attached "Conditions of Code Compliance Certificate".

Signed for and on behalf of the Manawatu District Council	 Name Jim Josephs
Position Environmental Services Manager	Date 26 APR 1999 Tim 08:37



APPLICATION FOR A BUILDING CONSENT
(Section 33, Building Act 1991)

PART A: GENERAL DETAIL

PROJECT DETAILS

Complete only if you have NOT applied separately for a project information memorandum.

A project involves the following matters, tick each as applicable, and attach relevant information in duplicate.

- A ☒ Location in relation to legal boundaries and external dimensions of new relocated, or altered buildings (site plan with elevations, topography, drawn to scale)
- B _____ Details of any known or potential erosion, avulsion, falling debris, filled ground, subsidence, slippage, alluvion, inundation, hazardous contaminants on or near the site.
- C _____ Provisions to be made for vehicular access, including parking.
(To be shown on site plan)
- D _____ Provisions to be made in building over or adjacent to any road or public place.
- E _____ Provisions to be made for disposing of stormwater and wastewater.
(To be shown on site plan)
- F _____ Precautions to be taken where building work is to take place over existing drains or sewers or in close proximity to wells or water mains.
- G _____ New connections to public utilities ie water supply, stormwater system wastewater system.
- H _____ Provisions to be made in any demolition work for the protection of the public suppression of dust, suppression of noise, disposal of debris and disconnection from public utilities.
- I _____ Details of any cultural or heritage significance of the building or building site, including whether its on a marae, or waahi tapu.
- J _____ Copy or reference to, of any resource consent or planning approval for this project.
- K _____ Details of volume of Proposed Excavations; include volumes for site preparation, basement and driveway.

BUILDING DETAILS

This application is accompanied by (tick each applicable, attach relevant documents in duplicate)

- A _____ The drawings, specifications, and other documents according to which the building is proposed to be constructed to comply with the provisions of the New Zealand Building Code, with supporting documents, if any, including:
- B _____ Building certificates
- C _____ Producer Statements
- D _____ Reference to accreditation certificates issued by the building industry authority.
- E _____ Reference to determinations issued by the Building Industry Authority.

OWNER

CONTACT (If not Owner)

Name: <u>MR E. EBREY</u>	Name: <u>CRAIG OSMAN</u>
Address: <u>N°6 WILLHART COURT</u> <u>FEILDING</u>	Address: <u>1049 TREMAINE AVE</u> <u>PALMERSTON NORTH</u>
Telephone: <u>3232313</u>	Telephone: <u>3567058</u>
Fax: _____	Fax: <u>3579172</u>

PROJECT LOCATION

Address: <u>N°6 WILLHART COURT FEILDING</u>		
Valuation Number: _____		Property ID <u>14247</u>
Lot Number: _____	DP Number _____	Area _____
Section: _____	Blk: _____	SD: _____

PROJECT

Description of work: <u>BUILD A NEW CONCRETE BASE SUPPLY AND INSTALL</u> <u>A CONSERVATORY ONTO SAME. TO EXTEND THE USEABLE LIVING AREA</u>	
Intended use: <u>SUN ROOM</u>	Estimated Value: <u>\$6300.00</u>
New Building ☒	Intended life: _____
Alteration _____	indefinite, but not less than 50 years ☒
Relocation _____	or specified as _____ years.
Demolition _____	Floor area: <u>8.92</u> m ² .

-Application for consent only, project information number _____
-Application for consent and project information memorandum
-Application for PIM only

SIGNED BY OR ON BEHALF OF THE OWNER:

Signature <u>[Signature]</u>	Application No. _____
Name <u>CRAIG OSMAN</u> Date _____	

PART B

PLEASE ANSWER THE FOLLOWING QUESTIONS IF THEY APPLY.

What materials will be used for the (tick) and which form of energy is being installed OR is already installed?

Floor 1. ☒ Timber 2. ☒ Concrete 3. ☐ Wood Prod 4. ☐ Other	Internal Linings 1. ☐ Plaster Board 2. ☐ Fibrous Plaster 3. ☐ Wood Products 4. ☐ Other	Framing 1. ☐ Timber 2. ☐ Concrete 3. ☒ Steel 4. ☒ Aluminium 5. ☐ Other	Insulation 1. ☐ Fibreglass 2. ☐ Paper 3. ☐ Wool 4. ☐ Foil 5. ☐ Other
Outer Walls 1. ☐ Brick 2. ☐ Concrete 3. ☐ Conc. Block 4. ☐ Cement Bd 5. ☐ Plaster 6. ☐ Timber 7. ☐ Steel 8. ☐ Aluminium 9. ☐ Other	Roof 1. ☐ Steel 2. ☐ Concrete Tiles 3. ☐ Steel Tiles 4. ☒ Shingles 5. ☒ Aluminium 6. ☐ Other	Energy 1. ☐ Electric 2. ☐ Gas 3. ☐ Solid Fuel 4. ☐ Floor Elect. 5. ☐ Ceiling Elect. 6. ☐ Storage Elec Cooking 7. ☐ Electric 8. ☐ Gas 9. ☐ Solid Fuel	

FEES PAYABLE ON APPLICATION Building Consent..... 245= Motor Vehicle Crossing..... BRANZ Levy..... B.I.A..... Reserves Contribution..... Footpath Deposit..... Street Deposit..... Water Connection..... Sewer Connection..... Stormwater Connection..... TOTAL AMOUNT PAYABLE \$ 245= RECEIPT NUMBER 60662 RECEIVED: 16/8/01	REFERRALS SENT RECEIVED Structural Fire Service AMENDED DETAILS RECEIVED TO FROM Planning Manawatu District Council GSI No: 52-867-193 16/08/01 10:06 am Health Water REPRINT Drainage Rept # 60662 P & D Building No of Items: 2 Total \$ 245.00 Structural PL Planning Inspection Fees 20.00 Cheque \$ 245.00 Payment From: Ross Aluminium Joinery Ltd THANK YOU
---	---

DESIGNER(S)

Name: FISHER WINDONE Ph.No: 3567058

Address: 1049 TREMBLING AVE PALMERSTON NORTH

BUILDER

Name: FISHER WINDONE Ph.No: 3567058

Address:

DRAINLAYER

Name: M Ph.No:

Address:

PLUMBER

Name: MARK ALLEN PLUMBER Ph.No:

Address:

GASFITTER

Name: Ph.No:

Address:

ELECTRICIAN

Name: Ph.No:

Address:

BUILDING CERTIFIER

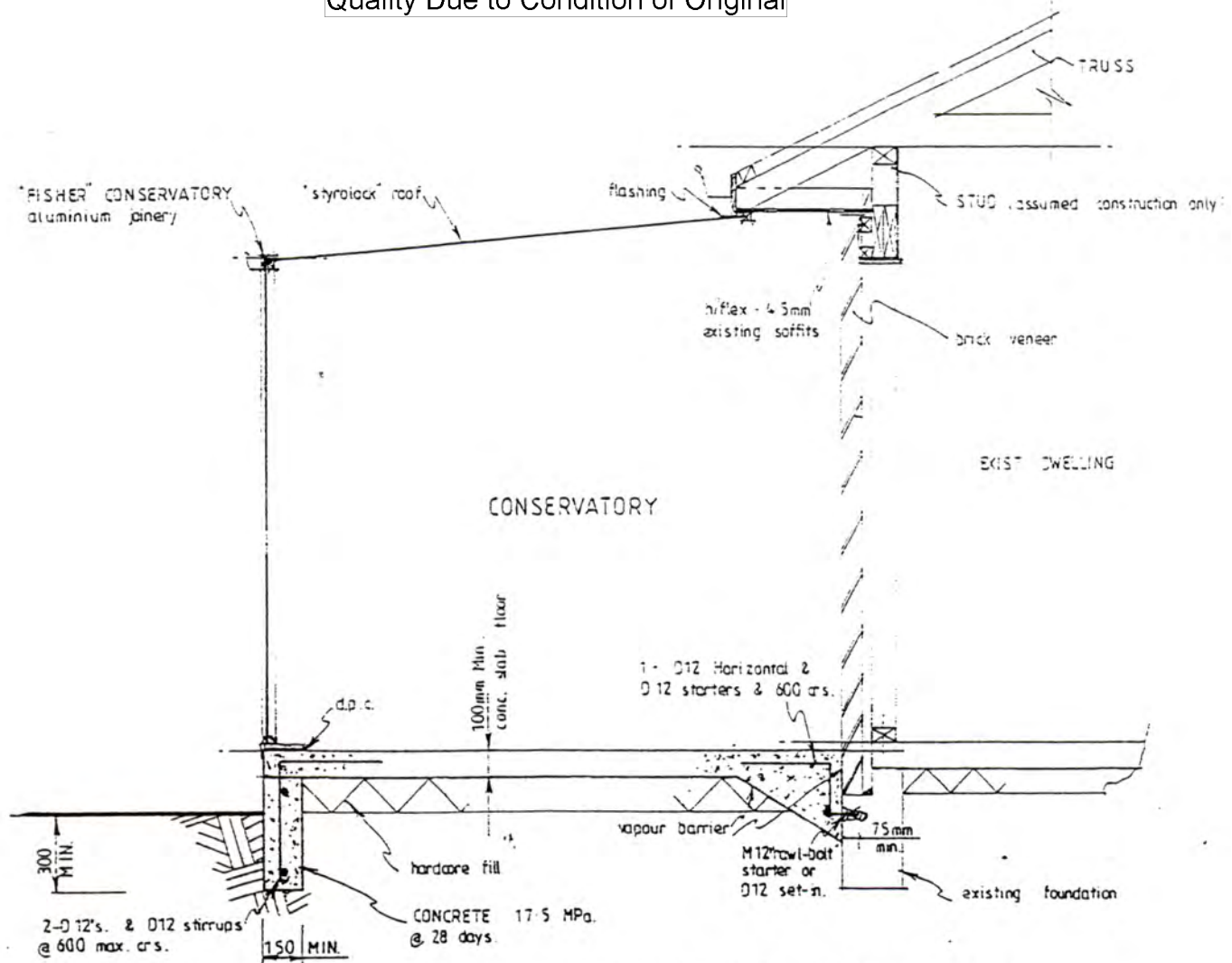
Name: Reg.No:

Address:

Ph.No: Fax.No:

Certifying:

Quality Due to Condition of Original



TYP CROSS-SECTION & FOUNDATION DETAIL 1:20

QUOTATION



Fisher Windows (Palm Nth)

1049 TREMAINE AVE, PALMERSTON NORTH, PHONE (06) 356-7058, FAX (06) 357-9172

QUOTE No

I-J-

DATE

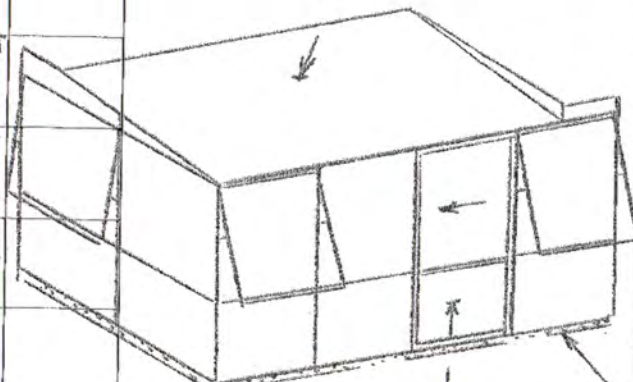
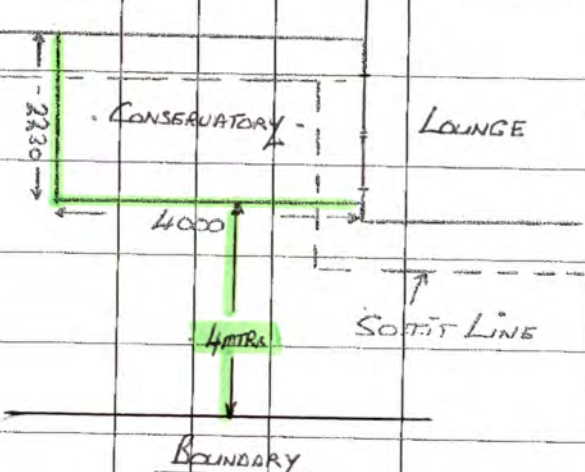
11-7-001

CUSTOMER No.

Customer MR E. EBREY
Address Nº 6 WILLHART CT
FEILDING
Phone 3232313

Job Name
Site Address As Listed
Site Phone

Frame Colour New Denim Blue
Reveal Type N/A
Glass: Clear Unless Specified
Others

ROOM	CODE	VIEWED FROM OUTSIDE	TRIM SIZE HEIGHT x WIDTH	QTY	GLASS	EXTERIOR CLADDING	OTHER COMMENTS
ON 1416	EW	TO APPLY FOR A BUILDING CONSENT BUILD A NEW CONCRETE BASE SLAB AND INSTALL A CONSERVATORY AS LISTED. STYROLOCK INSULATED ROOF  RANCHKINDER DEAR 17.8.01 Manawatu District Council 111310/1.					LOUNGE SOLID LINE BOUNDARY \$6316-00 INCL GST NEW CONCRETE BASE BUILT BY FISHER WINDOWS

Extra For:

GST
CONTRACT PRICE \$

Conditions of sale on reverse. Terms of payment details as set out below:

I accept the Contract sum of \$ _____ Signature _____ Date _____

TERMS OF PAYMENT:

1. A deposit of 1000- is required to confirm this order.
2. Payment is due 70% following delivery on the balance of the contract price, plus or minus and variations.
3. Interest at the rate of 1.5% per month may be charged on any overdue amount.
4. Legal action may be taken on accounts overdue 2 months or more with all costs and collection fees to buyers account

Manawatu District Council

135 Manchester Street
Private Bag 10-001
FEILDING
Phone (06) 323 0000
Fax (06) 323 8711

PROJECT INFORMATION MEMORANDUM

Section 31, Building Act 1991

P.I.M. No. 111310	Date Received 16-Aug-2001	Date Actioned 20-Aug-2001
--------------------------	----------------------------------	----------------------------------

APPLICANT / CONTACT	PROJECT
Applicant Name Ebrey Elaine Bonita Zelda Address 6 Wilhart Ct FEILDING 5600 Telephone No 06 323 2313 Contact Name Craig Osman Address 1049 Tremaine Avenue PALMERSTON NORTH Contact Phone No 06 356 7058 Contact Fax No 06 357 9172	Description of Project Build new conservatory/sun room Proposed Use Domestic Intended Life >50 Project Classification ACCESSORY BUILDINGS Project Types Alterations, repairs, extensions and resiting. No of Stages 1 Producer Statement Approximate Value \$6,300.00
PROPERTY	
Street Location 6 Willhart Legal Description LOT 6 DP 74557 - 1/6 SH IN LOT 7 DP 74557 Valuation No 14091 / 24601	

This Project Information Memorandum includes all information known to this authority and is issued in accordance with the Building Act 1991.
This project information memorandum is:

- ☐ Confirmation that the proposed building work may be undertaken, subject to the provisions of the Building Act 1991 and any requirements of the building consent
- ☐ Not yet applied for
- ☐ No.....attached
- ☐ Notification that other authorisations must be obtained before a building consent will be issued.
- ☐ Notification that the proposed building work may not be undertaken because a necessary authorisation has been refused.

Signed for and on behalf of the Manawatu District Council	Name Building Officer
Position	Date 20-Aug-2001 Time 08:42 AM

PROPERTY MEMORANDA

The property is zoned Residential under the Feilding Borough Section of the District Plan.

District Plan status: Permitted activity.

The project complies with the requirements of the District Plan.

Engineering: No requirements.

There are no known General Bylaw Implications to this application

All stormwater to be piped to an approved outlet

There are Health requirements. VENTILATION MUST COMPLY TO THE NZ BUILDING CODE.

The building is to comply with the Building Act 1991.

Manawatu District Council

135 Manchester Street
Private Bag 10-001
FEILDING
Phone (06) 323 0000
Fax (06) 323 8711

BUILDING CONSENT NO. 111310 / 1

Section 35, Building Act 1991

Issued in accordance with Project Information Memorandum No 111310

APPLICANT / CONTACT	STAGE DETAILS
Applicant Name Ebrey Elaine Bonita Zelda Address 6 Wilhart Ct FEILDING 5600 Telephone No 06 323 2313 Contact Name Craig Osman Address 1049 Tremaine Avenue PALMERSTON NORTH Contact Phone No 06 356 7058 Contact Fax No 06 357 9172	Stage Number 1 Description of Stage Build new conservatory/sun room Building Type Conservatory (Dwelling) Detailed Use Domestic Intended Life >50 Stage Classification ACCESSORY BUILDINGS Stage Type Alterations, repairs, extensions and resiting. No of Units 1 No of Storey 1 Floor Area 9 sq metres Designer Fisher Windows Value of Stage \$6,300.00
PROPERTY	
Street Location 6 Willhart Legal Description LOT 6 DP 74557 - 1/6 SH IN LOT 7 DP 74557 Valuation Roll No 14091 / 24601	

This building permit is a consent under the Building Act 1991 to undertake building work in accordance with the attached plans and specifications so as to comply with the provisions of the Building Code. It does not affect any duty or responsibility under any other Act nor permit any breach of any other Act. This building consent is issued subject to any endorsements specified in the attached pages.....headed consent endorsements.....

Signed for and on behalf of the Manawatu District Council	 Name Building Officer
Position	Date 20-Aug-2001 Time 09:02 AM

3 - SEP 2001

Inspection Record

DUNCAN	Application Number. 111316/1
--------	---------------------------------

Owners Name: Ebrey
Site Address: 6 Killhart Court.
Project: Conservatory / Sunroom.

☒ Site Inspection	☐ Wall Framing Inspection
☒ Foundation	☐ Roof Framing Inspection
☒ Concrete Floor Slab	☐ Framing Inspection
☐ Sub Floor Framing	☐ Prelining (Moisture, Insulation) Insp.

☐ Subfloor Plumbing Inspection	☐ Fire Safety Inspection
☐ Subfloor Drainage Inspection	☐ System / Services Inspection.
☐ Drainage Effluent Inspection	
☐ Drainage (to NUO System)	OTHER :
☐ Effluent disposal system	
☐ Plumbing & or Drainage Insp.	
☐ Preline Plumbing Inspection	

REINSPECTION.	FINAL INSPECTION
---------------	------------------

Date: 3.9.01.

Time: 9.45AM.

Comments:
Inspected Slab & Beam.
Polythene & steel placed as per plan.

OK to pour.

[Signature]

ISSUE C.C.C.

Inspection Record

DUNCAN	Application Number. 11310/1.
---------------	--

Owners Name: Ebrey.
Site Address: 6 Willhart Ct.
Project: Conservatory / Sun room.

Site Inspection	✓	Wall Framing Inspection
Foundation	✓	Roof Framing Inspection
Concrete Floor Slab	✓	Framing Inspection
Sub Floor Framing		Prelining (Moisture, Insulation) Insp.

Subfloor Plumbing Inspection		Fire Safety Inspection
Subfloor Drainage Inspection		System / Services Inspection.
Drainage Effluent Inspection		
Drainage (to NUO System)		OTHER :
Effluent disposal system		
Plumbing & or Drainage Insp.		
Preline Plumbing Inspection		

REINSPECTION.	✓	FINAL INSPECTION
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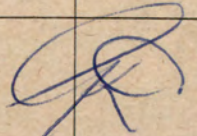
Date: 5.11.03.	Time:
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Comments:
Conservatory completed RA

ISSUE C.C.C.

PROCESSED

MANAWATU DISTRICT COUNCIL BUILDING CONSENT APPLICATION

DISCIPLINE	SIGN & DATE	ENDORSEMENTS (prefix with discipline)	
		P I M	CONSENT
PLANNING	27.6.69 Wendy 16/8/01		
OPERATIONS		ISSUED	CONSENT ISSUED
BUILDING • site and subdivn • stability • fire safety • access • safety users • ventilation - dwg • lighting -dwg • food prep - dwg • moisture - structure • insulation	 17.8.01 F/T.	P.I.M. ISSUED	
PLUMBING • water reticulation • surface water • foul water • personal hygiene			C.C.C. ISSUED
COMPLIANCE SCHEDULES			
GENERAL BY-LAWS			
HEALTH			
OTHERS REG. COUNCIL			

LAND ID No.	14247
VAL No.	14091/24601.
OWNER NAME	Ebrey E B Z
ADDRESS (site)	off Mo
	6 Willhart Court
CONSENT No.	111310
PROJECT	Conservatory / Sunroom
LOCATION	
CODE COMP. CERT.	
ADMINISTRATION	
NOTES	2001 - Conservatory / Sunroom

Manawatu District Council

CODE COMPLIANCE CERTIFICATE

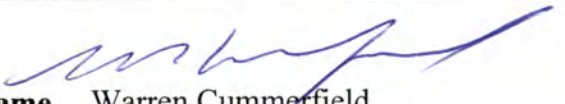
Issued in accordance with Section 43(3) of the Building Act 1991. Page 1 of 1

APPLICANT/CONTACT	STAGE DETAILS
Applicant Name Ebrey Elaine Bonita Zelda	Building Consent No 111310
Address 6 Wilhart Ct FEILDING 5600	Stage Number 1
Telephone No 06 323 2313	Description of Stage Build new conservatory/sun room
Contact Name Craig Osman	Building Type Conservatory (Dwelling)
Address 1049 Tremaine Avenue PALMERSTON NORTH	Detailed Use Domestic
Contact Phone No 06 356 7058	Intended Life >50 Years
Contact Fax No 06 357 9172	Brief Desc ACCESSORY BUILDINGS
PROPERTY	Stage Type Alterations, repairs, extensions and resiting.
Street Location 6 Willhart	No of Units 1
Valuation Roll No 14091 24601	No of Storeys 1
Legal Description LOT 6 DP 74557 - 1/6 SH IN LOT 7 DP 74557	Floor Area 9 Sq. Metres
	Designer Fisher Windows
	Value of Stage 6300

This is a final code compliance certificate issued in respect of all of the building work under the above consent. It is subject to any condition specified in the attached "Conditions of Code Compliance Certificate".

**Signed for and on behalf of the
Manawatu District Council**

Position Senior Building Officer


Name Warren Cummerfield

Date 07 NOV 2003 **Time** 11:14

Project Details

Complete only if you have **not** applied separately for a project information memorandum.

A project involves the following matters, tick each as applicable, and attach relevant information in duplicate.

- A ☐ Location in relation to legal boundaries and external dimensions of new relocated, or altered buildings (site plan with elevations, topography, drawn to scale).
- B ☐ Details of any known or potential erosion, avulsion, falling debris, filled ground subsidence, slippage, alluvion, inundation, hazardous contaminants on or near the site.
- C ☐ Provisions to be made for vehicular access, including parking (to be shown on site plan).
- D ☐ Provisions to be in building over or adjacent to any road or public place.
- E ☐ Provisions to be made for disposing of storm water and wastewater (to be shown on site plan).
- F ☐ Precautions to be taken where building work is to take place over existing drains or sewers or in close proximity to wells or water mains.
- G ☐ New connections to public utilities, ie water supply, storm water system, wastewater system.
- H ☐ Provisions to be made in any demolition work for the protection of the public suppression of dust, suppression of noise, disposal of debris and disconnection from public utilities.
- I ☐ Details of any cultural or heritage significance of the building or building site, including whether its on a marae, or waahi tapu.
- J ☐ Copy or reference to, of any resource consent or planning approval for this project.
- K ☐ Details of volume of Proposed Excavations; include volumes for site preparation, basement and driveway.

Building Details

This application is accompanied by (tick each applicable, attach relevant documents in duplicate).

- A ☐ The drawings, specifications, and other documents according to which the building is proposed to be constructed to comply with the provisions of the new Zealand Building Code, with supporting documents, if any, including:
- B ☐ Building Certificates.
- C ☐ Producer Statements.
- D ☐ Reference to accreditation certificates issued by the Building Industry Authority.
- E ☐ Reference to determinations issued by the Building Industry Authority.



Application For A Building Consent

Section 33, Building Act 1991

Part A - General Detail

Owner

Contact (if not owner)

Name: <u>Philip & Joy Kent</u>	Name: <u>Tim Riordan</u>
Address: <u>ASHURST.</u>	Address: <u>190 MANCHESTER STREET</u> <u>FEILDING</u>
Telephone: <u>326 8688</u>	Telephone: <u>323-1092</u>
Fax: <u>-</u>	Fax: <u>323-1092</u>

Project Location

Address: <u>6 WILLHART COURT, FEILDING</u>	
Valuation No: <u>14091/24601</u>	Property ID: <u>14247</u>
Lot No:	DP No:
Area:	Section:
Block:	SD:

Project

Description of Work: <u>NOVAFLOW PLACED IN BACK YARD (APPROX 40 METRE) TO SLIT TRAP - TO STORMWATER</u>		Building Use:
Intended Use:		Estimated Value: <u>\$2,500-</u>
New Building ☐	Intended Life: _____	
Alteration ☐	Indefinite, but not less than 50 years _____	
Relocation ☐	or specified as _____ years	
Demolition ☐	Floor Area: _____ m ²	

- ☐ Being Stage _____ of an intended _____ Stages
- ☐ Application for consent only, project information number _____
- ☐ Application for consent and project information memorandum
- ☐ Application for PIM only.

Signed by or on behalf of the Owner

Name: Tim Riordan Signature: [Signature]

Date: 2ND MARCH 2000 Application No: _____

Part B

Designer(s)	
Name:	Ph No:.....
Address:	

Builder	
Name:	Ph No:.....
Address:	

Drainlayer	
Name: <u>ACP Plumbing</u>	Ph No:.....
Address: <u>Palmerston North</u>	

Plumber	
Name:	Ph No:.....
Address:	

Gasfitter	
Name:	Ph No:.....
Address:	

Electrician	
Name:	Ph No:.....
Address:	

Building Certifier	
Name:	Reg No:.....
Address:	
Ph No:	Fax No:.....
Certifying:	

For Office Use Only

Fees Payable On Application

Building Consent	
Motor Vehicle Crossing	
BRANZ Levy	
BIA	
Land Use Consent	
Reserves Contribution	
Street Deposit	
Water Connection	
Sewer Connection	
Storm Water Connection	
Total Amount Payable	\$ 110.00.
Receipt Number	25573
Received	2/3/00

Amended Details Received

	To:	Details	From:
☐	Planning		
☐	Health		
☐	Water		
☐	Drainage		
☐	Plumbing & Drainage		
☐	Building		
☐	Structural		

Manawatu District Council

135 Manchester Street
Private Bag 10-001
FEILDING
Phone (06) 323 0000
Fax (06) 323 8711

PROJECT INFORMATION MEMORANDUM

Section 31, Building Act 1991

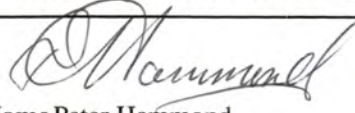
P.I.M. No. 109659	Date Received 2-Mar-2000	Date Actioned 2-Mar-2000
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APPLICANT / CONTACT	PROJECT
Applicant Name Kent Philip Ross Address 6 Willhart Ct FEILDING Telephone No Contact Name T RIORDAN Address 190 Manchester St FEILDING Contact Phone No 323 1092 Contact Fax No	Description of Project STORMWATER Proposed Use STORMWATER Intended Life 0 Project Classification SMALL WORK Project Types Alterations, repairs, extensions and resiting. No of Stages 1 Producer Statement Approximate Valu \$2,500.00
PROPERTY	
Street Location 6 Willhart Ct FEILDING Legal Description LOT 6 DP 74557 - 1/6 SH IN LOT 7 DP 74557 Valuation No 14091 / 24601	

This Project Information Memorandum includes all information known to this authority and is issued in accordance with the Building Act 1991.
This project information memorandum is:

- ☐ Confirmation that the proposed building work may be undertaken, subject to the provisions of the Building Act 1991 and any requirements of the building consent
Not yet applied for ☐ No.....attached ☐
☐ Notification that other authorisations must be obtained before a building consent will be issued.
☐ Notification that the proposed building work may not be undertaken because a necessary authorisation has been refused.

**Signed for and on behalf of the
Manawatu District Council**


Name Peter Hammond

Position Building Officer

Date 02-Mar-2000

Time 11:52 AM

PROPERTY MEMORANDA

There are no Town Planning requirements.

OPERATIONS: No requirements.

The building is to comply with the Building Act 1991.

There are no Environmental Health requirements.

There are no known General Bylaw Implications to this application

Plumbing and/or Drainage work is to comply with the N.Z Building Code 1992

Manawatu District Council

135 Manchester Street
Private Bag 10-001
FEILDING
Phone (06) 323 0000
Fax (06) 323 8711

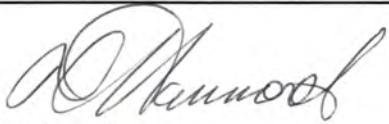
BUILDING CONSENT NO. 109659 / 1

Section 35, Building Act 1991

Issued in accordance with Project Information Memorandum No 109659

APPLICANT / CONTACT	STAGE DETAILS
Applicant Name Kent Philip Ross Address 6 Willhart Ct FEILDING Telephone No Contact Name T RIORDAN Address 190 Manchester St FEILDING Contact Phone No 323 1092 Contact Fax No	Stage Number 1 Description of Stage STORMWATER Building Type Dwelling (Additions) Detailed Use STORMWATER Intended Life 0 Stage Classification SMALL WORK Stage Type Alterations, repairs, extensions and resiting. No of Units 1 No of Storey 1 Floor Area 0 sq metres Designer Value of Stage \$2,500.00
PROPERTY	
Street Location 6 Willhart Ct FEILDING Legal Description LOT 6 DP 74557 - 1/6 SH IN LOT 7 DP 74557 Valuation Roll No 14091 / 24601	

This building permit is a consent under the Building Act 1991 to undertake building work in accordance with the attached plans and specifications so as to comply with the provisions of the Building Code. It does not affect any duty or responsibility under any other Act nor permit any breach of any other Act. This building consent is issued subject to any endorsements specified in the attached pages.....headed consent endorsements.....

Signed for and on behalf of the Manawatu District Council	 Name Peter Hammond
Position Building Officer	Date 02-Mar-2000 Time 11:52 AM

Inspection Record

Peter Hammond	Application Number.
----------------------	---------------------

109659

Owners Name:	<i>P. R. Kent</i>
Site Address:	<i>6 Willhart Court</i>
Project:	<i>Surface Water Damage to Section</i>

Site Inspection	Wall Framing Inspection
Foundation	Roof Framing Inspection
Concrete Floor Slab	Framing Inspection
Sub Floor Framing	Prelining (Moisture, Insulation) Insp.

Subfloor Plumbing Inspection	Fire Safety Inspection
Subfloor Drainage Inspection	System / Services Inspection.
Drainage Effluent Inspection	
Drainage (to NUO System)	OTHER :
Effluent disposal system	
Plumbing & or Drainage Insp.	
Preline Plumbing Inspection	

REINSPECTION.	✓ FINAL INSPECTION
---------------	--------------------

11:45

Date: *2-4-5*

→

Time: *11/2/00*

Comments:	<i>Inspected & measured up SW Drain</i> <i>taken Photos</i>
-----------	---

ISSUE C.C.C.



Ref: 6/1800
Land ID: 14247

3 August 1999

Mrs Joy Kent
6 Willhart Court
FEILDING

Dear Mrs Kent

ODOUR IN LOUNGE - DWELLING AT 6 WILLHART COURT

Further to my visit to your dwelling with Mr G Duncan, Building Officer Manawatu District Council, I wish to verify that at the time of our visit on Thursday 3 June 1999 at approximately 9am there was an odour in the mid-area of the lounge.

The odour was apparent when I first entered the room from the garage.

The odour was detectable for about 2 – 3 minutes. It was of a chemical/rubbery type of smell.

We checked the carpet, furnishings (couch, easy chairs, TV, glory type box, cupboards, fridge, ceiling lights, ceiling space (including insulation over lounge) for any dead/live creatures, spills or substances.

The carpet was lifted back to the middle of the lounge, there was no moisture or any other matter detected under the carpet,

There was possible vermin egress on outside wall where power/phone cables come into building ie an opening in the concrete foundation under the brick veneer.

It was noted at the time that the lawn in the back yard area was quite wet and there was water lying under the timber decking outside the lounge doors. The finished ground level appears to slope towards the deck area.

The immediate neighbour has a large concrete apron several metres away which appears to drain towards your section.

I consider that that odour **maybe** the result of decaying vegetation and/or water logged soil's' becoming anaerobic under the decking, the resulting odour/gas being

given off entering the house through the door joinery. (Anaerobic = absence of oxygen = stale/rotting).

It is acknowledged that people vary in their sensitivity to gases/chemicals/vibrations/light etc and that whilst one person may have an adverse reaction to a gas, or whatever, another person may not have any reaction to the same exposure level.

A simpler parallel to this phenomenon is a comparison between the dislikes of one person and another eg one mans meat is another mans poison.

I would advise that:

1. A cut off drain be laid across the back of the section and then discharged to the stormwater drain.

(Cut off drain of 100mm-nova flow laid in trench approx 600mm deep and backfilled with gravel – builders mix or pea metal).

2. In the interim some crushed lime could be laid over the ground under the decking.

(Chloride of lime would give quicker reaction and would give an instant reaction, however it would give off Chlorine type fumes, and should only be attempted if the house was unoccupied and left ventilated).

The cut off drain will also enhance the site, and prevent any dampness affecting the building.

Yours faithfully



C J Bland
ENVIRONMENTAL HEALTH OFFICER

cb:sma
j kent 30,7

6 Willhaot Ct



MANAWATU DISTRICT COUNCIL BUILDING CONSENT APPLICATION

LAND ID No.

14247

VAL No.

14091/24601

OWNER NAME

KENT P & E

ADDRESS (site)

6 Willhant Ct.

CONSENT No.

109659

PROJECT

Plumbing + Drainage

LOCATION

CODE COMP. CERT.

ADMINISTRATION

NOTES

2000- Stormwater drainage

DISCIPLINE	SIGN & DATE	ENDORSEMENTS (prefix with discipline)	
		P I M	CONSENT
PLANNING		 P.I.M. ISSUED C.C.C. ISSUED	CONSENT ISSUED
OPERATIONS			
BUILDING • site and subdivn • stability • fire safety • access • safety users • ventilation - dwg • lighting -dwg • food prep - dwg • moisture - structure • insulation			
PLUMBING • water reticulation • surface water • foul water • personal hygiene			
COMPLIANCE SCHEDULES			
GENERAL BY-LAWS			
HEALTH			
OTHERS REG. COUNCIL			

Manawatu District Council

CODE COMPLIANCE CERTIFICATE

Issued in accordance with Section 43(3) of the Building Act 1991

APPLICANT/CONTACT	STAGE DETAILS
Applicant Name Kent Philip Ross	Building Consent No 109659
Address 6 Willhart Ct FEILDING	Stage Number 1
Telephone No	Description of Stage STORMWATER
Contact Name T RIORDAN	Building Type Dwelling (Additions)
Address	Detailed Use STORMWATER
Contact Phone No 323 1092	Intended Life 0 Years
Contact Fax N	Brief Desc SMALL WORK
PROPERTY	Stage Type Alterations, repairs, extensions and resiting.
Street Location 6 Willhart Ct FEILDING	No of Units 1
Legal Description LOT 6 DP 74557 - 1/6 SH IN LOT 7 DP 74557	No of Storeys 1
Valuation Roll No 14091 24601	Floor Area 0 Sq. Metres
	Designer
	Value of Stage 2500

This is a final code compliance certificate issued in respect of all of the building work under the above consent. It is subject to any condition specified in the attached "Conditions of Code Compliance Certifica

**Signed for and on behalf of the
Manawatu District Council**



Name Graeme Duncan

Position Building Officer

Date 02 MAR 2000 **Tim** 11:53