

FILE No. **9030**



BC

BLLENHEIM BOROUGH COUNCIL

APPLICATION FOR BUILDING PERMIT

Permit No. **1991/**
BLLENHEIM BOROUGH COUNCIL
Engineer's Office
AUG 1983

To THE BOROUGH ENGINEER,
Sir,

Please indicate Work ✓

I/We hereby apply for permission to erect, ~~add, demolish, resite~~ a **NEW DWELLING**

at No. **233 WELD ST** Street

For **Mr AND Mrs WYLDE**

of **WELD ST**

according to locality plan and detailed plans, elevations, cross-sections, and specification of building deposited herewith in **DUPLICATE**. (See reverse side for guidance notes).

PARTICULARS OF LAND

Val. Roll No. **20530 141 00** LOT **8** DP **5493** Being Pt. Section

SITE AREA **654 89 METRES**

PARTICULARS OF BUILDING

Existing floor area: m²

Total floor area: **167** m²

Area of Accessory Building m²

Proposed purpose for which every part of building is to be used or occupied (describing separately each part intended for use or occupation for a separate purpose). If dwelling also state estimated completion date. **DECEMBER.**

RESIDENTIAL DWELLING PLUS GARAGE

Nature of ground on which building is to be placed and of the subjacent strata

Clay ✓ Silt Gravel Rock Please indicate type ✓

Mr AND Mrs WYLDE Owner **WELD ST** Address

Phone **89057**

PAT PRENTICE Builder **27 MOUNTAIN VIEW RD** Address

Phone **87448**

T HARRIS Plumber **6 MILFORD ST** Address

Phone **84142**

G. GREEN Drainlayer **RENWICK.** Address

Phone **28162**

ESTIMATED VALUE

Building	\$ 50300	: 00
Drainage	\$ 1200	: 00
Plumbing	\$ 3500	: 00
Total	\$ 55000	: 00

Yours faithfully

Signature of Applicant *[Signature]*

Date of Application **29-7-83**

Approved *[Signature]*
BOROUGH BUILDING INSPECTOR

Date: **16 8/83**

Footpath Damage Deposit Refunded
Retained

OFFICE USE ONLY

FEES PAYABLE—

Receipt Numbers

BUILDINGS	\$ 210.00	14143
Plumbing	\$ 50.00	14143
Drainage	\$ 36.00	14143
Building Research Levy	\$ 55.00	14143
Sewer Connection	\$ —	—
Stormwater Connection	\$ —	—
Water Connection	\$ —	—
Footpath Services Damage Deposit	\$ 100.00	14143
Vehicle Crossing	\$ —	—
Reserves Cont. Fee	\$ —	—

\$ 451.00

NOTES FOR GUIDANCE OF APPLICANTS:

Fill in **ALL** the details required on building application.

Enclose two copies of plans and specifications and other relevant details.

Plans to show floor plan, elevations, cross section(s), room sizes, window sizes, beam sizes and storage areas and site plan etc.

Site plan to show location of proposed and existing buildings with measurements to boundaries; existing or proposed sewer, stormwater and water connection; and proposed position of vehicular crossing (where necessary) see Council Visual Aids B3/VA/20.

If **plumbing and drainage** is required in building, enclose complete plumbing and drainage permit applications, signed by registered tradesman. If sewer, stormwater, vehicular footpath crossing application is required then they should be included with the building permit application. Specifications to have **DETAILS** of all standards, methods of workmanship and classifications of materials.

Structural work of specified design must be designed by structural engineer.

Drawings of reinforced blockwork or reinforced concrete work shall show clearly plans, cross sections, dimensions of all members, and size, length, shape, position and overlap of all reinforcement. All dimensions must be in metric with the exception of imperial sized materials.

All steel quantities, calculations and computations must be submitted with application and signed by engineer, architect or designer.

NOTE: One copy of approved plans will be returned with permit and must be kept **ON SITE** until building is completed.

BLENHEIM BOROUGH COUNCIL

No. 9030

Inspector: M. _____

Receipt No. 14/143

OWNER

Name Mr + Mrs WYLDE

Address 233 WOOD STREET

BLENHEIM

BUILDER

Name PAT PRENTICE

Mailing Address 27 MOUNTAIN VIEW ROAD

BLENHEIM

(PAID)

PROPERTY ON WHICH BUILDING IS TO BE ERECTED/DEMOLISHED

SITE

Street No. 233

Street Name WOOD STREET

Town/District BLENHEIM

Riding _____

LEGAL DESCRIPTION

Valuation Roll No. 20550 141 00

Lot 8 D.P. 5493

Section _____ Block _____

Survey District _____

DESCRIPTION OF PROPOSED WORK AND MAIN PURPOSE OF USE

Dwelling + GARAGE

Date Inspected

REMARKS (e.g. stage reached with work)

FOOTPATH ALREADY DAMAGE NE CORNER

31/8/83

Instruction left for builder to excavate for bearing wall + post otherwise site + rest ok. (return visit - builder excavated as requested)

5/9/83

Concrete slab full damp course HRC on

COMPLETED (Signature)

D. Leventy

Date

29/12/84

File No: 9030

BLENHEIM BOROUGH COUNCIL

Routine Check List

Date: 3/8/83

LEGAL DESCRIPTION: Val: Roll No: 20550 14/100

Lot: 8.

D.P.: 5493

PROPOSED BUILDING: Dwelling.

ADDRESS: 233 Weld Street.

OWNER: Mr & Mrs Wylde

BUILDER: P Rentine

DEPARTMENT:

CHECK LIST:

REMARKS:

INITIALS:

DATE:

TOWN PLANNER

Zoning, Use and Site

PP Front Prod.

OK.

Yards and Height

OK

Site Coverage

OK

Off Street Parking

OK

Street Set Back/Building
Line Restriction

OK

Length in Relation to Yards

OK

Other buildings on site

NO

Width of Eave

OK

Critical floor level area

NA

Catchment Board

NA

BUILDING
INSPECTOR

Certificate of Registration

NA

Value of Application

Foundation

haunching under centre partition

Concrete

Reinforcing

Framing.

Cantilevered joint OK

Roof

Insulation

Veneer

Chimney

log fire

Room Sizes and Combination

Stud Height

Light Ventilation

Fire Wall-Lateral Support

Requiring Specific Design

HEALTH-PLUMBING
AND DRAINAGE

General Plumbing

OK

Number of Sanitary Fittings

8

Sewer

OK

Sewer invert (Relative to floor
level)

OK

Stormwater Drains

OK

Stormwater to Street

yes OK

Water Supply

OK

Isolation of W.C. Compartments

OK

Sewer Connection

Water Connection

Stormwater Connection

existing by subdivider

WORKS

Footpath Crossing Required

NO

Footpath Level

OK

Sewer Invert Level

Finished Floor Level

OK

BLENHEIM BOROUGH COUNCIL

ADJOINING OWNERS CONSENT FOR
DISPENSATIONS FROM PROVISIONS OF THE
BLENHEIM BOROUGH COUNCIL'S OPERATIVE DISTRICT SCHEME

Date: 2.8.83

~~I~~ We the undersigned have no objection to Mrs. Wild
building a ~~garage~~ ^{Dwelling} adjacent to ~~my~~ our South Country boundary.

The total length of the building is Overheight Building metres.

The height within 1.5 metres of the boundary will not exceed
metres.

~~I~~ We have been shown the building plans by the applicant as required by the
Blenheim Borough Council.

Signed: offbbans

Address: 231. Hall St

Blenheim

Lot No.:

D.P.:

9030

SPECIFICATION OF WORK AND
MATERIALS

REQUIRED IN THE ERECTION OF A RESIDENCE FOR

Mrs MRS WYLDE
WELD ST.

A. GENERAL:

1. The Work

The building is constructed of concrete flooring, timber framing aluminium windows; CORR IRON ROOF 150mm split block, gib board linings.

Also the construction of all cabinets, interior and exterior joinery the fixing and finishing of all linings and the installation of all services.

The contractor shall provide all labour, materials, tools, and plant, etc., - obtain necessary permits - pay all dues and generally complete the building in the best trade manner in accordance with the accompanying drawings and this specification taken separately or collectively.

The contractor shall ensure that materials and workmanship shall comply to NZSS 623: 1964 General Conditions of Contract.

2. By-Laws:

The Contractor shall conform in all respects to the By-Laws of all or any Local Authority having jurisdiction over the work and be responsible for all damage to public or private property occasioned by the work.

3. Sub-Contractors

This specification is subdivided into trade sections for the convenience of reference only, and every trade jointly and severally shall assist and render all necessary assistance to complementary trades.

4. Site

The Contractor shall visit the site before tendering to satisfy himself regarding access, levels etc., and the conditions generally, as no extra will be allowed under this heading for insufficient or wrong description.

5. Setting Out

The Contractor shall be held responsible the the setting out of the work and he shall be required to make good at his own expense any error which may occur. Figure dimensions are to be taken in preference to scaled ones.

6. Availability of Materials:

Should any of the materials specified for this contract be unprocureable or be prohibited by any Government Regulations, negotiations shall be made for the provision of substitutes, to the approval of the owner. Any price difference due to this must be agreed upon by the owner before the respective work is commenced.

7. Prime Cost Sum (P.C. Sum)

The owner reserves the right to purchase or select items under the P.C. Sum, and the accounts will be adjusted on completion.

8. Completion

At regular periods during building and on completion of this contract, the Contractor shall remove debris which may accumulate, and leave the section and building clean and ready for use. All floors shall be left broom clean and all glass work shall be left sound and clean inside and out; all painted, stained or polished work shall be left free from spoil and dirt.

B.

EXCAVATIONS:

The Contractors Shall:

1. Excavate:

Excavate as required for foundations, wall, footings, fireplace block, steps, water pipes etc., where shown and as required to give a solid bearing to the various depths. Surplus spoil shall be placed where directed by the owner.

2. Back-Fill and Ram

Back-fill and ram carefully around footings, consolidating as the work proceeds, and make up to existing ground level.

3. Hardcore Fillings

Hardcore fillings shall be placed under steps and porch slabs, garage, floor and terrace. Hardcore filling shall consist of clean river metal consolidated and levelled off before placing concrete.

4. Over-Excavations

In the event of the Contractor excavating below the proper level, the contractor shall fill up the parts over-excavated, at his own expense, with concrete.

C. CONCRETE

1. Materials and Mix

The Materials and workmanship shall be in accordance with NZSS 1900 Chapter 9, Division 9/3., and NZSS

The concrete shall be ordinary grade 17.24 M.p.a. in all foundations, walls, piles etc., as described in the above specification

2. Foundations and Footings

All foundations shall rest on solid footings at least 300mm below adjacent ground level, and shall be constructed as shown on the plans.

3. Re-Inforcement:

All re-inforcement shall comply with NZSS 3402P.

4. Damp Proof Courses

All concrete faces in contact with timber shall be covered with one layer of 3 ply malthoid or other approved damp-proof course with minimum side laps of 75mm.

5. Concrete Flooring

Shall be minimum of 100mm thick, re-inforced with 665 steel mesh and laid on polythene sheeting properly sealed at all joints and exterior edges. Hardcore filling shall be properly consolidated.

GARAGE FLOOR 100mm BELOW LIVING AREA.

D. BLOCKLAYER

Build block veneer walls using 150 mm grey, split, bolstered blocks a minimum of 38 mm from the framing and tied to the studs

with galv. ties 450mm centres horizontally and 300 mm centres vertically. All joints to be finished clean and true. Blocks to be bolstered by the owner.



E. DRAINAGE:

1. Materials:

Provide and fix all materials which must be in ACCORDANCE WITH the best trade practice and with the specification of the Local Authority and Health Department.

2. Excavate

Excavate all trenches required for drains and fittings associated there with to the depths required, and the laying of sanitation and stormwater drains shall conform with NZSS. Sanitary and Drainage By Laws 1978/127.

3. Stormwater Connection

From each downpipe gully, collect all stormwater into 90 mm P.V.C. pipe and discharge as shown into existing stormwater connection on ROAD Boundary.

4. Sewer Connection

Connect up all foul sewerage drains to the main sewer connection as shown on plans.

5. Completion and Testing

On completion of the whole of the drainage, to be handed over in thorough working order, according to the Health Department's requirements and the Local By Laws, to the satisfaction of Inspectors.

F. CARPENTER AND JOINER

1. Timber Generally

All timber shall be to the best of its class, free from large loose or dead knots and wavy edges, thickened if possible, and shall be well seasoned and dry. All joinery timber shall be heart Rimu, Matai, or Mahogany thoroughly seasoned and machined timber shall be run dry. All timber shall be true square to full dimensions shown on the plan or as specified. Any timber not dry shall be fillet stacked on the site until required.

2. Standard Specification

All timber construction shall be carried out in accordance with either NZSS 1900 Chapter 6, Division 6/1 or Chapter 9, Division 9/1 where applicable.

3. Builders Ironmongery

The Contractor shall provide all nails, brads, screws, bolts and other ironmongery required. All interior and exterior finishing work shall be punch nailed.

4. Framing-General

The whole of the framework is to be securely braced with either Pride Angle on exterior walls or 100mm x 50mm solid bracing throughout. All bracing shall be as near as possible to 45 degrees. Refer to separate bracing schedule.

FLOOR JOISTS TO BE 200x50 GAUGED AT 450 & AND DWANGED TO TAKE THE 20mm PARTICLE BOARD FLOORING.

Beams above windows shall be in one length.

5. Wall Plates

Shall be 100mm x 50mm in long lengths,

6. Studs

Studs shall be 100mm x 50mm and cut to make 2450mm between floor joists and ceiling joists. Opening studs to be 100mm x 75mm. Studs to be spaced at not more than 600mm centres, and double studs to receive trimmers. Take all wall framing to an even width. Trim for all openings.

7. Trusses

Roof framing shall be trusses (Prydenail plates) ex 100mm x 50mm at 900 cts. Purlins shall be 50 x 75 tiles. Pitch of roof to be as shown at 15 degrees.

8. Dwangs

All walls shall be dwanged with 100mm x 50mm solid dwangs at not more than 600mm centres, or as required to suit linings. All dwangs shall be properly nailed to give strength and solidarity.

Ceilings shall be dwanged or battened to suit linings.

9. Insulation

R14 batts to all ceilings and R11 batts to all ext walls.

10. Joinery;

All joinery must be constructed according to best joinery practice, by mortice and tenon, dovetail, tongue and groove, mitres etc. All exposed nailing must be well punched. All timber shall be D.A. Heart Rimu unless otherwise specified. **KITCHEN CUPBOARDS TO BE CUSTOMWOOD WITH PREFINISHED FRONTS AND FORMICA TOPS.**

(a) Windows: **PANTRY SHELVES CUSTOMWOOD.**

Shall be **SILVER** aluminium to sizes shown.

(b) Doors and their Frames:

Front entry to be **ALUMINIUM** complete with coloured glass side light. Back doors to be **ALUMINIUM**. Garage door to be flush panel smoke stop door. **WITH 2 TILTA DOORS AT THE FRONT**. Rimu flush panel ply interior doors. Pantry door to be **LOUVRE**. Wardrobe and linen cupboards to be rimu **FLUSH DOORS** on sliders.

G. ROOFER

Supply and fix **CORRUGATED IRON**.

All necessary flashings and covers shall be fitted to give a fully waterproof roof.

H. EXTERNAL FINISHING1. Barge and Fascia Boards

To be Taylor Fascia colour to owners choice.

2. Soffit Lining

Soffit shall be lined 5mm asbestos cement sheet nailed to dwangs and framing with 38 mm galvanised flathead nails. Against wall all joints shall be finished with 38mm Scotia; all butt joints with P.V.C. Jointers.

3. Linings

Gables and Back Porch shall be Fibrolite. **FIRST FLOOR WALLS TO BE WOODGRAIN HARDIPLANK, FRONT ENTRY TO BE SHIPLAP.**

I. INTERIOR LININGS1. Ceilings

Pinex Softboard **TILES** throughout house, except bathrooms, which shall be Pinex Seratone white prefinished board and P.V.C. Joints. **GARAGE TO BE GIBBOARD**

2. Walls

Shall be Gilbralter board throughout except, shower walls shall be formica wallboard. **OR HARDIFLEX AND VYNAL . ONE WALL ONLY TO BE LINED IN THE GARAGE.**

3. MouldingsScotia

TO BE PINEX PM67

Skirtings

60mm flat bevelled throughout.

Grooved Jambs to all doors and windows.

PARTICLE BOARD FLOORS TO BE LEFT SANDED FOR CARPETS AND VYNALS.

WARDROBES TO HAVE PIPE RAIL WITH ONE 200mm SHELF ABOVE

J. PLUMBER1. Materials;

All materials used by the plumbers shall be to the best of their several kinds and must fully conform to all or any governing regulations or By-Laws.

2. Flashings

All flashings to be neatly executed in as long lengths as possible joints lapped and soldered, back edges beaded or folded 12mm.

3. Downpipes

Shall be 62 dia. **PVC** as shown to discharge into s/w gullies.

4. Spouting

Shall be concealed Taylor Fascia.

5. Waste Pipes

Carry waste pipes in PVC from all fittings with proper "S" waste traps fittings etc as required. Conceal wastes and traps wherever possible, and all pipes shall have correct fall to discharge waste fluids to gully traps, wastes, to be 38mm dia. except for wash hand basins which shall be 32mm dia.

6. Vents

Terminal vent shall be 75mm dia. PVC pipe with PVC cowl at top, flashed at roof with lead.

7. Cold Water Supply

Run in 20mm from BBC Connection to dwelling

Shall be run in **18/12** dia. **POLY B.** from supply tank in roof to all services.

8. Hot Water Supply

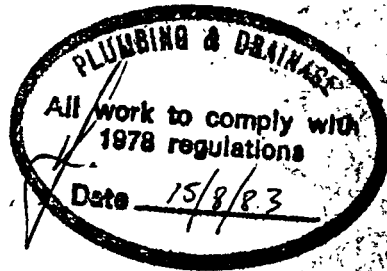
Shall be run in 18mm dia. copper from H.W. Cylinder to all services as shown or required, ~~PVC~~ piping may be used in place of copper for both hot and cold supply.

POLYBUTYLENE

TO BE INSTALLED AS PER MAKER'S CODE OF PRACTICE & B. R. ANZ APPRAISAL CERT.

9. Supply and Fit Up ready for use:

- 1 50 gal H.W. Cylinder in linen room to serve all rooms
- 1 1650 white ~~PLASTIC~~ bath
- 1 900 x 760 S/S Shower tray
- 1 W.C. Pans C/W plastic seat and lid
- 1 Dux plastic flushing cistern.
- 1 500 x 400 S/S tub. **AND CABINET**
- 1 Topliss shower mixing valve.
- 1 50 gal. supply tank (in roof)
- 1 Flushing valve
- 2 Exterior HOSE TAPS.

10. Taps

STREAMLINE TAPS 100 for all

1500 from Boundary to building

K. ELECTRICIAN1. Materials:

Materials used by the electrician shall conform to the regulations of the Electric Power Supply Authority. The electrician shall provide all materials necessary for the completion of the work, which shall be carried out in compliance with the appropriate regulations.

Wiring shall be done with tough plastic sheathed and insulated cables, and shall be concealed from view where possible.

2. Lighting

Wire up and provide the fittings as detailed on the plan.

12 Interior ceiling lights

2 Exterior **LIGHTS**

1 light

1 light for ceiling lights

All ceiling roses be centrally situated generally unless shown otherwise, and switches where indicated, 1350mm above floor level. Use ivory flush mounted switches.

3. Heat Points

Heat points shall be provided as shown on the plans, and shall be generally 300mm from floor level, except for washing machine, fridge and kitchen benches.

Number of heat points shall be **14**

Shaving point in bathroom shall be **1**

4. Range or Oven

Allow P.C. Sum **800** for range.

5. Point of Entry

Via underground cable from road to **EXTERNAL METRE BOX.**

6. Hot Water Cylinder

Shall be wired into night rate control. Cylinder to have 2,000 watt element

7. Test and Completion

The electrician shall provide for all tests prescribed by the Power Board, and hand over the whole of the work completed, passed, and sealed by them.

M. PAINTER AND PAPERHANGER

1. Materials

All materials used shall be the best of its respective kind and all surfaces to be painted shall be protected from weather, cleaned and free from dust or dirt.

Surfaces to be all prepared, shall be properly cleaned and treated with size to allow 100% bonding of paper to walls.

2. Exterior Work *TO BE DONE BY THE OWNER.*

(a) Woodwork

Prime all exterior woodwork with an approved red lead or general purpose primer, including all laps, butts, tops and bottoms of door frames. Apply one coat of approved spirit based under-coat and finish with one coat of approved exterior enamel.

(b) Steelwork

Spoutings, downpipes, flashings, pipework etc. shall be primed with galvanised iron primer.

After priming, undercoat all surfaces, of steelwork apply one coat of spirit based paint. Finish with one coat of exterior enamel.

(c) Fibrolite

Seal with one coat of Petriseal cement sealer, then apply one coat of spirit base undercoat and finish with one coat of exterior enamel.

3. Interior Woodwork

(a) Ceilings

Ceilings shall have two coats of Alkyd flat paint.

(b) Gibralter Board

Where Gibralter board is to be painted, it should be treated with size cover with lining paper, butt jointed, sealed and given one coat of under coat and one coat of interior enamel.

Where gibralter board is to be wall papered it shall be treated with size and wall papered with butt joints matching patterns properly registered, and shall be left free from wrinkling blisters, lumps of paste, dirt, plaster, stains or any other defects.

4. Varnishing

All timber requiring varnishing shall be given one coat of satin clear sealer, and finishing with two coats of clear enamel, work shall be well sanded between coats to give a perfectly smooth surface.

5. Wall-Papering

Wall papers shall be hung on walls, from floor to ceiling of the bedrooms, passage, dining, lounge, living, wardrobes, vanity and coat recess. The Contractor shall allow *£18-00* per roll for wallpaper to be selected by the owner.

N. GLAZIER

1. Materials

All glass shall be best quality and free from all defects. Where glass is bedded in putty, it shall be well bedded, sprigged and face puttied or to butt aluminium frames, and surplus putty shall be neatly trimmed off. Obscure glass shall be used in bathroom, toilet windows. *OWNER TO CHOOSE PATTERN.*

O. SUNDRIES *FREE STANDING FIRE P.C. SUM £1060-00*

Install a telephone where directed by the owner.

Kent Log Fire to be installed according to the manufacturers instructions on tile hearth. *P.C. SUM £250-00*

SHEET A

(CIRCLE whichever is applicable)

COUNCIL
DISAPPROVEDNAME: Mr and Mrs WYLDEADDRESS: WELD ST
LOT 8 DP 5493STOREY: ~~Single or Uppermost~~
Lower of two or middle of three
~~Lower of three~~ROOF TYPE: Light / ~~Heavy~~ROOF PITCH: 0° ~~25° / 26° / 45°~~WIND AREA: ~~High / Medium / Low~~W = ~~43~~ B.U.'s/mEARTHQUAKE ZONE: A / ~~B / C~~E = ~~6~~ B.U.'s/m²

ROOF OR BUILDING LENGTH

BL = ~~12.9~~ m

ROOF OR BUILDING WIDTH

BW = ~~6.5~~ m

GROSS ROOF OR BUILDING PLAN AREA

GPA = ~~84~~ m²

EARTHQUAKE: B.U.'s ALONG AND ACROSS

E x GPA = ~~504~~ = B.U.'s

WIND: B.U.'s ALONG

W x BW = ~~279~~ = B.U.'s

WIND: B.U.'s ACROSS

W x BL = ~~554~~ = B.U.'s

SKETCH PLAN (external and internal walls):

SHEET B

1 Total B.U.'s Required	2 Wall Line	3 Minimum B.U.'s Required	4 Label No.	5 Type	6 Rating B.U.'s/m	7 Length (m)	8 B.U.'s Provided
ALONG	A	129	A1	1	50	1.8	90
			A2	8	6.7	1.2	80.4
							170
			Sub-total				260.4
	B	129	B1	1	50	1.8	90
			B2	1	50	2.5	125
							215
			Sub-total				215
	C	70	C1	12	7.4	1.5	116.3
			Sub-total				116.3
	D						
			Sub-total				453
279							
504	TOTAL	328				TOTAL	531.4
ACROSS	L	130 65	L1	1	50	2.4	120
			L2	1	50	2.4	120
						1.5	75
			Sub-total				215
	M	65 130	M1	1	50	2.4	120
			M2	1	50	2.5	125
						2.4	120
			Sub-total				240
	N	70	N1	2	7.4	2.4	180
			N2	2	7.4	1.8	133
			Sub-total				311
	O	70	O1	2	7.4	1.8	133
			Sub-total				133
	P	20					
			Sub-total				
270							
554	TOTAL	470				TOTAL	879

SHEET B

1 Total B.U.'s Required	2 Wall Line	3 Minimum B.U.'s Required	4 Label No.	5 Type	6 Rating B.U.'s/m	7 Length (m)	8 B.U.'s Provided		
ALONG	A	129	A1	1	42	1.8 2.5	76 105		
			A2	1	42	1.2 2.0	84 105		
			8	67	.9	60			
		Sub-total						189	
	B	129	B1	1	42	2.4 2.5	101 105		
			B2	1	42	2.5 2.04	105 101		
			Sub-total						208
		C	70	C1	2	62	2.4	155	
	Sub-total						149		
	Sub-total						155		
	D							149	
		Sub-total							
		Sub-total							
		122			Sub-total				
	528	TOTAL		TOTAL				487	
	ACROSS	L	68	L1	1	42	2.4	105	
Sub-total						101			
Sub-total						105			
M			68	M1	1	42	2.3 1.65	97 69	
		Sub-total						97	
		Sub-total						149	
		N	70	N1	2	62	2.4	155	
Sub-total						149			
Sub-total						155			
O			70	O1	2	62	2.3	143	
		O2		2	62	1.9	118		
		Sub-total						261	
		P							
Sub-total									
Sub-total									
232					Sub-total				
555	TOTAL		TOTAL				580		
							618		

Finish floor

SHEET A

(CIRCLE whichever is applicable)

1.01.12.12
1.01.12.12

ADDRESS: *Wald St. Apt. 8*
DP 5493.

ROOF TYPE: Light / ~~Heavy~~

ROOF PITCH: 0° - 25° / ~~26° - 45°~~

$$W = 18 \text{ B.U.'s/m}$$
$$E = \frac{3}{6} \text{ B.U.'s/m}^2$$
$$BL = 1.29 \text{ m}$$

BW = 6.9 m

GPA = 8.8 m²

E x GPA = ~~228~~ = B.U.'s

W x BW = 282 = 3 B.U.'s

W x BL = ~~555~~ = B.U.'s

SKETCH PLAN (external and internal walls) :

BLENHEIM BOROUGH COUNCIL
APPLICATION FOR DISPENSATION FROM
PROVISIONS OF THE BLENHEIM BOROUGH
COUNCIL'S OPERATIVE DISTRICT SCHEME

Date: ..1-8-83

I/We hereby apply for dispensation from the Operative District Scheme.

I propose to ERECT...NEW DWELLING.....(OVER HEIGHT)
at 233 WELD ST.....~~ST~~/NORTH BOUNDARY.

Lot No. 8..... D.P. 5493.....

The Total length of the accessory building will be metres.

The height within 1.5 metres of the boundary will not exceed metres.

I/We have/~~have not~~ been required by the Blenheim Borough Council to show the building plans to other parties considered to be affected and I/We have complied with the Council's requirements in this respect.

(builder) Signed: P. Ventres

Address: 27 Mount
View Rd

.....
.....



BC SPEL

3C080451

Marlborough District Council
BUILDING CONSENT AUTHORITY
APPROVED DRAWINGS

Consent Number BC

Signed

Date/...../.....

ALL WORK IS TO COMPLY WITH THE NZ BUILDING CODE
DO NOT MAKE CHANGES WITHOUT PRIOR APPROVAL

RECEIVED

14 MAR 2008

MARLBOROUGH
DISTRICT COUNCIL

SPECIFICATION

of work shown on the accompanying drawings

RECEIVED

14 MAR 2008

MARLBOROUGH
DISTRICT COUNCIL

ADDITIONS and ALTERATIONS

(project name)

at

233 WELD STREET
BLLENHEIM.

(project address)

for

P & A WALTERS.

(owner's name)

RECEIVED

14 MAR 2008

MARLBOROUGH
DISTRICT COUNCIL

Marlborough District Council
BUILDING CONSENT AUTHORITY
APPROVED WITH
05 APR 2008
BUILDING CONSENT

ALL WORK IS TO COMPLY WITH THE NZ BUILDING CODE
DO NOT MAKE CHANGES WITHOUT PRIOR APPROVAL



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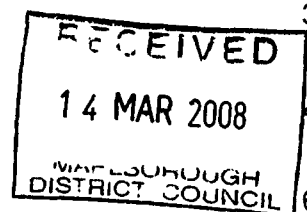
Job number: 07125

Date: FEBRUARY 2008.

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Note: *The standard text in the technical sections of this specification may have been customised to suit the project being specified.*



VALID FOR BUILDING CONSENT APPLICATIONS PRIOR TO 31 DECEMBER 2008 FOR MINOR RESIDENTIAL WORKS ONLY

PROJECT INFORMATION

OWNER

Name: ANGE & PETE WALTERS.
Mailing address: 233 WELD STREET, BLENHEIM.
Telephone/Facsimile: 5796050

DESIGNER

Name: PLANIT ARCHITECTURAL DESIGN LTD.
Mailing address: PO. BOX. 442, BLENHEIM
Telephone/Facsimile: 03 577 5267 / 03 5775268

PROJECT LOCATION

Street address: 233 WELD STREET, BLENHEIM.
Legal description: LOT 8. DP.5493.

PROJECT DESCRIPTION

Type: Addition
Intended use: Single residential building
Intended life: Indefinite but not less than 50 years

VALID FOR BUILDING CONSENT APPLICATIONS PRIOR TO 31 DECEMBER 2008 FOR MINOR RESIDENTIAL WORKS ONLY

11 GENERAL REQUIREMENTS

11.1 THE WORKS

The works are as described in this specification and shown on the drawings.

11.2 PERSONNEL

Owner: The person defined as "owner" in the New Zealand Building Code.

Contractor: The person contracted by the owner to carry out the contract.

11.3 THE SITE

The site of the works, the site address and the legal description are listed under PROJECT INFORMATION. Confine access and work to the area of site indicated on the drawings.

11.4 SPECIFICATION SECTIONS

Sections are for reference and convenience only and do not constitute individual trade sections or work elements. Read all sections together and read 11 GENERAL REQUIREMENTS with all other sections.

11.5 INTERPRETATIONS

Required: Required by the documents, or by a statutory authority.

Proprietary: Identifiable by naming the manufacturer, supplier, installer, trade name, brand name, catalogue or reference number.

Approval: Approval in writing.

Direction: Direction in writing.

Notified: Notified in writing.

11.6 INCONSISTENCIES

If there are any inconsistencies, errors or omissions in or between documents, the contractor must seek direction in resolving it. Figured dimensions take precedence over scaled dimensions; drawings to a larger scale take precedence over drawings to a smaller scale and drawings take precedence over specification.

11.7 SUBSTITUTIONS

A substitution may be proposed where specified products are not available, or if substitute products are brought to the attention of and are considered by the owner as equivalent or superior to those specified. Except where a specified product is not available, the owner is not bound to accept any substitutions. Notify proposed substitution of specified products. Include sufficient information to allow the owner to confirm that the substitution is equivalent or superior to that specified. Advise the owner whether an amendment will or may be required to the Building Consent and the expected costs of such amendment.

11.8 THE WORDS "PROVIDE" OR "FIX"

The words "provide" (or "supply") or "fix" if used separately mean "provide and fix" unless explicitly stated otherwise.

11.9 MANUFACTURERS AND SUPPLIERS

Manufacturers and suppliers requirements, instructions, specifications or details are those issued by them for their particular material, product or component and are the latest edition.

11.10 REFERENCED DOCUMENTS

Reference is made to various New Zealand Building Code (NZBC) acceptable solutions (AS) and verification methods (VM) for criteria and/or methods used to establish compliance with the Building Act 2004. Reference is also made to various Standards produced by Standards New Zealand (NZS, AS/NZS) and to listed Acts, Regulations and various industry codes of practice and practice guides. The latest edition (including amendments and provisional editions) at the date of this specification applies unless stated otherwise. Documents cited both directly and within other cited publications are part of this specification.

11.11 PRECEDENCE OF REFERENCED DOCUMENTS

This specification takes precedence in the event of it being at variance with and requiring a higher standard than, the cited documents. Resolution of any variance must be confirmed in writing and where Building Consent is affected, the change notified to the Building Consent Authority.

11.12 BUILDING CONSENT COMPLIANCE

It is an offence under the Building Act 2004 to carry out any work not in accordance with the Building Consent. Refer the resolution of matters concerning compliance to the owner for a direction. Where Building Consent is affected refer any change to the Building Consent Authority.

11.13 STATUTORY OBLIGATIONS

Comply with all statutory obligations and regulations of regulatory bodies controlling execution of the works.

11.14 BUILDING CONSENT

Obtain the original or copies of the Building Consent form and documents from the owner and keep on site. Liaise with the Building Consent Authority and/or the building certifier for all required notices and all inspections required during construction to ensure compliance. Return the consent form and documents to the owner on completion.

11.15 INSPECTIONS

Do not proceed with work noted on the Building Consent for inspection until it has been inspected and passed by the Building Consent Authority inspector.

11.16 PRODUCER STATEMENTS

When producer statements verifying construction are required, provide copies to both the Building Consent Authority and the owner. Provide producer statements in the form required by the Building Consent Authority.

11.17 TRADE GUARANTEES AND WARRANTIES

Where specific trade guarantees/warranties are offered covering materials and/or execution of proprietary products or complete installations, provide copies of all guarantees/warranties to the owner.

11.18 SITE ACCOMMODATION

Provide, erect and maintain scaffolding, sheds, toilets, water, power and hoardings. Allow for cartage, craneage, plant hire and storage. Arrange for temporary works and services necessary for the completion of the works.

11.19 HEALTH AND SAFETY

Make the works safe and provide and maintain a safe working environment. Ensure that all those working on or visiting the site are aware of the rules governing site safety, are properly supervised and are not unnecessarily exposed to hazards.

11.20 PROTECT THE WORKS

Protect parts of the work liable to damage until completion of the works. Take all precautions necessary to protect the works from damage by unauthorised entry or inclement weather. Brace and support all parts of the works against damage during construction.

11.21 STORAGE AND PROTECTION

Provide temporary storage areas and protective covers and screens. Fillet stack and protect all framing and structural members from moisture and contamination. Completely protect finishing materials from the weather and damage and store in accordance with the manufacturer's requirements. Protect fabricated elements from the weather and damage, and store in accordance with suppliers requirements.

11.22 ANTIQUITIES AND ITEMS OF VALUE AND INTEREST

Report immediately the finding of any fossils, antiquities, or objects of value. Ensure they remain undisturbed until approval is given for their removal.

11.23 MEANS OF COMMUNICATION

All directions and approvals in writing.

11.24 PROGRAMME

Provide a programme for the contract works, including the work of separate contractors being carried out concurrently with this contract. Form of programme: A dated bar chart, identifying the contract work's critical path and all key dates for the provision of labour, materials and elements. Supply a copy of the programme, and any updates to the owner.

11.25 WORKING HOURS

Work on site is restricted to between 8.00am to 6.00pm, Monday to Friday, excluding statutory holidays. Work outside these hours may be permitted, with prior approval in writing by the owner.

11.26 RESTRICTIONS

Do not:

- smoke on site
- light rubbish fires on the site
- bring dogs on to or near the site
- bring radios/audio players on to the site.

11.27 QUALITY ASSURANCE

Carry out and record regular checks of material quality and accuracy. Provide all necessary materials, equipment, plant, attendances, supervision, inspections and programming to ensure required standards are met.

11.28 DAMAGE AND NUISANCE

Prevent damage and nuisance from water, fire, smoke, vehicles, dust, rubbish, noise and other causes resulting from the contract works. Comply with the requirements of the territorial authority and relevant Acts and Standards.

11.29 SET-OUT AND DATUM

Set out the works to conform with the drawings. Establish a permanent site datum to confirm the existing ground floor level and its relationship to other existing and new building levels.

11.30 EXECUTION OF THE WORK

Conform to the requirements of this specification. Ensure work is level, plumb, and true to line and face. Employ only experienced workers familiar with the materials and techniques specified.

11.31 MATERIALS AND PRODUCTS

Use only new materials and products, unless stated otherwise, of the specified quality and complying with cited documents.

11.32 COMPATIBILITY

Ensure all parts of a construction or finish are compatible and their individual use approved by the manufacturers and suppliers of other parts of the system. Source all parts of a system from a single manufacturer or supplier.

11.33 COMPLETE ALL SERVICES

Ensure completed building services are operational, with temporary labelling removed, required labelling fixed and service instructions provided.

11.34 CLEAR AWAY

Regularly clear away trade debris, unused materials and elements from the site. On completion of the work leave the building clean and ready for occupancy, with all services operating and mechanical parts in good working order. Remove temporary markings, coverings and protective wrappings.

11.35 CLEAN

Clean and wash down external surfaces to remove dirt, debris and marking. Clean interior surfaces including floors, glass, cabinetwork, joinery, sanitary and hardware items.

31 CONCRETE

31.1 REINFORCEMENT

Bars to AS/NZS 4671, grade 300 deformed. Welded reinforcing mesh to AS/NZS 4671. Mild drawn steel tying wire not less than 1.2 mm diameter.

31.2 SPACERS AND CHAIRS

Precast concrete or purpose made moulded PVC. Use concrete spacer blocks only where the concrete surface is not exposed in the finished work.

31.3 CONCRETE

Strength as selected. Ready-mix normal grade, maximum aggregate size 19 mm to NZS 3104. Site mixed prescribed grade, using either separate batching of sand and coarse aggregate, or builder's mix, to NZS 3104.

31.4 HANDLE AND STORE REINFORCING

Handle and store reinforcing steel and accessories without damage or contamination. Ensure reinforcement is clean and remains clean and free of contamination that may reduce bonding capacity.

31.6 CUT AND BEND

Cut and bend bars using proper bending tools to avoid notching and to the requirements of NZS 3109. Do not rebend bars without written approval. Bend main reinforcing bars, stirrups and ties to the former pin diameters as given in NZS 3109, figure 3.1.

31.7 SECURE REINFORCEMENT

Secure reinforcement adequately with tying wire and place, support and secure against displacement when concreting. Bend tying wire back well clear of the formwork. Spacing as dimensioned, or if not shown, to the clear distance minimums laid down in NZS 3109, clause 3.3.

31.8 LAPPED SPLICES

Set length of laps, where not dimensioned on the drawings, in accordance with NZS 3109: 3.7. Increase laps of plain round steel by 100%.

31.9 COVER

Minimum cover to reinforcing as shown on the drawings and to NZS 3109, clause 2.7. Fix chairs for top reinforcement in slabs at 1.0 metre centres. Cover tolerances to NZS 3109, clause 3.8.

31.10 SURFACE FINISHES

To comply with NZS 3114, section 105, or as denoted on the drawings. Formwork linings and surface finishes as nominated for both fair face and concealed or exposed surfaces. Surface tolerances to comply with NZS 3114, sections 104 and clause 105.3.2.

31.11 DAMP-PROOF MEMBRANE

Apply membrane to prepared basecourse with 150 mm laps between sheets. Tape seal laps and penetrations with 50 mm wide pressure sensitive plastic tape. Refer to drawings for perimeter details.

31.12 CASTING IN

Build in grounds, bolts and fixings for wall plates and bracing elements, holding down bolts, pipes, sleeves and fixings as required. Form pockets, chases and flashing grooves as required. No grounds exceeding 100 mm in length. Minimum cover on conduits 40 mm. Do not encase aluminium items in concrete. Do not paint steel embedded items more than 25 mm into the concrete encasement. Cut back form ties to specified cover and fill the cavities with mortar. Wrap all pipes embedded in concrete with tape to break the bond and to allow for expansion.

31.13 CONSTRUCT FLOOR SLABS

Construct in accordance with NZS 3604, 7.5 Concrete slab-on-ground floors for timber buildings. Lay to true and straight surfaces, screeded, floated and steel (manual or power) trowelled finish. Tolerance on flatness: maximum 3 mm gradual deviation over a 3 metre straight-edge, to the requirements of NZS 3114, section 104.

31.14 SAW CUTS

Pour floor slabs cast on the ground in areas no greater than 25 square metres, with a maximum ratio of length to breadth of 1:1.5. Cut slabs where indicated on the drawings and as required to control shrinkage cracking. Carry out cutting as soon as possible, without causing tear-out of aggregate and before shrinkage cracking has occurred, generally within 24 hours of pouring. Where saw cuts are made, cut out 100 mm of every second wire of the mesh for a length of 50 mm each side of the saw cut position. Saw cuts: $\frac{1}{3}$ rd slab depth, or 30 mm minimum.

31.16 CURING OF CONCRETE

Keep damp for not less than seven days. Ensure curing of slabs commences as soon as possible after final finishing, by the use of continuous water sprays, or ponding. Alternately, apply a curing membrane. Ensure any membrane used will not affect subsequent applied finishes.

31.18 CLEAN OUT

Clean out saw cuts. Fill with cement grout where the floor will be covered with carpet or vinyl.

33 CARPENTRY

- 33.3 TIMBER FRAMING DRY, TREATED
Species, grade and level of treatment to NZS 3602, tables 1 to 3 Requirements for wood-based building components..., and moisture content to NZS 3602, table 4 Allowable moisture content. Either mechanically stress graded to AS/NZS 1748, or visual grading to NZS 3631.
- 33.4 STRUCTURAL LVL
Structural laminated veneer lumber (LVL) to AS/NZS 4357 with an average moisture content at supply of 16% or less.
- 33.5 FLOORING AND DECKING
As selected and to the following details:
Particleboard: Flooring grade high density resin bonded.
Spaced decking: Selected radiata pine to NZS 3602, table 1 Requirements for wood-based building components.... Dressed four sides and with arrises removed.
Provide sample for review prior to laying.
- 33.6 FINISHING TIMBER
As selected.
- 33.7 INSULATION
As selected.
- 33.8 ACCESSORIES
Building wrap: Breather type, waterproof.
Damp-proof course: 2-ply/3-ply kraft felt strip saturated and coated with bitumen.
Nails, bolts and screws: Steel, stainless steel, galvanized steel of pattern to suit the location and to BRANZ Bulletin 453: Fasteners selection. To NZS 3604, section 4 Durability, for durability.
Nail plates connectors: Stainless steel and/or galvanized steel toothed or nailed plates to the plate manufacturer's design for the particular locations as shown on the drawings and to NZS 3604, section 4 Durability, for durability. Galvanized steel and stainless steel connectors and brackets to the connector manufacturer's design for locations shown on drawings and to NZS 3604, section 4 Durability, for durability.
- 33.9 ATTENDANCE
Provide and fix blocks, nogs, openings and other items as required by others.
- 33.10 MOISTURE CONTENT
Maximum allowable moisture content to NZS 3602, table 4 Allowable moisture content..., for framing supporting interior linings:
- Framing at erection 24%
- Framing at enclosure 20%
- Framing at lining 16%
- 33.11 EXECUTION GENERALLY
To NZS 3604 except as varied in this specification. To include those methods, practices and processes contained in the unit standards for the National Certificate in Carpentry and the National Certificate in Joinery (cabinetry, exterior joinery, stairs). Set out framing in accordance with the requirements of NZS 3604 and as required to support sheet linings and claddings.
- 33.13 INSTALL FLOOR, WALL AND ROOF FRAMING
Floors and bottom plates framed and fastened to NZS 3604, section 7 Floors. Frame walls to required loading and bracing complete with lintels, sills and nogs, all fabricated and fastened to NZS 3604, section 8 Walls. Frame roof to required loading and bracing complete with valley boards, ridge boards and purlins to NZS 3604, section 10 Roof framing. Design and fit roof trusses complete with anchorage. All fabricated and fastened to NZS 3604, section 9 Posts, and section 10 Roof framing.
- 33.14 INSTALL CAVITY BATTENS
Install battens to form a drained cavity to NZBC E2/AS1, 9.1.8 Drained cavities, to suit the selected wall cladding.
- 33.15 INSTALL LINING BATTENS
Fabricate and fasten battens to suit the selected linings. Fasten ceiling battens in accordance with NZS 3604, section 13 Ceilings.
- 33.17 INSTALL INSULATION
Fit insulation as detailed, to the insulation manufacturer's requirements, and to the requirements of BRANZ Bulletin 357: Thermal insulation of houses.
- 33.18 LAY PARTICLEBOARD FLOORING
Fasten to the flooring manufacturer's requirements and NZS 3604, 7.2.3 Wood-based sheet flooring. Punch nails, fill holes, then sand with one coarse and one fine paper, hand sanding into corners.
- 33.21 LAY TIMBER SPACED BOARDING FOR EXTERIOR DECKS
Avoid very short or long lengths, drill all fixings, stagger end joints and space boards a maximum of 2 mm apart. Fix using annular grooved galvanized jolt head nails, heads driven flush with the surface.

41 WALL CLADDING

- 41.1 **HARDIPLANK WEATHERBOARD**
Treated cellulose fibre in a matrix of cement and sand autoclaved weatherboards to match existing.
- 41.5 **FIBRE CEMENT SOFFIT LINING**
Cellulose cement autoclaved sheets.
- 41.6 **TIMBER FASCIAS AND BARGE BOARDS**
As selected, or radiata pine to NZS 3631 for grading and to NZS 3602, table 2 Requirements for wood-based building components ..., for selection and treatment.
- 41.7 **EXTERIOR FINISHING TIMBER**
As selected.
- 41.8 **ACCESSORIES**
As selected and to the following details:
 Building wrap: Breather type, waterproof.
 PVC jointers: To suit sheet thickness.
 Nails, screws, fastenings: Metal, size and pattern, to cladding manufacturer's requirements and complying with the relevant aspects of NZS 3604, section 4: Durability.
- 41.9 **METAL FLASHINGS**
As selected.
- 41.10 **MOISTURE CONTENT**
Maximum allowable moisture content to NZS 3602, table 4 Allowable moisture content....
- 41.11 **EXECUTION GENERALLY**
To NZBC E2/AS1 except as varied in this specification. Execution to include those methods, practices and processes contained in the unit standards for the National Certificate in Carpentry and the National Certificate in Joinery (cabinetry, exterior joinery, stairs).
- 41.12 **INSTALL WALL WRAP**
Fix wall wrap as detailed and to the cladding manufacturer's requirements.
- 41.15 **PRIME OR SEAL**
Prime (for opaque finish) or seal (for clear finish) front and back faces, edges and end grain (minimum 2 coats) before fixing weatherboards and exterior trim.
- 41.16 **INSTALL HARDIPLANK WEATHERBOARDS**
Install level, true to line and face.
- 41.18 **INSTALL FIBRE CEMENT SOFFITS**
Cut sheets dry and scribe fit to fully support all edges and joints. Nail and drill for and insert fasteners to the sheet manufacturer's requirements. Fit complete with jointers and capping moulds. Refer to the cladding manufacturer's literature for fixing details and fixings durability requirements to NZS 3604.
- 41.19 **INSTALL EXTERIOR TIMBER FINISHINGS**
Install timber fascias, barge boards, facings, beads, trim and enclosures level, true to line and face, with all end grain sealed and joints mitred.
- 41.20 **INSTALL FLASHINGS**
Install flashings, covers and soakers as detailed on the drawings and to NZBC E2/AS1, 4.0 Flashings.
- 41.21 **USE OF SEALANTS**
Selection and use of sealants to follow BRANZ Bulletin 441: Sealed joints in external claddings - 2. Sealants.
- 41.22 **COMPLETE**
Complete all flashings, finishings and trim so the cladding system is completely weathertight.

43 STUCCO AND SOLID PLASTER

- 43.1 **QUALIFICATIONS**
Carry out solid plaster work using competent, experienced plasterers.
- 43.2 **MATERIALS**
 Building wrap: Breather type, waterproof.
 Underlay: Breather type, waterproof.
 Wire mesh: Galvanized (to 400 g/square metre) 15 mm hexagon mesh to NZS 4251, part 1, clause 4.2.8 (rigid backings) or 5.3.3 (non-rigid backing) 0.9 mm diameter steel wire in 900 mm (minimum) wide rolls. 6 mm deep, 25 mm diameter purpose made plastic spacers and galvanized flathead nails.
 Metal lath: 0.55 mm thick steel, galvanized to 400 g/square metre, slit and expanded, complete with all control joints, beads sections and fixings supplied by manufacturer.
 Sand: To BRANZ Good practice guide: Stucco, clause 4.11.
 Cement: Portland cement to NZS 4251, part 1, clause 2.2.2.3.
 Water: From local town supply.
 Lime putty: To BRANZ Good practice guide: Stucco, and NZS 4251, part 1.
 Admixtures: Strictly in accordance with the admixture manufacturer's requirements.

43.3 PLASTER MIX
(C = cement; L = lime; S = sand)
On concrete/concrete block

Finish

Bond coat 1 : 1.5 CS
Flanking coat 1 : 1 : 6 CLS
Finish coat - sponge 1 : 1 : 6 CLS

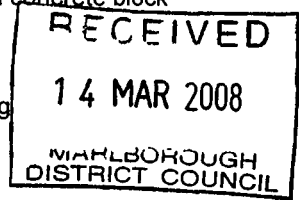
Rigid or non-rigid backing on steel or timber framing

Bond coat 1 : 1 : 6 CLS or
1 : 0.5 : 4.5 CLS
Flanking coat 1 : 1 : 6 CLS or
1 : 0.5 : 4.5 CLS
Finish coat - sponge 1 : 2 : 9 CLS
1 : 0.25 : 3.5 CLS

Thickness

} Combined bond and flanking coats
} 15 mm (minimum) 12 mm on concrete block
Finish coat 3 mm (maximum)

}
} Combined bond and flanking
} coats 18 mm (minimum)
} Finish coat 3 mm (maximum)



43.4 STORAGE

Store materials on site in conditions ensuring protection from contamination and deterioration.

43.5 BACKGROUND STANDARD

Ensure that backgrounds and adjoining surfaces are (with the preparation called for) of a standard required for plastering. Protect existing adjoining work and surrounding areas with boards, dust sheets and protective panels. Completely mask metals, joinery, glass and other adjoining finished surfaces. Ensure flashings and penetrations are in place, and work liable to damage the plaster complete before commencing laying up.

43.6 PREPARATION OF SOLID BACKGROUND

Hack off projections, fill voids. Remove oils, retarders, loose material and leave surfaces dust free. Roughen concrete to provide a mechanical bond, rake out concrete block joints and dampen surface if necessary before applying the bond coat.

43.7 PREPARATION OF FRAMED BACKGROUND

Install building wrap to NZBC E2/AS1: 9.1.8 Drained cavities and 9.3 Stucco. Form a 20 mm drained cavity using H3.1 treated timber battens to NZS 3602, table 1 Requirements for wood-based building components..., reference 1D.10, installed to NZBC E2/AS1: 9.1.8 Drained cavities and 9.3 Stucco.

43.8 INSTALL RIGID BACKING

Install in accordance with sheet manufacturer's requirements. Install underlay as a slip layer over the rigid backing.

43.10 INSTALL WIRE MESH

Fix to NZS 4251, part 1, section 4 (rigid backings) section 5 (non-rigid backing) and to BRANZ Good practice guide: Stucco.

43.12 PLASTERING

Lay up all coats to the requirements of NZS 4251, part 1 and BRANZ Good practice guide: Stucco, under atmospheric conditions that will not adversely affect the finished work. Scratch the initial coats of plaster to provide a mechanical key for following coats. Complete any coat in sufficient time to enable subsequent coats to be applied under conditions that give full bond. Cut out damaged and faulty work in any coat and make good before proceeding.

43.13 ACCURACY

For trowelled surfaces no deviation more than 3 mm from a 1200 mm long straight edge. For textured surfaces no deviation more than 3 mm from a 900 mm long straight edge.

43.14 PROVIDE CONTROL JOINTS

When not detailed, provide control joints at 4 metre centres maximum vertically and horizontally; vertically at all openings and horizontally at inter-storey level at the underside of the floor construction.

43.15 CURING

Wet cure unmodified plaster by continuous mist spray or protect with wet hessian for 4 days and then slowly dry for 3 days. Wet cure acrylic-modified plaster for 1 day and shade for another 4 days. Protect finished work from the weather and from damage by building operations or other causes.

44 ROOF CLADDING

44.1 QUALIFICATIONS

Use experienced competent roofers familiar with the materials and techniques specified.

44.2 WIND AND EARTHQUAKE LOADINGS

Use fixings and methods capable of sustaining the loads appropriate to the area as set out in NZS 3604, section 5 Bracing design.

44.3 PROFILED METAL

Profile, metal and finish as selected. Accessories, cappings, flashings and fixings to match and to the roofing manufacturer's requirements.

44.6 ACCESSORIES

Roof underlays: As selected.
Nails, screws, fastenings: Metal, size and pattern, to roofing manufacturer's requirements and complying with the relevant aspects of NZS 3604, section 4 Durability.

Flashings: As selected.

- 44.7 STORAGE
Stack roofing and accessories on clean, level areas of the site. Cover and protect from damage and from weather until ready to fix in place.
- 44.8 SET-OUT
Set out the planned layout before fixing commences, to ensure true lines and the correct relationship to module, grid and roof features. Overlaps to face away from prevailing wind direction.
- 44.9 LAY ROOF UNDERLAY
Lay and fix to NZBC E2/AS1, 8.1.5 Underlays, and to NZS 3604, 11.2 Roof cladding underlays.
- 44.10 TAKE CARE
Take care to avoid damaging pre-finished roofing both during and after fixing. Mark only with chalk or spirit-based pen. Wear only soft-soled shoes on the finished surface. Remove metal filings daily.
- 44.11 INSTALL PROFILED METAL
Use cutting tools recommended by the roofing manufacturer. Fold ends and seal cut edges to the roofing manufacturer's requirements. Fix complete with matching accessories, flashed to roof features and penetrations; all in accordance with the New Zealand Metal Roofing Manufacturers Inc. publication "NZ metal roof and wall cladding code of practice".
- 44.16 FIXINGS AND SEALANTS
Refer to the roofing manufacturer's literature for fixing details and to NZS 3604 for fixings durability requirements. Select and use sealants only as recommended by the roofing manufacturer.
- 44.17 INSTALL COVERS AND FLASHINGS
Provide apron, verge and ridge flashings. Install and fix as detailed and to the roofing manufacturer's details and to comply with NZBC E2/AS1, 4.0 Flashings, 5.0 Roof/wall junctions, and 6.0 Parapets.
- 44.18 PENETRATIONS
Flash and overflash penetrations through the roof. Fit proprietary boots to pipework penetrations.
- 44.19 COMPLETE
Ensure the work is complete with flashings, undercloaks, valleys, ridges and hips properly installed so the finished roof is completely weathertight.
- 44.20 CLEAR
Clear trade debris and unused materials from the roof and surrounds regularly during the work and at completion. Sweep down the completed roof and flush out spoutings, gutters and rainwater pipes.

48 ALUMINIUM WINDOWS AND DOORS

- 48.1 CERTIFICATION
Provide a certificate from a laboratory accredited by International Accreditation of New Zealand that the windows and doors offered comply with the performance requirements of NZBC E2/VM1 and the listed project site data. Fabrication by a member of the Window Association of New Zealand.
- 48.2 WINDOWS AND DOORS
Brand, finish and type as selected.
- 48.3 WINDOW AND DOOR REVEALS
As selected with timber jamb liners to NZS 3602.
- 48.4 GLASS
As selected, and complying with NZS 4223.
- 48.5 FLASHINGS
As selected.
- 48.6 ORGANIC POWDER COATING FINISH
To the Window Association of New Zealand's "Specification for powder coatings on architectural aluminium products". All finished surfaces to show uniformity of gloss and colour (to match sample) free of all coating defects.
- 48.7 HARDWARE
As selected.
- 48.8 SEALANT, GLAZING TAPE AND GASKETS
To the window manufacturer's requirements.
- 48.9 FIXINGS
Ensure fixings and bracketing are compatible with aluminium. Do not use electroplated zinc fasteners or brass fastenings.
- 48.10 OPENING PREPARATION
Confirm framing openings on site for dimension, plumb and straightness prior to fabrication or ordering of aluminium joinery. Prepare and trim to WANZ WIS™ Pre Cladding Trim Preparation requirements.
- 48.11 EXECUTION GENERALLY
To NZBC E2/VM1, WANZ "Aluminium Window Handbook" and "Installation code for aluminium joinery products". Install to WANZ WIS™ Window installation System requirements.

48.12 HANDLING

Avoid distortion of elements during transit, handling and storage. Prevent pre-finished surfaces from rubbing together. Prevent contact with mud, plaster and cement. Do not deliver to site any elements which cannot be immediately unloaded into suitable conditions of storage.

48.13 CORROSION PROTECTION

Seal or suitably coat cut ends and holes drilled in aluminium before the frames are installed. Before fixing, apply bituminous coatings, slips or underlays between dissimilar metals in contact, or aluminium in contact with concrete.

48.14 FIX FRAMES

Fix frames rigidly in place without distortion, to the window manufacturer's and the Window Association of New Zealand's "Aluminium Window Handbook" requirements, plumb, true to line and face, weathertight and with all openings operating freely.

48.15 DRAINAGE

Anti-condensation channels to sills. All sills to sashes and fixed lights to incorporate positive drainage to the exterior.

48.16 GLAZING INSTALLATION

All glass held in aluminium beads and black PVC gaskets.

48.17 SAFETY GLASS INSTALLATION

Use in doors, sidelight panels, low level windows and all other locations to comply with NZS 4223, part 3, as modified by NZBC F2/AS1, 1.0 Glazing.

48.18 INSTALL FLASHINGS

Install flashings to heads, jambs and sills of frames as supplied and required by the window manufacturer and as detailed on the drawings. Finish on head flashings to match window finish.

48.19 SEAL FRAMES ON SITE

Seal frames to each other and to adjoining structure and finishes, all as required by the window manufacturer and to make the installation weathertight.

48.20 SAFETY

Indicate the presence of transparent glasses for the remainder of the contract period, with whiting, tape or signs compatible with the glass type. Indicators other than whiting must not be applied to the glass surface. Permanent manifestations to comply with NZS 4223, part 3, 303.1.

48.21 CLEAN GLASS AND FRAMES

Clean off or remove glass indicators at completion of the building. Clean glass inside and out to a shining finish. Clean down both sides of window and door frames using the methods required by the window and door manufacturer.

62 PAINTING AND PAPERHANGING

62.1 QUALIFICATIONS

Carry out work using competent and experienced painters and paperhangers.

62.2 HEALTH AND SAFETY

Refer to the requirements of the Health and Safety in Employment Act 1992 and if elimination or isolation is not possible, then minimise the hazards in this work. Refer to OSH publication, Repainting lead based paints, for the required procedures and precautions when treating or removing lead based paint, burning or sanding off paint, or using solvent based paint removers.

62.3 PAINT

As selected and to the paint manufacturer's standards for exterior and/or interior primers, undercoats, sealers, stains, clear coatings, solvent-borne and water-borne paints.

62.4 GAP FILLERS

Linseed oil, putty, plastic wood, wood filler or plastic filler, to suit and to match the surface being prepared.

62.5 INSPECT SURFACES

Inspect surfaces being painted and report to the owner any that will not, after the preparatory work laid down by the paint manufacturer, allow work of the required standard. Confirm that all areas have adequate lighting and are sufficiently free of other construction activities to enable painting and/or paperhanging work to proceed.

62.6 PROTECT

Cover up adjoining surfaces and areas liable to damage or over-painting.

62.7 REMOVE HARDWARE

Remove hardware and door/window furniture and replace on completion. Do not paint over permanently attached hinges, or any hardware items which cannot be removed.

62.8 PRIMING AND SEALING

Ensure that priming and sealing work needed before or during construction is carried out when required.

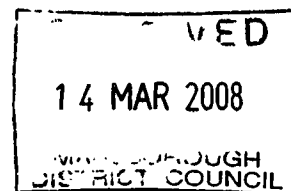
62.9 ENVIRONMENTAL CONDITIONS

Carry out work within acceptable temperature and humidity limits, with timber dry, all to the requirements of the paint manufacturer.

62.10 SELECTIONS

Confirm all selections, colours and finishes for both paint and wallpaper with the owner.

- 62.11 SHARP EDGES, CRACKS AND HOLES
Repair as required by the paint manufacturer.
- 62.12 PREPARE SURFACES
Prepare surfaces as required by the paint manufacturer. Make good all damage and defects.
- 62.13 PAINT APPLICATION
Apply paint by brush and/or roller to suit the location of the coating and to the paint manufacturer's requirements. Do not spray on site without express permission.
- 62.14 MANUFACTURER'S MANUALS
Refer to the paint manufacturers' manuals and follow their preparation, sequence and application requirements applying to each system. Ensure all paint coats in any system are supplied by the same manufacturer.
- 62.15 SCUFF BETWEEN COATS
Scuff between all coats to remove any dust pick-up, protruding fibres and coarse particles.
- 62.16 FINISHED PAINT SURFACES
Finished paint surfaces to show uniformity of gloss and colour, with the correct thickness for each coat, and freedom from painting defects. Ensure finished work is clean and free of any disfigurement.
- 62.19 CLEAN
Clean adjoining surfaces, glass and fittings of any paint contamination.
- 62.20 REPLACE
Replace hardware without damage to the hardware or the adjoining surfaces.



REFERENCES

Documents listed below are, when referred to in the text, part of this specification. However, this specification takes precedence in the event of it being at variance with and requiring a higher standard than any cited document.

Acts and Regulations

Building Act 2004

Health and Safety in Employment Act 1992

Plumbers, Gasfitters and Drainlayers Act 1976

New Zealand Building Code verification methods

E2/VM1 External moisture

New Zealand Building Code acceptable solutions

B1/AS1 Structure - general

D1/AS1 Access routes

E1/AS1 Surface water

E2/AS1 External moisture

F2/AS1 Hazardous building materials

F7/AS1 Domestic smoke alarms

Gas Regulations 1993

Electricity Regulations 1997

New Zealand Electrical Codes of Practice (ECP)

G10/AS1 Piped services - gas

G12/AS1 Water supplies

G13/AS2 Foul Water – drainage

New Zealand Standards

AS/NZS 1748 Mechanically stress – graded for structural purposes

AS/NZS 2642 Polybutylene pipe systems

AS/NZS 2269 Plywood - Structural

AS/NZS 2589 Gypsum linings - Application and finishing

AS/NZS 2699 Built-in components for masonry construction, 2699.1: Wall ties

AS/NZS 3000 Electrical installations (known as the Australian/NZ Wiring Rules)

AS/NZS 3500 Plumbing and drainage

Part 2 Sanitary plumbing and drainage

Part 3 Stormwater drainage

AS/NZS 4129 Fittings for polyethylene pipes for pressure applications

AS/NZS 4130 Polyethylene(PE) pipes for pressure applications

Series 1 pipes: General pressure applications

Series 2 pipes: Gas (nominal outside diameter series)

Series 3 pipes: Gas (nominal inside diameter series)

AS/NZS 4357 Structural laminated veneer lumber

AS/NZS 4671 Steel reinforcing materials

NZS 3103 Sands for mortars and plasters

NZS 3104 Specification for concrete production

NZS 3109 Concrete construction

NZS 3114 Concrete surface finishes

NZS 3501 Specification for copper tubes for water, gas and sanitation

NZS 3602 Timber and wood-based products for use in building

NZS 3604 Timber framed buildings

NZS 3631 New Zealand national timber grading rules

NZS 4210 Masonry construction materials and workmanship

NZS 4223 Glazing in buildings

Part 1: The selection and installation of glass in buildings

Part 3: Human impact safety requirements

NZS 4229 Concrete masonry buildings not requiring specific design

NZS 4251 Solid plastering, Part 1: Cement plasters for walls, ceilings and soffits

NZS 4357 Structural laminated veneer lumber

NZS 5261 Installation of gas burning appliances and equipment

NZS 6803 Acoustics - Construction noise

Building Research Association of New Zealand (BRANZ)

Good practice guide: Stucco

Good practice guide: Tiling

Good practice guide: Membrane roofing

Bulletin 357 Thermal insulation of houses

Bulletin 436 Masonry veneer construction

Bulletin 441 Sealed joints in external claddings - 2. Sealants

Bulletin 453 Fasteners selection

Department of Labour – Occupational Safety and Health (OSH)

Approved code of practice for demolition

Approved code of practice for safety in excavation and shafts for foundations

Guidelines for the management and removal of asbestos

Repainting lead based paints

New Zealand Metal Roofing Manufacturers Inc

NZ Metal roofing and wall cladding: Code of practice

Window Association of New Zealand Incorporated (WANZ)

Aluminium Window Handbook

Specification for powder coatings on architectural aluminium products

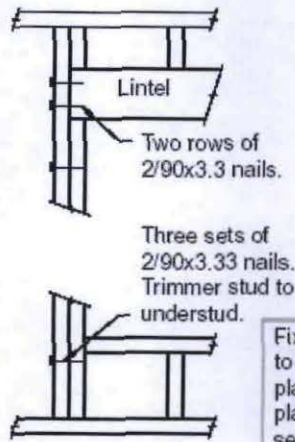
Installation code for aluminium joinery products

WIS™ Window Installation System

9998 LINTEL FIXINGS

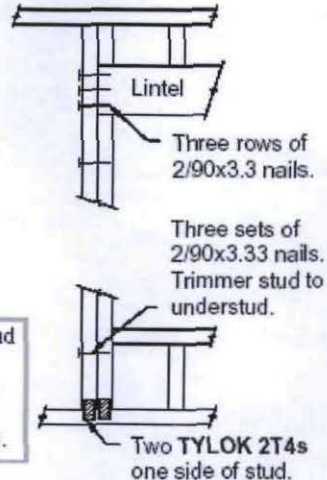
LINTEL FIXING TYPES

TYPE A
1.4kN



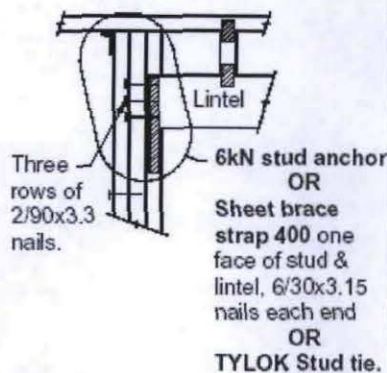
"All other nailing as Table 8.19"

TYPE B
4.0kN



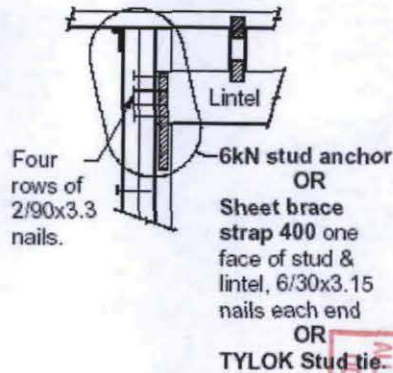
"All other nailing as Table 8.19"

TYPE C
7.5kN



"All other nailing as Table 8.19"

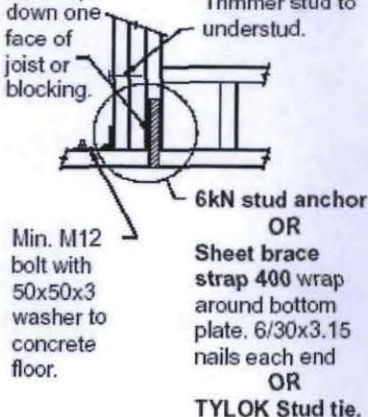
TYPE D
13.5kN



"All other nailing as Table 8.19"

For timber floors run the strap down one face of joist or blocking.

Three sets of 2/90x3.33 nails. Trimmer stud to understud.



Three sets of 2/90x3.33 nails. Trimmer stud to understud.



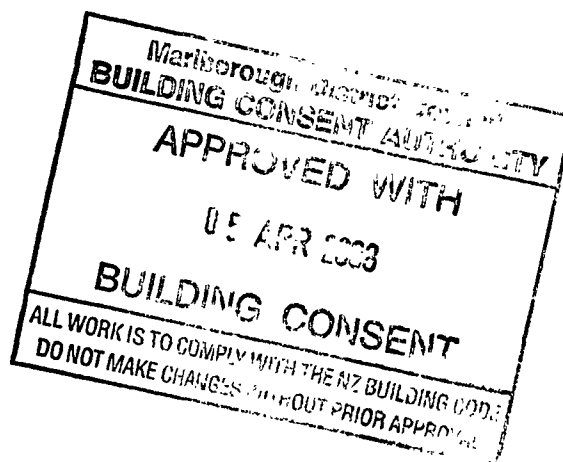
9999 FIXING TYPES

Fixings Schedule

For Fixings not indicated on drawings



Joint	Hand Driven Nails		Power Driven Nails		Finish
	Lgth x dia	No. & Location	Lgth x dia	No. & Location	
Dwang to stud	75 x 3.15	2 (skewed)	75 x 3.06	2 (skewed)	Mild Steel
	or 100 x 3.75	2 (end nailed)	90 x 3.15	2 (end nailed)	Mild Steel
Lintel to trimming stud	75 x 3.15	4 (skewed)	90 x 3.15	3 (end nailed)	Mild Steel
	or 100 x 3.75	2 (end nailed)			Mild Steel
Sill or header trimmer to trimming stud for:					
(a) Trimmer not exceeding 2.4m long	100 x 3.75	2 (end nailed)	90 x 3.15	3 (end nailed)	Mild Steel
(b) Trimmer not exceeding 3.6m long	100 x 3.75	3 (end nailed)	90 x 3.15	5 (end nailed)	Mild Steel
(c) Trimmers not exceeding 4.2m long	100 x 3.75	4 (end nailed)	90 x 3.15	6 (end nailed)	Mild Steel
Stud to plate	100 x 3.75	2 (end nailed)	75 x 3.06	4 (skewed)	Mild Steel
	or 75 x 3.15	4 (skewed)	90 x 3.15	3 (end nailed)	Mild Steel
Top plate 150 x 40 to 100 x 50 and top plate to lintel	100 x 3.75	2 @ 500 crs	90 x 3.3	3 @ 500 crs	Mild Steel
			or 90 x 3.15	3 @ 500 crs	Mild Steel
Trimming studs at openings, blocking and studs at wall intersections	100 x 3.75	600 crs	90 x 3.3	600 crs	Mild Steel
			or 90 x 3.15	600 crs	Mild Steel
Trimming stud to doubled stud immediately under lintel	100 x 3.75	2	90 x 3.15	2	Mild Steel
Purlin to truss	100 x 3.75	3 (skewed)	90 x 3.15	3 (skewed)	Mild Steel
Truss to top plate at supports	100 x 3.75	2 (skewed)	90 x 3.15	2 (skewed)	Mild Steel
	+ wire dogs	2	+ wire dogs	2	
Truss to top plate of internal wall	100 x 3.75	2	90 x 3.15	2	Mild Steel
Ceiling batten to parallel top plate of internal wall bracing element	75 x 3.15	2 @ 400 crs	90 x 3.15	2 @ 400 crs	Mild Steel
Ceiling batten to top plate	75 x 3.15	1	75 x 3.06	1	Mild Steel
Ceiling batten to truss	75 x 3.15	2	75 x 3.06	2	Mild Steel





Design Steps 4 and 5 – Bracing Units Achieved (Wind and Earthquake)

MARCH 2006

TABLE 1: Bracing Unit Ratings for 10mm GIB® Standard Plasterboard and any other 10mm and 13mm GIB® plasterboard.

TYPE	LENGTH (m)	LINING REQUIREMENT	OTHER REQUIREMENTS		BU PER METRE	
	MINIMUM		DIAGONAL BRACE		WIND	EARTHQUAKE
GS1a	1.8	10mm GIB® Standard Plasterboard one face fixed horizontal or vertical	yes		65	55
	2.4				75	65
GS2	1.2	10mm GIB® Standard Plasterboard both sides fixed horizontal or vertical ¹	no		70	60
	1.8				80	70
	2.4				90	80

TABLE 2: Bracing Unit Ratings for 10mm GIB Braceline®, 10mm GIB Noiseline® and 10mm GIB Toughline® (fixed with GIB Braceline® screws or GIB Braceline® nails)

TYPE	LENGTH (m)	LINING REQUIREMENT	OTHER REQUIREMENTS		BU PER METRE	
	MINIMUM		DIAGONAL BRACE	HOLD-DOWNS	WIND	EARTHQUAKE
BL1	0.4	GIB Braceline® one face fixed horizontal or vertical ²	no	yes	120	115
	0.6		no	yes	125	115
BL1a	1.8	GIB Braceline® one face fixed horizontal or vertical ²	yes	yes	130	115
BLP	0.6	GIB Braceline® one face fixed horizontal or vertical, 7mm D-D plywood on the other ^{1,2}	no	yes	145	135
	0.9				145	145
BLG	0.6	GIB Braceline® one face, 10mm GIB® Standard on the other face, linings fixed horizontal or vertical ^{1,2}	no	yes	145	130
	1.2				150 ³	130

Notes:

- 1) Where linings are specified on both faces, each face must be fastened as a bracing element.
- 2) GIB Aqualine® can be used in place of GIB Braceline® in bracing elements 900mm or longer, provided the perimeter of the element is fixed with GIB Braceline® nails or screws spaced at 100mm centres generally, using the GIB Braceline® corner fixing pattern.
- 3) A maximum of 150 BU/m is recommended for any bracing system used with NZS 3604:1999 construction. Higher ratings generate loads beyond the capacity of NZS 3604:1999 timber foundation and slab details. If ratings exceed 150 BU/m, hold downs and foundations must be the subject of specific structural engineering design.

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.

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

A ceiling diaphragm shall 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 NZS3604:1999.

Limitations for 10mm or 13mm GIB® Standard Plasterboard Ceiling Diaphragms

- Diaphragms not steeper than 25 degrees to the horizontal shall not exceed 7.5 metres in length.
 - 10mm or 13mm GIB® Standard Plasterboard is fastened at 150mm centres to the boundary members around the entire perimeter of the diaphragm.
- Fasteners – 32mm x 6g GIB® Grabber® Drywall Screws or 30mm x 2.8mm GIB® Nails.

Limitations for GIB Ultraline® Ceiling Diaphragms

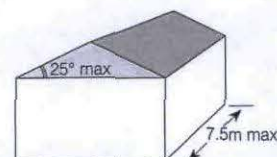
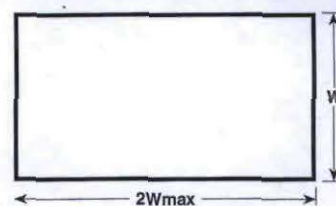
- Diaphragms not steeper than 25 degrees to the horizontal shall not exceed 10 metres in length.
 - GIB Ultraline® is fastened at 150mm centres to the boundary members around the entire perimeter of the diaphragm.
- Fasteners – 32mm x 6g GIB® Grabber® Drywall Screws or 30mm x 2.8mm GIB® Nails.

GIB Braceline® Ceiling Diaphragms

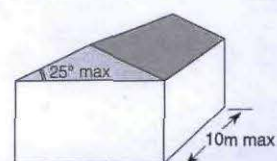
- Diaphragms not steeper than 25 degrees to the horizontal shall not exceed 15 metres in length.
 - Diaphragms not steeper than 45 degrees to the horizontal shall not exceed 7.5 metres in length.
 - GIB Braceline® is fastened at 150mm centres to the boundary members around the entire perimeter of the diaphragm.
- Fasteners – 32mm x 7g GIB® Braceline® Drywall Screws or 35mm GIB® Braceline® Nails.

General Fixing Requirements for GIB® Ceiling Diaphragms

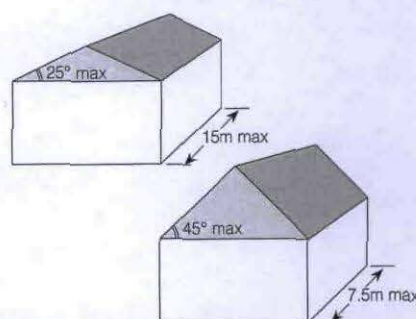
- Linings shall be installed over the entire area of the diaphragm.
- Fastening shall be no less than 12mm from sheet edges.
- Sheets shall be supported by framing members (e.g., ceiling battens) spaced at no more than 450mm centres for 10mm GIB® plasterboard and at no more than 600mm centres for 13mm GIB® plasterboard.
- Sheets within the diaphragm area may be fastened and finished conventionally in accordance with the publication entitled, "GIB® Site Guide". All joints shall be paper tape reinforced and stopped. It is recommended that sheet butt joints are formed off framing and back-blocked (see "GIB® Site Guide").
- Use full width sheets where possible. At least 900mm wide sheets with a length not less than 1800mm shall be used. Sheets less than 900mm wide but no less than 600mm may be used provided all joints with adjacent sheets are back-blocked (see "GIB® Site Guide").
- Openings are allowed within the middle third of the diaphragm's length and width. Fixing of sheet material to opening trimmers shall be at 150mm centres. Neither opening dimension shall exceed a third of the diaphragm width. Larger openings, or openings in other locations, require specific engineering design. Refer "Openings in Bracing Elements" page 27.
- Fasteners are placed at 150mm centres around the ceiling diaphragm starting at 50mm and 150mm from the sheet corners.



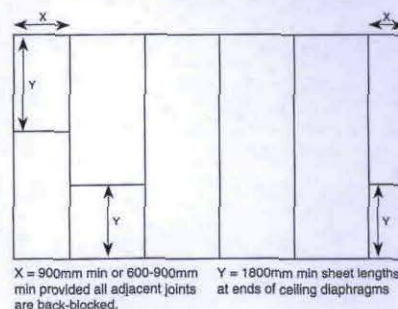
GIB® Standard Plasterboard Diaphragms



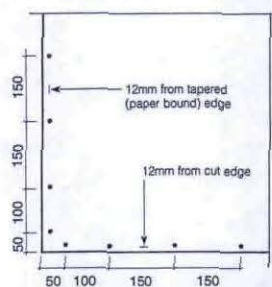
GIB Ultraline® Diaphragms



GIB Braceline® Ceiling Diaphragms



Sheet Widths and Lengths in Ceiling Diaphragms



Fastening pattern for ceiling diaphragms

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.

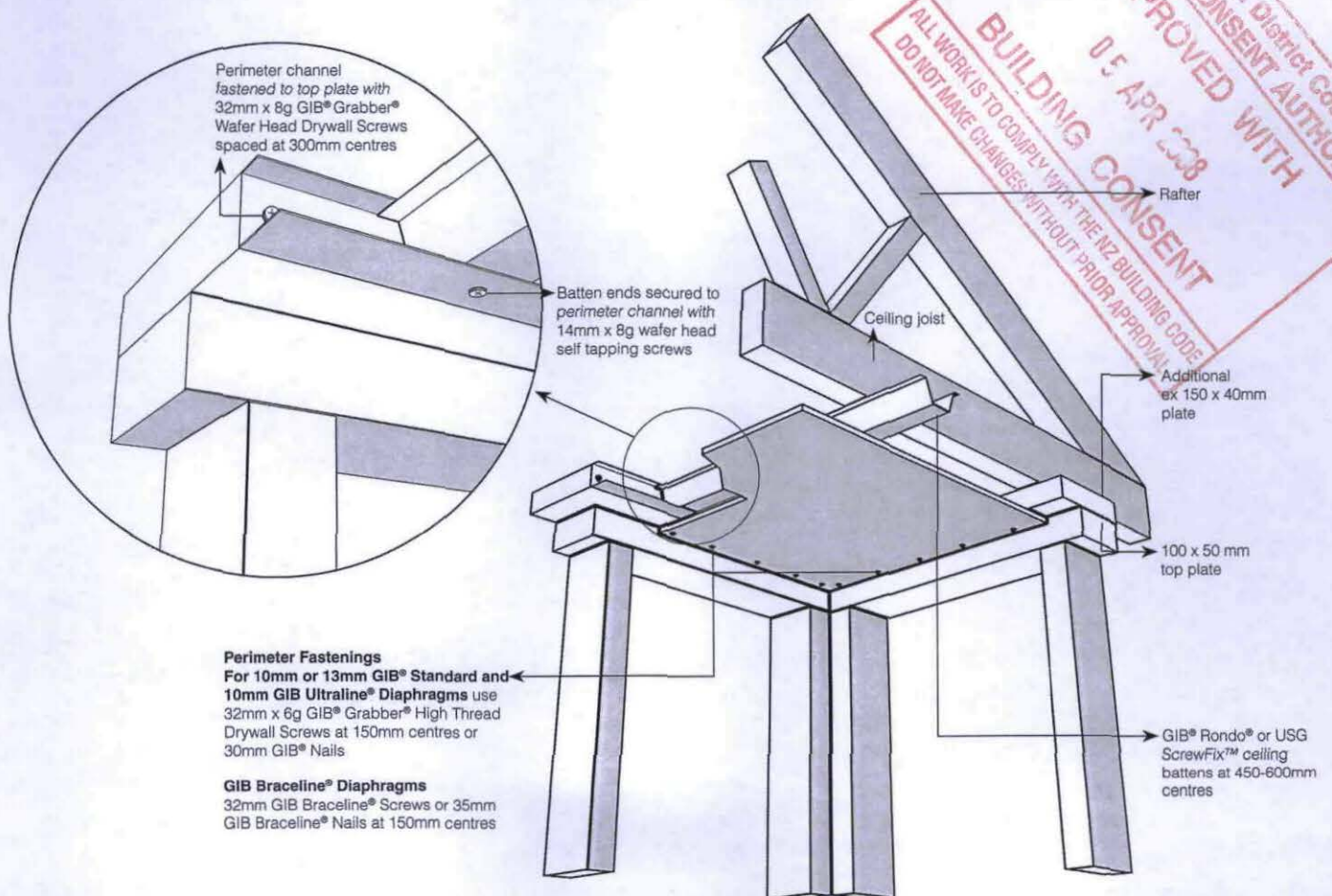


Steel Battens

The GIB® Rondo® and USG DONN Screwfix™ (FC37 and FC50) battens may be used to construct GIB® plasterboard ceiling diaphragms.

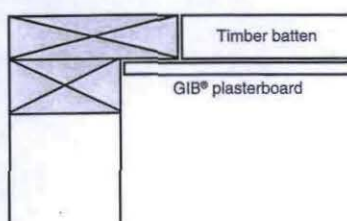
- The battens shall be spaced at 450mm centres maximum for 10mm GIB® plasterboard and at no more than 600mm centres for 13mm GIB® plasterboard. The battens are fastened through both flanges directly to the ceiling framing with 32mm x 8g GIB® Grabber® Wafer Head Self Tapping Drywall Screws.
- A steel perimeter channel is required at the perimeter of the diaphragm. The channel shall be fastened to the top plate with 32mm x 8g GIB® Grabber® Wafer Head Self Tapping Drywall Screws spaced at 300mm centres maximum.
- The linings are fastened to the perimeter channel at 150mm centres maximum with 25mm x 6g Self Tapping Screws.
- Within the diaphragm area sheets may be fastened as described in "General Fixing Requirements for GIB® Ceiling Diaphragms".

Ceiling Diaphragm on Steel Battens – Typical Fixing Detail

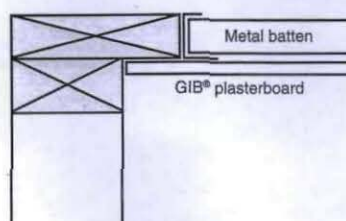


The perimeter of a ceiling diaphragm must be connected to a single continuous member along all edges. Connection to dwangs between trusses is not acceptable.

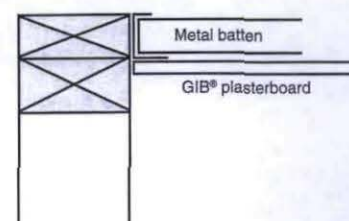
Timber battens example



Steel battens with perimeter channel example



OR



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.



GIB® Bracing Systems Changes

GIB® Bracing Systems have undergone a thorough review as part of Winstone Wallboards ongoing programme to make GIB® systems simpler, easier and faster for customers to use. Users of the previous systems will notice some significant changes. Please review this technical literature in detail to make yourself aware of these changes. The key differences are as follows:

- The new EzyBrace™ Specification Numbering System is designed to make specification, installation and identification of GIB® Bracing Systems easier.
- A rationalised number of bracing element types and a more consistent construction method.
- Fasteners must not be placed closer than 18mm to a sheet end or a cut edge or no closer than 12mm to the tapered (paper bound) machine edge of the GIB® plasterboard sheets.
- Some hold down details and corner fastening details have changed.
- A new 35mm GIB Braceline® Nail replaces the 32mm GIB Braceline® Nail in GIB Braceline® bracing elements.
- GIB® plasterboard sheets used in GIB® Bracing Systems March 2006 must have a manufacturing date after 16 January 2006.
- No additional framing is required for narrow panels.
- Introduction of a shorter 0.4m bracing element.
- Ability to substitute GIB Aqualine® for GIB Braceline® with modified fastener patterns.

Note: The bracing systems in the GIB® Bracing Systems 1999-2003 technical literature will remain valid, however, transfer to the systems contained in this publication is recommended for new designs for the benefits these systems offer.

Framing

General framing requirements such as grade, spacings and installation shall comply with the provisions of NZS 3604:1999. Winstone Wallboards Ltd recommends the use of kiln-dried machine stress graded framing (KD MSG). To achieve the published bracing performance the minimum actual framing dimensions are 90 x 35mm for external walls and 70 x 35mm for internal walls. Wall bracing tests on GIB® Bracing Systems were undertaken without nogs. Nogs are not considered to add to the bracing performance of the wall.

Fastening GIB® plasterboard Linings

GIB® Standard Plasterboard bracing systems must be fastened using minimum length 32mm x 6g GIB® Grabber® Drywall Screws or 30 x 2.8mm GIB® Nails. GIB Braceline® bracing systems must be fastened with 32mm x 7g GIB Braceline® screws, or 35mm GIB Braceline® nails.

GIB® plasterboard linings for designated bracing elements are fastened at 150mm centres around the perimeter of the bracing element. For GIB® Standard bracing elements fasteners are placed at 50 and 150mm from the sheet corner (see page 30). For GIB Braceline® bracing elements fasteners start at 50, 100 and 150mm from the sheet corner (see page 31). Fasteners must be placed 12mm from the tapered edge (paper bound) and 18mm from the cut edge.

Fastening in the field of the bracing element is conventional and the screw and glue method is recommended as outlined in the "GIB® Site Guide".

When fixing part sheets of GIB® plasterboard, a minimum width of 300mm applies for bracing elements.

Horizontal fixing is recommended. If fixing vertically, full height sheets shall be used where possible. Where sheet end butt joints are unavoidable they must be formed over nogs or over the studs and fastened at 200mm centres. Alternatively, the sheet end butt joints may be back-blocked.

Plywood

'Plywood' specified in BLP is grade D-D 7mm construction plywood manufactured to AS/NZS 2269:2004, fixed with 30 x 2.8mm flat head nails at 150mm centres around the perimeter of the bracing element and at 300mm centres to intermediate framing.

Fire Resistance and Noise Ratings

10mm GIB Braceline®, 10mm GIB Aqualine®, 10mm GIB Noiseline®, 10mm and 13mm GIB Ultralite® and 10mm GIB Toughline® may be substituted for 10mm GIB Fyrelite® in fire rated constructions. 10mm GIB Braceline® and 10mm GIB Toughline® may be substituted for 10mm GIB Noiseline® in GIB® Noise Control Systems. The fastener length for the fire rated system applies. The field of the braced element must also be fastened in accordance with the fire rated specification (adhesive not permitted).

Jointing and Stopping

All sheet joints must be paper tape reinforced and stopped in accordance with the publication entitled "GIB® Site Guide".

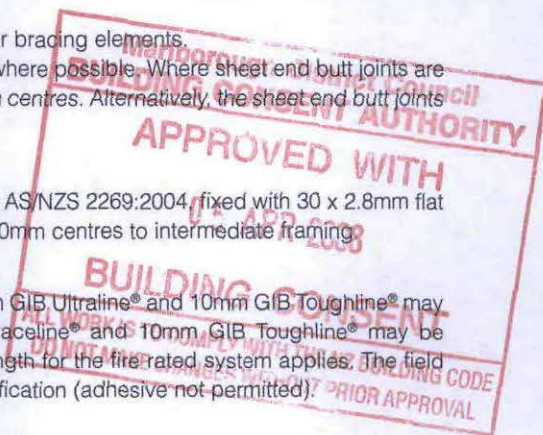
Fastening the Bracing Element to Timber Floors

Fastening the bottom plate of a GIB® wall bracing element to a timber framed floor must be in accordance with NZS3604:1999 with pairs of 100 x 3.75mm hand driven nails or three 90 x 3.15mm power driven nails at 600mm centres. In addition panel hold-downs, as detailed on page 29, must be installed when specified for the particular bracing element type (BL1, BL1a, BLG and BLP).

Fastening the Bracing Element to Concrete Slabs

Fastening the bottom plate of an external wall for bracing element GS1a is in accordance with NZS 3604:1999. On internal bracing lines, the bottom plate of wall bracing elements GS1a and GS2 may be fixed using minimum 65mm x 3.8mm shot fired fasteners fitted with 16mm discs, spaced at 150mm and 300mm from the end studs and thereafter at 600mm centres. Wall bracing elements BL1, BL1a, BLG and BLP installed on both external and internal walls require a panel hold-down connection at each end of the bracing element (see page 29). Within the length of the bracing element bottom plates are fixed in accordance with NZS 3604:1999.

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.





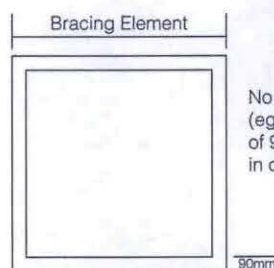
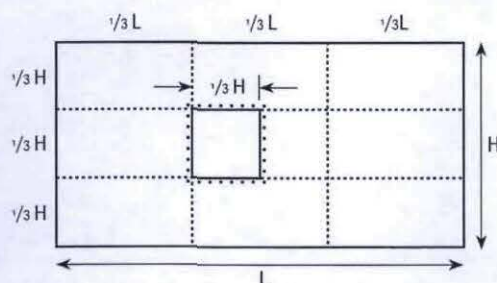
Panel Hold-Down Details

GIB® Standard Bracing Systems GS1a and GS2 do not require specific connections at the bracing element ends.

GIB Braceline® Bracing Systems BL1, BL1a, BLP and BLG all have panel hold-down connections at each end of the bracing element. Refer to page 29 for construction details.

Openings in Bracing Elements

Openings are allowed within the middle third of a wall bracing element's length and height. Neither opening dimension shall be more than one third of the element height. Wall linings are fixed to opening trimmers at 150mm centres. Small openings (e.g. power outlets) of 90 x 90mm or less may be placed no closer than 90mm to the edge of the braced element.

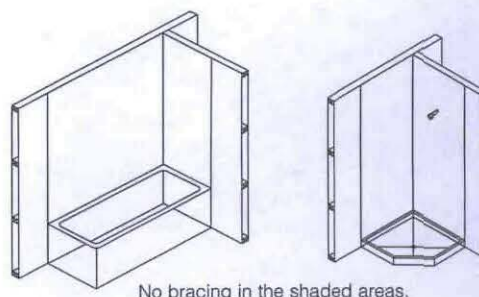


GIB® Bracing in Water-Splash Areas

Bracing elements are required to have a durability of 50 years. Winstone Wallboards recommends that bracing elements are not located in shower cubicles or behind baths because of durability requirements, the likelihood of renovation, and practical issues associated with fixing bracing elements to perimeter framing members.

Otherwise GIB® Bracing Systems can be used in water-splash areas as defined by NZBC Clause E3, provided these are maintained impervious for the life of the building.

GIB Aqualine® can be used in place of GIB® Standard in bracing elements. GIB Aqualine® can be used in place of GIB Braceline® in bracing elements 900mm or longer, provided the perimeter of the element is fixed with GIB Braceline® nails or screws at 100mm centres generally, using the GIB Braceline® corner fixing pattern.



No bracing in the shaded areas.

Renovation

When relining walls during the process of renovation, ensure that bracing elements are reinstated (check the building plans).

Angle Braces

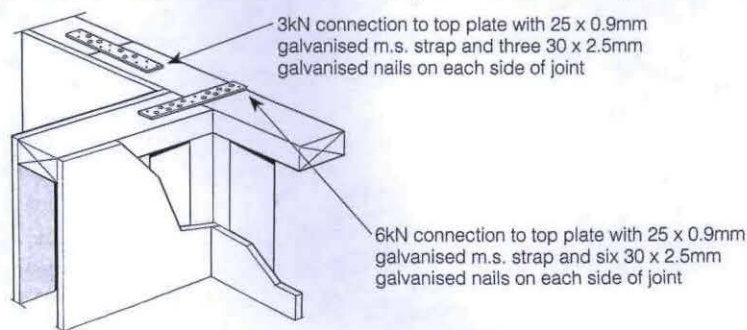
Angle braces serve to keep frames square during transport and construction. They also act as part of the temporary bracing of a building under construction.

Where specified, metal angle braces must be placed at an angle no steeper than 55 degrees, and within the designated length of the bracing element. For elements longer than 3.6 metres, pairs of angle braces (in opposite directions) are required. Fixing of angle braces is with three 30 x 2.8mm galvanised flat head nails to top and bottom plates, and two 30 x 2.8mm nails to intermediate framing.

Top Plate Connections

The top plate of a wall that contains one or more wall bracing elements shall be jointed according to the rating of the highest-rated individual wall bracing element as follows:

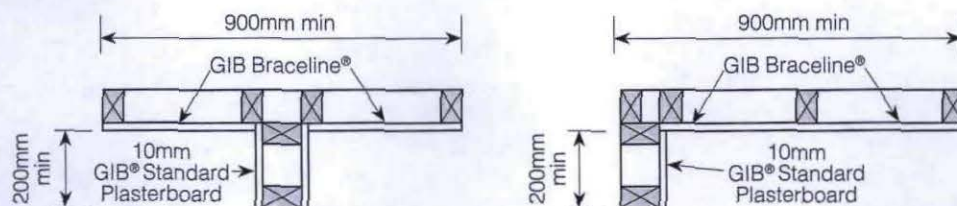
- Rating not exceeding 100 bracing units: A 3kN connection as shown or by an alternative fixing of 3kN capacity in tension or compression along the plate;
- Rating exceeding 100 bracing units: A 6kN connection as shown or by an alternative fixing of 6kN capacity tension or compression along the plate.





Guidelines for Intersecting Walls

GIB® Bracing Elements may have intersecting walls with a minimum length of 200mm. Bracing element sheets shall be fixed and jointed as given on pages 30 and 31. Fasteners are required around the perimeter of the bracing element. Vertical joints at T-junctions (illustrated below) shall be fixed and jointed as specified for intermediate sheet joints. **The bracing element length must be no less than 900mm.**



Where a Wall Bracing Element is interrupted by a T or L junction the element is deemed to be continuous for the whole length (900mm in the example illustrated above).

Fixing the Perimeter of a Bracing Element

A bracing element can consist of a part sheet (such as in a 600 mm long BL1 element), or multiple sheets (such as in a 2.4 metre or longer GS1a element). The critical fasteners are located around the perimeter of a bracing element as outlined on the fastener layout pages. The perimeter of a bracing element must be connected to a continuous member such as studs or plates. Connection to a row of nogs is not acceptable.

Fixing in the Field of the Bracing Element

Fixing in the field of a bracing element is conventional and for GIB® wall bracing elements this means that adhesive fixing is recommended, eliminating the need for mechanical fasteners in the body of the sheets.

For GIB® ceiling diaphragms the screw and glue method is recommended resulting in a minimum number of mechanical fasteners along the centre line in the body of the sheets.

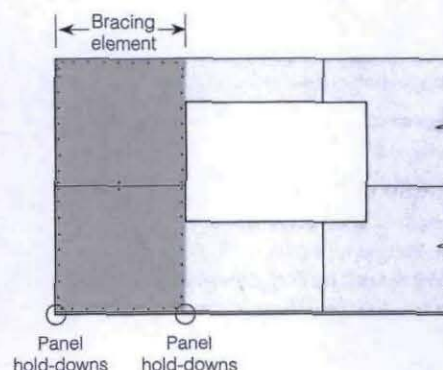
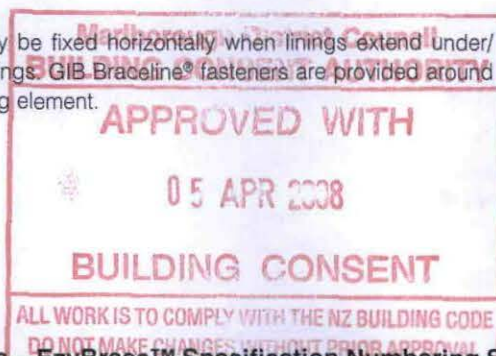
When applied correctly, paper-tape and stopped joints within the bracing element are strong enough to transfer loads within the element and conventional fixing of intermediate sheet joints to framing is sufficient.

Any sheet end butt joints within the field of the bracing element must be back-blocked in accordance with the "GIB® Site Guide".

Consult the "GIB® Site Guide" for further details on recommended fixing details.

Horizontal Fixing

GIB Braceline® linings may be fixed horizontally when linings extend under/over door or window openings. GIB Braceline® fasteners are provided around the perimeter of the bracing element.



GIB® Bracing Systems – EzyBrace™ Specification Numbering System

The EzyBrace™ Specification Numbering System is designed to make specification of GIB® Bracing Systems by designers and identification on site by builders and building officials more transparent. Note: the EzyBrace™ Specification Numbering System (and sub-components thereof) are protected by copyright.

GS = GIB® Standard Plasterboard
BL = GIB Braceline®
BLP = GIB Braceline® / Plywood
BLG = GIB Braceline® / GIB® Standard Plasterboard

1 = lined one side
2 = lined both sides
a = angle brace

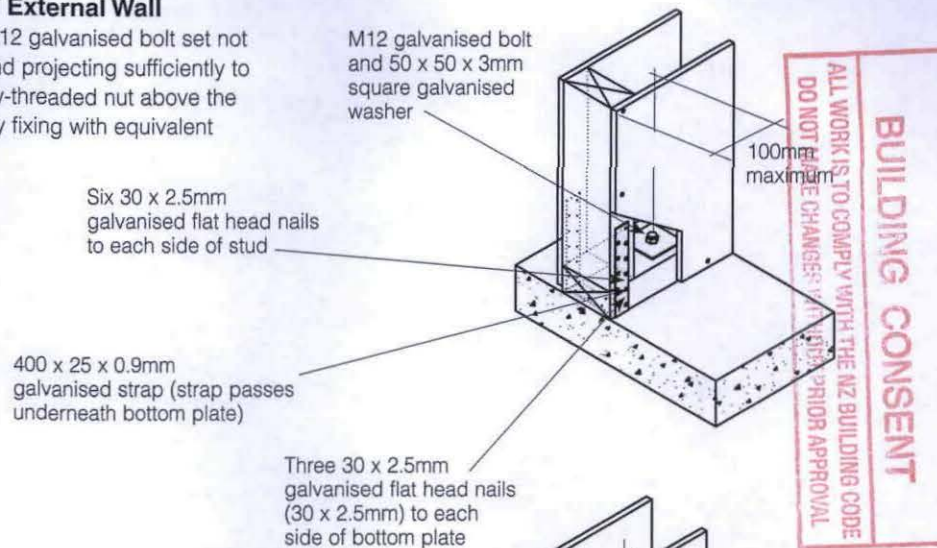
Therefore,
GS1a = GIB® Standard Plasterboard one side with an angle brace
GS2 = GIB® Standard Plasterboard both sides
BL1 = GIB Braceline® one side
BL1a = GIB Braceline® one side with an angle brace
BLP = GIB Braceline® one side, Plywood on the other
BLG = GIB Braceline® one side, GIB® Standard Plasterboard on the other

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.

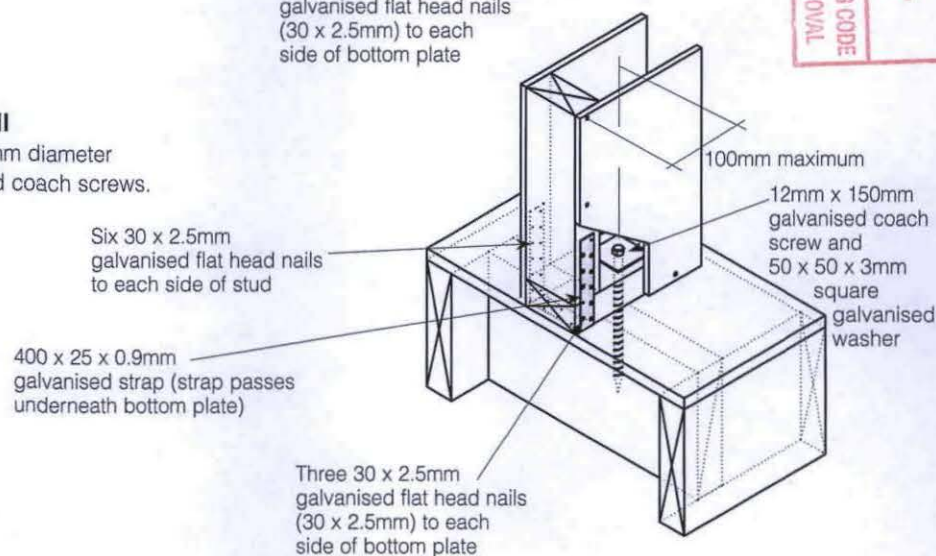
Copyright© Winstone Wallboards Ltd 2006. All of the material on this document, including all text, tables, charts, graphs, drawings, fastener patterns, diagrams and the EzyBrace™ Specification Numbering System (and the sub-components thereof), are protected by copyright.

**Concrete Floor – Internal / External Wall**

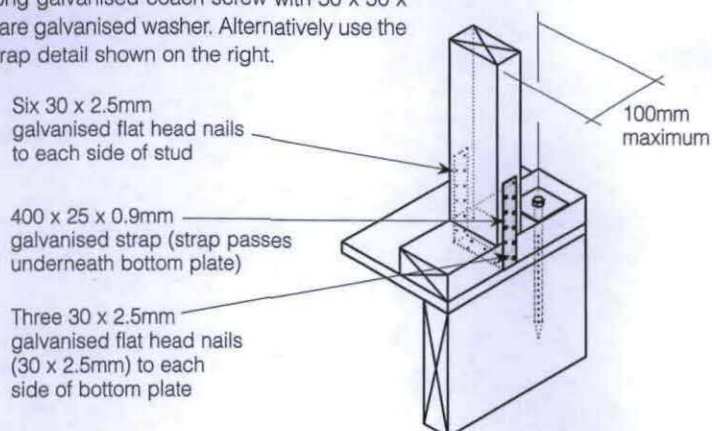
Bottom plate is fixed using an M12 galvanised bolt set not less than 75mm into concrete and projecting sufficiently to allow for a 3mm washer and fully-threaded nut above the timber. Alternatively a proprietary fixing with equivalent capacity may be used.

**Timber Floor – Internal Wall**

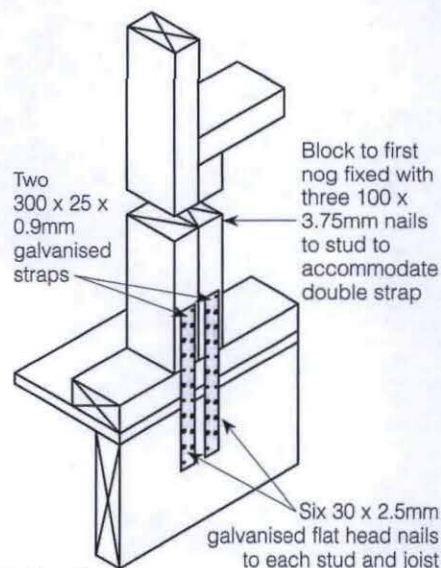
Bottom plate is fixed using a 12mm diameter minimum 150mm long galvanised coach screws.

**Timber Floor – External Wall Alternatives**

Bottom plate is fixed using a 12mm diameter minimum 150mm long galvanised coach screw with 50 x 50 x 3mm square galvanised washer. Alternatively use the double strap detail shown on the right.



Option 1



Option 2

Notes:

Additional thickness and/or corrosion protection is required in exposed and sheltered applications. (Consult NZS 3604:1999). To maintain a flush surface for the wall linings, it is recommended that hold down straps are checked into the framing.

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.

GIB® BRACING SYSTEMS – CONSTRUCTION



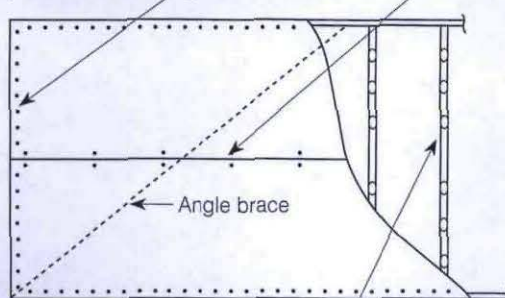
Fastener Layouts – GIB® Standard Bracing Elements

MARCH 2006

For 10mm GIB® Standard Plasterboard and any other 10mm and 13mm GIB® plasterboard

32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 150mm centres to perimeter of bracing element

Single 32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails where sheets cross studs

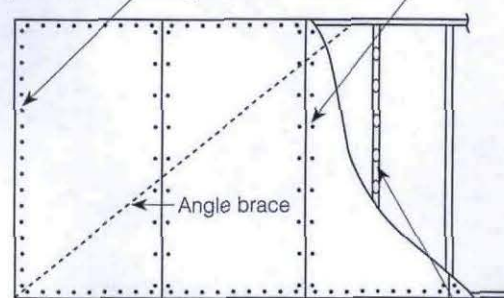


**GS1a (lined one side)
(Horizontal Fixing)**

Daub of GIBFix® adhesive at 300mm centres to intermediate studs

32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 150mm centres to perimeter of bracing element

Single 32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 300mm centres

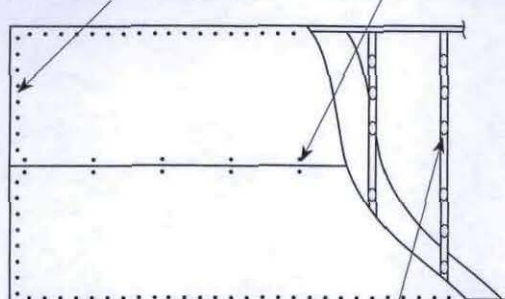


**GS1a (lined one side)
(Vertical Fixing)**

Daub of GIBFix® adhesive at 300mm centres to intermediate studs and nogs

32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 150mm centres to perimeter of bracing element

Single 32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails where sheets cross studs

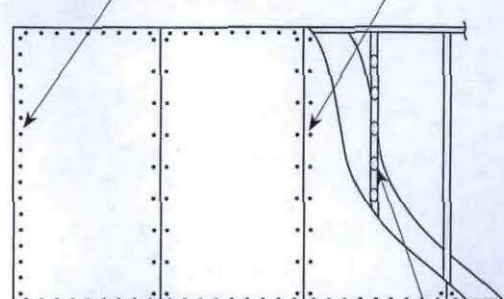


**GS2 (lined both sides)
(Horizontal Fixing)**

Daub of GIBFix® adhesive at 300mm centres to intermediate studs

32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 150mm centres to perimeter of bracing element

Single 32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 300mm centres



**GS2 (lined both sides)
(Vertical Fixing)**

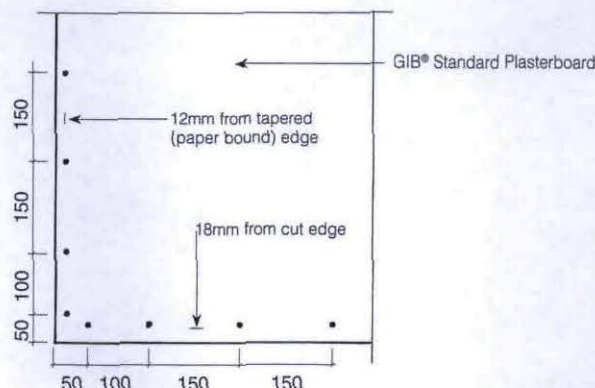
Daub of GIBFix® adhesive at 300mm centres to intermediate studs and nogs

Fixing the perimeter of a GIB® Standard Plasterboard bracing element

Fasteners are placed no closer than 12mm to the tapered (paper bound) machine edge of the GIB® plasterboard sheets. Fasteners are placed no closer than 18mm to a sheet end or a cut sheet edge.

For GIB® Standard bracing elements fasteners are placed at 150mm centres around the bracing element perimeter, starting at 50 and 150mm from the sheet corners.

Fastening pattern for
GIB® Standard
bracing elements



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.

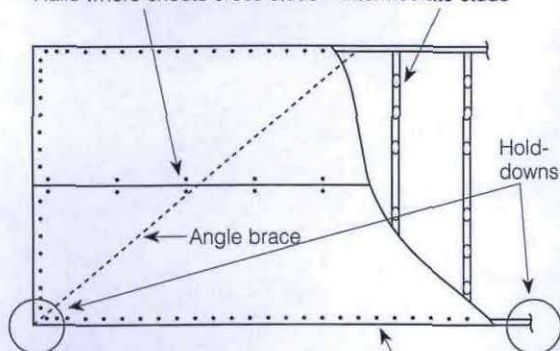
Copyright© Winstone Wallboards Ltd 2006. All of the material on this document, including all text, tables, charts, graphs, drawings, fastener patterns, diagrams and the EzyBrace™ Specification Numbering System (and the sub-components thereof), are protected by copyright.



For 10mm GIB Braceline®, 10mm GIB Noiseline® and 10mm GIB Toughline®

32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails where sheets cross studs

Daub of GIBFix® adhesive at 300mm centres to intermediate studs

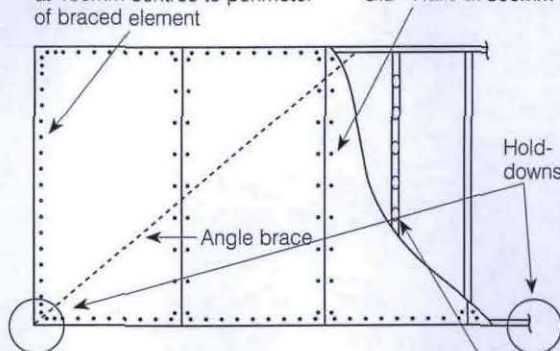


**BL1a (lined one side)
(Horizontal Fixing)**

32mm GIB Braceline® screws or 35mm GIB Braceline® nails at 150mm centres to perimeter of braced element

32mm GIB Braceline® Screws or 35mm GIB Braceline® Nails at 150mm centres to perimeter of braced element

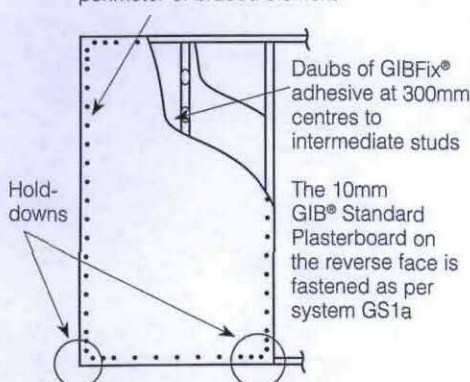
32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 300mm centres



**BL1a (lined one side)
(Vertical Fixing)**

Daub of GIBFix® adhesive at 300mm centres to intermediate studs and nogs

32mm GIB Braceline® Screws or 35mm GIB Braceline® Nails at 150mm centres to perimeter of braced element

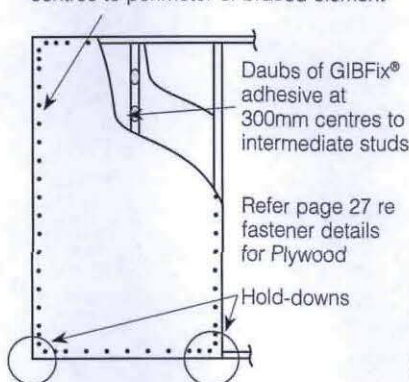


BLG (lined both sides)

Daubs of GIBFix® adhesive at 300mm centres to intermediate studs

The 10mm GIB® Standard Plasterboard on the reverse face is fastened as per system GS1a

32mm GIB Braceline® Screws or 35mm GIB Braceline® Nails at 150mm centres to perimeter of braced element

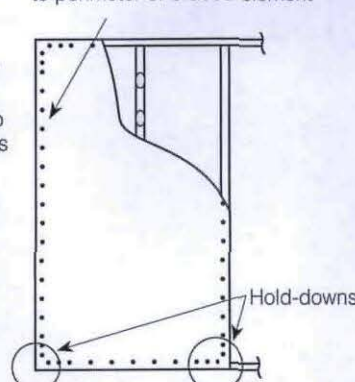


BLP (lined both sides)

Daubs of GIBFix® adhesive at 300mm centres to intermediate studs

Refer page 27 re fastener details for Plywood

32mm GIB Braceline® Screws or 35mm GIB Braceline® Nails at 150mm centres to perimeter of braced element



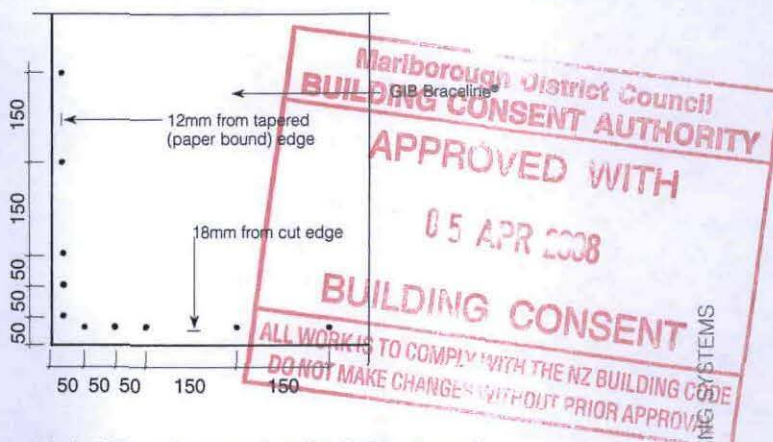
BL1 (lined one side)

Fixing the perimeter of a GIB Braceline® bracing element

Fasteners are placed no closer than 12mm to the tapered (paper bound) machine edge of the GIB® plasterboard sheets. Fasteners are placed no closer than 18mm to a sheet end or a cut sheet edge.

For GIB Braceline® systems, fasteners are placed at 150mm centres around the bracing element perimeter, starting at 50, 100 and 150mm from the sheet corners.

**Fastening pattern
for GIB Braceline®
bracing elements**



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.



GIB® Bracing System Installation Checklist

MARCH 2006

Contract ID	
Site Address	
Specifier	
Building Contractor	
Plasterboard Installer	
Check carried out by	
Date	

Marlborough District Council
BUILDING CONSENT AUTHORITY
APPROVED WITH
05 APR 2008
BUILDING CONSENT
 ALL WORK IS TO COMPLY WITH THE NZ BUILDING CODE
 DO NOT MAKE CHANGES WITHOUT PRIOR APPROVAL

Reference Material: GIB® Bracing Systems, GIB® Site Guide (Edition current at time of installation)

PRE LINING	Y	N	CHECKED BY	DATE
Bracing element position corresponds with the bracing plan				
Hold-down straps correctly positioned and installed (<i>systems incorporating "BL"</i>)				
Hold-down straps checked in flush with framing				
Hold-down bolts correctly positioned and installed				
No power points or light switch outlets situated within 90mm of the edge of the element. <i>Easier to move now than later.</i>				
Any opening larger than 90 x 90mm is positioned in the middle third of the element both vertically and horizontally				
Braces extend from top to bottom plates. Angle braces installed correctly				
No bracing elements situated within a shower cubicle or above a bath				
POST LINING	Y	N	CHECKED BY	DATE
Correct corner fastening pattern has been used for the specified system				
Perimeter fastenings are correctly spaced for the system being used				
Correct fasteners have been used. <i>32mm GIB® Grabber® or GIB® Nails for all GS systems and 32mm GIB® Braceline® screws or 35mm GIB® Braceline® nails for BL systems.</i>				
Sheet end butt joints within the bracing element are back-blocked				
CEILING DIAPHRAGMS	Y	N	CHECKED BY	DATE
Steel battens are directly fixed to framing. <i>Clip system cannot be used in ceiling diaphragm applications.</i>				
Perimeter of the diaphragm is fixed to a single continuous member along each edge				
No sheets shorter than 1800mm used in diaphragm				
End sheets are a minimum of 600mm wide x 1800mm long				
Longitudinal joint adjacent to end sheet is back-blocked if end sheet is between 600mm and 900mm wide				
Corner fastenings correct				
Sheet end butt joints back-blocked				

07125-WALTERS - DECK BEARER.
80080451

FLOOR BEAMS - 2.0 kPa - LIVE LOAD

Section Size dxb (mm)	Span of Glulam Beam, Length (m)									
	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
	Maximum Tributary Width (m) at Span L									
225 x 65	2.3									
225 x 90	3.2	2.1								
270 x 90	4.8	3.3	2.3							
315 x 90	6.6	4.6	3.3	2.4						
360 x 90	8.8	6.0	4.4	3.3	2.5	1.8				
360 x 90 Precambered						2.1				
precamber required(mm)						5				
405 x 90		7.8	5.5	4.2	3.3	2.6	1.9			
405 x 90 Precambered							2.2			
precamber required(mm)							5			
450 x 90			7.1	5.2	4.1	3.3	2.7	2.0		
450 x 90 Precambered								2.2		
precamber required(mm)								6		
495 x 90			9.0	6.6	5.0	4.0	3.2	2.7	2.1	1.6
495 x 90 Precambered									2.3	1.9
precamber required(mm)									6	7

Live load = 2.0 kPa, Dead Load = 0.5 kPa
Maximum Precamber = 1.5 x Dead Load deflection or span / 400, whichever is the least
If precamber width not shown there is no additional benefit of precamber
Glulam Grade = GL 8

Beams Fully Restrained



Instructions

To use this table you will need to know:

- The Span of the floor beam.
 - The Maximum Tributary Width - (this is generally the measured spacing between floor beams).
1. Under the 'Span of Glulam Beam' heading, locate the column headed with a span that meets or exceeds the required span.
 2. Read down this column until you find a figure equal to or greater than the Maximum Tributary width required.
 3. The section size of the Glulam beam can be read off the left hand column.

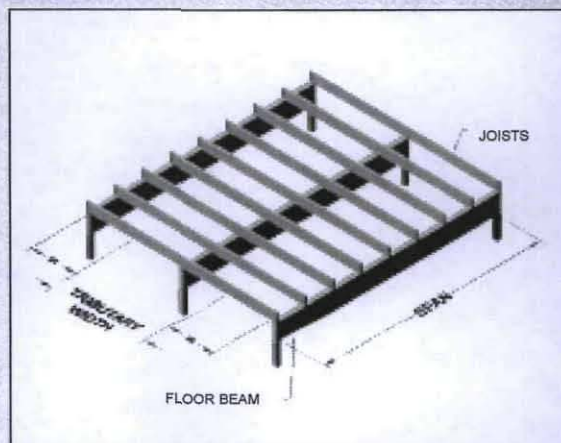
Example:

For a floor beam spanning 5m at centres of 3m carrying a deck load of 2.0kPa

Span of Glulam Beam = 5

Maximum Tributary Width = 3

Therefore Section Size = 450 x 90



Marlborough District Council
BUILDING CONSENT AUTHORITY

APPROVED WITH

05 APR 2008

BUILDING CONSENT

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DO NOT MAKE CHANGES WITHOUT PRIOR APPROVAL



Job: 03WALTER

Client: Peter Walters
Phone:Site: Peter Walters
233 Weld street
BlenheimDescription:
Building Consent No.:
MITek 20/20 - Engineering 4.4 Gamma1.5 (build 1597-53)

MITek New Zealand Ltd.

Phone:
Printed: 14:50:02 31 Mar 2008**PRODUCER STATEMENT**
MITek 20/20™ TRUSS DESIGN PROGRAM**Certification of MITek 20/20™ Truss Design Program**

The MITek 20/20™ truss design program has been developed by MITek New Zealand Ltd for the design of GANG-NAIL timber roof, floor and attic trusses in New Zealand. The truss designs computed by this program are prepared using sound and widely accepted engineering principles, and in accordance with NZS 4203, NZS 3603 and NZS 3604 as verification methods and acceptable solutions of the approved documents of the New Zealand Building Code to satisfy the requirements of the Building Regulations 1992: Clause B1 - Structure. This computer design for the proposed building complies with the relevant provisions of the NZ Building Code. This is subject to all proprietary products meeting their performance specification requirements, the provision of adequate bracing, fixings and the correct input of design data carried out by suitably trained personnel.

Summary of MITek 20/20™ Truss Design Data and Output

The MITek 20/20™ computer design output for this job titled and located at the site identified on the top of this page is based on the following parameters entered into the program. The owner must ensure that the following job details below are current and relevant to the project before fabrication and erection of the GANG-NAIL trusses.

Job Details**Roof Truss**

Timber Group: DDPx45MSG8H3

Roof

Material: Galv Iron .5mm

Dead Load: 0.210 kPa

Restraints: 900 mm centres

Live Load: Q_{ur} = 0.250 kPaQ_c = 1.000 kN

Pitch: 15.000 deg

Ceiling

Material: Standard

Dead Load: 0.200 kPa

Restraints: 400 mm centres

Std Overhang: 600 mm

Wind

Area: Medium (37.0 m/s)

Pressure Coeff: C_{pe} = varies; C_{pi} = -0.30, 0.20**Snow**

Location: Blenheim at 220 m

Open Ground Load 0.240 kPa

Basic Roof Load: 0.194 kPa

These trusses must be fabricated and erected in accordance with the GANG-NAIL manual. Proper erection bracing must be installed to hold the components true and plumb and in a safe condition until permanent bracing is fixed. All permanent bracing and fixing must be installed before any loads are applied. The specifications for timber shall be as shown on the output. The timber shall be standard gauged and treated to the requirements of NZS 3640:2003. Unless otherwise noted, this design assumes that the steel fixings and timber connectors are situated in a closed environment, as defined by NZS3604:1999 Section 4.

Truss List

Legend: * = detail only, ? = input only, ~~xxx~~ = failed design, Unmarked trusses = designed successfully, LB = lateral bracing required

Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)
ET01	1	6000	15.000	900
T01	3	6000	15.000	900
T01A	2	6000	15.000	900
V01	1	4200	15.000	900
V02	1	2400	15.000	900
*R01	1	7200	15.000	900
*R02	9	1455	0.000	900
*V03	1	600	14.999	900

Total quantity : 19



The computer design input has been carried out by:

Signed: S. Cabb.

Date: 31/3/2008

Name of Computer Operator: Shaun Cabb

Qualifications and Title:

Company: PlaceMakers Blenheim

Verification / Acceptance of Input Data:

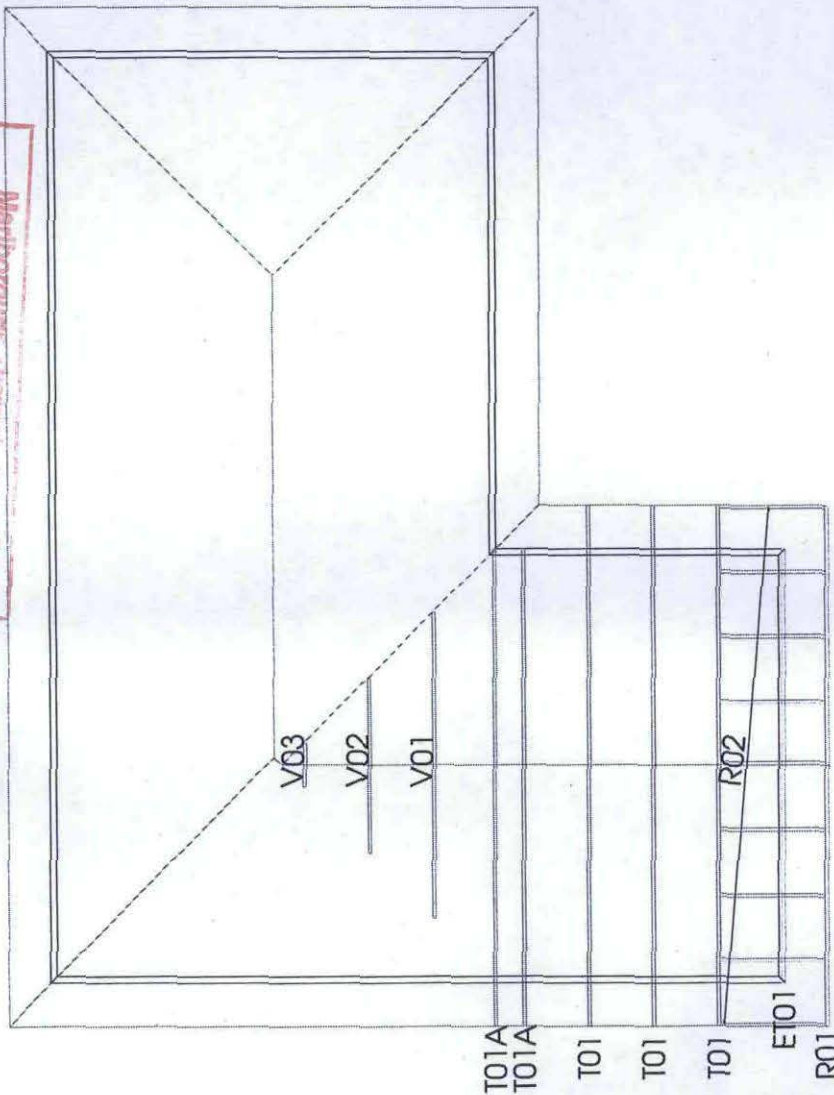
I have checked the input data against the construction drawings and specifications and verify that they are correct and suitable for this job.

Signed:

Date:

Name:

Company:



Marlborough District Council
BUILDING CONSENT AUTHORITY
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 U.F. APP 2008
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 DO NOT MAKE CHANGES WITHOUT PRIOR APPROVAL

RECEIVED
 31 MAR 2008

PlaceMakers®
 Know how. Can do.

Site Address :
 Peter Walters
 233 Weld street
 Blenheim

Sheet Title :
For Building Consent
Buildable Truss Layout
 Date : 31 Mar, 2008 Drawn : Shaun Crabb
 Scale : 1:100 System : MiTek 20/20

Job Details:
 Roof Pitch : 15.0 Deg
 Roof Material : Galv Iron .5mm
 Ceiling Material : Standard
 Wind Zone : Medium
 Roof Snow Load : 0.194 kPa

Truss Centres : 900 mm
 Roof Live Load : 0.250kPa
 Floor Live Load : kPa
 Wind Speed : 37 m/s

PrimeCad v4.4.1597.52
MiTek™
 Job Title :
03WALTER
 Sheet :
1
 Revision Number :

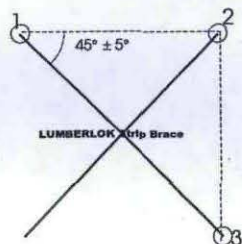
Truss Fixings

- D - Pair of LUMBERLOK Wire Dogs
- X - LUMBERLOK JH47x90 Joist Hanger
- Z - LUMBERLOK JH47x120 Joist Hanger
- P - LUMBERLOK JH47x190 Joist Hanger
- E - LUMBERLOK JH95x165 Joist Hanger
- O - Pair of LUMBERLOK CT200 Ceiling Ties
- H - LUMBERLOK CT400 Cyclone Tie
- B - LUMBERLOK CT600 Cyclone Tie
- M - Pair of LUMBERLOK Multi Grips
- NP - LUMBERLOK Nailon Plate
- N - LUMBERLOK N21 Diagonal Cleat
- W - Pair of LUMBERLOK CPC40 Cleats
- K - LUMBERLOK TTP 16kN Truss to Top Plate set

Roof Bracing

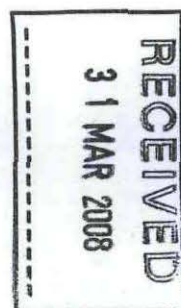
Refer to:
LUMBERLOK Roof Bracing Specifications
brochure 08/2006 for end fixing details.

The brace must be located such that it forms an
angle of $45^\circ \pm 5^\circ$ to the wall

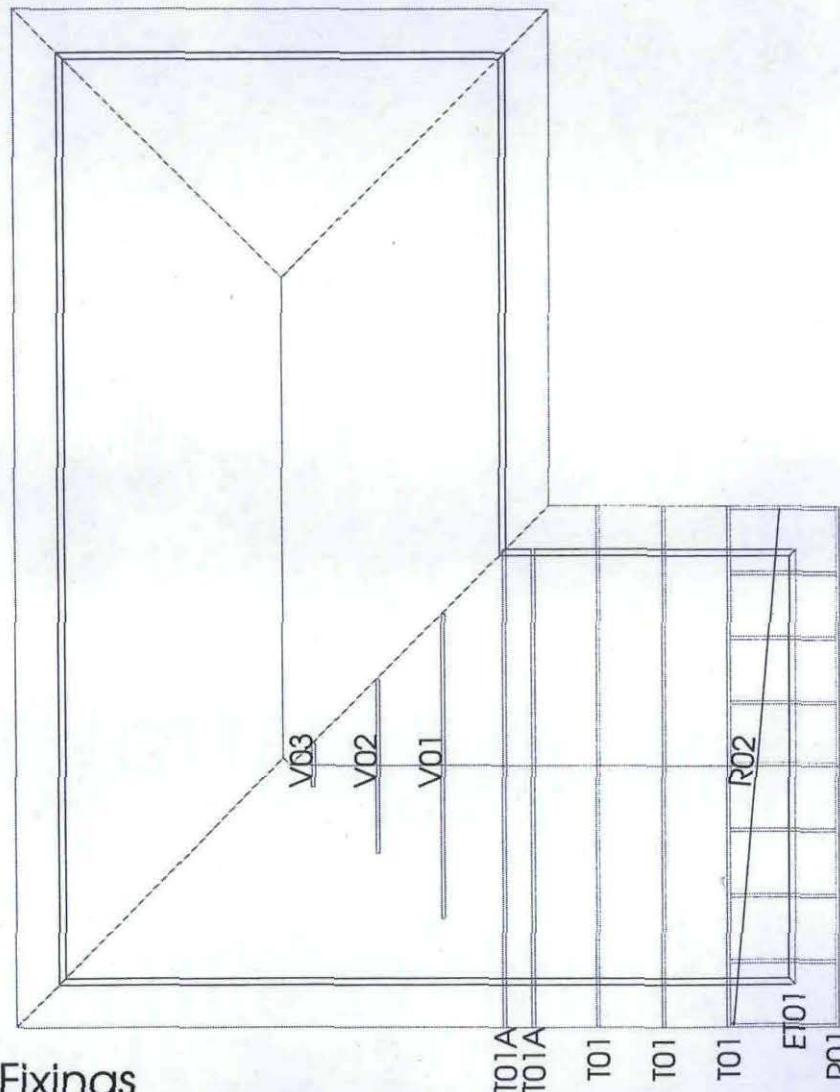


NOTES:

All other areas must have a minimum of a pair of
90mm skew nails for truss to top plate connections.
Refer to:
LUMBERLOK Timber Connectors Characteristic
Loadings Data brochure 03/4



All Wire Dog Fixings



PlaceMakers®
Know how. Can do.

Site Address :
Peter Walters
233 Weld street
Blenheim

Sheet Title :
**For Building Consent
Truss Fixings & Roof Bracing**

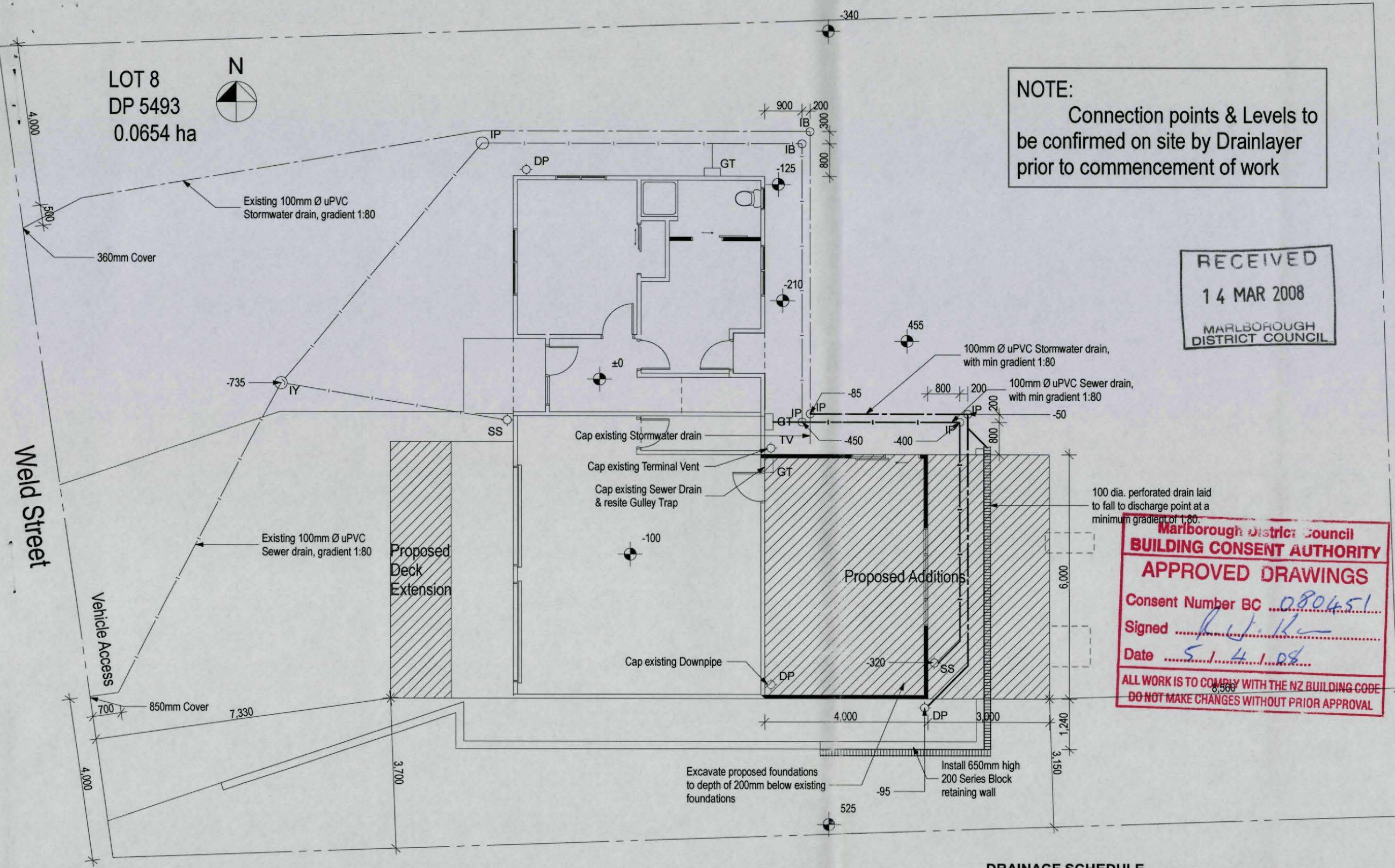
Date : 31 Mar 2008 Drawn : Shaun Crabb
Scale : 1:100 System : MiTek 20/20

Job Details:
Roof Pitch : 15.0 Deg
Roof Material : Galv Iron .5mm
Ceiling Material : Standard
Wind Zone : Medium
Roof Snow Load : 0.194 kPa

Truss Centres : 900 mm
Roof Live Load : 0.250kPa
Floor Live Load : kPa
Wind Speed : 37 m/s

MiTek
MiTek

Job Title :
03WALTER
Sheet :
2
Revision Number :



NOTE:
Connection points & Levels to
be confirmed on site by Drainlayer
prior to commencement of work

RECEIVED
14 MAR 2008
MARLBOROUGH
DISTRICT COUNCIL

Marlborough District Council
BUILDING CONSENT AUTHORITY
APPROVED DRAWINGS
Consent Number BC 080451
Signed R. J. R.
Date 5.1.4.08
ALL WORK IS TO COMPLY WITH THE NZ BUILDING CODE
DO NOT MAKE CHANGES WITHOUT PRIOR APPROVAL

DRAINAGE SCHEDULE

Waste Pipe Sizes, Falls & Unvented Length			
Fixture	Min Size	Min Fall	Max. Unvented Length
Basin	32mmø	1:20	2.5m
Bidet	32mmø	1:20	2.5m
Drinking Fountain	40mmø	1:40	2.5m
Cleaning Sink	50mmø	1:40	2.5m
Single Urinal	32mmø	1:20	2.5m
Shower	40mmø	1:40	2.5m
Sink	40mmø	1:40	2.5m
Bath	40mmø	1:40	2.5m
Laundry Tub	40mmø	1:40	2.5m
WC	100mmø	1:60	6.0m

Marlborough District Council
BUILDING CONSENT AUTHORITY
APPROVED WITH
14 APR 2008
BUILDING CONSENT
ALL WORK IS TO COMPLY WITH THE NZ BUILDING CODE
DO NOT MAKE CHANGES WITHOUT PRIOR APPROVAL

Job Title
Additions

Client
Ange & Pete Walters

At
233 Weld Street
Blenheim

Job Number **07125**

Reference: 07125 - Proposed Plan pin

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 12/03/2008

Project Status Preliminary

Rev	Amendments made	Date

NOTES

RECEIVED
14 MAR 2008
MARLBOROUGH
DISTRICT COUNCIL

Drawing Title
Site Plan

Scale (at A3) 1:100

Revision

Drawing Number
A-01

of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE

Job Title

Additions

Client

Ange & Pete Walters

At

233 Weld Street
Blenheim

Job Number **07125**

Reference: 07125 - Proposed Plan.pln

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 12/03/2008

Project Status Preliminary

Rev	Amendments made	Date

NOTES



Drawing Title
Existing Floor Plans

Scale (at A3) 1:100

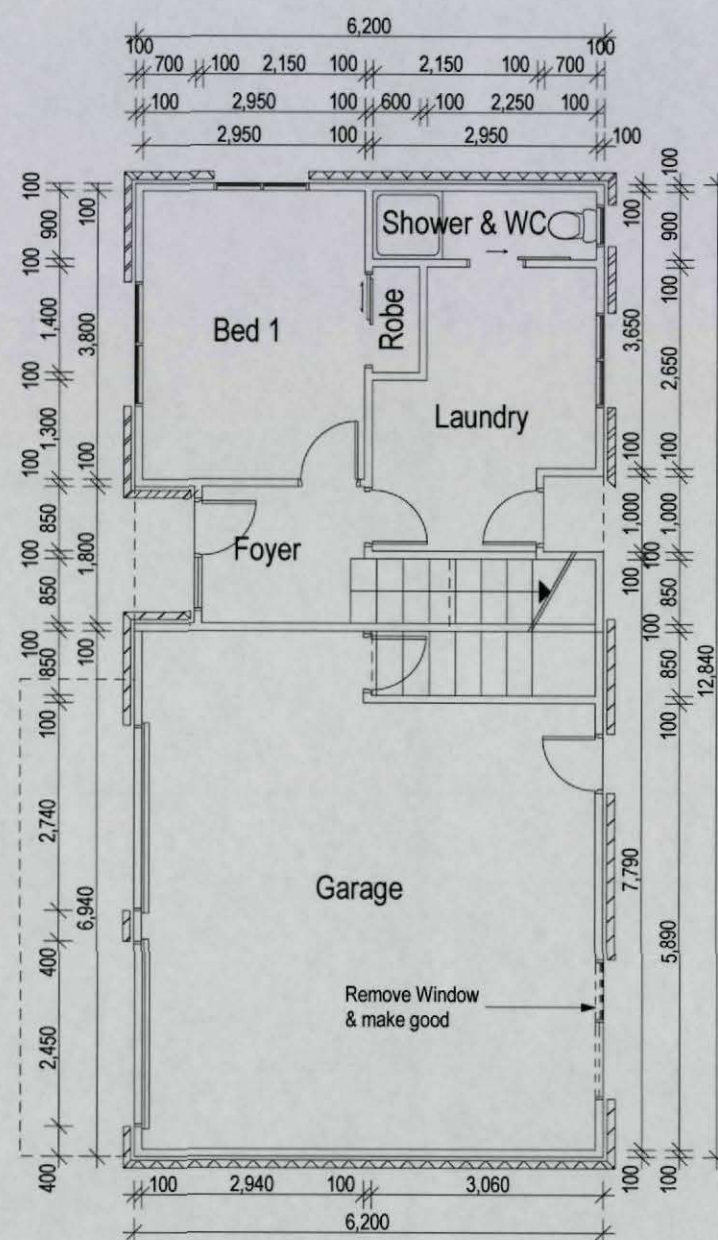
Revision

Drawing Number

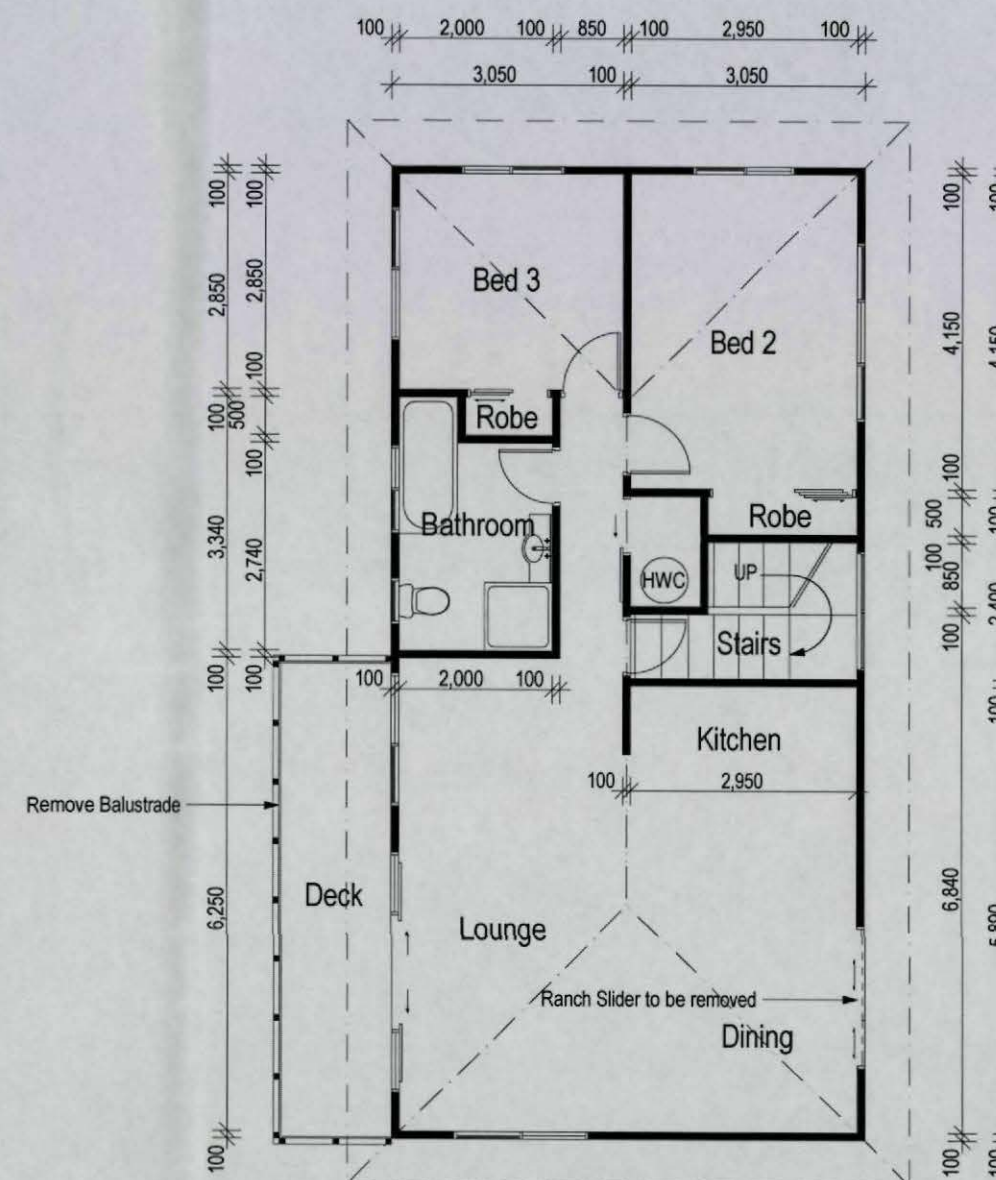
A-02

of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE



Existing Ground Floor Plan



Existing 1st Floor Plan



Job Title

Additions

Client

Ange & Pete Walters

At

233 Weld Street

Blenheim

Job Number 07125

Reference: 07125 - Proposed Plan.pdf

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 12/03/2008

Project Status Preliminary

Rev	Amendments made	Date

NOTES



Drawing Title
Existing Elevations

Scale (at A3) 1:100

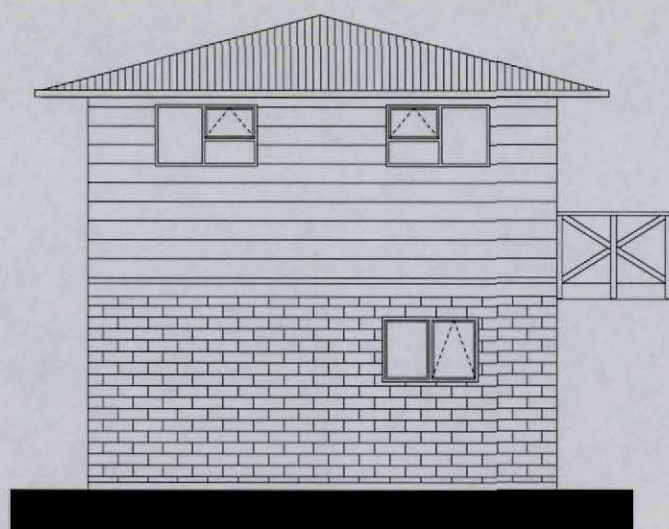
Revision

Drawing Number

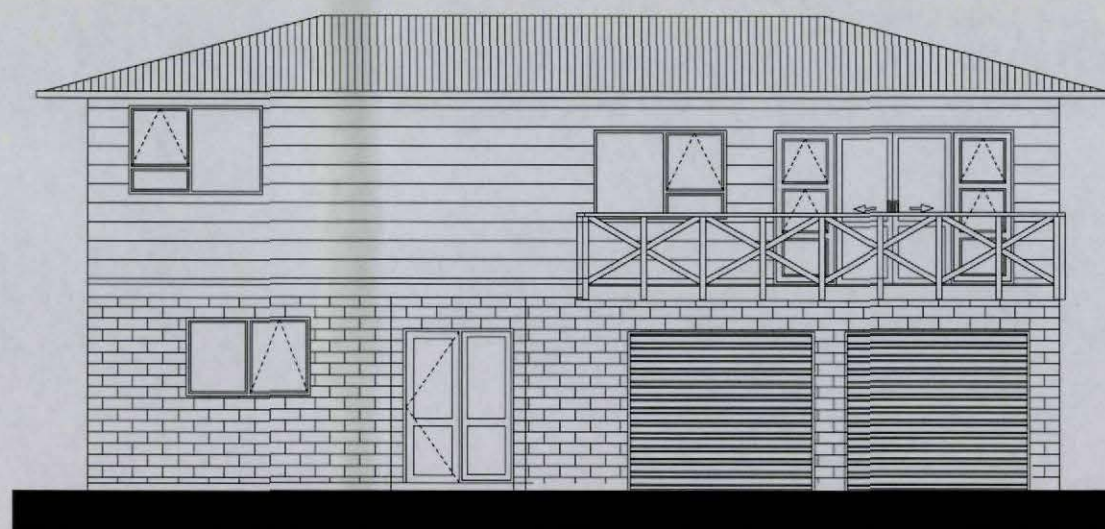
A-03

of 11

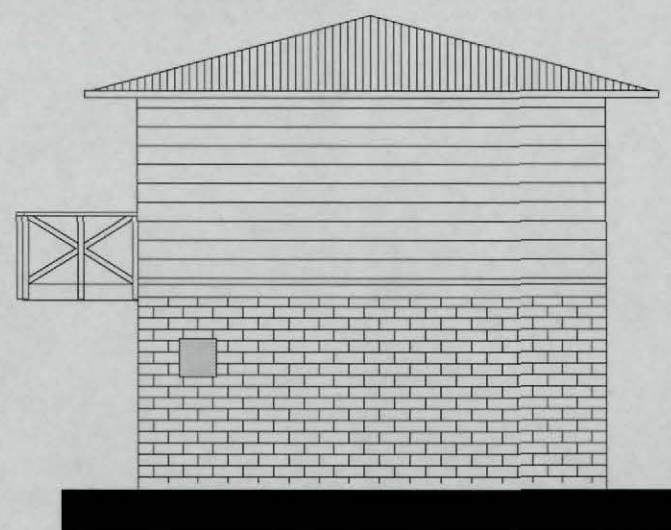
ALL DIMENSIONS TO BE VERIFIED ON SITE



Existing North Elevation



Existing West Elevation



Existing South Elevation



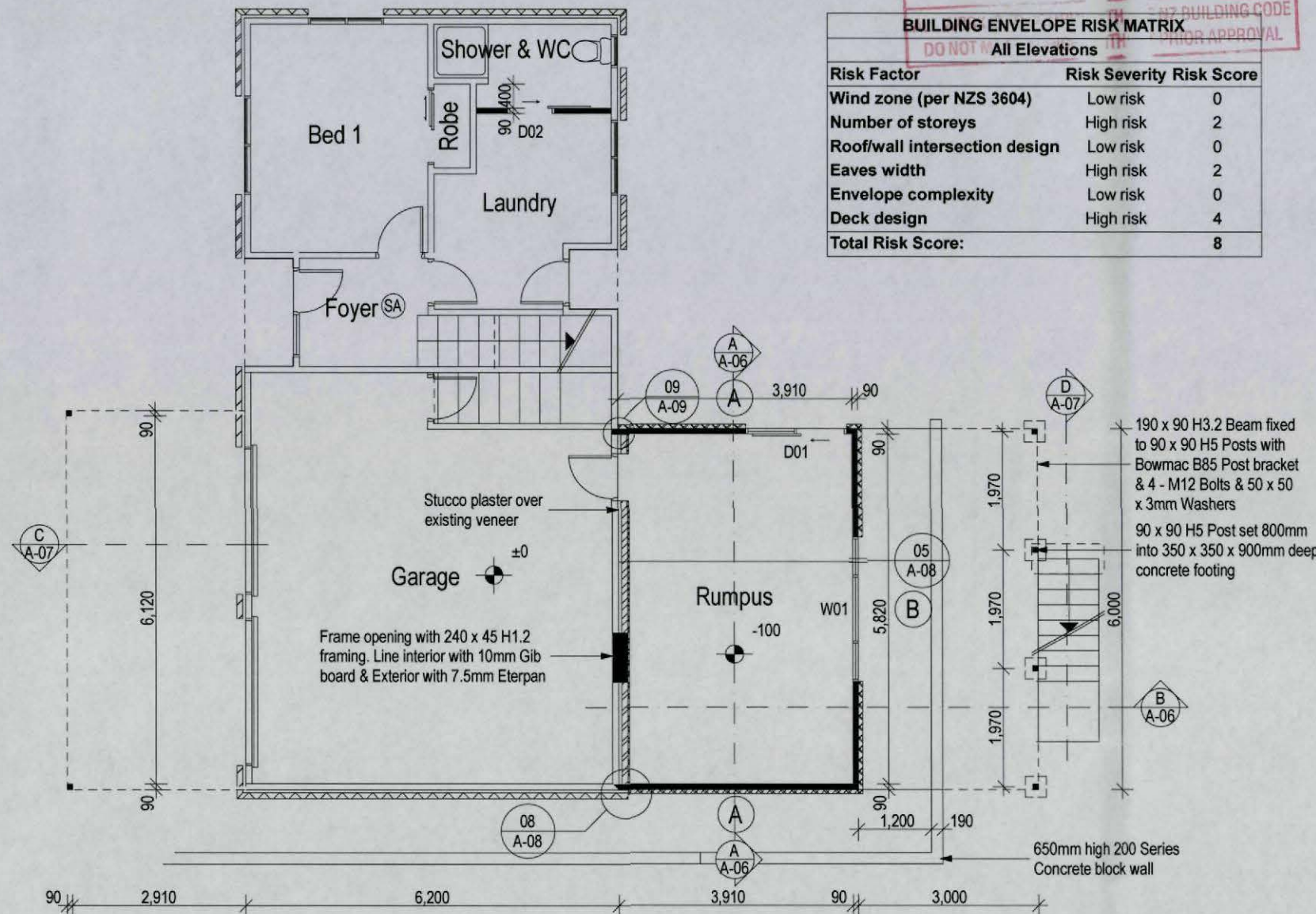
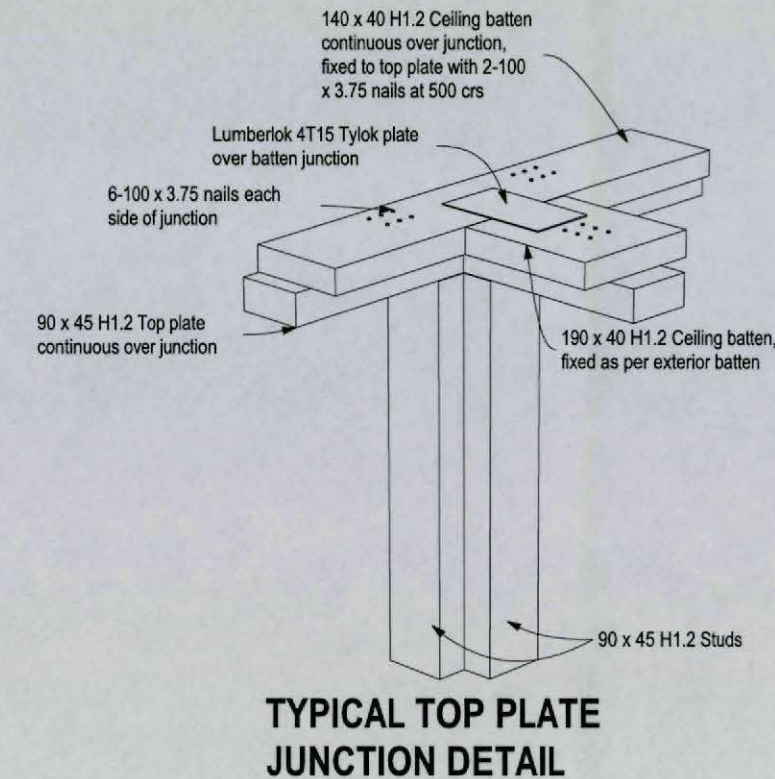
Existing East Elevation



Hardiplank weatherboard

Summerhill Stone veneer

BUILDING ENVELOPE RISK MATRIX		
DO NOT EXCEED ALL ELEVATIONS		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	Low risk	0
Number of storeys	High risk	2
Roof/wall intersection design	Low risk	0
Eaves width	High risk	2
Envelope complexity	Low risk	0
Deck design	High risk	4
Total Risk Score:		8



Proposed Ground Floor Plan

H1 COMPLIANCE

TOTAL	
Wall Area :	91.30m ²
Glazing Area:	15.54m ²
Percentage of glazing to wall area:	17.02%
East, South and West Walls	
Wall Area :	71.30m ²
Glazing Area:	9.42m ²
Percentage of glazing to wall area:	13.21%

Therefore dwelling complies with the Schedule Method

Lintel Fixing Schedule			
Refer to Lumberlok wall fixing schedule			
in specification for details of fixings			
Opening ref	VSG8 & MSG8 Opening Size	Lintel Size	Fixing Type
W01	2400	290 x 90	C
W101	1800	140 x 90	A
W102	2400	190 x 90	B
D01	1680	240 x 90	C
D101	1680	140 x 90	A

LEGEND	
Symbol	Description
SA	Domestic Smoke Detector
HWC	Hot water cylinder
M	Meter Box
DS	Double Stud
CJ	Control Joint to wall cladding as per Manufacturer's recommendations and specifications

STUD TO TOP PLATE FIXING SCHEDULE		
Fixing Ref	Fixing Details	Alternative Fixing capacity (kN)
A	2-90 x 3.33 plain steel nails driven vertically into stud	0.7
B	2-90 x 3.33 plain steel nails driven vertically into stud plus single Tylok 2T4 plate	1.7
C	2-90 x 3.33 plain steel nails driven vertically into stud plus pair Tylok 2T4 plates	2.7
D	2-90 x 3.33 plain steel nails driven vertically into stud plus Tylok Stud tie	6.0
Where fixing type is not indicated, use type A fixing		

Job Title

Additions

Client

Ange & Pete Walters

At

233 Weld Street
Blenheim

Job Number 07125

Reference: 07125 - Proposed Plan.pln

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 12/03/2008

Project Status Preliminary

Rev	Amendments made	Date

NOTES



Drawing Title
Proposed Floor Plan

Scale (at A3) 1:100

Revision

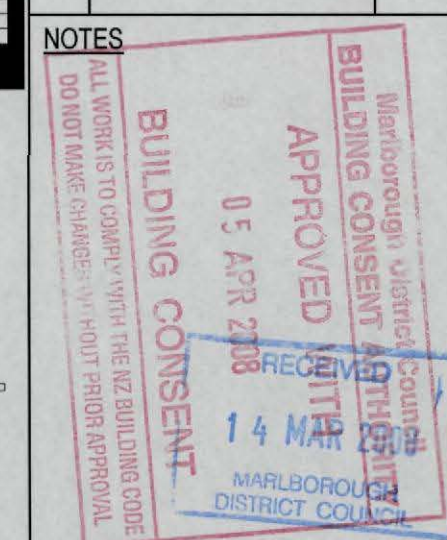
Drawing Number

A-04

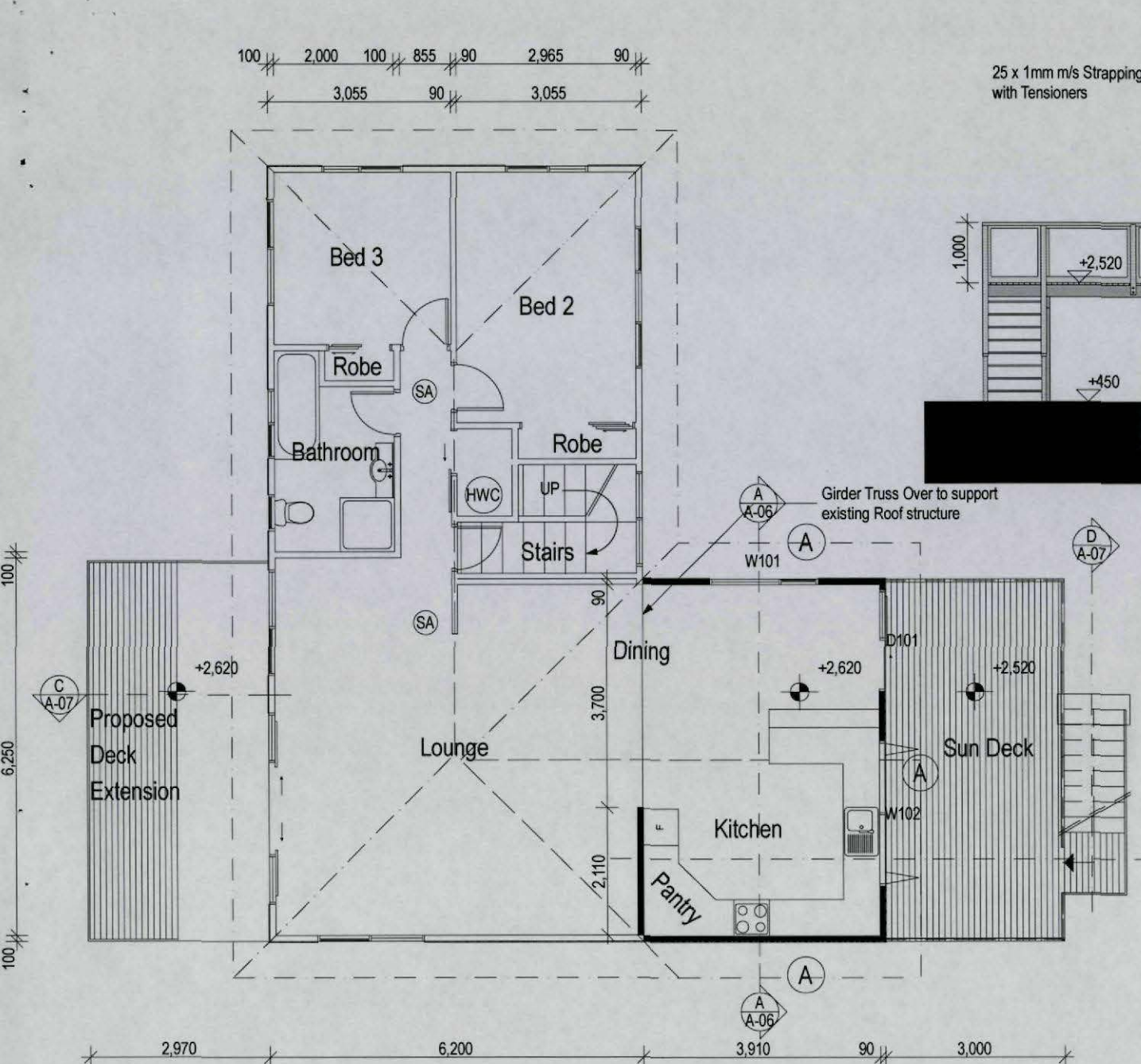
of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE

Job Title	Additions	
Client	Ange & Pete Walters	
At	233 Weld Street Blenheim	
Job Number	07125	
Reference:	07125 - Proposed Plan.pln	
Drawn	Alf Shave	
Checked	Tony Fitzpatrick	
Creation Date	09/01/2008	
Plot Date	12/03/2008	
Project Status	Preliminary	
Rev	Amendments made	Date



Drawing Title	
Proposed 1st Floor Plan & Elevations	
Scale (at A3)	1:100
Revision	
Drawing Number	
A-05	
of 11	
ALL DIMENSIONS TO BE VERIFIED ON SITE	



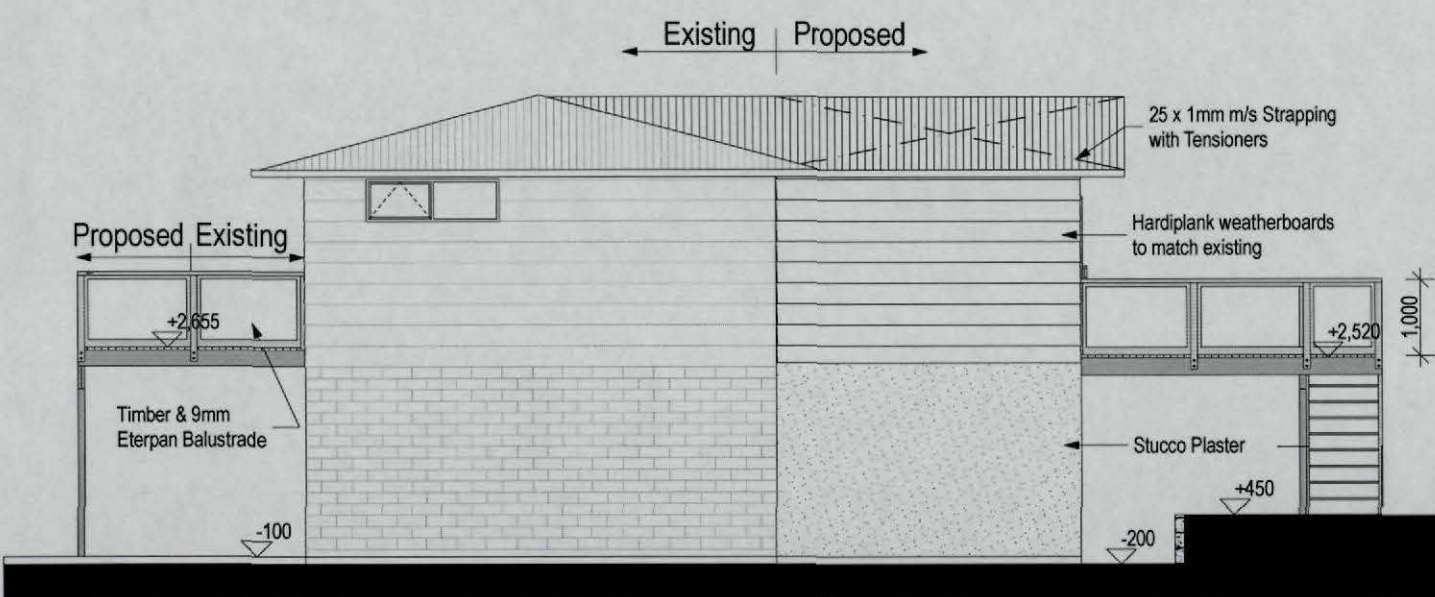
Proposed 1st Floor Plan



Proposed North Elevation



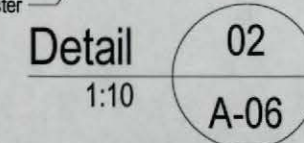
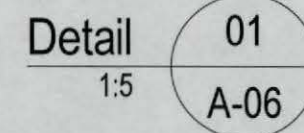
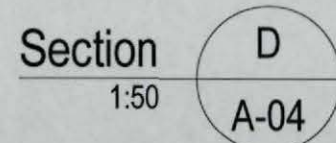
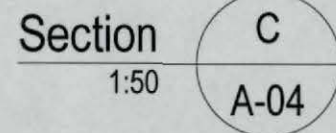
Proposed West Elevation



Proposed South Elevation



Proposed East Elevation

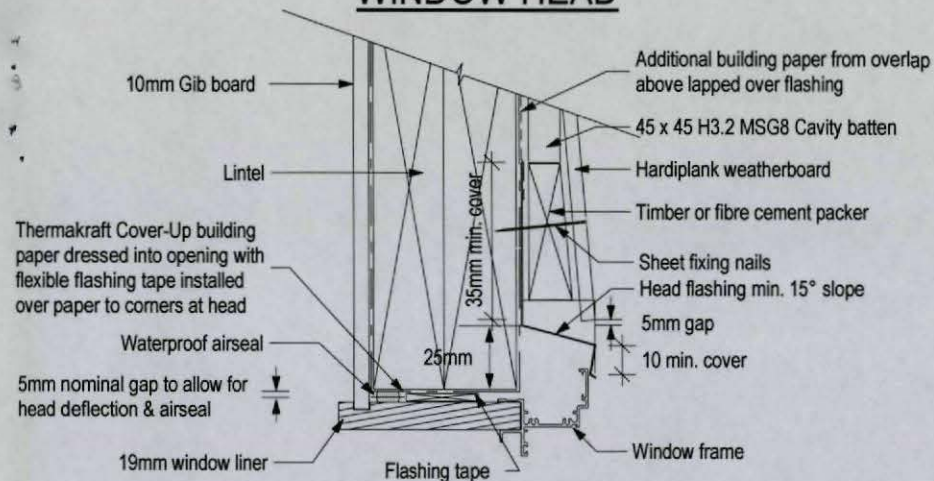
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NOTES

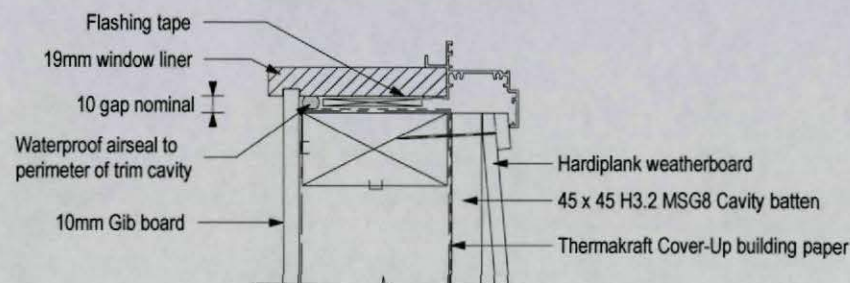
of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE

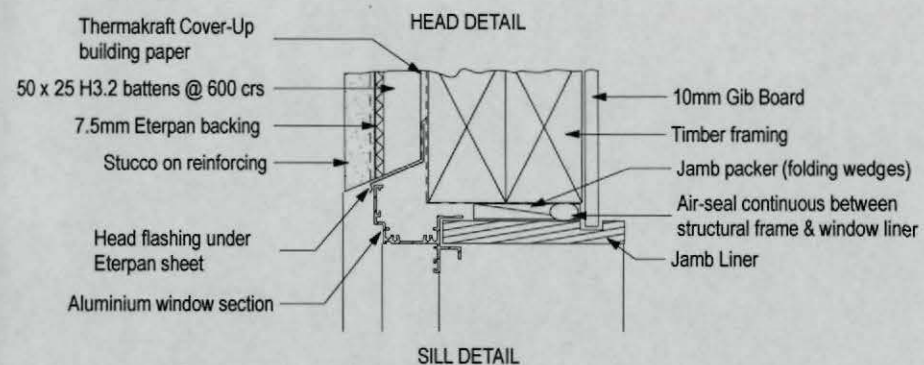
WINDOW HEAD



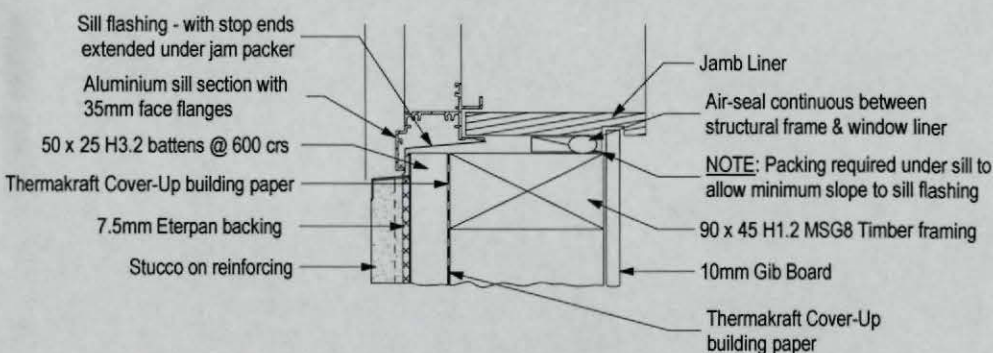
SECTION AT SILL



Detail 03
1:5
A-05

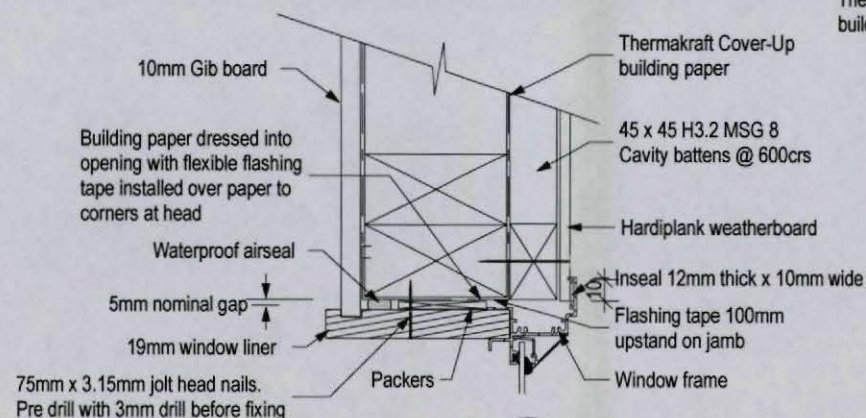


SILL DETAIL

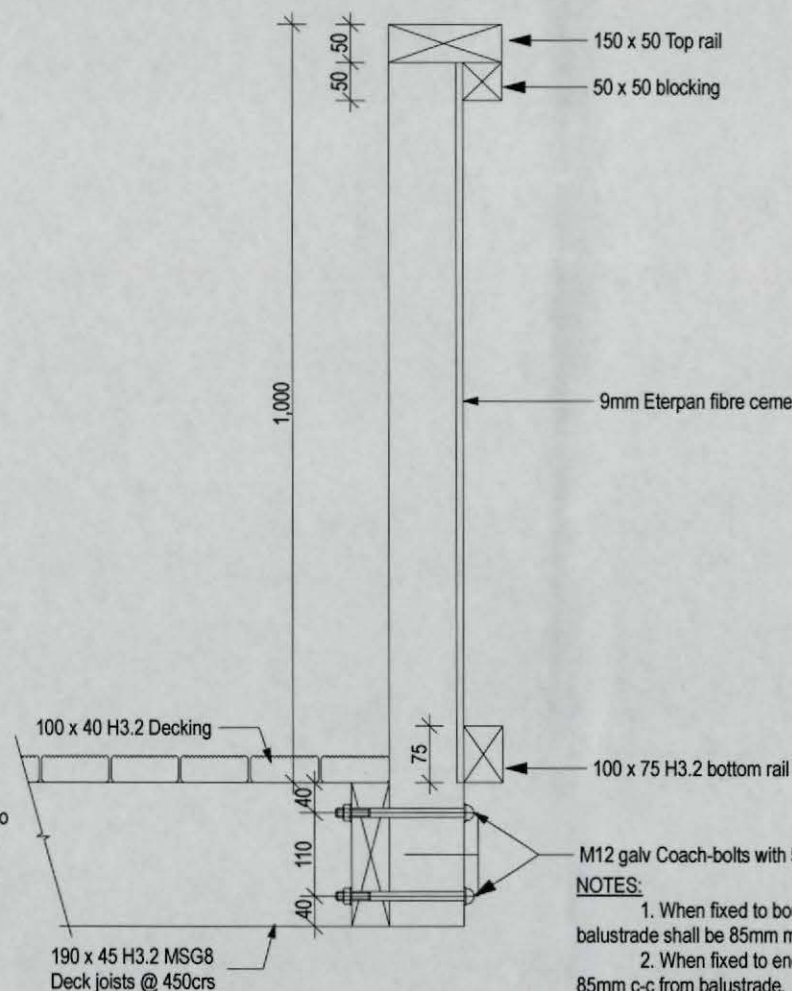


Detail 05
1:5
A-04

WINDOW JAMB

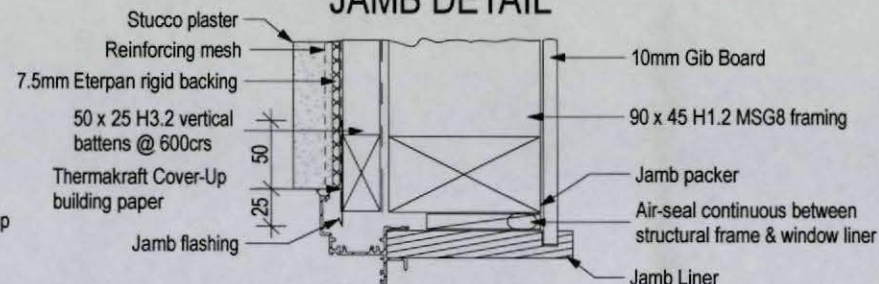


Detail 04
1:5
A-05

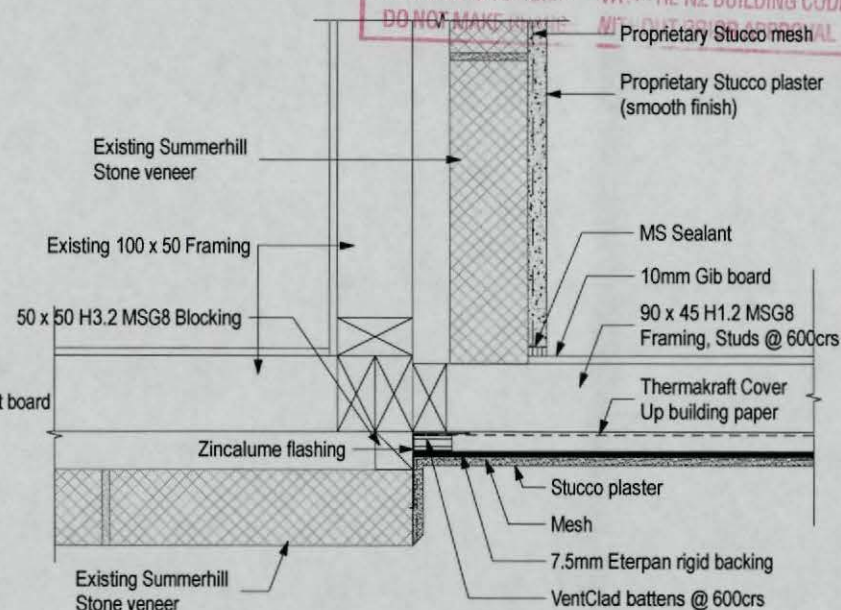


DETAIL 07
1:10
A-07

JAMB DETAIL



Detail 06
1:5
A-05



Detail 08
1:10
A-04

Job Title
Additions

Client
Ange & Pete Walters
At
233 Weld Street
Blenheim

Job Number
07125

Reference: 07125 - Proposed Plan.pln
Drawn Alf Shave
Checked Tony Fitzpatrick
Creation Date 09/01/2008
Plot Date 12/03/2008
Project Status Preliminary

Rev	Amendments made	Date

NOTES



Drawing Title
Details

Scale (at A3) 1:5 & 1:10

Revision

Drawing Number

A-08

of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE

Job Title
Additions

Client
Ange & Pete Walters

At
233 Weld Street
Blenheim

Job Number
07125

Reference: 07125 - Proposed Plan pin

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 12/03/2008

Project Status Preliminary

Rev	Amendments made	Date

NOTES



Drawing Title
Details & Foundation Plan

Scale (at A3) 1:100 & 1:10

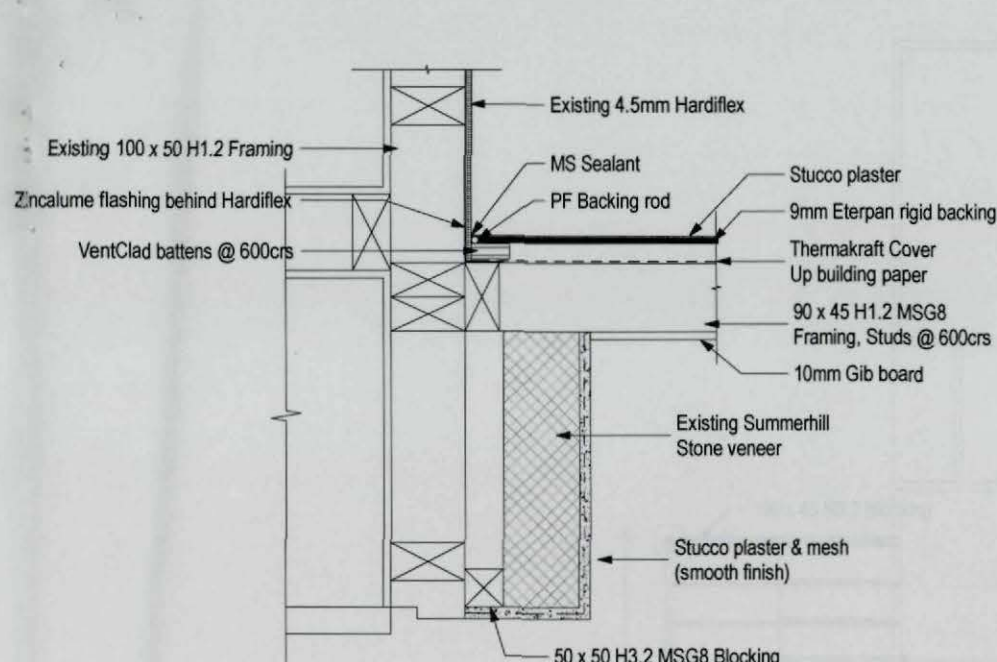
Revision

Drawing Number

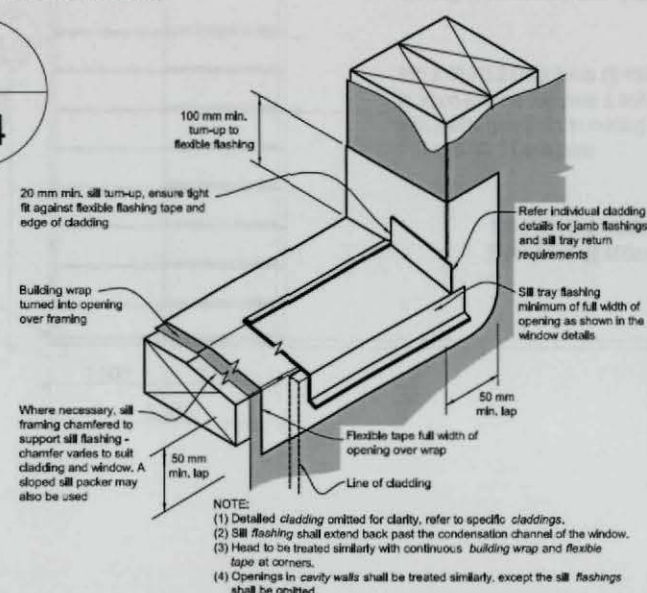
A-09

of 11

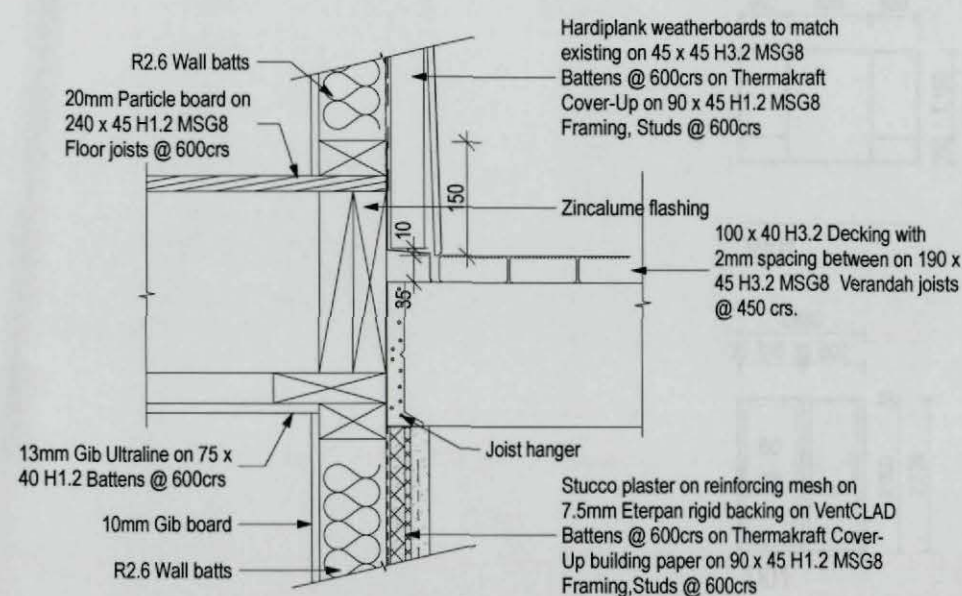
ALL DIMENSIONS TO BE VERIFIED ON SITE



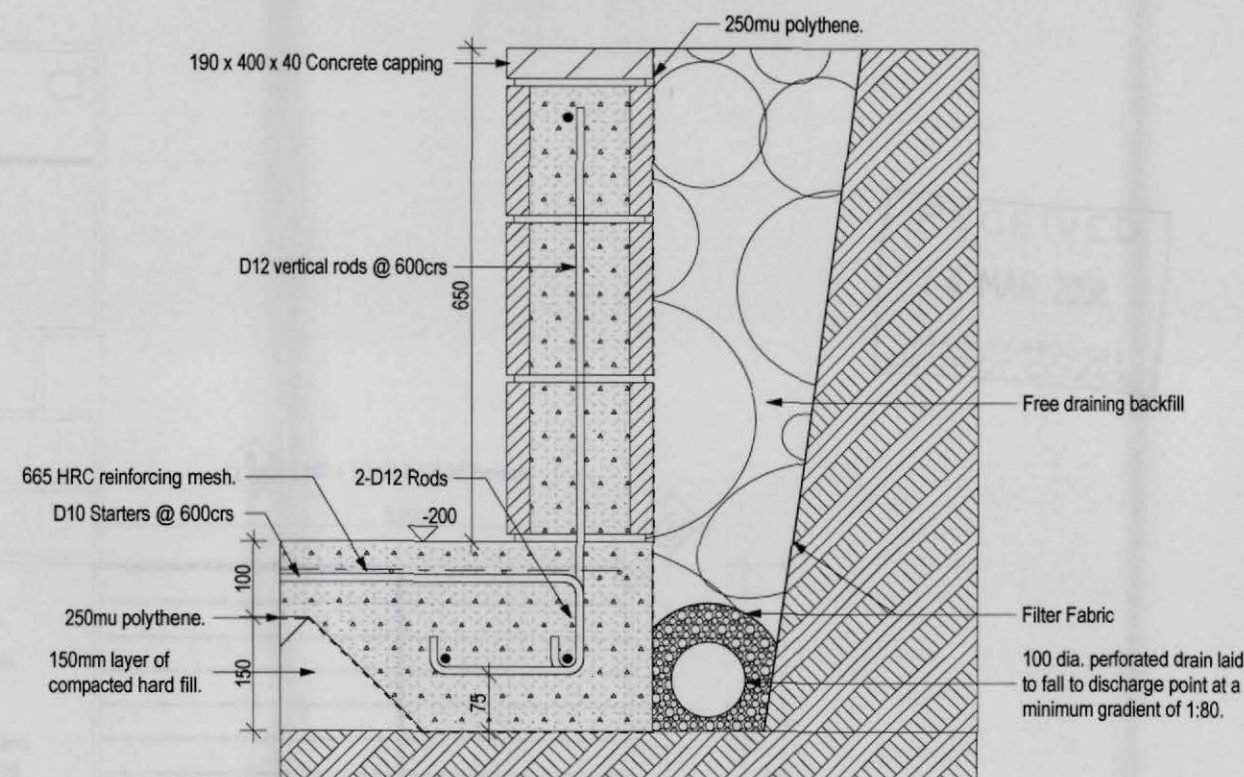
Detail 09
1:10
A-04



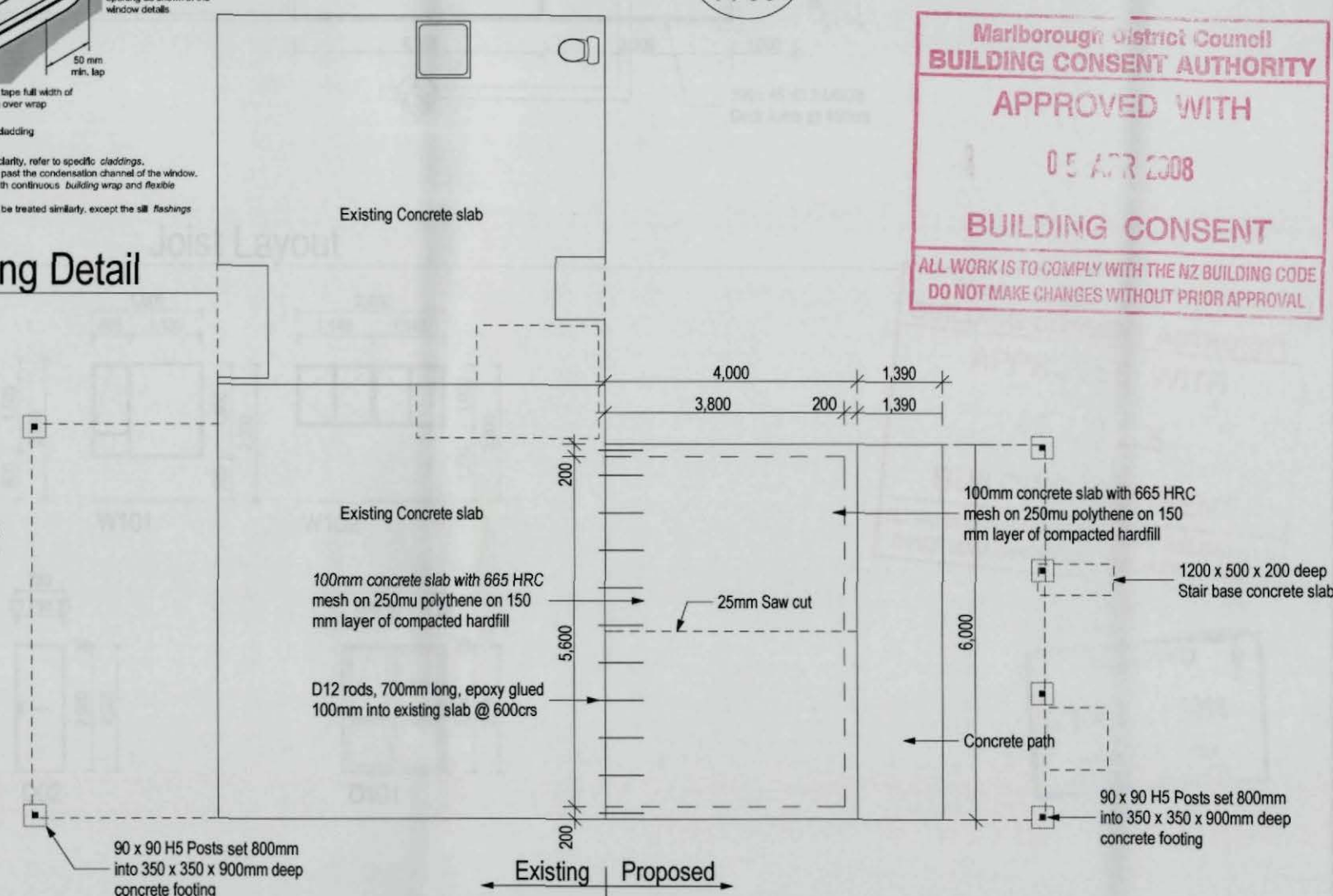
Window Flashing Detail



Detail 11
1:10
A-06



Detail 10
1:10
A-06



Foundation Plan



Job Title

Additions

Client

Ange & Pete Walters

At

233 Weld Street
Blenheim

Job Number 07125

Reference: 07125 - Proposed Plan pin

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 12/03/2008

Project Status Preliminary

Rev	Amendments made	Date

NOTES

All glazing, gear & ironmongery to be confirmed with the Client. Exact sizes of openings are to be confirmed on site before manufacture may begin.

Wherever possible the specialist joiner is to advise the Architect with regards to better fabrication and detailing alternatives prior to manufacture.

All glazing to be double, clear glass unless otherwise specified:

SG	:	Laminated Safety Glass
OG	:	Obscured Glass
OS	:	Laminated, Obscured Glass
RS	:	Restrictor Stay

LINTELS

Refer to Lumberlok wall fixing schedule and specification for details of fixings

This drawing is to be read in conjunction with the Floor Plan Layouts and all respective detail drawings where noted.

Drawing Title
Floor Joist Layout & D/W Schedule

Scale (at A3) 1:100

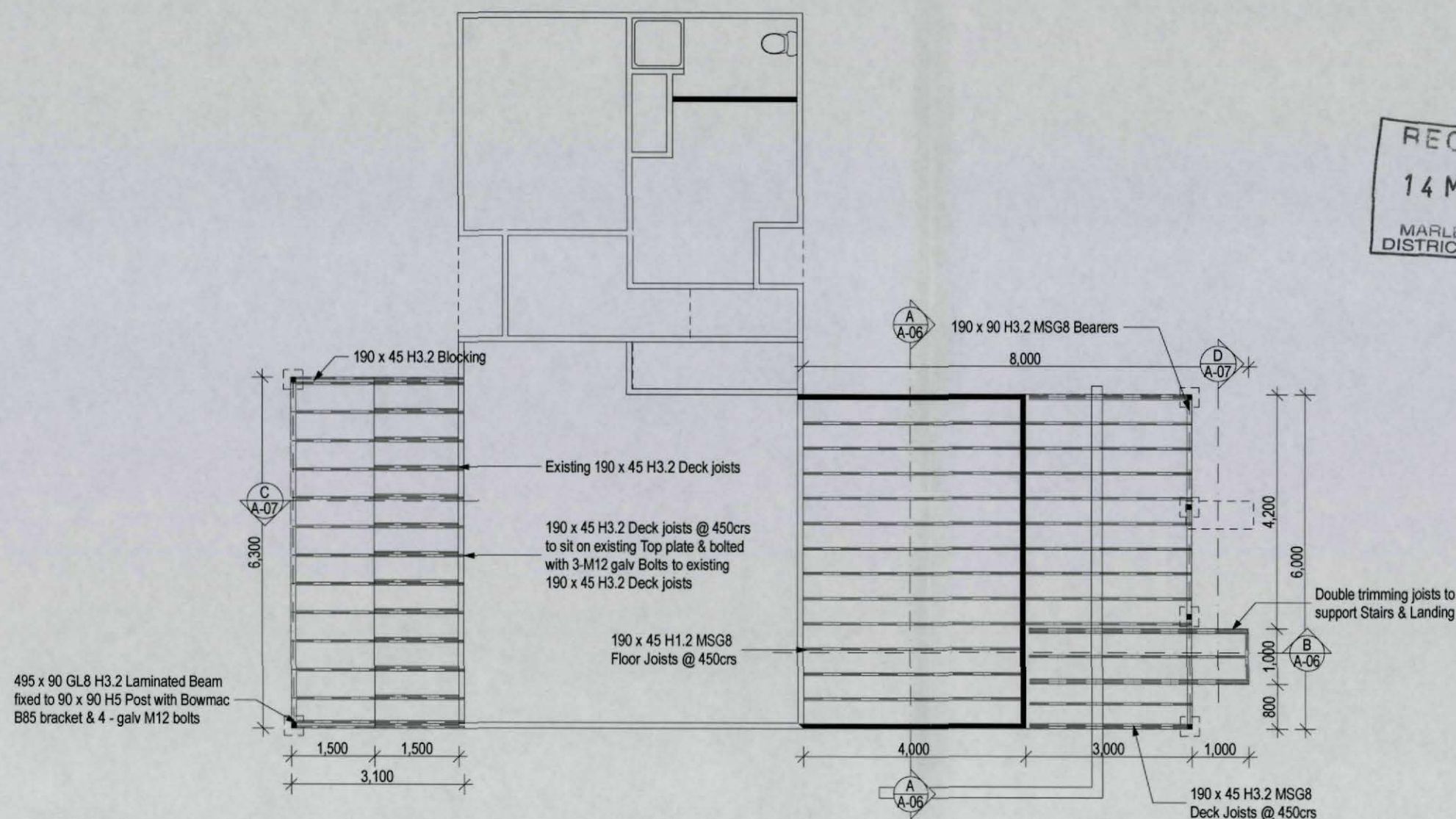
Revision

Drawing Number

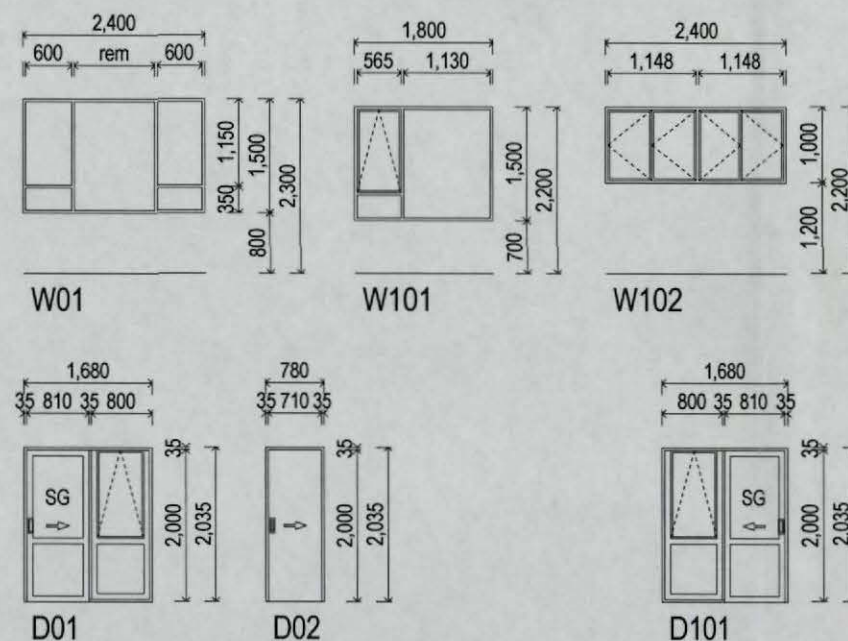
A-10

of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE

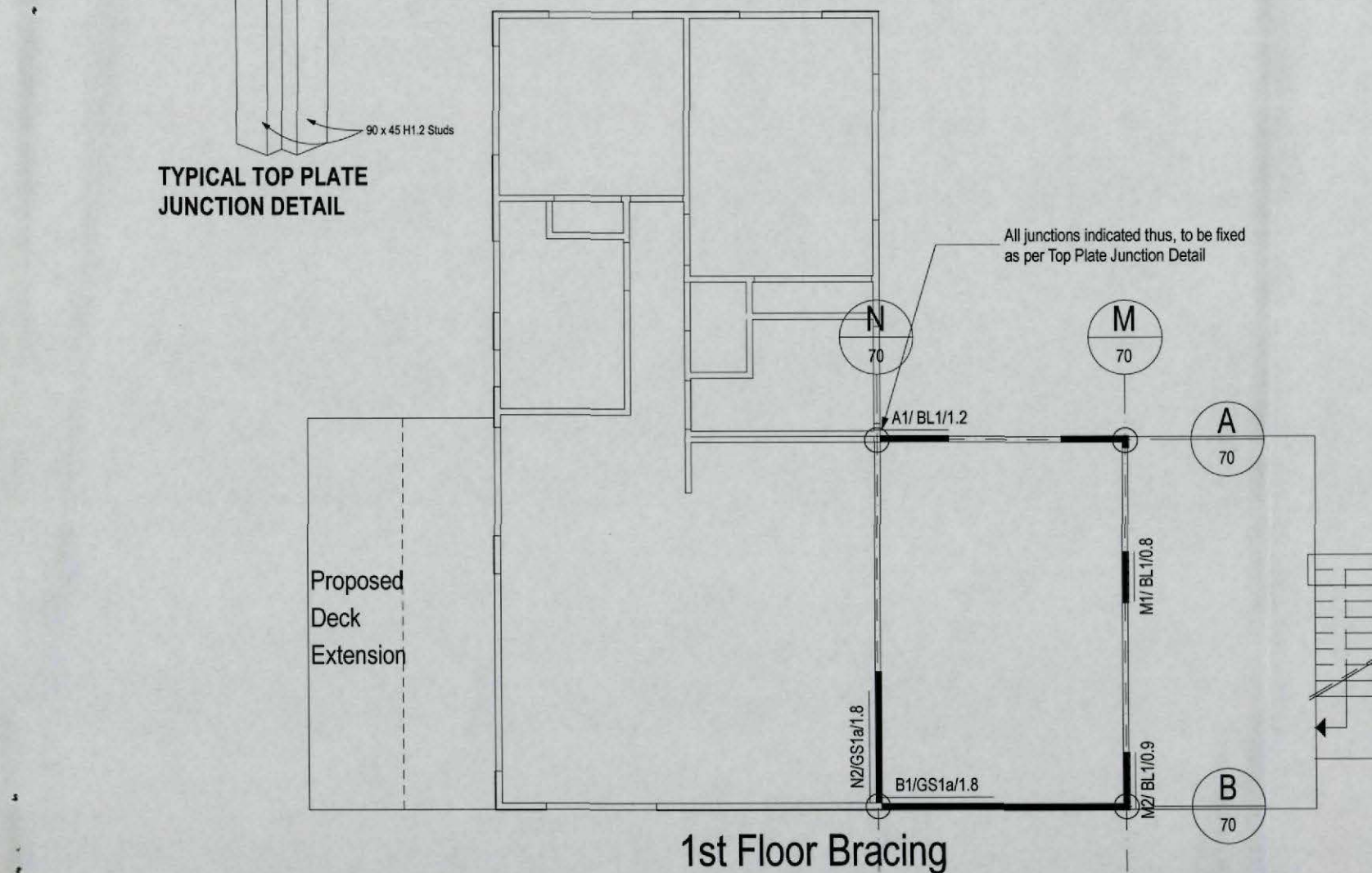
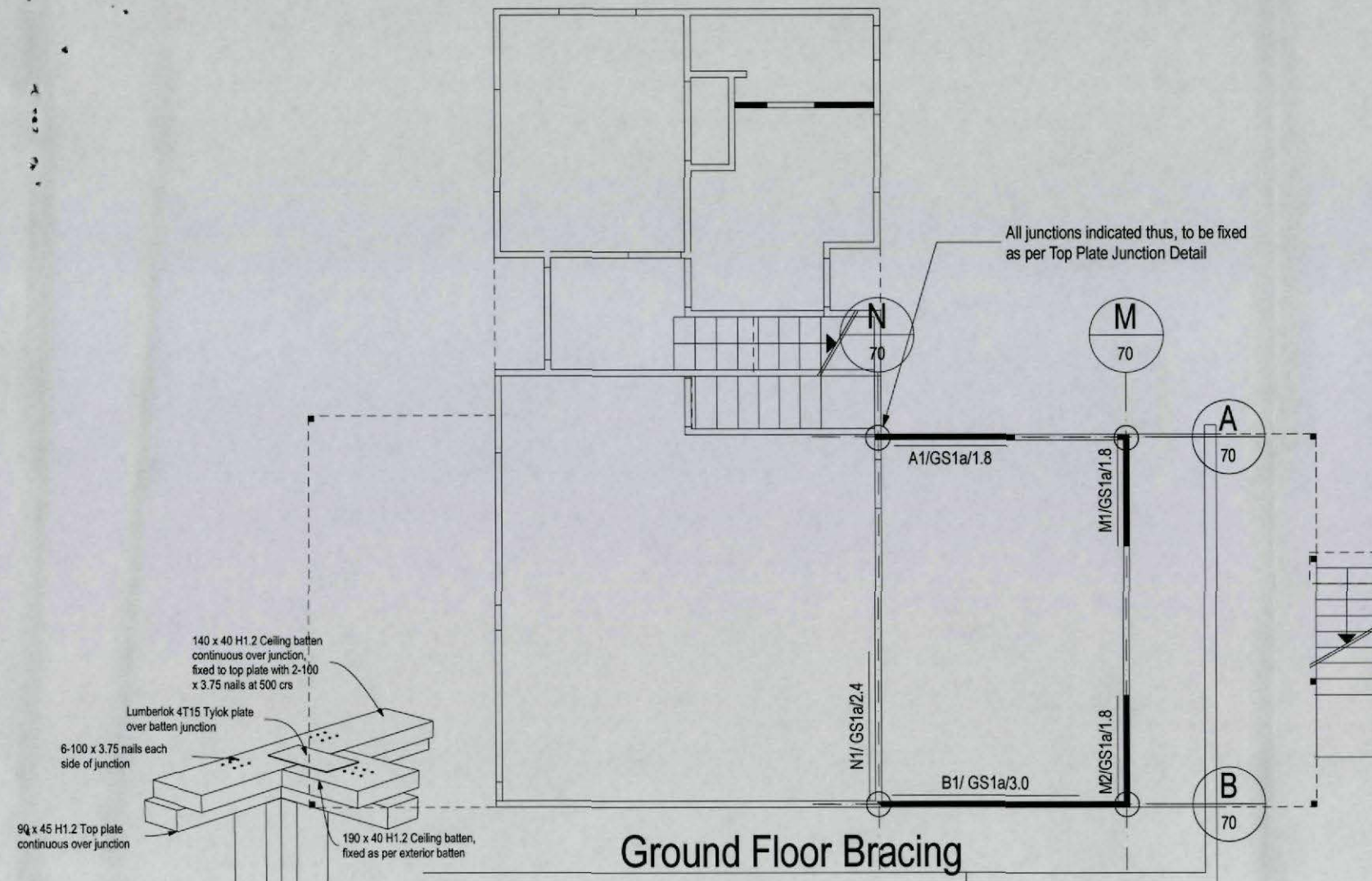


Joist Layout



Door & Window Schedule





BRACING CALCULATIONS

Building Height to Apex	7.0 m	Location of Storey	Lower of Tw
Roof Height Above Eaves	2.0 m	Floor Load	2kP
Stud Height	2.4 m	Roof Weight	Lig
Roof Pitch	0 - 25 °	Cladding Weights:	
Hip Roof	No	- Subfloor	Concrete Flo
Building Length (BL)	6.0 m	- Lower Floor	Mediu
Building Width (BW)	4.0 m	- Upper Floor	Lig
Wind Zone	Low	Room in Roof Space	N
W along	72 BUs/m	Gross Plan Area (GPA)	24.0 m
W across	67 BUs/m	Earthquake Zone	
W along x BW	288.0 BUs	EQ	11.2 BUs/m
W across x BL	402.0 BUs	EQ x GPA	268.8 BU

ALONG

Bracing Line		Bracing Elements Provided					Wind		Earthquake	
Line Label	Min BUs Required	Brace No.	Brace Type	Brace Length	Brace Angle	Brace Height	Rating BUs/m	BUs Achieved	Rating BUs/m	BUs Achieve
A	70	A1	GS1a	1.8	0.0	2.4	65	117.0	55	99.0
B	70	B1	GS1a	3.0	0.0	2.4	75	225.0	65	195.0
Totals Achieved							W	342.0	E	294.0
Totals Required							W	288.0	E	268.8

ACROSS

Bracing Line		Bracing Elements Provided					Wind		Earthquake	
Line Label	Min BUs Required	Brace No.	Brace Type	Brace Length	Brace Angle	Brace Height	Rating BUs/m	BUs Achieved	Rating BUs/m	BUs Achieve
M	70	M1	GS1a	1.8	0.0	2.4	65	117.0	55	99.0
		M2	GS1a	1.8	0.0	2.4	65	117.0	55	99.0
N	70	N1	GS1a	2.4	0.0	2.4	75	180.0	65	156.0
Totals Achieved							W	414.0	E	354.0
Totals Required							W	402.0	E	268.8

BRACING CALCULATIONS

Building Height to Apex	7.0 m	Location of Storey	Upper of Tw
Roof Height Above Eaves	2.0 m	Floor Load	2kF
Stud Height	2.4 m	Roof Weight	Lig
Roof Pitch	0 - 25 °	Cladding Weights:	
Hip Roof	No	- Subfloor	Concrete Flo
Building Length (BL)	6.0 m	- Lower Floor	Mediu
Building Width (BW)	4.0 m	- Upper Floor	Lig
Wind Zone	Low	Room in Roof Space	N
W along	33 BUs/m	Gross Plan Area (GPA)	24.0 m
W across	28 BUs/m	Earthquake Zone	
W along x BW	132.0 BUs	EQ	5.8 BUs/m
W across x BL	168.0 BUs	EQ x GPA	139.2 BU

ALONG

Bracing Line		Bracing Elements Provided					Wind		Earthquake	
Line Label	Min BUs Required	Brace No.	Brace Type	Brace Length	Brace Angle	Brace Height	Rating BUs/m	BUs Achieved	Rating BUs/m	BUs Achieved
A	70	A1	BL1	1.2	0.0	2.4	125	150.0	115	138.0
B	70	B1	GS1a	1.8	0.0	2.4	65	117.0	55	99.0
Totals Achieved							W	267.0	E	237.0
Totals Required							W	132.0	E	139.2

ACROSS

Bracing Line		Bracing Elements Provided					Wind		Earthquake	
Line Label	Min BUs Required	Brace No.	Brace Type	Brace Length	Brace Angle	Brace Height	Rating BUs/m	BUs Achieved	Rating BUs/m	BUs Achieve
M	70	M1	BL1	0.8	0.0	2.4	125	100.0	115	92.0
		M2	BL1	0.9	0.0	2.4	125	112.5	115	103.5
N	70	N2	GS1a	1.8	0.0	2.4	65	117.0	55	99.0
Totals Achieved							W	329.5	E	294.5
Totals Required							W	168.0	E	139.2

PlanIt
another way of design
Architectural design

www.planit-design.co.nz
Upstairs 39 Queen Street PO Box 442 Blenheim
Tel 03 577 5267 Mob 021 775 267 Fax 03 577 5268

Job Title

Additions

Client

Ange & Pete Walters

At

233 Weld Street

Blenheim

Job Number

07125

Reference: 07125 - Proposed Plan.pln

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 12/03/2008

Project Status Preliminary

Rev	Amendments made	Date

NOTES



Drawing Title
Lower & Upper Bracing Plan

Scale (at A3) 1:100

Revision

Drawing Number

A-11

of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE

CODE COMPLIANCE CERTIFICATE

SECTION 95, BUILDING ACT 2004



PO Box 443, Blenheim 7240

Phone: (03) 520 7400

Fax: (03) 520 7496

ISO9001:2000
Document Number
BCF0041

THE BUILDING

Street address of building: **233 Weld Street Blenheim**Legal description of land where building is located **LOT 8 DP 5493**

Building name:

Current, lawfully established, use: **Dwelling Additions and Alterations**Maximum occupant number: **N/A**

Property Reference Number

383419

Building Consent Number

BC080451

THE OWNER

Paw Properties Limited
233 Weld Street
Blenheim 7201

BUILDING WORK

Building Consent No: **BC080451** for

Dwelling Additions and Alterations

Issued by:



Marlborough District Council - Building Consent Authority

Contact Person:

Postal Address: PO Box 443
Blenheim 7240

Phone: 520 7400

Fax: 520 7496

CODE COMPLIANCE

(1) The Marlborough District Council is satisfied, on reasonable grounds, that
[✓ tick applicable option(s)]



(a) the building work complies with the building consent; and



(b) the specified systems in the building are capable of performing to the performance standards set out in the building consent.

ATTACHMENT

A copy of the following document is attached to this Code Compliance Certificate
[✓ tick if applicable]



Compliance schedule

Signature



Position

BUILDING CONTROL OFFICER

On behalf of **Marlborough District Council**

Date: 16 June 2009

Planit Architectural Design Ltd
PO Box 442
Blenheim 7240



MARLBOROUGH
DISTRICT COUNCIL

PO Box 443, Blenheim 7240

Phone: (03) 520 7400

Fax: (03) 520 7496

APPLICATION FOR CODE COMPLIANCE CERTIFICATE

Form 6

SECTION 92, BUILDING ACT 2004

ISO9001:2000

Document Number:
BAF0002.13-CI966

THE BUILDING CONSENT

Building Consent Number

Property Reference Number

Issued by: **Marlborough District Council**
PO Box 443, Blenheim 7240
Phone: (03) 520 7400, Fax: (03) 520 7496

OFFICE USE

Date Received Stamp

THE OWNER

Full name of Owner(s):

PAN PROPERTIES LTD

[first names]

[family name]

Mailing Address:

233 LEED ST
NITHERGA

Street
address/
registered
office

Phone Numbers

5796050

Business

After Hours

021-966365

Mobile

03-5796050

Fax

Email address:

pan@makeitgo.co.nz

Contact Person:

Ben Hallen

THE AGENT (only required if application is being made on behalf of the owner)

Full name of Agent(s):

[first names]

[family name]

Mailing Address:

Street
address

Phone Numbers

Business

After Hours

Mobile

Fax

Email address:

APPLICATION

(1) All building work to be carried out under the above consent was completed on _____

date

(2) The following specified systems are contained on the compliance schedule for the building and, in the opinion of the personnel who installed them, are capable of performing to the performance standards set out in the building consent:

☒ There are no specified systems in the building

SS01A	Fire Sprinkler System (residential)	☐
SS01B	Fire Sprinkler System	☐
SS02A	Manual Fire Alarm (call points)	☐
SS02B	Automatic Fire Alarm (smoke detection)	☐
SS02C	Automatic Fire Alarm (heat detection)	☐
SS02D	Voice communication Systems for Fire Evacuation	☐
SS02E	Hazardous Substance Warning System	☐
SS02F	Gas Flooding Fire Suppression Warning System	☐
SS03A	Electromagnetic Held-open Type Released on Fire Alarm (fire/smoke control doors)	☐
SS03B	Automatic Sliding Doors	☐
SS03C	Self-closing Fire/Smoke Control Doors	☐
SS03D	Controlled Access Doors	☐
SS04A	Lighting for Safe Path to Facilitate Evacuation	☐
SS04B	Lighting for Identification of Exitways	☐
SS05A	Corridor Pressurisation System	☐
SS05B	Stairwell Pressurisation System	☐
SS06A	Dry Riser	☐
SS06B	Charged Riser	☐
SS07	Backflow Preventors	☐
SS08	Passenger Carrying Lifts	☐
SS08B	Service Lift	☐
SS08C	Escalators and Moving Walkways	☐
SS08D	Other (eg dumb-waiter or wheelchair lift)	☐
SS09A	Ventilation Systems - Cooling Towers	☐
SS09B	Ventilation Systems - Lift Shaft Ventilation	☐
SS09C	Ventilation Systems - Parking/Garage Extraction	☐
SS09D	Ventilation Systems - Kitchen/Bathroom/Laundry	☐
SS09E	Ventilation Systems - Dust/Fume/Hazardous Atmospheric Extract Systems	☐
SS09F	Ventilation Systems - Gas Systems	☐
SS09G	Ducted Ventilation or Air conditioning System	☐
SS10A	Suspended Access Equipment	☐
SS10B	Travelling Ladders and Gantries	☐
SS11	Laboratory Fume Cupboards/Ducted Extract Systems	☐

- | | | |
|-------|---|--------------------------|
| SS12 | Audio Loops/FM Radio Frequency/Infrared Beam Systems | ☐ |
| SS13A | Smoke Control Systems - System Shutdown | ☐ |
| SS13B | Smoke Control Systems - Purge Systems | ☐ |
| SS13C | Smoke Control Systems - Extract Systems | ☐ |
| SS13D | Smoke Control Systems - Zone Pressurisation | ☐ |
| SS13E | Smoke Control Systems - Fire-isolated Exit Pressurisation | ☐ |
| SS13F | Smoke Control Systems - Lift-shaft Pressurisation | ☐ |
| SS13G | Smoke Control Systems - Automatic Smoke | ☐ |
| SS14A | Emergency Power Supply | ☐ |
| SS14B | Uninterrupted Power Supply | ☐ |
| SS14C | Signs for Systems | ☐ |

Systems Below Included Only If Compliance Schedule contains one or more of the Specified Systems 1-6, 9 and 13

- | | | |
|-------|---|--------------------------|
| SS15A | Fusible Link Type Roller or Slider Door | ☐ |
| SS15B | Fire Separation | ☐ |
| SS15C | Smoke Separation | ☐ |
| SS15D | Final Exits | ☐ |
| SS19 | Cable Cars | ☐ |

(3) I request that you issue a code compliance certificate for this work under section 95 of the Building Act 2004. The code compliance certificate should be sent to [✓ tick applicable option]

- ☐ Owner
- ☐ Agent

Signed:



[✓ tick one option only]

☒ Owner

☐ Agent on behalf of and with the authority of the owner

Date:

5/5/09

Full name of person signing:

Peter

[first name]

WALTERS

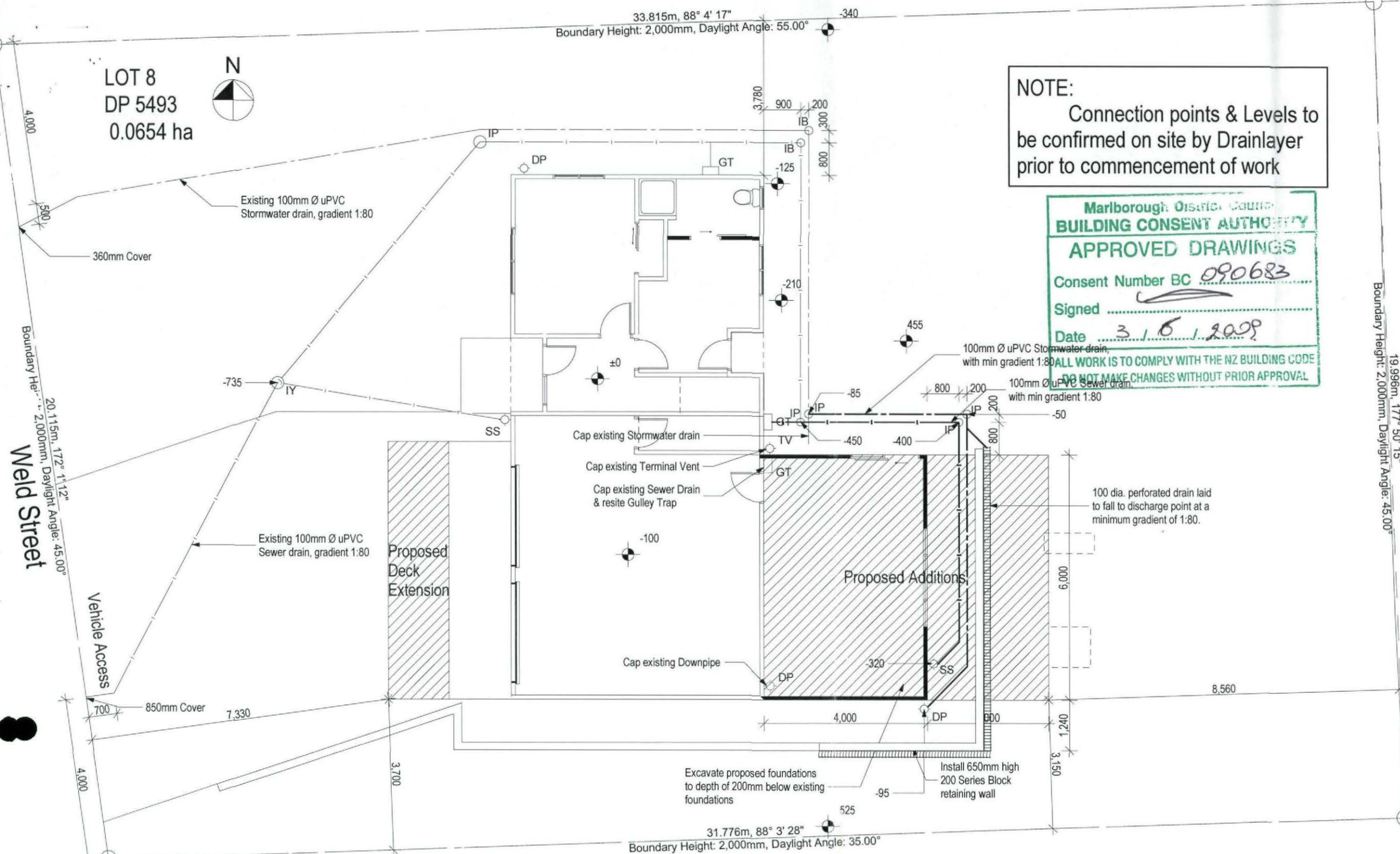
[family name]

ATTACHMENTS

The following documents are attached to this application [✓ tick applicable option(s)]

- ☐ Certificates from the personnel who carried out the work
- ☐ Certificates that relate to the energy work
- ☐ Evidence that specified systems are capable of performing to the performance standards set out in the building consent.

**If you have any queries regarding completion of this form please contact us on
phone (03) 520 7400 or fax (03) 520 7496**



NOTE:
Connection points & Levels to be confirmed on site by Drainlayer prior to commencement of work



DRAINAGE SCHEDULE

Waste Pipe Sizes, Falls & Unvented Length			
Fixture	Min Size	Min Fall	Max. Unvented Length
Basin	32mmø	1:20	2.5m
Bidet	32mmø	1:20	2.5m
Drinking Fountain	40mmø	1:40	2.5m
Cleaning Sink	50mmø	1:40	2.5m
Single Urinal	32mmø	1:20	2.5m
Shower	40mmø	1:40	2.5m
Sink	40mmø	1:40	2.5m
Bath	40mmø	1:40	2.5m
Laundry Tub	40mmø	1:40	2.5m
WC	100mmø	1:60	6.0m

www.planit-design.co.nz
Upstairs 39 Queen Street PO Box 442 Blenheim
Tel 03 577 5267 Mob 021 775 267 Fax 03 577 5268

Job Title
Additions

Client
Ange & Pete Walters

At
233 Weld Street
Blenheim

Job Number
07125

Reference: 07125 - Proposed Plan plan

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 4/03/2009

Project Status Preliminary

Rev	Amendments made	Date

NOTES

BC 090683

Drawing Title
Site Plan

Scale (at A3) 1:100

Revision

Drawing Number
A-01

of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE



Job Title	
-----------	--

Additions

Client

Ange & Pete Walters

At

233 Weld Street
Blenheim

Job Number	07125
------------	-------

Reference: 07125 - Proposed Plan.pln

Drawn	Alf Shave
-------	-----------

Checked	Tony Fitzpatrick
---------	------------------

Creation Date	09/01/2008
---------------	------------

Plot Date	4/03/2009
-----------	-----------

Project Status	Preliminary
----------------	-------------

Rev	Amendments made	Date
	<i>Garage north wall veneer ammended</i>	<i>03/03/09</i>

NOTES

03 JUN 2003
BUILDING CONSENT
ALL WORK IS TO COMPLY WITH THE NZ BUILDING CODE
DO NOT MAKE CHANGES WITHOUT PRIOR APPROVAL

Drawing Title	Existing Floor Plans
---------------	----------------------

Scale (at A3)	1:100
---------------	-------

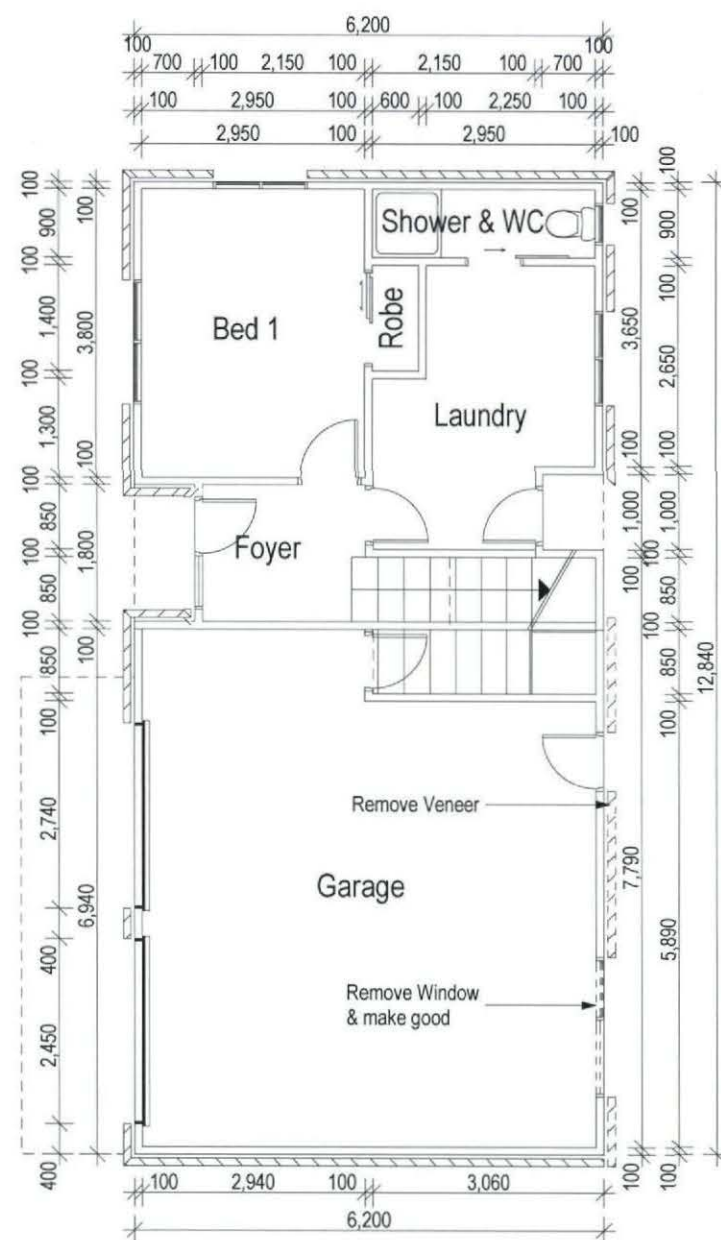
Revision

Drawing Number

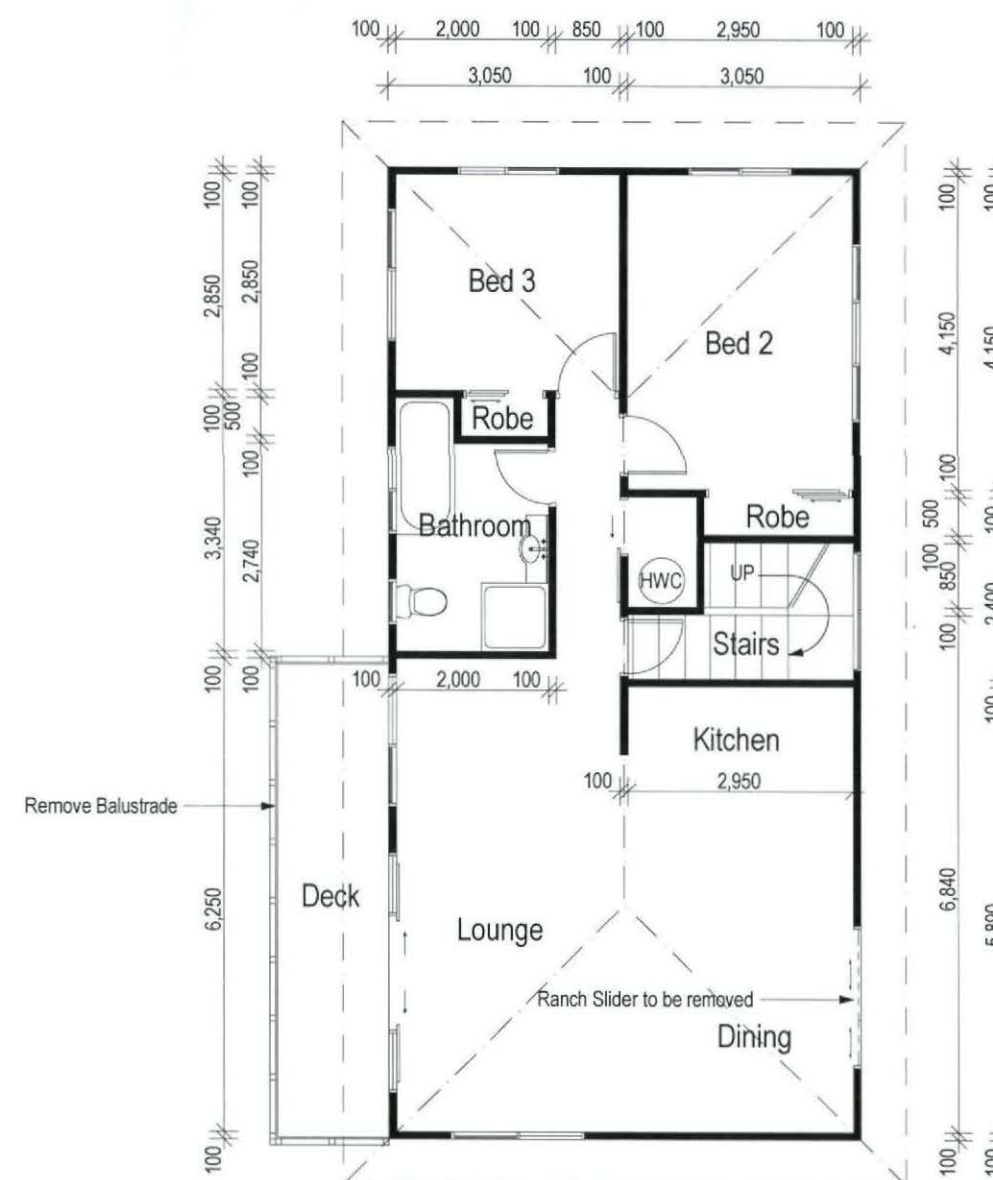
A-02

of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE



Existing Ground Floor Plan



Existing 1st Floor Plan

Job Title

Additions

Client

Ange & Pete Walters

At

233 Weld Street
Blenheim

Job Number 07125

Reference: 07125 - Proposed Plan pin

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 4/03/2009

Project Status Preliminary

Rev	Amendments made	Date

NOTES

Drawing Title
Existing Elevations

Scale (at A3) 1:100

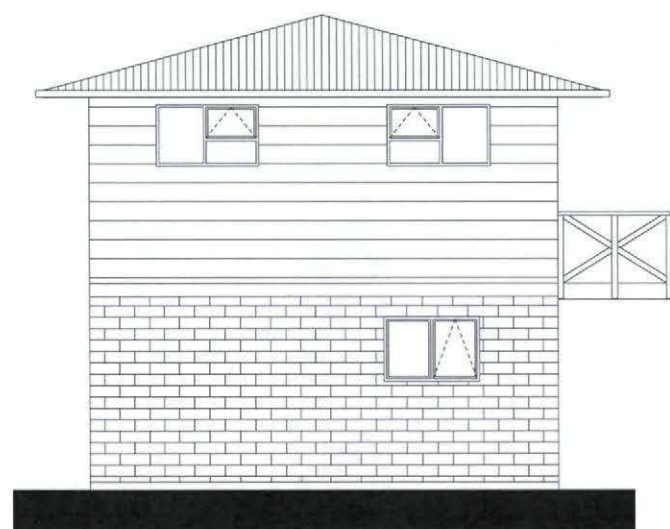
Revision

Drawing Number

A-03

of 11

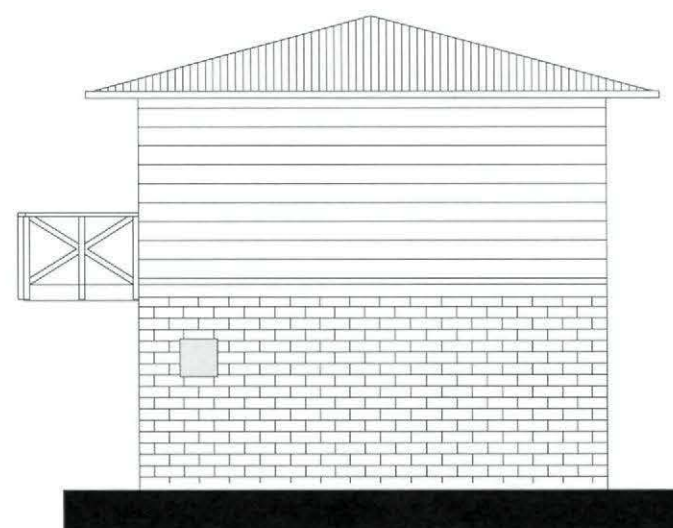
ALL DIMENSIONS TO BE VERIFIED ON SITE



Existing North Elevation



Existing West Elevation



Existing South Elevation



Existing East Elevation



Hardiplank weatherboard

Summerhill Stone veneer



Job Title
Additions

Client
Ange & Pete Walters

At
233 Weld Street
Blenheim

Job Number **07125**

Reference: 07125 - Proposed Plan pin

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 4/03/2009

Project Status Preliminary

Rev	Amendments made	Date
A	Exterior cladding to Rumpus room amended to HARDPLANK Frontier weatherboard	03/03/09
B	Risk Matrix corrected	11/03/09

NOTES



Drawing Title
Proposed Floor Plan

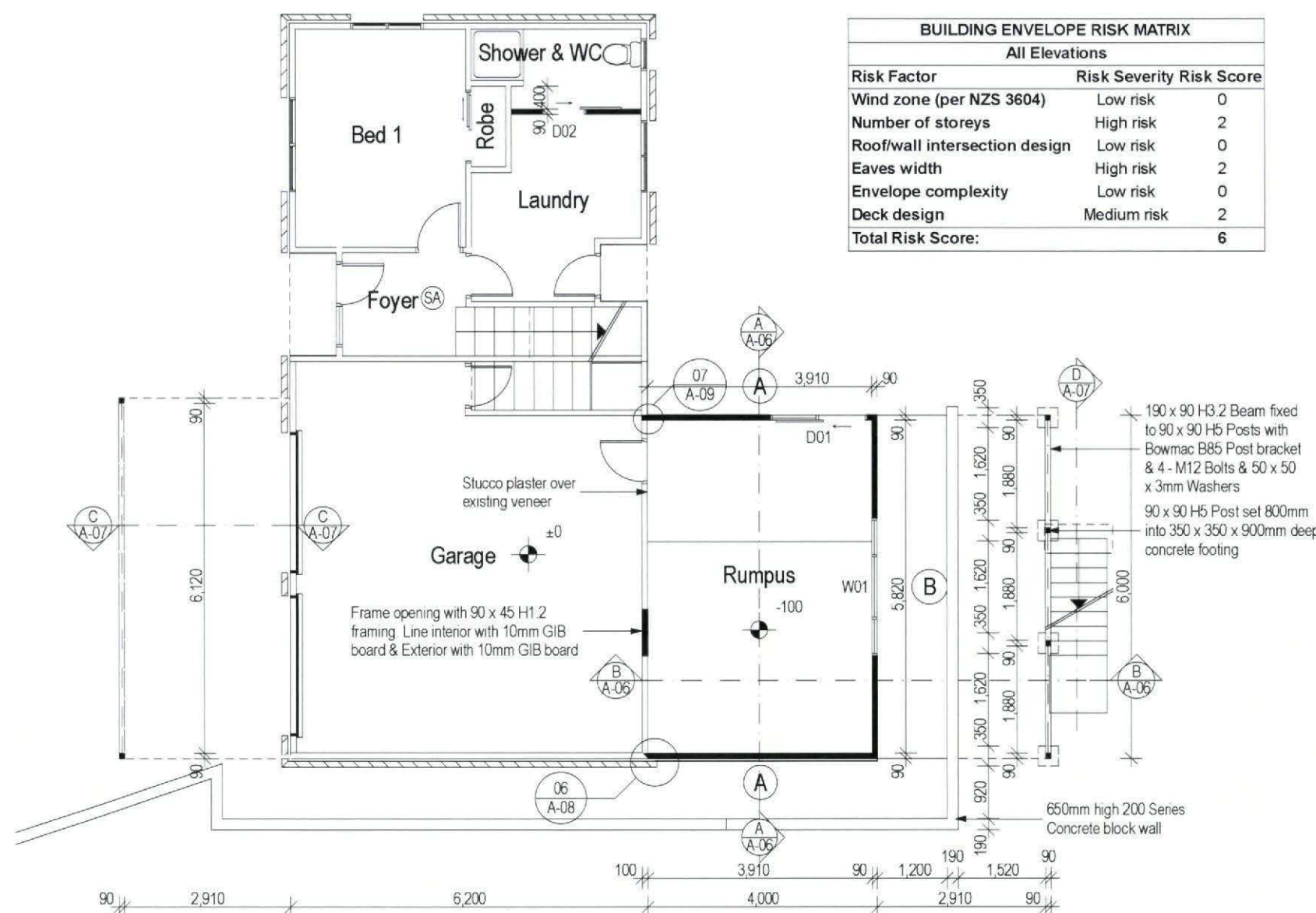
Scale (at A3) 1:100

Revision

Drawing Number

A-04

of 11
ALL DIMENSIONS TO BE VERIFIED ON SITE



Proposed Ground Floor Plan

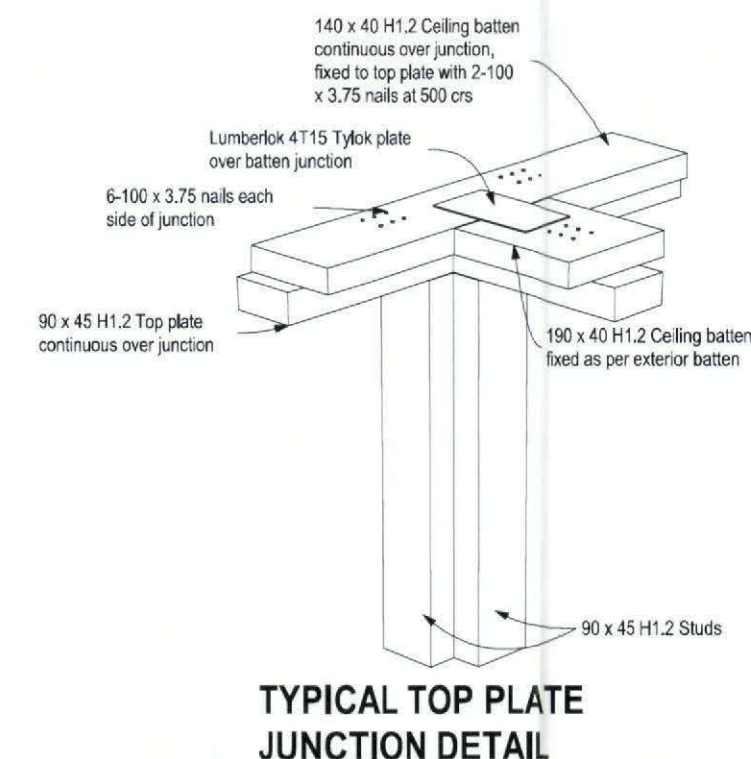
H1 COMPLIANCE

TOTAL	
Wall Area :	91.30m ²
Glazing Area:	15.54m ²
Percentage of glazing to wall area:	17.02%
East, South and West Walls	
Wall Area :	71.30m ²
Glazing Area:	9.42m ²
Percentage of glazing to wall area:	13.21%

Therefore dwelling complies with the Schedule Method

Lintel Fixing Schedule			
Refer to Lumberlok wall fixing schedule			
in specification for details of fixings			
Opening ref	VSG8 & MSG8 Opening Size	Lintel Size	Fixing Type
W01	2400	290 x 90	C
W101	1800	140 x 90	A
W102	2400	190 x 90	B
D01	1680	240 x 90	C
D101	1680	140 x 90	A

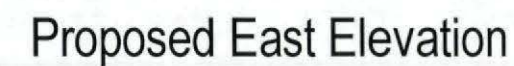
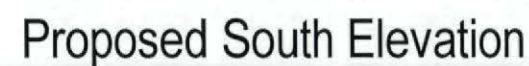
BUILDING ENVELOPE RISK MATRIX		
All Elevations		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	Low risk	0
Number of storeys	High risk	2
Roof/wall intersection design	Low risk	0
Eaves width	High risk	2
Envelope complexity	Low risk	0
Deck design	Medium risk	2
Total Risk Score:		6



LEGEND	
Symbol	Description
SA	Domestic Smoke Detector
HWC	Hot water cylinder
M	Meter Box
DS	Double Stud
CJ	Control Joint to wall cladding as per Manufacturer's recommendations and specifications

STUD TO TOP PLATE FIXING SCHEDULE		
Fixing Ref	Fixing Details	Alternative Fixing capacity (kN)
A	2-90 x 3.33 plain steel nails driven vertically into stud	0.7
B	2-90 x 3.33 plain steel nails driven vertically into stud plus single Tylok 2T4 plate	1.7
C	2-90 x 3.33 plain steel nails driven vertically into stud plus pair Tylok 2T4 plates	2.7
D	2-90 x 3.33 plain steel nails driven vertically into stud plus Tylok Stud tie	6.0

Where fixing type is not indicated, use type A fixing



Client

At

Job Number

Reference: 07125 - Proposed Plan.pln

Reference:	07/125 - Proposed F.A.
Drawn	Alf Shave

Checked	Tony Fitzpatrick
---------	------------------

Creation Date	09/01/2008
---------------	------------

Plot Date	4/03/2009
-----------	-----------

Project Status	Preliminary
----------------	-------------

NOTES

1

Scale (at A3)	1:50
---------------	------

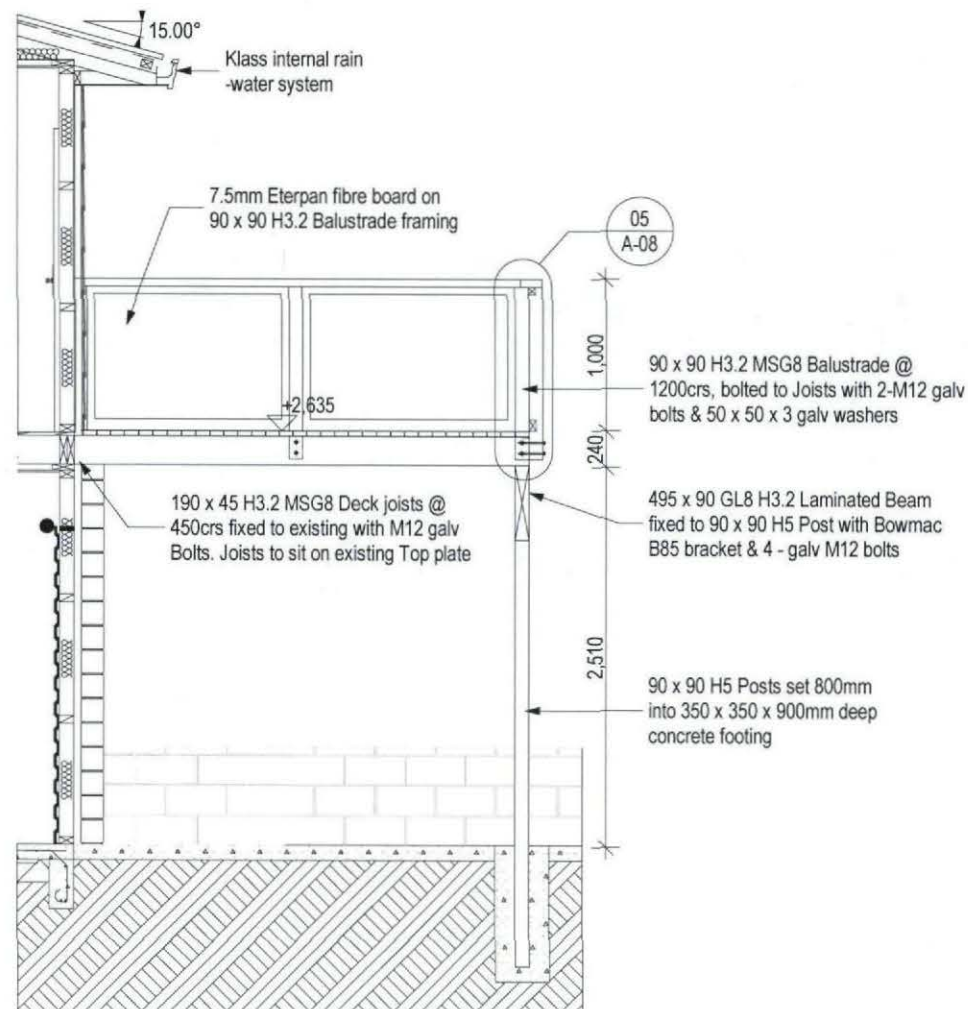
Revision

Drawing Number

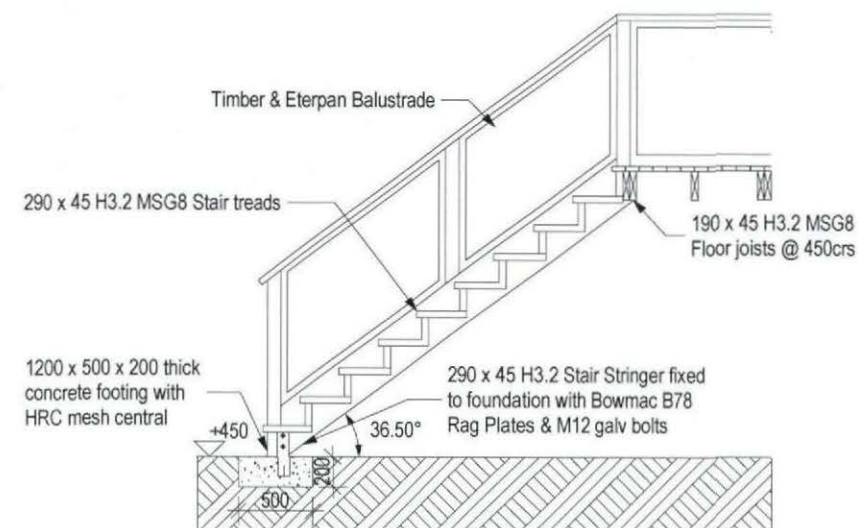
of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE

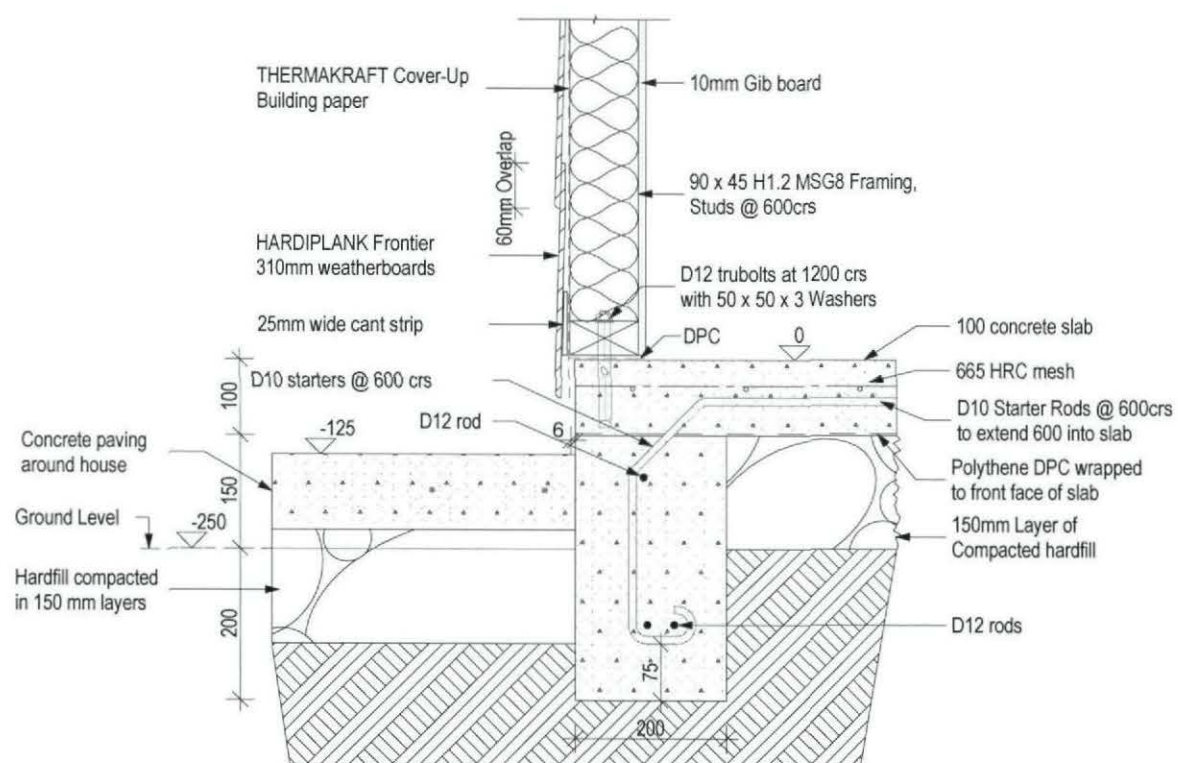




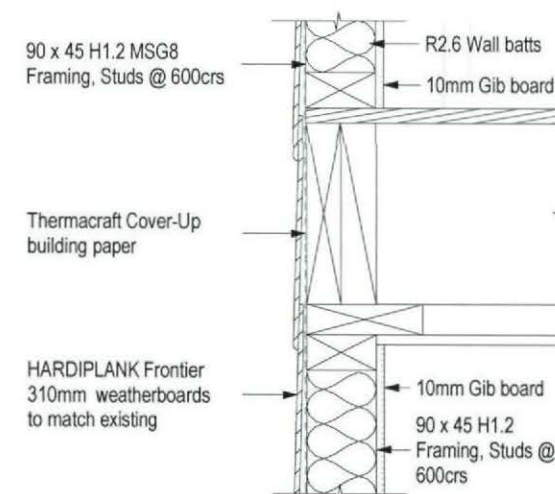
Section C
1:50
A-04



Section D
1:50
A-04



Detail 01
1:10
A-06



Detail 02
1:10
A-06

Job Title

Additions

Client

Ange & Pete Walters

At

233 Weld Street
Blenheim

Job Number

07125

Reference: 07125 - Proposed Plan pin

Drawn

Alf Shave

Checked

Tony Fitzpatrick

Creation Date

09/01/2008

Plot Date

4/03/2009

Project Status

Preliminary

Rev

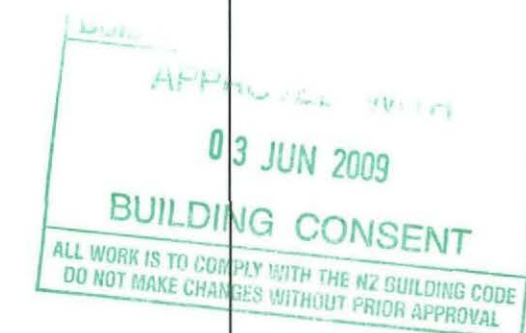
Amendments made

Date

Exterior cladding ammended from
Stucco to HARDIPLANK Frontier
weatherboard

03/03/09

NOTES



Drawing Title

Sections C & D. Details 01 & 02

Scale (at A3)

1:50, 1:10 & 1:5

Revision

Drawing Number

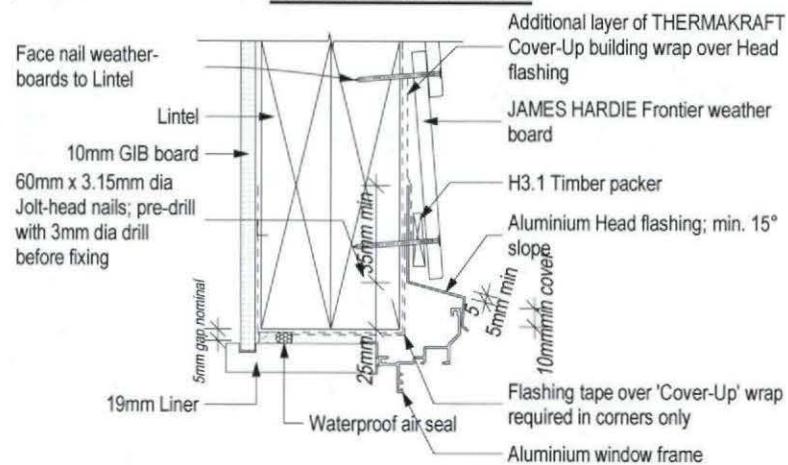
A-07

of 11

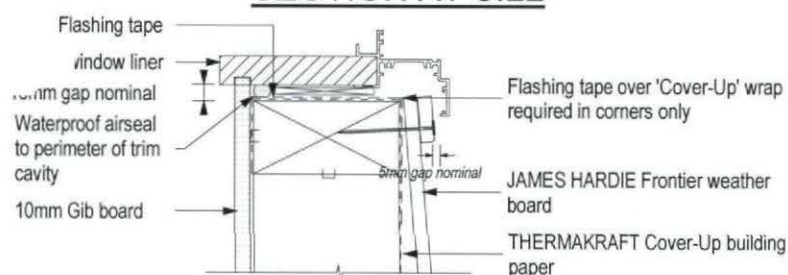
ALL DIMENSIONS TO BE VERIFIED ON SITE



WINDOW HEAD

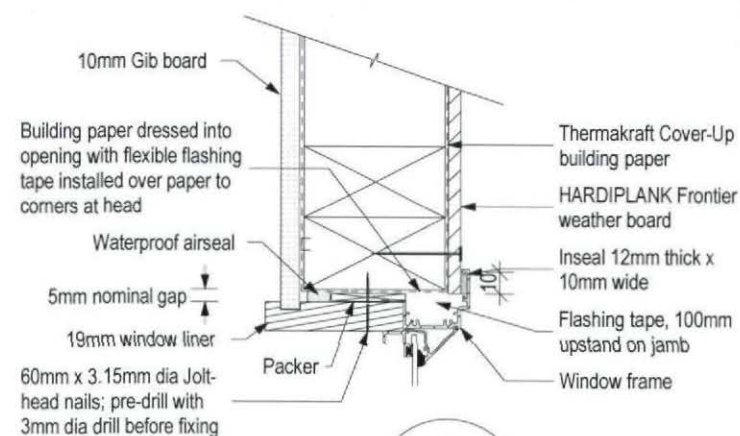


SECTION AT SILL

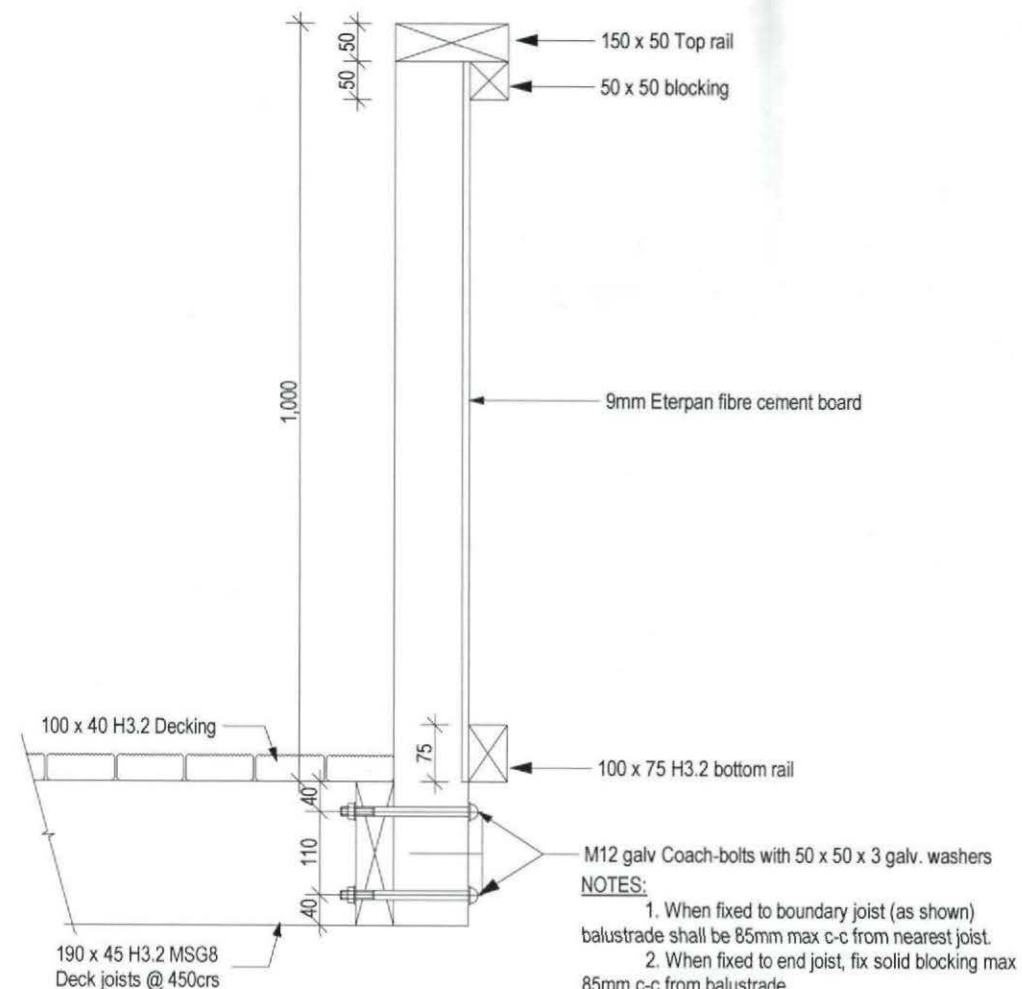


Detail 03
1:5
A-05

WINDOW JAMB

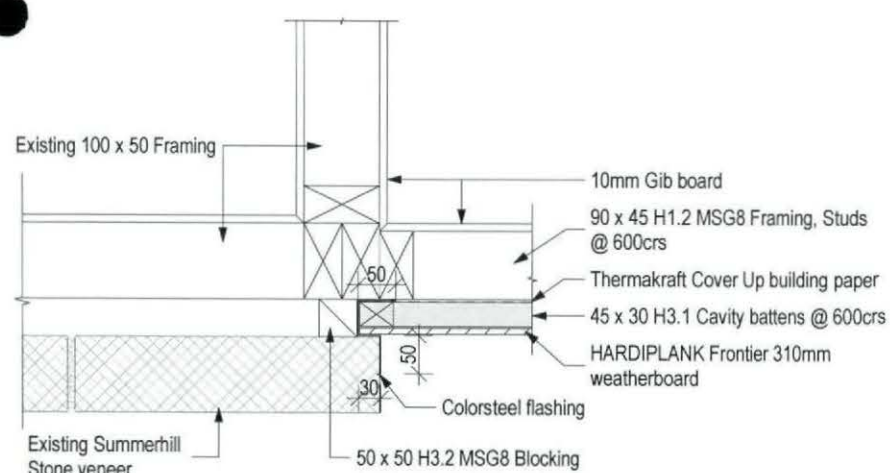


Detail 04
1:5
A-05

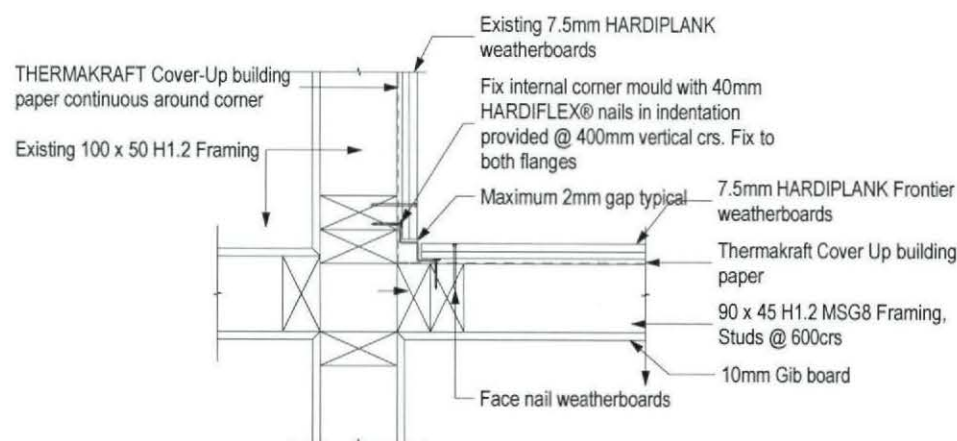


DETAIL 05
1:10
A-07

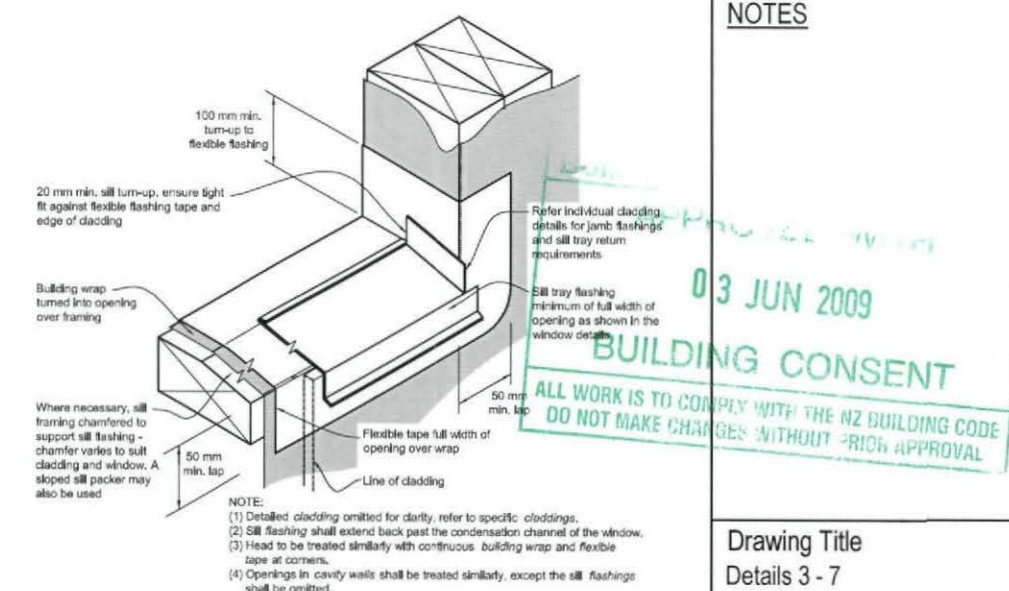
- NOTES:
1. When fixed to boundary joist (as shown) balustrade shall be 85mm max c-c from nearest joist.
 2. When fixed to end joist, fix solid blocking max 85mm c-c from balustrade.
 3. Fixing between boundary joist and floor joist closest to balustrade shall be with 2 - M12 coach screws with 50 x 50 x 3mm washers and nail plate to top and bottom of joist. Fixing to next joist out shall be with 3 - 100mm nails.
 4. Blocking beside balustrade shall be fixed as in 3 above with other end of blocking fixed to joist with 5 - 100mm nails.



Detail 06
1:10
A-04



Detail 07
1:10
A-04



Window Flashing Detail

Job Title
Additions

Client
Ange & Pete Walters
At
233 Weld Street
Blenheim

Job Number 07125

Reference: 07125 - Proposed Plan pin

Drawn Alf Shave

Checked Tony Fitzpatrick

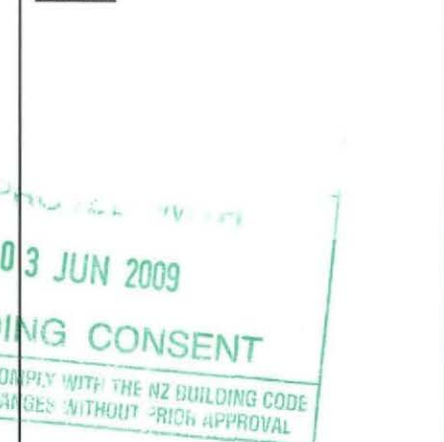
Creation Date 09/01/2008

Plot Date 4/03/2009

Project Status Preliminary

Rev	Amendments made	Date
	Exterior cladding amended from Stucco to HARDIPLANK Frontier weatherboard	03/03/09

NOTES



Drawing Title
Details 3 - 7

Scale (at A3) 1:5 & 1:10

Revision

Drawing Number

A-08 of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE



Job Title

Additions

Client

Ange & Pete Walters

At

233 Weld Street
Blenheim

Job Number

07125

Reference: 07125 - Proposed Plan plan

Drawn Alf Shave

Checked Tony Fitzpatrick

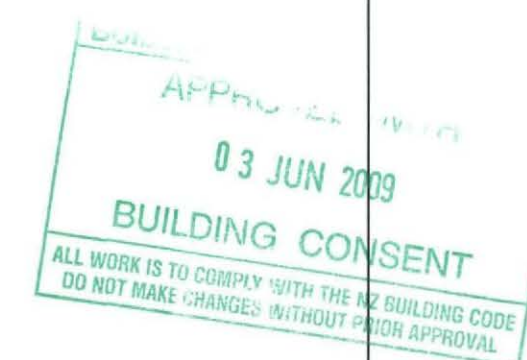
Creation Date 09/01/2008

Plot Date 4/03/2009

Project Status Preliminary

Rev	Amendments made	Date
	Exterior cladding ammended from Stucco to HARDIPLANK Frontier weatherboard	03/03/09

NOTES



Drawing Title

Details & Foundation Plan

Scale (at A3) 1:100 & 1:10

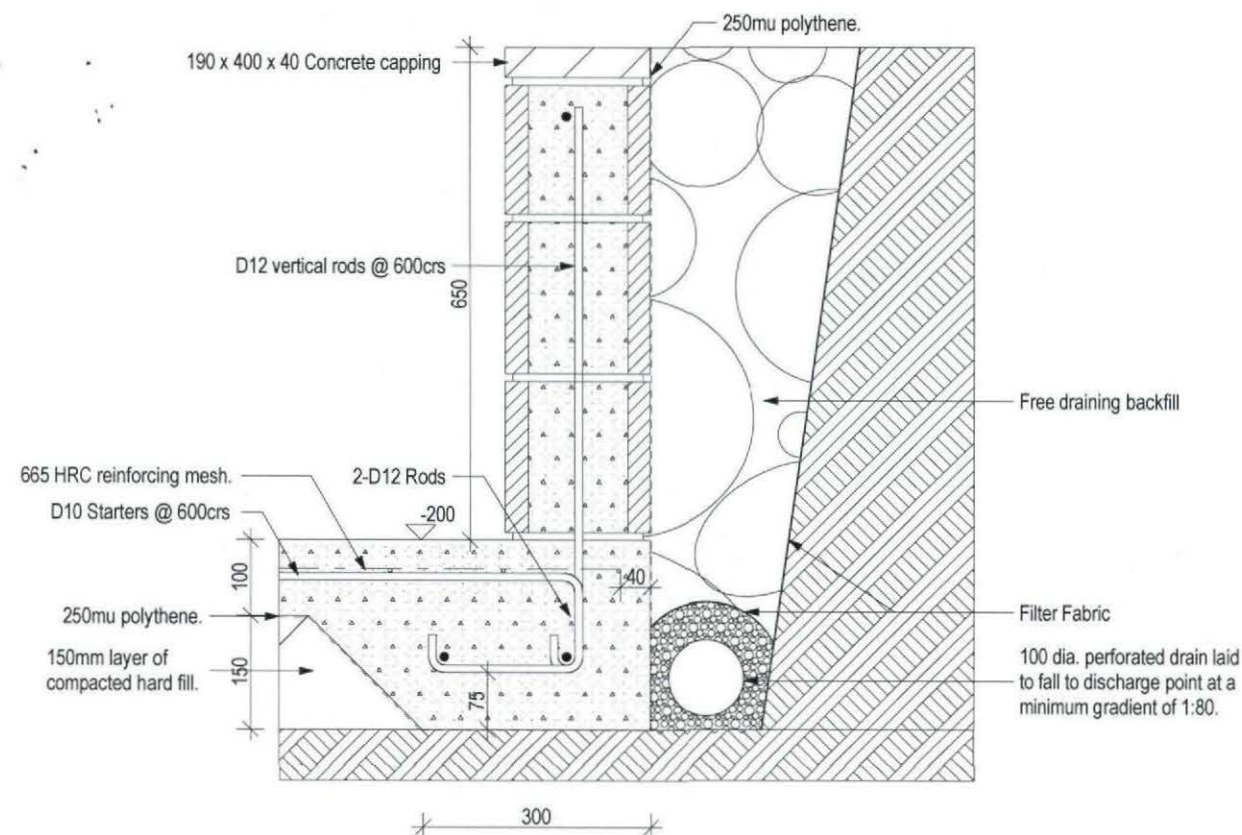
Revision

Drawing Number

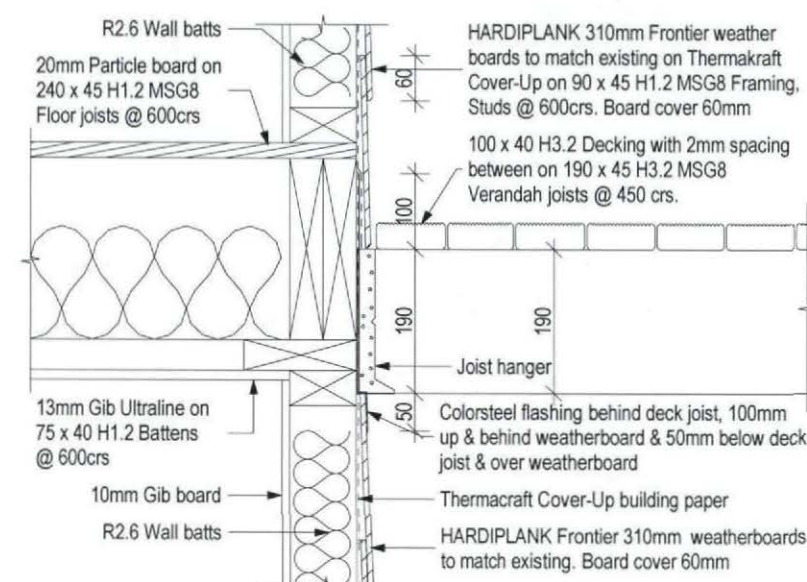
A-09

of 11

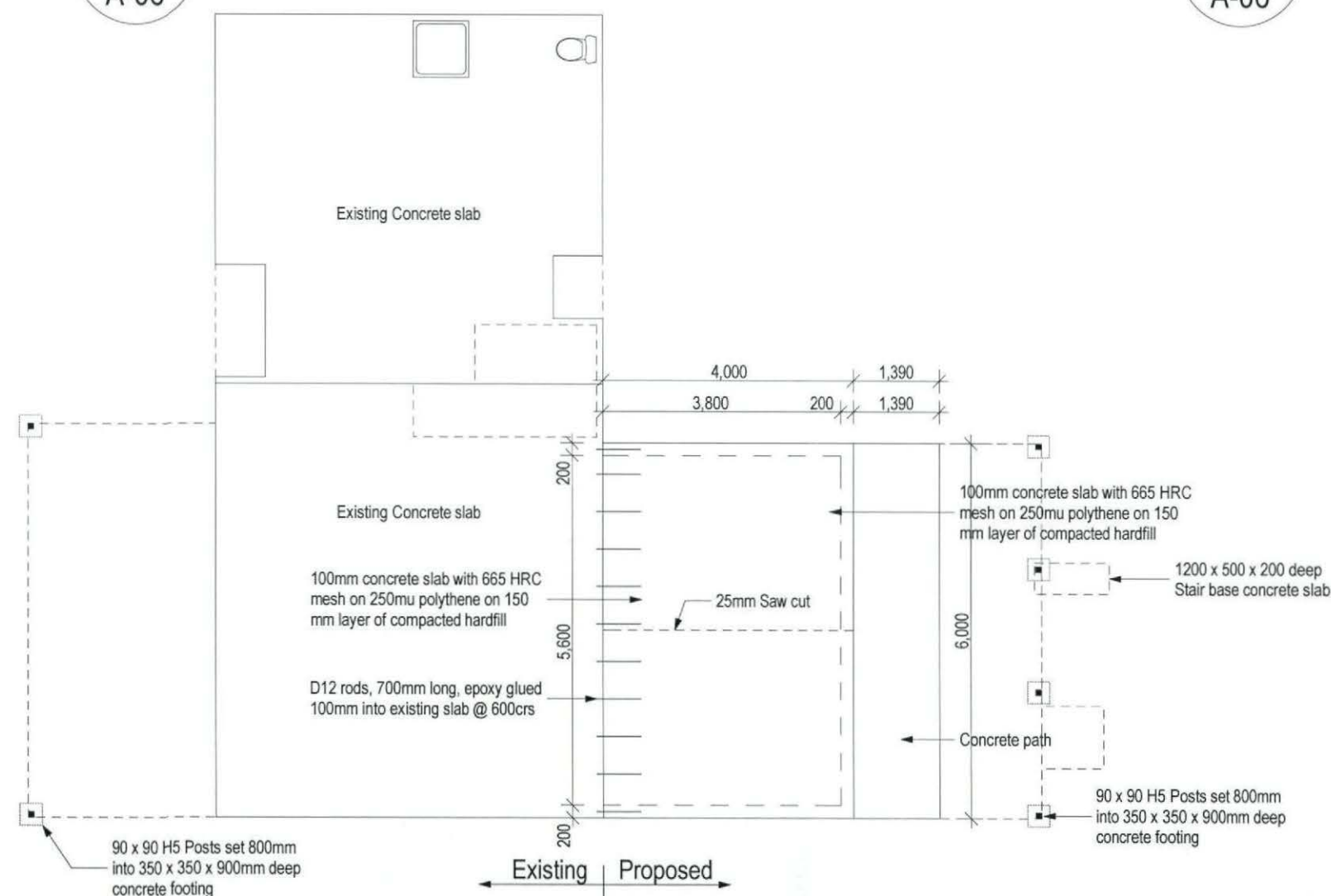
ALL DIMENSIONS TO BE VERIFIED ON SITE



Detail 08
1:10
A-06



Detail 09
1:10
A-06



Foundation Plan



Job Title

Additions

Client

Ange & Pete Walters

At

233 Weld Street
Blenheim

Job Number

07125

Reference: 07125 - Proposed Plan pin

Drawn Alf Shave

Checked Tony Fitzpatrick

Creation Date 09/01/2008

Plot Date 4/03/2009

Project Status Preliminary

Rev	Amendments made	Date

NOTES

APPROVED
03 JUN 2009
BUILDING CONSENT
ALL WORK IS TO COMPLY WITH THE NZ BUILDING CODE
DO NOT MAKE CHANGES WITHOUT PRIOR APPROVAL

Drawing Title

Lower & Upper Bracing Plan

Scale (at A3)

1:100

Revision

Drawing Number

A-11

of 11

ALL DIMENSIONS TO BE VERIFIED ON SITE

BRACING CALCULATIONS

Building Height to Apex	7.0 m	Location of Storey	Lower of Two
Roof Height Above Eaves	2.0 m	Floor Load	2kPa
Stud Height	2.4 m	Roof Weight	Light
Roof Pitch	0 - 25 °	Cladding Weights:	
Hip Roof	No	- Subfloor	Concrete Floor
Building Length (BL)	6.0 m	- Lower Floor	Medium
Building Width (BW)	4.0 m	- Upper Floor	Light
Wind Zone	Low	Room in Roof Space	No
W along	72 BUS/m	Gross Plan Area (GPA)	24.0 m2
W across	67 BUS/m	Earthquake Zone	A
W along x BW	288.0 BUS	EQ	11.2 BUS/m2
W across x BL	402.0 BUS	EQ x GPA	268.8 BUS

ALONG

Bracing Line		Bracing Elements Provided					Wind		Earthquake	
Line	Min BUs	Brace	Brace	Brace	Brace	Brace	Rating	BUs	Rating	BUs
Label	Required	No.	Type	Length	Angle	Height	BUs/m	Achieved	BUs/m	Achieved
A	70	A1	GS1a	1.8	0.0	2.4	65	117.0	55	99.0
B	70	B1	GS1a	3.0	0.0	2.4	75	225.0	65	195.0
Totals Achieved							W	342.0	E	294.0
Totals Required							W	288.0	E	268.8

ACROSS

Bracing Line		Bracing Elements Provided					Wind		Earthquake	
Line	Min BUS	Brace	Brace	Brace	Brace	Brace	Rating	BUS	Rating	BUS
Label	Required	No.	Type	Length	Angle	Height	BUS/m	Achieved	BUS/m	Achieved
M	70	M1	GS1a	1.8	0.0	2.4	65	117.0	55	99.0
		M2	GS1a	1.8	0.0	2.4	65	117.0	55	99.0
N	70	N1	GS1a	2.4	0.0	2.4	75	180.0	65	156.0
Totals Achieved							W	414.0	E	354.0
Totals Required							W	402.0	E	268.8

BRACING CALCULATIONS

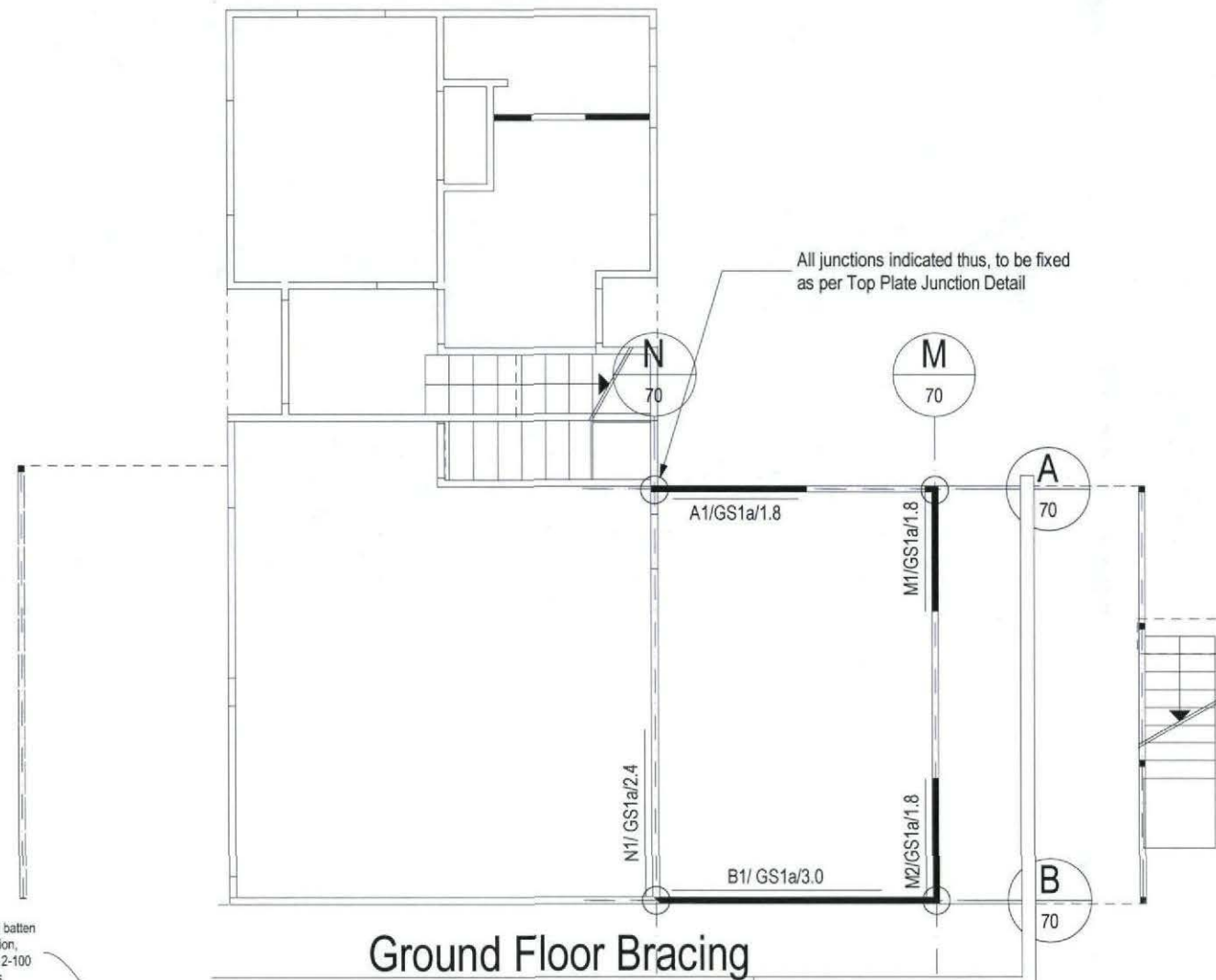
Building Height to Apex	7.0 m	Location of Storey	Upper of Two
Roof Height Above Eaves	2.0 m	Floor Load	2kPa
Stud Height	2.4 m	Roof Weight	Light
Roof Pitch	0 - 25 °	Cladding Weights:	
Hip Roof	No	- Subfloor	Concrete Floor
Building Length (BL)	6.0 m	- Lower Floor	Medium
Building Width (BW)	4.0 m	- Upper Floor	Light
Wind Zone	Low	Room in Roof Space	No
W along	33 BUS/m	Gross Plan Area (GPA)	24.0 m2
W across	28 BUS/m	Earthquake Zone	A
W along x BW	132.0 BUS	EQ	5.8 BUS/m2
W across x BL	168.0 BUS	EQ x GPA	139.2 BUS

ALONG

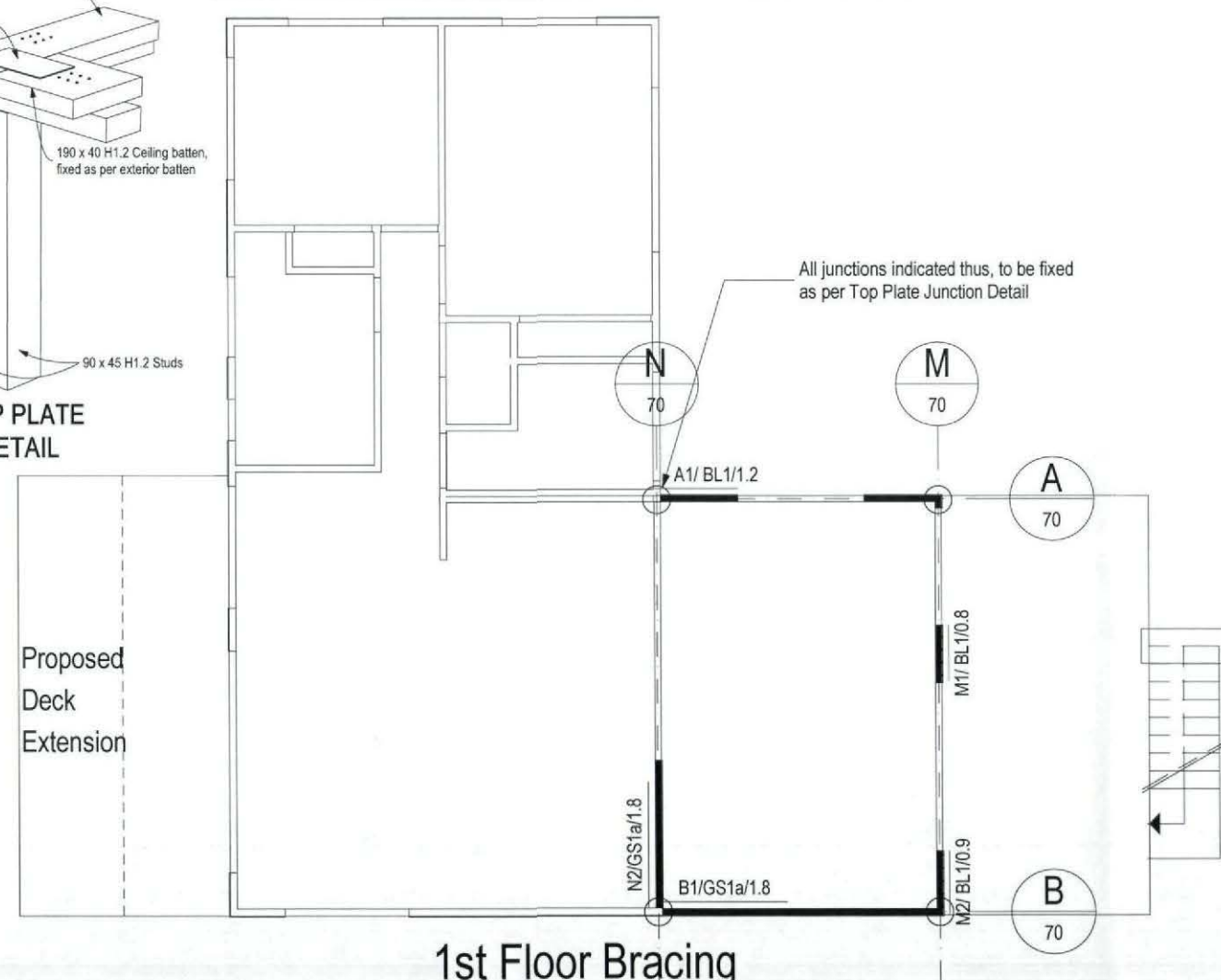
Bracing Line		Bracing Elements Provided					Wind		Earthquake	
Line Label	Min BUs Required	Brace No.	Brace Type	Brace Length	Brace Angle	Brace Height	Rating BUs/m	BUs Achieved	Rating BUs/m	BUs Achieved
A	70	A1	BL1	1.2	0.0	2.4	125	150.0	115	138.0
B	70	B1	GS1a	1.8	0.0	2.4	65	117.0	55	99.0
Totals Achieved							W	267.0	E	237.0
Totals Required							W	132.0	E	139.2

ACROSS

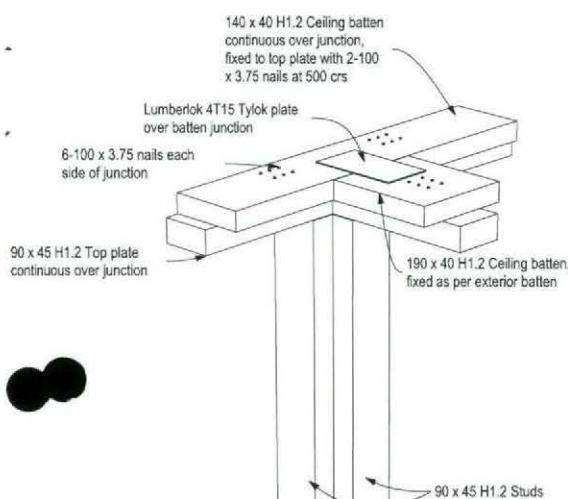
Bracing Line		Bracing Elements Provided					Wind		Earthquake	
Line Label	Min BUs Required	Brace No.	Brace Type	Brace Length	Brace Angle	Brace Height	Rating BUs/m	BUs Achieved	Rating BUs/m	BUs Achieved
M	70	M1	BL1	0.8	0.0	2.4	125	100.0	115	92.0
		M2	BL1	0.9	0.0	2.4	125	112.5	115	103.5
N	70	N2	GS1a	1.8	0.0	2.4	65	117.0	55	99.0
Totals Achieved							W	329.5	E	294.5
Totals Required							W	168.0	E	139.2



Ground Floor Bracing



1st Floor Bracing



TYPICAL TOP PLATE JUNCTION DETAIL

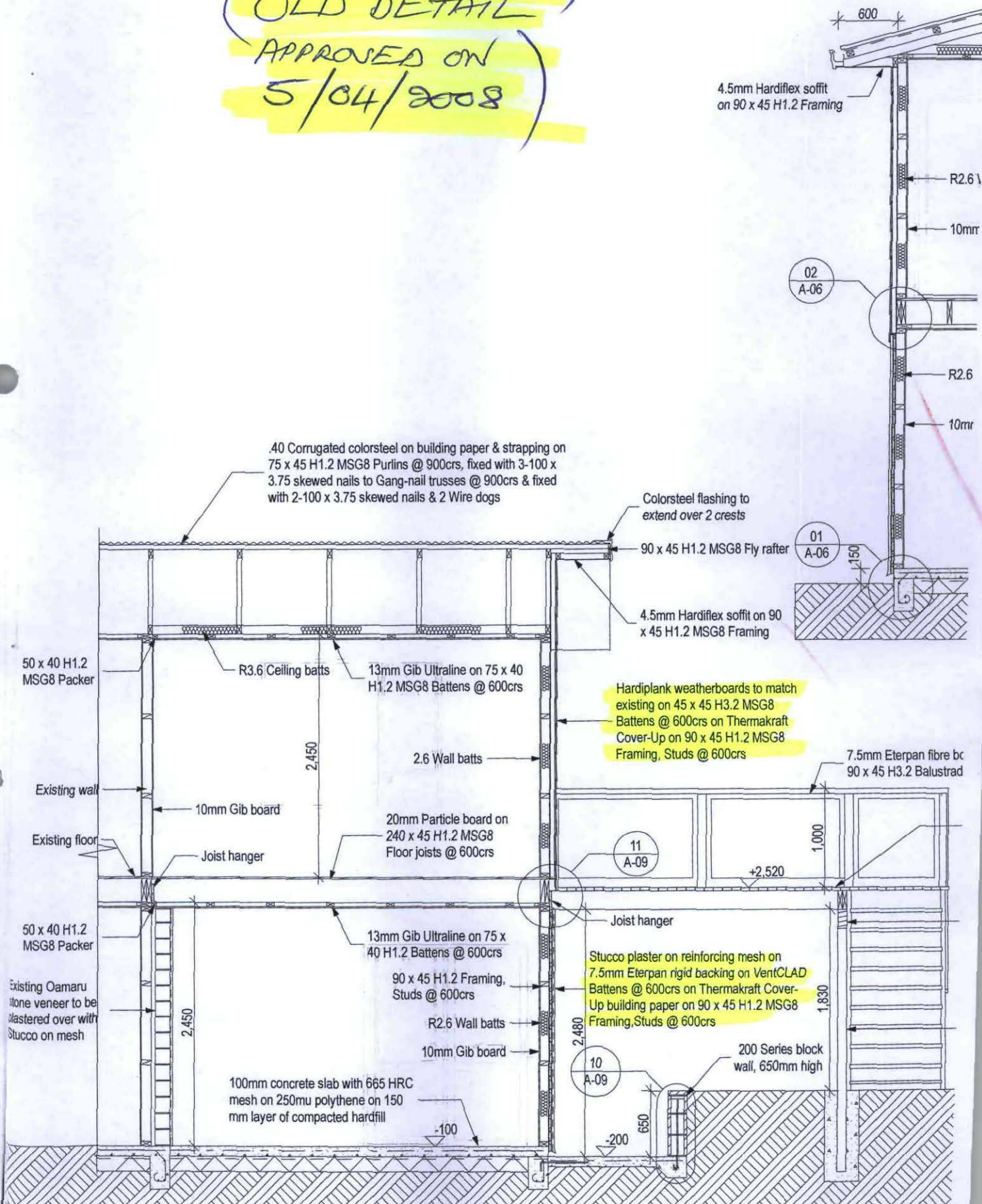
Proposed Deck Extension

RECEIVED
-5 MAR 2009
MARLBOROUGH DISTRICT COUNCIL

BC 080451

OLD DETAIL

APPROVED ON
5/04/2008



Section

1:50

B

A-04

CODE COMPLIANCE CERTIFICATE

SECTION 95, BUILDING ACT 2004



MARLBOROUGH
DISTRICT COUNCIL

PO Box 443, Blenheim 7240

Phone: (03) 520 7400

Fax: (03) 520 7496

ISO9001:2000
Document Number
BCF0041

THE BUILDING

Street address of building: **233 Weld Street Blenheim**

Legal description of land where building is located **LOT 8 DP 5493**

Building name:

Current, lawfully established, use: **Amendment To BC080451 - Change Cladding From Cavity & Batten To Direct Fix Hardiplank**

Maximum occupant number: **N/A**

Property Reference Number

383419

Building Consent Number

BC090683

THE OWNER

Paw Properties Limited
233 Weld Street
Blenheim 7201

BUILDING WORK

Building Consent No: **BC090683** for
Amendment To BC080451 - Change Cladding From Cavity & Batten To Direct Fix Hardiplank

Issued by:



Marlborough District Council - Building Consent Authority

Contact Person:

Postal Address: PO Box 443
Blenheim 7240

Phone: 520 7400

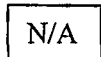
Fax: 520 7496

CODE COMPLIANCE

(1) The Marlborough District Council is satisfied, on reasonable grounds, that
[✓ tick applicable option(s)]



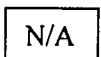
(a) the building work complies with the building consent; and



(b) the specified systems in the building are capable of performing to the performance standards set out in the building consent.

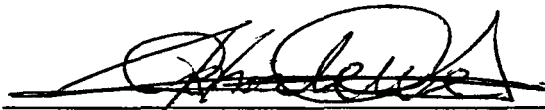
ATTACHMENT

A copy of the following document is attached to this Code Compliance Certificate
[✓ tick if applicable]



Compliance schedule

Signature



Position

BUILDING CONTROL OFFICER

On behalf of **Marlborough District Council**

Date: 16 June 2009

Planit Architectural Design Ltd
PO Box 442
Blenheim 7240