

Sharalyn Fraser *Agency*

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CODE COMPLIANCE CERTIFICATE

Section 95 Building Act 2004

Consent No: 130599



The Building		
Street address of building:	9 Angus Way, Paraparaumu	Building name:
Current, Lawfully established, use:	Vacant Land	Location of building within site/block number:
Level/unit number:		Intended life of the building if 50 years or less: Indefinite, but not less than 50 years
Legal description of land where building is located:	LOT 117 DP 442630 CT 552375	Year first constructed:
The Owner		
Name of owner:	Vinten Barry Michael John & Vinten Hayley	Street address /registered office:
Contact person:		Phone numbers:
Mailing address:	C/- Generation Homes P.O. Box 197 Waikanae	Landline:
Email address:	barryvinten@hotmail.com	Mobile: 021 02529725
Website:		Daytime:
		After hours:
		Facsimile number:
First point of contact for communications with the Kāpiti Coast District Council:		
Full Name: Generation Homes Mailing Address: PO Box 197, Waikanae Phones: 06 362653; 0275181909; 04 2935816 Email: dan@generation.co.nz		
Building Work		
Building Consent No:	130599	Issued by: Kāpiti Coast District Council
Project Description:	Erection of new single storey home with attached double garage on lifestyle block. Includes septic tanks & 2x 22,000 litre water storage tanks.	

Code Compliance

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

Russell Brook – Team Leader – Site Inspections
On behalf of Kāpiti Coast District Council

Date: 10 February 2014

BC 130599

MAKE PROVISION FOR THE STORAGE OF POTABLE WATER
MINIMUM QUANTITY 30,000 LITRES

Some secondary water treatment recommended after first flush device

BED DRAINS IN PEA METAL

A drainage inspection is required

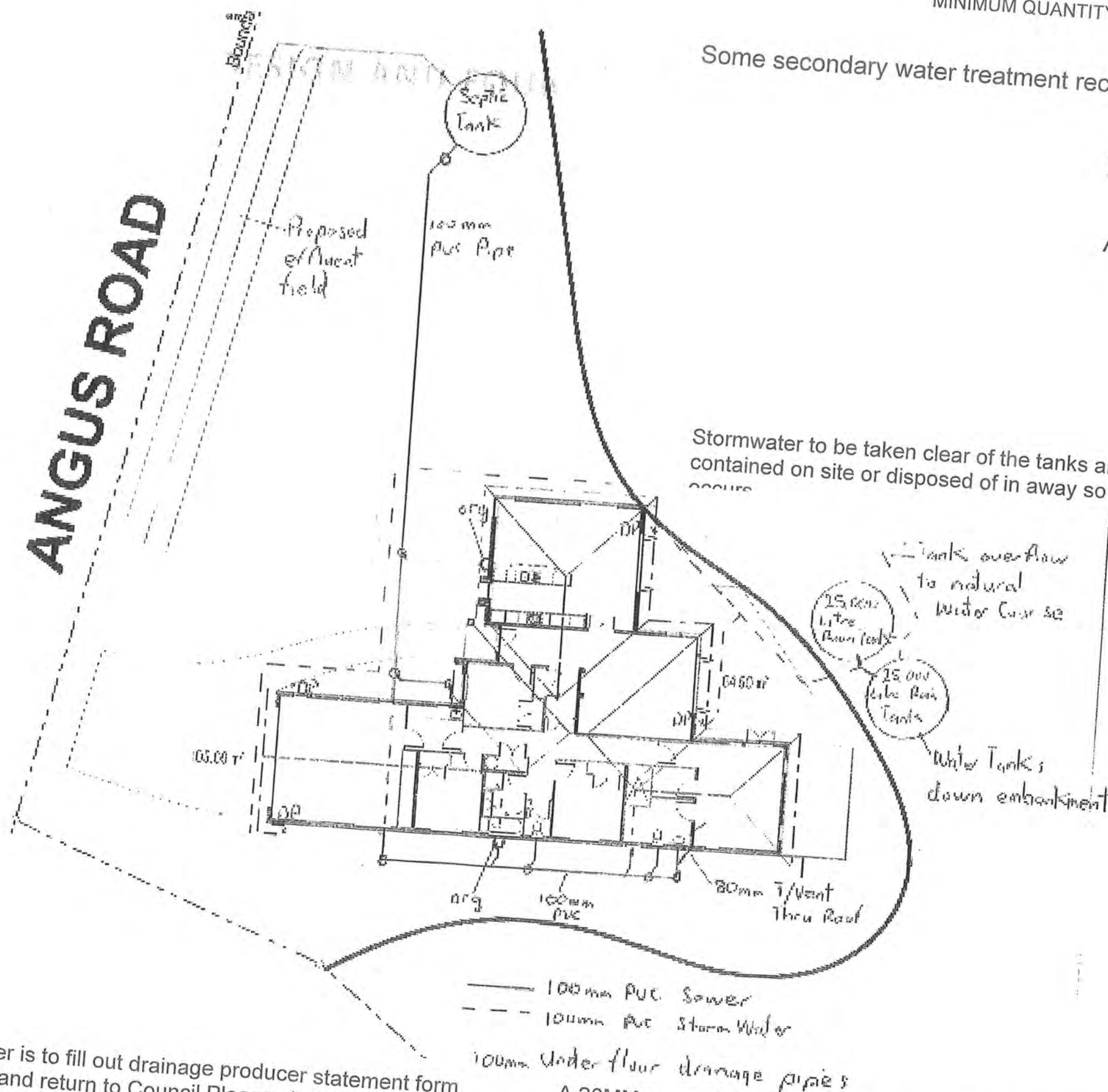
APPROVED
BY
PLUMBING
AND
DRAINAGE
Simon C
7/9/2013
00010

Stormwater to be taken clear of the tanks and the overflow be contained on site or disposed of in away so that no erosion occurs.

- 4 SEP 2013

BY:

BUILDER TO ENSURE THAT
PROPOSED FOUNDATION
HEIGHT WILL ALLOW A
SATISFACTORY DRAINAGE
CONNECTION TO THE
SEWAGE TREATMENT
SYSTEM



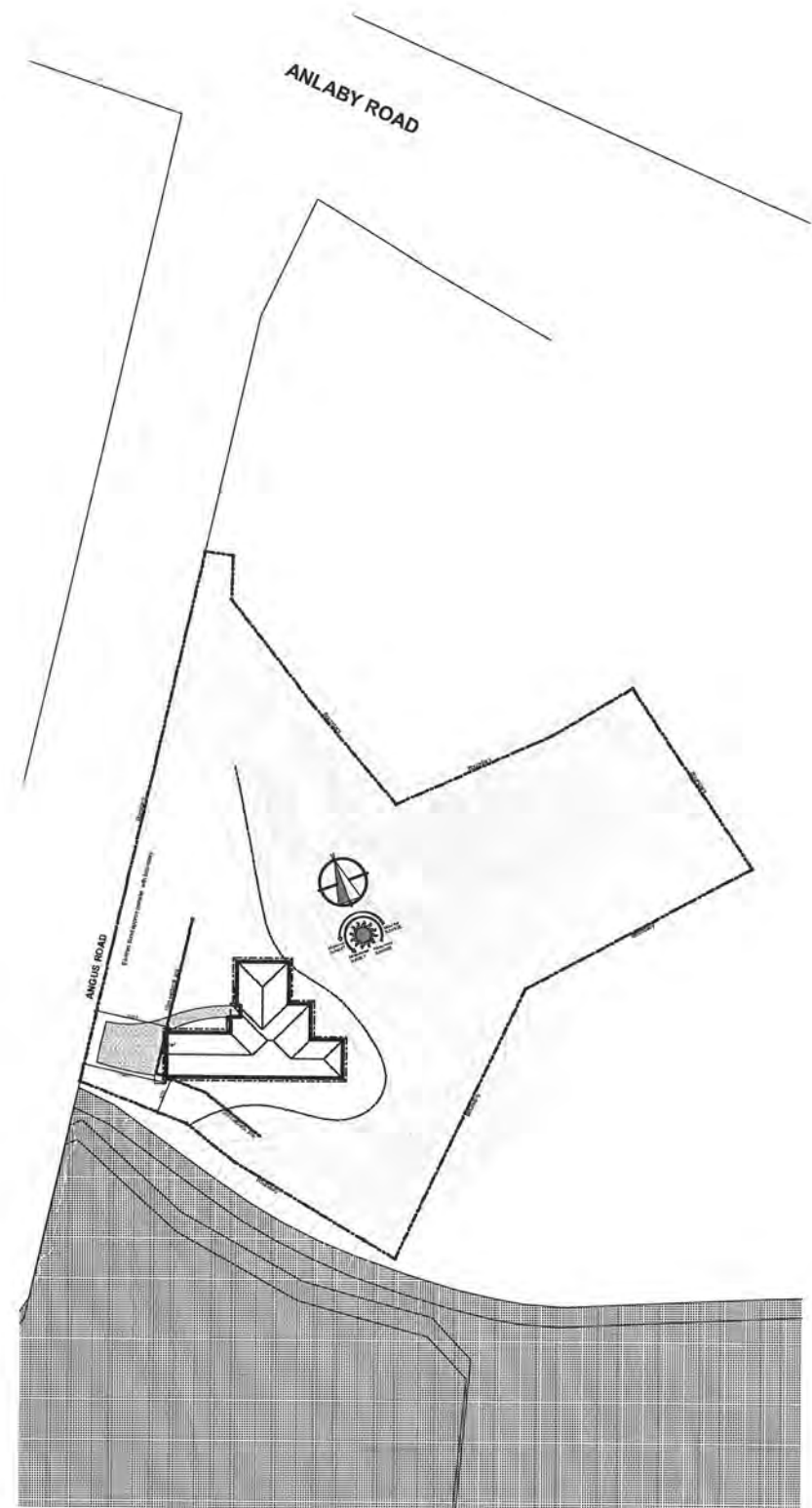
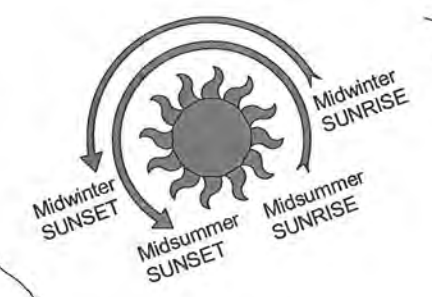
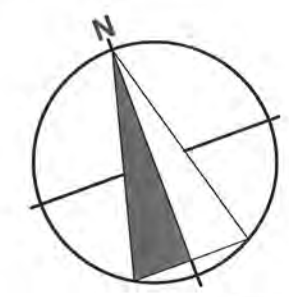
ing plumber/drain layer is to fill out drainage producer statement form
as near as laid drawing and return to Council. Please show all
including under slab drainage

A 20MM copper TPR drain from the HWC is to run from the tundish to the discharge point at low level outside of the building at low level Plastic pipe not to be used!

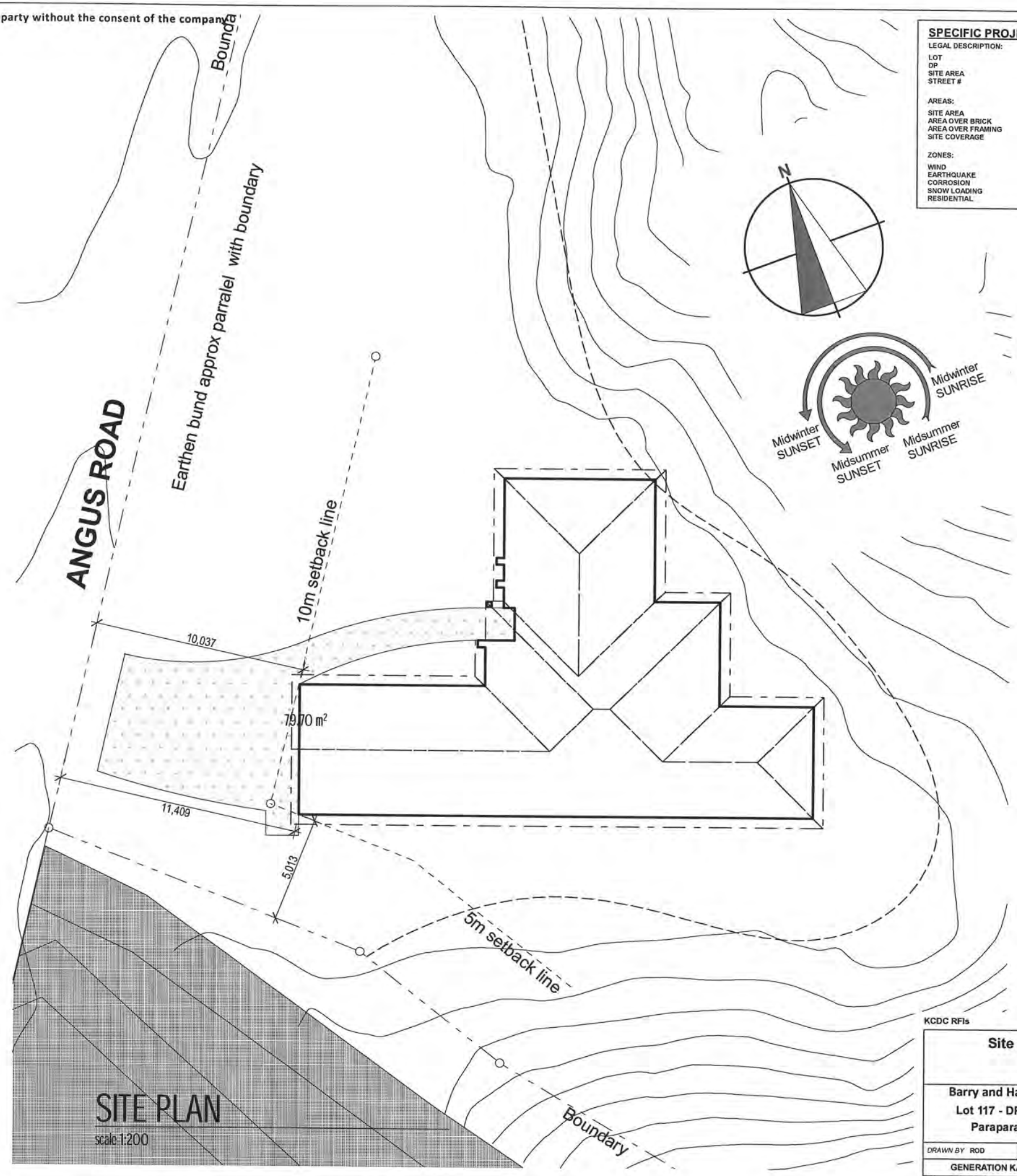
DRAINAGE PLAN		
Barry and Hayley Vinten Lot 117 - DP442630 Paraparaumu		
DRAWN BY ROD	CHECKED BY MARTY	
GENERATION KAPITI COAST NZ		
DATE AUG 13	SCALES: 1:100	EC183 - dwg 11

this plan is the property of GENERATION KAPITI COAST NZ and must not be copied nor used by any third party without the consent of the company

SPECIFIC PROJECT NOTES	
LEGAL DESCRIPTION:	
LOT	117
DP	442630
SITE AREA	4271sq m
STREET #	Paraparaumu
AREAS:	
SITE AREA	4271sq m
AREA OVER BRICK	234.56 sq m
AREA OVER FRAMING	224.269 sq m
SITE COVERAGE	5.5%
ZONES:	
WIND	Very High
EARTHQUAKE	3
CORROSION	C
SNOW LOADING	N/A
RESIDENTIAL	Rural



SITE LOCATION PLAN
scale 1:1000



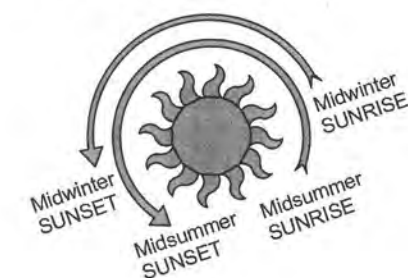
SITE PLAN
scale 1:200

KCDC RFIs		11/09/2013
Site Plan		
Barry and Hayley Vinten		
Lot 117 - DP442630		
Paraparaumu		
DRAWN BY	ROD	CHECKED BY MARTY
GENERATION KAPITI COAST NZ		
DATE	AUG 13	SCALES: 1:200, 1:1000/183 - dwg 03

this plan is the property of GENERATION KAPITI COAST NZ and must not be copied nor used by any third party without the consent of the company

SPECIFIC PROJECT NOTES

LEGAL DESCRIPTION:	
LOT	117
DP	442630
SITE AREA	4271sq m
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CORROSION	C
SNOW LOADING	N/A
RESIDENTIAL	Rural

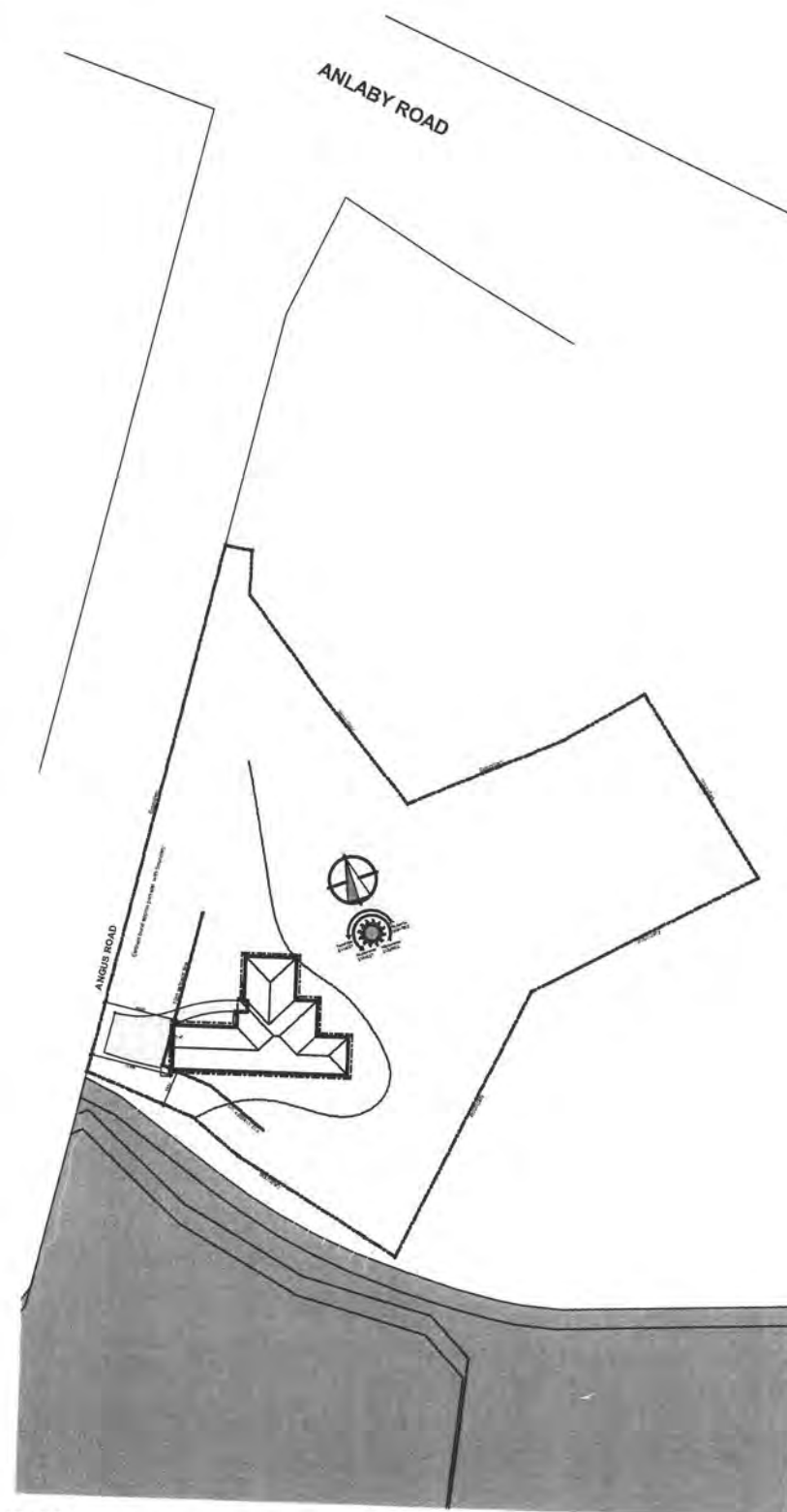


FOR TVET
- 4 SEP 2013
BY: *[Signature]*

00002

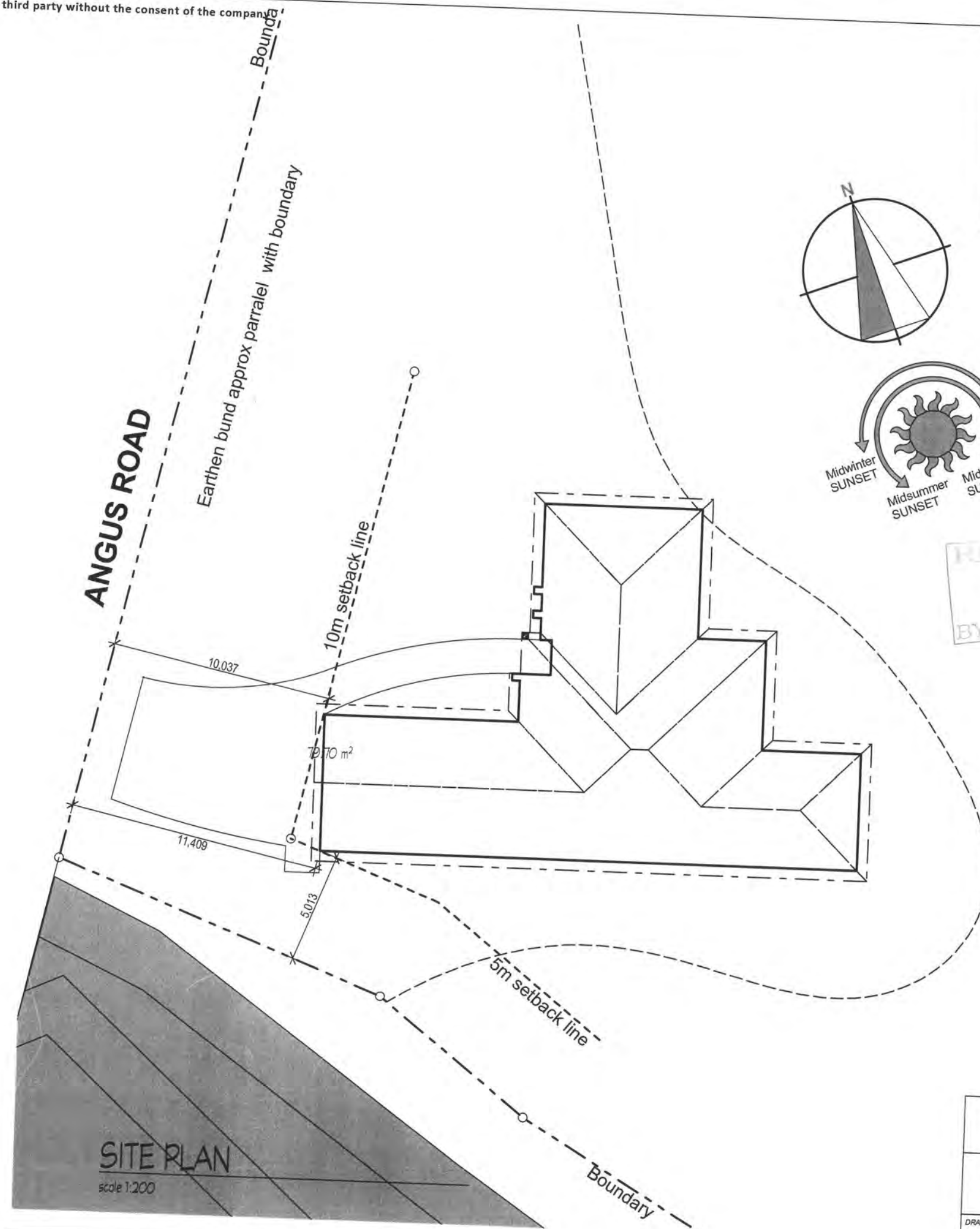
SITE LOCATION PLAN

scale 1:1000



SITE PLAN

scale 1:200



Site Plan	
Barry and Hayley Vinten	
Lot 117 - DP442630	
Paraparaumu	
DRAWN BY ROD	CHECKED BY MARTY
GENERATION KAPITI COAST NZ	
DATE AUG 13	SCALE: 1:200, 1:1000 - dwg 03

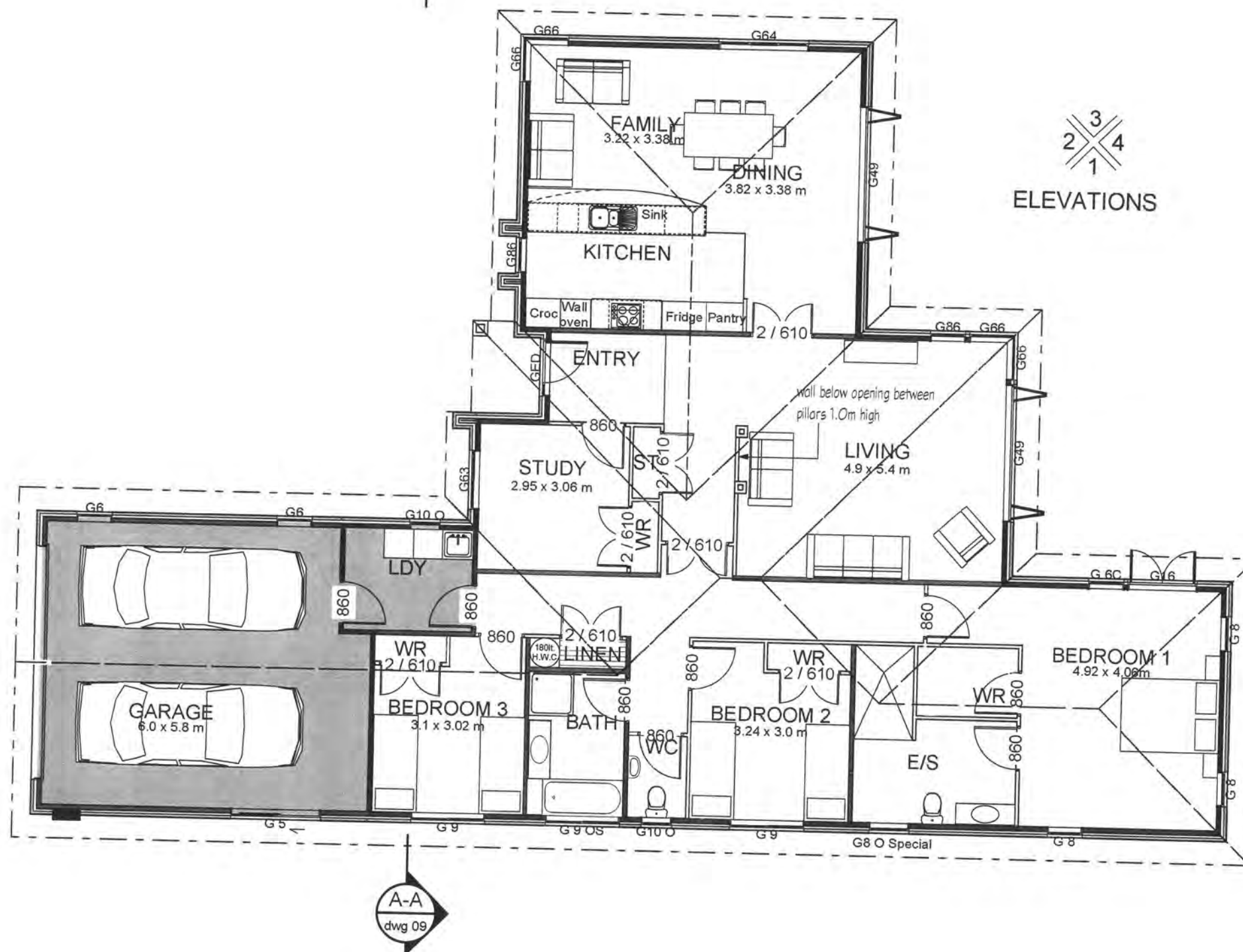
SPECIFIC PROJECT NOTES

LEGAL DESCRIPTION:	
LOT	117
DP	442630
SITE AREA	4271sq m
STREET #	Paraparaumu
AREAS:	
SITE AREA	4271sq m
AREA OVER BRICK	234.56 sq m
AREA OVER FRAMING	224.269 sq m
SITE COVERAGE	5.5%
ZONES:	
WIND	Very High
EARTHQUAKE	3
CORROSION	C
SNOW LOADING	N/A
RESIDENTIAL	Rural



3
2 X 4
1
ELEVATIONS

4 SEP 2013
BY: *[Signature]*



00000

Floor Plan

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

DRAWN BY	ROD	CHECKED BY	MARTY
GENERATION KAPITI COAST NZ			
DATE	AUG 13	SCALES:	1:100
		EC183 - dwg 04	

SCOPE OF INSPECTION SHEET

Date 21-1-14 BCA 130599 Inspection No. 13
Time 9-15
Owner Name GENERATION Documents on site ☒ YES / NO
Site Address 9 Angus Way Poroporo Project Description New Deck
Restricted Building Work ☒ YES / NO

☒ Building Plumbing

Circle appropriate Type & Inspection Other

Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall ☒ Final

Engineer Supervision Yes No n/a - Name

Notes Recheck

Diagram (if necessary)

Cully raised & sealed
Hot Water reads 50.4%

Renewal under
Supervision
JBROOK

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued

Confirmation of person on site

Name LBP No. Result: ☒ Pass ☐ Fail

Your next inspection will be.....
(Guidance notes for inspection on the rear of this sheet)

Agreed, Alan Lee Sign AL
Officer Name Craig Watson Sign CW

Information entered into data base ☐ Initial Date 1/1/14

FINAL INSPECTION SINGLE RESIDENTIAL

Date 21-1-14 BCA 130599 Inspection No. 13

Time 9-15 Documents on site YES / NO

Owner Name GENERATION Project Description New Dwg

Site Address 9 Angus Way Poroporo Restricted Building Work YES / NO

All inspections are carried out with strict reference to the building consent granted.

P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.

Please refer to the related scope sheet for definition of the inspections extent.

Applicable to all inspections

Sighted previous inspection notes	<u>Y</u>	N	NA	Conforms with approved drawings	<u>Y</u>	N	NA	Confirm Additional information/amended plan	Y	N	<u>NA</u>
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FINAL – Exterior

Sub-floor ventilation	P	F	NA	Roof fixings	P	F	NA	Spouting + Down-pipes	P	F	NA
Deck Structure	P	F	NA	Flashings – Roof	P	F	NA	Penetrations – Flashings	P	F	NA
Barriers	P	F	NA	Gully Dishes	<u>P</u>	F	NA	Storm-water + site drainage	P	F	NA
Handrails	P	F	NA	Wastes to gully	P	F	NA	Fixings – Durability	P	F	NA
Steps/Stairs	P	F	NA	Terminal vents/AAV's	P	F	NA	Cladding painted/sealed	P	F	NA
Flashings – Windows/Doors	P	F	NA	Cladding Ground Clearance	P	F	NA		P	F	NA

FINAL – Interior

Service areas – floors/walls	P	F	NA	Food storage/preparation	P	F	NA	Hot water temp <u>50.4</u>	<u>P</u>	F	NA
Stair design	P	F	NA	Ventilation	P	F	NA	Solid fuel heater	P	F	NA
Handrails	P	F	NA	Insulation + clearance	P	F	NA	Water supply tank	P	F	NA
Balustrades	P	F	NA	HWC flues	P	F	NA	Trap seals + AAV's	P	F	NA
Lightings	P	F	NA	HWC valves	P	F	NA	Cistern flushing	P	F	NA
Laundering	P	F	NA	HWC restraint	P	F	NA	WC pan connection	P	F	NA
Cooking facilities	P	F	NA	Tempering valve	P	F	NA	Septic tank	P	F	NA
Smoke detectors	P	F	NA	Glazing – Human Impact	P	F	NA	Window labels	P	F	NA

FINAL – Intertenancy/Commercial

Fire/Life systems sighted	P	F	NA	Guarantees/Warranties/Certificates/Expert Opinion	P	F	NA	Intertenancy STC	P	F	NA
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All Inspections

Road Crossing Complete	P	F	NA	Energy Certificates supplied	P	F	NA	Final Check Complete	<u>Y</u>	N	NA
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Officer Name: CRAIG WATSON Sign: CW Date: 21/1/14

SCOPE OF INSPECTION SHEET

Date 17-1-14 BCA 130599 Inspection No. 12
Time 11.00
Owner Name GENERATION Documents on site YES / NO
Project Description New Dwell
Site Address 9 Angus Way Paopao Restricted Building Work YES / NO

Building Plumbing

Circle appropriate Type & Inspection Other
Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a - Name

Notes Exterior all sealed, painted
& sealed. with good ground clearance.
Storm water to tanks, TV OK.
Interior all sealed - painted, smoke detectors fitted
Cooking & Laundry OK, HWC Restraints & Valves fitted
Window labels & Hammer Glazing safety glass, fitted
toilets flushing, clearance around down lights.
2 x 25,000L Fresh water tanks.
Electrical cert reviewed.

Diagram (if necessary)

* Septic tank design cert Req'd, + Asbuilt plan.

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued

① Gully needs raising

② Hot water temp needs to be less than 55°

Reviewed under supervision
OK

Confirmation of person on site

Name

LBP No.

Result:

Pass

Fail

Your next inspection will be Recheck
(Guidance notes for inspection on the rear of this sheet)

Agreed, Alan Be Sign OK
(Print Name)
Officer Name Craig Watson Sign CW

Information entered into data base ☐

Initial

Date 1/1

FINAL INSPECTION SINGLE RESIDENTIAL

Date 17-1-14 BCA 130599 Inspection No. 12
Time 11.00 Documents on site YES / NO
Owner Name C. Watson Project Description New Drive
Site Address 9 Angus Way, Paopao Restricted Building Work YES / NO

All inspections are carried out with strict reference to the building consent granted.

P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.

Please refer to the related scope sheet for definition of the inspections extent.

Applicable to all inspections

Sighted previous inspection notes	<u>Y</u>	N	NA	Conforms with approved drawings	<u>Y</u>	N	NA	Confirm Additional information/amended plan	Y	N	<u>NA</u>
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FINAL - Exterior

Sub-floor ventilation	P	F	<u>NA</u>	Roof fixings	P	F	NA	Spouting + Down-pipes	P	F	NA
Deck Structure	P	F	<u>NA</u>	Flashings – Roof	P	F	NA	Penetrations – Flashings	P	F	NA
Barriers	P	F	<u>NA</u>	Gully Dishes	P	<u>F</u>	NA	Storm-water + site drainage	P	F	NA
Handrails	P	F	<u>NA</u>	Wastes to gully	P	F	NA	Fixings – Durability	P	F	NA
Steps/Stairs	P	F	<u>NA</u>	Terminal vents/AAV's	P	F	NA	Cladding painted/sealed	P	F	NA
Flashings – Windows/Doors	<u>P</u>	F	NA	Cladding Ground Clearance	<u>P</u>	F	NA		P	F	NA

FINAL - Interior

Service areas – floors/walls	P	F	NA	Food storage/preparation	P	F	NA	Hot water temp	P	F	<u>NA</u>
Stair design	P	F	<u>NA</u>	Ventilation	P	F	NA	Solid fuel heater	P	F	<u>NA</u>
Handrails	P	F	<u>NA</u>	Insulation + clearance	P	F	NA	Water supply tank	P	F	NA
Balustrades	P	F	<u>NA</u>	HWC flues	P	F	NA	Trap seals + AAV's	P	F	NA
Lightings	<u>P</u>	F	NA	HWC valves	P	F	NA	Cistern flushing	P	F	NA
Laundering	<u>P</u>	F	NA	HWC restraint	P	F	NA	WC pan connection	P	F	NA
Cooking facilities	<u>P</u>	F	NA	Tempering valve	P	F	NA	Septic tank	P	F	NA
Smoke detectors	<u>P</u>	F	NA	Glazing – Human Impact	P	F	NA	Window labels	P	F	NA

FINAL - Intertency/Commercial

Fire/Life systems sighted	P	F	<u>NA</u>	Guarantees/Warranties/ Certificates/ Expert Opinion	P	F	<u>NA</u>	Intertency STC	P	F	<u>NA</u>
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All Inspections

Road Crossing Complete	P	F	<u>NA</u>	Energy Certificates supplied	P	F	NA	Final Check Complete	Y	N	
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Officer Name: Craig Watson Sign: CW Date: 17/1/14

SCOPE OF INSPECTION SHEET

Date 9/12/13 BCA 130 599 Inspection No. 11
Time 3:00 Documents on site ☒ YES ☐ NO
Owner Name Generation Project Description New Dwg
Site Address 9 Angus Way Poroporo Restricted Building Work ☒ YES ☐ NO

☒ Building ☐ Plumbing

Circle appropriate Type & Inspection

Other Wet area Membrane

Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a - Name

Notes * Bond breaker tape
* Reinforcing tape 150mm
* 2 coats Hydrathane

Diagram (if necessary)

ok to continue

Reviewed under
supervision
pbroot

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued

* Installer to give warranty for CCC

Confirmation of person on site

Name LBP No.

Result: ☒ Pass ☐ Fail

Your next inspection will be Final
(Guidance notes for inspection on the rear of this sheet)

Agreed AL-RETTEFAR Sign AL-RETTEFAR
(Print Name)

Officer Name Craig Wicks Sign CW

Information entered into data base ☐ Initial

Date 1/1/14

WEATHERTIGHTNESS / PRELINE / POSTLINE

Date 9/12/13 BCA 130 599 Inspection No. 11

Time 3:00 Documents on site YES / NO

Owner Name Generation Project Description New Deck

Site Address 9 Angus Way Porpoise Restricted Building Work YES / NO

All inspections are carried out with strict reference to the building consent granted.

P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.

Please refer to the related scope sheet for definition of the inspections extent.

Applies to all inspections

Sighted previous inspection notes	<u>Y</u>	N	NA	Conforms with approved drawings	<u>Y</u>	N	NA	Confirm Additional information/amended plan	Y	N	<u>NA</u>
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WEATHERTIGHTNESS

Cladding selection complies with BC?	P	F	NA	Roof material complies with BC?	P	F	NA	Sheets fixed to manufacturers	P	F	NA
Roof fixing complies	P	F	NA	Fixings appropriate for durability?	P	F	NA	Sheet layout	P	F	NA
Ridge/hip flashings in place	P	F	NA	Roof/wall junctions flashed	P	F	NA	Control joints where appropriate	P	F	NA
Penetrations correctly flashed	P	F	NA	Fixings appropriate for bracing elements	P	F	NA	Flashings in place	P	F	NA
Clearance provided for fascia & spouting	P	F	NA	Ground clearances achieved	P	F	NA	Clearance off deck surface	P	F	NA
Flashings/wraps in place, parapets/barriers	P	F	NA	Glazing – human impact	P	F	NA	Truss/Rafter fixings	P	F	NA

PRELINE

Max moisture Content	P	F	NA	Insulation R Value	P	F	NA	Bracing connections	P	F	NA
Ventilation to rooms	P	F	NA	Top plate connection	P	F	NA	Air seals	P	F	NA
Timber treatment	P	F	NA	Ceiling batten spacing	P	F	NA	Bottom plate fixings	P	F	NA
Lintel/beam size & fixing	P	F	NA	Stud spacing	P	F	NA		P	F	NA
Plumber Name				TPR line	P	F	NA	Waste pipe size & test	P	F	NA
Soil pipe size and test	P	F	NA	Inbuilt SAW pipes tested	P	F	NA	Floor wastes	P	F	NA
Pipes fixed/supported	P	F	NA	Vents terminated	P	F	NA	Shut off valves	P	F	NA
System: AS3500, G13, Other	P	F	NA	Pressure Test	P	F	NA	Fire wraps and collars	P	F	NA

POSTLINE

Sheet bracing	P	F	NA	Wet area substrate system	P	F	NA	Sheet fixings	P	F	NA
Penetrations sleeved	P	F	NA		P	F	NA	Fire/Acoustic separation	P	F	NA

Officer Name: Gray John Sign: CW Date: 9/13/13

SCOPE OF INSPECTION SHEET

Date 19/11/13 SR or BCA 130599 Inspection No. 10
 Time 13:00
 Owner Name Generation Documents on site YES / NO
 Project Description New Dwg
 Site Address 9 Awaia Way Paopapa

Building Plumbing

Circle appropriate Type & Inspection Other

Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a - Name

Notes * All Bracing Elements fixed as per plans Diagram (if necessary)

* Aqualine in bathrooms screwed off for tiles @ 100cbs
* All penetrations sealed.

NO ONE ON SITE

*Reviewed under supervision
P. Brook*

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued

Confirmation of person on site

Name LBP No. Result: Pass Part pass Fail

Your next inspection will be Water proof Membrane
(Guidance notes for inspection on the rear of this sheet)

Agreed, Sign
 Officer Name Greg Watson Sign GW

Information entered into data base ☐ Initial Date 1/1/14

WEATHERTIGHTNESS / PRELINE / POSTLINE

Date 19/11/13 SR or BCA 130599 Inspection No. 10

Time 13:00

Owner Name Generation Documents on site YES / NO

Site Address 9 Angus Way Paopapa Project Description New Dwg

All inspections are carried out with strict reference to the building consent granted.
P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.
Please refer to the related scope sheet for definition of the inspections extent.

Applies to all inspections

Sighted previous inspection notes	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> NA	Conforms with approved drawings	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> NA	Confirm Additional information/amended plan	<input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> NA
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WEATHERTIGHTNESS

Cladding selection complies with BC?	P	F	NA	Roof material complies with BC?	P	F	NA	Sheets fixed to manufacturers	P	F	NA
Roof fixing complies	P	F	NA	Fixings appropriate for durability?	P	F	NA	Sheet layout	P	F	NA
Ridge/hip flashings in place	P	F	NA	Roof/wall junctions flashed	P	F	NA	Control joints where appropriate	P	F	NA
Penetrations correctly flashed	P	F	NA	Fixings appropriate for bracing elements	P	F	NA	Flashings in place	P	F	NA
Clearance provided for fascia & spouting	P	F	NA	Ground clearances achieved	P	F	NA	Clearance off deck surface	P	F	NA
Flashings/wraps in place, parapets/barriers	P	F	NA	Glazing - human impact	P	F	NA	Truss/Rafter fixings	P	F	NA

PRELINE

Max moisture Content	P	F	NA	Insulation R Value	P	F	NA	Bracing connections	P	F	NA
Ventilation to rooms	P	F	NA	Top plate connection	P	F	NA	Air seals	P	F	NA
Timber treatment	P	F	NA	Ceiling batten spacing	P	F	NA	Bottom plate fixings	P	F	NA
Lintel/beam size & fixing	P	F	NA	Stud spacing	P	F	NA		P	F	NA
Plumber Name				TPR line	P	F	NA	Waste pipe size & test	P	F	NA
Soil pipe size and test	P	F	NA	Inbuilt S/W pipes tested	P	F	NA	Floor wastes	P	F	NA
Pipes fixed/supported	P	F	NA	Vents terminated	P	F	NA	Shut off valves	P	F	NA
System: AS3500, G13, Other	P	F	NA	Pressure Test	P	F	NA	Fire wraps and collars	P	F	NA

POSTLINE

Sheet bracing	<input checked="" type="radio"/> P <input type="radio"/> F <input type="radio"/> NA	Wet area substrate system	<input checked="" type="radio"/> P <input type="radio"/> F <input type="radio"/> NA	Sheet fixings	<input checked="" type="radio"/> P <input type="radio"/> F <input type="radio"/> NA
Penetrations sleeved	<input checked="" type="radio"/> P <input type="radio"/> F <input type="radio"/> NA		<input type="radio"/> P <input type="radio"/> F <input type="radio"/> NA	Fire/Acoustic separation	<input type="radio"/> P <input type="radio"/> F <input checked="" type="radio"/> NA

Officer Name: Bary Watson Officer Sign: CW Date: 19/11/13

SCOPE OF INSPECTION SHEET

Date 14/11/13 SR or BCA 130599 Inspection No. 9

Time 9.40

Owner Name Generation Home Documents on site YES NO

Site Address 9 ANGUS WAY Project Description NEW DWL

Building Plumbing

Circle appropriate Type & Inspection

Other

Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a - Name

Notes

Diagram (if necessary)

WINDOW ROADS

MOISTURE 14%

BRAILING 2 BOOBIN PLATE FIXING COMPRESSOR

WIND BATS 2.6

ROND CULINE PANEL

CUL BATT 3.6

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued

Confirmation of person on site

Name

LBP No.

Result:

Pass

Part pass

Fail

Your next inspection will be POST LINE
(Guidance notes for inspection on the rear of this sheet)

Agreed,

Officer Name

Sign

Sign

Information entered into data base

☐

Initial

Date 1/1/14

WEATHERTIGHTNESS / PRELINE / POSTLINE

Date 14/11/13 SR or BCA 130599 Inspection No. 9

Time 9.40

Owner Name Generation Home Documents on site YES / NO

Site Address 9 ANGUS WAY Project Description NEW DWG

All inspections are carried out with strict reference to the building consent granted.

P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.

Please refer to the related scope sheet for definition of the inspections extent.

Applies to all inspections

Sighted previous inspection notes	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> NA	Conforms with approved drawings	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> NA	Confirm Additional information/amended plan	<input type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> NA
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WEATHERTIGHTNESS

Cladding selection complies with BC?	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Roof material complies with BC?	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Sheets fixed to manufacturers	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Roof fixing complies	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Fixings appropriate for durability?	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Sheet layout	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Ridge/hip flashings in place	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Roof/wall junctions flashed	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Control joints where appropriate	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Penetrations correctly flashed	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Fixings appropriate for bracing elements	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Flashings in place	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Clearance provided for fascia & spouting	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Ground clearances achieved	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Clearance off deck surface	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Flashings/wraps in place, parapets/barriers	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Glazing - human impact	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Truss/Rafter fixings	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA

PRELINE

Max moisture Content <u>14</u> %	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Insulation R Value <u>2.6</u> <u>3.6</u>	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Bracing connections	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Ventilation to rooms	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Top plate connection	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Air seals	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Timber treatment	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Ceiling batten spacing	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Bottom plate fixings	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Lintel/beam size & fixing	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Stud spacing	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA		<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Plumber Name				TPR line	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Waste pipe size & test	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Soil pipe size and test	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Inbuilt S/W pipes tested	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Floor wastes	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Pipes fixed/supported	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Vents terminated	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Shut off valves	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
System: AS3500, G13, Other	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Pressure Test	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Fire wraps and collars	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA

POSTLINE

Sheet bracing	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Wet area substrate system	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Sheet fixings	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Penetrations sleeved	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA		<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Fire/Acoustic separation	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA

Officer Name: Alan Officer Sign: [Signature] Date: 14/11/13

SCOPE OF INSPECTION SHEET

Date 6/11/13 SR or BCA 130599 Inspection No. 8
Time 9.10.

Owner Name VINTEN Documents on site YES / NO

Site Address 9 Angus way Project Description new dig

Building Plumbing Circle appropriate Type & Inspection Other

Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a Name

Notes 20m main feed in with
hot water cylinder 20m + 15m
IPlex for in for air
features clipped + sealed under
test + housing.

Diagram (if necessary)

waste pipes in place

NOTE TOBANK WAS TO FOLLOW

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued

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Confirmation of person on site

Name Pumariis Ake LBP No. Result Pass Part pass Fail
Kapiti Pumariis
No one on site

Your next inspection will be.....
(Guidance notes for inspection on the rear of this sheet)

Agreed,..... (Print Name) Sign.....

Officer Name [Signature] Sign.....

Information entered into data base ☐ Initial Date 1/1/13

WEATHERTIGHTNESS / PRELINE / POSTLINE

Date 6/11/13 SR or BCA 130599 Inspection No. 8
 Time 9:00 Documents on site YES / NO
 Owner Name V. Jones Project Description new house
 Site Address 7. [unclear]

All inspections are carried out with strict reference to the building consent granted.

P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.

Please refer to the related scope sheet for definition of the inspections extent.

Applies to all inspections

Sighted previous inspection notes	Y	N	NA	Conforms with approved drawings	Y	N	NA	Confirm Additional information/amended plan	Y	N	NA
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WEATHERTIGHTNESS

Cladding selection complies with BC?	P	F	NA	Roof material complies with BC?	P	F	NA	Sheets fixed to manufacturers	P	F	NA
Roof fixing complies	P	F	NA	Fixings appropriate for durability?	P	F	NA	Sheet layout	P	F	NA
Ridge/hip flashings in place	P	F	NA	Roof/wall junctions flashed	P	F	NA	Control joints where appropriate	P	F	NA
Penetrations correctly flashed	P	F	NA	Fixings appropriate for bracing elements	P	F	NA	Flashings in place	P	F	NA
Clearance provided for fascia & spouting	P	F	NA	Ground clearances achieved	P	F	NA	Clearance off deck surface	P	F	NA
Flashings/wraps in place, parapets/barriers	P	F	NA	Glazing - human impact	P	F	NA	Truss/Rafter fixings	P	F	NA

PRELINE

Max moisture Content	P	F	NA	Insulation R Value	P	F	NA	Bracing connections	P	F	NA
Ventilation to rooms	P	F	NA	Top plate connection	P	F	NA	Air seals	P	F	NA
Timber treatment	P	F	NA	Ceiling batten spacing	P	F	NA	Bottom plate fixings	P	F	NA
Lintel/beam size & fixing	P	F	NA	Stud spacing	P	F	NA		P	F	NA
Plumber Name				TPR line	P	F	NA	Waste pipe size & test	P	F	NA
Soil pipe size and test	P	F	NA	Inbuilt S/W pipes tested	P	F	NA	Floor wastes	P	F	NA
Pipes fixed/supported	P	F	NA	Vents terminated	P	F	NA	Shut off valves	P	F	NA
System: AS3500, G13, Other	P	F	NA	Pressure Test	P	F	NA	Fire wraps and collars	P	F	NA

POSTLINE

Sheet bracing	P	F	NA	Wet area substrate system	P	F	NA	Sheet fixings	P	F	NA
Penetrations sleeved	P	F	NA		P	F	NA	Fire/Acoustic separation	P	F	NA

Officer Name: Officer Sign: [Signature] Date: 6/11/13

SCOPE OF INSPECTION SHEET

Date 6/11/13 SR or BCA 130599 Inspection No. 8

Time 9:10 Documents on site YES / NO

Owner Name Vincent Project Description new dig

Site Address 9 Angus way

Building Plumbing Circle appropriate Type & Inspection Other

Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a Name

Notes 20m main FEW in width

Diagram (if necessary)

Hot water cylinder 20m + 15m

IPlex for in for air

Fixtures capped + sealed under

TEST + HOLDING

WASTE PIPES in place

NOTE TRUNKING WAST TO FLOOR

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued

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Confirmation of person on site

Name LBP No. Result: Pass Part pass Fail

Plumbing

Hot water cylinder

No one on site

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Your next inspection will be.....
(Guidance notes for inspection on the rear of this sheet)

Agreed, (Print Name) Sign

Officer Name Matthew Sign

Information entered into data base ☐ Initial Date/...../.....

SCOPE OF INSPECTION SHEET

Date 4/11/13 ~~SR~~ or BCA 130 599 Inspection No. 7
 Time 9-30 Documents on site YES / NO
 Owner Name GENERATION Project Description New Dwg
 Site Address 9 Angus Way Paopapa Restricted Building Work YES / NO

Building Plumbing

Circle appropriate Type & Inspection

Other

Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a - Name

Notes * Rebate Moistened
 * Brick ties every 2nd Row
 @ 600 cts
 * Overhang OK
 * Wash out - weep holes
 in place.
 * 50mm cavity clean.

Diagram (if necessary)

Reviews
 Unsupervised
 5/11/13 GARGHAM

OK to continue

Photo's Taken - Nos. 4 saved / scanned? Y / N

Site instruction issued

Confirmation of person on site

Name Cord LBP No.

Result: Pass

Part pass

Fail

Your next inspection will be.....
 (Guidance notes for inspection on the rear of this sheet)

Agreed, Kohu Sweetman Sign [Signature]
 (Print Name)
 Officer Name Craig Watson Sign [Signature]

Information entered into data base ☐

Initial

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

BLOCK / BRICK / RETAINING WALL / SOLID FUEL HEATER

Date 4/11/13 SR or BCA 130 599 Inspection No. 7

Time 9.30

Owner Name GENERATION Documents on site YES / NO (YES)

Site Address 9 Angus Way Paraparaumu Project Description New Deck

All inspections are carried out with strict reference to the building consent granted.
P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.
Please refer to the related scope sheet for definition of the inspections extent.

BLOCK

Washouts	P	F	NA	Control joints	P	F	NA	Engineer Design	P	F	NA
Reinforcing	P	F	NA	Mortar Bedding	P	F	NA	Engineer Report available	P	F	NA
Starters	P	F	NA	Eng. Company:							Eng. Name:

BRICK VENEER

Min/max cavity achieved	<u>(P)</u>	F	NA	Mortar Bedding	<u>(P)</u>	F	NA	Rebate clear of debris	<u>(P)</u>	F	NA
Brick tie fixings	<u>(P)</u>	F	NA	Flashings to openings	<u>(P)</u>	F	NA	Veneer overhang	<u>(P)</u>	F	NA
Washouts	<u>(P)</u>	F	NA	Brick tie durability	<u>(P)</u>	F	NA	Brick tie spacing	<u>(P)</u>	F	NA
Weep holes	<u>(P)</u>	F	NA	Building wrap	<u>(P)</u>	F	NA	Head Lintels	P	F	<u>(NA)</u>
Mortar strength	<u>(P)</u>	F	NA	Under window vents	P	F	NA	Control Joints	<u>(P)</u>	F	NA

RETAINING WALL

Reinforcing	P	F	NA	Backfill drainage material	P	F	NA	Timber treatment	P	F	NA
Waterproof membrane	P	F	NA	Discharge point	P	F	NA	Surcharge to design assumptions	P	F	NA
Membrane protection	P	F	NA	subsoil drain	P	F	NA	Inclination angle	P	F	NA
Cleaning/Flush point	P	F	NA	Engineer design	P	F	NA	Engineer Report Available	P	F	NA
				Eng. Company:							Eng. Name:

SOLID FUEL HEATER

Inbuilt	Y / N			Free standing	Y / N			Wetback	Y / N		
Chimney interior	P	F	NA	Tempering valve (wetback)	P	F	NA	Ceiling plate	P	F	NA
Chimney exterior	P	F	NA	Flue swept	P	F	NA	Seismic fixing	P	F	NA
Flue height	P	F	NA	Flue support ceiling	P	F	NA	Flue flashing	P	F	NA
Smoke detectors fitted	P	F	NA	Roof	P	F	NA	Installer Check sheet	P	F	NA
Make:				Installer:							

Officer Sign: Craig Watson Name: CW Date: 4 / 11 / 13

SCOPE OF INSPECTION SHEET

Date 31/10/13 SR or BCA 130599 Inspection No. 6

Time 10.50

Owner Name 9 GENERATION Documents on site YES / (NO) (NO)

Site Address 1 ANGUS WAY Project Description NEW DWG

Building Plumbing

Circle appropriate Type & Inspection Other

Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a - Name

Notes Diagram (if necessary)

TRITON WRAP VALLEY BOARDS
ROBBER SEALING
ALU BAND WINDOW TAPER
WAN 2 BARS
DPC TO WINDOWS

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued

Confirmation of person on site

Name LBP No. Result: Pass Part pass Fail

Your next inspection will be 1/2 BRICAL
(Guidance notes for inspection on the rear of this sheet)

Agreed, (Print Name) Sign.

Officer Name Alan Sign.

Information entered into data base ☐ Initial Date/...../.....

PRE WRAP / PRE CLAD

Date 31/10/13 SR or BCA 130597 Inspection No. 6
Time 10:50
Owner Name GENERATION Documents on site YES / (NO)
Site Address 1 ANGUS WAY Project Description NEW DWG

All inspections are carried out with strict reference to the building consent granted.
P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.
Please refer to the related scope sheet for definition of the inspections extent.

Applies to all inspections

Sighted previous inspection notes	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> NA	Conforms with approved drawings	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> NA	Confirm Additional information/amended plan	<input type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> NA
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PRE WRAP

Cladding type identified	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Exterior sheet bracing & angle brace fixing	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Bracing requirements	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Framing moisture meets cladding requirements%	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Bottom plate connections	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Purlin fixing	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Stud spacing appropriate for cladding	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Building wrap type	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Decking substrate	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA

PRE CLAD

Building wrap type <u>TAKTON</u>	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Building wrap	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Head flashings	<input type="radio"/> P	<input type="radio"/> F	<input checked="" type="radio"/> NA
Flexible sealing tape type <u>APU BOND</u>	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Flexible sealing tape	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Sill flashings	<input type="radio"/> P	<input type="radio"/> F	<input checked="" type="radio"/> NA
Deck membrane type	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Deck membrane fixed in accordance with Spec	<input type="radio"/> P	<input type="radio"/> F	<input checked="" type="radio"/> NA	Back flashings	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Saddle flashings	<input type="radio"/> P	<input type="radio"/> F	<input checked="" type="radio"/> NA	Internal/external corner flashings	<input type="radio"/> P	<input type="radio"/> F	<input checked="" type="radio"/> NA	Jamb flashings	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Capillary clearances	<input type="radio"/> P	<input type="radio"/> F	<input checked="" type="radio"/> NA	Flashing of penetrations	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Ground/deck cladding clearance	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA

CAVITY SYSTEM

Additional strapping to wrap	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Batten timber treatment	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Cavity closers	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Battens in place	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Battens structural fixing	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Cavity spacers	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Cavity spacers size & slope	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Reinforcing fixed in place (stucco)	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Proprietary self spacing mesh	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Mesh spacers (stucco)	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Proprietary control joints (stucco)	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Rigid backing type (stucco)	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Fixings (galvanized or stainless) (stucco)	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Waterproofing to slab-edge	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA		<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA

Name: Alan Officer Sign: [Signature] Date: 31/10/13

SCOPE OF INSPECTION SHEET

Date 15/10/13 SR or BCA 130599 Inspection No. S
Time 1.30
Owner Name Vinton Documents on site ☒ YES ☐ NO
Site Address 9 Angus way Project Description new Bay

Building Plumbing

Circle appropriate Type & Inspection

Other

Site Found Piles PreSlab Subfloor Drainage ☒ PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No ☒ n/a - Name

Notes SIGHTED TRUSS PLAN AN EXISTING
+ INTERNAL FIXINGS IN PLACE.
STUDS AT LOOM CORNERS STU TO
TOP PLATE CONNECTED. UNTIL STRAP FIXINGS
TOP + BOTTOM COMPLETED
PLY BRACING SHEETS IN AND NAIL FIXED
AS REQUIRED. BOTTOM PLATE FIXINGS
COMPLETED USING HAND BRACKS FOR
BRACING BOTTOM PLATE NAIL PLATES
IN.
ROOF STRAPPING BRACK IN PLACE.

Diagram (if necessary)

Photo's Taken - Nos. saved / scanned? Y / N

~~Site instruction issued~~ - Still to check mulsion to brick ROOF
- TO REPAIR STUD AND BOTTOM IN GABLE EXTERIOR
WALL WHERE SERVICE COME THROUGH
AND VANDY BOARDS.

Confirmation of person on site

Name B. Burman LBP No. 106355

Result:

Pass

Part pass

Fail

Your next inspection will be Recess and ABOVE.
(Guidance notes for inspection on the rear of this sheet)

Agreed, Brett Flanagan Sign B. Flanagan
(Print Name)

Officer Name James Sign [Signature]

Information entered into data base ☐

Initial

Date / /

PRE WRAP / PRE CLAD

Date 15/10/13 SR or BCA 150-99 Inspection No. 5

Time 1.30 Documents on site YES / NO

Owner Name Vision Project Description new build

Site Address 9 Angus way

All inspections are carried out with strict reference to the building consent granted.
P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.
Please refer to the related scope sheet for definition of the inspections extent.

Applies to all inspections

Sighted previous inspection notes	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> NA	Conforms with approved drawings	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> NA	Confirm Additional information/amended plan	<input type="radio"/> Y	<input type="radio"/> N	<input checked="" type="radio"/> NA
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PRE WRAP

Cladding type identified	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Exterior sheet bracing & angle brace fixing	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Bracing requirements	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Framing moisture meets cladding requirements%	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Bottom plate connections	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	<i>Done By Roofer</i> Purlin fixing	<input type="radio"/> P	<input type="radio"/> F	<input checked="" type="radio"/> NA
Stud spacing appropriate for cladding	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Building wrap type	<input checked="" type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Decking substrate	<input type="radio"/> P	<input type="radio"/> F	<input checked="" type="radio"/> NA

PRE CLAD

Building wrap type				Building wrap	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Head flashings	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Flexible sealing tape type				Flexible sealing tape	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Sill flashings	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Deck membrane type				Deck membrane fixed in accordance with Spec	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Back flashings	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Saddle flashings	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Internal/external corner flashings	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Jamb flashings	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Capillary clearances	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Flashing of penetrations	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Ground/deck cladding clearance	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA

CAVITY SYSTEM

Additional strapping to wrap	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Batten timber treatment	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Cavity closers	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Battens in place	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Battens structural fixing	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Cavity spacers	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Cavity spacers size & slope	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Reinforcing fixed in place (stucco)	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Proprietary self spacing mesh	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Mesh spacers (stucco)	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Proprietary control joints (stucco)	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Rigid backing type (stucco)	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA
Fixings (galvanized or stainless) (stucco)	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA	Waterproofing to slab-edge	<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA		<input type="radio"/> P	<input type="radio"/> F	<input type="radio"/> NA

Name: Officer Sign: [Signature] Date: 15/10/13

SCOPE OF INSPECTION SHEET

Date 8/10/13 SR or BCA 130599 Inspection No. 4
Time 11:10 Documents on site YES/NO
Owner Name Vision Project Description new dy
Site Address 9 Angus way

Building Plumbing
Circle appropriate Type & Inspection Other
Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a - Name

Notes 100mm PVC WASTE + SOIL PIPE
CONNECTED TO AN FIXTURES AND
SEPTIC TANK
GOOD FROM UNDER TEST + HOLDING
INSPECTION POINTS IN PLACE
GULLY TRAP IN PLACE
EXTERNAL TIE WITH VENT IN PLACE
STORMWATER 100mm GOING TO
TANK OVER FLOW TO CONTAINERS
ON SITE

Diagram (if necessary)

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued AS BUILT DRAWING REQUIRED

Confirmation of person on site

Name Vision LBP No. 12724
Result Pass Part pass Fail

Your next inspection will be Proposed
(Guidance notes for inspection on the rear of this sheet)

Agreed, Marks Scate Sign
(Print Name)

Officer Name Sign

Information entered into data base Initial Date

SITE / FOUNDATIONS / PILES / PRE SLAB / SUBFLOOR / DRAINAGE

Date 8/10/13 SR or BCA 130599 Inspection No.

Time 11:10 Documents on site YES / NO

Owner Name Project Description New Deck

Site Address 1 Arguing Way

All inspections are carried out with strict reference to the building consent granted.

P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.

Please refer to the related scope sheet for definition of the inspections extent.

SITE

Conforms with approved drawings	Y	N	NA	Checked driveway	Y	N	NA	Engineer supervision required	Y	N	NA
Scope of Resource consent granted?	Y	N	NA	Checked position off relevant boundaries and datum height	Y	N	NA		Y	N	NA
Expert Opinion (Producer statement) required	Y	N	NA	Name of Surveyor				Name of Engineer			
				Company				Company			

FOUNDATIONS

PILES

SUBFLOOR

Footing Depth	P	F	NA	Pile size	P	F	NA	Pile/Bearer/Joist Fixings	P	F	NA
Good bearing (NZS 3604)	P	F	NA	Pile layout is to plan	P	F	NA	Notching, Holes, etc	P	F	NA
Reinforcing	P	F	NA	Special piles - point load	P	F	NA	Solid Blocking	P	F	NA
Siting	P	F	NA	Timber Treatment	P	F	NA	Joists	P	F	NA
Sub-floor vents	P	F	NA	Hole depth	P	F	NA	Beams/Bearers	P	F	NA

PRE SLAB

Rebate for brick veneer	P	F	NA	Sand blinding	P	F	NA	Steel reinforcing	P	F	NA
Ground clearance	P	F	NA	Slab thickenings	P	F	NA	Bar chairs	P	F	NA
Concrete Cover	P	F	NA	Vapour barrier (DPC)	P	F	NA	DPC penetrations taped	P	F	NA
Driveway s/w control	P	F	NA	Bottom plate fixings	P	F	NA	Minimum Floor Level	P	F	NA
Secondary flow path	P	F	NA	TPR line	P	F	NA	Wastes and drains - size / fall	P	F	NA
Pipe material	P	F	NA	Plumbing layout	P	F	NA	Test - Water / Air	P	F	NA
Pipe protection	P	F	NA	Pipes supported	P	F	NA	Visual leak check	P	F	NA

DRAINAGE

Pipe diameter	<u>P</u>	F	NA	Connections/Angles	<u>P</u>	F	NA	Holding water	<u>P</u>	F	NA
Bedding material	<u>P</u>	F	NA	Branch length	<u>P</u>	F	NA	Terminal vent	<u>P</u>	F	NA
Gully trap(s)	<u>P</u>	F	NA	Direction/Fall	<u>P</u>	F	NA	LBP/Registration No:			

Officer Name: Sign: Date: 8/10/13

SCOPE OF INSPECTION SHEET

Date 7/10/13 SR or BCA 130599 Inspection No. 3
 Time 12:50 Documents on site ☒ YES ☐ NO
 Owner Name Vinton Project Description new dig
 Site Address 9 Angus way

Building ☒ Plumbing

Circle appropriate Type & Inspection Other

Site Found Piles PreSlab Subfloor ☒ Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No ☒ n/a Name

Notes Inspection on Septic Tank
+ Disposal Field Drains
HYDAS SYSTEM in place
As per Design.

Diagram (if necessary)

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued As Built Drawing of Field Drains

Confirmation of person on site

Name Andrew LBP No. 22988
1 22988

Result: ☒ Pass ☐ Part pass ☐ Fail

Your next inspection will be
 (Guidance notes for inspection on the rear of this sheet)

Agreed, Alan Gardner Sign AG
 (Print Name)
 Officer Name Caroline Ma Sign [Signature]

Information entered into data base ☐ Initial Date/...../.....

SITE / FOUNDATIONS / PILES / PRE SLAB / SUBFLOOR / DRAINAGE

Date 4/10/13 SR or BCA 10/10/13 Inspection No. 10/10/13

Time 12:30 Documents on site YES / NO

Owner Name V. Jones Project Description New Deck

Site Address 7 Myra Ave

All inspections are carried out with strict reference to the building consent granted.

P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.

Please refer to the related scope sheet for definition of the inspections extent.

SITE

Conforms with approved drawings	Y	N	NA	Checked driveway	Y	N	NA	Engineer supervision required	Y	N	NA
Scope of Resource consent granted?	Y	N	NA	Checked position off relevant boundaries and datum height	Y	N	NA		Y	N	NA
Expert Opinion (Producer statement) required	Y	N	NA	Name of Surveyor				Name of Engineer			
				Company				Company			

FOUNDATIONS

PILES

SUBFLOOR

Footing Depth	P	F	NA	Pile size	P	F	NA	Pile/Bearer/Joist Fixings	P	F	NA
Good bearing (NZS 3604)	P	F	NA	Pile layout is to plan	P	F	NA	Notching, Holes, etc	P	F	NA
Reinforcing	P	F	NA	Special piles - point load	P	F	NA	Solid Blocking	P	F	NA
Siting	P	F	NA	Timber Treatment	P	F	NA	Joists	P	F	NA
Sub-floor vents	P	F	NA	Hole depth	P	F	NA	Beams/Bearers	P	F	NA

PRE SLAB

Rebate for brick veneer	P	F	NA	Sand blinding	P	F	NA	Steel reinforcing	P	F	NA
Ground clearance	P	F	NA	Slab thickenings	P	F	NA	Bar chairs	P	F	NA
Concrete Cover	P	F	NA	Vapour barrier (DPC)	P	F	NA	DPC penetrations taped	P	F	NA
Driveway s/w control	P	F	NA	Bottom plate fixings	P	F	NA	Minimum Floor Level	P	F	NA
Secondary flow path	P	F	NA	TPR line	P	F	NA	Wastes and drains - size / fall	P	F	NA
Pipe material	P	F	NA	Plumbing layout	P	F	NA	Test - Water / Air	P	F	NA
Pipe protection	P	F	NA	Pipes supported	P	F	NA	Visual leak check	P	F	NA

DRAINAGE

Pipe diameter	P	F	NA	Connections/Angles	P	F	NA	Holding water	P	F	NA
Bedding material	P	F	NA	Branch length	P	F	NA	Terminal vent	P	F	NA
Gully trap(s)	P	F	NA	Direction/Fall	P	F	NA	LBP/Registration No:			

Officer Name: [Signature] Sign: [Signature] Date: 4/10/13

SCOPE OF INSPECTION SHEET

Date 1/10/13 SR or BCA 130599 Inspection No. 2

Time 3.16 Documents on site YES/NO

Owner Name GENERATION HOMES Project Description NEW DWG

Site Address 9 AUGUS WAY

Building Plumbing

Circle appropriate Type & Inspection Other

Site Found Piles PreSlab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a - Name H WELLS

Notes Diagram (if necessary)

PILES WITH HD 12mm

VAPOUR BARRIER / SE 500 ALL TILES

200mm PORN BAR CHAINS

FOOTINGS 4 x HD 12mm

GARAGE 2 x HD 16mm RIBS

STP RIB 1 x HD 12mm

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued

ALL PASSED BY ENGINEER ON SITE
PS4 ARCCC

Confirmation of person on site

Name DAMIAN GREGG

LBP No. BP106236

Result:

Pass

Part pass

Fail

Your next inspection will be
(Guidance notes for inspection on the rear of this sheet)

Agreed, Damian Gregg Sign [Signature]

Officer Name Alan Sign [Signature]

Information entered into data base ☐ Initial Date

SITE / FOUNDATIONS / PILES / PRE SLAB / SUBFLOOR / DRAINAGE

Date: 1/10/13 SR or BCA: 130577 Inspection No.: 2

Time: 3:16 Documents on site YES / NO: YES

Owner Name: CONCRETE HOME Project Description: NEW DWG

Site Address: 9 AGENE WAY

All inspections are carried out with strict reference to the building consent granted.

P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.

Please refer to the related scope sheet for definition of the inspections extent.

SITE

Conforms with approved drawings	<u>Y</u>	N	NA	Checked driveway	Y	N	NA	Engineer supervision required	<u>Y</u>	N	NA
Scope of Resource consent granted?	Y	N	NA	Checked position off relevant boundaries and datum height	<u>Y</u>	N	NA		Y	N	NA
Expert Opinion (Producer statement) required	Y	N	NA	Name of Surveyor				Name of Engineer			
				Company				Company	<u>H W & S</u>		

FOUNDATIONS

PILES

SUBFLOOR

Footing Depth	<u>P</u>	F	NA	Pile size	P	F	NA	Pile/Bearer/Joist Fixings	P	F	NA
Good bearing (NZS 3604)	P	F	NA	Pile layout is to plan	<u>P</u>	F	NA	Notching, Holes, etc	<u>P</u>	F	NA
Reinforcing	<u>P</u>	F	NA	Special piles - point load	P	F	NA	Solid Blocking	P	F	NA
Siting	<u>P</u>	F	NA	Timber Treatment	P	F	NA	Joists	P	F	NA
Sub-floor vents	P	F	NA	Hole depth	P	F	NA	Beams/Bearers	P	F	NA

PRE SLAB

Rebate for brick veneer	<u>P</u>	F	NA	Sand blinding	P	F	<u>NA</u>	Steel reinforcing	<u>P</u>	F	NA
Ground clearance	<u>P</u>	F	NA	Slab thickenings	<u>P</u>	F	NA	Bar chairs	<u>P</u>	F	NA
Concrete Cover	<u>P</u>	F	NA	Vapour barrier (DPC)	<u>P</u>	F	NA	DPC penetrations taped	<u>P</u>	F	NA
Driveway s/w control	P	F	NA	Bottom plate fixings	P	F	<u>NA</u>	Minimum Floor Level	<u>P</u>	F	NA
Secondary flow path	P	F	NA	TPR line	P	F	NA	Wastes and drains - size / fall	P	F	NA
Pipe material	P	F	NA	Plumbing layout	P	F	NA	Test - Water / Air	P	F	NA
Pipe protection	P	F	NA	Pipes supported	P	F	NA	Visual leak check	P	F	NA

DRAINAGE

Pipe diameter	P	F	NA	Connections/Angles	P	F	NA	Holding water	P	F	NA
Bedding material	P	F	NA	Branch length	P	F	NA	Terminal vent	P	F	NA
Gully trap(s)	P	F	NA	Direction/Fall	P	F	NA	LBP/Registration No:			

Officer Name: alan Sign: [Signature] Date: 1/10/13

SCOPE OF INSPECTION SHEET

Date 30/9/13 SR or BCA 130599 Inspection No. 1
 Time 1.15 Documents on site YES / NO
 Owner Name Vinton Project Description New Bldg
 Site Address 9 Angus Road

Building Plumbing

Circle appropriate Type & Inspection Other

Site Found Piles Pre Slab Subfloor Drainage PreWrap PreClad Weathertight PreLine PostLine Block Brick Ret.Wall Final

Engineer Supervision Yes No n/a - Name

Notes As fixtures 100m A/c

Diagram (if necessary)

Good for water testing

Laundry 100m

Kitchen 100m

20m copper T.P.R. line in back

Pipe Protection as per L.B.M.A.

Design

Photo's Taken - Nos. saved / scanned? Y / N

Site instruction issued As Built Drawing required

NOTE NOW TESTED
+ Housing 3-30pm

Due to no person on site couldn't test
APES TO TEST PIPES

Confirmation of person on site

Result:

Pass

Part pass

Fail

Name P. M. B. C. LBP No. 12724

Your next inspection will be Site Found + Slab
(Guidance notes for inspection on the rear of this sheet)

Agreed, Mark Scate Sign [Signature]
(Print Name)

Officer Name [Signature] Sign [Signature]

Information entered into data base ☐ Initial Date 1/1/13

SITE / FOUNDATIONS / PILES / PRE SLAB / SUBFLOOR / DRAINAGE

Date 20/9/13 SR or BCA 10-99 Inspection No. 1

Time 1.15 Documents on site YES / NO

Owner Name V. Jones Project Description New Deck

Site Address 1. Inver Road

All inspections are carried out with strict reference to the building consent granted.

P = Pass F = Fail NA = Non-Applicable

Inspection decisions are based on the extent of work inspected at the time of inspection.

Please refer to the related scope sheet for definition of the inspections extent.

SITE

Conforms with approved drawings	Y	N	NA	Checked driveway	Y	N	NA	Engineer supervision required	Y	N	NA
Scope of Resource consent granted?	Y	N	NA	Checked position off relevant boundaries and datum height	Y	N	NA		Y	N	NA
Expert Opinion (Producer statement) required	Y	N	NA	Name of Surveyor				Name of Engineer			
				Company				Company			

FOUNDATIONS

PILES

SUBFLOOR

Footing Depth	P	F	NA	Pile size	P	F	NA	Pile/Bearer/Joist Fixings	P	F	NA
Good bearing (NZS 3604)	P	F	NA	Pile layout is to plan	P	F	NA	Notching, Holes, etc	P	F	NA
Reinforcing	P	F	NA	Special piles - point load	P	F	NA	Solid Blocking	P	F	NA
Siting	P	F	NA	Timber Treatment	P	F	NA	Joists	P	F	NA
Sub-floor vents	P	F	NA	Hole depth	P	F	NA	Beams/Bearers	P	F	NA

PRE SLAB

Rebate for brick veneer	P	F	NA	Sand blinding	P	F	NA	Steel reinforcing	P	F	NA
Ground clearance	P	F	NA	Slab thickenings	P	F	NA	Bar chairs	P	F	NA
Concrete Cover	P	F	NA	Vapour barrier (DPC)	P	F	NA	DPC penetrations taped	P	F	NA
Driveway s/w control	P	F	NA	Bottom plate fixings	P	F	NA	Minimum Floor Level	P	F	NA
Secondary flow path	P	F	NA	TPR line	P	F	NA	Wastes and drains - size / fall	P	F	NA
Pipe material	P	F	NA	Plumbing layout	P	F	NA	Test - Water / Air	P	F	NA
Pipe protection	P	F	NA	Pipes supported	P	F	NA	Visual leak check	P	F	NA

DRAINAGE

Pipe diameter	P	F	NA	Connections/Angles	P	F	NA	Holding water	P	F	NA
Bedding material	P	F	NA	Branch length	P	F	NA	Terminal vent	P	F	NA
Gully trap(s)	P	F	NA	Direction/Fall	P	F	NA	LBP/Registration No:			

Officer Name: [Signature] Date: 20/9/13

SCOPE OF INSPECTION

Inspections are made in conjunction with, and with the cooperation of, the owner/owner's agent to ensure that the building work complies with the provisions of the Building Act and NZ Building Code. The inspection is general in nature and involves an audit of the following aspects:

Engineer – Civil/Structural/Fire/Geotechnical: An engineer has been engaged to carry out inspections on behalf of the owner. Please ensure those inspections are carried out. A Certificate of Expert Opinion is required to be supplied to Council.

Site: A surveyor's report, or visible boundary markers provided, so that the set out of the project can be clearly identified.

Foundation: When all formwork has been completed, footings have been excavated and reinforcement is in place.

Piles: When all holes are excavated prior to installation.

Pre-slab plumbing (concrete slab): When all plumbing and drainage pipes have been installed, prior to backfilling.

Pre-slab building (concrete slab): When DPM has been placed with all laps and penetrations sealed, reinforcing in place and in position with chairs as appropriate.

Sub-floor (timber suspended floor): When all sub-floor connections, joists and required blocking, and any suspended plumbing pipe work have been completed, but before any flooring or base boards have been fitted. Relocated dwellings require a sub-floor inspection prior to the base boards being fitted.

Drainage: When all drainage works is completed and is under test, before backfilling occurs. As laid drainage plan is required at time of inspection.

Pre-wrap: When all roof and wall framing is complete, including any exterior sheet bracing, but before building wrap has been installed.

Pre-clad: When building wrap and window and door flexible flashing tape has been installed, cavity battens (cavity systems), cavity closers and all flashing systems are in place, but before joinery has been installed.

Weathertightness: When exterior cladding has been installed, flashings in place, air seals fitted to openings, but before any coating system have been applied.

Pre-line (plumbing): When all internal plumbing is complete and plumbing pipe work is under test pressure.

Pre-line (building): When the exterior of the building is weather tight, all structural components (including bracing) have been completed and wall insulation is in place.

Wet area membranes, decks, roofs and shower area: Pre application of wet area membrane, when all outlets and flashings have been installed, ready for membrane installation.
Post application of wet area membrane.

Post-line: When all interior linings have been installed, but before skirting, Scotia or plastering stopping. Installation details of screws check of wall bracing element.

Block: When all masonry block work including block foundations for slab floors, is completed, reinforcing in place and washout openings in place.

Brick Veneer: When veneer is at half height and all flashings are in place.

Retaining wall: Pre application of waterproof membrane system.

Post application of waterproof membrane system.

Protection installed for membrane system and installation of perforated drainage system before back filling.

Final: Final inspections are carried out at the completion of the project and may include entire project, plumbing, drainage and storm water. The Code Compliance Certificate is issued if the building work complies with the approved building consent.

Free Standing Fireplace: Final inspection required only.

In Built Fireplace: Inspection required before installation and after installation.

PRIVACY STATEMENT

1. The information contained on the Building Inspection Report Sheet is held by the Kapiti Coast District Council, whose address is Private Bag 601, Paraparaumu.
2. The information is available for public inspection as part of the Building Record of the property concerned.
3. You have the right under the Privacy Act 1993 to obtain access to, and to request correction of any personal information held by Council concerning you.

Council has a Privacy Officer. If you have any concerns regarding privacy issues please telephone (04) 296 4700

Site Inspection Report - New BC Applications

BC Application number: 130599 Lot 117 DP 442630

Site Address: 9 Angus Way Paraparaumu

Building Project: New Dwellings

Check NCS status is currently "To Site Inspection"

Item to be checked	Decision	Record any relevant information	Action required
Contours match application?	Yes / No		
Datum point identified?	Yes / No		
Boundaries identified?	Yes / No	1 Peg & Many Pins on fence posts on South Elevation	
Check ground conditions?	Yes / No	Firm Ground 100mm on Rod test	
Check f/path, kerb & channel, grass berm, note existence/damage.	Yes / No		
Vehicle entrance crossing installed (describe condition)	Yes / No		
Photos taken? (Save & link to NCS)	Yes / No		
Dogs or other hazards on property?	Yes / No		
Is there a requirement for further foundation investigation e.g Engineers design	Yes / No		Referred to Approvals T/L Yes / No

Record all decisions in accordance with KCDC Policy 007. Circle Yes or No in each case.

Note: if there is a requirement for further information or some areas which do not appear to comply refer file to Team Leader Consent Approvals for action.

Inspecting Officer:

Name: Craig Watson Signature: CW Date: 5/9/13

Unless further foundation information required, change NCS status to "To Plumbing & Drainage" and place file in P&D shelf area for Approvals. If further information is required, then Status change to "To Senior Building Inspector" and hand to Team Leader Consent Approvals for action.

Department	For Referral	Comments	Approving Officer / Date
Site Inspection	✓	Refer to Form 241 for completion of site inspection & sign off this form when completed.	Craig W 5/9/13
Resource Consents (refer PIM Sheet)	✓		
Plumbing and Drainage	✓		8/7/9/2013
Building	✓		12/9/13
Fire Design			
Compliance Schedule			
Environmental Health			
Other.....			
NOTES:			

APPLICATION WORKFLOW COVERSHEET (Blue Folder)



Building Consent No.	BC 130599
Building Project	dwelling
Location (Site Address)	9 Angus Way Paopao
Building Category	Circle appropriate category 1 2 3 4

Note # A signature confirms that the application contains sufficient information to enable compliance with the building code to be assessed

	Name and signature	Date
# Note: Checked, date stamped and initialled by TO/BCO. Select and circle appropriate category above & identify allocation to appropriate technical groups and if required to go to "site inspection" BC1	G. Ma	4/9/13
Payment taken and receipted (details entered inside this cover sheet) by CSO BC1		
Data entered and invoiced by CSO BC1	To Craft	4/9/13
Pages numbered by CSO BC1	G. Ma	4/9/13
BC Application and documentation scanned, checked & status update by CSO BC1	To Craft	4/9/13
BC Application signed over to BC BC1	To Craft	4/9/13
Application reviewed by Technical Officers who sign off at back of this form BC2 & BC5	Simon Copp Jaime Shulock	7/9/2013 10/9/13
Once Technical review complete, passed to CS for Plan Production and Invoicing BC3	Jaime Shulock	12/9/13
CSO checks data entry input, including required inspections BC3		
BC, plans and other appropriate paperwork produced by CSO BC3	Barbara	18/9/13
BC, Approved plans and appropriate paperwork sent to applicant or agent with receipt by CSO BC3		
Inspection envelope prepared by CSO with endorsed plans and other appropriate paperwork and filed to cabinet. BC3		

CONSENT DATA INPUT REQUIREMENTS

✓ Required Inspections	✓ Required Inspections	✓ Required Inspections	✓ Required Inspections
✓ Foundation/Piles	✓ Drainage	✓ Pre-lining (Plumbing)	✓ Final (Dwelling)
Block	✓ Pre-Wrap	✓ Wet areas - membrane	Retaining Wall
✓ Pre-Slab (Plumbing)	✓ Pre-Clad	✓ Post Lining	
✓ Pre-Slab (Building)	✓ Weathertightness	✓ Brick Veneer	
Sub-Floor	✓ Pre-lining (Building)	Retaining Wall	

Office use ✓	Office use ✓
32 ✓ Lapse and cancellation after 12mths of consent	23A Second hand wood burner certified
2 ✓ Engineer design specific components	25 Contractor to leave site clean and clear
3 Foundations to solid bearing of 200mm	30 To comply with Food Hygiene Regulations 1974
4 ✓ NZS3604 as acceptable solution in terms of NZ Building Code	31 As in CCZ, all fixings need to be stainless steel
6 Not approved as Habitable Room	33 Approval only given for relocation purposes
9 ✓ Note and comply with all endorsements on approved plans	34 If cladding to have pre-finished colour coating, to be appropriate for coastal conditions
10 ✓ Names and Registration of plumber and drain-layer required	38 Window sashes on upper levels less than 760mm above floor to have stays fixed
11 Concealed soil and TV pipes and gas flues only allowed in ducts or minimum framed	39 Construction of playground to comply with NZS5828
12 ✓ Hot & Cold water pipes tested to 1500kPa	40 Fencing, gates, doors directly leading to swimming pool to comply with Pool Act 1987
13 Roof stormwater to be connected to existing	43 Textured systems should be applied by licensed, trained applicators – supply warranty
15 Owner/builder to ensure prop foundation height will allow satisfactory connection	44 ✓ Exterior cladding system to be completed and inspected prior to internal lining
21 ✓ Minimum FFL to comply with NZS3604	
23 Installation of solid fuel appliance (wood burner) comply and secured	

Act Ref ✓	Standard Consent Conditions	Comment
37	Resource Consent has not yet been obtained	
72	Land subject to natural hazard	
75-80	Construction on two or more allotments	

Non-Standard Addenda

Yes/No ☐ Compliance Schedule

Yes/No ☐ Office - please see additional consent data comments on next page

<p>✓ This project contains elements specifically designed by an engineer. The Owner/Builder is required to ensure the Engineer inspects the work and provides KCDC with written evidence of the inspections.</p>	<p>✓ The attached fire report constitutes an essential part of this Building Consent and must be read and fully implemented on site - refer to the fire report for full details that are not necessarily indicated on the architectural drawings. It is the owner's & contractor's responsibility to ensure the full fire precautions, systems & construction are incorporated in the building.</p>	<p>✓ Ground bearing must be reconfirmed on site following excavation but prior to placing of concrete and reinforcing. Soft ground may be encountered requiring engineer specific design.</p>
<p>Other...</p>		

OGST 51-860-608

Received with thanks by 50/01
KAPITI COAST DISTRICT COUNCIL

4-09-13 14:07 Receipt no.451613

COPY *COPY* *COPY*
DR BC130599 3,765.03-
Generation Homes: PO Box 197:Waikanae:
CQ A
PP GH (KAPITI COAST) 3,765.03

FEES		APPLICATION FEE \$3765.03	
Building Fee	\$2510.00	RECEIPT NO	DATE.....
Sewer Connection	\$.....	INVOICE NO	DATE 4/9/13
Water Connection	\$.....	61767	
Vehicle Crossing	\$.....	RECEIPT NO	DATE 4/9/13
Damage Deposit	\$.....	451613	
Code Compliance Administration	\$.....	FEES PAID BY:	
Building Research Levy	\$403.00	SH (Kapiti Coast) Ltd.	
Development Levy	\$.....	BUILDING CONSENT	DATE ISSUED
DBH Levy	\$810.03	NUMBER	4/9/13
Compliance Schedule	\$.....		
Digital Storage Fee	\$42.00	AUTHORISATION FOR REFUND OF DEPOSITS	
Certificate of Title Charge	\$.....	Deposit held =	\$.....
Photocopying	\$.....	Cost to Repair Damage Caused During Construction =	\$.....
SUBTOTAL	\$.....	Total Balance to be Refunded	
Less Fee Paid	\$.....	Authority Number:	
TOTAL	\$.....	Authorised:	DATE:
GST INCLUDED	\$3765.03		

Generation Homes
PO Box 197
Waikanae

18 September 2013

Dear Building Consent Applicant / Building Owner

Approval of Building Consent: 130599

Location: 9 Angus Way, Paraparaumu
Legal Description: LOT 117 DP 442630 CT 552375
Description: Erection of new single storey home with attached double garage on lifestyle block. Includes septic tanks & 2x 22,000 litre water storage tanks.

I am pleased to inform you that the above building consent application has been approved. The building consent documents have been issued and are enclosed.

Before starting any work please read ALL the building consent documents carefully and in full so that you as the owner understand the conditions under which the consent has been issued.

As the owner you are also responsible for the following:

- ensuring that building work starts within 12 months of the approval of the building consent and that work progresses at a reasonable pace.
- ensuring that all required inspections are completed and that a Code Compliance Certificate is obtained once the work has been completed – please be aware that before a Code Compliance Certificate is issued, the building work must comply with the Building Act 2004 and the Building Code as at the date of Consent.
- that no work with noisy equipment is to be carried out before 7.30 a.m. or after 6 p.m. Monday to Saturday. During the week there may be workers on site from 6.30 a.m. quietly preparing for work. Work with noisy equipment is not permitted on Sundays and public holidays.
- ensuring that no damage occurs to public property, for example footpaths or retaining structures. Should damage occur you will be required to pay for any repairs.
- ensuring that if you wish to make any changes to the approved building consent, then an amendment to the building consent will need to be lodged with us.

If you have any questions regarding your building consent or your responsibilities, please contact Kapiti Coast District Council on (04) 296 4700.

Building Consent
130599
Section 51, Building Act 2004

The building

Street address of building: 9 Angus Way, Paraparaumu
Legal description of land where building is located: LOT 117 DP 442630 CT 552375
Valuation number: 1515007857
Building name:
Location of building within site/ block number:
Level/unit number:

The owner

Name of owner: Barry & Hayley Vinten
Contact person:
Mailing address: 6B Cedar Drive, Paraparaumu 5032
Street address/registered office:
Email address: barryvinten@hotmail.com
Website:
Phone numbers:
Landline: *Mobile:* 021 02529725
After hours: *Fax number:*
First point of contact for communications with the council/building consent authority:
Full Name: Generation Homes
Mailing Address: PO Box 197, Waikanae
Phones:: 06 362653: 0275181909: 04 2935816
Email: dan@generation.co.nz

Building work

The following building work is authorised by this building consent:
Erection of new single storey home with attached double garage on lifestyle block. Includes septic tanks & 2x 22,000 litre water storage tanks.
Dwelling

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130599
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Erection of new single storey home with attached double garage on lifestyle block. Includes septic tanks & 2x 22,000 litre water storage tanks.

Dwelling

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

Build conditions

Compliance schedule


A compliance schedule is not required for the building.

Attachments

Copies of the following documents are attached to this building consent:

- Building Consent Addendum
- List of required inspections
- Plans and specifications
- Certificate attached to PIM.


Signature


Position

On behalf of: KAPITI COAST DISTRICT COUNCIL

Date: 12/09/13

Addenda to Application

Application

Generation Homes PO Box 197 Waikanae	No.	130599
--	-----	--------

Project

Description	New (& prebuilt) House, Unit, Bach, Crib, Town House etc. Being Stage 1 of an intended 1 Stages Erection of new single storey home with attached double garage on lifestyle block. Includes septic tanks & 2x 22,000
Intended Life	Indefinite, but not less than 50 years
Intended Use	Dwelling
Estimated Value	\$403,000
Location	9 Angus Way, Paraparaumu
Legal Description	LOT 117 DP 442630 CT 552375
Valuation No.	1515007857

Builder:	Brett Flannagan PO Box 16421 : 0276180835
Designer:	E-Cad PO Box 652, Palmerston North : 021 2845674
Plumber:	Kapiti Plumbing - Mark Scaife PO Box 612, Paraparaumu : 021 565546
Contractor:	Deke Consulting - Malcolm Thomson : 029 9767889 / 04 9767889
Contractor:	Generation Homes - Todd c/- 95 Waterstone Ave, Paraparaumu : 027 7025141

General Requirements

- a) The Building Inspector is to be given 24 hours' notice before carrying out the following inspections:
1. Foundations
 2. Pre-slab
 3. Pre-slab
 4. Drainage
 5. Pre Wrap
 6. Pre Clad
 7. Weathertightness
 8. Preline
 9. Preline
 10. Wet Area - pre Application
 11. Wet Area - post application
 12. Postline
 13. Brick Veneer

14. Final Inspection
- b) To arrange for any of the above required inspections by Building Control Team, please contact the Call Centre on (04) 296 4700 between the hours of 8am and 5pm.

I have read the foregoing addenda to application, and the Owner/Builder/Authorised Person hereby agrees to comply with them.

**OWNER/BUILDER/
AUTHORISED PERSON**

Date:

1. LAPSE AND CANCELLATION OF BUILDING CONSENT. A building consent shall lapse and be of no effect if the building work concerned has not been commenced within 12 calendar months after the date of issue. Or within such further period as the territorial authority allows.
2. The inspection of all specific design components of the building is the responsibility of the Design Engineer who is also required to supply a written report to Council.
3. NZS3604 is an Acceptable Solution in terms of the New Zealand Building Code and is a recommended reference document for timber framed buildings.
4. Note and comply with endorsements on approved plans.
5. Names and registration numbers of plumber and drainlayer are required before work commences.
6. Both hot and cold water pipes are to be tested to 1500 KPA pressure.
7. Minimum heights of finished concrete slab-on-ground floors above adjoining finished ground level to comply with the current NZS3604.
8. Exterior cladding system to be previously completed and inspected by Council's Inspector prior to any subsequent prelining inspection/approval being granted for the fixing of internal linings.
9. This project contains elements specifically designed by an engineer. The Owner/Builder is required to ensure the Engineer inspects the work and provides KCDC with written evidence of the inspections.
10. All work to be in accordance with RM100103 & Section 221 Consent Notice.

I have read the foregoing addenda to application, and the Owner/Builder/Authorised Person hereby agrees to comply with them.

**OWNER/BUILDER/
AUTHORISED PERSON**

Date: _____

Custom Design

RBW

Sheet Index

Layout ID	Layout Name
dwg 03	Site Plan
dwg 04	Floor Plan
dwg 05	Elevations
dwg 06	DOOR & WINDOW SCHEDULE
dwg 07	FOUNDATION PLAN
dwg 08	WALL SETOUT PLAN
dwg 09	CROSS SECTION AND NOTES
dwg 10	ROOF PLAN
dwg 11	DRAINAGE PLAN
dwg 12	BRACING PLAN
dwg 13	BRACING CALCS
dwg 14	ELECTRICAL PLAN
dwg 15	WATERPROOFING DETAILS
dwg 16	RIBRAFT/FLOOR STANDARD DETAILS 1
dwg 17	RIBRAFT/FLOOR STANDARD DETAILS 2
dwg 18	FIRTH MANORSTONE STANDARD DETAILS
dwg 19	METROTILE ROOFING DETAILS 1
dwg 20	METROTILE ROOFING DETAILS 2
dwg 21	Linea Details

PROPOSED NEW RESIDENCE FOR

Barry and Hayley Vinten

Lot 117, 6 Angus Rd, Nikau Views - Kapiti Coast



00001



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85 Lombard Street, P.O. Box 652, Palmerston North P. 06 353 0217 F. 06 353 0218

Job no: EC183



- 4 SEP 2013

00013

BY:

BRACING CALCULATIONS				ALONG										ACROSS										TABLE: 1							
Location of Storey	Single	Floor Load	2kPa	Bracing Line			Bracing Elements Provided					Wind	Earthquake			Bracing Line			Bracing Elements Provided					Wind	Earthquake						
Floor Height to Apex	5.0 m	Roof Weight	Light	Line	Min BUs	Min BUs	Brace	Brace	Brace	Brace	Brace	Rating	BUs	Rating	BUs	Line	Min BUs	Min BUs	Brace	Brace	Brace	Brace	Brace	Rating	BUs	Rating	BUs				
Roof Height Above Eaves	3.0 m	Cladding Weights:		Label	W	E	No.	Type	Length	Angle	Height	BUs/m	Achieved	BUs/m	Achieved	Label	W	E	No.	Type	Length	Angle	Height	BUs/m	Achieved	BUs/m	Achieved				
Roof Pitch	0 - 25 °	- Subfloor	Concrete Floor	1A	129	155	A1	EP1	3.2	0.0	2.5	130	405.5	130	405.5	1M	262	262	M1	EP1	1.2	0.0	2.5	130	152.1	130	152.1				
Roof Style	Hip	- Wall Cladding	Heavy				A2	EP1	1.2	0.0	2.5	130	152.1	130	152.1				M2	EP1	1.2	0.0	2.5	130	152.1	130	152.1				
Building Length (BL)	17.2 m						A3	EP1	0.6	0.0	2.5	130	76.2	130	76.2	1N	168	194	N2	GS1(10)	3.6	0.0	2.4	70	249.9	55	196.4				
Building Width (BW)	16.6 m	Room in Roof Space	No				A4	GS1(10)	0.4	0.0	2.4	60	25.7	55	23.6	1O	168	194	O2	GS1(10)	0.7	0.0	2.4	60	41.7	55	38.2				
Wind Zone	Very High	Soil Class	E - Very Soft	1B	129	155	B1	GS1(10)	0.7	0.0	2.4	60	40.8	55	37.4				O3	GS1(10)	3.6	0.0	2.4	70	249.9	55	196.4				
W along	78.0 BUs/m	Gross Plan Area (GPA)	172.4/m ²				B2	GS1(10)	1.7	0.0	2.4	70	117.5	55	92.3				O4	EP1	0.6	0.0	2.5	130	76.0	130	76.0				
W across	78.0 BUs/m	Earthquake Zone	3				B4	GS1(10)	2.6	0.0	2.4	70	180.5	55	141.8				O5	EP1	0.6	0.0	2.5	130	76.0	130	76.0				
W along x BW	1,294.8 BUs	EQ	9.0 BUs/m ²	1C	129	155	C1	EP1	1.2	0.0	2.5	130	152.1	130	152.1				O6	GS1(10)	3.6	0.0	2.4	70	249.9	55	196.4				
W across x BL	1,341.6 BUs	EQ x GPA	1,551.1 BUs				C2	EP1	1.2	0.0	2.5	130	152.1	130	152.1				O7	GS1(10)	3.6	0.0	2.4	70	249.9	55	196.4				
Calculations based on NZS 3604:2011							C3	GS1(10)	2.0	0.0	2.4	70	138.8	55	109.1	1P	262	262	P1	EP1	1.2	0.0	2.5	130	152.1	130	152.1				
				1D	152	155	D1	EP1	1.2	0.0	2.5	130	152.1	130	152.1				P2	EP1	1.2	0.0	2.5	130	152.1	130	152.1				
							D2	GS1(10)	1.1	0.0	2.4	60	67.8	55	62.2				P3	EP1	1.2	0.0	2.5	130	152.1	130	152.1				
				1E	129	155	E1	EP1	1.2	0.0	2.5	130	152.1	130	152.1																
							E2	EP1	0.6	0.0	2.5	130	76.2	130	76.2																
Totals Achieved												W	1,889.4	E	1,784.6	Totals Achieved												W	1,953.8	E	1,736.1
Totals Required												W	1,294.8	E	1,551.1	Totals Required												W	1,341.6	E	1,551.1

BRACING CALCULATIONS				ALONG										ACROSS										TABLE: 2							
Location of Storey	Single	Floor Load	2kPa	Bracing Line			Bracing Elements Provided					Wind		Earthquake		Bracing Line			Bracing Elements Provided					Wind		Earthquake					
Floor Height to Apex	5.0 m	Roof Weight	Light	Line	Min BUs	Min BUs	Brace No.	Brace Type	Brace Length	Brace Angle	Brace Height	Rating BUs/m	BUs Achieved	Rating BUs/m	BUs Achieved	Line Label	Min BUs W	Min BUs E	Brace No.	Brace Type	Brace Length	Brace Angle	Brace Height	Rating BUs/m	BUs Achieved	Rating BUs/m	BUs Achieved				
Roof Height Above Eaves	2.0 m	Cladding Weights:																													
Roof Pitch	0 - 25 °	- Subfloor	Concrete Floor	2A	133	133	A1	EP1	1.2	0.0	2.5	130	152.1	130	152.1	2M	123	123	M1	BLP	0.6	0.0	2.5	135	79.0	135	79.0				
Roof Style	Gable	- Wall Cladding	Heavy				A2	EP1	1.8	0.0	2.5	130	228.1	130	228.1				M2	BLP	0.6	0.0	2.5	135	79.0	135	79.0				
Building Length (BL)	9.3 m			2B	133	133	B1	EP1	1.2	0.0	2.5	130	152.1	130	152.1	2N	101	100	N1	BLG	1.0	0.0	2.4	145	143.8	135	133.9				
Building Width (BW)	7.2 m	Room in Roof Space	No				B2	EP1	1.2	0.0	2.5	130	152.1	130	152.1				N2	GS1(10)	3.6	0.0	2.4	70	249.9	55	196.4				
Wind Zone	Very High	Soil Class	E - Very Soft													2O	101	100	O1	GS2(10)	0.6	0.0	2.4	75	46.1	70	43.0				
W along	71.5 BUs/m	Gross Plan Area (GPA)	52.8 m²																O2	BLG	1.1	0.0	2.4	145	158.2	135	147.3				
W across	65.0 BUs/m	Earthquake Zone	3																												
W along x BW	514.8 BUs	EQ	9.0 BUs/m²																												
W across x BL	604.5 BUs	EQ x GPA	475.2 BUs																												
Calculations based on NZS 3604:2011				Totals Achieved										W	684.3	E	684.3	Totals Achieved										W	755.9	E	678.5
				Totals Required										W	514.8	E	475.2	Totals Required										W	604.5	E	475.2

BRACING CALCS

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

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Metro Tile pressed metal le roofing over 45 x 45 SG8 purlins at c/c to suite le profile

Austral 70mm brick over 60mm cavity

connuous colorsteelspoung / fascia system

double glazed aluminium framed windows and exterior doors as scheduled with selected powdercoated finish

Elevation 1

scale 1:100

Metro Tile pressed metal le roofing over 45 x 45 SG8 purlins at c/c to suite le profile

310 sq brick column

double glazed aluminium framed windows and exterior doors as scheduled with selected powdercoated finish

James Hardie Linea weather board fixed to framing over 20mm cavity

connuous colorsteel spoung / fascia system

Austral 70mm brick over 60mm cavity

- 4 SEP 2013

BY:

BUILDING ENVELOPE RISK MATRIX

All Elevations worst case

Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Low	0
Eaves width	Very high risk	5
Envelope complexity	Low risk	0
Deck design	Low	0
Total Risk Score:		6

Elevation 2

scale 1:100

Metro Tile pressed metal le roofing over 45 x 45 SG8 purlins at c/c to suite le profile

double glazed aluminium framed windows and exterior doors as scheduled with selected powdercoated finish

Austral 70mm brick over 60mm cavity

connuous colorsteelspoung / fascia system

Austral 70mm brick over 60mm cavity

double glazed aluminium framed windows and exterior doors as scheduled with selected powdercoated finish

Elevation 3

scale 1:100

Metro Tile pressed metal le roofing over 45 x 45 SG8 purlins at c/c to suite le profile

Austral 70mm brick over 60mm cavity

connuous colorsteelspoung / fascia system

double glazed aluminium framed windows and exterior doors as scheduled with selected powdercoated finish

Elevation 4

scale 1:100

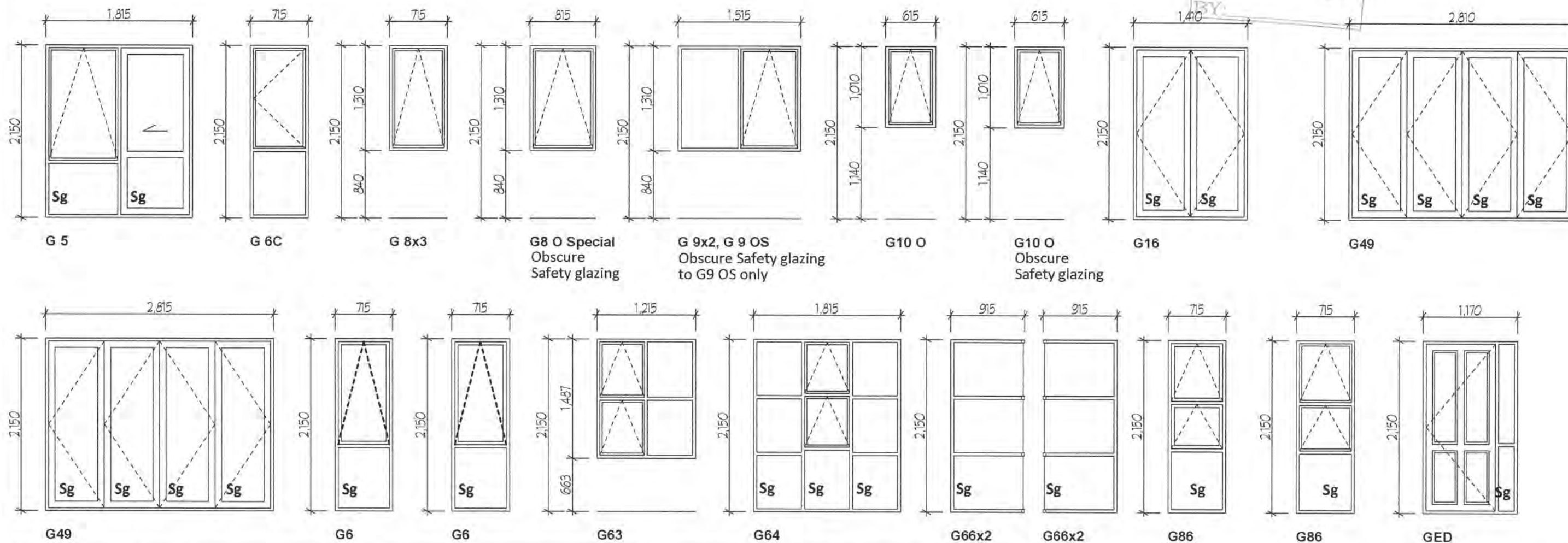
Elevations

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

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GROUND FLOOR VENTILATION

Room name	Floor Area	Openable area	% ratio	Complies
Bedroom 1	22.3	5.87	26.3	NZBC G4/AS1
Bedroom 2	10.71	0.86	8.0	NZBC G4/AS1
Bedroom 3	10.26	0.86	8.4	NZBC G4/AS1
Study	9.15	0.777	8.5	NZBC G4/AS1
Ensuite	8.94	0.5	5.6	NZBC G4/AS1
Bathroom	5.78	0.86	14.9	NZBC G4/AS1
WC	2.01	0.5	24.9	NZBC G4/AS1
Living /Entry	37.48	8.313	22.2	NZBC G4/AS1
Kitchen/Dining/Family	39.28	7.248	18.5	NZBC G4/AS1

note floor to openable window ratio of no less than 5% NZBC G4 AS1 Natural ventilation

GROUND FLOOR NATURAL LIGHT

Room name	Floor Area	Glazed area	% ratio	Complies
Bedroom 1	22.3	6.37	28.6	NZBC G7/AS1
Bedroom 2	10.71	1.77	16.5	NZBC G7/AS1
Bedroom 3	10.26	1.77	17.3	NZBC G7/AS1
Study	9.15	1.137	12.4	NZBC G7/AS1
Ensuite	8.94	0.912	10.2	NZBC G7/AS1
Bathroom	5.78	1.77	30.6	NZBC G7/AS1
WC	2.01	0.5	24.9	NZBC G7/AS1
Living /Entry	37.48	11.2	29.9	NZBC G7/AS1
Kitchen/Dining/Family	39.28	14.33	36.5	NZBC G7/AS1

note floor to glazed window ratio of no less than 10% NZBC G7 AS1 Natural Light

NZBC H1/AS1 COMPLIANCE - SCHEDULE METHOD

WALL FACE	WALL AREA	GLAZING AREA	% GLAZING
North Wall (Elv 3)	46.14 m ²	14.59 m ²	31.71 %
East Wall (Elv 4)	39.39 m ²	15.93 m ²	40.84 %
West Wall (Elv 2)	39.39 m ²	7.82 m ²	20.05 %
South Wall (Elv 1)	44.44 m ²	8.07 m ²	18.34 %
Total	123.22 m²	31.82 m²	25.86 %

Note: - Total Glazing area < 30 % Hence use of Schedule Method
- Excludes Garage walls and glazing

SCHEDULE METHOD NZS4218 "NON SOLID CONSTRUCTION"

	NZS4218 R-Values	R-Values Provided	Compliance
Roof	R 3.3	R 3.6	NZBC H1/AS1
Wall	R 2.0	R 2.6	NZBC H1/AS1
Floor	R 1.3	R 2.41	NZBC H1/AS1
Glazing	R 0.26	R 0.26	NZBC H1/AS1
Skylights	N/A	N/A	N/A

DOOR & WINDOW NOTES:

- All glazing excluding garage to be double glazed
- All joinery polyester powder coated
- All glazing to comply with NZS4223:1985 pt 1 & 2 and Pt 3:1993
- All glazing to Ensuite to be selected obscure panel
- O - denotes window as drawn but with obscure glazing
- Sg - denotes window as drawn but with safety glazing
- Osg - denotes window as drawn but with Obscure safety glazing

PLEASE NOTE:

ALL MEASUREMENTS REFER TO THE TIMBER FRAME TRIMMED OPENING SIZE

CONFIRM ALL SIZES ON SITE

DOOR & WINDOW SCHEDULE

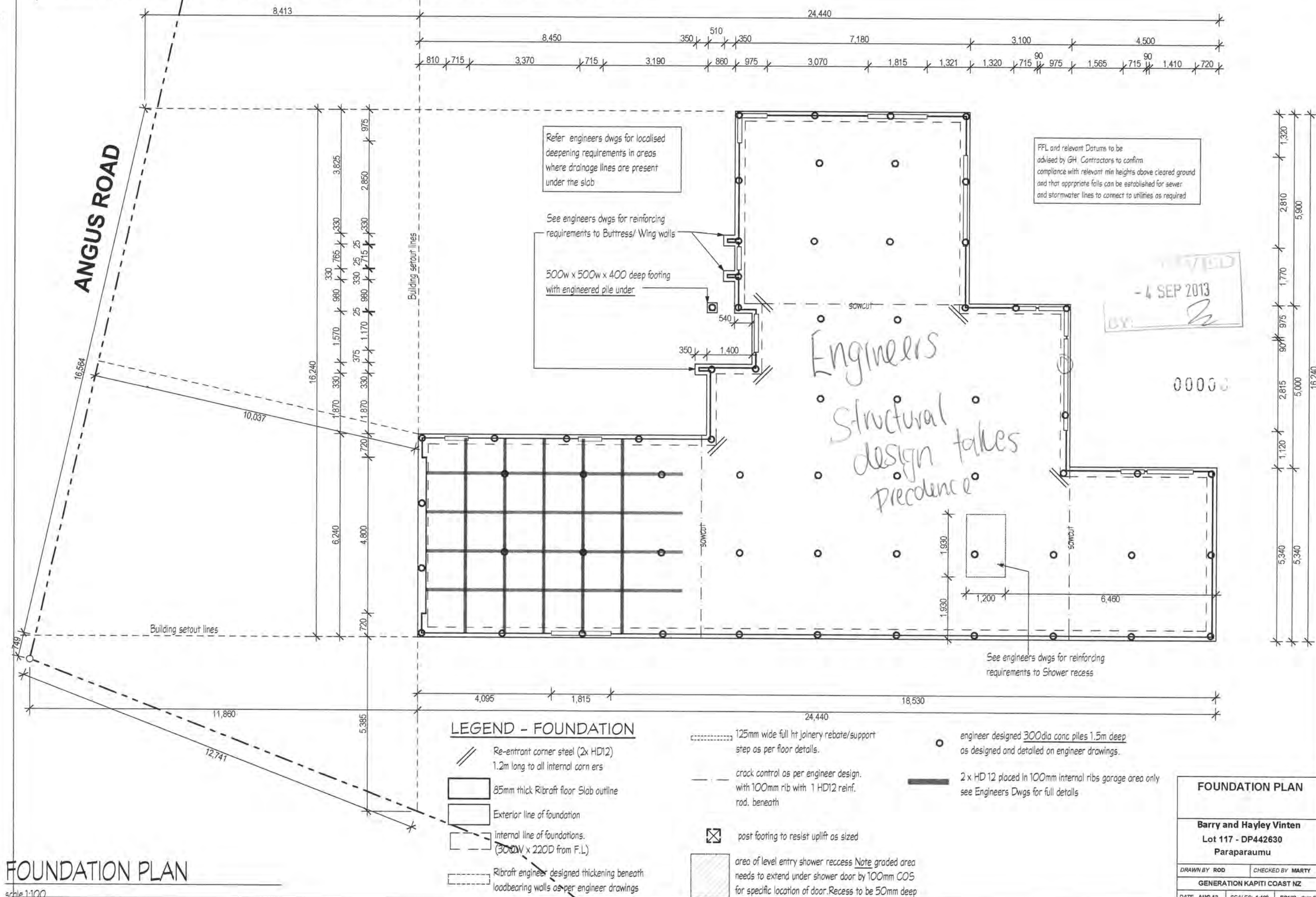
Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

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GENERATION KAPITI COAST NZ

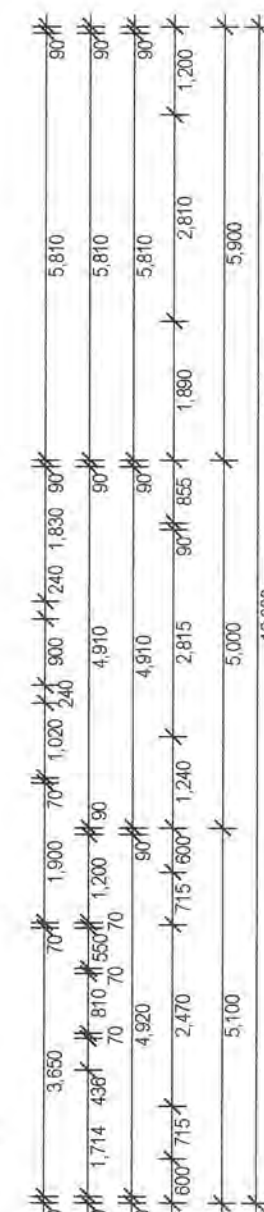
DATE AUG 13 SCALES 1:50 EC183 - dwg 06

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FOUNDATION PLAN

scale 1:100

[illegible]

CHECK ALL DIMENSIONS
ON SITE PRIOR TO
MANUFACTURE.
ANY DISCREPANCIES TO BE
VERIFIED BY DESIGNER

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GENERATION KAPITI COAST NZ		
DATE AUG 13	SCALE: 1:100	EC183 - dwg 08

Section A-A

scale 1:50

SECTION AND ELEVATION NOTES - LOT 117 Lot 117, 6 Angus Rd, Nikau Views

2 SITE

22 Preparation & Groundwork

22a Building Platform - form a level platform that allows a minimum of 1m between any edge of the building and a slope, to comply with the standard Rib-raft technical construction manual.

23 Foundations

23a concrete footing size and strength per engineer design and documentation to posts and buttresses

3 STRUCTURE

31 Concrete

31a 85mm thick Ribraft concrete slab with grade 500e 665 reinforcing mesh over 1100 x 1100 x 220mm deep Polystyrene PODS at 1.2m c/c as per Ribraft specification & as indicated on section with ribs between as noted below.

refer to engineer design for additional footings, concrete strength requirements and construction details

31b 300 W x 300 D below C.G.L ring footing generally with 3x HD12 horizontal bars & 1 x HD12 reinforcing to ribs at 1.2m c/c - refer to standard Ribraft specification for further information also see architectural details

38 Timber

38a 90 x 45 SGB H1.2 exterior wall framing, studs at 600 c/c & 1 row of dwangs - insulation as noted below.

38b 90 x 45 SGB H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs - insulation as noted below.

38c 70 x 45 SGB H1.2 interior partition wall framing with studs at 600 c/c & 1 row of dwangs

38e Pre-fabricated SGB H1.2 treated trusses at 900 c/c as per truss design - Trusses cantilevered as required

38f Timber Beams as noted on Floor Plan and as detailed

4 ENCLOSURE

42 Cladding

42a Austral 70mm brick over 60mm cavity and Tekton Universal building paper.

42b 4.5mm pre-finished soffit lining

43 Roofing

43a Metro Tile pressed metal tile roofing over 45 x 45 SGB purlins at c/c to suit tile profile with standard flashings as selected - over Thermakraft 215 roofing underlay

Also with galv. strap brace to roof plane to comply with Mlitek manual.

43b 80mm Ø uPVC downpipes with selected continuous colorsteel spouting and fascia system

45 Doors, Windows

45a double glazed aluminium framed windows and exterior doors as scheduled with selected powdercoated finish, architraves as detailed. Tyvek wrap to be used at openings to framing at corners and as required.

46 Glazing

46a Double glazing with safety glazing as required to comply with NZS4223

47 Insulation

47a R2.6 Pink Batts 90mm wall thermal insulation

47b R3.6 Pink Batts 180mm ceiling thermal insulation

47c R2.41 220mm polystyrene Ribraft POD system underfloor insulation system

5 INTERIOR

51 Wall Linings

51a 10mm standard GIB wall linings generally

51b 10mm Aqualine GIB wall lining to wet areas

52 Partitions & Doors

52a All int. doors shall be ex150 x 30 pine FJP framed with architraves, door leaves to be hollowcore flush panel PQ MDF

53 Ceilings

53a 13mm Gibraltar board ceiling linings throughout over Rondo metal battens at 600 c/c with level 4 stopped finish to ceilings with 55mm GIB cove cornice.

55 Joinery Fixtures & Hardware

55a Kitchen Joinery and all fixtures, hardware etc as per Generation Homes specific kitchen plans - confirm all measurements on site prior to any manufacture of joinery required

55b Door hardware as selected by owner

55c All bathroom, laundry, and other joinery that is supplied under contract to be constructed shall be confirmed in accordance with signed contract.

57 Furniture & Appliances

57a Kitchen appliances as covered by contract shall be supplied and confirmed in accordance with contract

6 FINISH

62 Tiling

62a Floor tile selection to Bathroom, Ensuite, Kitchen and Toilet as per clients approval. contractor to lay tiles

65 Carpeting

65a selected carpet as per project specification and as per contract

67 Painting, Decorating & Coating

67a Paint and coatings as selected

7 SERVICES

71 Liquid

71a Refer to drainage plan for water supply to all fixtures

74 Drainage

74a refer to drainage plan for waste pipe size, selections and type

77 Electrical

77a refer to electrical plan for requirements and notes

8 EXTERNAL

82 Roads & Paving

82a concrete driveway formed as per indicated layout on site plan

83 Landscaping

83a Concrete exterior paving to outdoor areas, formed as per indicated layout on site plan

- 4 SEP 2013

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CROSS SECTION AND NOTES

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

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GENERATION KAPITI COAST NZ

DATE: AUG 13 SCALES: 1:50, 1:100 EC183 - dwg 09

DOWNPIPE WATER DISCHARGE SCHEDULE

determined by NZBC E1/AS1 section 4.0 downpipes - table 5

DP name	roof area serviced by DP in plan	average roof angle	intended DP size for use (min internal dia)	max. allowable roof area by DP size	gains compliance
DP01	55.39m ²	0-25°	74mm	85 m ²	yes
DP02	78.05m ²	0-25°	74mm	85 m ²	yes
DP03	78.69m ²	0-25°	74mm	85 m ²	yes
DP04	73.13m ²	0-25°	74mm	85 m ²	yes

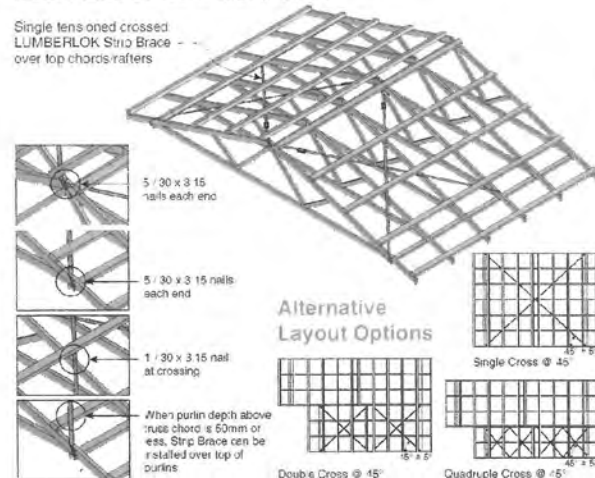
STUD / TOP PLATE NAILING

Table 8.18 - Fixing of top plate of wall to supporting members such as studs and Lintels @ 600mm centers (see 8.7.6 and [figure 8.12](#))

Loaded dimension of wall (m)	Light roof										Heavy roof					
	Roof member spacing (mm)															
	900					1200					900					
	Wind zone					Wind zone					Wind zone					
	L	M	H	VH	EH	L	M	H	VH	EH	L	M	H	VH	EH	
	Fixing type (see below)															
2.0	A	A	B	B	B	A	A	B	B	B	A	A	A	B	B	
3.0	A	B	B	B	B	A	B	B	B	B	A	A	B	B	B	
4.0	A	B	B	B	B	A	B	B	B	B	A	A	B	B	B	
5.0	B	B	B	B	B	B	B	B	B	B	A	A	B	B	B	
6.0	B	B	B	B	B	B	B	B	B	B	A	A	B	B	B	
Fixing type	Fixing to resist uplift										Capacity of alternative fixing (kN)					
A	2 / 90 x 3.15 end nails										0.7					
B	2 / 90 x 3.15 end nails + 2 wire dogs										4.7					

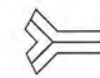
Root Plane Brace & Installation

Single tensioned crossed
LUMBERLOK Strip Brace -
over top chords/rafters



00063

Metro Tile pressed metal tile
roofing over 45 x 45 SGB
purlins at c/c to suit tile profile



standard flashings to roof
as indicated and as per
standard/architectural details



- continuous colorsteel spouting with colorsteel fascia system

diagonal Stainless Steel
roof strap brace -
1 per 35m² of roof

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LINTEL HOLD DOWN DETAIL

SECTION 8 - WALLS

NZS 3604:2011

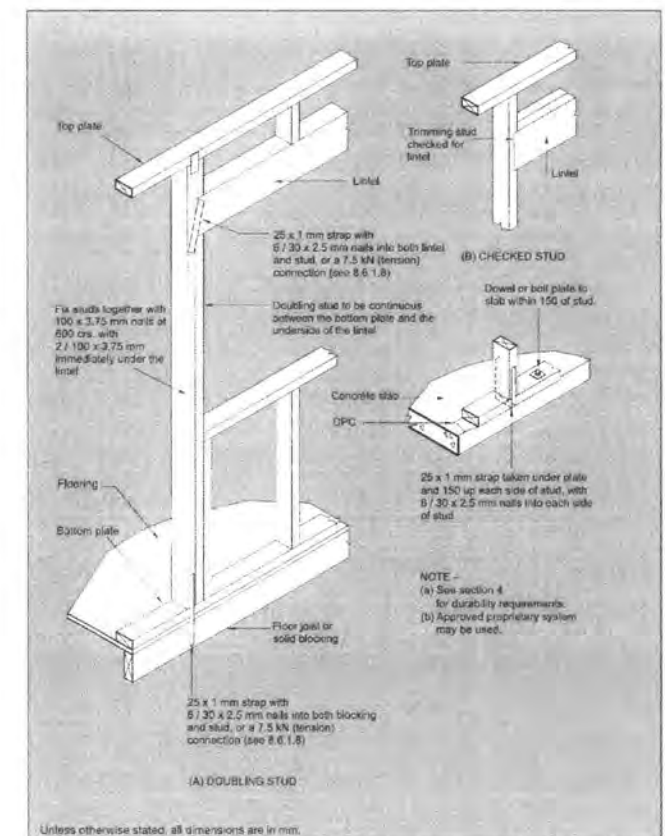


Figure 8.12 – Lintel fixing to prevent uplift [\(see 8.6.3.6 and table 8.14 a\) and \(b\)](#)

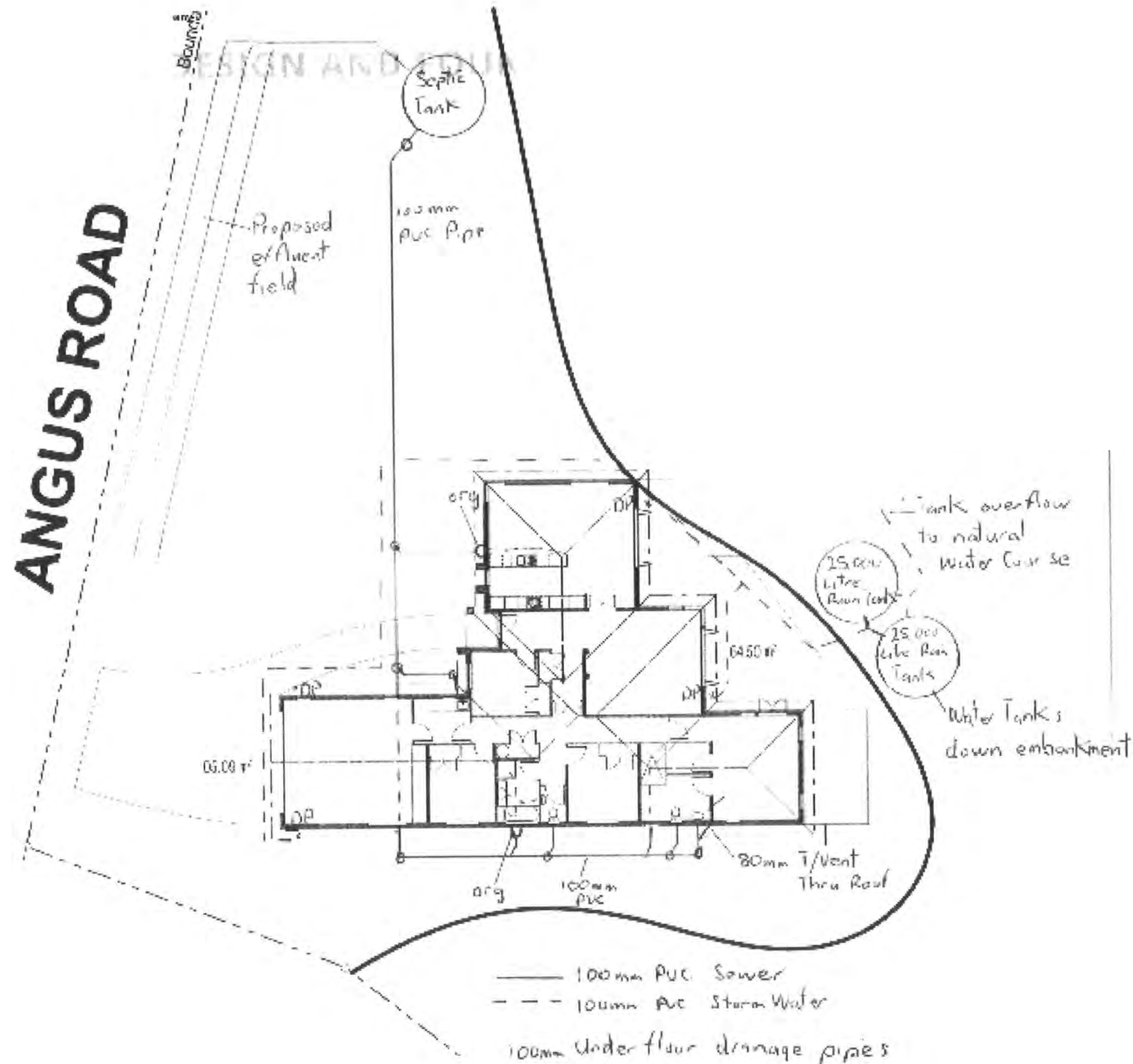
ROOF PLAN

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

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00010

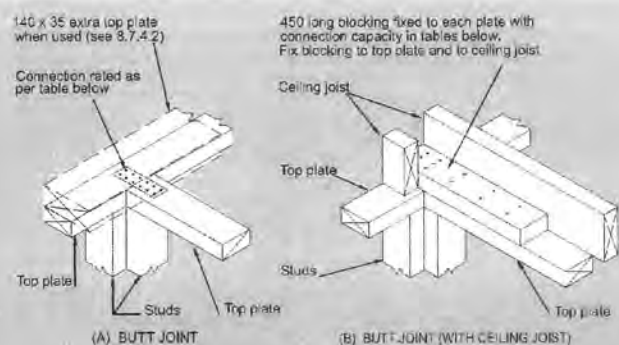
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- 4 SEP 2013
BY: [Signature]

DRAINAGE PLAN	
Barry and Hayley Vinten Lot 117 - DP442630 Paraparaumu	
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GENERATION KAPITI COAST NZ	
DATE: AUG 13	SCALES: 1:100
EC183 - dwg 11	

Note to contractors

- Ensure any meter box or distribution board penetrations of interior linings are kept clear of bracing elements
- Ensure also bottom plate penetrations for services entry do not occur within bracing elements
- Ensure also plywood bracing elements are kept min 40mm clear of garage door openings to allow fitting of aluminium jamb extrusions
- Refer to specification for fixing of hold-downs and Ecoply or GIB bracing elements as required.

REFER TO ARCHITECTURAL SPECIFICATION AS REQUIRED FOR GIB AND ECOPLY MANUFACTURERS BRACING DETAILS



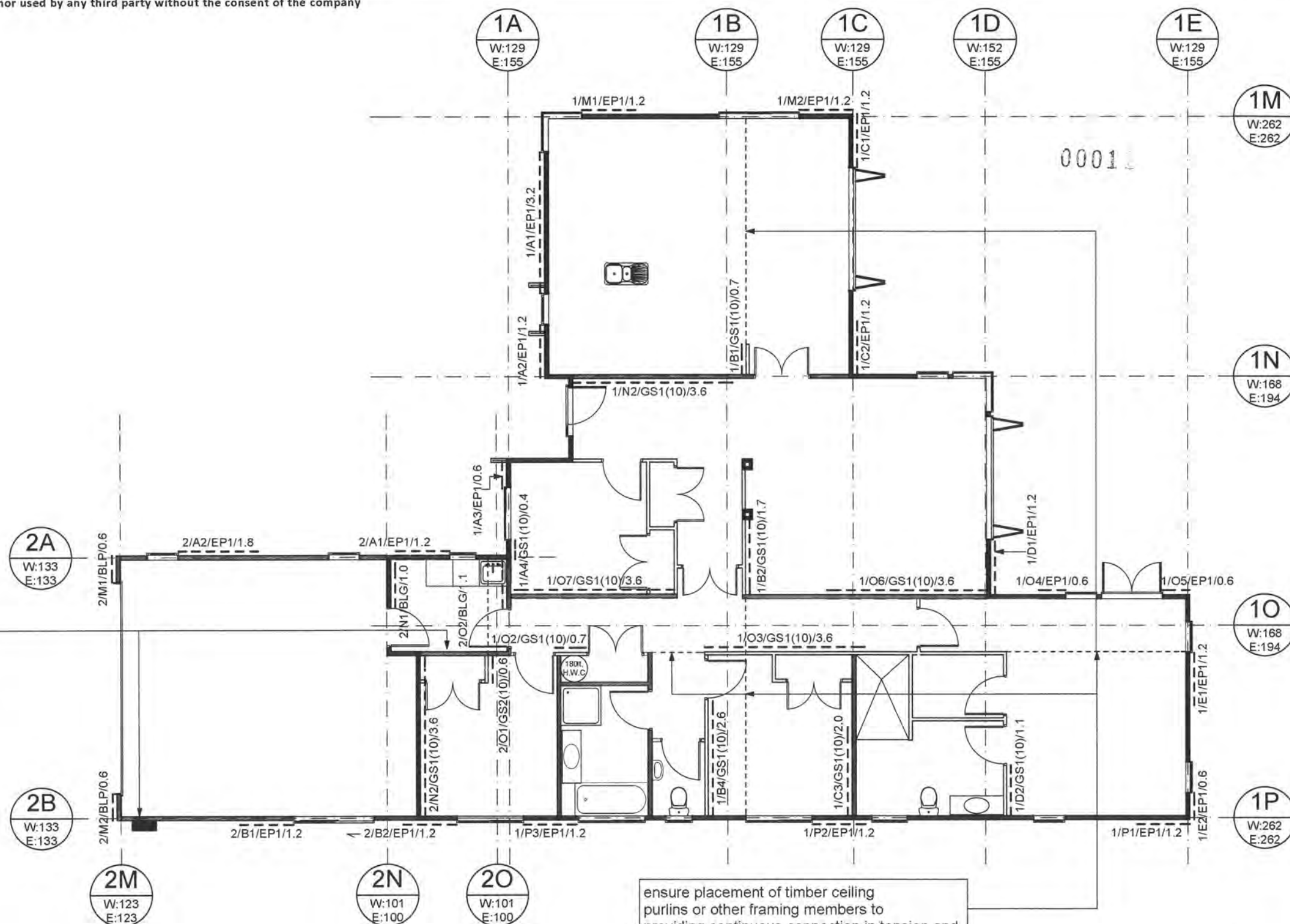
Capacities of metal plate joints		Capacities of nailed joints	
Up to 3 kN	3 / 30 x 3.15 mm nails per side	Up to 3 kN	3 / 100 x 3.75 mm nails per side
Up to 6 kN	6 / 30 x 3.15 mm nails per side	Up to 6 kN	6 / 100 x 3.75 mm nails per side

NOTE - See section 4 for durability requirements.

Unless otherwise stated, all dimensions are in mm.

Each wall that contains one or more wall bracing elements shall be connected at top plate level, either directly, or through a framing member in the line of the wall, to external walls at right angles to it. Top plate fixing(s) of the capacity in tension or compression along the line of the wall bracing element are given as follows:

- For each wall containing wall bracing elements with a total bracing capacity of not more than 125 bracing units; to at least one such external wall by a fixing as shown in figure 8.16 of 6 kN capacity;
- For each wall containing wall bracing elements with a total bracing capacity of not more than 250 bracing units; to at least 2 external walls by fixings as shown in figure 8.16 each of 6 kN capacity;
- For each wall containing wall bracing elements with a total bracing capacity of more than 250 bracing units; to at least 2 external walls by fixings as shown in figure 8.16 each having a rating of not less than 2.4 kN per 100 bracing units.



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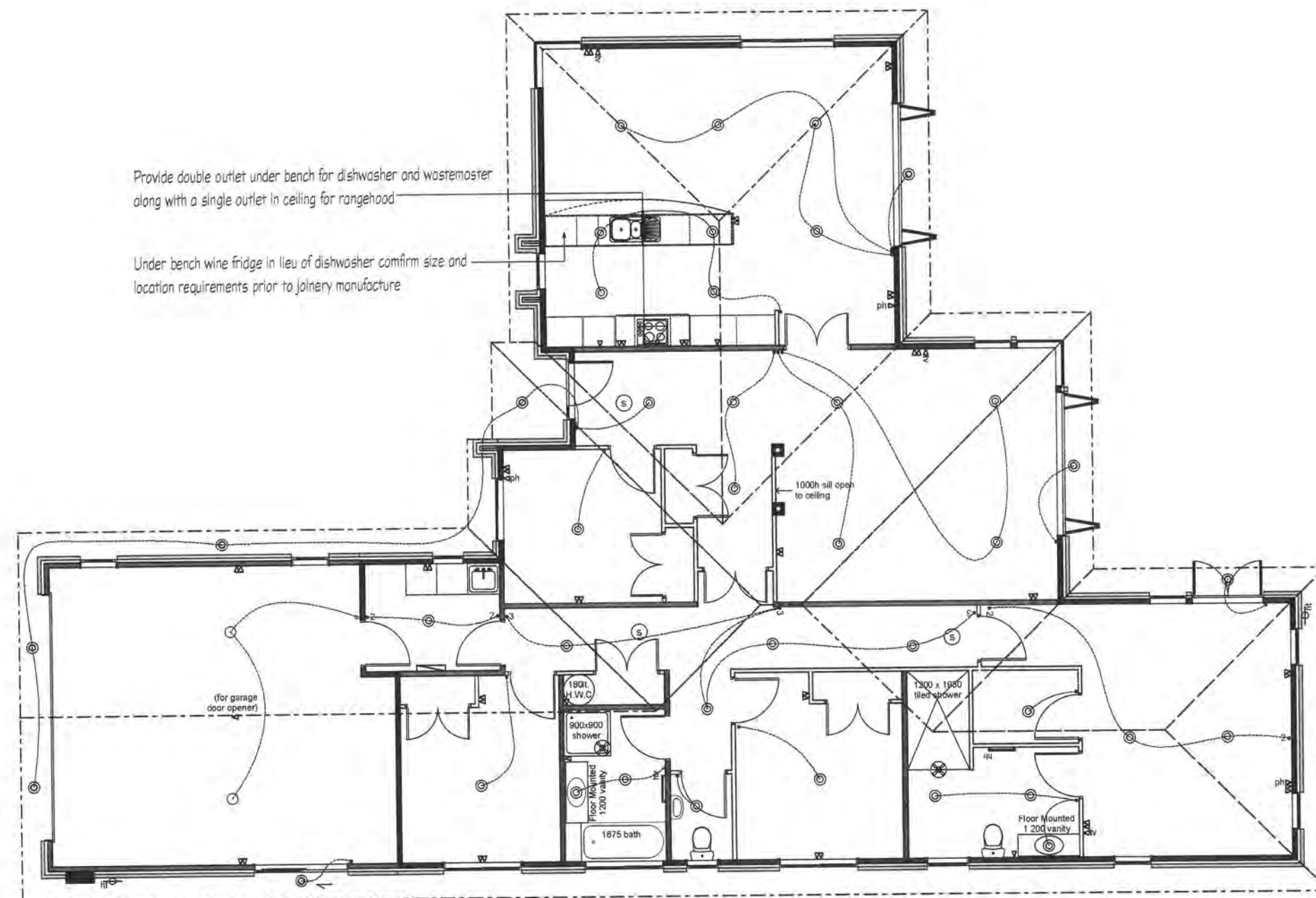
BY:

BRACING PLAN

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

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GENERATION KAPITI COAST NZ
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00013



ELECTRICAL LEGEND

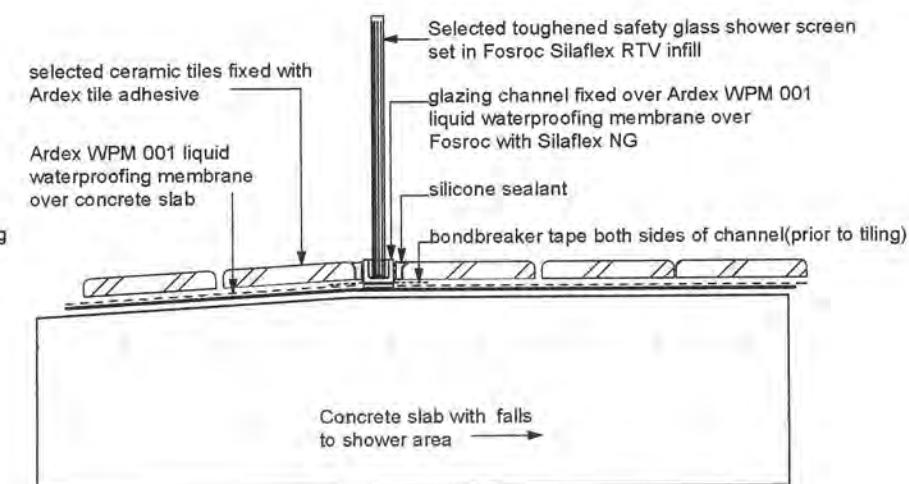
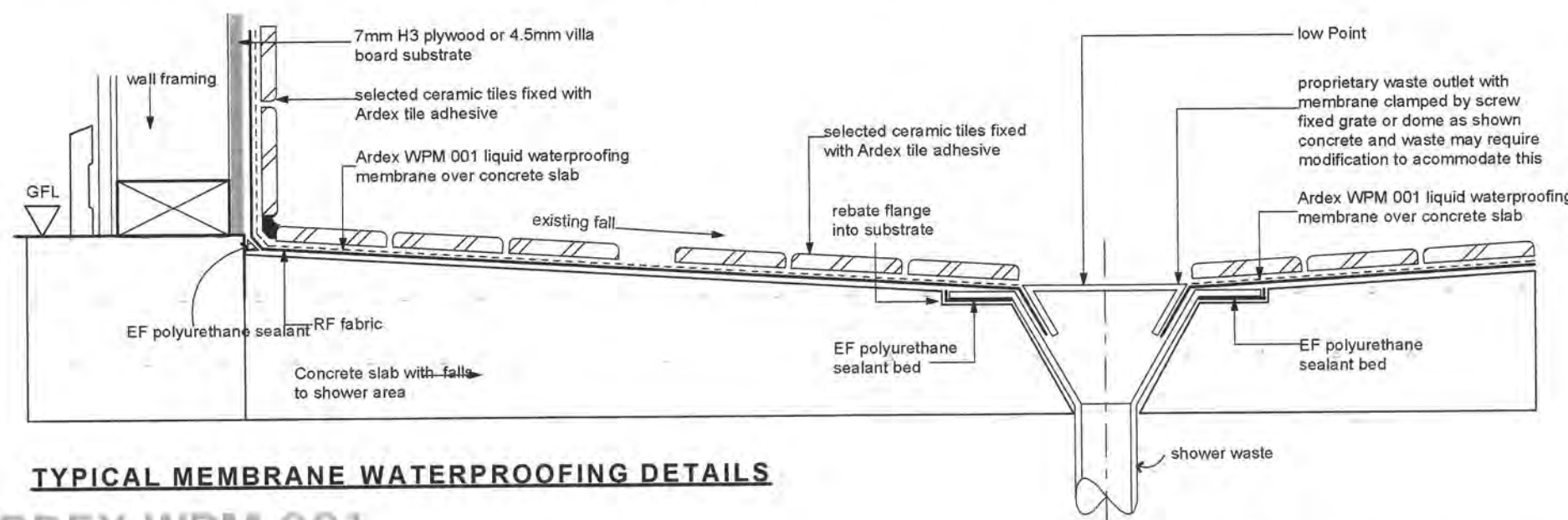
- ⊕ ceiling light - halogen
- ⊕ halogen pendant light
- ⊙ ceiling light - recessed
- ceiling batten light and shade
- ⊗ PIR sensor
- ⊕ wall light
- ⊠ owners Own Light
- wall switch
- 2 way wall switch
- dimmer switch
- dimmer switch - 2 way
- ⊗ ceiling extractor fan
- ∇ exterior power point
- ⌋ pantry light
- ⌋ double socket outlet
- ∇ tv ariel outlet = RG6coax
- ∇ phone jack point
- ∇ network connection
- Ⓢ smoke alarm
- ∇ single socket outlet
- ⌋ meter board
- ⊕ exterior hose tap
- heated towel rail
- 12.5kw heater
- ⊕ security Alarm sensor
- ⌋ security Alarm Keypad
- ⊙ fan Light on Timer
- ⊕ door bell
- ⊕ gas bayonet
- ⊕ gas continuous hot water
- Indoor Unit Indoor Wall mounted Heatpump Unit
- Outdoor Unit Outdoor Slab Mounted Condensing Unit

- 4 SEP 2013
BY:

ELECTRICAL PLAN

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

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TYPICAL MEMBRANE WATERPROOFING DETAILS

ARDEX WPM 001

Superflex Bathroom & Balcony Premixed - 1 Part

Undertile Waterproofing Membrane

USER NOTES

The technical details and recommendations contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is the responsibility of the user to ensure that the product is used in accordance with Ardex instructions and in applications for which they are intended.

APPLICATION

Apply Ardex WPM 001 by brush or roller. A medium nap (12-15mm pile) paint roller is recommended. New rollers should be dampened with water before being used for the first time.

For best results with a paint brush use a good quality, 50mm long bristle variety.

To achieve the required dry film thickness per coat, application must consist of laying the product onto the surface and light finish the surface. Do not try to apply in the same manner as a building paint. A conventional building paint is normally applied at 25-40 micrometers wet film thickness while Ardex WPM 001 needs to be applied at between 0.5 and 1.0 mm per coat depending on product and application (Refer Table 1).

Critical Areas:

INTERNAL WET AREAS

- Construction should be in accordance with Australian 3740 - 2004 Waterproofing of wet areas within residential buildings.
- All render and tile bed requirements should be completed before application of the membrane and tiles or other floor coverings should be direct bonded to the membrane.
- Ensure wall & floor sheets are installed as per sheet manufacturer's recommendations.
- Ensure suitable brick/concrete hobs are used (do not use timber).
- Ensure that falls to the waste are min 1:60 (ie. approx. 30mm in 2mtr) before waterproofing. Ensure outlet pipes are fixed securely and that the waste or drainage flanges are recessed into the floor.
- Avoid sheet joints in shower recess floor. Ensure that sheets are securely fixed to the wall at the bottom edge, and sheet joints are sealed with a neutral cure silicone sealant spread approximately 6mm on either side of the joint.
- Treat nail and screw holes with neutral cure silicone sealant.
- Seal the perimeters of taps, shower outlets and waste outlets with neutral cure silicone sealant.
- Apply a bead of neutral cure silicone sealant to all horizontal and vertical corners.
- Apply a bead of neutral cure silicone sealant to the junction of the hob or angle and walls. Spreading the sealant to 6mm on either side of the joint.
- Waste outlets shall incorporate a puddle flange or similar in accordance with AS3740 & the top surface shall be set flush with the surface to which the membrane is to be applied. A bead of neutral cure silicone shall be applied across the intersection of the puddle flange and the screed/floor.
- Apply the membrane to the entire shower recess floor and down into waste or drainage flange. Apply the membrane over the hob and at least 150mm beyond the outside edge of the hob (ideally to entire wet area floor).
- Apply the membrane 1800mm up the walls or to the height of the shower rose within the shower recess.
- Install the shower screen to inside edge of the hob.

Fig.1 - Shower Recess - Critical Areas

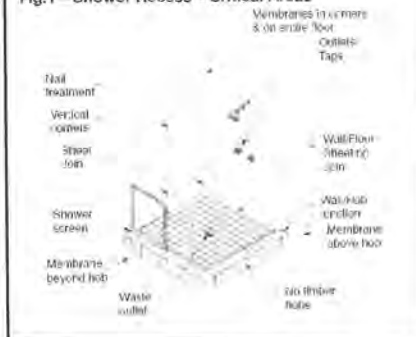
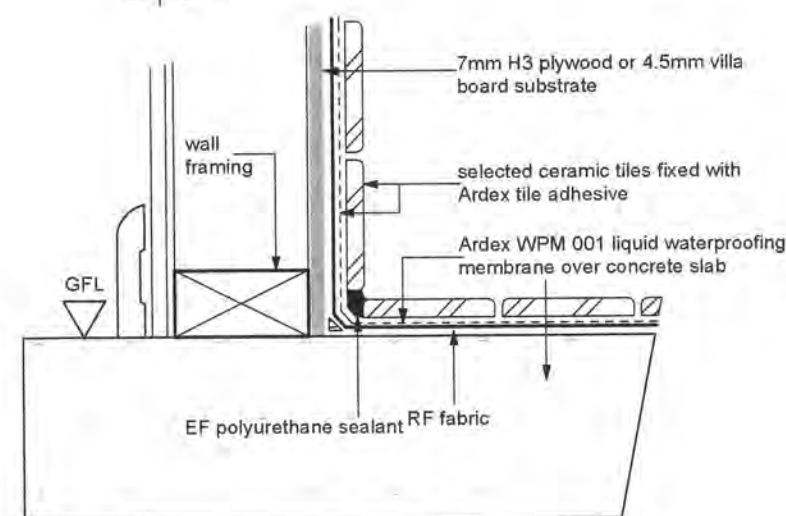
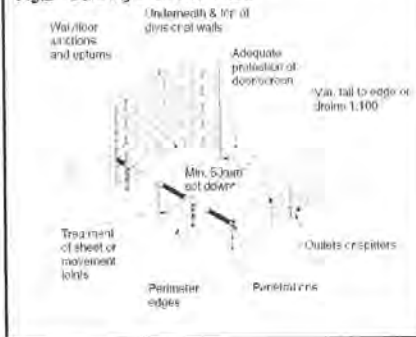
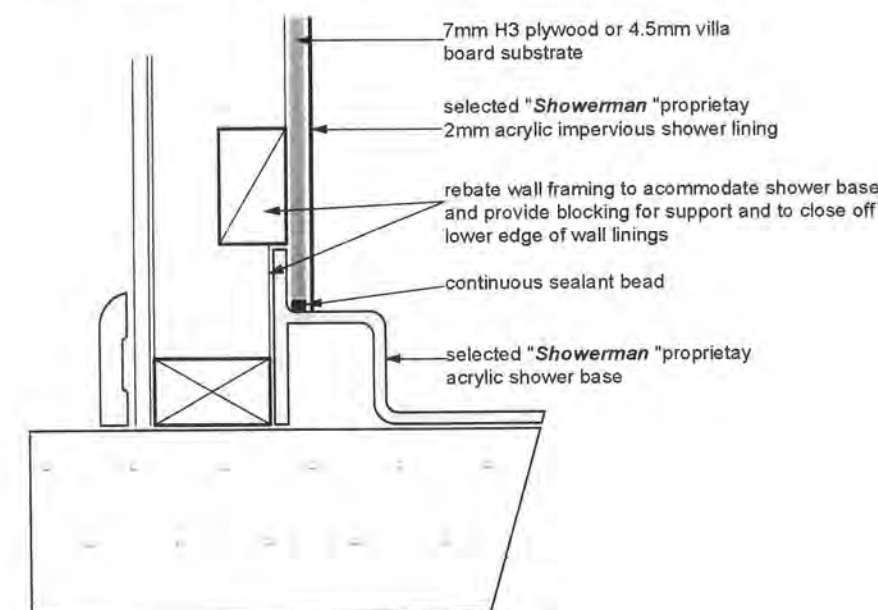


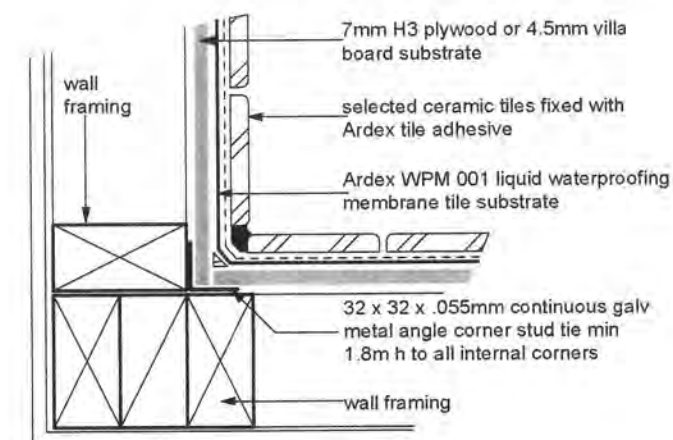
Fig.2 - Balcony - Critical Areas



TYPICAL HORIZONTAL / VERTICAL TILE AND WATER-PROOFING JUNCTION



TYPICAL SHOWERBASE DETAIL

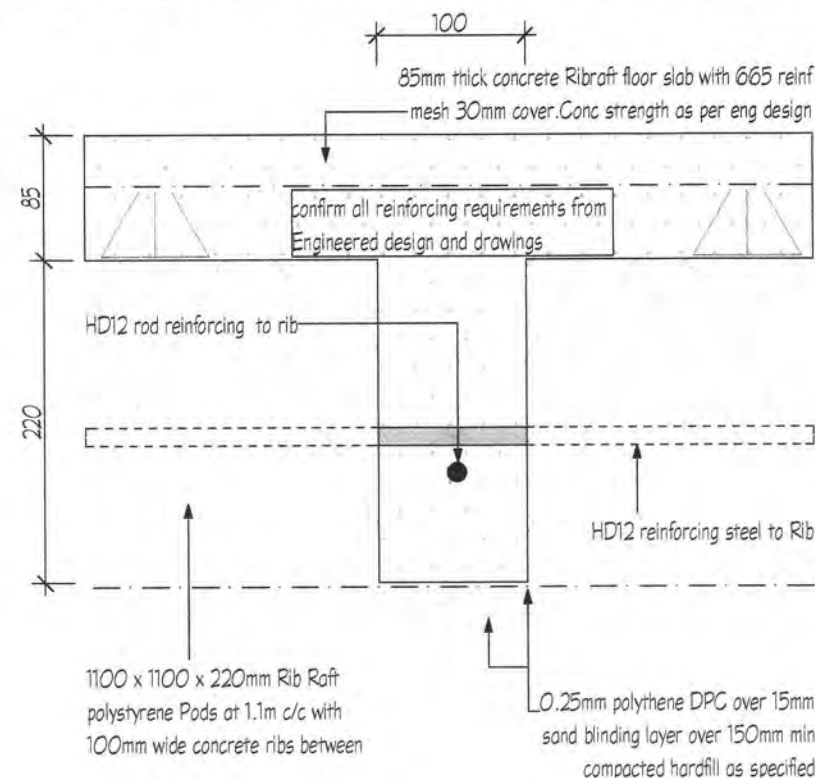


TYPICAL WATER-PROOFING INTERNAL CORNER DETAIL (PLAN VIEW)

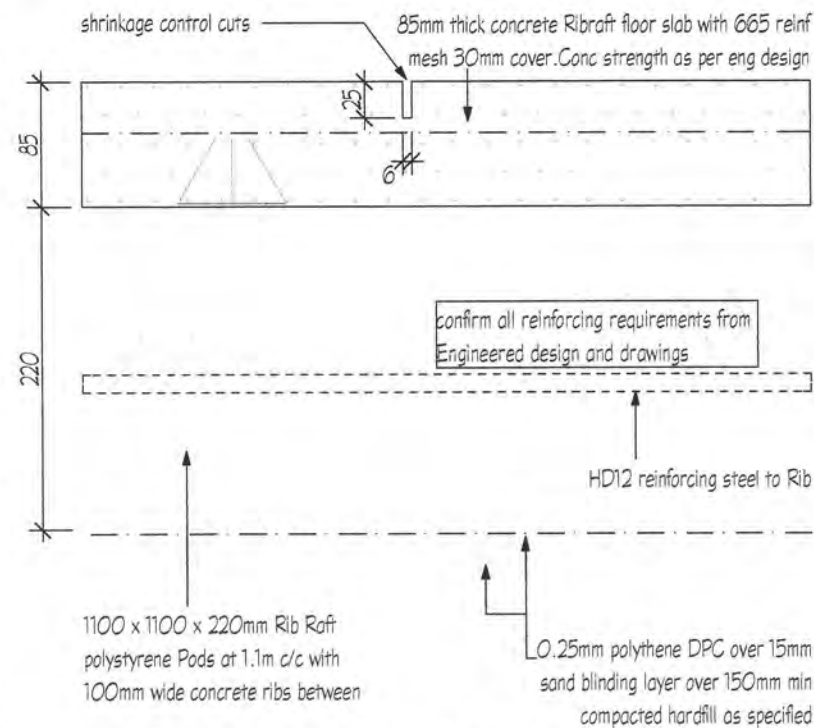
WATERPROOFING DETAILS

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

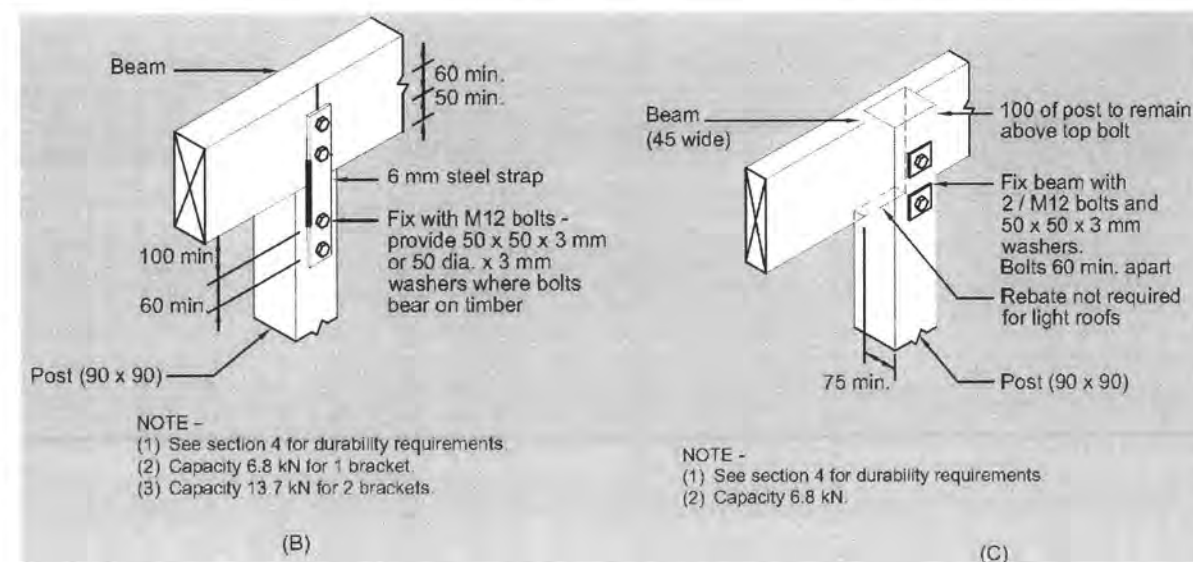
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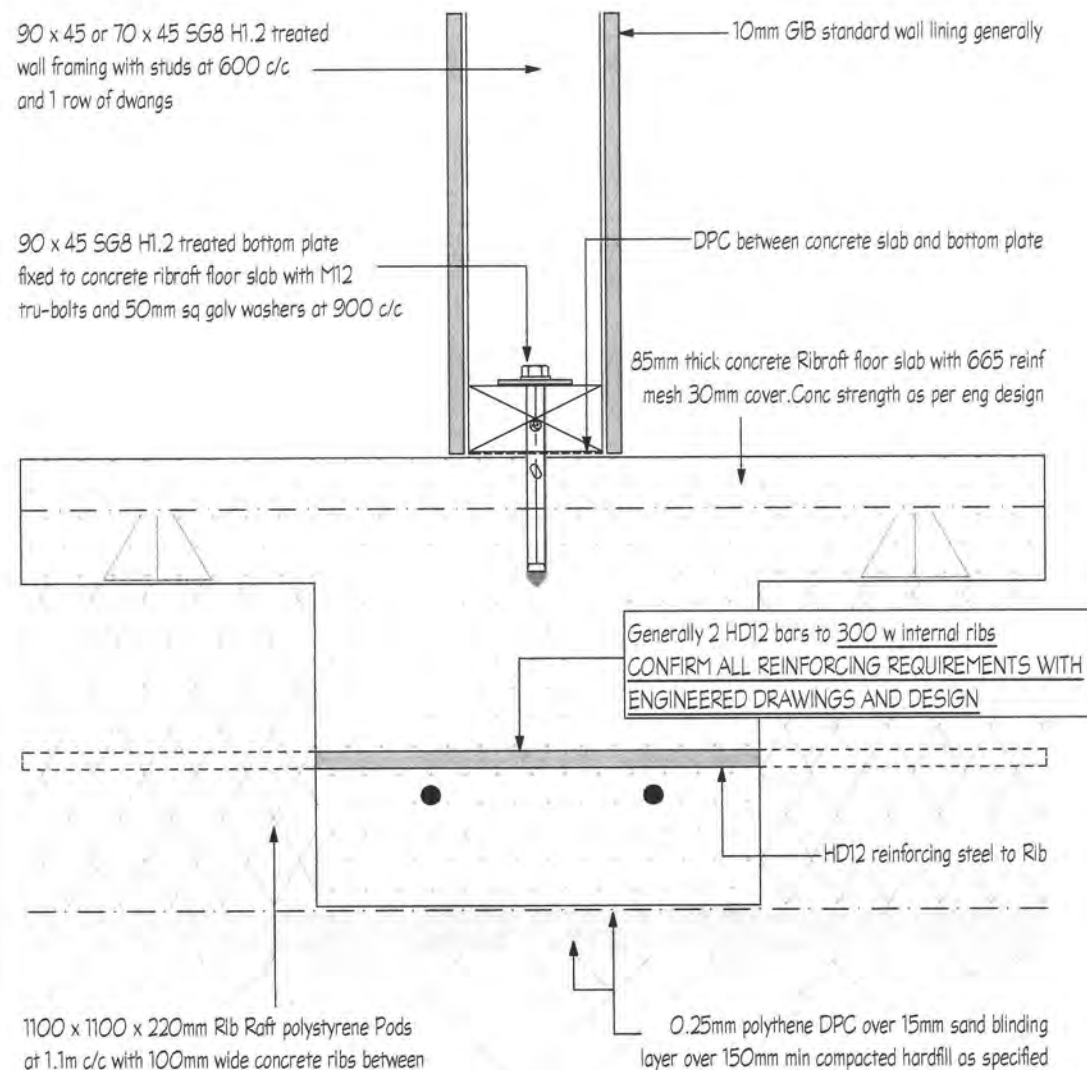
INTERNAL RIB DETAIL



SHRINKAGE CONTROL JOINT DETAIL

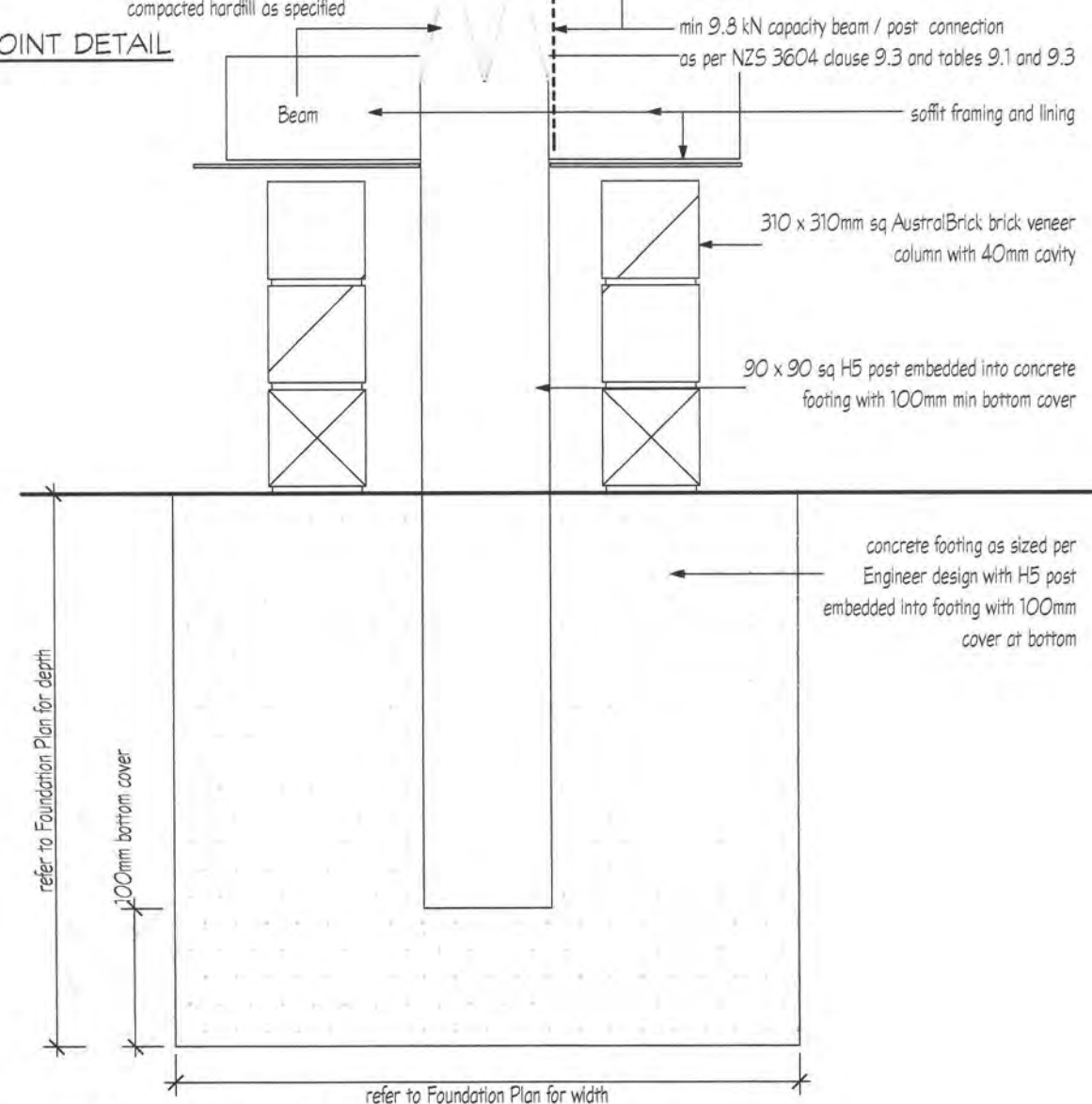


NZS 3604 connection options sec 9 Posts Fig 9.3



INTERNAL FOOTING DETAIL

NOTE :- Refer to engineers design for final slab construction details



POST FOOTING and BEAM CONNECTION DETAIL

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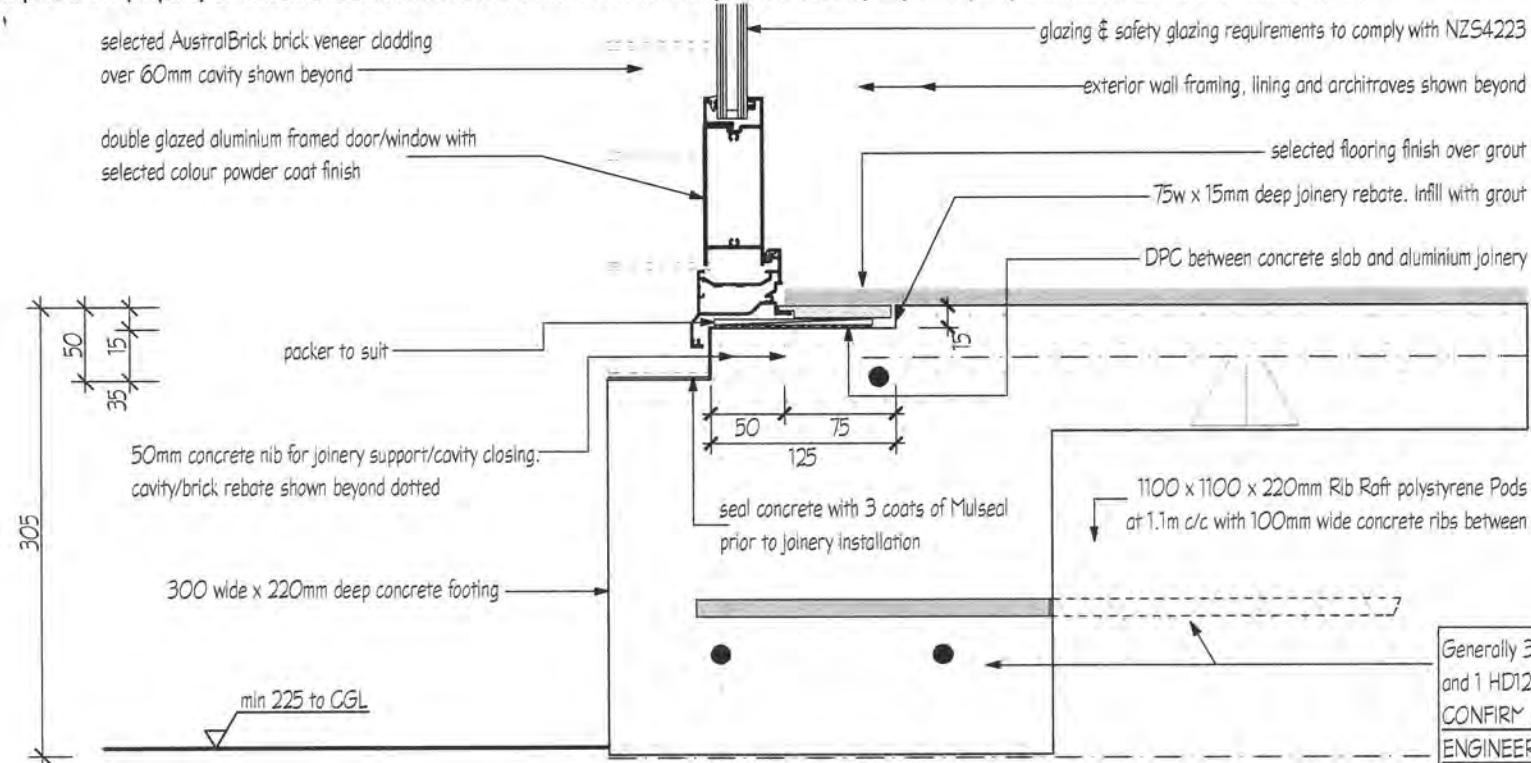
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RIBRAFT/FLOOR
STANDARD DETAILS 1

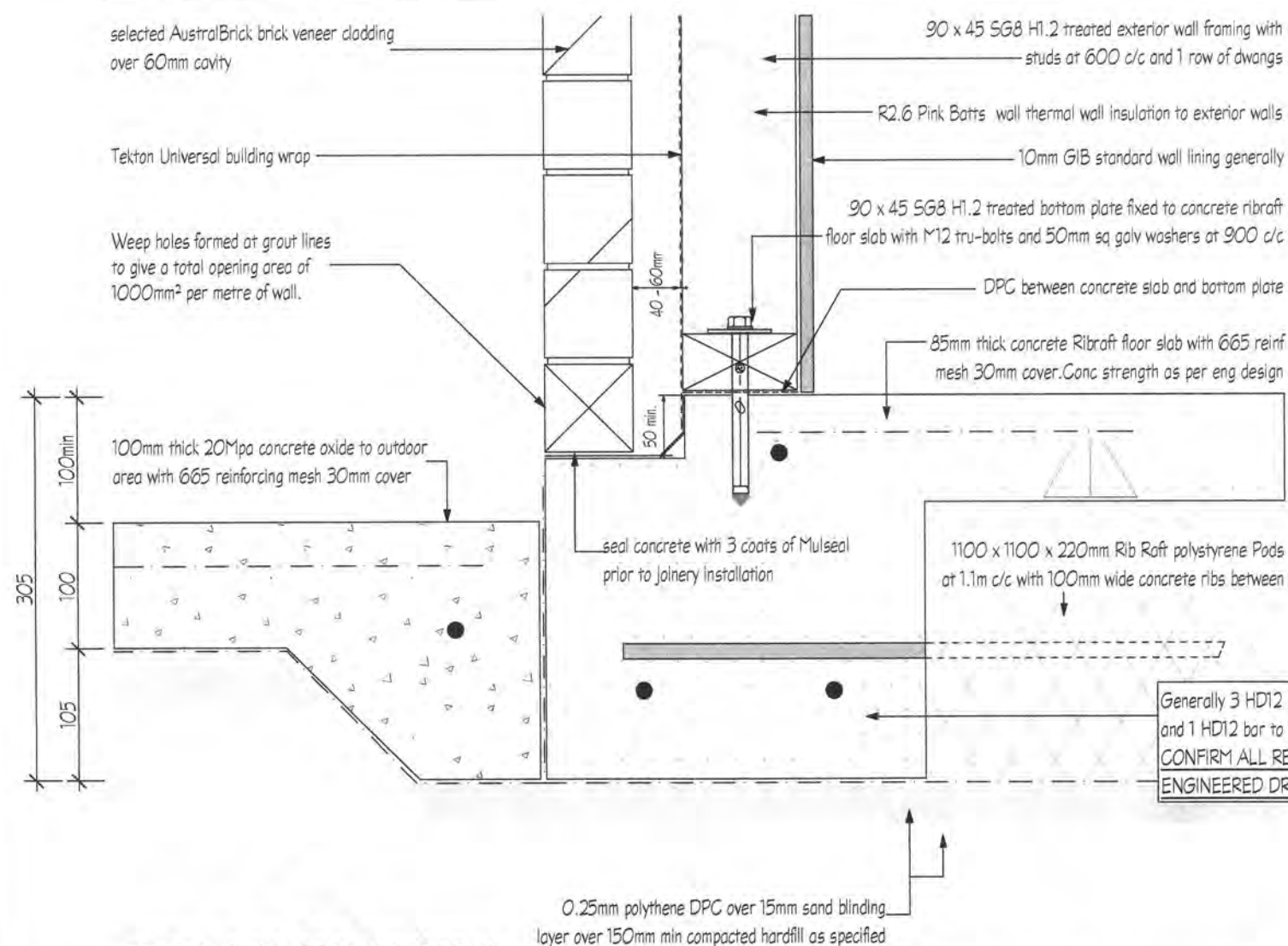
Barry and Hayley Vinten
Lot 117 - DP442630
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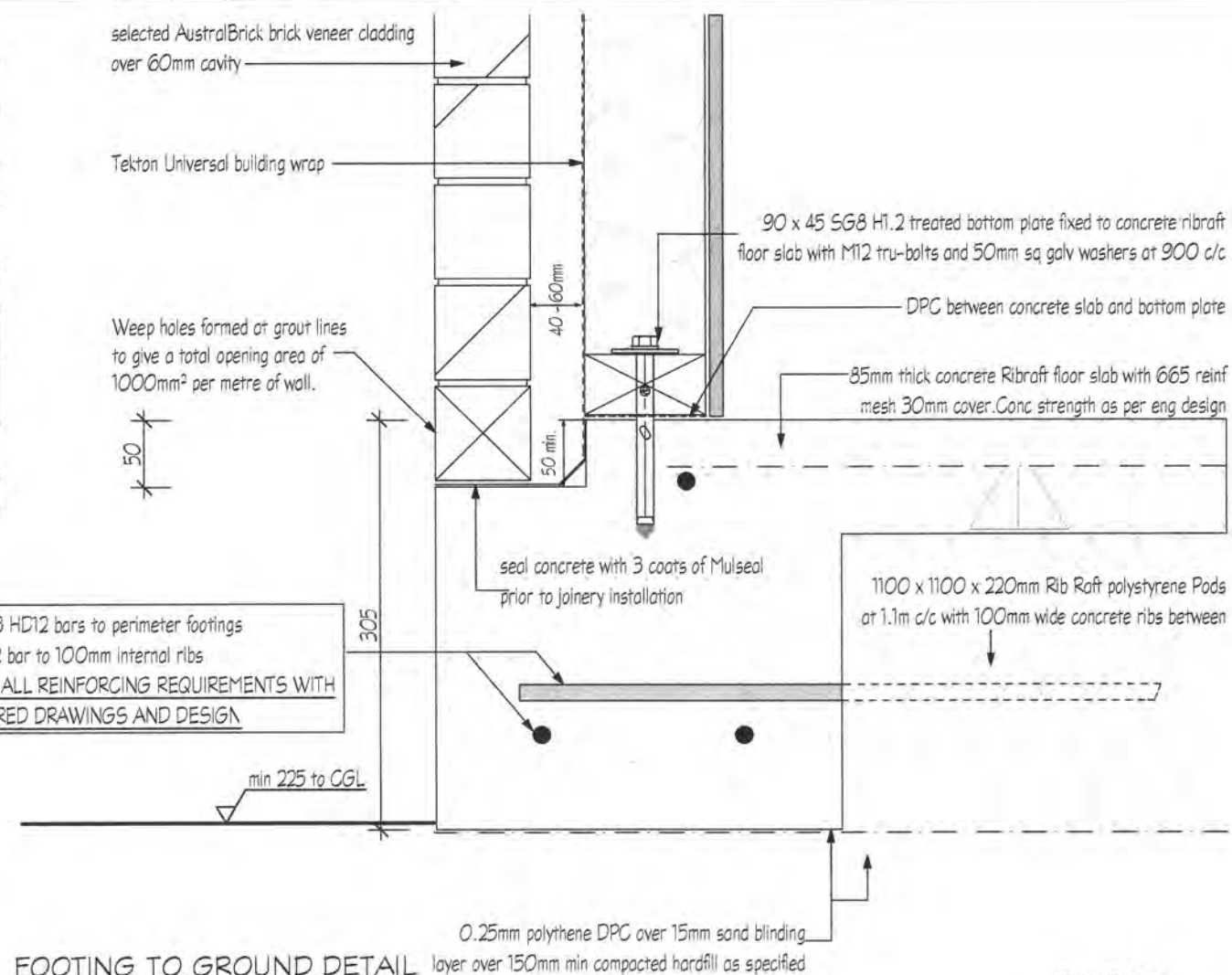


DOOR SILL TO GROUND DETAIL



FOOTING TO GROUND DETAIL

NOTE :- Refer to engineers design for final slab construction details



FOOTING TO GROUND DETAIL

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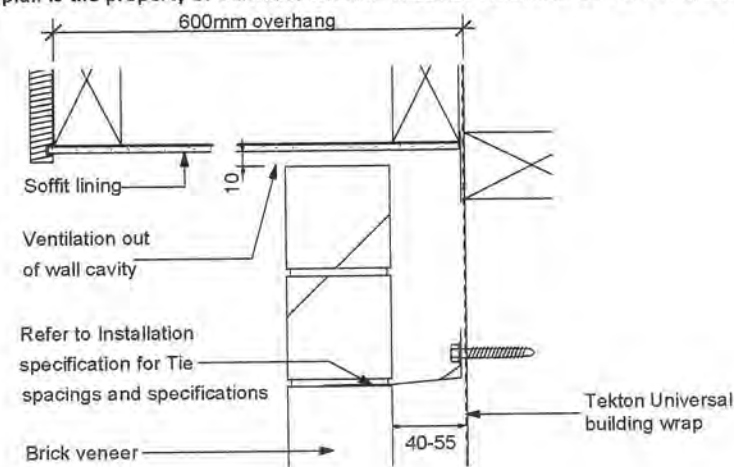
RIBRAFT/FLOOR STANDARD DETAILS 2

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

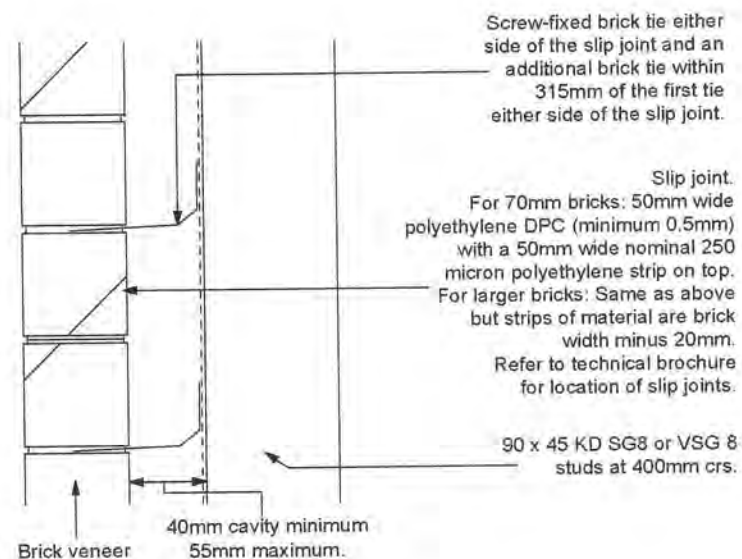
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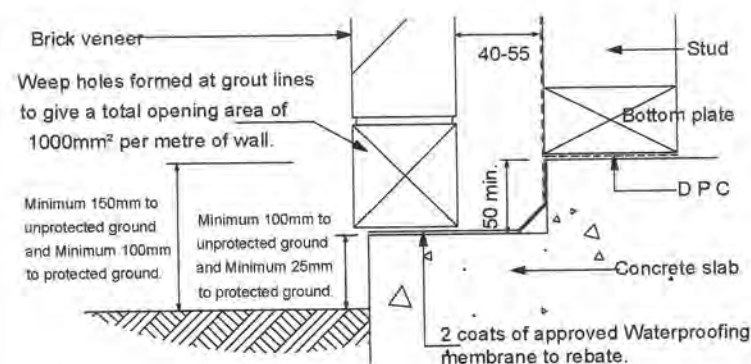
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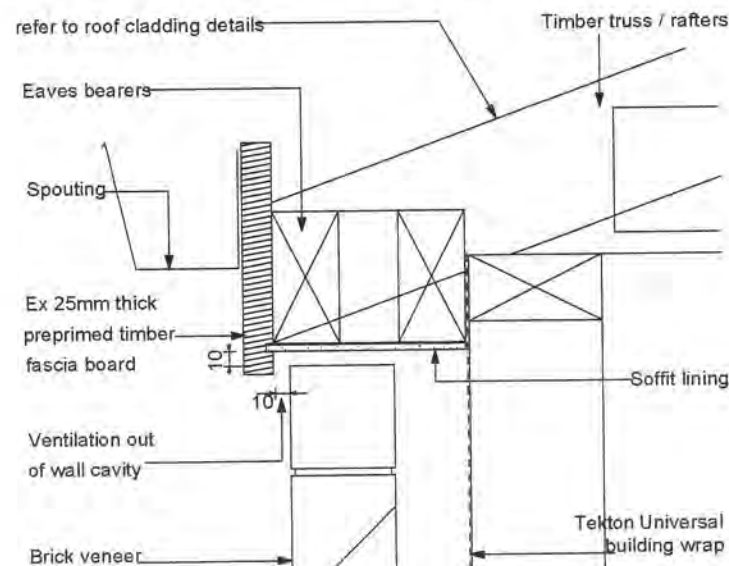
SOFFIT DETAIL



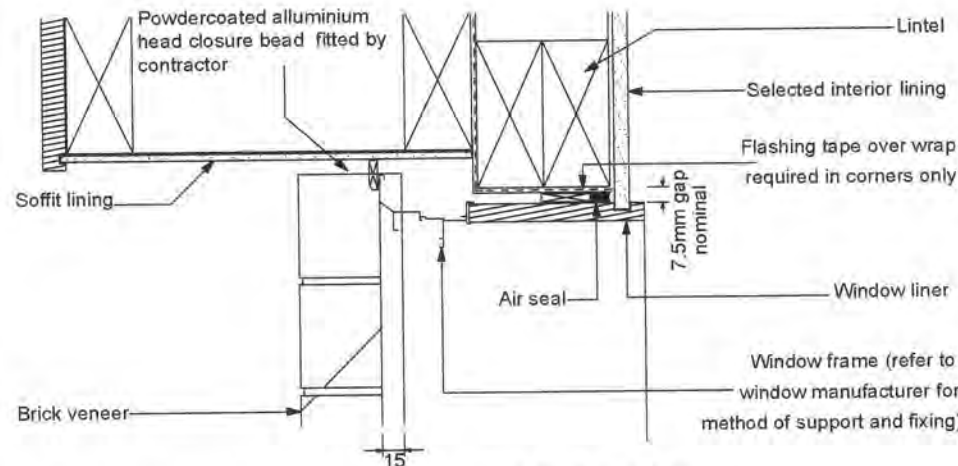
SLIP JOINT



FOUNDATION DETAIL



REDUCED SOFFIT AND VERGE DETAIL



ALTERNATIVE WINDOW HEAD DETAIL



BRICK VENEERS

STANDARD CLADDING DETAILS

NOTES:

- 1). All details shown are standard details
- 2). Specific materials for use. Refer to details for construction;
 - Brick Veneer: James Hardie Linea weather board fixed to framing over 20mm cavity with 10mm selected colour mortar
 - Building Paper: Tekton Universal building wrap to ext wall framing
 - Cavity Zone: 40 - 55mm cavity between brick and framing
 - Flashing Tape: Protectowrap flashing system
 - Insulation: R2.6 Pink Batts thermal wall insulation
R3.6 Pink Batts thermal ceiling insulation
 - Interior Lining: 10mm GIB std generally, 10mm aqualine to wet zones
 - Roofing: Metro Tile pressed metal tile roofing over 45 x 45 SG8 purlins at c/c to suit tile profile
battens to suit tile profile
 - Soffit Lining: 90 x 45 SG8 H1.2 trusses at 900 c/c as per registered manufacturers design and specs
4.5mm Hardies Silkline lining with PVC jointers at sheet joints and blocking as required
 - Spouting & Fascia: Continuous colorsteel spouting / fascia system
 - Wall Framing: 90 x 45 SG8 H1.2 exterior wall framing with studs at 600 c/c & 1 row of dwangs.
90 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
70 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
 - Window Liner: H3.1 FJP PQ window liner
- 3). Refer to other construction details for roof construction and floor construction

ALL BRICK TIES AND BRICK LINTELS IN COASTAL ZONE "D" SHALL BE STAINLESS STEEL AS PER NZBC E2 AS1 TABLE 20 REQUIREMENTS

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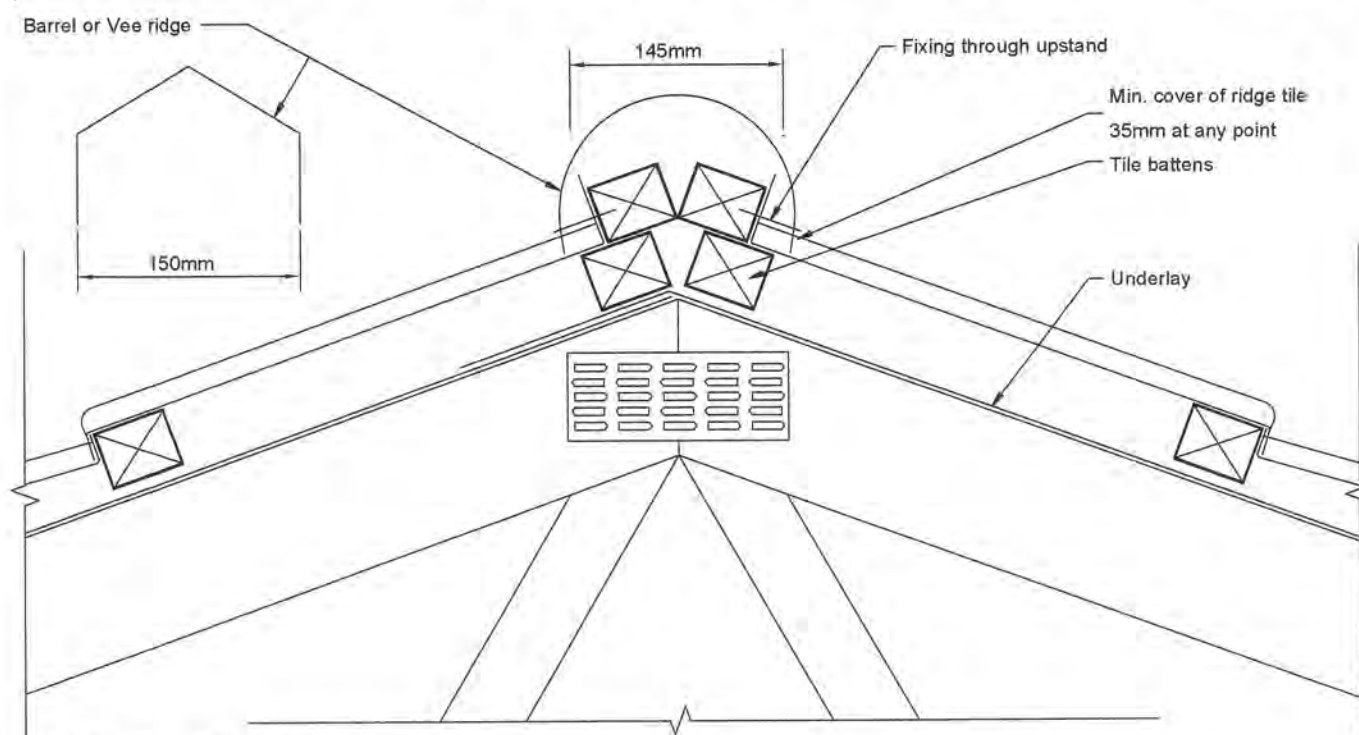
FIRTH MANORSTONE
STANDARD DETAILS

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

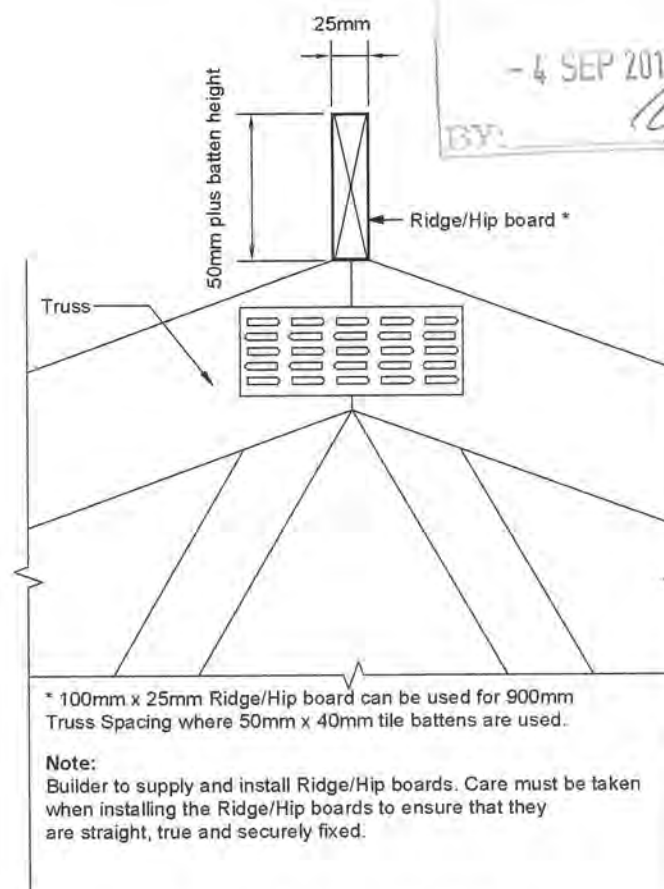
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TYPICAL RIDGE/HIP DETAIL



TYPICAL BARGE HIP/RIDGE

Metrotile
ROOFING SYSTEMS

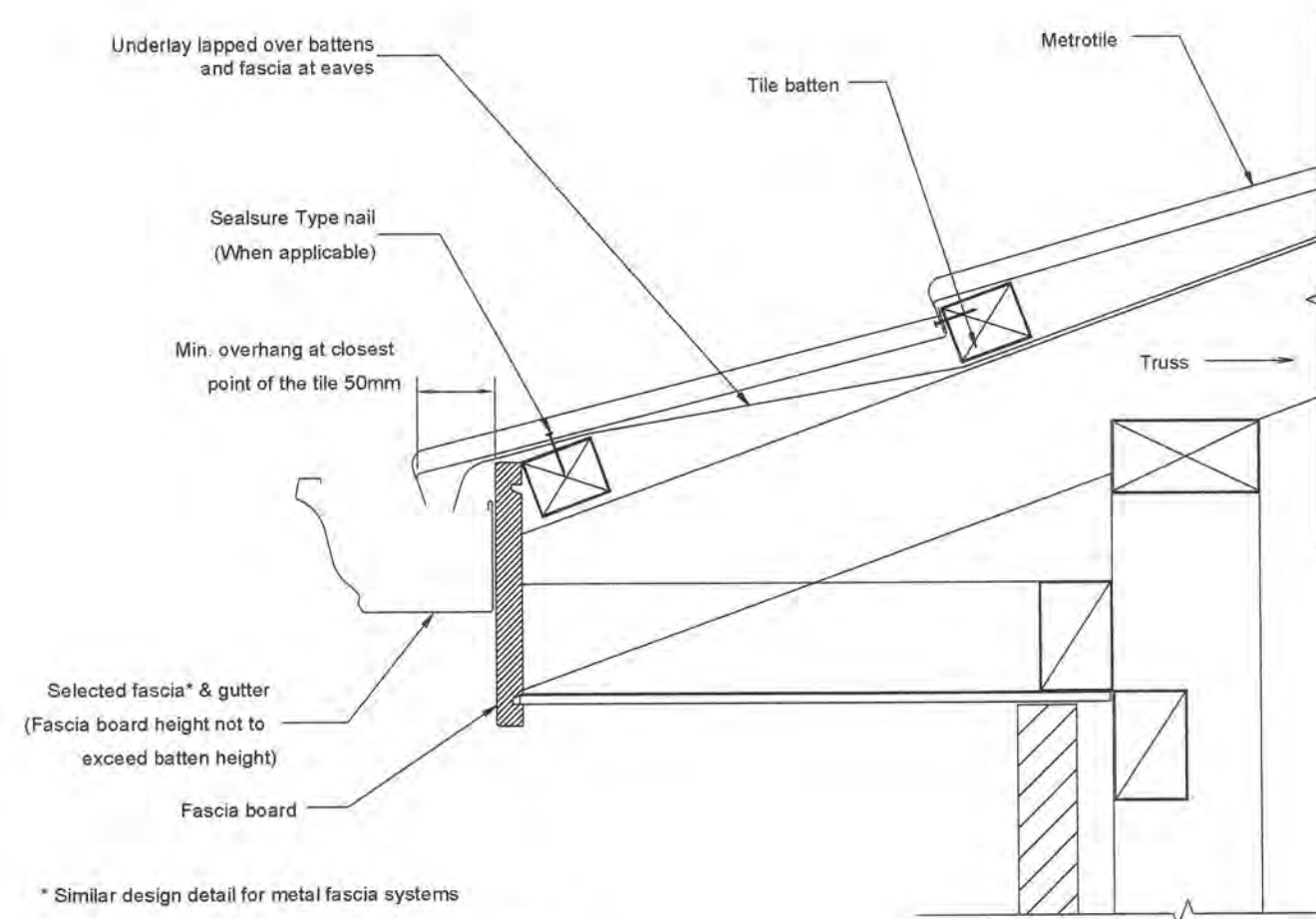
STANDARD ROOFING DETAILS

NOTES:

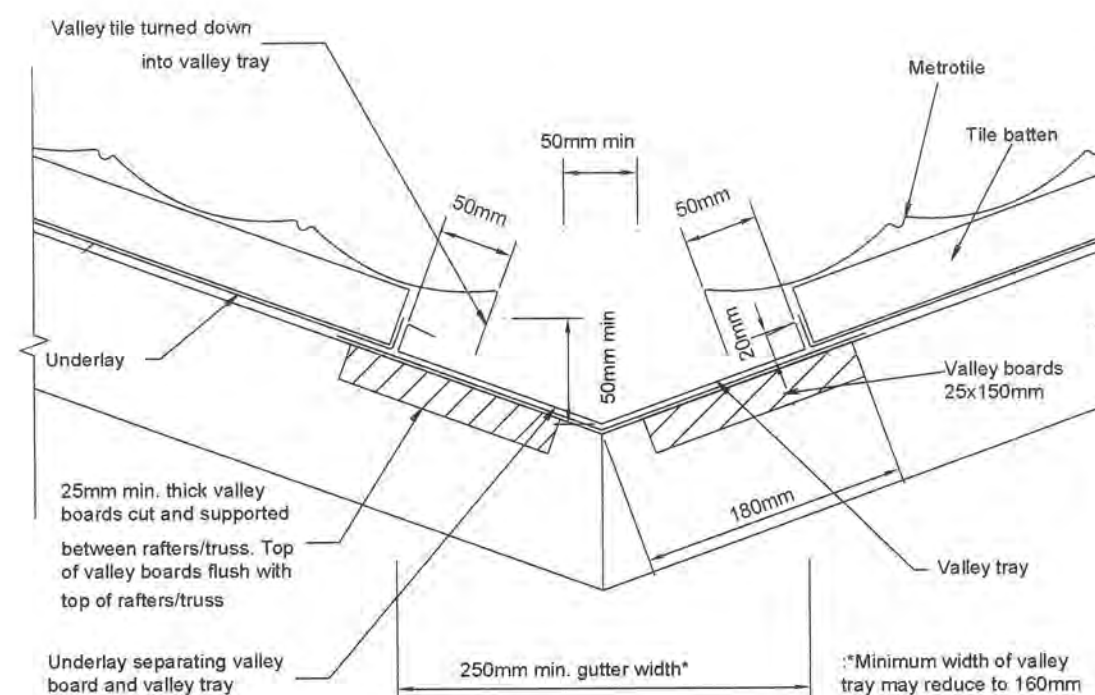
1). All details shown are standard details attained from the Metro Roofing technical information website.

- 2). Specific materials for use. Refer to details for construction;
- Insulation: R2.6 Pink Batts thermal wall insulation
R3.6 Pink Batts thermal ceiling insulation
 - Roofing: Metro Tile pressed metal tile roofing over 45 x 45 SG8 purlins at c/c to suit tile profile
 - Roof Structure: 90 x 45 SG8 trusses at 900 c/c as per registered manufacturers design and specification
 - Roofing Underlay: **Thermakraft 215 roofing underlay**
 - Soffit Lining: 4.5mm Hardies Si Iklene lining with PV C jointers at sheet joints and blocking as required
 - Spouting & Fascia: Continuous colorsteel spouting / fascia system
 - Wall Framing: 90 x 45 SG8 H1.2 exterior wall framing with studs at 600 c/c & 1 row of dwangs.
90 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
 - Valley Boards: All timber valley boards to be SG8 H3.1 treated
 - Valley Tray: Custom folded colorsteel valley flashing with colour to match roofing selection

3). Refer to other drawings for typical/standard details for claddings and foundations.



TYPICAL FASCIA/EAVE DETAIL



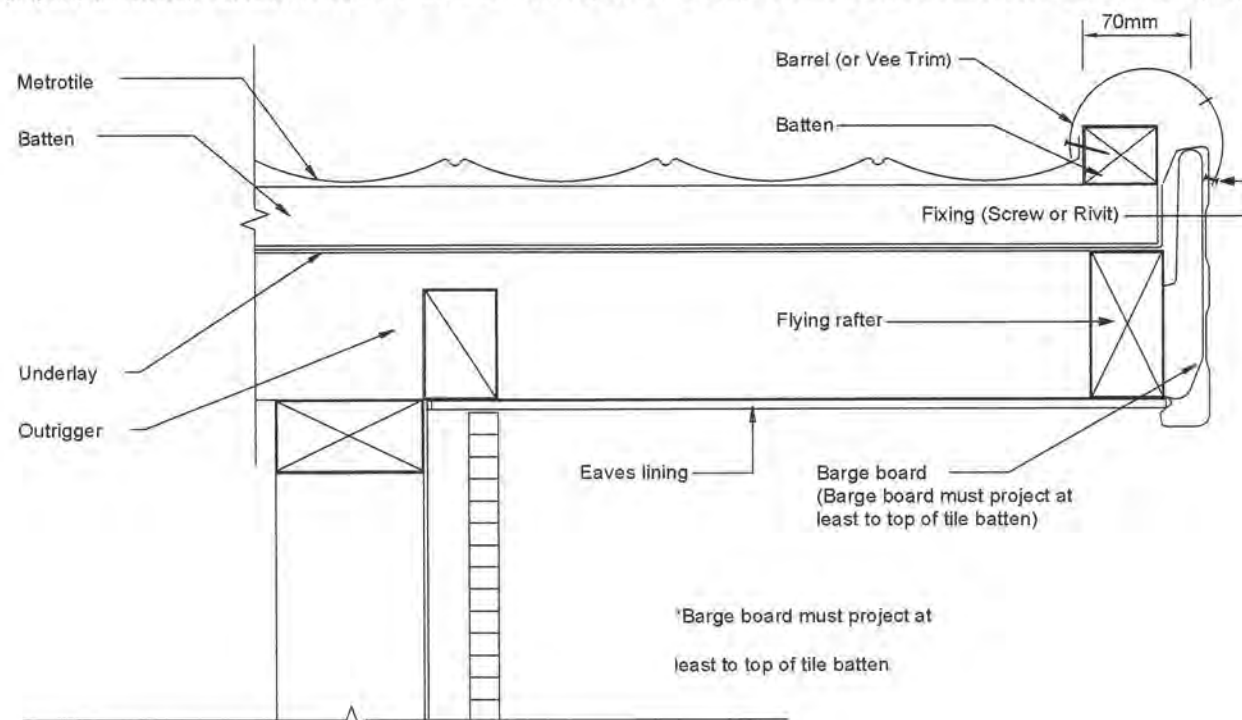
TYPICAL VALLEY DETAIL

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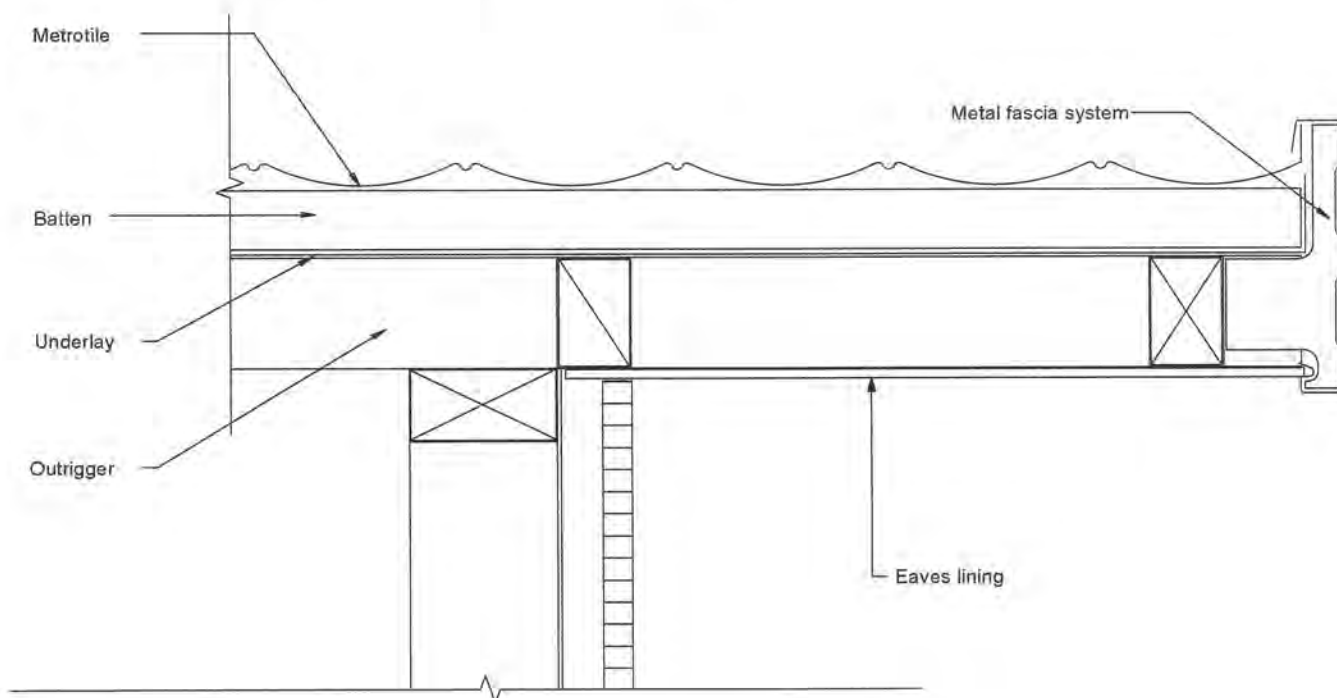
**METROTILE ROOFING
DETAILS 1**

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

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TYPICAL RIDGE/HIP DETAIL 01



TYPICAL BARGE DETAIL 02

Metrotile
ROOFING SYSTEMS

STANDARD ROOFING DETAILS

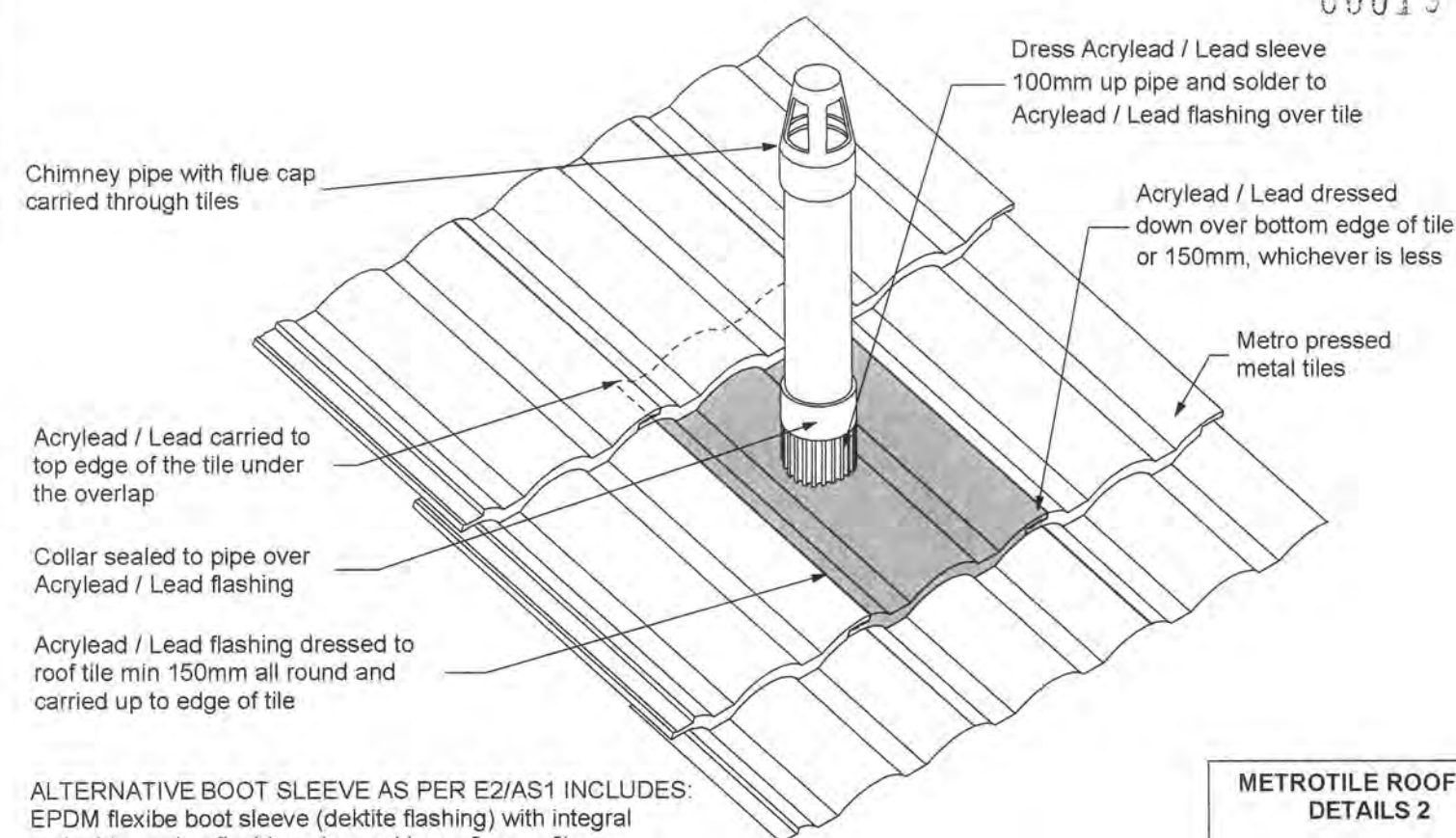
NOTES:

1). All details shown are standard details attained from the Metro Roofing technical information website.

- 2). Specific materials for use. Refer to details for construction;
- Insulation: R2.6 Pink Batts thermal wall insulation
R3.6 Pink Batts thermal ceiling insulation
 - Roofing: Metro Tile pressed metal tile roofing over 45 x 45 SG8 purlins at c/c to suit tile profile
 - Roof Structure: 90 x 45 SG8 trusses at 900 c/c as per registered manufacturers design and specification
 - Roofing Underlay: **Thermakraft 215 roofing underlay**
 - Soffit Lining: 4.5mm Hardies Si Iklene lining with PV C jointers at sheet joints and blocking as required
 - Spouting & Fascia: Continuous colorsteel spouting / fascia system
 - Wall Framing: 90 x 45 SG8 H1.2 exterior wall framing with studs at 600 c/c & 1 row of dwangs.
90 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
 - Valley Boards: All timber valley boards to be SG8 H3.1 treated
 - Valley Tray: Custom folded colorsteel valley flashing with colour to match roofing selection

3). Refer to other drawings for typical/standard details for claddings and foundations.

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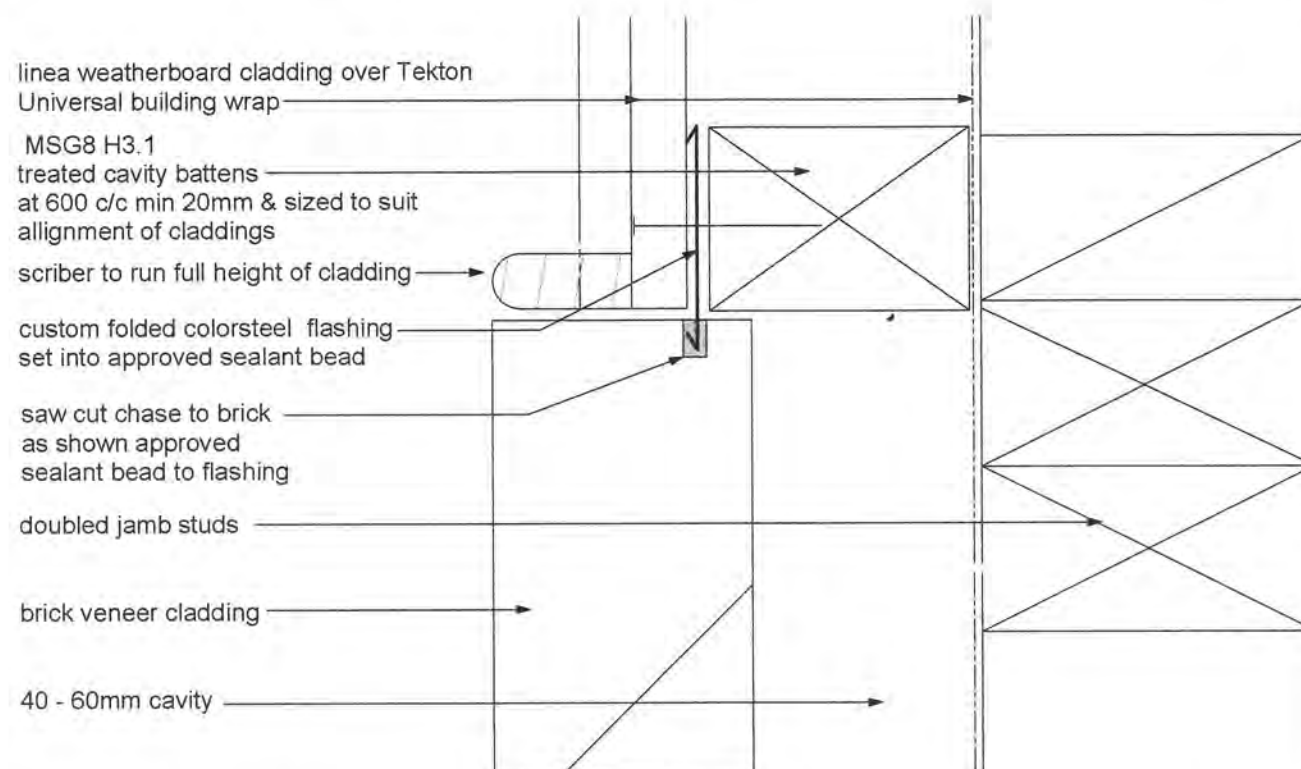
ALTERNATIVE BOOT SLEEVE AS PER E2/AS1 INCLUDES:
EPDM flexibe boot sleeve (dektite flashing) with integral maleable soaker flashing. dressed to roofing profile

TYPICAL PENETRATION DETAIL

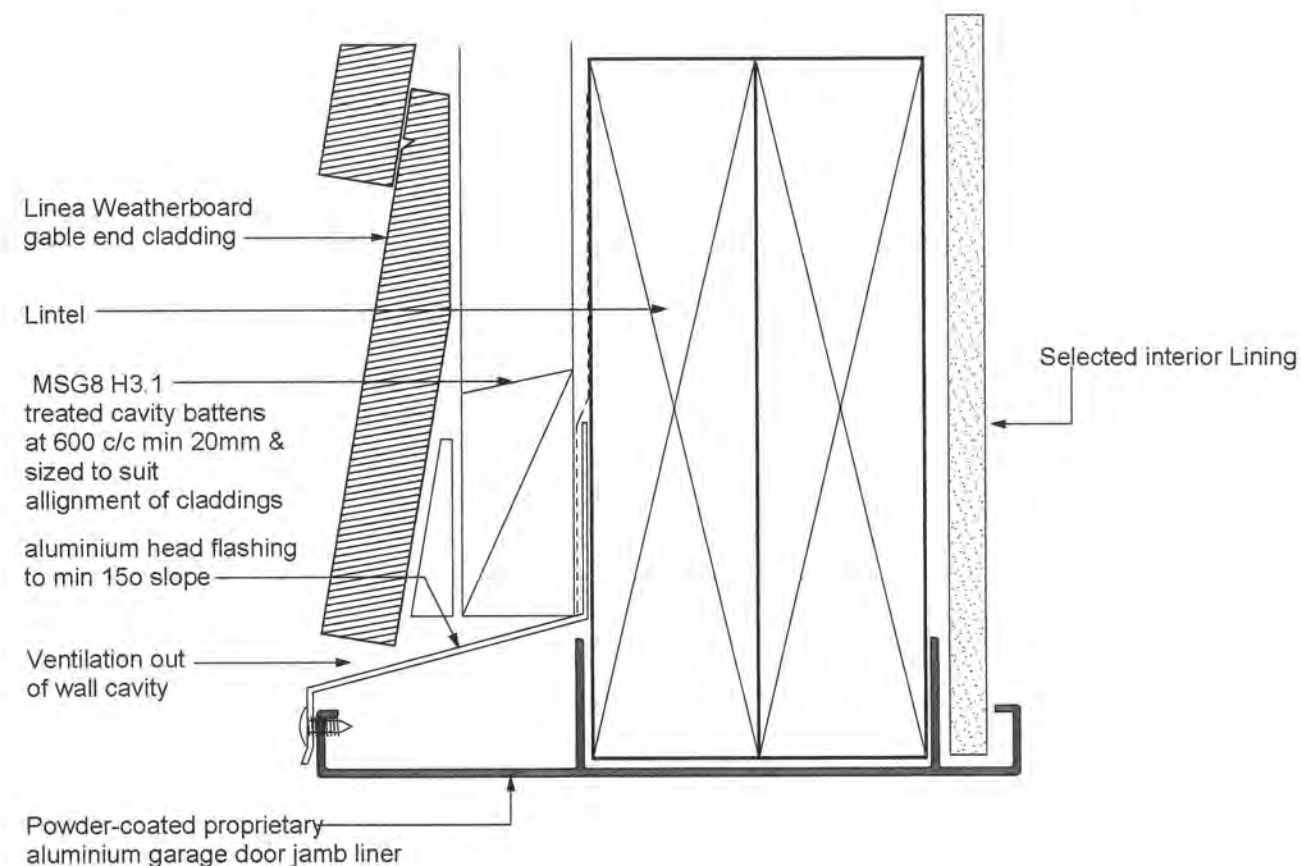
**METROTILE ROOFING
DETAILS 2**

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

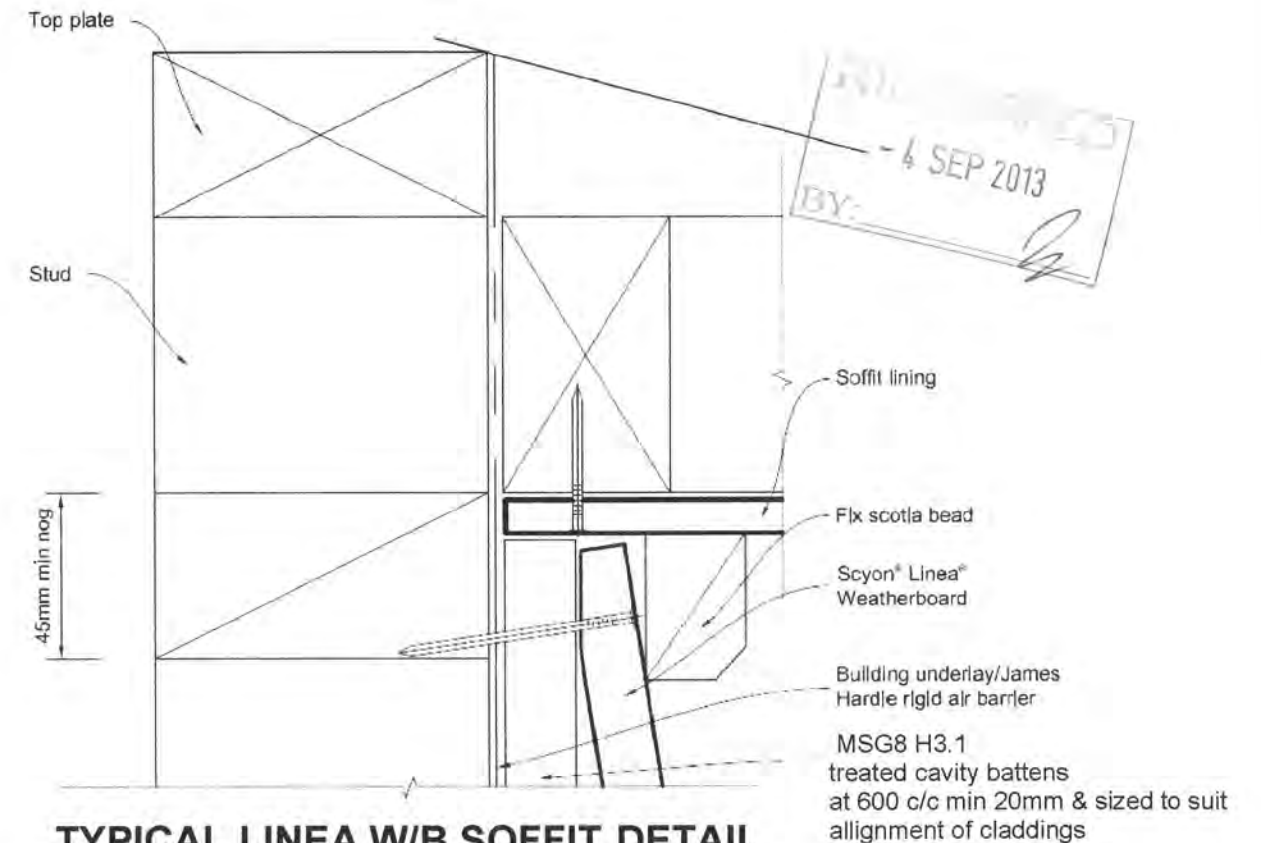
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EC183 - dwg 20	



TYPICAL LINEA / BRICK CHANGE OF CLADDING JUNCTION DETAIL



LINEA AT GARAGE DOOR HEAD DETAIL

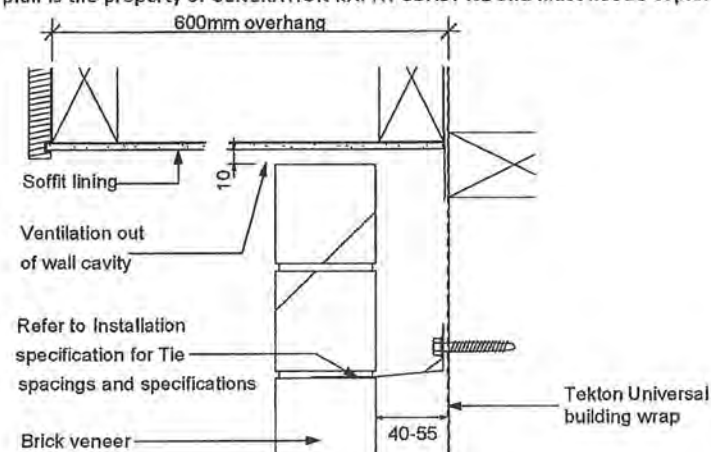


TYPICAL LINEA W/B SOFFIT DETAIL

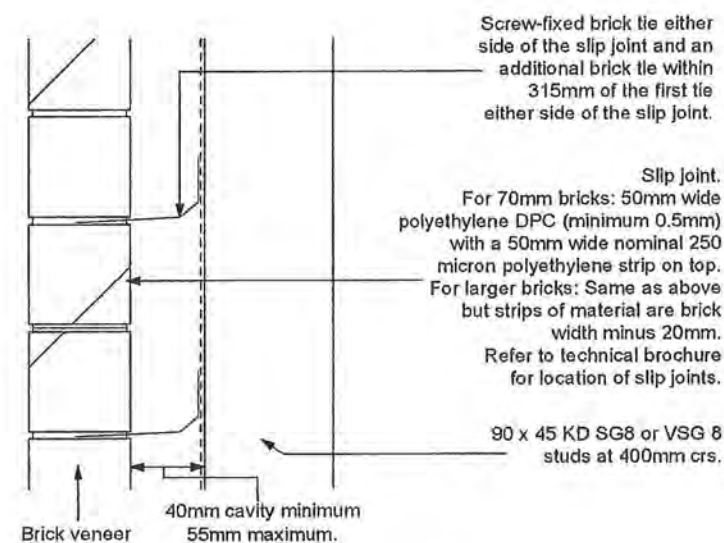
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Linea Details			
Barry and Hayley Vinten			
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Paraparaumu			
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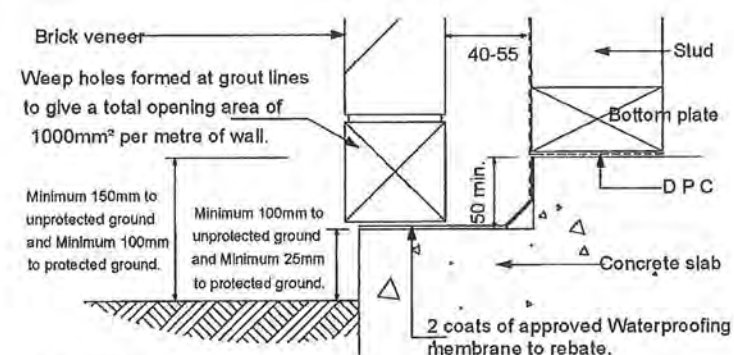
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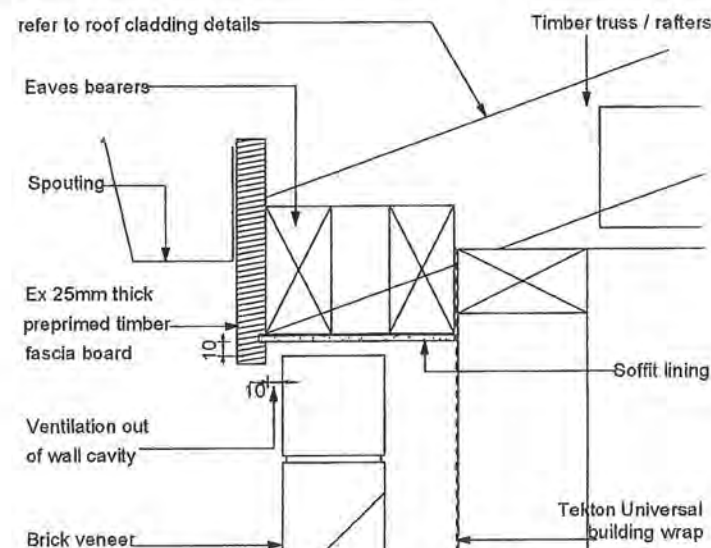
SOFFIT DETAIL



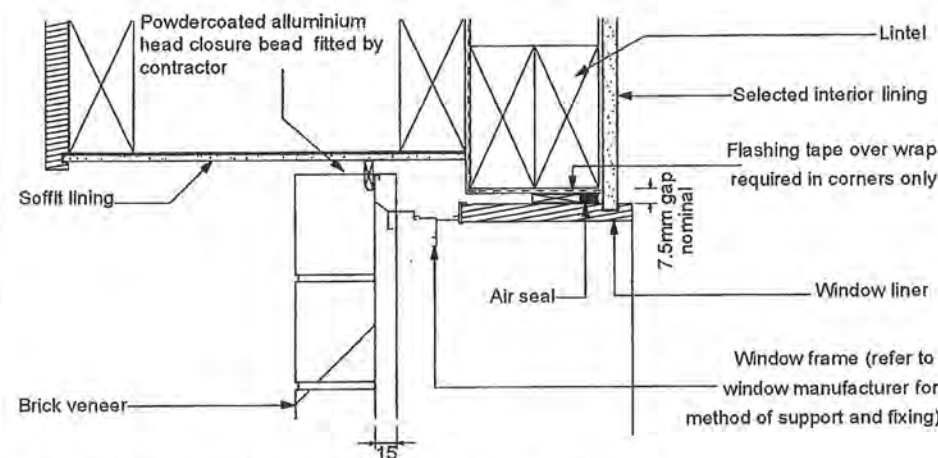
SLIP JOINT



FOUNDATION DETAIL



REDUCED SOFFIT AND VERGE DETAIL



ALTERNATIVE WINDOW HEAD DETAIL



BRICK VENEERS

STANDARD CLADDING DETAILS

NOTES:

- 1). All details shown are standard details
- 2). Specific materials for use. Refer to details for construction;
 - Brick Veneer: James Hardie Linea weather board fixed to framing over 20mm cavity with 10mm selected colour mortar
 - Building Paper: Tekton Universal building wrap to ext wall framing
 - Cavity Zone: 40 - 55mm cavity between brick and framing
 - Flashing Tape: Protectowrap flashing system
 - Insulation: R2.6 Pink Batts thermal wall insulation
R3.6 Pink Batts thermal ceiling insulation
 - Interior Lining: 10mm GIB std generally, 10mm aqualine to wet zones
 - Roofing: Metro Tile pressed metal tile roofing over 45 x 45 SG8 purlins at c/c to suit tile profile
battens to suit tile profile
 - Roof Structure: 90 x 45 SG8 H1.2 trusses at 900 c/c as per registered manufacturers design and specs
 - Soffit Lining: 4.5mm Hardies Silkline lining with PVC jointers at sheet joints and blocking as required
 - Spouting & Fascia: Continuous colorsteel spouting / fascia system
 - Wall Framing: 90 x 45 SG8 H1.2 exterior wall framing with studs at 600 c/c & 1 row of dwangs.
90 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
70 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
 - Window Liner: H3.1 FJP PQ window liner
- 3). Refer to other construction details for roof construction and floor construction

ALL BRICK TIES AND BRICK LINTELS IN COASTAL ZONE "D" SHALL BE STAINLESS STEEL AS PER NZBC E2 AS1 TABLE 20 REQUIREMENTS

00017

4 SEP 2013
BY: [Signature]

FIRTH MANORSTONE STANDARD DETAILS

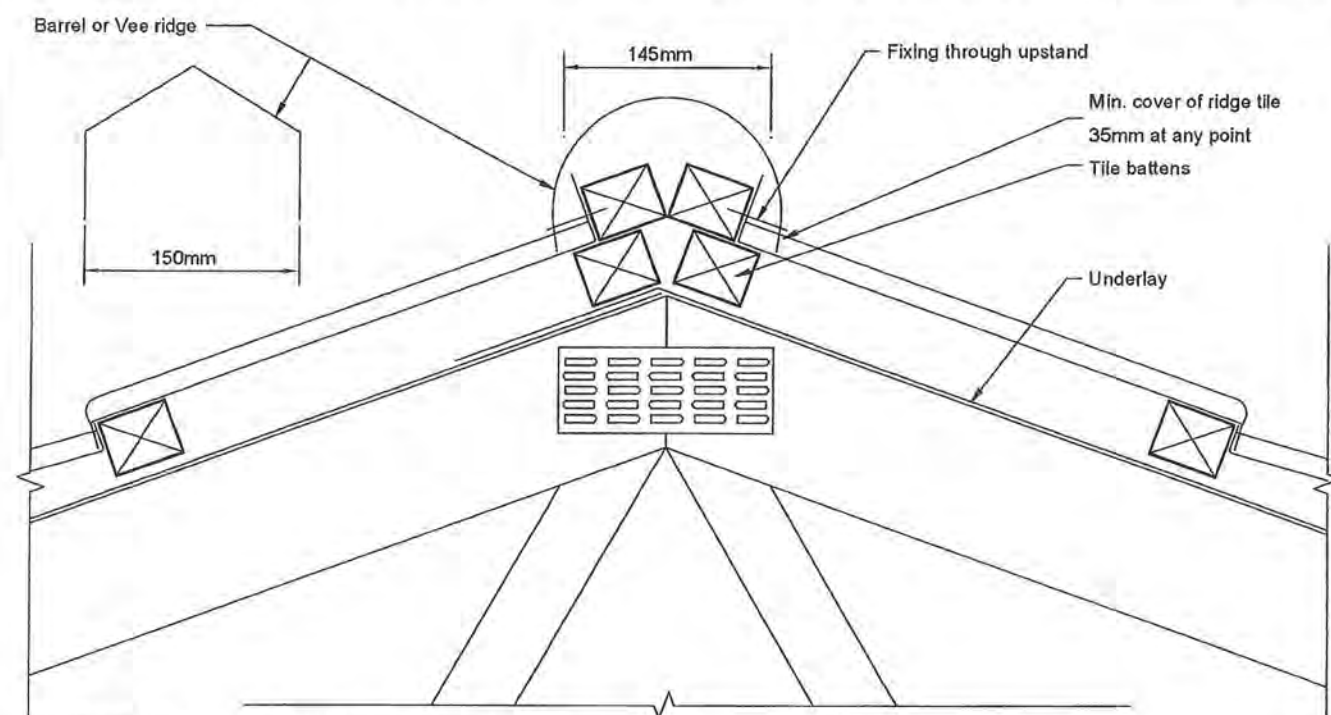
Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

DRAWN BY: ROD CHECKED BY: MARTY

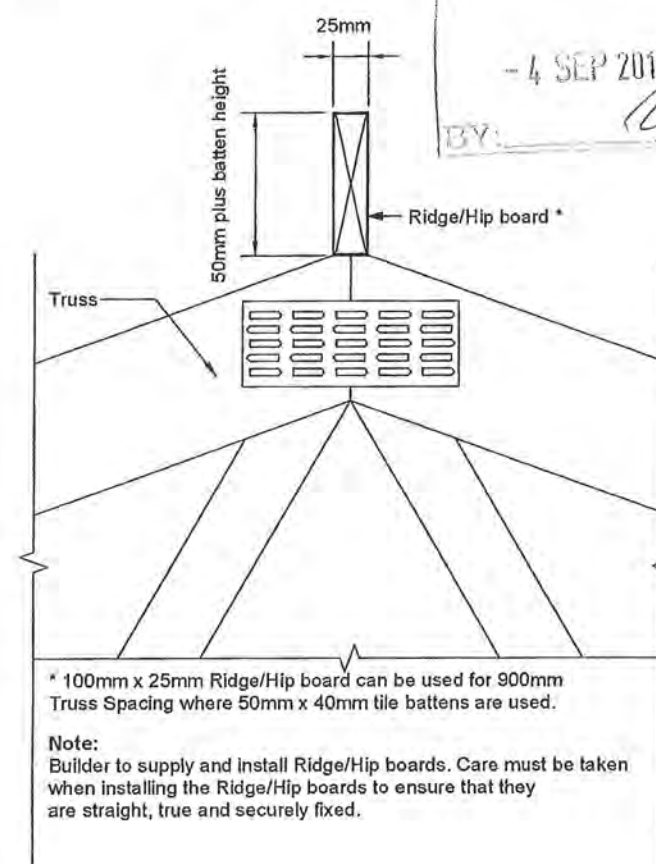
GENERATION KAPITI COAST NZ

DATE: AUG 13 SCALES: 1:5 EC183 - dwg 18

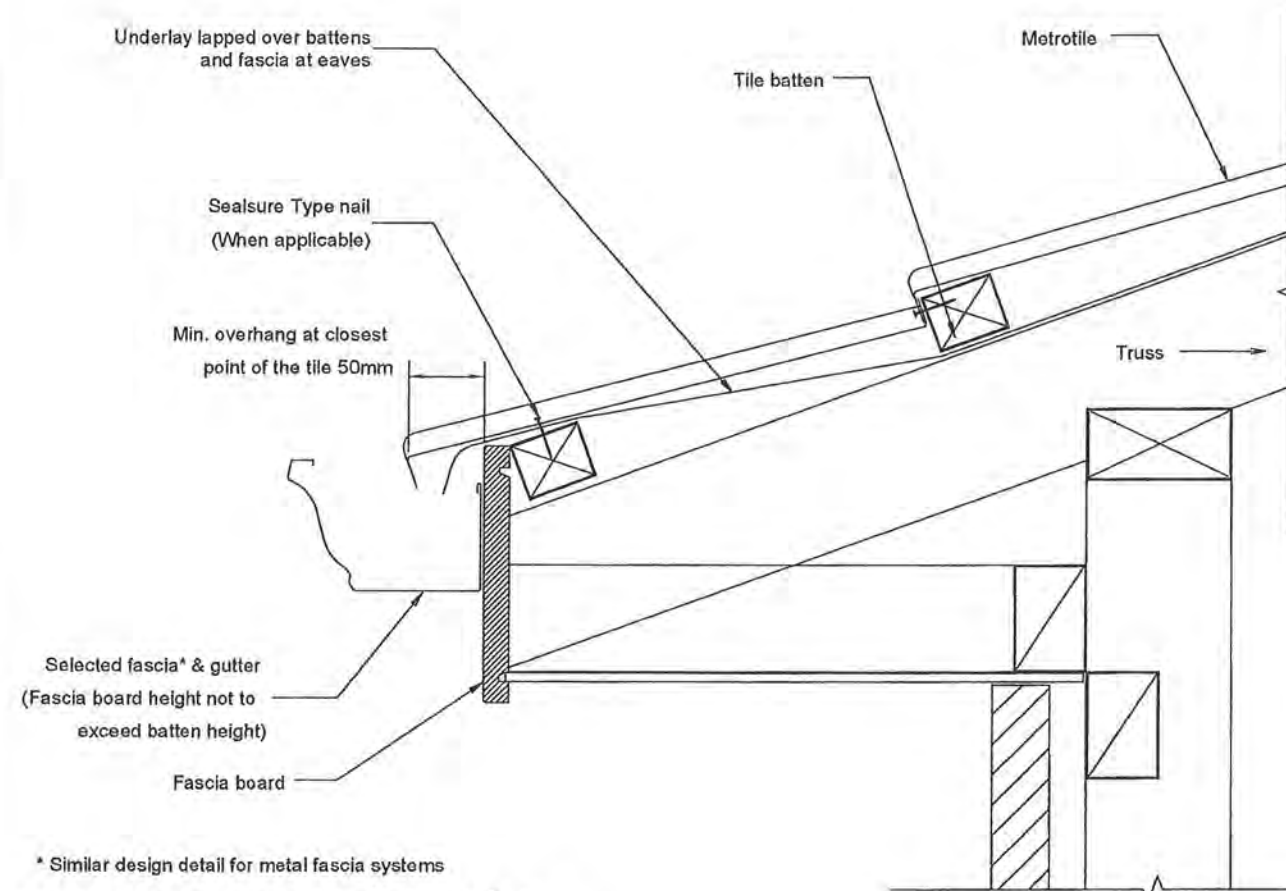
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TYPICAL RIDGE/HIP DETAIL

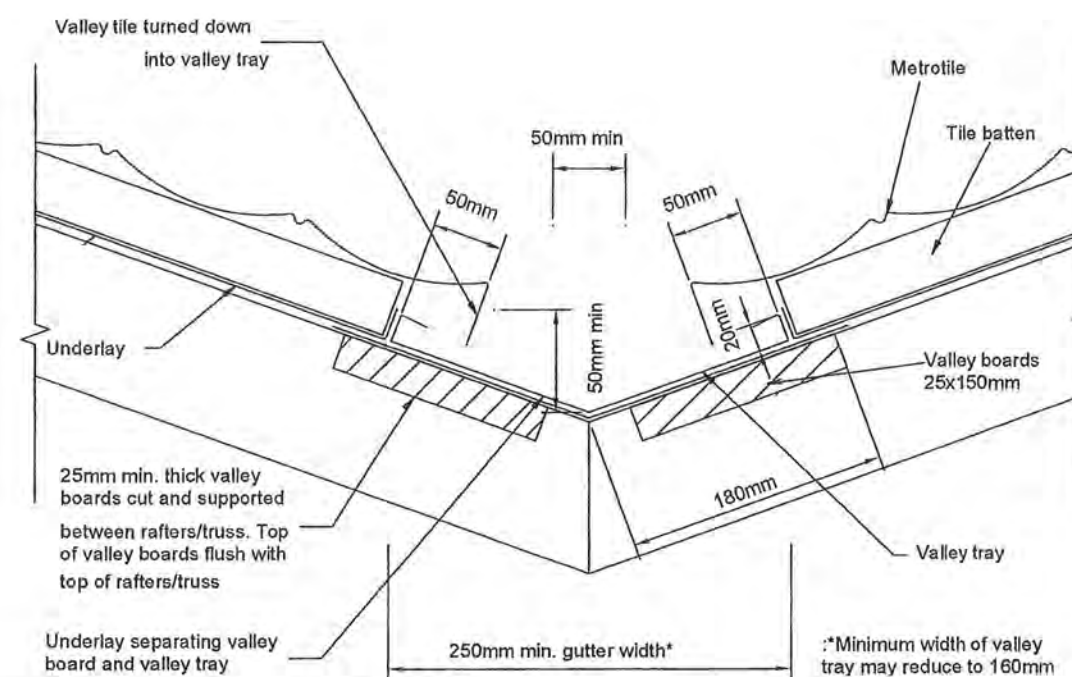


TYPICAL BARGE HIP/RIDGE



* Similar design detail for metal fascia systems

TYPICAL FASCIA/EAVE DETAIL



TYPICAL VALLEY DETAIL

- 4 SEP 2013

BY:

Metrotile
ROOFING SYSTEMS

STANDARD ROOFING DETAILS

NOTES:

1). All details shown are standard details attained from the Metro Roofing technical information website.

2). Specific materials for use. Refer to details for construction;
- Insulation: R2.6 Pink Batts thermal wall insulation
R3.6 Pink Batts thermal ceiling insulation
- Roofing: Metro Tile pressed metal tile roofing over 45 x 45 SG8 purlins at c/c to suit tile profile
- Roof Structure: 90 x 45 SG8 trusses at 900 c/c as per registered manufacturers design and specification

- Roofing Underlay: Thermakraft 215 roofing underlay
- Soffit Lining: 4.5mm Hardies Si Iklene lining with PV C jointers at sheet joints and blocking as required
- Spouting & Fascia: Continuous colorsteel spouting / fascia system

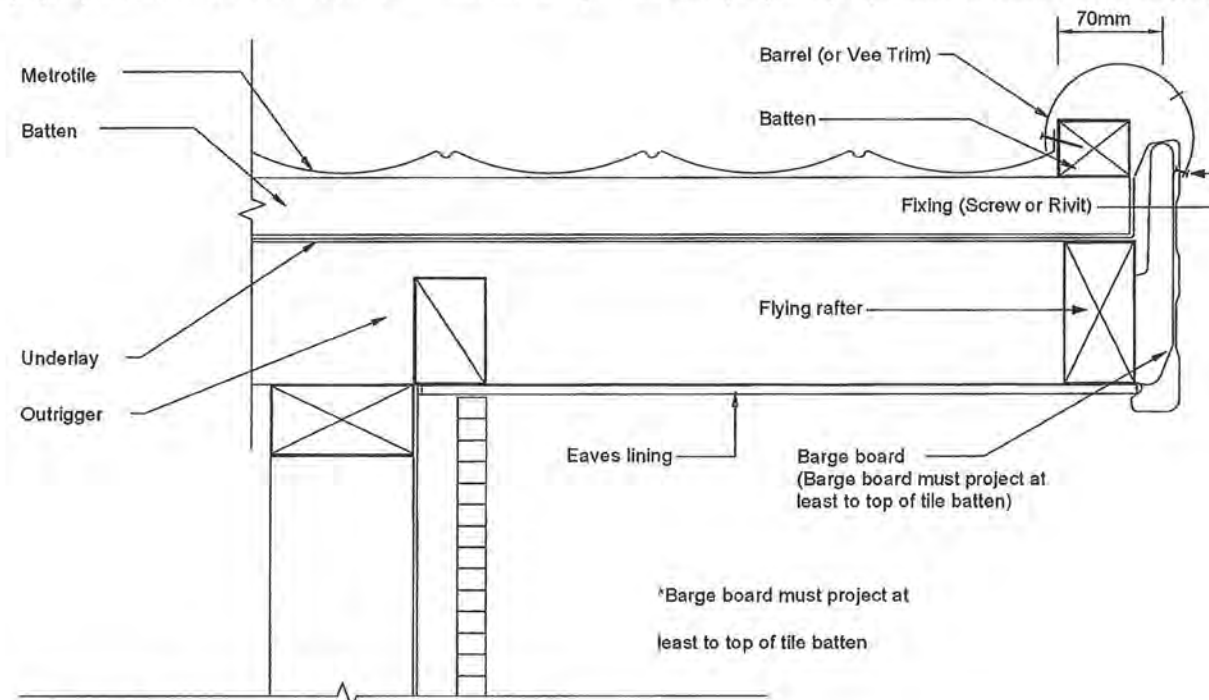
- Wall Framing: 90 x 45 SG8 H1.2 exterior wall framing with studs at 600 c/c & 1 row of dwangs.
90 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
- Valley Boards: All timber valley boards to be SG8 H3.1 treated
- Valley Tray: Custom folded colorsteel valley flashing with colour to match roofing selection

3). Refer to other drawings for typical/standard details for claddings and foundations.

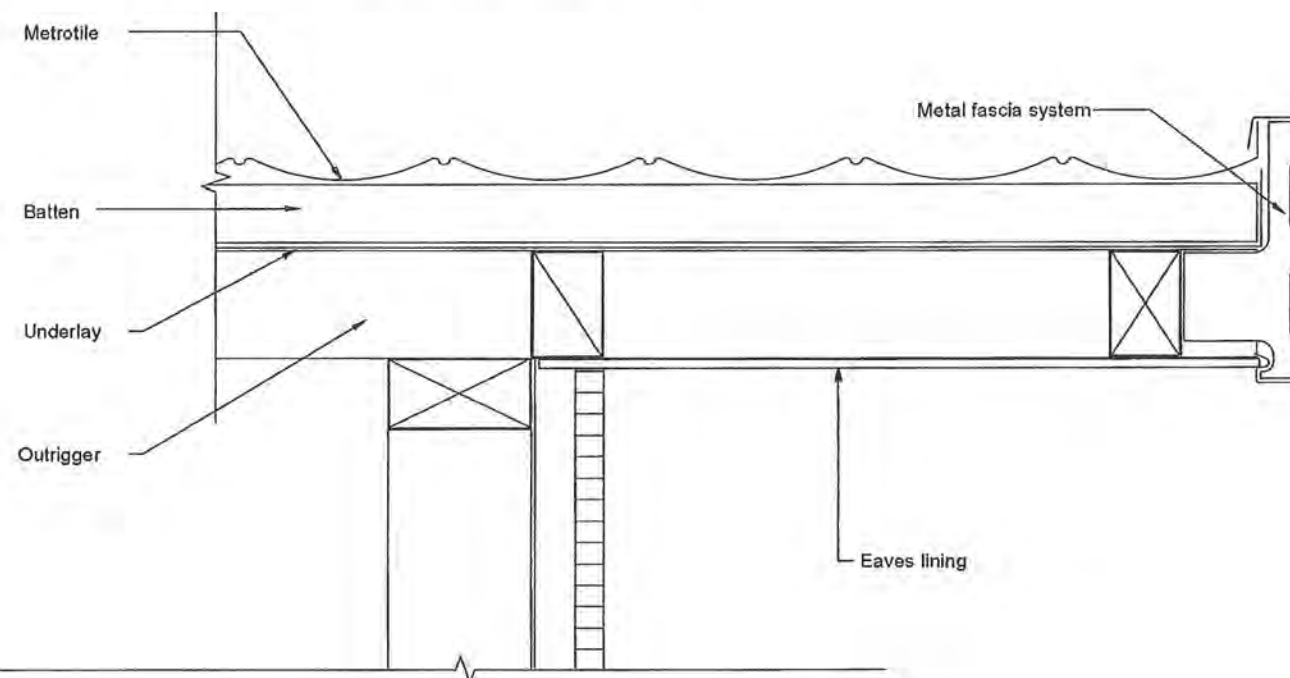
00010

METROTILE ROOFING DETAILS 1	
Barry and Hayley Vinten Lot 117 - DP442630 Paraparaumu	
DRAWN BY ROD	CHECKED BY MARTY
GENERATION KAPITI COAST NZ	
DATE AUG 13	SCALE: 1:5
EC183 - dwg 19	

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TYPICAL RIDGE/HIP DETAIL 01



TYPICAL BARGE DETAIL 02

Metrotile
ROOFING SYSTEMS

STANDARD ROOFING DETAILS

NOTES:

- 1). All details shown are standard details attained from the Metro Roofing technical information website.
- 2). Specific materials for use. Refer to details for construction;
 - Insulation: R2.6 Pink Batts thermal wall insulation
R3.6 Pink Batts thermal ceiling insulation
 - Roofing: Metro Tile pressed metal tile roofing over 45 x 45 SG8 purlins at c/c to suit tile profile
 - Roof Structure: 90 x 45 SG8 trusses at 900 c/c as per registered manufacturers design and specification
 - Roofing Underlay: **Thermakraft 215 roofing underlay**
 - Soffit Lining: 4.5mm Hardies Si Iklone lining with PV C jointers at sheet joints and blocking as required
 - Spouting & Fascia: Continuous colorsteel spouting / fascia system
 - Wall Framing: 90 x 45 SG8 H1.2 exterior wall framing with studs at 600 c/c & 1 row of dwangs.
90 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
 - Valley Boards: All timber valley boards to be SG8 H3.1 treated
 - Valley Tray: Custom folded colorsteel valley flashing with colour to match roofing selection
- 3). Refer to other drawings for typical/standard details for claddings and foundations.

00019

Chimney pipe with flue cap carried through tiles

Acrylead / Lead carried to top edge of the tile under the overlap

Collar sealed to pipe over Acrylead / Lead flashing

Acrylead / Lead flashing dressed to roof tile min 150mm all round and carried up to edge of tile

Dress Acrylead / Lead sleeve 100mm up pipe and solder to Acrylead / Lead flashing over tile

Acrylead / Lead dressed down over bottom edge of tile or 150mm, whichever is less

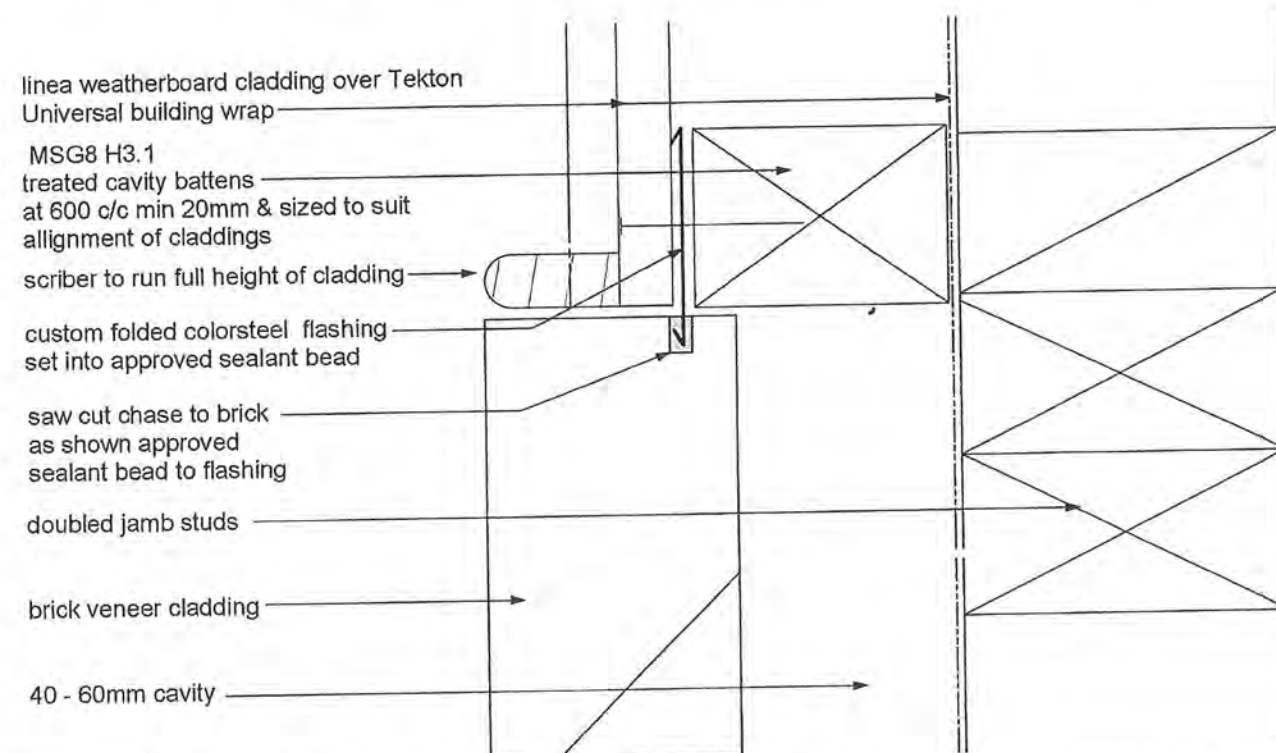
Metro pressed metal tiles

ALTERNATIVE BOOT SLEEVE AS PER E2/AS1 INCLUDES: EPDM flexibe boot sleeve (dektite flashing) with integral maleable soaker flashing. dressed to roofing profile

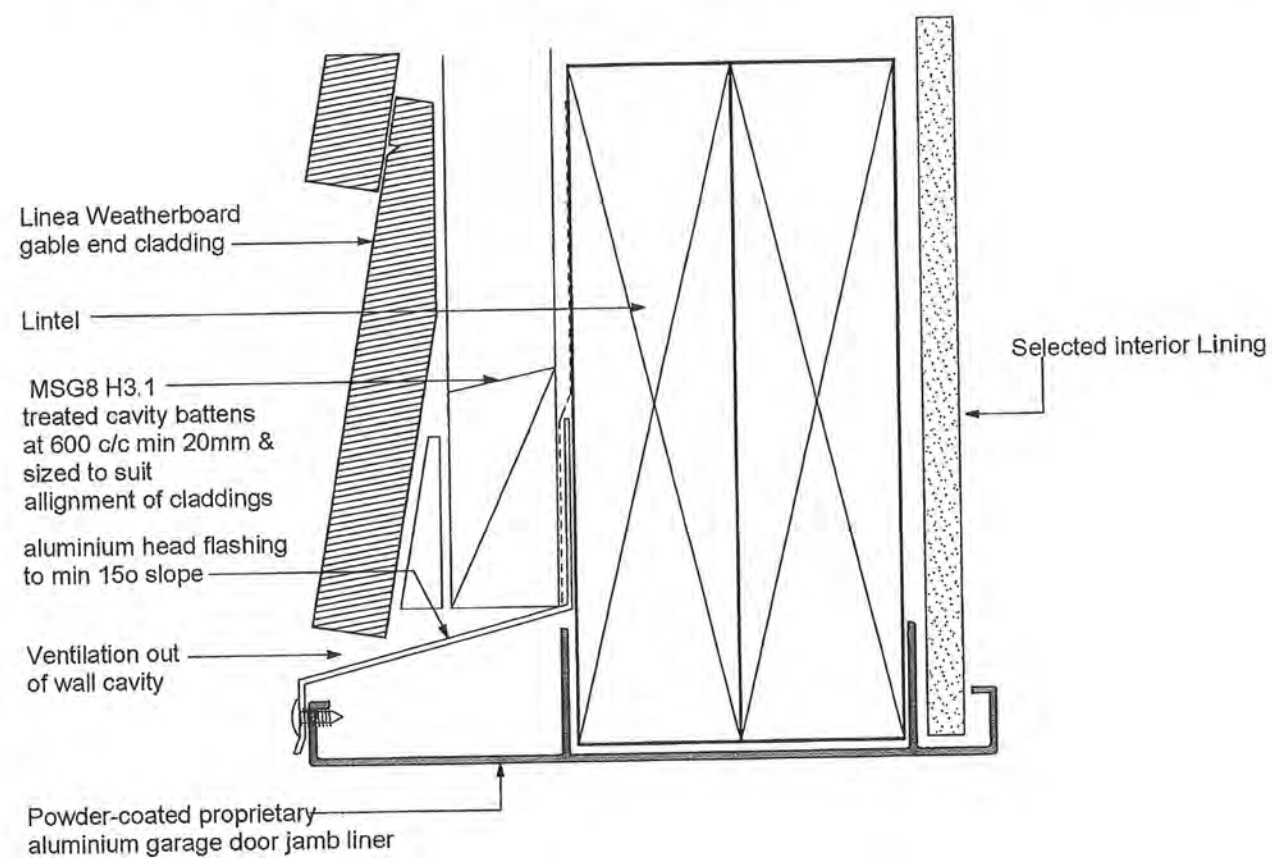
TYPICAL PENETRATION DETAIL

METROTILE ROOFING DETAILS 2		
Barry and Hayley Vinten Lot 117 - DP442630 Paraparaumu		
DRAWN BY ROD		CHECKED BY MARTY
GENERATION KAPITI COAST NZ		
DATE AUG 13	SCALES: 1:5	EC183 - dwg 20

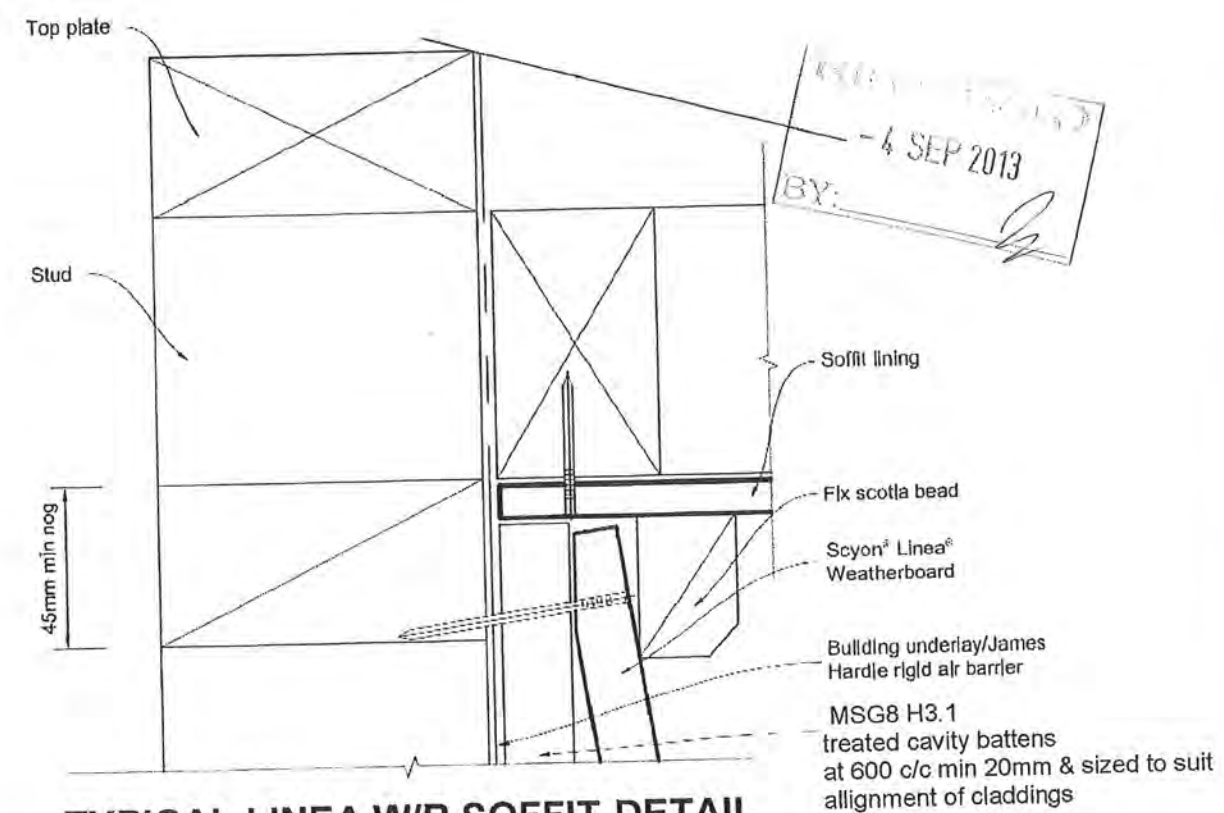
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TYPICAL LINEA / BRICK CHANGE OF CLADDING JUNCTION DETAIL



LINEA AT GARAGE DOOR HEAD DETAIL

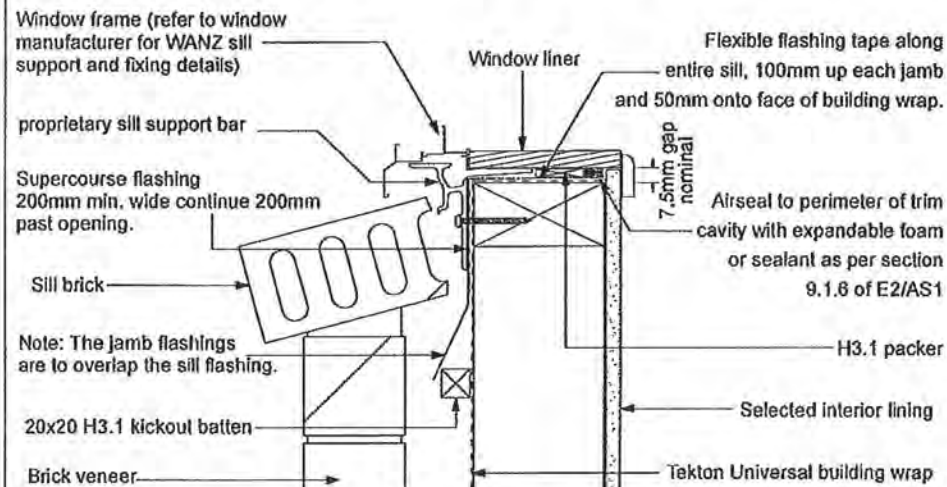


TYPICAL LINEA W/B SOFFIT DETAIL

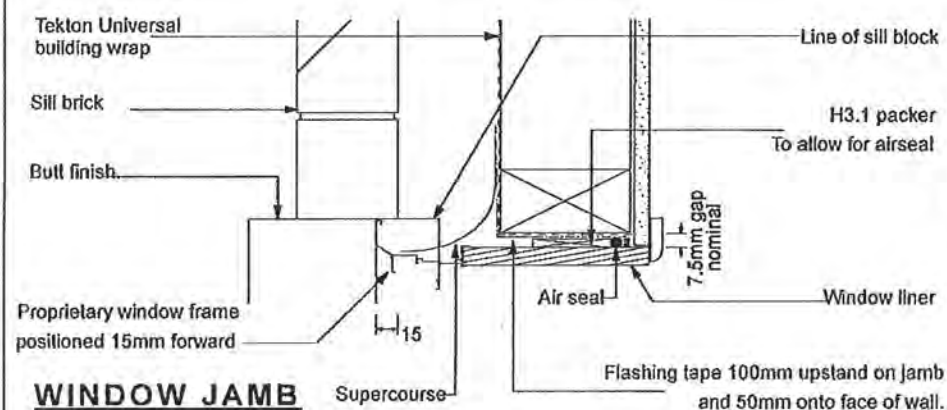
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Linea Details		
Barry and Hayley Vinten Lot 117 - DP442630 Paraparaumu		
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GENERATION KAPITI COAST NZ		
DATE AUG 13	SCALES: 1:2	EC183 - dwg 21

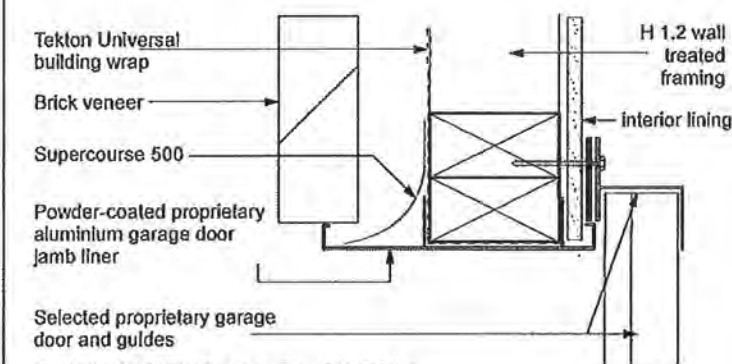
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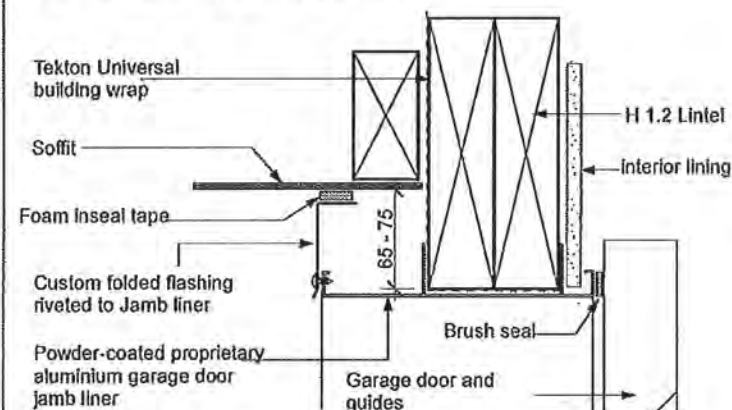
WINDOW SILL



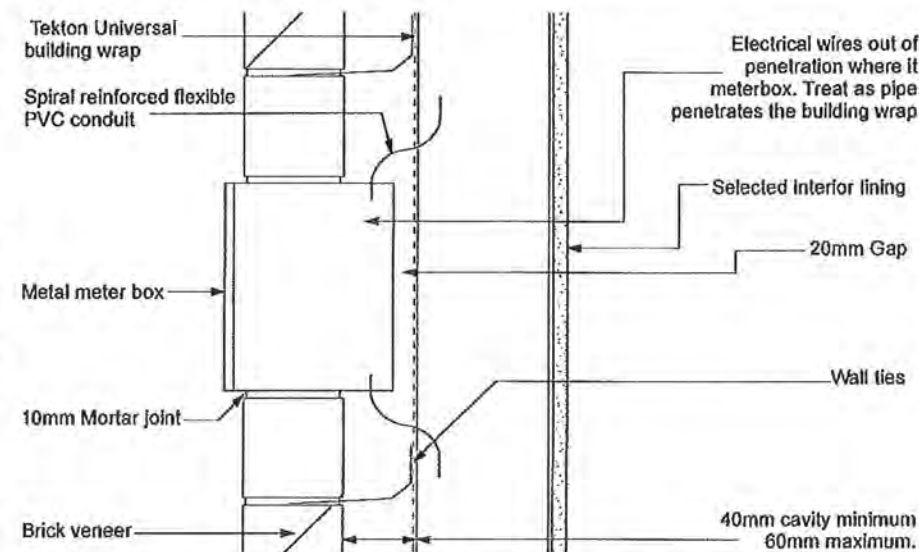
WINDOW JAMB



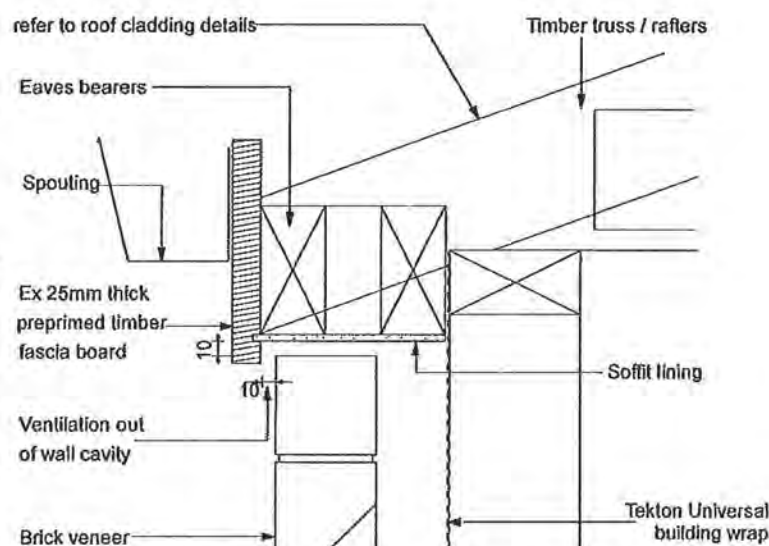
GARAGE DOOR JAMB



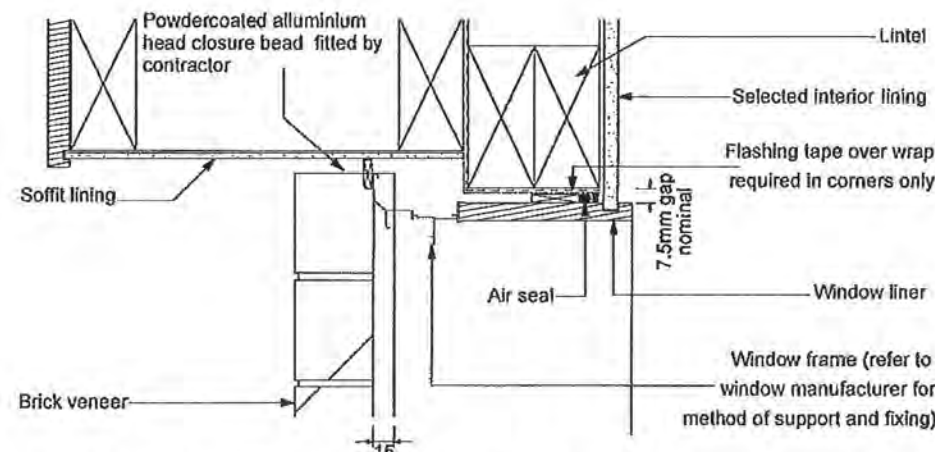
GARAGE DOOR HEAD



ALTERNATIVE METER BOX



REDUCED SOFFIT AND VERGE DETAIL



ALTERNATIVE WINDOW HEAD DETAIL



STANDARD CLADDING DETAILS

NOTES:

- 1). All details shown are standard details attained from the AustralBrick technical information website.
- 2). Specific materials for use. Refer to details for construction;
 - Brick Veneer: Austral 70mm brick over 60mm cavity with 10mm selected colour mortar
 - Building Paper: Tekton Universal building wrap to ext wall framing
 - Cavity Zone: 40 - 60mm cavity between brick and framing
 - Flashing Tape: Protectowrap flashing system
 - Insulation: R2.6 Pink Batts thermal wall insulation
R3.6 Pink Batts thermal ceiling insulation
 - Interior Lining: 10mm GIB std generally, 10mm aqualine to wet zones
 - Roofing: Metro Tile pressed metal tile roofing over 45 x 45 SG8 purlins at c/c to suit tile profile
battens to suit tile profile
 - Roof Structure: 90 x 45 SG8 H1.2 trusses at 900 c/c as per registered manufacturers design and specs
 - Soffit Lining: 4.5mm Hardies Silkline lining with PVC jointers at sheet joints and blocking as required
 - Spouting & Fascia: Continuous colorsteel spouting / fascia system
 - Wall Framing: 90 x 45 SG8 H1.2 exterior wall framing with studs at 600 c/c & 1 row of dwangs.
90 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
70 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
 - Window Liner: H3.1 FJP PQ window liner
- 3). Refer to other construction details for roof construction and floor construction

ALL BRICK TIES AND BRICK LINTELS IN COASTAL ZONE "D" SHALL BE STAINLESS STEEL AS PER NZBC E2 AS1 TABLE 20 REQUIREMENTS

KDCD RFls		11/09/2013
AUSTRAL BRICK STANDARD DETAILS 2		
Barry and Hayley Vinten Lot 117 - DP442630 Paraparaumu		
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GENERATION KAPITI COAST NZ		
DATE AUG 13	SCALE: 1:5	EC183 - dwg 23

Custom Design

R B W

~~SUPERSEDED~~

PROPOSED NEW RESIDENCE FOR

Barry and Hayley Vinten

Lot 117, 6 Angus Rd, Nikau Views - Kapiti Coast

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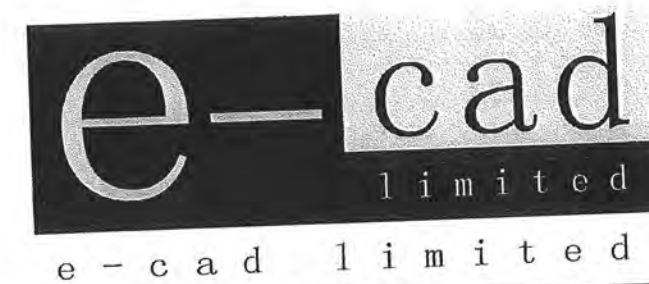
Layout ID	Layout Name
dwg 03	Site Plan
dwg 04	Floor Plan
dwg 05	Elevations
dwg 06	DOOR & WINDOW SCHEDULE
dwg 07	FOUNDATION PLAN
dwg 08	WALL SETOUT PLAN
dwg 09	CROSS SECTION AND NOTES
dwg 10	ROOF PLAN
dwg 11	DRAINAGE PLAN
dwg 12	BRACING PLAN
dwg 13	BRACING CALCS
dwg 14	ELECTRICAL PLAN
dwg 15	WATERPROOFING DETAILS
dwg 16	RIBRAFT/FLOOR STANDARD DETAILS 1
dwg 17	RIBRAFT/FLOOR STANDARD DETAILS 2
dwg 18	FIRTH MANORSTONE STANDARD DETAILS
dwg 19	METROTILE ROOFING DETAILS 1
dwg 20	METROTILE ROOFING DETAILS 2
dwg 21	Linea Details



00001



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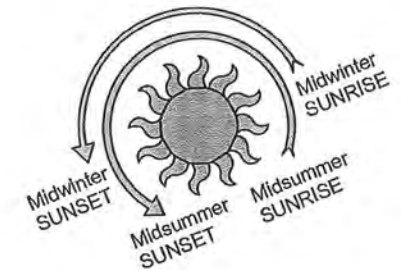
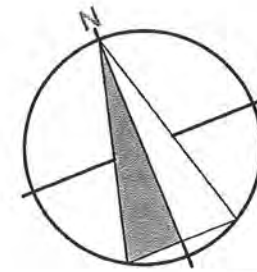
ARCHITECTURAL
DESIGNERS NZ

Job no: EC183

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SPECIFIC PROJECT NOTES

LEGAL DESCRIPTION:	
LOT	117
DP	442630
SITE AREA	4271sq m
STREET #	Paraparaumu
AREAS:	
SITE AREA	4271sq m
AREA OVER BRICK	234.56 sq m
AREA OVER FRAMING	224.269 sq m
SITE COVERAGE	5.5%
ZONES:	
WIND	Very High
EARTHQUAKE	3
CORROSION	C
SNOW LOADING	N/A
RESIDENTIAL	Rural



4 SEP 2013
BY: [Signature]

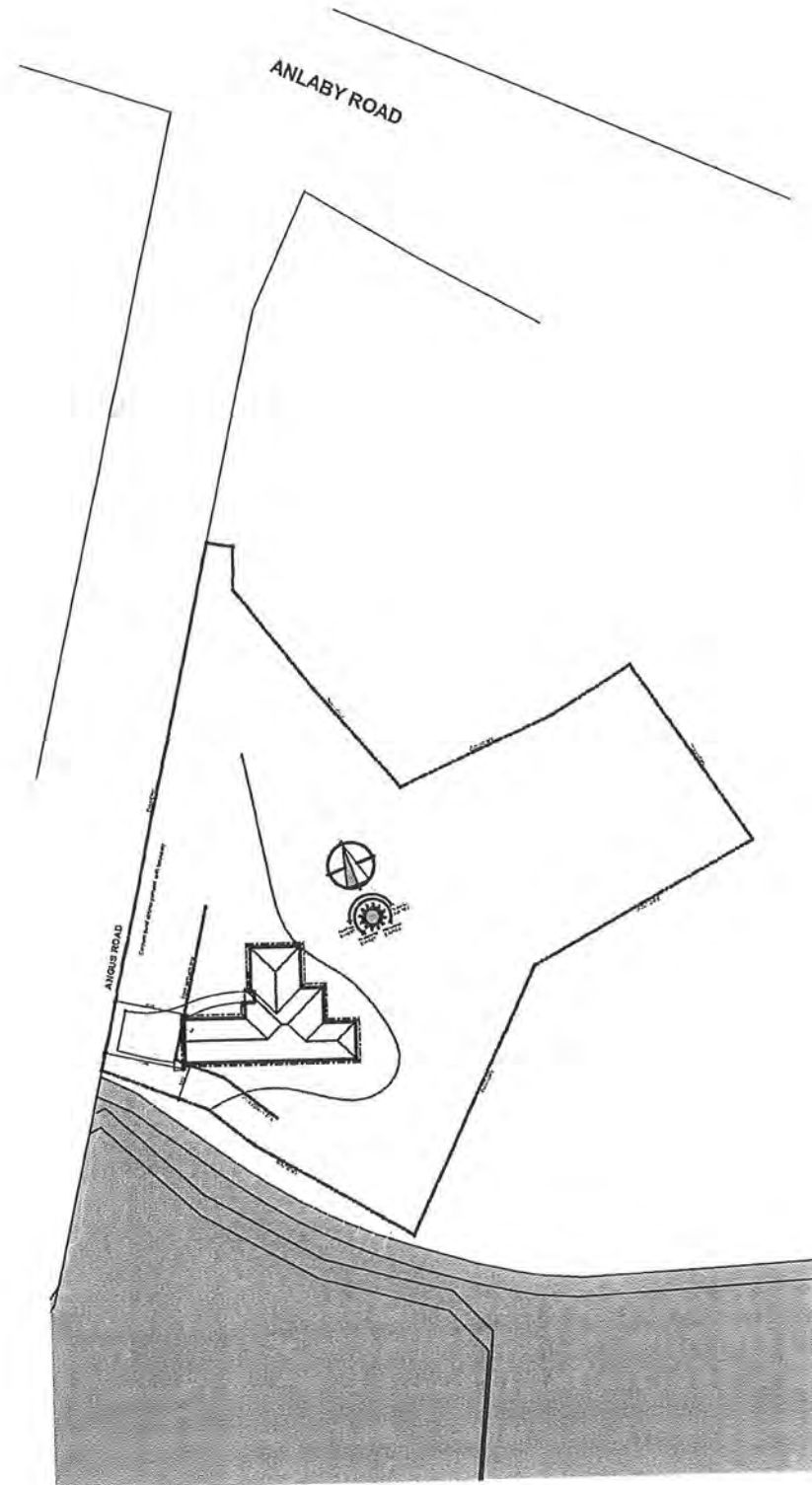
00002

Planning
Approved by
Jill Burke
5/09/2013

Site Plan

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

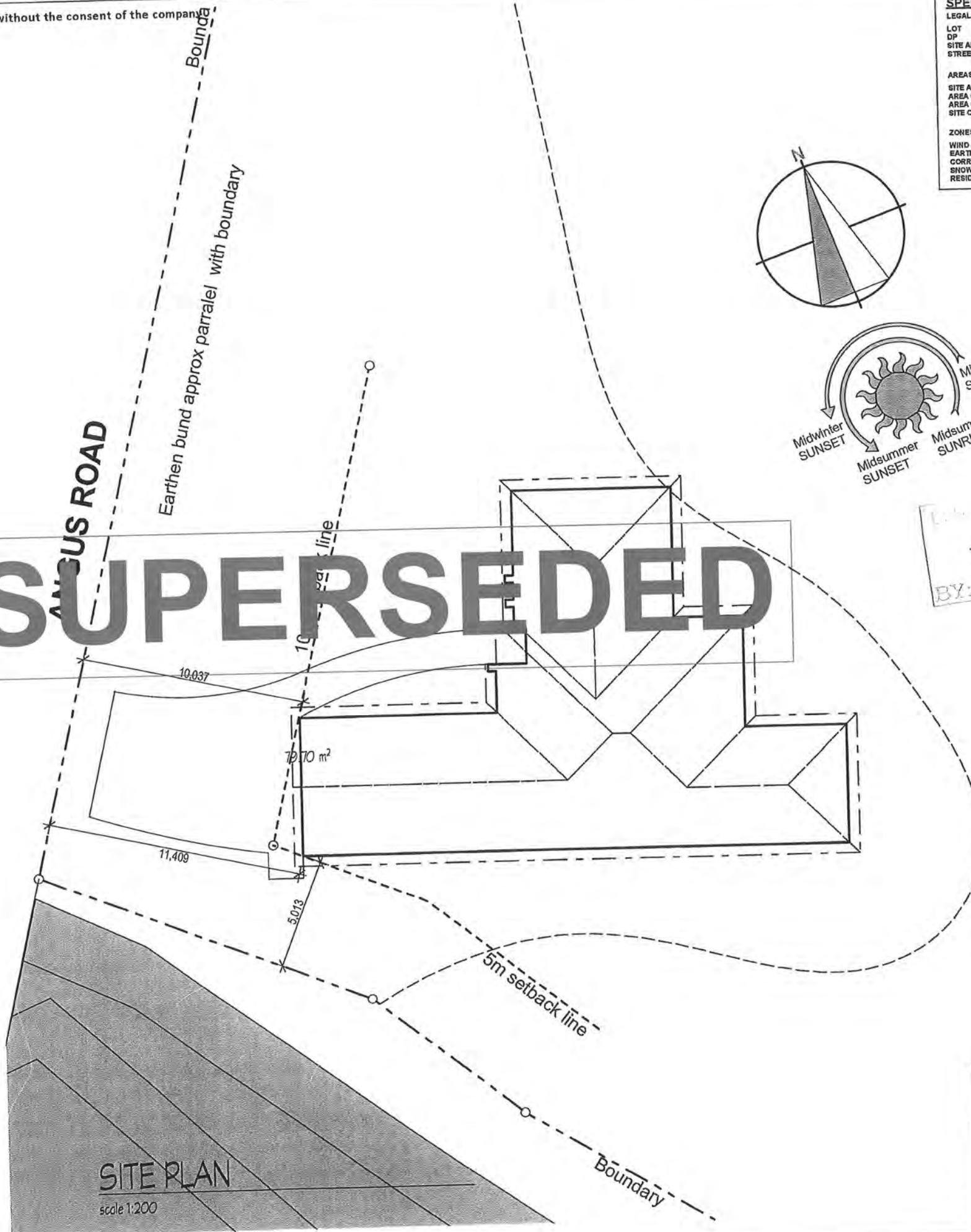
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DATE AUG 13 SCALES: 1:200, 1:1000 - dwg 03



SITE LOCATION PLAN

scale 1:1000

SUPERSEDED



SITE PLAN

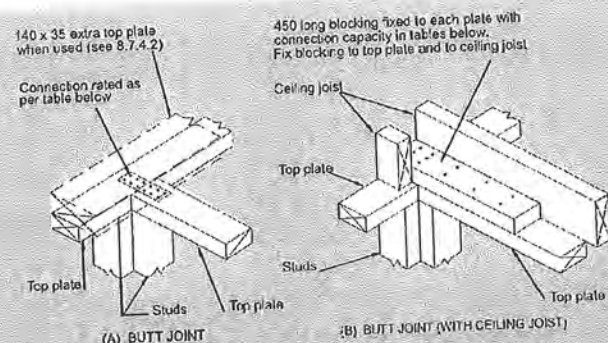
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Note to contractors

- Ensure any meter box or distribution board penetrations of interior linings are kept clear of bracing elements
- Ensure also bottom plate penetrations for services entry do not occur within bracing elements
- Ensure also plywood bracing elements are kept min 40mm clear of garage door openings to allow fitting of aluminium jamb extrusions
- Refer to specification for fixing of hold-downs and Ecopy or GIB bracing elements as required.

REFER TO ARCHITECTURAL SPECIFICATION AS REQUIRED FOR GIB AND ECOPELY MANUFACTURERS BRACING DETAILS

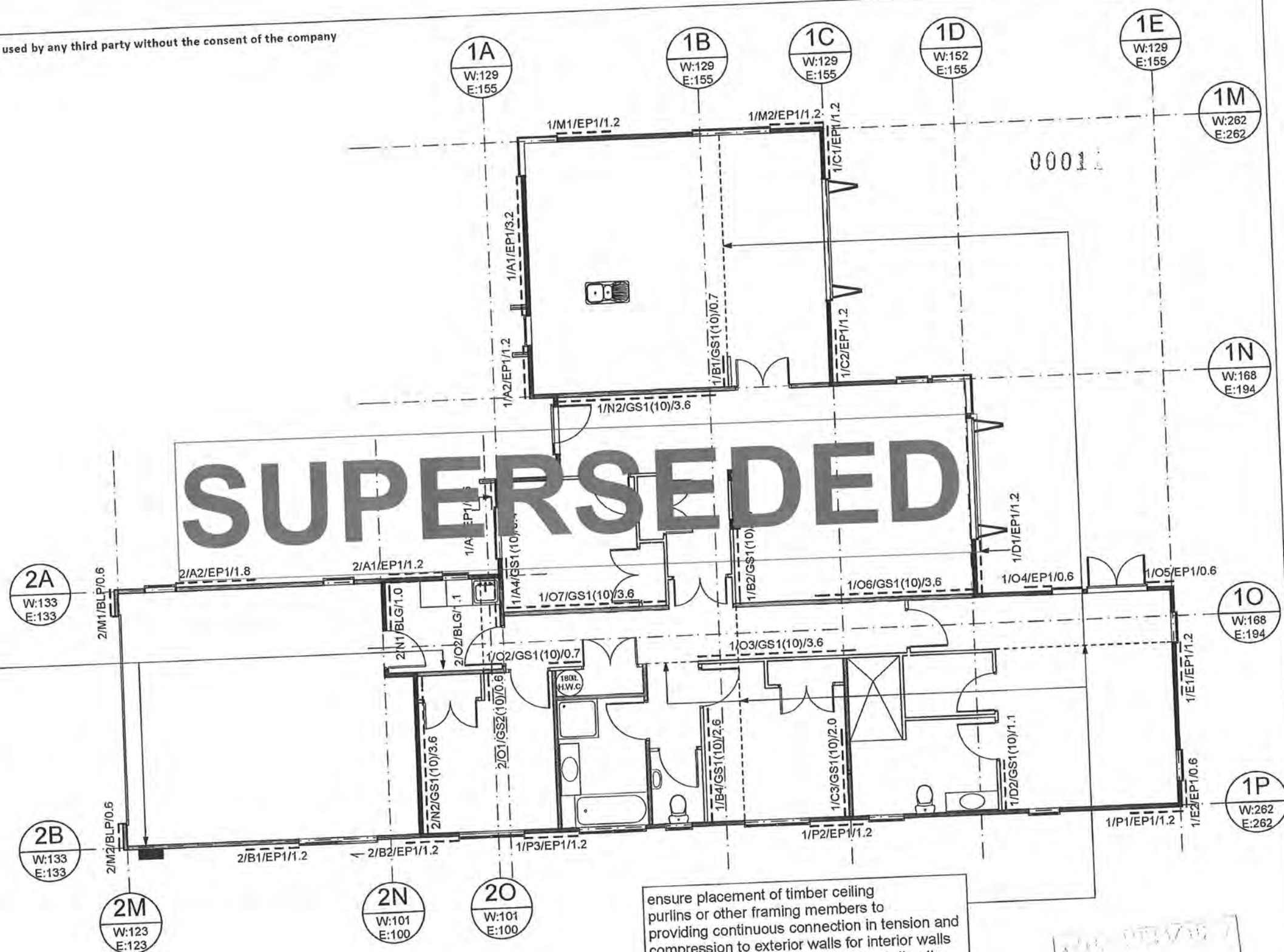


Capacities of metal plate joints		Capacities of nailed joints	
Up to 3 kN	3 / 30 x 3.15 mm nails per side	Up to 3 kN	3 / 100 x 3.75 mm nails per side
Up to 6 kN	6 / 30 x 3.15 mm nails per side	Up to 6 kN	6 / 100 x 3.75 mm nails per side

NOTE - See section 4 for durability requirements.

Each wall that contains one or more wall bracing elements shall be connected at top plate level, either directly, or through a framing member in the line of the wall, to external walls at right angles to it. Top plate fixing(s) of the capacity in tension or compression along the line of the wall bracing element are given as follows:

- For each wall containing wall bracing elements with a total bracing capacity of not more than 125 bracing units: to at least one such external wall by a fixing as shown in figure 8.16 of 6 kN capacity;
- For each wall containing wall bracing elements with a total bracing capacity of not more than 250 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each of 6 kN capacity;
- For each wall containing wall bracing elements with a total bracing capacity of more than 250 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each having a rating of not less than 2.4 kN per 100 bracing units.



4 SEP 2013

BY:

BRACING PLAN

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

DRAWN BY: ROD CHECKED BY: MARTY
GENERATION KAPITI COAST NZ

DATE: AUG 13 SCALES: 1:100 EC183 - dwg 12

BY

SUPERSEDED

BRACING CALCS

DATE AUG 13	SCALES: 1:100	EC183 - dwg 13
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Custom Design

Sheet Index

Layout ID	Layout Name
dwg 03	Site Plan
dwg 04	Floor Plan
dwg 05	Elevations
dwg 06	DOOR & WINDOW SCHEDULE
dwg 07	FOUNDATION PLAN
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dwg 12	BRACING PLAN
dwg 13	BRACING CALCS
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dwg 15	WATERPROOFING DETAILS
dwg 16	RIBRAFT/FLOOR STANDARD DETAILS 1
dwg 17	RIBRAFT/FLOOR STANDARD DETAILS 2
dwg 18	AUSTRAL BRICK STANDARD DETAILS 1
dwg 19	METROTILE ROOFING DETAILS 1
dwg 20	METROTILE ROOFING DETAILS 2
dwg 21	Linea Details
dwg 22	Landscaping Plan

PROPOSED NEW RESIDENCE FOR

Barry and Hayley Vinten

Lot 117, 9 Angus Rd, Nikau Views - Kapiti Coast

Job no: EC183



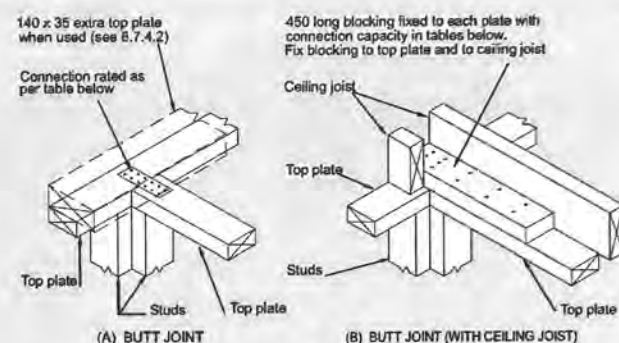
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Note to contractors

- Ensure any meter box or distribution board penetrations of interior linings are kept clear of bracing elements
- Ensure also bottom plate penetrations for services entry do not occur within bracing elements
- Ensure also plywood bracing elements are kept min 40mm clear of garage door openings to allow fitting of aluminium jamb extrusions
- Refer to specification for fixing of hold-downs and Ecoply or GIB bracing elements as required.

REFER TO ARCHITECTURAL SPECIFICATION AS REQUIRED FOR GIB AND ECOPLY MANUFACTURERS BRACING DETAILS



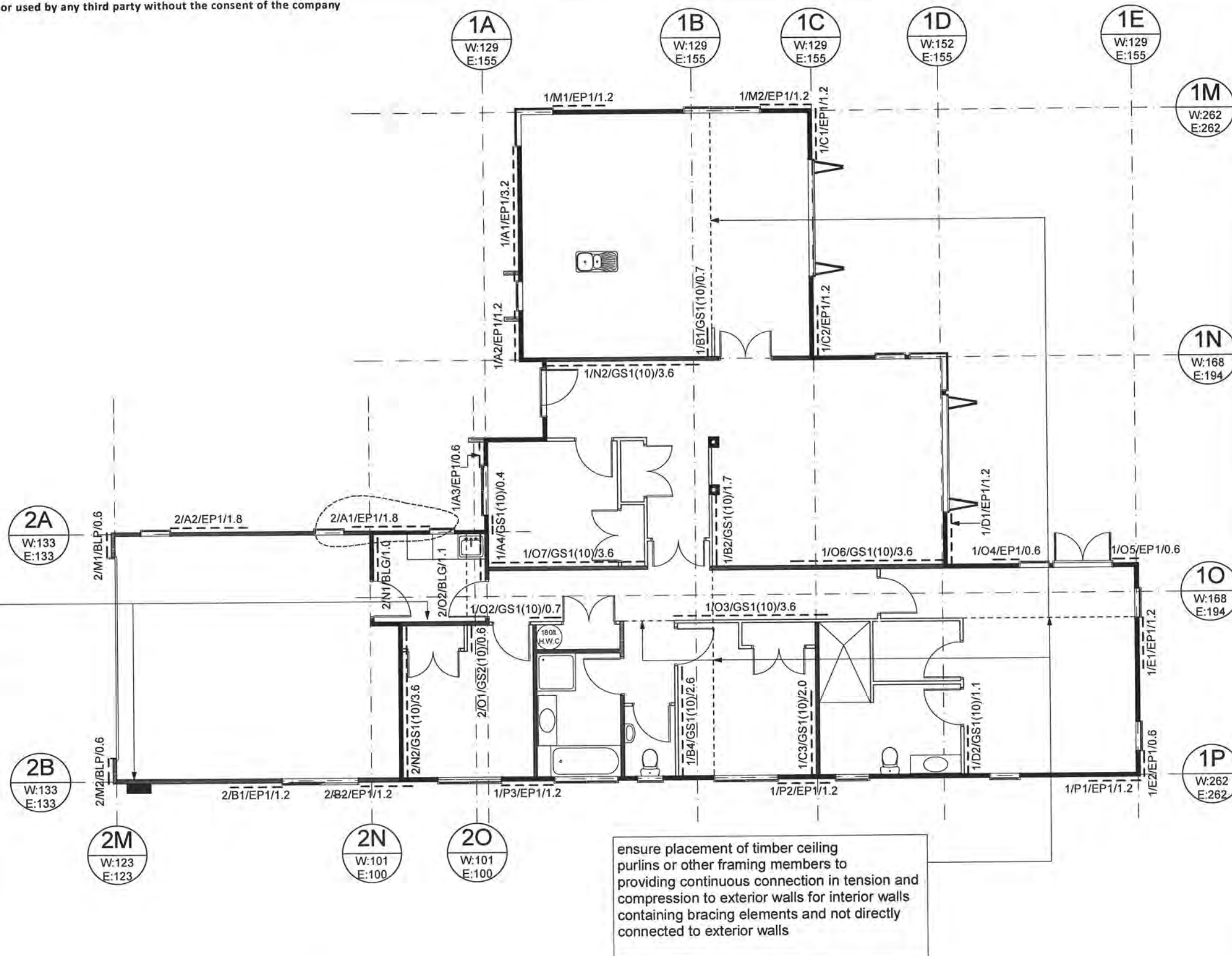
Capacities of metal plate joints		Capacities of nailed joints	
Up to 3 kN	3 / 30 x 3.15 mm nails per side	Up to 3 kN	3 / 100 x 3.75 mm nails per side
Up to 6 kN	6 / 30 x 3.15 mm nails per side	Up to 6 kN	6 / 100 x 3.75 mm nails per side

NOTE - See section 4 for durability requirements.

Unless otherwise stated, all dimensions are in mm.

Each wall that contains one or more wall bracing elements shall be connected at top plate level, either directly, or through a framing member in the line of the wall, to external walls at right angles to it. Top plate fixing(s) of the capacity in tension or compression along the line of the wall bracing element are given as follows:

- For each wall containing wall bracing elements with a total bracing capacity of not more than 125 bracing units: to at least one such external wall by a fixing as shown in figure 8.16 of 6 kN capacity;
- For each wall containing wall bracing elements with a total bracing capacity of not more than 250 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each of 6 kN capacity;
- For each wall containing wall bracing elements with a total bracing capacity of more than 250 bracing units: to at least 2 external walls by fixings as shown in figure 8.16 each having a rating of not less than 2.4 kN per 100 bracing units.



KCDC RFIs 11/09/2013

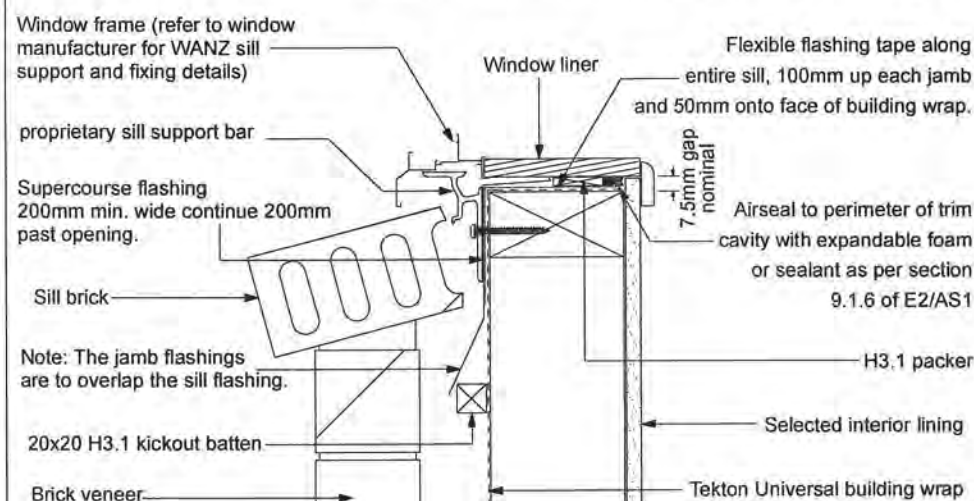
BRACING PLAN

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

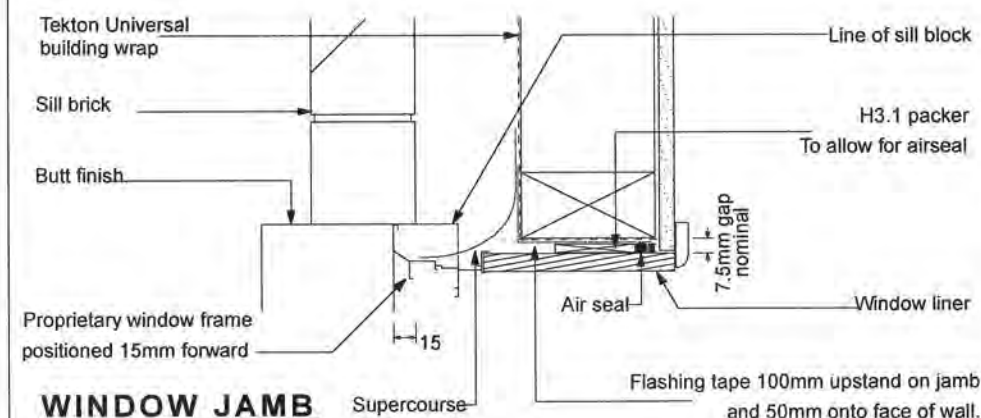
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GENERATION KAPITI COAST NZ
DATE: AUG 13 SCALES: 1:100 EC183 - dwg 12

BRACING CALCULATIONS				ALONG											ACROSS												TABLE: 1			
Location of Storey	Single	Floor Load	2kPa	Bracing Line			Bracing Elements Provided					Wind		Earthquake		Bracing Line			Bracing Elements Provided					Wind		Earthquake				
Floor Height to Apex	5.0 m	Roof Weight	Light	Line	Min BUs	Min BUs	Brace	Brace	Brace	Brace	Brace	Rating	BUs	Rating	BUs	Line	Min BUs	Min BUs	Brace	Brace	Brace	Brace	Brace	Rating	BUs	Rating	BUs			
Roof Height Above Eaves	3.0 m	Cladding Weights:		Label	W	E	No.	Type	Length	Angle	Height	BUs/m	Achieved	BUs/m	Achieved	Label	W	E	No.	Type	Length	Angle	Height	BUs/m	Achieved	BUs/m	Achieved			
Roof Pitch	0 – 25 °	- Subfloor	Concrete Floor	1A	129	155	A1	EP1	3.2	0.0	2.5	125	389.9	130	405.5	1M	262	262	M1	EP1	1.2	0.0	2.5	125	146.2	130	152.1			
Roof Style	Hip	- Wall Cladding	Heavy				A2	EP1	1.2	0.0	2.5	125	146.2	130	152.1				M2	EP1	1.2	0.0	2.5	125	146.2	130	152.1			
Building Length (BL)	17.2 m						A3	EP1	0.6	0.0	2.5	125	73.2	130	76.2	1N	168	194	N2	GS1(10)	3.6	0.0	2.4	70	249.9	55	196.4			
Building Width (BW)	16.6 m	Room in Roof Space	No				A4	GS1(10)	0.4	0.0	2.4	60	25.7	55	23.6	1O	168	194	O2	GS1(10)	0.7	0.0	2.4	60	41.7	55	38.2			
Wind Zone	Very High	Soil Class	E - Very Soft	1B	129	155	B1	GS1(10)	0.7	0.0	2.4	60	40.8	55	37.4				O3	GS1(10)	3.6	0.0	2.4	70	249.9	55	196.4			
W along	78.0 BUs/m	Gross Plan Area (GPA)	172.4 m2				B2	GS1(10)	1.7	0.0	2.4	70	117.5	55	92.3				O4	EP1	0.6	0.0	2.5	125	73.1	130	76.0			
W across	78.0 BUs/m	Earthquake Zone	3				B4	GS1(10)	2.6	0.0	2.4	70	180.5	55	141.8				O5	EP1	0.6	0.0	2.5	125	73.1	130	76.0			
W along x BW	1,294.8 BUs	EQ	9.0 BUs/m2	1C	129	155	C1	EP1	1.2	0.0	2.5	125	146.2	130	152.1				O6	GS1(10)	3.6	0.0	2.4	70	249.9	55	196.4			
W across x BL	1,341.6 BUs	EQ x GPA	1,551.1 BUs				C2	EP1	1.2	0.0	2.5	125	146.2	130	152.1				O7	GS1(10)	3.6	0.0	2.4	70	249.9	55	196.4			
Calculations based on NZS 3604:2011							C3	GS1(10)	2.0	0.0	2.4	70	138.8	55	109.1	1P	262	262	P1	EP1	1.2	0.0	2.5	125	146.2	130	152.1			
				1D	152	155	D1	EP1	1.2	0.0	2.5	125	146.2	130	152.1				P2	EP1	1.2	0.0	2.5	125	146.2	130	152.1			
							D2	GS1(10)	1.1	0.0	2.4	60	67.8	55	62.2				P3	EP1	1.2	0.0	2.5	125	146.2	130	152.1			
				1E	129	155	E1	EP1	1.2	0.0	2.5	125	146.2	130	152.1															
							E2	EP1	0.6	0.0	2.5	125	73.2	130	76.2															
				Totals Achieved								W	1,838.7	E	1,784.6	Totals Achieved								W	1,918.7	E	1,736.1			
				Totals Required								W	1,294.8	E	1,551.1	Totals Required								W	1,341.6	E	1,551.1			

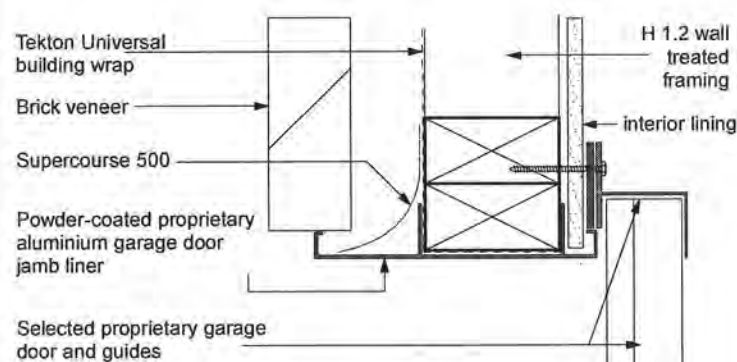
BRACING CALCULATIONS				ALONG										ACROSS														TABLE: 2			
Location of Storey	Single	Floor Load	2kPa	Bracing Line			Bracing Elements Provided					Wind		Earthquake		Bracing Line			Bracing Elements Provided					Wind		Earthquake					
Floor Height to Apex	5.0 m	Roof Weight	Light	Line	Min BUs	Min BUs	Brace	Brace	Brace	Brace	Brace	Rating	BUs	Rating	BUs	Line	Min BUs	Min BUs	Brace	Brace	Brace	Brace	Brace	Rating	BUs	Rating	BUs				
Roof Height Above Eaves	2.0 m	Cladding Weights:		Label	W	E	No.	Type	Length	Angle	Height	BUs/m	Achieved	BUs/m	Achieved	Label	W	E	No.	Type	Length	Angle	Height	BUs/m	Achieved	BUs/m	Achieved				
Roof Pitch	0 - 25 °	- Subfloor	Concrete Floor	2A	133	133	A1	EP1	1.8	0.0	2.5	125	219.3	130	228.1	2M	123	123	M1	BLP	0.6	0.0	2.5	135	79.0	135	79.0				
Roof Style	Gable	- Wall Cladding	Heavy				A2	EP1	1.8	0.0	2.5	125	219.3	130	228.1				M2	BLP	0.6	0.0	2.5	135	79.0	135	79.0				
Building Length (BL)	9.3 m			2B	133	133	B1	EP1	1.2	0.0	2.5	125	146.2	130	152.1	2N	101	100	N1	BLG	1.0	0.0	2.4	145	143.8	135	133.9				
Building Width (BW)	7.2 m	Room in Roof Space	No				B2	EP1	1.2	0.0	2.5	125	146.2	130	152.1				N2	GS1(10)	3.6	0.0	2.4	70	249.9	55	196.4				
Wind Zone	Very High	Soil Class	E - Very Soft													2O	101	100	O1	GS2(10)	0.6	0.0	2.4	75	46.1	70	43.0				
W along	71.5 BUs/m	Gross Plan Area (GPA)	52.8 m2																O2	BLG	1.1	0.0	2.4	145	158.2	135	147.3				
W across	65.0 BUs/m	Earthquake Zone	3																												
W along x BW	514.8 BUs	EQ	9.0 BUs/m2																												
W across x BL	604.5 BUs	EQ x GPA	475.2 BUs																												
Calculations based on NZS 3604:2011				Totals Achieved										W	731.1	E	760.4	Totals Achieved										W	755.9	E	678.5
				Totals Required										W	514.8	E	475.2	Totals Required										W	604.5	E	475.2



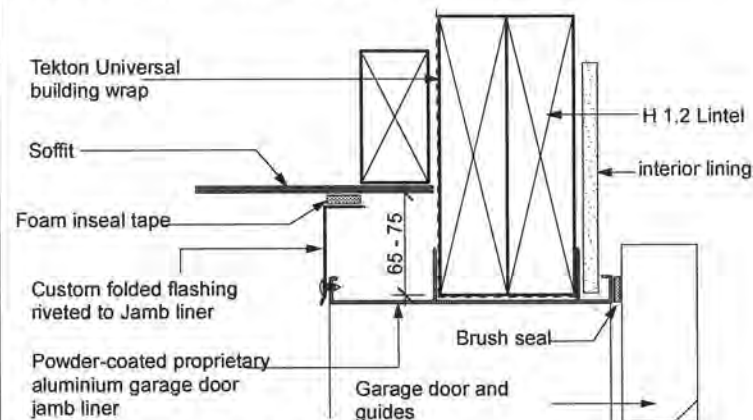
WINDOW SILL



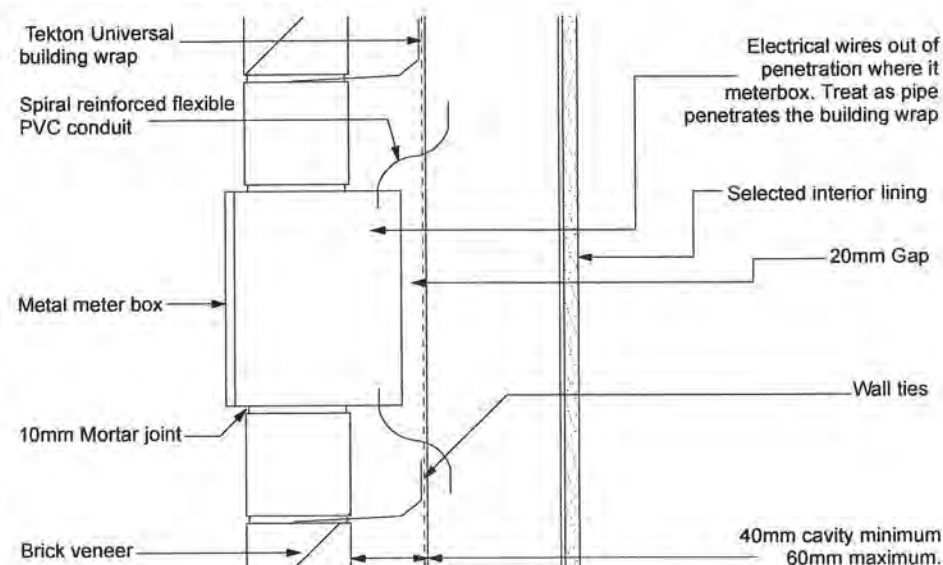
WINDOW JAMB



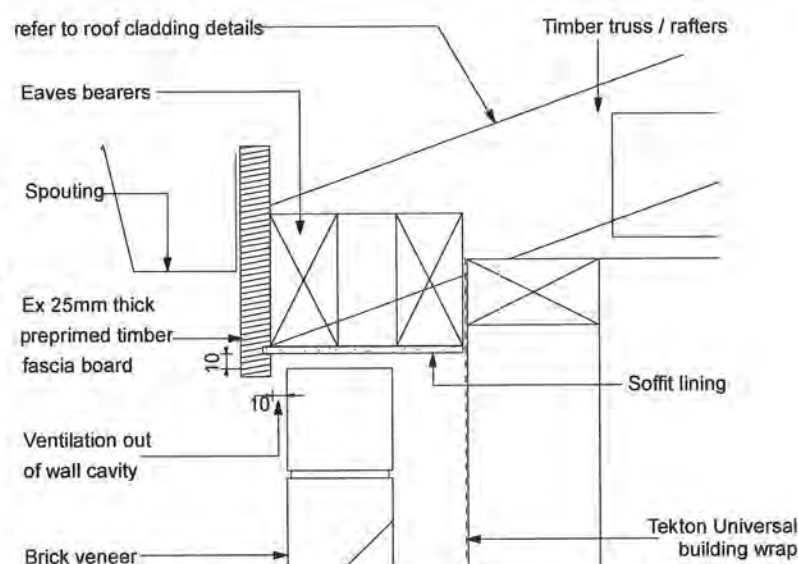
GARAGE DOOR JAMB



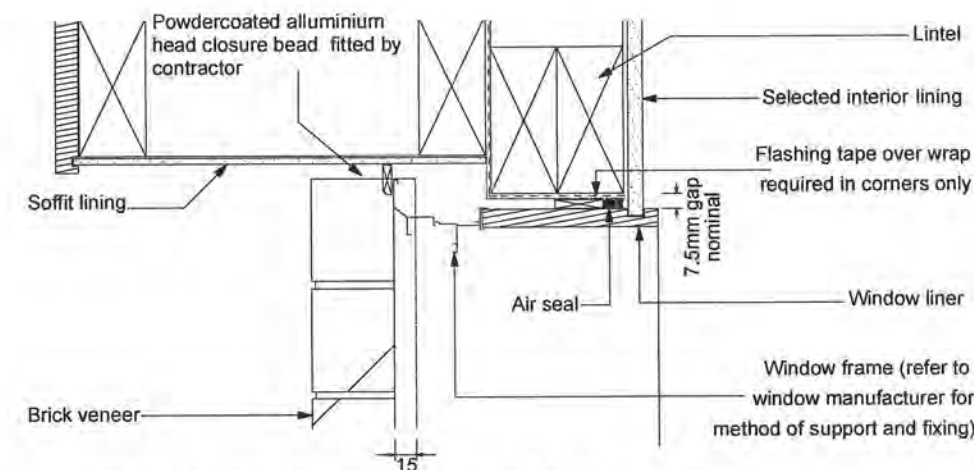
GARAGE DOOR HEAD



ALTERNATIVE METER BOX



REDUCED SOFFIT AND VERGE DETAIL



ALTERNATIVE WINDOW HEAD DETAIL



STANDARD CLADDING DETAILS

NOTES:

- All details shown are standard details attained from the AustralBrick technical information website.
- Specific materials for use. Refer to details for construction;
 - Brick Veneer: Austral 70mm brick over 60mm cavity with 10mm selected colour mortar
 - Building Paper: Tekton Universal building wrap to ext wall framing
 - Cavity Zone: 40 - 60mm cavity between brick and framing
 - Flashing Tape: Protectowrap flashing system
 - Insulation: R2.6 Pink Batts thermal wall insulation
R3.6 Pink Batts thermal ceiling insulation
 - Interior Lining: 10mm GIB std generally, 10mm aqualine to wet zones
 - Roofing: Metro Tile pressed metal tile roofing over 45 x 45 SG8 purlins at c/c to suit tile profile
battens to suit tile profile
 - Roof Structure: 90 x 45 SG8 H1.2 trusses at 900 c/c as per registered manufacturers design and specs
 - Soffit Lining: 4.5mm Hardies Silkline lining with PVC jointers at sheet joints and blocking as required
 - Spouting & Fascia: Continuous colorsteel spouting / fascia system
 - Wall Framing: 90 x 45 SG8 H1.2 exterior wall framing with studs at 600 c/c & 1 row of dwangs.
90 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
70 x 45 SG8 H1.2 interior wall framing with studs at 600 c/c & 1 row of dwangs
 - Window Liner: H3.1 FJP PQ window liner
- Refer to other construction details for roof construction and floor construction

ALL BRICK TIES AND BRICK LINTELS IN COASTAL ZONE "D" SHALL BE STAINLESS STEEL AS PER NZBC E2 AS1 TABLE 20 REQUIREMENTS

KCDC RFIs 11/09/2013

AUSTRAL BRICK STANDARD DETAILS 2

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

DRAWN BY ROD CHECKED BY MARTY

GENERATION KAPITI COAST NZ

DATE AUG 13 SCALES: 1:5 EC183 - dwg 23

Date:

26/8/2013

Fabricator: Wellington Frame & Truss

Job Name: Generation Homes
Lot 117 Angus Road
Nikau Views
Paraparaumu

Building Consent No: _____

(to be provided by the City / District Council)

Attn: City / District Council

We have been engaged to provide the trusses for the above project and have enclosed the truss layout and Producer Statement to allow completion of the consent application. On advice from the building project owner, the structure will be designed under the following parameters:

Wind Zone HighSnow Load N/AEarthquake Zone 3Roof Material Light

Treatment Definition	External walls	<u>H1.2</u>	Trusses	<u>H1.2</u>
	Internal walls	<u>H1.2</u>		

We can advise that the following will be provided at the time of truss manufacture to both the building owner and your office:

1. A full as-built truss layout and Producer Statement
2. Specific truss / truss and truss / top plate fixing details indicated on the truss layout.
3. All lintel sizes outside NZS3604: 2011 will be indicated on the frame layout.
(all timbers to be SG8 unless otherwise stated on layouts)
4. Top plate to stud connections will be indicated on the frame layout.

Acknowledgement of this letter, along with the Building Consent number, by fax to our office, would be appreciated.



MiTek New Zealand Limited

Correspondence from : **AUCKLAND**
40 Neales Road, East Tamaki 2013
PO Box 58-014, Botany 2163
Phone: 09 274 7109
Fax: 09 274 7100

CHRISTCHURCH
14 Pilkington Way, Wigram 8042
PO Box 8387, Riccarton 8440
Phone: 03 348 8691
Fax: 03 348 0314

MiTek 20/20 Engineering 4.6.5.148

www.mitek.nz.co.nz

Printed: 09:21:41 28 Aug 2013

PRODUCER STATEMENT for MiTek 20/20[®] TRUSS DESIGN - Version 4.6

ISSUED BY: **MiTek New Zealand Limited**

TO: **PLACEMAKERS - W.F.T.**

0004

IN RESPECT OF: **MiTek[®] Truss Designs**

This producer statement covers the MiTek 20/20[®] truss design and the structural performance of the GANG-NAIL[®] connector plate for the job reference **45823** and may be used by a Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

The MiTek 20/20[®] truss design program has been developed by MiTek New Zealand Limited for the design of MiTek[®] timber roof, floor and attic trusses in New Zealand. The truss designs computed by MiTek 20/20[®] are prepared using sound and widely accepted engineering principles, and in accordance with compliance documents of the New Zealand Building Code and Verification Method B1/VM1; and internationally accepted standard ANSI/TPI 1 - 2002 as an alternative solution to satisfy the requirements of Clause B1 of the New Zealand Building Code.

On behalf of MiTek New Zealand Limited, and subject to:

- i) All proprietary products meeting their performance specification requirements
- ii) The provision of adequate roof bracing and overall building stability
- iii) Correct selection and placement of GANG-NAIL connector plates
- iv) Correct input of Truss Design Data as shown in the Fabricator Design Statement for this job
- v) The design being undertaken by the accredited fabricator under the terms of the software licence

I believe on reasonable grounds that the trusses, if constructed in accordance with the MiTek 20/20[®] truss design and shop drawings, will comply with the relevant provisions of the New Zealand Building Code.

MiTek New Zealand Limited holds a current policy of Professional Indemnity Insurance no less than \$500,000.

On behalf of MiTek New Zealand Limited,

Date: Wednesday, 28 August 2013

In Ling Ng, BE (Hons), CPEng, IntPE, MIPENZ (ID: 146585)
TECHNICAL SERVICES MANAGER, MiTek New Zealand Limited

Job: 45823

Client: Placemakers Paraparaumu
Phone:Site: GENERATION HOMES
LOT 117 ANGUS ROAD
NIKAU VIEWS
PARAPARAUMU

Phone:

Description:
Building Consent No.:
M/Tek 2020 Engineering 4.0.0.145

M/Tek New Zealand Limited

Printed: 28/21/13 16 Aug 2013

MITEK FABRICATOR DESIGN STATEMENT

This statement is issued by MiTek accredited fabricator **PLACEMAKERS - W.F.T.**, being licensed to use the MiTek 20/20[®] software, to the client listed above and may be used by the Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

MiTek 20/20[®] TRUSS DESIGN DATA

The MiTek 20/20[®] computer design for this job is based on the following design parameters entered into the program. The Fabricator shall ensure that these job details are current and relevant to the project for the design of the MiTek[®] trusses.

Job Details

Importance Level: 2

Design Working Life: 50 years

Roof Truss

Timber Group: MSGx45 H1.2

Pitch: 25.000 deg

Nominal Overhang: 590 mm

Roof**Ceiling****Wind**Material: Metal Tiles
Dead Load: 0.210 kPa
Restraints: 400 mm centres
Live Load: Q_{ur} = 0.250 kPa
Q_c = 1.100 kNMaterial: Rondo on clips
Dead Load: 0.200 kPa
Restraints: 1800 mm centres
Live Load: Q_c = 1.400 kNArea: High (44.0 m/s)
Pressure Coeff: C_{pe} = varies; C_{pi} = -0.30, 0.20

The timber for these MiTek[®] trusses shall be treated to the requirements of NZS 3602:2003 and shall be graded to the requirements of NZS 3603:1993. Unless otherwise noted, this design assumes that the steel fixings and timber connectors proposed are located in a "closed environment", as defined by NZS3604:2011 Section 4.

MiTek[®] Truss List

Legend: * = detail only, ? = input only, Fxx = failed design, Ø = non certified, Unmarked trusses = designed successfully, LB = lateral bracing required
GB = gable brace required

Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)
J1	2	3227	25.000	900	ET1	1D	6000	25.000	900	T7A	1	3227	25.000	830
J1A	2	3227	25.000	900	J1F	2	3227	25.000	900	T7B	1	3227	25.000	830
J1B	1	3227	25.000	900	J1H	3	3227	25.000	818	T7C	1	3227	25.000	830
J1C	1	3227	25.000	900	J2	1	2327	25.000	900	V1	1	5050	25.000	900
J1D	1	3227	25.000	900	J2A	1	2327	25.000	900	V2	1	3250	25.000	900
J1E	1	3227	25.000	900	J2B	1	2282	25.000	900	V3	1	1450	25.000	900
J1G	2	3227	25.000	900	J2C	1	2282	25.000	900	V4	1	2182	25.000	818
J4A	2	3447	25.000	900	J3	1	1427	25.000	900	V5	1	1364	25.000	818
T1	2	10055	25.000	900	J3A	1	1427	25.000	900	V6	1	546	25.000	818
T2	1	6940	25.000	900	J3B	1	1427	25.000	900	*HB1	1	3504	18.249	900
T2A	1	6940	25.000	900	J3C	1	1427	25.000	900	*HB2	1	7944	18.249	900
T3	2	6940	25.000	803	J4	1	3447	25.000	900	*HB3	1	7280	18.249	900
T4	1	6000	25.000	871	J5	2	2547	25.000	900	*HB4	1	2867	18.249	900
T5	9	6000	25.000	871	J5A	2	2547	25.000	900	*HB5	2	5710	18.249	900
T6	1	5100	25.000	900	J6	2	1647	25.000	900	*HB6	2	4409	18.249	900
T7	1	5100	25.000	940	J6A	2	1647	25.000	900	*R1	1	1108	25.000	900
T8	1	5100	25.000	940	J7	1	2527	25.000	900	*R2	1	638	25.000	900
TG1	1	10055	25.000	900	J7A	2	2527	25.000	900	*R3	2	1328	25.000	900
TG1A	1	10055	25.000	900	J8	2	1627	25.000	900	*R4	2	3590	25.000	900
TR1	1	10055	25.000	900 LB	J8A	2	1627	25.000	900	*R5	10	1451	0.000	878
TR1A	1	10055	25.000	900 LB	R7	8	591	25.000	900	*R6	2	1308	25.000	900

Total quantity : 108

The computer design input has been carried out by:

Signed: 

Name of Detailer: M. J. Taycor

On behalf of:

PLACEMAKERS - W.F.T.

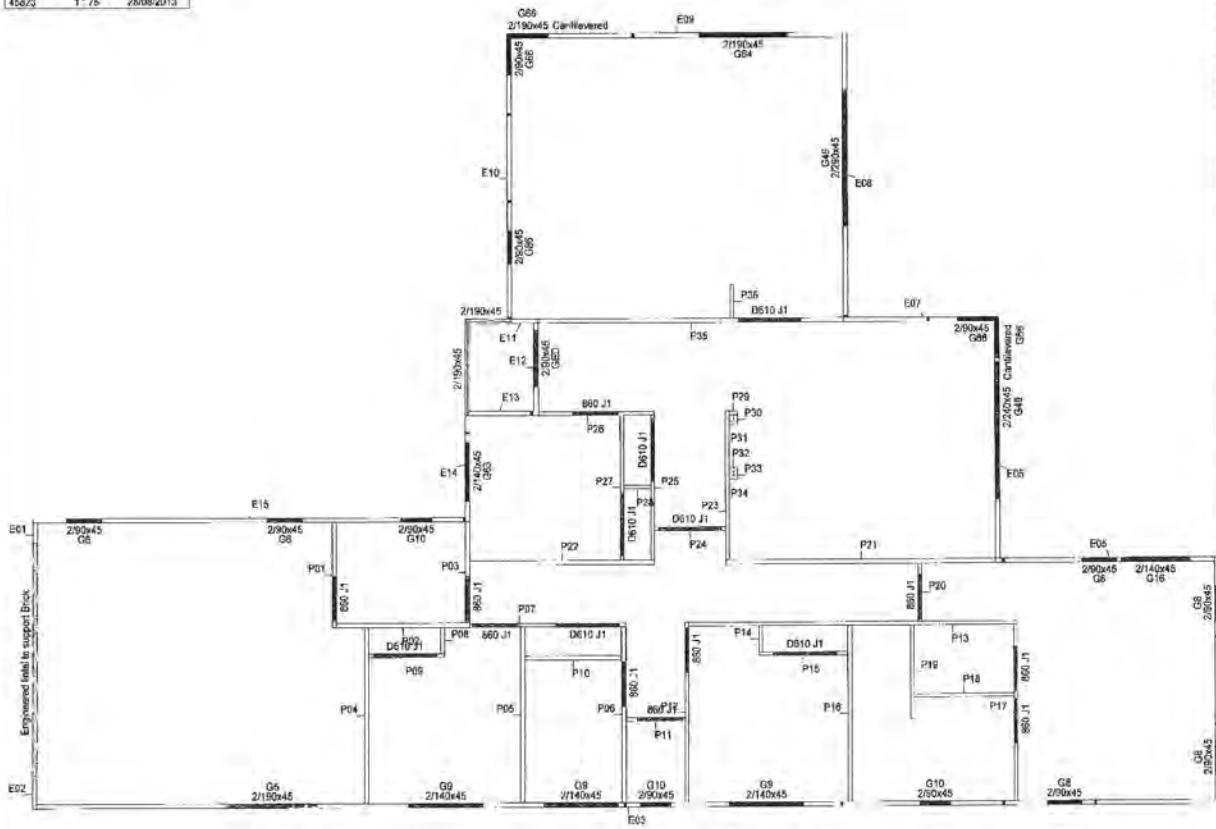
Date: ...Wednesday, 28 August 2013....

Qualifications and Title: C.O.C 1990 + 2006

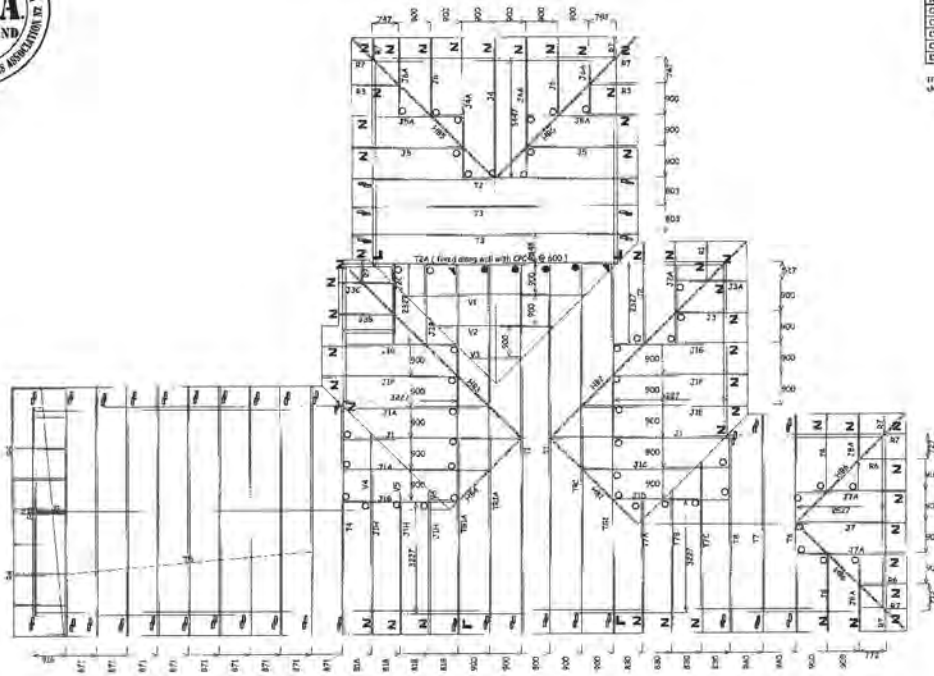
PlaceMakers DETAILING MANAGER
Know how. Can do.
Manufacturing

0004

Client	PlaceMakers Manufacturing
Project	PlaceMakers Paraparaumu
Address	LOT 117 ANGUS ROAD, NIKAU VIEWS
Site	2427
First Floor	1:75 26/08/2013



Author: [Name]	Work Version: 4.6	
<p>• Treatment</p> <p>Ext Walls - H0.3</p> <p>Int Walls - H0.3</p> <p>Walls with 70 in the label to be H0.1</p>		
<p>Please Note:</p> <p>These plans are provided solely to enable the builder to select the material on site. They are not intended for any other purpose and PlaceMakers will not accept any liability arising from any other use of these plans.</p> <p>Builder to read pre-cut plans in conjunction with architectural plans.</p> <p>Builder should ensure that ALL OSH approved safety practices are carried out when erecting framing.</p> <p>Builder to check all spanning time (H) and sizes and braces on site before erecting.</p> <p>PlaceMakers will not accept any charge for material not ordered or material not used before any work is commenced. A copy of the order to be accompanied by invoice to Wellington Frame & Truss.</p> <p>All internal door frame 2060 unless otherwise listed.</p> <p>If Experiencing Problems, Contact:</p>		
<p>Trevor Strang</p> <p>Phone: 04 256 1006 email: tstrang@placemakers.co.nz</p> <p>If Experiencing Problems, Contact Your Rep</p>		
<p>PlaceMakers</p> <p>Know how. Can do.</p> <p>Wellington Frame & Truss</p>		
<p>178 Kaiti Road Phone: 256 1006</p> <p>Paraparaumu Fax: 04 256 5488</p> <p>P.O. Box 84</p> <p>Paraparaumu 5254</p>		
<p>Customer: Generation Homes</p> <p>Address: Lot 117 Angus Road</p> <p>Nikau Views, Paraparaumu</p>		
<p>Job No: 45823</p>		
<p>Drawn By: [Name]</p>		
FILE	SITE	FACTORY



Underlaid spiral category: High
Pressure Coefficient: $C_{pe} = \text{various}$; $C_{pi} = <0.6, 0.10$
Titrator size and type: Model MS20 and MS10G, 0.1 L
Roof Weight & Type: Light (Pressed Metal Tiles)
Hand Feet: 25.8 Degrees
Roof Dead Load: 0.510 kN/m²
Roof Remains: 900mm eaves
Roof Live Load: $Q_{ur} = 0.250 \text{ kN/m}^2$; $Q_r = 1.100 \text{ kN/m}^2$
Gutting Material: 12mm Plywood Board
Cutting Thread Lead: 0.110 kN
Cutting Rate: 600mm eaves
Cutting Live Load: $Q_r = 1.400 \text{ kN}$
Earthquake Zone: A Seismic Zone 1.5

Box ref.	Picture description
1 points	Z Zig-zag (1 pair)
1	J117 x 80
1	X1317 x 120
1	J1447 x 80
1	J1517 x 120
1	J1647 x 120
1	J1670 x 180
1	J1675 x 165
1 pairs	J1707 and J1800 x 105
1	J2014 x 105mm Flat box
1	J2014 x 105mm Flat box
1 pairs	J2015 x 105mm Flat box
1 pairs	J2015 x 105mm Flat box
1	J2140 x 80
1	J2140 x 80

Truss to Truss Fixings.

[illegible]**WELLINGTON FRAME & TRUSS**

Drawn by: Matt Taylor
PHONE (04) 199 6567 - FAX (04) 298 5486
E-MAIL: mattyb@iqlactrisastra.co.nz

Wellington Frame & Truss

F.T.M.A. NEW ZEALAND
QUALITY ASSURANCE
Frames & Truss Manufacturers
Association NZ

Kapiti Road, Paraparaumu
Tel (04) 296 1086
Fax (04) 298 5488

Tel	Placemakers – Paraparaumu	Date	24/6/2013
		MNUF	45714
Branch	Paraparaumu	Index #	
Plan Name	Generation Homes	TDX #	
	Lot 117 Angus Road, Nikau Views	Prepared By	Matt

Frame Quotation

Ground Floor frames as per specification sheet (page2)

00045

I Hereby Accept The Above Quantity & Price As Shown

Frames priced as per PS1 supplied.

140x35 Ceiling packer, 90x45 temp bracing included.

Signed.....	Dated.....	Total (excl GST)	\$9,392.00
-------------	------------	------------------	------------

Truss Quotation

All trusses & truss fixings required to form roof profile are manufactured to Mitek NZ. Specifications (refer to page 2 for job specifications).

I Hereby Accept The Above Quantity & Price As Shown

Trusses priced as per PS1 supplied.

90x45 Soffit ribbon & soffit sprockets included.

Signed.....	Dated.....	Total (excl GST)	\$8,682.00
-------------	------------	------------------	------------

CONDITIONS OF SALE

1. This Quotation is subject to the PlaceMakers Standard Terms of Trade. For full details go to the PlaceMakers website <http://www.placemakers.co.nz/terms.html>. If you do not have access to the web to view the Standard Terms of Trade, then please ask your local branch or PlaceMakers Representative for a copy.
2. All Trusses fabricated to Mitek NZ Ltd specification.
3. No work will commence until client has returned the signed copy of this form.
4. It is the Client's responsibility to ensure correct and latest copy of plans are provided prior to manufacture. Any changes in Plans provided, once quoted, must be provided in writing.
5. Frames, Trusses, Posistruts, etc. will be charged in month of manufacture.
6. This quotation is on site by Hiab truck, subject to access, to flat area within Hiab reach. Site access must be at least 3m wide of cleared formed and stable driveway.
7. To place on 1st floor joist or lower floor frames, 2 people need to be on site inclusive of driver, or trusses/frames put on ground.
8. Any site material to be moved will be charged as an extra to Quote. Waiting on site time will be charged.
9. Unless otherwise agreed, this quotation shall be valid for thirty (30) days from the date of issue.
10. Placemakers reserves the right to alter the quotation in the event of circumstances beyond its control, including alterations for increases in award or materials after the above date.

Wellington Frame & Truss

Generation Homes - Lot 117 Angus Road, Nikau Views

F.T.M.A. NEW ZEALAND
QUALITY ASSURANCE
Frames & Truss Manufacturers
Association NZ

Kapiti Road, Paraparaumu
Tel (04) 296 1086
Fax (04) 298 5488

28/08/2013

Job Specification for MNUF 45823

FRAMES

1st & 2nd Floor

	Timber Size
External	90x45
Internal	90x45

Timber Treatment
H1.2
H1.2

Stud ht	Stud crs	Dwang crs
Varies	600	800
Varies	600	800

Garage door lintel included.

0004

4T10 Nail plates to corners & external intersections
4T5 Nail plates to joints & internal intersections

Special Details: Price Excludes: Ply Bracing (ie. no ripped studs), Posts, Parapets,
Handrails, Extra Blocking, Curved Framing, Extra Dwanging.

NOTE: NO STUD TO TOP PLATE FIXINGS PRICED

TRUSSES & ROOF ANCILLARIES

Timber Treatment	H1.2
Roof weight	Light

Wind Zone	High
Pressed Metal Tiles	

Truss ctrs	900mm	Roof Pitch	25.0 deg
90x45 Hip blades between Jack trusses			

150x25 R/S Valley Boards	
Fascia	External Klass Fascia

Overhang length 590mm

NOTE: ALL TRUSS TO TRUSS & TRUSS TO TOP PLATE FIXINGS SUPPLIED (indicated on layout plan).

I Hereby Accept The Above Specifications As Written

Signed..... Dated.....

Any Variation To Above Specifications After Acceptance Must Be In Writing And Could Incur Costs.

NEW ZEALAND INSTITUTE OF
ARCHITECTS
(INCORPORATED)

Building Code Clause(s) B1 ONLY

PRODUCER STATEMENT – PS1 – DESIGN

(Guidance notes on the use of this form are printed on the reverse side*)

0002

ISSUED BY: DEKE CONSULTING LTD. (Design Firm)

TO: B AND H VINTEN (Owner/Developer)

TO BE SUPPLIED TO: KAPITI COAST DISTRICT COUNCIL (Building Consent Authority)

IN RESPECT OF: NEW RESIDENCE (Description of Building Work)

AT: 6 ANGUS RD, NIKAU VIEWS, KAPITI (Address)

LOT 117 DP SO

We have been engaged by the owner/developer referred to above to provide DESIGN AND DETAILING OF RIBRAFT SLAB SUPPORTED ON PILES services in respect of the requirements of

Clause(s) B1 ONLY of the Building Code for
☐ All or ☒ Part only (as specified in the attachment to this statement), of the proposed building work.

The design carried out by us has been prepared in accordance with:

☒ Compliance Documents issued by Department of Building & Housing VM1 AND VM4 (verification method / acceptable solution)☐ Alternative solution as per the attached schedule

The proposed building work covered by this producer statement is described on the drawings titled NEW VINTEN RESIDENCE and numbered 130852

together with the specification, and other documents set out in the schedule attached to this statement.

On behalf of the Design Firm, and subject to:

- (i) Site verification of the following design assumptions GROUND AS PER PACT ENGINEERING REPORT
- (ii) All proprietary products meeting their performance specification requirements;

I believe on reasonable grounds the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code.

I, MALCOLM THOMSON am: ☒ CPEng 144906 #

(Name of Design Professional)

☐ Reg Arch #I am a Member of: ☒ IPENZ ☐ NZIA and hold the following qualifications: BE CIVIL

The Design Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than \$200,000*.



The Design Firm is a member of ACENZ ☐ YES ☒ NO

SIGNED BY MALCOLM THOMSON ON BEHALF OF DEKE CONSULTING LTD. (Design Firm)

Date 29/8/13 (signature) M Thomson

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of \$200,000*.

This form is to accompany Form 2 of the Building (Forms) Regulations 2004 for the application of a Building Consent.



Watersmart Limited Concrete Tank Warranty

Who gives this warranty (Warrantor).

Watersmart Ltd
PO Box 533
Paraparaumu
NEW ZEALAND

Who receives this warranty (Purchaser).

The owner of the property at Lot 117 Angus Way Nelson Heights Paraparaumu

Duration

Five years from the date of purchase by the original purchaser.

What products are covered by this warranty.

Concrete Tanks

What is covered under this warranty.

Manufacturing defects in materials and workmanship, which occur within the duration of the warranty period.

What is not covered under this warranty.

Any incidental, indirect, or consequential loss, damage or expense that may result from any defect, failure or malfunction of the warranted product.
Any failure that results from an accident, purchaser's abuse, neglect, use in association with corrosive chemical or solvents, operation in excess of stated maximum working pressure and temperature or failure to operate and maintain the warranted product.
Items or service that is normally required to maintain the product (eg. Reseal inner surface)

Responsibilities of warrantor under this warranty.

Repair or replace at the warrantor's option Concrete Tank or components that have failed as a result of faulty manufacture, within the duration of the warranty period.

Responsibilities of purchaser under this warranty.

Provide access to the Concrete Tank. Travel costs or any costs associated with providing access to the tank if incurred must be borne by the purchaser.
Use reasonable care in the operation and maintenance of the product.

When the warrantor will perform repair or replacement under warranty.

Repair or replacement will be scheduled and serviced according to the normal workflow at the warrantor's manufacturing facility, dependent upon the availability of replacement parts.
If the purchaser does not receive satisfactory results from the product repair or replacement, the purchaser shall advise the warrantor immediately.



DEPARTMENT
OF CORRECTIONS

CIE Wanganui Precast,
Pauri Rd.,
Wanganui.
6/7/07

cie

Corrections Institute of New Zealand

North Is West Coast
Regional Office

P.O. Box 100

Wanganui

01 865 2000

Wanganui

01 865 2000

01 865 2000

Producer Statement – Water Tanks.

Issued by CIE Wanganui Precast, Department of Corrections, Wanganui prison,
Wanganui.

To: Water Smart, Paraparaumu.

IN RESPECT OF : Water Tanks

I, John Hackshaw, a duly authorised agent of CIE believe on reasonable grounds that
the Water Tanks we manufacture are suitable for the containment of potable water,
and are fit for this purpose.

On behalf of CIE Wanganui Precast, Wanganui Prison.

John Hackshaw.
Production Manager.
CIE Wanganui Precast.

PRODUCER STATEMENT – PS4 – CONSTRUCTION REVIEW

(Guidance notes on the use of this form are printed on the reverse side)

 ISSUED BY: **Hamish Wells**

 TO: **Generation Homes** (Construction Review Firm)

 TO BE SUPPLIED TO: **KCDC** (Owner/Developer)

 IN RESPECT OF: **PILED RISER** (Building Consent Authority)

 AT: **89 Angus Way, NIKAU VALLEY, PARAPARAUMU** (Description of Building Work)

(Address)

 LOT **17** DP **RFL** SO

Hamish Wells Consulting Civil Engineer (Construction Review Firm) has been engaged by

 to provide ☐ CM1 ☐ CM2 ☐ CM3 ☒ CM4 ☐ CM5 (Engineering Categories) or ☐ OL1 ☐ OL2 ☐ OL3 ☐ OL4 (Architectural Categories)

 observation ☐ or other services

 in respect of clause(s) **B1 & 2** of the Building Code for the building work described in

 documents relating to Building Consent No. **130599** and those relating to

 Building Consent Amendment(s) Nos. **NA** issued during the course of the works. We have sighted these Building Consents and the conditions of attached to them.

Authorised instructions / variation(s) No. (copies attached)

or by the attached Schedule have been issued during the course of the works.

 On the basis of ☒ this ☐ these review(s) and information supplied by the contractor during the course of the works, I believe on reasonable grounds that ☐ All ☒ Part only of the building works have been completed in accordance with the relevant requirements of the Building Consents and Building Consent Amendments identified above, with respect to Clause(s) **B1 & 2** of the Building Regulations.

 I, **Hamish Wells** am: ☒ CPEng No. **186323**
☐ Reg Arch No.

 I am a Member of: ☒ IPENZ ☐ NZIA and hold the following qualifications: **NZCE, Civil, REA**

The Construction Review Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than \$200,000*.

 The Construction Review Firm is a member of ACENZ: ☐ YES ☒ NO

 SIGNED BY **Hamish Wells** ON BEHALF OF **Hamish Wells**

 Date: **3/10/13** Signature: **[Signature]**

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Construction Review Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of \$200,000.*

 This form to accompany **Forms 6 or 8 of the Building (Form) Regulations 2004** for the issue of a Code Compliance Certificate.

Hamish Wells Consulting Civil Engineer CPEng # 186323 MIPENZ	SITE INSPECTION REPORT FORM		0274 459 757 & 06 36 46728 engenr@xtra.co.nz 202 Otaki Gorge Road RD 2 Otaki 5582	
Controlling Authority	KCDC		Date	1-10-2013
BC/RC reference #	130599		Other Ref #	130852
Site location details (add UTM co-ords for rural sites)	10+117, 6 Argus Way, Otaki Valley			
Owner phone # details email details	Generation Homes, Ltd. 041 976 7889			
Designer/Engineer phone # details email details	Deke Consulting 041 976 7889			
Contractor details phone # details email details	R.L.I. Dano 021 244 3861			
Description of construction work being inspected Piles 2000meter @ 900mm Nith Steel as per design.				
CONCRETE SLAB ON GROUND OR RIBRAFT				
Specified rebar used	<input checked="" type="radio"/>	N	Correct rebar placement	<input checked="" type="radio"/> N
Rebar bends comply with DBH PA1	<input checked="" type="radio"/>	N	Spec reinforcing mesh used	<input checked="" type="radio"/> N
Load bearing beams/ribs correctly placed and reinforced	<input checked="" type="radio"/>	N	Perimeter steel correctly placed	<input checked="" type="radio"/> N
Internal corners correctly constructed and reinforced	<input checked="" type="radio"/>	N	Chairs correctly placed	<input checked="" type="radio"/> N
Piles correctly placed and constructed	<input checked="" type="radio"/>	N	Shear keys correctly placed and constructed	<input checked="" type="radio"/> N
Free joints	<input checked="" type="radio"/>	N	Construction joints	<input checked="" type="radio"/> N
Remedial work required?	<input checked="" type="radio"/>	N	Remedial work required?	<input checked="" type="radio"/> N
More details				
STRUCTURAL STEEL				
As per plans	<input checked="" type="radio"/>	N	Correct fittings	<input checked="" type="radio"/> N
Coatings as per design/spec	<input checked="" type="radio"/>	N	Coatings damaged	<input checked="" type="radio"/> N
Remedial work required?	<input checked="" type="radio"/>	N	Remedial work required?	<input checked="" type="radio"/> N
More details				

BLOCK WORK

Series	Y	N	Bond Type	R	S	Correct reinforcing	Y	N
Correct steel placement	Y	N	Washouts	Y	N	Expansion Joints	Y	N
Free joints	Y	N						

More details

CONCRETE PANEL

Specified rebar used	Y	N	Correct rebar placement	Y	N	Correct rebar laps (300+)	Y	N
Correct mesh	Y	N	Chairs	Y	N	Cure time	Y	N

More details

CONCRETE PANEL ERECTION

Specified rebar used	Y	N	Correct rebar placement in slab or footing	Y	N	Correct rebar laps in slab or footing	Y	N
Correct mesh in slab or footing	Y	N	Correct propping	Y	N			

More details

CLEARANCE TO PROCEED

Work is all good	<input checked="" type="radio"/> Yes	No	Preparation of the building system complies with the design and specification and work may proceed
------------------	--------------------------------------	----	--

More details

Signed:

Name:

James Wriet
James Wriet



Compliance and Electrical Safety Certificate

This form has been issued by the Electrical Workers Registration Board



Safety • Competency

Unique ID: MM 0030

This form has been designed to be used by licensed electrical workers to certify low voltage installations or part installations that comply with Part 2 of AS/NZS 3000 and are safe to be connected to a 230/400 volt multiple earth neutral (MEN) system of electrical supply.

(1) Location of installation

Address: Lot 117 Angus Way Wilkes Valley Powerhouse

(2) Customer Information

Name: Generation Homes

Postal Address: 11

Phone and Email: 11

(3) Electrical Worker Information

Name: Matt Mearns Registration/Practising Licence Number: E266636

Organisation: LASe electrical Telephone Number: 0275353332

Email: matt.mearns@gmail.com

Name of person(s) being supervised: _____

(4) Work Details

The work is (circle): ☐ additions ☐ alterations ☒ new work

The prescribed electrical work is: ☐ High Risk ☒ General ☐ Low Risk ☐ The homeowner has undertaken part of the electrical installation work.

Indicate the number of each item installed or altered:

Number of lighting outlets: 40

Number of socket outlets: 32

Number of ranges: 1

Number of water heaters: 1

Other Work?

40 lights 32 power points
1 x HotB 1x oven
2 x Fridge 1x Pump
1x Septic 1x HVC

Tick (✓) if work includes:

- ☐ Mains
☒ MEN switchboard closest to point of supply
☒ Main Earthing System
☐ Electric Lines

(5) Certification of Work

I certify that the completed prescribed electrical work to which this certificate applies, has been done lawfully and safely and the information in the certificate is correct in that the installation, or part of the installation:

- ☐ has been installed in accordance with a certified design
☒ has an earthing system that is correctly rated
☒ contains fittings which are safe to connect to a power supply
☐ relies on supplier's Declaration of Conformity (attach or reference¹)
☐ relies on manufacturer's instructions (attach or reference¹)
☒ has been satisfactorily tested in accordance with Electricity (Safety) Regulations 2010
☒ is safe to connect

Electronic reference: MM 0030

Electrical Worker's Signature: Matt Mearns

Date: 16/12/13

1. If it is impractical to attach a copy of a particular manufacturer's instructions, or of any certified design or supplier declarations of conformity, provide a reference to where the documents can be found, in a readily accessible format, through electronic means.

Test Results:

	Electrical Worker	Inspector
Polarity (independent earth):		
Insulation resistance:		
Earth continuity:		
Bonding:		
Other (specify):		

(6) Electrical Safety Certificate

I certify that the installation, or part of the installation, to which the Electrical Safety Certificate applies is connected to a power supply and is safe to use

Name: Matt Mearns Registration/Practising Licence Number: E266636

Signature: Matt Mearns
(if certifier is different from electrical worker)

Date: 16/12/13

CUSTOMER COPY - THIS IS AN IMPORTANT DOCUMENT AND SHOULD BE RETAINED

Signature: _____

Company Name: LASe

Contact Number: _____



000520

Customer Name: LAUREL LLOYD
Location of Installation: 9 ANGUS LN. PARAPARA UMU Reference / Job / ID
Date of Inspection 18/12/13 Time of Inspection 1600 ICP Number (if known)

Certificates of Compliance

Reference: MM0030 Issued By: M. MACLEOD Reg Number: L280636 Dated: 16/10/13
Reference: _____ Issued By: _____ Reg Number: _____ Dated: _____
Additional CoC's attached: _____ (Enter quantity attached) CoC Details held on MMS: ☐

Description of Work Inspected

NEW DOMESTIC INSTALLATION METERBOARD
MEN SWITCHBOARD COMBINED + MAIN EARTH.

Mains

- | | |
|---|--|
| <input checked="" type="checkbox"/> Installation of Mains | <input type="checkbox"/> Alteration of Mains |
| <input checked="" type="checkbox"/> Entire | <input type="checkbox"/> Alteration of Point of Supply |
| <input type="checkbox"/> Partial | <input type="checkbox"/> Alteration of Point of Entry |
| <input type="checkbox"/> Revenue Meters | <input type="checkbox"/> Relocation of Main Switch |
| <input type="checkbox"/> Main Earthing System | <input type="checkbox"/> Relocation of Mains Termination |
| <input checked="" type="checkbox"/> At Main Switchboard | <input type="checkbox"/> Relocation of Metering / Load Control |
| <input type="checkbox"/> At Out-building | <input checked="" type="checkbox"/> M.E.N. Link |
| <input checked="" type="checkbox"/> Main Earthing Conductor | <input checked="" type="checkbox"/> Earth Electrode |
| <input checked="" type="checkbox"/> Installation | <input checked="" type="checkbox"/> Installation |
| <input type="checkbox"/> Alteration | <input type="checkbox"/> Alteration |

Testing Undertaken

Mains

- ☒ Insulation Resistance to Earth (All Live Conductors) 750 MΩ
- ☒ Polarity Method Used: ☐ Continuity (trailing lead / jumper)
☐ Identification of N by low resistance to Earth
☒ Live test
- ☐ Phase Rotation ☐ RWB ☐ BWR ☐ n/a
- ☒ Integrity of Main Neutral ☐ N not interrupted at metering point
☐ Submain PEN not dependent on intermediate connections
- ☒ Metering in place at time of inspection?
- ☒ Mains connected to Network at time of inspection?

Main Earthing System

- ☐ Continuity of MEC 0.01 Ω
- ☒ Earth Fault Loop Impedance (Active to MEC) 242V 0.17 Ω PSSC 133 KΩ

I have inspected this High Risk prescribed electrical work described above, and am satisfied that:

- The work has been done in accordance with the Electricity (Safety) Regulations 2010; and
- The specified parts of the Installation are, and will be when enlivened, electrically safe.

Name: A. S. GUNAWARDENA

Registration Number: 32866

Signature: [Signature]

Date: 18/12/13

Contact Number: _____

Company Name: ISI 110

PRODUCER STATEMENT STORMWATER DRAINS



Construction Review

Send or deliver this form to: Kapiti Coast District Council,
175 Rimu Road, Paraparaumu 5032
Private Bag 60601, Paraparaumu 5254
For enquiries, phone 04 296 4700 (Toll Free: 0800 486 486)

TO BE COMPLETED BY THE INSTALLER

Issued by: *Kapiti Plumbing LTD*

Registration number: *12724*

In respect of: Stormwater Drains installed in accordance with E1 AS1 as shown on the approved plans or as per the attached amended plan

Installed at: *9 Angus Way, Nikaia Valley*

Building Consent No: *130599*

As a certified drainlayer, currently holding an annual practicing license, certify that I, or personnel under my control, have carried out the installation of the above system and I believe on reasonable grounds that the installation complies with the New Zealand Building Code.

Name *Mark Scarfe*

Signature *[Signature]*

Address *12 McGrath Ave*

Date *18.12.13*

Phone *9027586*

Fax

Mobile *021 565546*

Email *kapitiplumb@vodafone.co.nz*

Note: Fully dimensioned as built drain plan to be supplied. (scale 1:100)

COUNCIL USE ONLY

Producer Statement author authenticated and current registration verified
Verification & Registration checked: <https://www2.pgdb.co.nz/PGDB/PublicRegister>

Date

Name

Signature:

Signature:

21 JAN 2014

PRODUCER STATEMENT PRIVATE SEWER DRAINS



Construction Review

Send or deliver this form to: Kapiti Coast District Council,
175 Rimu Road, Paraparaumu 5032
Private Bag 60601, Paraparaumu 5254
For enquiries, phone 04 296 4700 (Toll Free: 0800 486 486)

TO BE COMPLETED BY THE INSTALLER

Issued by: *Kapiti Plumbing LTD*

Registration number: *12724*

In respect of: Private Sewer Drains installed in accordance with G13 AS2 or AS/NZS 3500 .2.2 as shown on the approved plans or as per the attached amended plan

Installed at: *Angus Way, Nikau Valley*

Building Consent No: *130599*

As a certified drainlayer, currently holding an annual practicing license, certify that I, or personnel under my control, have carried out the installation of the above system and I believe on reasonable grounds that the installation complies with the New Zealand Building Code.

Name *Mark Scafe*

Signature *M Scafe*

Address *12 MacGrath Ave*

Date *18.12.13*

Phone *9027586*

Fax

Mobile *021 565546*

Email *Kapplumb@Vodafone.co.nz*

Note: Fully dimensioned as built drain plan to be supplied. (scale 1:100)
Drains may be laid and backfilled without inspection provided that the drain is left under test with a min of 1.0 m head and the inspection at the lateral left exposed.

COUNCIL USE ONLY

Producer Statement author authenticated and current registration verified
Verification & Registration checked: <https://www2.pgdb.co.nz/PGDB/PublicRegister>

Date

Name

Signature:

Signature:

21 JAN 2014

PRODUCER STATEMENT PIPED SERVICES AND PLUMBING STACKS



Construction Review

Send or deliver this form to: Kapiti Coast District Council,
175 Rimu Road, Paraparaumu 5032
Private Bag 60601, Paraparaumu 5254
For enquiries, phone 04 296 4700 (Toll Free: 0800 486 486)

TO BE COMPLETED BY THE INSTALLER

Issued by: Kapiti Plumbing

Registration number: 12724

In respect of Piped Services installed in accordance with G12/AS1 as shown on the approved plans or as per the attached amended plan and Sanitary Plumbing Stacks installed in accordance with G13/AS1 or AS/NZS 3500.2.2

Installed at: ~~18~~ 9 Angus Way, Nikaia Valley

Building Consent No: 130 599

As a certified plumber, currently holding an annual practicing license, certify that I, or personnel under my control, have carried out the installation of the above system and I believe on reasonable grounds that the installation complies with the New Zealand Building Code. Both hot and cold systems have been pressure tested for a period of 15 minutes at a pressure of 1500 kPa.

Name Mark Scarfe

Signature M Scarfe

Address ~~18/18~~ 12 McGrath Ave

Date 18.12.13

Phone 9027586

Fax

Mobile 021 565546

Email kapplumb@vodafone.co.nz

COUNCIL USE ONLY

Producer Statement author authenticated and current registration verified

Verification & Registration checked: <https://www2.pgdb.co.nz/PGDBPublicRegister>

Date

Name

Signature:

Signature

21 JAN 2014

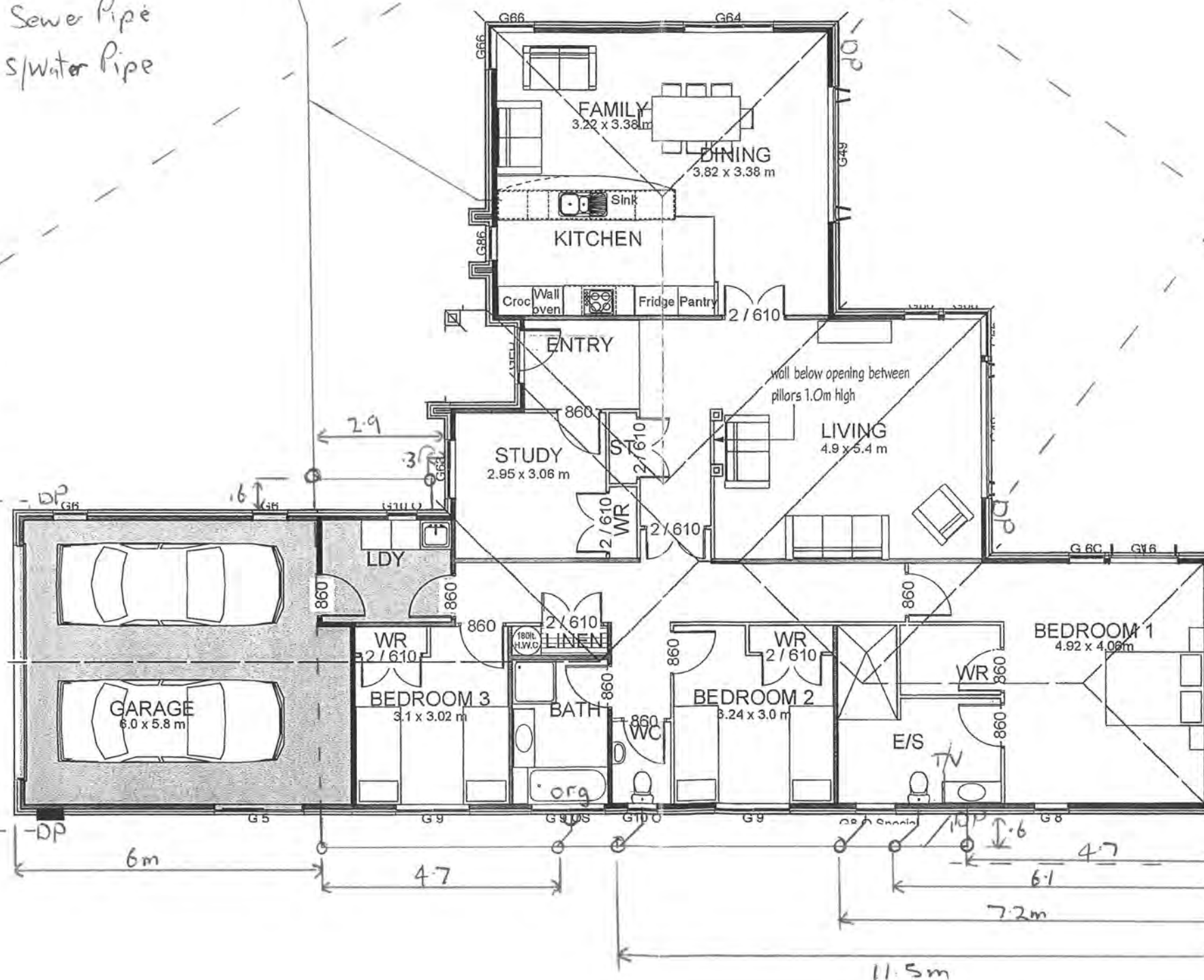
Septic Tank
by others

S/Water overflow
to natural water
way

25,000
Litre Water
Tank

25,000
Litre Water
Tank

— 100mm Sewer Pipe
- - - 100mm S/Water Pipe



Floor Plan

Barry and Hayley Vinten
Lot 117 - DP442630
Paraparaumu

DRAWN BY ROD CHECKED BY MARTY
GENERATION KAPITI COAST NZ
DATE AUG 13 SCALES: 1:100 EC183 - dwg 04

Metrotile

ROOFING SYSTEMS

Date: 31ST OCTOBER 2013

Warranty No: 105818.01

Distributor: JTG LTD

SATIN ACRYLIC COATED TILE WARRANTY FOR NEW ZEALAND USE ONLY

(Manufactured from Zinalume only)

To the Purchaser Named Hereunder: GENERATION HOMES

Address: 9 ANGUS WAY, NIKAU VALLEY, PARAPARAUMU

Tile warranty by Metrotile (NZ) Limited (hereinafter called the Company).

(a) Weather Security Warranty

The Company warrants that each Zinalume roofing tile comprised in the roof fitted to the purchaser's property described below; will carry a 50 year pro-rata weatherproof warranty. This warranty is a full 25-year weatherproof warranty plus a diminishing pro-rata weatherproof warranty for the subsequent 25 years. Should any tile not remain weatherproof over this period the Company may at its option repair or replace the tile. The Company's obligation under this section of the warranty shall be limited to the cost of the remedial work during the first 25 years following the date of this warranty, and thereafter shall be limited to sharing the costs with the purchaser based on the schedule on the reverse of this warranty.

(b) Surface Coating Warranty

If during a period of 15 years from the date of this warranty, the surface coatings of the tile deteriorates to the extent that in the Company's reasonable opinion the appearance of the roof is substantially affected, then the Company will at its option either repair the roof or apply the Company's surface coating to the roof. The Company's obligation under this surface warranty shall be limited to the cost of the remedial work during the first five years following the date of this warranty, and thereafter shall be limited to the sharing of costs with the purchaser based on the schedule on the reverse side of this warranty.

(c) Installation Warranty by the Installation Contractor

The installation contractor warrants that defects in the purchaser's roof arising within five years of the date of this warranty and caused by faulty workmanship in the fitting of the roof shall, within a reasonable time, be made good by the installation contractor and without cost to the purchaser.

(d) Terms and Conditions of the Tile and Installation Warranties:

- (i) The warranties shall only apply if the purchaser has made full payments for the supply and fitting of the roof and thereafter will extend to subsequent owners of the property.
- (ii) The warranties shall only apply where the defect is a direct result of a manufacturing defect or faulty workmanship in fitting of the roof. (For example, damage caused by walking on the roof by the owner or any other persons such as plumbers, TV repairmen, electricians, painters etc. following the correct fitting of the roof, or any defects in the structure on which the roof is fitted, is not covered by the warranty.)
- (iii) The Company by virtue of these warranties shall not be liable for any consequential, indirect or special damage or loss of any kind whatsoever beyond the period that the Company is liable to the consumer under the Consumer Guarantees Act 1993.
- (iv) As colour variations may exist in tiles manufactured at different times the Company and installation contractor reserve the right to repair or replace tiles in a colour similar to the original.
- (v) The warranties shall not apply if any work, except temporary emergency work, is done other than under the supervision of or subject to the inspection and approval of the Company.
- (vi) The Company gives no warranty if during installation of the roof skill saws, abrasive discs or hacksaws are used to cut tiles except as directed in fixing instructions issued by the manufacturer of the tiles.
- (vii) The surface coating warranty shall not apply where the growth of organic matter such as moss or lichen occurs on the roof. Organic matter, if left unchecked, may damage the surface of any roofing or cladding product.
- (viii) Any remedial work carried out under this warranty shall not extend the term of warranty.
- (ix) This warranty does not in any way limit the rights of the consumer or limit the obligations of the Company under the Consumer Guarantees Act 1993

(e) Special Note:

If rainwater is to be collected from this roof and intended for drinking, the system must be disconnected for three good rainfalls or thoroughly hosed down before reconnecting.

How to care for your roof:

1. You should not walk on your roof unless absolutely necessary. If you do need to walk on your roof, to avoid denting or causing other damage to your roof, you should, firstly wear soft-soled shoes and secondly place your feet on the lowest point of the tile at the front edge.
2. Metrotile roofs must be washed down regularly with fresh water especially those areas sheltered by the eaves overhang of a higher roof. In areas near the sea, where salt deposits are noticeable on windows and similar surfaces, or near areas of industrial pollution, washing down should be carried out every 2-3 months. In other areas, washing down every 6 months should suffice.
3. All organic growth such as moss, mould, algae, lichen or other organic growth can damage the surface coating of your Metrotile roof and must be removed with chemical cleaners as recommended by Metrotile in order for your warranty to be valid – refer to section (d) (vii). Metrotile recommends to chemically clean the roof within a 3 year time period of your roof being installed and thereafter once every 2-3 years to maintain a good appearance and prevent the growth of moss, mould, algae, lichen or other organic growth. Metrotile recommends the use of MossBoss to chemically clean your roof.

<u>Clause (a) Weather Security Pro Rata Warranty Schedule</u>				
Year	Company Contribution	%	Purchaser (Owner) Contribution	%
1 to 26	"	100%	"	0%
27	"	96%	"	4%
28	"	92%	"	8%
29	"	88%	"	12%
30	"	84%	"	16%
31	"	80%	"	20%
32	"	76%	"	24%
33	"	72%	"	28%
34	"	68%	"	32%
35	"	64%	"	36%
36	"	60%	"	40%
37	"	56%	"	44%
38	"	52%	"	48%
39	"	48%	"	52%
40	"	44%	"	56%
41	"	40%	"	60%
42	"	36%	"	64%
43	"	32%	"	68%
44	"	28%	"	72%
45	"	24%	"	76%
46	"	20%	"	80%
47	"	16%	"	84%
48	"	12%	"	88%
49	"	8%	"	92%
50	"	4%	"	96%
51 - thereafter	"	0%	"	100%

<u>Clause (b) Satin Surface Coating Pro Rata Warranty Schedule</u>				
Year	Company Contribution	%	Purchaser (Owner) Contribution	%
1 to 5	"	100%	"	0%
6	"	90.9%	"	9.1%
7	"	81.8%	"	18.2%
8	"	72.7%	"	27.3%
9	"	63.6%	"	36.4%
10	"	54.6%	"	45.5%
11	"	45.5%	"	54.6%
12	"	36.4%	"	63.6%
13	"	27.3%	"	72.7%
14	"	18.2%	"	81.8%
15	"	9.1%	"	90.9%
16 - thereafter	"	0%	"	100%

Metrotile

ROOFING SYSTEMS

Date: 31ST OCTOBER 2013

Warranty No: 105818.01

Distributor: JTG LTD

SATIN ACRYLIC COATED TILE WARRANTY FOR NEW ZEALAND USE ONLY

(Manufactured from Zinalume only)

To the Purchaser Named Hereunder: GENERATION HOMES

Address: 9 ANGUS WAY, NIKAU VALLEY, PARAPARAUMU

Tile warranty by Metrotile (NZ) Limited (hereinafter called the Company).

(a) Weather Security Warranty

The Company warrants that each Zinalume roofing tile comprised in the roof fitted to the purchaser's property described below; will carry a 50 year pro-rata weatherproof warranty. This warranty is a full 25-year weatherproof warranty plus a diminishing pro-rata weatherproof warranty for the subsequent 25 years. Should any tile not remain weatherproof over this period the Company may at its option repair or replace the tile. The Company's obligation under this section of the warranty shall be limited to the cost of the remedial work during the first 25 years following the date of this warranty, and thereafter shall be limited to sharing the costs with the purchaser based on the schedule on the reverse of this warranty.

(b) Surface Coating Warranty

If during a period of 15 years from the date of this warranty, the surface coatings of the tile deteriorates to the extent that in the Company's reasonable opinion the appearance of the roof is substantially affected, then the Company will at its option either repair the roof or apply the Company's surface coating to the roof. The Company's obligation under this surface warranty shall be limited to the cost of the remedial work during the first five years following the date of this warranty, and thereafter shall be limited to the sharing of costs with the purchaser based on the schedule on the reverse side of this warranty.

(c) Installation Warranty by the Installation Contractor

The installation contractor warrants that defects in the purchaser's roof arising within five years of the date of this warranty and caused by faulty workmanship in the fitting of the roof shall, within a reasonable time, be made good by the installation contractor and without cost to the purchaser.

(d) Terms and Conditions of the Tile and Installation Warranties:

- (i) The warranties shall only apply if the purchaser has made full payments for the supply and fitting of the roof and thereafter will extend to subsequent owners of the property.
- (ii) The warranties shall only apply where the defect is a direct result of a manufacturing defect or faulty workmanship in fitting of the roof. (For example, damage caused by walking on the roof by the owner or any other persons such as plumbers, TV repairmen, electricians, painters etc. following the correct fitting of the roof, or any defects in the structure on which the roof is fitted, is not covered by the warranty.)
- (iii) The Company by virtue of these warranties shall not be liable for any consequential, indirect or special damage or loss of any kind whatsoever beyond the period that the Company is liable to the consumer under the Consumer Guarantees Act 1993.
- (iv) As colour variations may exist in tiles manufactured at different times the Company and installation contractor reserve the right to repair or replace tiles in a colour similar to the original.
- (v) The warranties shall not apply if any work, except temporary emergency work, is done other than under the supervision of or subject to the inspection and approval of the Company.
- (vi) The Company gives no warranty if during installation of the roof skill saws, abrasive discs or hacksaws are used to cut tiles except as directed in fixing instructions issued by the manufacturer of the tiles.
- (vii) The surface coating warranty shall not apply where the growth of organic matter such as moss or lichen occurs on the roof. Organic matter, if left unchecked, may damage the surface of any roofing or cladding product.
- (viii) Any remedial work carried out under this warranty shall not extend the term of warranty.
- (ix) This warranty does not in any way limit the rights of the consumer or limit the obligations of the Company under the Consumer Guarantees Act 1993

(e) Special Note:

If rainwater is to be collected from this roof and intended for drinking, the system must be disconnected for three good rainfalls or thoroughly hosed down before reconnecting.

How to care for your roof:

1. You should not walk on your roof unless absolutely necessary. If you do need to walk on your roof, to avoid denting or causing other damage to your roof, you should, firstly wear soft-soled shoes and secondly place your feet on the lowest point of the tile at the front edge.
2. Metrotile roofs must be washed down regularly with fresh water especially those areas sheltered by the eaves overhang of a higher roof. In areas near the sea, where salt deposits are noticeable on windows and similar surfaces, or near areas of industrial pollution, washing down should be carried out every 2-3 months. In other areas, washing down every 6 months should suffice.
3. All organic growth such as moss, mould, algae, lichen or other organic growth can damage the surface coating of your Metrotile roof and must be removed with chemical cleaners as recommended by Metrotile in order for your warranty to be valid – refer to section (d) (vii). Metrotile recommends to chemically clean the roof within a 3 year time period of your roof being installed and thereafter once every 2-3 years to maintain a good appearance and prevent the growth of moss, mould, algae, lichen or other organic growth. Metrotile recommends the use of MossBoss to chemically clean your roof.

<u>Clause (a) Weather Security Pro Rata Warranty Schedule</u>				
Year	Company Contribution	%	Purchaser (Owner) Contribution	%
1 to 26	"	100%	"	0%
27	"	96%	"	4%
28	"	92%	"	8%
29	"	88%	"	12%
30	"	84%	"	16%
31	"	80%	"	20%
32	"	76%	"	24%
33	"	72%	"	28%
34	"	68%	"	32%
35	"	64%	"	36%
36	"	60%	"	40%
37	"	56%	"	44%
38	"	52%	"	48%
39	"	48%	"	52%
40	"	44%	"	56%
41	"	40%	"	60%
42	"	36%	"	64%
43	"	32%	"	68%
44	"	28%	"	72%
45	"	24%	"	76%
46	"	20%	"	80%
47	"	16%	"	84%
48	"	12%	"	88%
49	"	8%	"	92%
50	"	4%	"	96%
51 - thereafter	"	0%	"	100%

<u>Clause (b) Satin Surface Coating Pro Rata Warranty Schedule</u>				
Year	Company Contribution	%	Purchaser (Owner) Contribution	%
1 to 5	"	100%	"	0%
6	"	90.9%	"	9.1%
7	"	81.8%	"	18.2%
8	"	72.7%	"	27.3%
9	"	63.6%	"	36.4%
10	"	54.6%	"	45.5%
11	"	45.5%	"	54.6%
12	"	36.4%	"	63.6%
13	"	27.3%	"	72.7%
14	"	18.2%	"	81.8%
15	"	9.1%	"	90.9%
16 - thereafter	"	0%	"	100%



RESIDENTIAL WARRANTY & MAINTENANCE REQUIREMENTS FOR ROOFING & RAINWATER PRODUCTS



PROPERTY OWNER: Barry & Hayley Vinten

SITE ADDRESS: 9 Angus Way
Paraparam

PHONE NO:

DATE: 26 September 2013

You have chosen high quality COLORCOTE® pre-painted metal products for your building which are designed to give you protection well into the future. The terms and conditions of this warranty are detailed below. To ensure you gain maximum value from your investment over time, the minimum maintenance program specified below **MUST BE STRICTLY ADHERED TO:**

This warrants the following material: External Fascia ZR8 135mm/190mm - Ironsand

Lift No: P410977B/ST10007

	Roofing		Cladding	
Will not perforate through corrosion:	N/R	Years	N/R	Years
Will not flake, peel or excessively fade:	N/R	Years	N/R	Years
	Fascia		Gutter	
Will not perforate through corrosion:	15	Years	N/R	Years
Will not flake, peel or excessively fade:	10	Years	N/R	Years

This roof was installed by: Coastal Roofing Solutions

And carries a workmanship warranty for: FIVE Years

Signature of Installer

J. Nothhouse

Signature of property owner or agent:

TO VALIDATE THIS WARRANTY A SIGNED COPY MUST BE RETURNED TO THE ROOFING MANUFACTURER

COLORCOTE® products will inevitably weather, chalk and fade over time as a result of normal wear and tear. The environmental classifications are described in AS/NZS 2728:1997, and are as summarised in the Atmospheric Environment Usage Guide published by Pacific Coilcoaters. Determination of coating performance will be as per test methods described in Australian Standard AS1580.

If any COLORCOTE® ZR8™, ZRX™, AR8™ or ARX™ product fails to perform as warranted we will, at our sole option, repair or replace (including labour) the affected material.

Please note this warranty is subject to the following terms and conditions:

- This warranty will not apply to weathering, chalking or fading over time as a result of normal wear and tear.
- If the COLORCOTE® ZR8™, ZRX™, AR8™ or ARX™ product has not been selected, processed or maintained in accordance with the published recommendations of Pacific Coilcoaters and accepted good trade practices, this warranty will not apply.
- If inappropriate fastenings are used this warranty will not apply.
- Defects caused by faulty design, or method of manufacture of residential buildings are not covered by this warranty.
- Garage doors are not covered by this warranty.
- Pacific Coilcoaters must be given the opportunity for inspection on site prior to any remedial action being offered or taken.
- The product must be manufactured from prime COLORCOTE® pre-painted metal products.
- Damage or corrosion resulting from the following is not covered by this warranty:
 1. Damage sustained during handling, storage, processing or installation.
 2. Damage sustained after installation.
 3. Damage caused after the product has left our control.
 4. Failure to remove debris leading to the accumulation of moisture retaining matter in gutters and downpipes.

Our liability under this warranty shall in all cases be limited to replacing or repairing the defective product as specified above including labour. Any repaired or replaced product will be covered by this warranty only for the unexpired portion of the warranty of the original product. Pacific Coilcoaters will not under any circumstances be liable for consequential loss or damage. All claims must be made promptly in writing and accompanied by the original warranty document. This warranty does not in any way affect the rights of a consumer under the Consumer Guarantees Act.

Minimum Maintenance Requirements

1. Washing of naturally unwashed areas every 6 months.
2. Removal of debris from gutters every 6 months.
3. Washing of any noticeable buildup of salty deposits and/or other contaminants are to be removed when identified.
4. When considering overpainting consult with your local distributor to ensure correct procedures are undertaken.

This Warranty is issued by: Roofing Industries Ltd
233 Bush Rd, PO Box 302-385
North Harbour.

Signed: *[Signature]*
Position: General Manager
Date: 19 December 2013



PRODUCER STATEMENT – CONSTRUCTION (PS 3)

Building Consent No:

Issued by: Elite Windows & Doors

To: (City/District Council)

In respect of Building Consent Application Number:

Granted To (Building Consent Applicant):

In Relation to: Supply and install of aluminium windows & doors

At: 9 Angus Way, Nikau Heights, PARAPARAUMU

Lot:

DP:

SO:

I: Elite Windows & Doors have been engaged by

(Building Consent Applicant)

To Manufacture and install	
	Aluminium Windows & Doors in accordance with plans and specifications as supplied by GH (Kapiti Coast) Limited

Am satisfied on reasonable grounds that the building work specified above has been completed to the extent required by the New Zealand Building Code – NZS 4211: 1985 Specification for Performance of Windows NZS 4223 (Part 3) Glazing and NZS 3504: 1997 Specification for Windows. H1 requirements for the combined values of aluminium joinery and 4-12-4 double glazing, with an R-value rating of R0.26 as listed in table C1, NZS:4218. I understand that if this Producer Statement is accepted, it will be relied upon by (City/District Council) _____ for the purpose of establishing compliance with the Building Code.

Constructor: Elite Windows & Doors
24 Birmingham Street PARAPARAUMU
Phone 04 902 6668

Date: 25/10/13

Construction Chemicals (NZ) Ltd's Waterproof Membrane System

Installation Check Sheet

B/CN^o 130599

Project Name	VINTEN		
Project Address	LOT 117, 8 ANGUS WAY, NIKAU HEIGHTS, PHU.		
Building Contractor	GENERATION HOMES (KARTI LTD)		
	Phone	04 2935816	
Applicator	ADAM PETTEFATZ (PTPM LTD)		
Commencement Date	5/12/2013	Completion Date	20/12/2013

Construction By Builder	Signature	Date
Concrete deck structurally sound and cured at least 28 days (installed / /)		
Compressed fibre cement sheet, glued and screwed to falls and without ponding		
Check support structure is H3.2 treated timber on 200x50 joists @ 400mm centres	N/A	
Ensure doors, penetrations and cladding are not installed prior to waterproofing (Remove if necessary)		
Falls (minimum 1:80) even to adequate outlets/overflows		
Construction Chemicals Certified Applicator		
Substrates checked and satisfactory (cleaned and ready)	A. Pettefatz	5/12/13
Repairs (listed separately) carried out	N/A	
Primer (Primer & Grout Additive, SuperPrime or Bonding Slurry) applied to all surfaces PRIMEBOND	A. Pettefatz	-
50mm Bond Breaking Tape applied to all sheet joints, penetrations and changes of plane	A. Pettefatz	-
1 st coat of selected membrane applied and 140mm Reinforcing Tape embedded fully to all sheet joints, penetrations and changes of plane	A. Pettefatz	-
2 nd and 3 rd coats of selected membrane applied to the whole substrate of the selected areas	A. Pettefatz	6/12/13
Curing and Protection Time given to builder – Work may commence (/ /)	N/A	
Project completed to satisfactory standard, warranty provided	A. Pettefatz	20/12/13

Repairs required to conform to NZ Building Code	Builder	Applicator
Problem		
Remedy		
Problem		
Remedy	N/A	
Problem		
Remedy		
Problem		
Remedy		

Areas where membranes applied			Product
Product	Type of Area	m ²	Warranty Period
HYDRATHANE	SHOWER BASE + OUTSIDE MAIN FLOOR		15 YRS
"	500mm	3.0	
"	SHOWER WALL TO APPROX 2.9m HIGH	10.0	"
"	WALLS OVER BATH APPROX 300mm HIGH		
	+ SHELF	1.0	"

Quality Assurance Checklist		TICK
1.	Supporting Structures and substrate checked	✓
2.	Substrate cleaned, prepared and primed	✓
3.	Application in accordance with Construction Chemicals (NZ) Ltd written instructions, NZ Building Code, project documents and sound trade practise	✓
4.	Application work supervised and inspected at each stage	✓
5.	Maintenance/remedial work carried out	N/A
6.	Satisfied that the work is to a very high standard	✓
7.	Quality Assurance form remitted to Construction Chemicals (NZ) Ltd?	N/A
8.	Is there a main contractor Project Warranty required for this installation	✓
9.	Have you provided the Workmanship warranty and Producer Statement to the main contractor	✓
10.	If so, for what period (.....2.....years) WORKMANSHIP	✓
11.	Has this installation been inspected by Construction Chemicals (NZ) Ltd ICAPITI COAST DISTRICT COUNCIL	✓
12.	If so, name of representative (.....CRAIG WATSON.....)	✓
ON Date 9/12/2013		✓

Products Used on site		
Number	Size	Product Name
16 LITRES		HYDRATHANE

In support of this application, we advise that Construction Chemicals (NZ) Ltd (CCNZ) supplied all materials used and covered under this warranty. Further, in consideration of your issuing the Product Performance Warranty to the benefit of our client, we warrant and declare that all the materials, application and processes have been applied and carried out by us in accordance with Construction Chemicals (NZ) Ltd application instructions and technical literature, AS 3740-2004 and other relevant Standards and will comply with the NZ Building Code, Sections B2, E2 & E3. Furthermore we agree to indemnify and keep indemnified Construction Chemicals (NZ) Ltd against all liability incurred by them to our client as a result of the issue of the Product Performance Warranty for materials supplied that become faulty due to incorrect application procedures. We will further issue a separate Workmanship Warranty and Producer Statement to the client

Signature of the Applicator 

APPLICATOR'S PRODUCER STATEMENT

I/We ADAM PETTEFAR

Of PETTEFAR TILING & PROPERTY MAINTENANCE LTD

Being an Applicator

Confirm that we have applied HYDRATHANE (Product)

At LOT 17, 9 ANGUS WAY, NIKAU HEIGHTS, PPM.

Completed 20TH DECEMBER 2013 for GENERATION HOMES
(KAPITI) LTD

In accordance with the manufacturers written application instructions, AS3740-2004 and clauses E2, E3 and B2 of the current NZ Building Code.

I/We are satisfied that the substrate over which this system has been applied has been suitably prepared, and the materials have been correctly installed, including 50mm wide Bond Breaking Tape or Neutral-Cure Silicone, Reinforcing Tape 140mm minimum and Reinforcing Matting 970mm as required.

This work has been certified by ADAM PETTEFAR

Signed



Date

20/12/2013.

Manufacturer's 15 year Guarantee

- *Construction Chemicals manufactures products throughout Australia, Asia and New Zealand and has over 30 years of manufacturing experience.*
- *We maintain a Research and development laboratory that maintains and develops leading edge technology.*
- *We guarantee our tile adhesives and grout; Waterproof membranes are guaranteed when applied by an Accredited Applicator.*

"When tiles are installed in accordance with AS 3958 Part 1- guide to the installation of ceramic tiles, and waterproofing is installed in accordance with AS 3740 -2004, Waterproofing of wet areas within residential areas, in conjunction with our written instructions, good trade practise and any relevant local requirement, Construction Chemicals guarantees the performance of the products mentioned on the guarantee when applied to structurally sound surfaces"

This guarantee is for a fifteen (15) year period from the time of the original installation and covers only the cost of materials and labour of the original installation when the product is proven and acknowledged to be faulty.

**CONSTRUCTION
CHEMICALS**

Adelaide, Brisbane
Melbourne, Sydney, Perth
Auckland & Kuala Lumpur

Dribond

NZ BRICK & BLOCKLAYERS ASSOCIATION



Memorandum from licensed building practitioner:
Record of building work
Section 88, Building Act 2004 Form 6A



JOB No. INVOICE No. 11411

The Building

Street address of building: 9 Angus Way
Peraparamu.

The project

Building consent number: 130599.

The owner

Name: B & H Vinten

Address: 9 Angus Way
Peraparamu.

Telephone:

Email:

Record of work that is restricted building work

Work that is restricted building work	Description	Carried out/ supervised
Primary structure		
Foundations and subfloor framing ()		() Carried out () Supervised
Walls ()		() Carried out () Supervised
Columns and beams (✓)	Brick veneer	(✓) Carried out () Supervised
Other ()		() Carried out () Supervised

External moisture management systems

Damp proofing & Penetrations ()		() Carried out () Supervised
Wall cladding or wall system (✓)	Brick veneer	(✓) Carried out () Supervised
Other ()		() Carried out () Supervised

Issued by

Name: Miles Gordon Sweetman

LBP number: 112381

Class(es) licensed in B1 B2

Mailing address: 11 Edgewater St

Street address or registered office:

Telephone: Landline: 04 2938889

Mobile: 0274 378509

Daytime:

After hours:

Facsimile:

Email:

Declaration

I m.g. Sweetman (name of practitioner)

carried out or supervised the restricted building work recorded on this form.

Signature: m.g. Sweetman

Date: 17-12-2013



Home Insulation Installation Guarantee

This is to certify that

this home has been insulated with Pink® Batts® Insulation
by a Tasman Insulation preferred Pink® Batts® installer.

The Pinkfit® Licensee guarantees that, at the time of installation, the
Pink® Batts® have been properly installed in accordance with
New Zealand Standard Energy Efficiency -

Installing Insulation in Residential Buildings NZS 4246 A1:2006

Proper installation is essential for insulation to meet the
durability requirements of NZBC B2.31(a) not less than 50 years

This guarantee is transferred to subsequent owners of the home.

Signed

Russell Knight Annie Unuka (Wgtn)

Date

17/Dec/2013

Pinkfit® Licensee

Placemakers - Placemakers Paraparaumu Limited

Registration Details:

Compliance Number: 131190

Builder Details:

Generation Homes

Site Details:

Generation Homes

Lot 117, 9 Anus Way

Nikau Valley, Paraparaumu, New
Build

Date Printed:

17/Dec/2013

Install Date:

06/Nov/2013

Completion:

06/Nov/2013

Product Details

PinkFit® GHB L2 Ceiling R3.6, PinkFit® GHB L2 Wall R2.6

Pinkfit® 0800 746 534

Pinkfit® is a network of independent installers licensed by Pinkfit® Limited. Pinkfit®, Pink® Batts® and the colour PINK are registered trade marks of Owens Corning used under licence.

Guarantee

BC 130599



PO Box 4083
Palmerston North
Mobile: 027 557 8808
Ph: 06 357 8808
Fax: 06 357 8818
Email: manawatucont@xtra.co.nz

c/o Agna Mondo

Installer Declaration

Producer Statement

Client: Mr & Mrs Vinton

Address 9 Angus Way
Paraparaumu

System Installed: Hynds Lifestyle
Tank # 1355

Date of installation: October 2013

I declare that I am a licensed drain layer and have installed the drainage at the above address in accordance with the New Zealand building code and relevant plans and specifications, and hereby guarantee the quality of the workmanship.

Signed [Signature]

Authorised Installer Alvin Cameron

Company Name: Manawatu Contracting and Drainage Limited

Registration Number 22988

Received by Kāpiti Coast District Council at Paraparaumu	
28 OCT 2013	
By <u>Forde</u>	Time <u>2-01</u>

Date: 9/09/2013

Fabricator: Wellington Frame & Truss

Job Name: Generation Homes
Lot 117, 6 Angus Way
Paraparaumu

Building Consent No:
(to be provided by the City / District Council)

Attn: City / District Council

We have been engaged to provide the trusses for the above project and have enclosed the truss layout and Producer Statement to allow completion of the consent application. On advice from the building project owner, the structure will be designed under the following parameters:

Wind Zone Very High

Snow Load N/A

Earthquake Zone 3

Roof Material Light

Treatment Definition	External walls	H1.2	Trusses	H1.2
	Internal walls	H1.2		

We can advise that the following will be provided at the time of truss manufacture to both the building owner and your office:

1. A full as-built truss layout and Producer Statement
2. Specific truss / truss and truss / top plate fixing details indicated on the truss layout.
3. All lintel sizes outside NZS3604: 2011 will be indicated on the frame layout.
(all timbers to be SG8 unless otherwise stated on layouts)
4. Top plate to stud connections will be indicated on the frame layout.

Acknowledgement of this letter, along with the Building Consent number, by fax to our office, would be appreciated.



MiTek New Zealand Limited

Correspondence from : AUCKLAND
40 Neales Road, East Tamaki 2013
PO Box 58-014, Botany 2163
Phone: 09 274 7109
Fax: 09 274 7100

CHRISTCHURCH
14 Pilkington Way, Wigram 8042
PO Box 8387, Riccarton 8440
Phone: 03 348 8691
Fax: 03 348 0314

www.mitek.nz.co.nz

Printed: 12:10:03 09 Sep 2013

MiTek 20/20 Engineering 4.6.6.148

PRODUCER STATEMENT for MiTek 20/20[®] TRUSS DESIGN - Version 4.6

ISSUED BY: MiTek New Zealand Limited

TO: PLACEMAKERS - W.F.T.

IN RESPECT OF: MiTek[®] Truss Designs

This producer statement covers the MiTek 20/20[®] truss design and the structural performance of the GANG-NAIL[®] connector plate for the job reference **45823** and may be used by a Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

The MiTek 20/20[®] truss design program has been developed by MiTek New Zealand Limited for the design of MiTek[®] timber roof, floor and attic trusses in New Zealand. The truss designs computed by MiTek 20/20[®] are prepared using sound and widely accepted engineering principles, and in accordance with compliance documents of the New Zealand Building Code and Verification Method B1/VM1; and internationally accepted standard ANSI/TPI 1 - 2002 as an alternative solution to satisfy the requirements of Clause B1 of the New Zealand Building Code.

On behalf of MiTek New Zealand Limited, and subject to:

- i) All proprietary products meeting their performance specification requirements
- ii) The provision of adequate roof bracing and overall building stability
- iii) Correct selection and placement of GANG-NAIL connector plates
- iv) Correct Input of Truss Design Data as shown in the Fabricator Design Statement for this job
- v) The design being undertaken by the accredited fabricator under the terms of the software licence

I believe on reasonable grounds that the trusses, if constructed in accordance with the MiTek 20/20[®] truss design and shop drawings, will comply with the relevant provisions of the New Zealand Building Code.

MiTek New Zealand Limited holds a current policy of Professional Indemnity Insurance no less than \$500,000.

On behalf of MiTek New Zealand Limited,

Date: Monday, 9 September 2013

In Ling Ng, BE (Hons), CPEng, IntPE, MIPENZ (ID: 146585)
TECHNICAL SERVICES MANAGER, MiTek New Zealand Limited

PLACEMAKERS - W.F.T.

Fabricator Design Statement : Page 1

Job: 45823

Client: Placemakers Paraparaumu
Phone:

Site: GENERATION HOMES
LOT 117 ANGUS ROAD
NIKAU VIEWS
PARAPARAUMU

Phone: 04 582 5252

Description:
Building Consent No.:
MTEK 20/20 Truss Design 1 & 2

MTEK 20/20 Truss Design

MITEK FABRICATOR DESIGN STATEMENT

This statement is issued by Mitek accredited fabricator PLACEMAKERS - W.F.T., being licensed to use the Mitek 20/20[®] software, to the client listed above and may be used by the Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

MITEK 20/20[®] TRUSS DESIGN DATA

The Mitek 20/20[®] computer design for this job is based on the following design parameters entered into the program. The Fabricator shall ensure that these job details are current and relevant to the project for the design of the Mitek[®] trusses.

Job Details

Roof Truss

Timber Group:

Roof

Material: Metal Tiles
Dead Load: 0.210 kPa
Restraints: 400 mm centres
Live Load: Q_u = 0.250 kPa
Q_c = 1.100 kN

Importance Level: 2

Pitch: 25.000 deg
Celling
Material: Rondo on clips
Dead Load: 0.200 kPa
Restraints: 1800 mm centres
Live Load: Q_c = 1.400 kN

Design Working Life: 50 years

Nominal Overhang: 500 mm
Wind
Area: Very High (50.0 m/s)
Pressure Coeff: C_{pe} = varies; C_{pi} = -0.30, 0.20

The timber for these Mitek[®] trusses shall be treated to the requirements of NZS 5602:2003 and shall be graded to the requirements of NZS 3603:1993. Unless otherwise noted, this design assumes that the steel fixings and timber connectors proposed are located in a "closed environment", as defined by NZS3604:2011 Section 4.

MITEK[®] Truss List

Legend: * = detail only, ? = input only, Fxx = failed design, Ø = non certified, Unmarked trusses = designed successfully, LB = lateral bracing required
GB = gable brace required

Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)
J1	2	3227	25.000	900	ET1	10	6000	25.000	900	T7A	1	3227	25.000	830
J1A	2	3227	25.000	900	J1F	2	3227	25.000	900	T7B	1	3227	25.000	830
J1B	1	3227	25.000	900	J1H	3	3227	25.000	818	T7C	1	3227	25.000	830
J1C	1	3227	25.000	900	J2	1	2327	25.000	900	V1	1	5050	25.000	900
J1D	1	3227	25.000	900	J2A	1	2327	25.000	900	V2	1	3250	25.000	900
J1E	1	3227	25.000	900	J2B	1	2282	25.000	900	V3	1	1450	25.000	900
J1G	2	3227	25.000	900	J2C	1	2282	25.000	900	V4	1	2182	25.000	818
J4A	2	3447	25.000	900	J3	1	1427	25.000	900	V5	1	1384	25.000	818
T1	2	10055	25.000	900	J3A	1	1427	25.000	900	V6	1	546	25.000	818
T2	1	6940	25.000	900	J3B	1	1427	25.000	900	*HB1	1	3504	18.249	900
T2A	1	6940	25.000	900	J3C	1	1427	25.000	900	*HB2	1	7844	18.249	900
T3	2	6940	25.000	803	J4	1	3447	25.000	900	*HB3	1	7280	18.249	900
T4	1	6000	25.000	871	J5	2	2547	25.000	900	*HB4	1	2887	18.249	900
T5	9	6000	25.000	871	J5A	2	2647	25.000	900	*HB5	2	6710	18.249	900
T6	1	5100	25.000	900	J6	2	1647	25.000	900	*HB6	2	4409	18.249	900
T7	1	5100	25.000	940	J6A	2	1647	25.000	900	*R1	1	1108	25.000	900
T8	1	5100	25.000	940	J7	1	2527	25.000	900	*R2	1	638	25.000	900
TG1	1	10055	25.000	900	J7A	2	2527	25.000	900	*R3	2	1328	25.000	900
TG1A	1	10055	25.000	900	J8	2	1627	25.000	900	*R4	2	3590	25.000	900
TR1	1	10055	25.000	900 LB	J8A	2	1627	25.000	900	*R5	10	1451	0.000	878
TR1A	1	10055	25.000	800	R7	8	591	25.000	900	*R6	2	1308	25.000	900

Total quantity : 108

The computer design input has been carried out by:

Signed: 

Name of Designer: M.J. Thompson

On behalf of: PLACEMAKERS - W.F.T.

Date: ...Monday, 9 September 2013....

Qualifications and Title: C.O.C 1990 + 2006

PlaceMakers
Know how. Can do.
Manufacturing

DETAILING MANAGER.

Job No: 45823
Job Name: Generation Homes

Client: Vinten
Building Consent No:

Site: Lot 117 Angus Road, Paraparaumu

DESIGN STATEMENT
MiTek Beam Program v1.10 June 2011

Certification of MiTek Beam Program v1.10 June 2011

The MiTek Beam Program v1.10 June 2011 has been developed by MiTek New Zealand Ltd for the design of these beams: Timber, Glulam, **GANGLAM** and **GANG-NAIL FLITCH BEAMS**. The beam designs calculated by this program are prepared using sound and widely accepted engineering principles, and in accordance with Compliance Documents of the New Zealand Building Code and Verification Method B1/M1 to satisfy the requirements of Clause B1 of the Building Code. We believe on reasonable grounds that these beams for the proposed building, if constructed in accordance with the drawings, specifications and other documents provided will comply 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 and fixings; and the correct input of design data carried out by suitably trained personnel. This document may be used by the Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

Summary of MiTek Beam Program v1.10 June 2011 Data and Output

Roof
Weight: light + ceiling
Dead Load: 0.45 kPa
Live Load: 0.25 kPa

Wind
Area/Speed: very high (50.0 m/s)
Snow
Area: 0 kPa

Wall
Type: NA
Floor
Live Load: NA

Beam List

Opening Label	Beam Material	Beam Size	Beam Length	Design Status	Opening Label	Beam Material	Beam Size	Beam Length	Design Status
Garage door lintel	MSG6VSG4	2290x45	4500	OKAY					

GANGLAM plating details indicated with RD (regular duty plating), HD (heavy duty plating) and SHD (super heavy duty plating)

The design input has been carried out by:

Signed: 

Date:

9/09/2013

Name of Computer Operator:

M.J. TAYLOR

Qualifications and Title:

DETAINER

Company:

W.F.T

MiTek Beam v1.07 February 2009

Date: Monday, 9 September 2013
Job Number 45823
Job Name Generation Homes
Client Vinten
Calculated By

Roof Weight light + ceiling
Wind Zone very high (50.0 m/s)
Snow Load 0 kPa

Beam Details

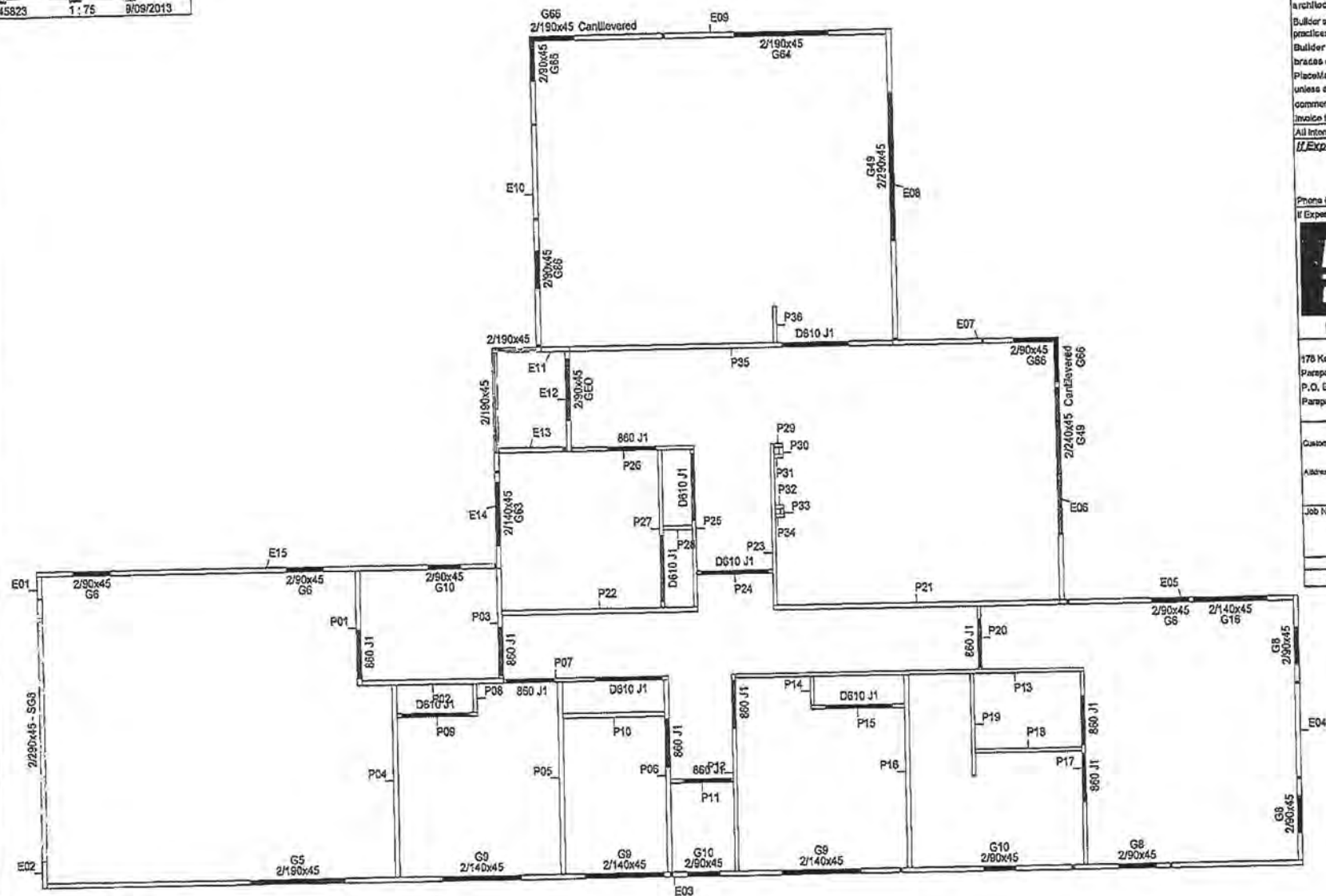
[illegible]

MiTek Bearing Reactions

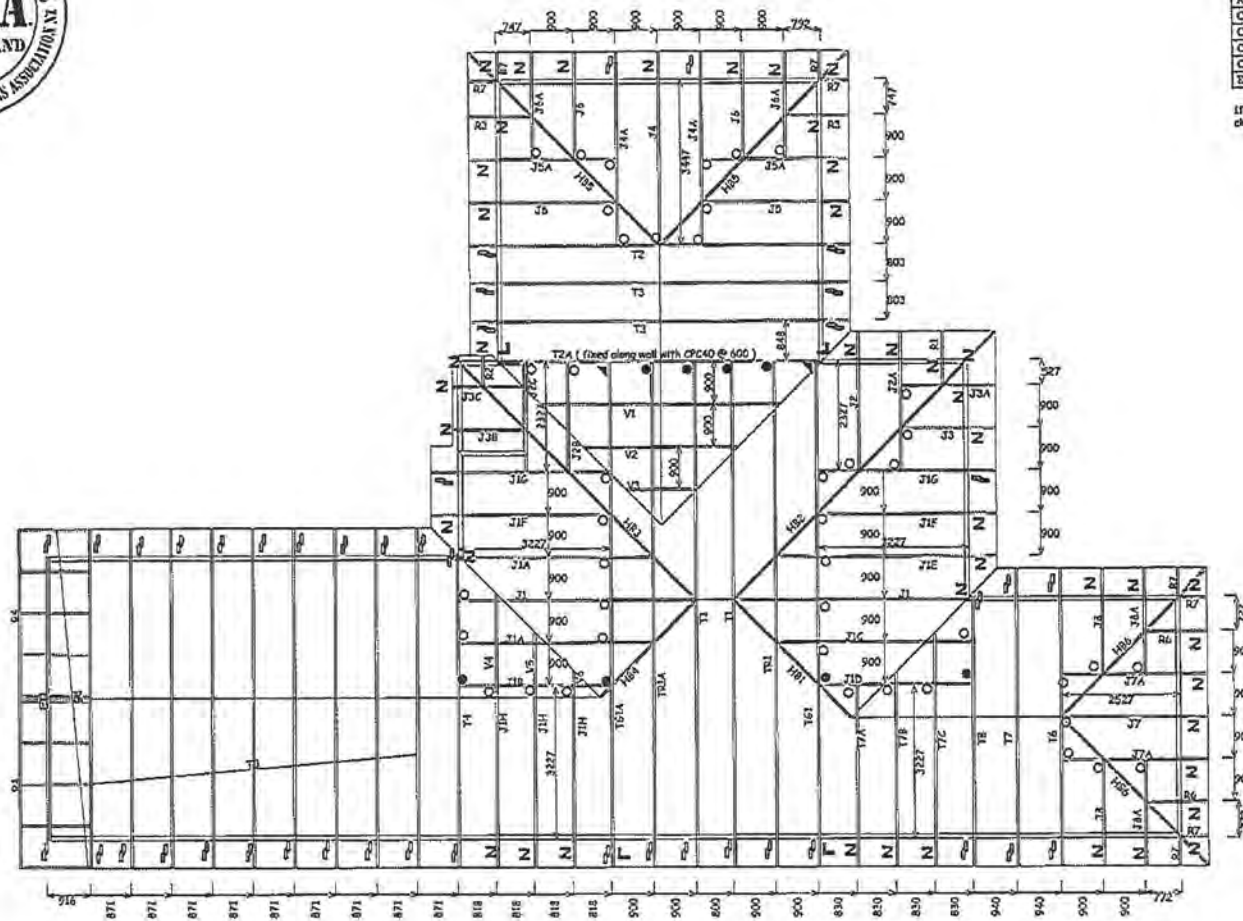
Not in use in this version

Point Load 1		Point Load 2		Point Load 3		Beam Status	
Girder Span (mm)		Girder Span (mm)		Girder Span (mm)		Beam Material	MSG8VSG8
Setback (mm)		Setback (mm)		Setback (mm)		Beam Size	2/290x45
Location (mm)		Location (mm)		Location (mm)		Beam Deflection	5.33mm
						Beam Length	4800

Placemakers Manufacturing
Placemakers Paraparaumu
Customer Address
GENERATION HOMES
LOT 117 ANGUS ROAD, NIKAU VIEWS
Site
2427
First Floor
45823 1:75 9/09/2013








Factory Notes:	Mitek Version:	4.6
- Treatment: Ext Walls - H1.2 Int Walls - H3.1 Walls with 'H' in the label to be H3.1		
Please Note: These plans are provided solely to enable the builder to erect the precast on site. They are not intended for any other purpose and PlaceMakers will not accept any liability arising from any other use of these plans. Builder to read pre-cut plans in conjunction with architectural plans. Builder should ensure that ALL OSH approved safety practices are carried out when erecting framing. Builder to check all opening trim / lintel sizes and braces on site before enclosing. PlaceMakers will not accept any charges for remedial work unless a written order is issued before any work is commenced. A copy of the order is to accompany any invoice to Wellington Frame & Truss. All internal door trims 2000 unless otherwise listed. If Experiencing Problems, Contact:		
Trevor Strang Phone (04) 293 1088 email: tstrang@placemakers.co.nz If Experiencing Problems, Contact Your Rep		
PlaceMakers Know how. Can do.		
Wellington Frame & Truss		
178 Kapiti Road Paraparaumu P.O. Box 84 Paraparaumu 5254		Ph 04-293 1088 Fax 04-298 5488
Customer: Generation Homes		
Address: Lot 117 Angus Road Nikau Views, Paraparaumu		
Job No.: 45823		29/09/2013
FILE	SITE	FACTORY



Design wind speed category: Very High
Pressure Coeff: C_{pe} varies; $C_{pi} = -36.0, 0.20$
Timber size and grades: 99x45 MSG8 & N1SG18 (3x1.5)
Roof Weight & Type: Light (Pressed Metal Tiles)
Roof Pitch: 25.0 Degrees
Roof Dead Load: 0.16 kN/kPa
Roof Restraints: 950mm crates
Roof Live Load: $Q_{ur} = 0.258 \text{ kN/kPa}$; $Q_C = 1.105 \text{ kN/kPa}$
Ceiling Material: 13mm Plaster Board
Ceiling Dead Load: 0.210 kPa
Ceiling Restraints: 600mm centres
Ceiling Live Load: $Q_{ul} = 1.405 \text{ kN/kPa}$
Earthquake Zone: A Snow Zone: I

Truss to Top Plate Fixings.

	CPC80	For all holes with Product n/a 30x15mm
	CT300 (pair)	For all holes with Product n/a 30x15mm
	CT400 (cyclone filter)	For Product with 10x25mm / 1 g Type 17, 25mm screen
	"Z" n/a (pair)	
	Multi-Grp (pair)	For all holes with Product n/a 30x15mm

(In all other situations use 2 / 100mm skew nails)

1	1	JH70 x 180	770 all holes with Product nails 30x3.15mm
2	1	JH95 x 165	770 all holes with Product nails 30x3.15mm
3	1	CYC 80	8 x Product nails 30x3.15mm / A x Type 11, 35mm screws
4	2	2000x1000x1mm NAIL on plate.	(fill all holes to within 10mm of the timber edge.)
5	2	3000x1000x1mm NAIL on plate.	(fill all holes to within 10mm of the timber edge.)

Truss to Truss Fixings.

	FM all holes with Prodent nails 39x3.15cm	FM all holes with Prodent nails 39x3.15cm
JH37 x 90	□	□
JH37 x 120	×	×
JH47 x 90	□	□
JH47 x 120	●	●
JH47 x 190	▲	▲

JOB # 45823

WELLINGTON FRAME & TRUSS

Drawn by: Matt Taylor
PHONE (04) 298 8567 • FAX (04) 298 5488
E-MAIL mtaylor@placemakers.co.nz

Version	Issue Date

RECEIVED
- 4 SEP 2013

RRW

00021

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Residential Civil and Structural Design

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Job Title:	New Vinten Residence	Page:	1
Designer:	e-cad	Job #:	130852
Owner:	B and H Vinten	Date:	29/08/2013
Job Address:	Lot 117, 6 Angus Rd, Nikau Views, Kapiti	By:	M Thomson
		Chkd:	

The design calls for a single light timber frame house (heavy cladding, light roof) supported on Firth Ribraft slab on grade.

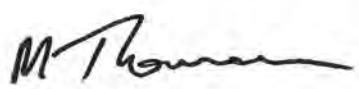
PACT Engineering have carried out a soil assessment and found unsatisfactorily soft material overlying increasingly firm ground at 0.8-1.0m below EGL

Accordingly the proposed Ribraft floor structure is to be supported on bored concrete piles.

From attached pile design, use 300mm dia pile with 2 HD12 turned into footing.

Works required are:

- 1 Stripping and cutting of the site to the required level and place sand.
- 2 Installation of piles as per attached detail.
- 3 Construction of the Firth Ribraft slab as per attached design.



MIPENZ, CPEng
Deke Consulting Ltd

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Owner:	B and H Vinten	Date:	29/08/2013
Job Address:	Lot 117, 6 Angus Rd, Nikau Views, Kapiti	By:	M Thomson
		Chkd:	

The design calls for new single storey house. Attached is a calculation of shear key piles required for this house.

Calculation of Shear Pile Requirements

Use AS1170 design philosophy of preventing damaging movement up to an SLS event, and thereafter accepting increasing levels of damage as the event increases.

The site is likely either Class B or C soil.

Siesmic Loads
 $C(t) = Ch(t) Z R N(T,D)$

Class C Soil	Ch(t)	2.36	Ru	1	Ductility	2	Timber Structure on Slab
	Z	0.4	Rs	0.25	ku	1.57	
	T	0.4	Sp	1	Ct	0.94	
			For base sliding Sp = 1.0		Cd	0.60	
Cd	ULS	0.60					
	SLS	0.24					

Testing by Dr McManus University of Canterbury (Geotechnical Society Symposium, 2003) found the friction co-efficient of slab on polythene on sand had peak friction co-efficients of 0.42 for an unloaded slab and 0.53 for a loaded slab. Residual friction angles were 0.38 and 0.49 respectively.

These values are somewhat lower than that published by other sources, normally 0.7 peak and 0.5 residual.

Even using the lower values there will not be relative movement between the slab and the ground at SLS level event on Class C soil.

At ULS level event there may be relative movement between the slab and the ground. Note that services are sleeved to allow 25mm of relative movement between the slab and the ground, and that even small amounts of relative movement greatly increases ductility and reduces loads to the structure. Relative movement greater than this may break services to the house but will also serve to further reduce the forces transferred to the structure of the house. This is acceptable within the intent of NZS 1170.5 2004.

Accordingly, as a design professional, I believe that shear key piles are not required for the above residence.

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		Chkd:	

Ribraft Slab Design

Ribraft slab is to be supported on bored concrete piles.

External walls Brick Veneer over light timber frame, and light timber frame internal walls.

Loads to be supported

Edge Beam 300x300				Internal Rib 300x100			
Roof	G	0.3	kPa	G		kPa	
	Q	0.25	kPa	Q		kPa	
	RLW	4	m	RLW		m	
Upper Wall	G		kg/m2	G		kg/m2	
	Height		m	Height		m	
Suspended Floor	G		kPa	G		kPa	
	Q		kPa	Q		kPa	
	FLW		m	FLW		m	
Lower Wall	G	180	kg/m2	G	40	kg/m2	
	Height	2.4	m	Height	2.4	m	
Ribraft Slab	G	3.6	kPa	G	3.6	kPa	
	Q	1.50	kPa	Q	1.50	kPa	
	FLW	1.20	m	FLW	2.40	m	
	Self weight	2.2	kN/m	Self weight	2.2	kN/m	
1.2G and 1.5Q ULS UDL		10.8	kN/m	UDL	3.8	kN/m	
1.2G and 1.5Q ULS Floor W		9.5	kN	W	18.9	kN	
	Span	2.4	m	Span	2.4	m	
Treat as Fixed End	M*	7.5	kNm	M*	6.6	kNm	
	V*	15.0	kN	V*	13.1	kN	
	Load to Pile	35.3	kN		28.0	kN	
Check Moment Capacity							
Reo dia	12	mm		h	305	mm	
Top bars	2			b	100	mm	
Bot bars	2			d	250	mm	
fy	500	MPa		Es	200000	MPa	
f'c	20	MPa		As	226.08	mm2	
				Asfy	113	kN	Top and bot
				a	66.5	mm	
				jd	210.8	mm	
				phi	0.85	bending	
				phiMn =	20.2	kNm	Top and bot
					OK		

Check Shear Capacity

Check demand	dv =	250	mm	phi =	0.75
	bv =	300	mm	vn =	#REF! MPa OK

From ACI Journal Jan-Feb 1996 Paper 93-S5 Collins, Mitchell, Adebar & Vecchio

General Shear Design Method

M* = #REF! kNm

V* = #REF! kN

Shear design for no shear reo.

sx = 250

cx = #REF!

From Table 2 gives $\phi = 40$ degrees and $\beta = 0.18$ $\phi \cdot V_n = \beta \cdot (f'c)^{0.5} \cdot b_v \cdot d_v = 45.3$ kN OK

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Designer:	e-cad	Job #:	130852
Owner:	B and H Vinten	Date:	29/08/2013
Job Address:	Lot 117, 6 Angus Rd, Nikau Views, Kapiti	By:	M Thomson
		Chkd:	

Garage Slab Supported On Piles

Internal Rib 300x100 on 1.2m sq grid with piles at 2.4m crs.

Check case of 13kN (unfactored) wheel load at mid-span.

Note triangular distribution of G to ribs. Load sharing of point load not allowed for so conservative.

G	3.6	kPa	ULS UDL	10.4	kN/m peak
Q	13.00	kN point load	ULS Q	19.5	kN
FLW	2.40	m	Span	2.4	m

At pile Mid-span

M*	-9.0	7.7	kNm
V*	16.0	0	kN

Check Moment Capacity

Reo dia	12	mm	h	305	mm	Asfy	57	kN	Top and bot
Top bars	1		b	100	mm	a	33.2	mm	
Bot bars	1		d	250	mm	jd	227.4	mm	
fy	500	MPa	Es	200000	MPa	phi	0.85	bending	
fc	20	MPa	As	226.08	mm ²	phiMn =	10.9	kNm	Top and bot
				Single HD12			OK		

Check case of 2.5kPa UDL load

Note triangular distribution to ribs.

G	3.6	kPa	ULS UDL	19.4	kN/m peak
Q	2.50	kPa	Span	2.4	m
Peak FLW	2.40	m			

At pile Mid-span

M*	-5.8	3.5	kNm
V*	11.6	0	kN

From above moment capacity OK

00023

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$$= ((H54 * 1000000 / E49) + (0.5 * K53 * 1000 / (\tan(\text{RADIANS}(H55)))) / (G45 * G46))$$

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Job Address:	Lot 117, 6 Angus Rd, Nikau Views, Kapiti	By:	M Thomson
		Chkd:	

Check case of 13kN (unfactored) wheel load at d/2 from pile.

4 ribs lead to each pile with a triangular distribution of G to rib. Rib acting as continuous member rib area to each rib of 1.5m2.

G	3.6	kPa	Induces	M* =	-1.6	kNm over pile
ULS W	6.2	kN		V* =	3.1	kN at pile

Q point load	13.0	kN point load	Span	2.4	m
ULS Q	19.5	kN	Induces M*	=	-1.1 kNm
Dist from pile	150	mm	and V*	=	18.3 kN

In rib at pile	Total M* =	-2.6	kNm
	Total V* =	21.4	kN

Check Moment Capacity

Reo dia	16	mm	h	305	mm	Asfy	174	kN
Top bars	1		b	100	mm	a	102.3	mm
Bot bars	1		d	250	mm	jd	190.8	mm
fy	500	MPa	Es	200000	MPa	phi	0.85	bending
f'c	20	MPa	As	348	mm2	phiMn =	28.2	kNm

HD16 and 0.9m width of
mesh as flexural tension reo.

OK

Check Shear Capacity

dv =	250	mm	phi =	0.75	
bv =	100	mm	vn =	1.14	MPa OK
Flexural tension As =	348	mm2			

From ACI Journal Jan-Feb 1996 Paper 93-S5 Collins, Mitchell, Adebar & Vecchio

General Shear Design Method

M* = -2.6 kNm **V*** = 21.4 kN

Shear design for no shear reo.

sx = 250 **Ex** = 0.00037

From Table 2 gives ϕ = 35.5 degrees and β = 0.26

$\phi \cdot V_n = \phi \cdot \beta \cdot (f'c)^{0.5} \cdot b_v \cdot d_v = 21.8$ kN OK

Note the above paper is referenced in NZS3101.

Also there have been no recorded failures of this method in the years since Ribraft was introduced.

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Job Address:	Lot 117, 6 Angus Rd, Nikau Views, Kapiti	By:	M Thomson
		Chkd:	

Load Capacity Of Bored Concrete Pile

Line load from spreadsheet (ULS loads) = kN/m
Pile spacing = m
Point load = 35.3 kN

$$Q_A = Q_s + Q_p : A \left(\frac{9c_u + 4c_a D/D_p + P_0}{F} \right)$$

1800

Q_A = allowable bearing capacity of a pile 1800

Q_s = load applied to the top of the pile by the structure = 35.3 kN

Q_p = total mass of pile = 2.00 kN

A = area of pile at base or tip = 0.07 m^2

c_u = immediate undrained shear strength obtained by field m = 200 kPa

c_a = adhesion between the soil and the pile obtained by suit = kPa

laboratory or field measurements, with a minimum value equal to the remoulded undrained shear strength.

D = depth to base of pile = 1.2 m

D_p = average diameter of pile = 0.3 m

F = factor of safety = 2

P_0 = total overburden pressure defined by the expression = 21.6 kPa

$P_0 = \gamma D$ where γ is saturated density of the clay.

γ = 18 kN/m³

$Q_A = 65.14 \text{ kN}$ **OK!**

00030

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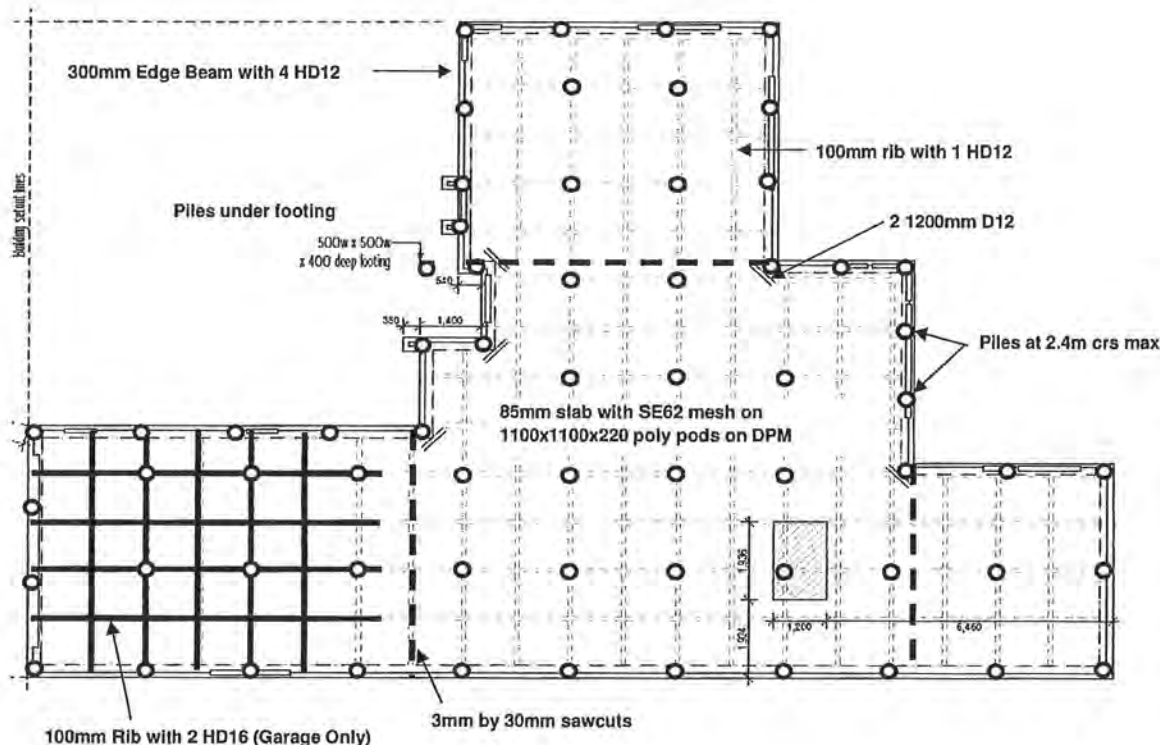
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Job Address:	Lot 117, 6 Angus Rd, Nikau Views, Kapiti	By:	M Thomson
		Chkd:	

Ribraft Plan Supported on Piles**Strip topsoil and cut to required level and fill with 20mm of sand..**

- 1 Construction of Ribraft slab to be as per Firth Technical Manual except as altered by this design.
- 2 Bored concrete piles to be 300mm dia taken through soft ground and 500mm into firm ground, 1.5m below EGL.
- 3 Internal 300mm wide ribs to be located under load bearing walls (refer designers floor plan).
- 4 Sawcuts are to be made within 24 hrs of pouring of the slab. Note that cutting the slab reduces the risk of uncontrolled cracking but does not eliminate the risk. Should additional assurance against cracking be required, please refer to Deke Consulting Ltd for advice.
- 5 Services to be run through slab as per attached details to allow movement..

85mm topping slab with SE62 mesh
If under floor heating installed, slab to be 110mm



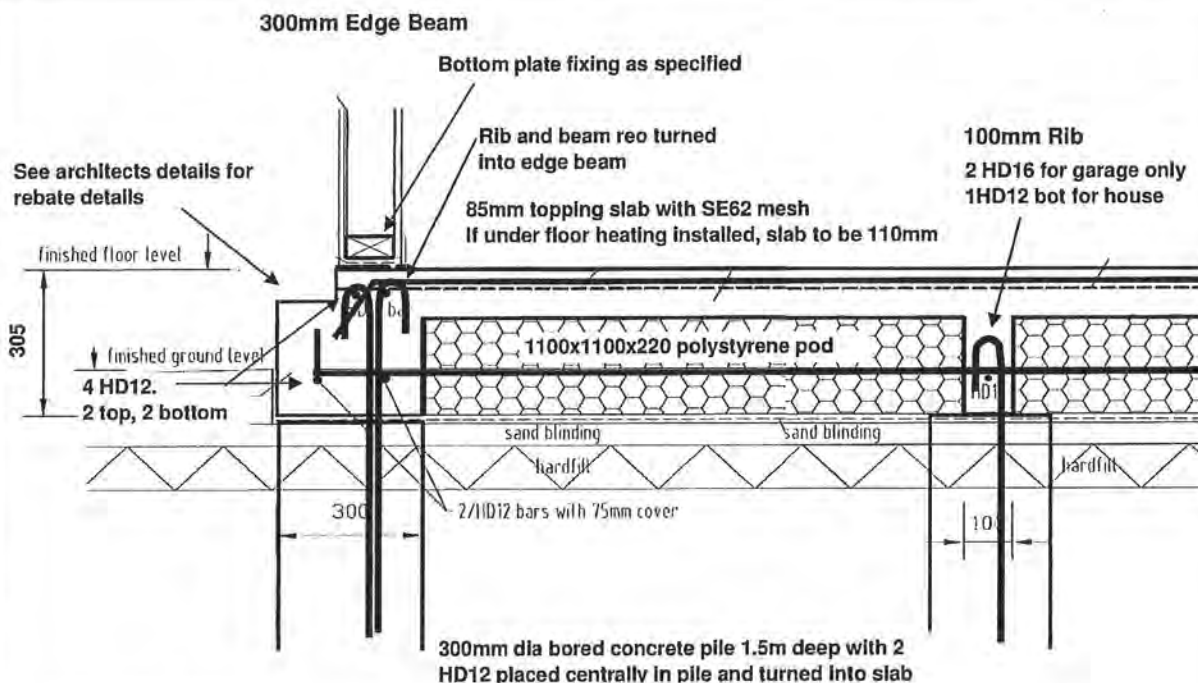
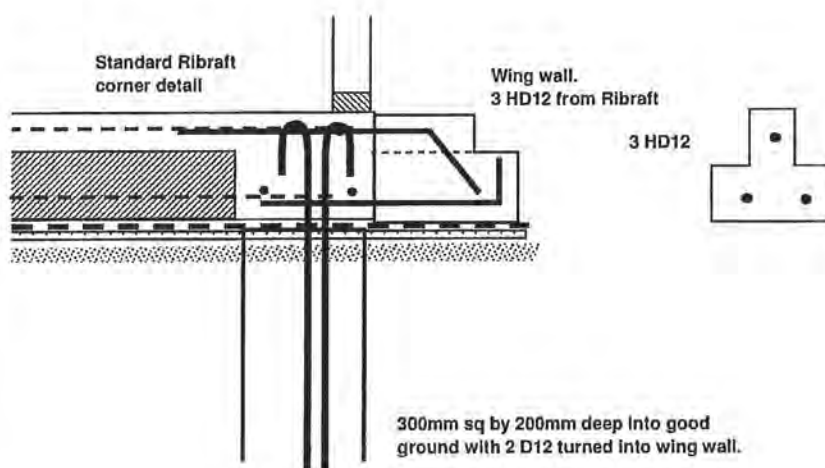
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		Chkd:	

**Wing Wall With Brick Rebate**

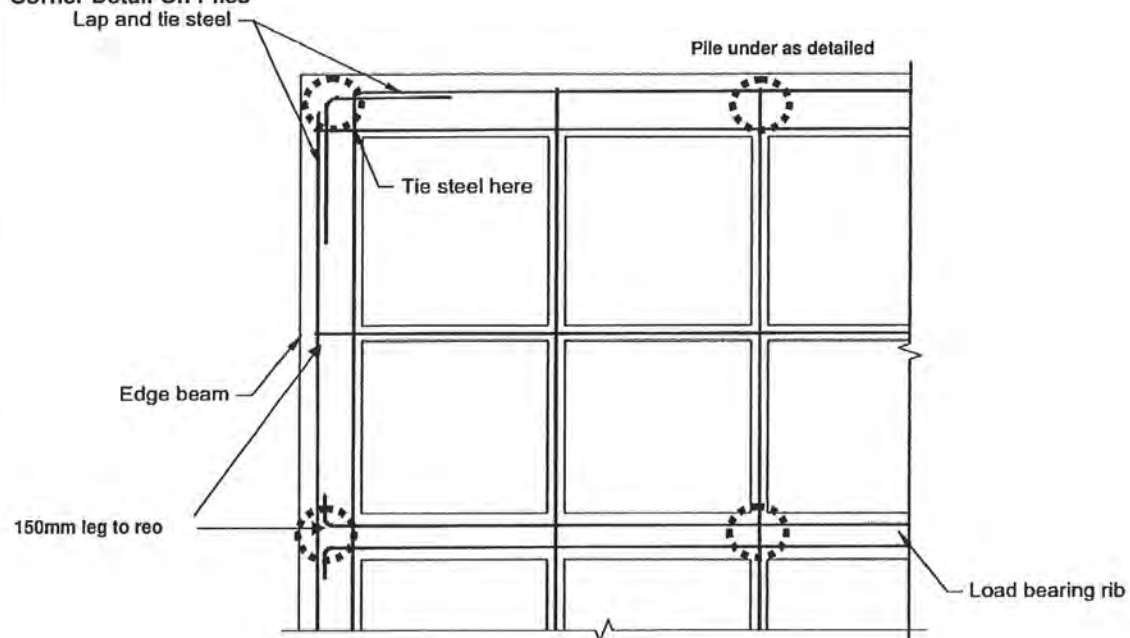
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		Chkd:	

Corner Detail On Piles

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Residential Civil and
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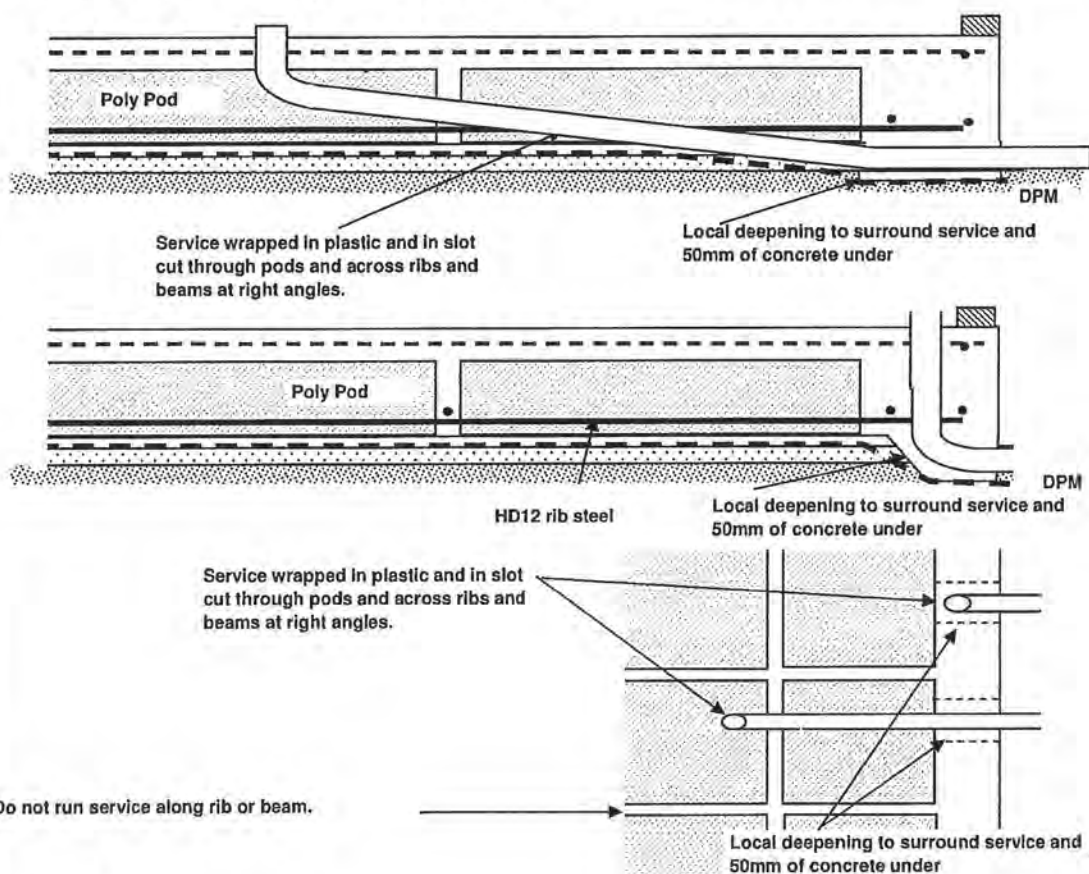
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		Chkd:	

Services Through Slab

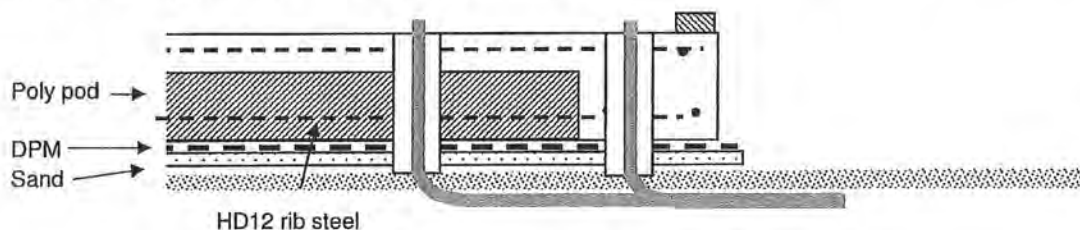
Preferred Detail

Following placing of pods, cut slot in pods with hot wire to cross ribs and beams. **Do not run services along ribs and beams. Take service under edge beam reinforcing.**



Or Sleeved Services.

Services to be placed centrally in ducts with ID 50mm larger than service OD. Ducts to be firmly embedded in sand and securely fixed and taped to prevent displacement during concreting.



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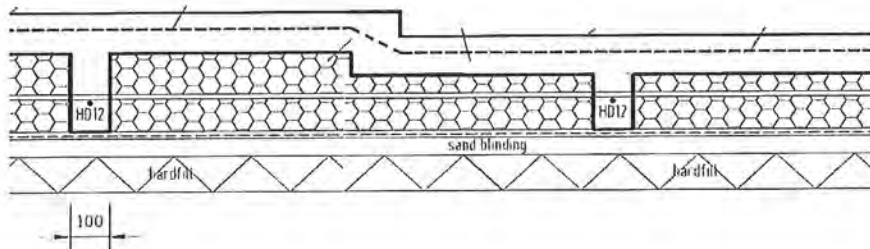
DEKE CONSULTING LTD**Residential Civil and
Structural Design**

68 Northland Rd, Wellington. Ph (04) 976 7889 Fax (04) 976 7886. e-mail malcolm.thomson@clear.net.nz

Job Title:	New Western and Nicholls Residence	Page:	11
Designer:	Navigation Homes	Job #:	130749
Owner:	A Western and J Nicholls	Date:	23/07/2013
Job Address:	Lot 19 56 Alberta Rd, Glen Avon, New Plymouth	By:	M Thomson
		Chkd:	

Shower Recess

"Drape" mesh under recess.



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Job Title:	New Vinten Residence	Page:	Spec 1
Designer:	e-cad	Job #:	130852
Owner:	B and H Vinten	Date:	29/08/2013
Job Address:	Lot 117, 6 Angus Rd, Nikau Views, Kapiti	By:	M Thomson
		Chkd:	

SPECIFICATION**MATERIALS****BLINDING**

50 mm maximum compacted GAP 7.

DAMP-PROOF MEMBRANE

0.25 mm minimum polyethylene to NZS 3604: clause 7.5.4, Damp-proof membrane (DPM). Refer to SELECTIONS.

POLYSTYRENE PODS**Firth RibRaft®** proprietary purpose made polystyrene pods.**REINFORCEMENT**

Bars to AS/NZS 4671. Grade 500E deformed, other than for ties, stirrups and spirals, unless shown otherwise on the drawings.

INTERNAL CORNER REINFORCEMENT

Minimum 2 x D12 bars Grade 300E to AS/NZS 4671.

MESH

2.27kg/m2 Grade 500E reinforcing mesh conforming to NZS4671.

TYING WIRE

Mild drawn steel wire not less than 1.2 mm diameter.

CONCRETE – RIBRAFT® APPLICATIONS

20 MPa 100 mm slump mix in either 13 mm or 19 mm nominal aggregate size.

Firth Raftmix™ for direct placement and **Firth Raftmix™** Pump for pump applications.

Use 25MPa concrete when in seaspray zones.

SPACERS**Firth** proprietary spacers or Wilton Joubert spacers.**INSTALLATION****BUILDING PLATFORM**

Clear the slab area of any vegetation and topsoil down to the subgrade level.

Create a building platform to a level surface approximately 330 mm below finished floor level. Cut and/or fill sloping sites. Confirm finished floor level.

POST-CUT INSPECTIONInspect and confirm that the soil conditions are as anticipated by the geotechnical investigation and report and conform with the requirements of the **Firth RibRaft®** manual. Refer to **Firth RibRaft®** Floor System Manual Section 1 - Design Information, 3.5 Foundation Soils.**TEMPORARY BUILDING PLATFORM DRAINAGE**

Construct suitable drainage to keep excessive ground water off the building platform during and after construction as required.

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Job Title:	New Vinten Residence	Page:	Spec 2
Designer:	e-cad	Job #:	130852
Owner:	B and H Vinten	Date:	29/08/2013
Job Address:	Lot 117, 6 Angus Rd, Nikau Views, Kapiti	By:	M Thomson
		Chkd:	

HARDFILL

Place hardfill and ensure it is spread and compacted with mechanical compaction.

UNDERGROUND SERVICESEnsure underfloor services are installed in the subsoil or hardfill in locations as shown on the drawings and according to **Firth RibRaft®** floor system requirements. Refer to **Firth RibRaft®** Floor System Manual Section 2 - Installation Information, 3.4 Plumbing and Services.**BLINDING**

Spread GAP 7 blinding layer to a minimum 500 mm past the outside edge of the slab, compact to a level layer no greater than 50 mm thick and no higher than 305 mm below finished ground level.

FORMWORK

Construct formwork as required, well braced and tied to remain in position, straight and plumb during construction. Ensure formwork will provide for the topping depth, including rebates and the required concrete finish.

INSTALL DAMP-PROOF MEMBRANE

Apply DPM to the prepared basecourse extending to the outside of all edge beams or fold and staple up the inside of the formwork. Overlap all joints in the DPM sheets a minimum 150 mm. Tape laps and penetrations with 50 mm wide pressure sensitive plastic tape. Ensure DPM is not damaged during the construction process. Repair all damage to DPM before proceeding with following procedures.

PLACE POLYSTYRENE PODS

Place polystyrene pods in a regular waffle pattern using the spacers in the specified grid pattern to fit the floor plan. Cut pods on site with a saw or suitable hot wire as required. Cut holes for services and trim around piles as required on site.

INSTALL SPACERSInstall spacers and locations to the **Firth RibRaft®** floor system requirements.Form standard ribs between pods using **Firth** 100 mm spacers. Place the spacers at a minimum of one spacer along each edge of each pod or part pod. The ribs in both directions form a waffle pattern throughout the slab.Form the edge beam using **Firth** 300 mm spacers. Place the spacers at 1200 mm centres maximum along the perimeter of the slab at least and one spacer per pod or part pod.Form ribs to support loadbearing walls using **Firth** 300 mm spacers. Place the spacers at a minimum of one spacer along the edge of each pod or part pod.**PLACE REINFORCING STEEL: RIB STEEL**Place rib reinforcing steel in the bottom of the internal ribs and supported in the correct position by the **Firth** spacers. Lap all steel 600 mm minimum. At the junction with the edge beam, each rib steel bar shall sit on top of the edge beam bars and extend to the outermost bar. Allow for 75 mm cover to the edge of the beam. Place 1 x HD12 bar in each 100 mm wide rib and 2 x HD12 bars in each 300 mm wide rib.

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Structural Design**

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Job Title:	New Vinten Residence	Page:	Spec 3
Designer:	e-cad	Job #:	130852
Owner:	B and H Vinten	Date:	29/08/2013
Job Address:	Lot 117, 6 Angus Rd, Nikau Views, Kapiti	By:	M Thomson
		Chkd:	

PLACE REINFORCING STEEL: EDGE BEAM STEEL

Place the two edge beam reinforcing bars in the bottom of the edge beam and supported in the correct position by the **Firth** spacers. Tie one edge beam bar below the mesh at the perimeter of the area covered by the polystyrene pods. Lap all steel 600 mm minimum. At corners, the inner bottom bars and the top bars cross each other and extend to 75 mm from the outside face of the edge beam. Tie these bars together where they cross. Tying of edge beam steel is only required at corners.

PLACE REINFORCING STEEL: RE-ENTRANT CORNER STEEL

Place two D10 bars, 1200 mm in length across the corner. Tie to the top of the mesh at re-entrant corners at 200 mm centres with 50 mm side cover from the internal corner.

Install specified steel to Firth RibRaft® Floor System Manual Section 2 - Installation Information, 3.9 Reinforcing Steel. Ensure specified minimum cover requirements are maintained.

PLACE REINFORCING MESH AND CHAIRS

Place reinforcing mesh over the pods and support on the mesh chairs spaced at 1200 mm centres minimum, with two mesh chairs minimum placed per pod and with one mesh chair minimum per part pod. Lap mesh 225 mm minimum and tied at all laps.

FORM SLAB AND OPENING REBATES

Form rebates, as detailed on drawings.

Form a minimum 50 mm rebate in slab for masonry veneer construction with a width dependent on the veneer width, cavity width and overhang. Waterproof the rebate with a bituminous sealer on both the vertical and horizontal faces.

STARTERS FOR MASONRY WALL CONSTRUCTION

Install wall starter bars in the correct position for the masonry block series being used to NZS 4229 and RibRaft® manual.

UNDERFLOOR HEATING

Where underfloor in-slab heating system is required ensure installation is completed to manufacturer's requirements.

TOPPING SLAB DEPTH

85 mm minimum plus additional cover as required for in-floor heating.

PRE-PLACEMENT INSPECTION

Arrange for excavations, formwork and reinforcement to be inspected and passed by the Building Consent Authority.

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Job Title:	New Vinten Residence	Page:	Spec 4
Designer:	e-cad	Job #:	130852
Owner:	B and H Vinten	Date:	29/08/2013
Job Address:	Lot 117, 6 Angus Rd, Nikau Views, Kapiti	By:	M Thomson
		Chkd:	

CONCRETE PLACEMENT AND COMPACTION

Ensure the rib and edge beam canals are clean, free of debris. Pour the floor in a single pour using only **Firth Raftmix™** or **Firth Raftmix™** Pump concrete and ensuring that the pods remain in position during placing. Pour concrete onto the top of each pod prior to filling the ribs around the pod to help prevent them from floating and lifting.

Use **Firth Raftmix™** for placement in the floor directly from the concrete truck chute or **Firth Raftmix™** Pump concrete for placement in the floor by concrete pump.

Compact concrete using a suitable poker vibrator for the ribs and ground beams and into all corners of the formwork. Screed as required. Confirm levels with a laser level.

CONCRETE FINISHING

Float and trowel to provide a U3 finish to NZS 3114: table 2, Classes of floor, exterior pavement and invert finishes.

CONCRETE CURING

Curing of the concrete slab must take place immediately after finishing the concrete to NZS 3109 by one of the following curing methods:

- ponding or continuous sprinkling of water
- Placing a wet covering or plastic membrane over the slab
- the use of liquid membrane curing compounds

SHRINKAGE CONTROL JOINTS

Cut shrinkage control joints as shown on the plans after hardening to a depth of 25 mm within 24 hours in summer or 48 hours in winter.

Where shrinkage control joints have not been shown on the plans, position the shrinkage control joints to coincide with major changes in the floor plan. Agree position of shrinkage control joints with the designer.

Bay dimensions formed by the shrinkage control joints to be limited to a maximum ratio of length to width of 2 to 1 with a maximum dimension of 5 metres. Place the shrinkage control joints over the 100 mm wide internal ribs wherever possible. Where a shrinkage control joint runs along the line of a 300 mm wide loadbearing rib, locate the cut directly above one edge of the 300 mm rib. Do not place supplementary reinforcing bars (including re-entrant corner steel) across any shrinkage control joints.

CLEAN OUT SHRINKAGE CONTROL JOINTS

Clean out control joints. If required fill with suitable flexible sealant.

- 4 SEP 2013

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Ecoply® Bracing Specification – EP1

June 2012

Single sided structural plywood brace

Specification No.	Minimum Wall Length	Lining Requirements	B0.5m Wind	B0.5m Earthquake
EP1	0.6m	7mm Ecoply®, or Ecoply Barrier one side	125	130

Framing

Wall framing must comply with:

- NZBC B1 - Structure: AS1 Clause 3 Timber (NZS3604:2011)
- NZBC B2 - Durability: AS1 Clause 3.2 Timber (NZS3602)

Framing dimensions and height are as determined by the NZS3604:2011 stud and top plate tables for load bearing and non load bearing walls. Kiln dried verified structural grade timber must be used. Machine stress graded timber, such as Laserframe®, is recommended.

Bottom Plate Fixing

Use GIB HandiBrac® hold-down connections at each end of the bracing element. Refer to installation instructions supplied with the connectors for correct installation instructions and bolt types to be used for either concrete or timber floors. Within the length of the bracing element, bottom plates are fixed in accordance with the requirements of NZS 3604:2011.

Lining

One layer 7mm Ecoply structural plywood fixed directly to framing or over cavity battens. If part sheets are used, ensure nailing at required centres is carried out around the perimeter of each sheet or part sheet. A 2-3mm expansion gap should be left between sheets.

Fastening the Ecoply

Fasteners

Fasten with 50 x 2.8 mm galvanised or stainless steel flat head nails. Place fasteners no less than 7 mm from sheet edges.

Fasteners for H3.2 CCA treated Ecoply

Where fasteners are in contact with CCA treated timber or plywood, fasteners shall be a minimum of hot dip galvanised

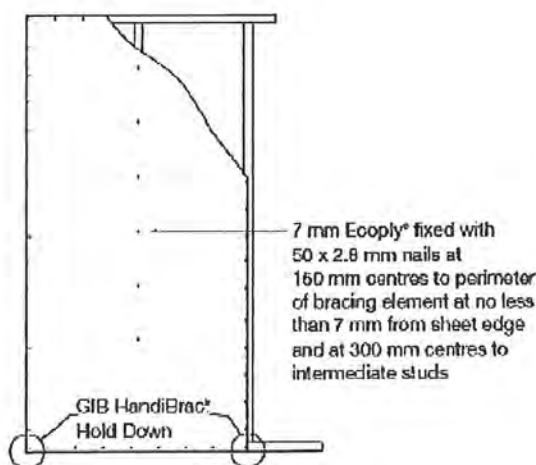
In certain circumstances stainless steel fasteners may be required. Refer to section 4 of NZS 3604:2011 for these circumstances.

Refer to Table 8 in the Ecoply Specification and Installation Guide for further fastener selection advice.

Stainless steel fasteners must be annular grooved

Fastening Centres

Fasteners are placed at 150 mm centres around the perimeter of each sheet and 300 mm centres to intermediate studs.



Ecoply® Bracing Systems are designed to meet the requirements of the NZBC and have been tested and analysed using the P21 method referenced in NZS3604:2011 listed as an acceptable solution B1/AS1 Structure. Testing was carried out using Ecoply and Laserframe SG8 timber framing manufactured by Carter Holt Harvey Limited trading as Carter Holt Harvey Woodproducts New Zealand, and GIB® products manufactured by Winstone Wallboards Ltd. Substituting materials may compromise performance of the system. GIB® and GIB HandiBrac® are registered trade marks of Fletcher Building Holdings Ltd.

Ecoply® Bracing Specification – EP2

June 2012

Double sided structural plywood brace

Specification No.	Minimum Wall Length	Lining Requirements	Bu/m Wind	Bu/m Earthquake
EP2	0.6 m	7mm Ecoply® or Ecoply Barrier each side	140	150

Framing

Wall framing must comply with:

- NZBC B1 - Structure: AS1 Clause 3 Timber (NZS3604:2011)
- NZBC B2 - Durability: AS1 Clause 3.2 Timber (NZS3602)

Framing dimensions and height are as determined by the NZS3604 stud and top plate tables for load bearing and non load bearing walls. Kiln dried verified structural grade timber must be used. Machine stress graded timber, such as Laserframe®, is recommended.

Bottom Plate Fixing

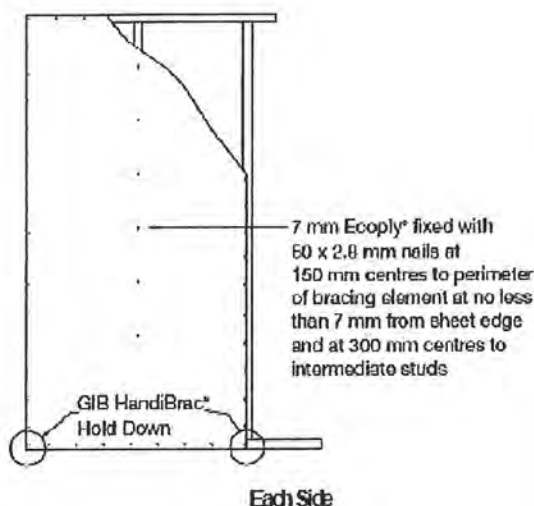
Use GIB Handibrac® hold-down connections at each end of the bracing element. Refer to installation instructions supplied with the connectors for correct installation instructions and bolt types to be used for either concrete or timber floors. Within the length of the bracing element, bottom plates are fixed in accordance with the requirements of NZS 3604:2011.

Lining

Each Side: One layer 7mm Ecoply structural plywood fixed directly to framing. If part sheets are used, ensure nailing at required centres is carried out around the perimeter of each sheet or part sheet. A 2-3mm expansion gap should be left between sheets.

Fastening Centres

Fasteners are placed at 150mm centres around the perimeter of each sheet and 300mm centres to intermediate studs.



Fastening the Ecoply®

Fasteners

Fasten with 50 x 2.8 mm galvanised or stainless steel flat head nails. Place fasteners no less than 7 mm from sheet edges.

Fasteners for H3.2 CCA treated Ecoply

Where fasteners are in contact with CCA treated timber or plywood, fasteners shall be a minimum of hot dip galvanised

In certain circumstances stainless steel fasteners may be required. Refer to section 4 of NZS 3604:2011 for these circumstances.

Refer to Table 8 in the Ecoply Specification and Installation Guide for further fastener selection advice.

Stainless steel fasteners must be annular grooved.

Ecoply® Bracing Systems are designed to meet the requirements of the NZBC and have been tested and analysed using the P21 method referenced in NZS3604:2011 listed as an acceptable solution B1/AS1 Structure. Testing was carried out using Ecoply and Laserframe SG8 timber framing manufactured by Carter Holt Harvey Limited trading as Carter Holt Harvey Woodproducts New Zealand, and GIB® products manufactured by Winstone Wallboards Ltd. Substituting materials may compromise performance of the system. GIB® and GIB HandiBrac® are registered trade marks of Fletcher Building Holdings Ltd.



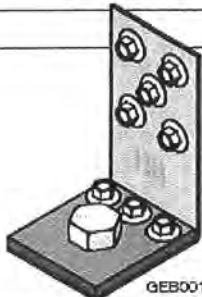
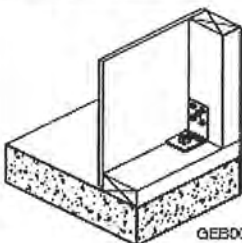
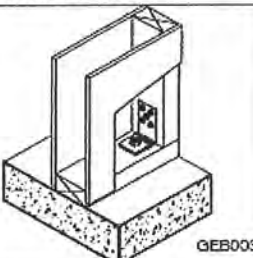
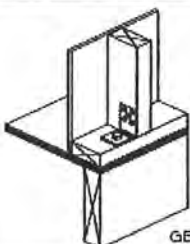
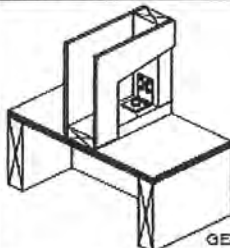
Bottom Plate Fixing

JUNE 2011

Bottom plate fixings for GIB® Bracing Elements			
Brace type	Concrete slabs		Timber floors
	External wall	Internal wall	External and Internal walls
GS1-N	As per NZS 3604:2011. No specific additional fastening required	As per NZS 3604:2011. Alternatively use 75 x 3.8mm shot-fired fasteners with 16mm washers, 150mm and 300mm from each end of the bracing element and at 600mm thereafter.	Pairs of 100 x 3.75mm flat head hand driven nails or 3 / 90 x 3.16mm power driven nails at 600mm centres in accordance with NZS 3604:2011
GS2-N	Not applicable		
GSP-H BL1-H BLP-H	Intermediate fastenings to comply with NZS 3604:2011. In addition: GIB Handibrac® fixings or metal wrap-around strap fixings and bolt as illustrated on pages 19 and 20.		Pairs of 100 x 3.75mm flat head hand driven nails or 3 / 90 x 3.16mm power driven nails at 600mm centres in accordance with NZS 3604:2011.
BLG-H	Not applicable	As for GSP-N, BL1-H, BLP-H on concrete slab above	In addition: GIB Handibrac® fixings or metal wrap-around strap fixings and bolt as illustrated below.



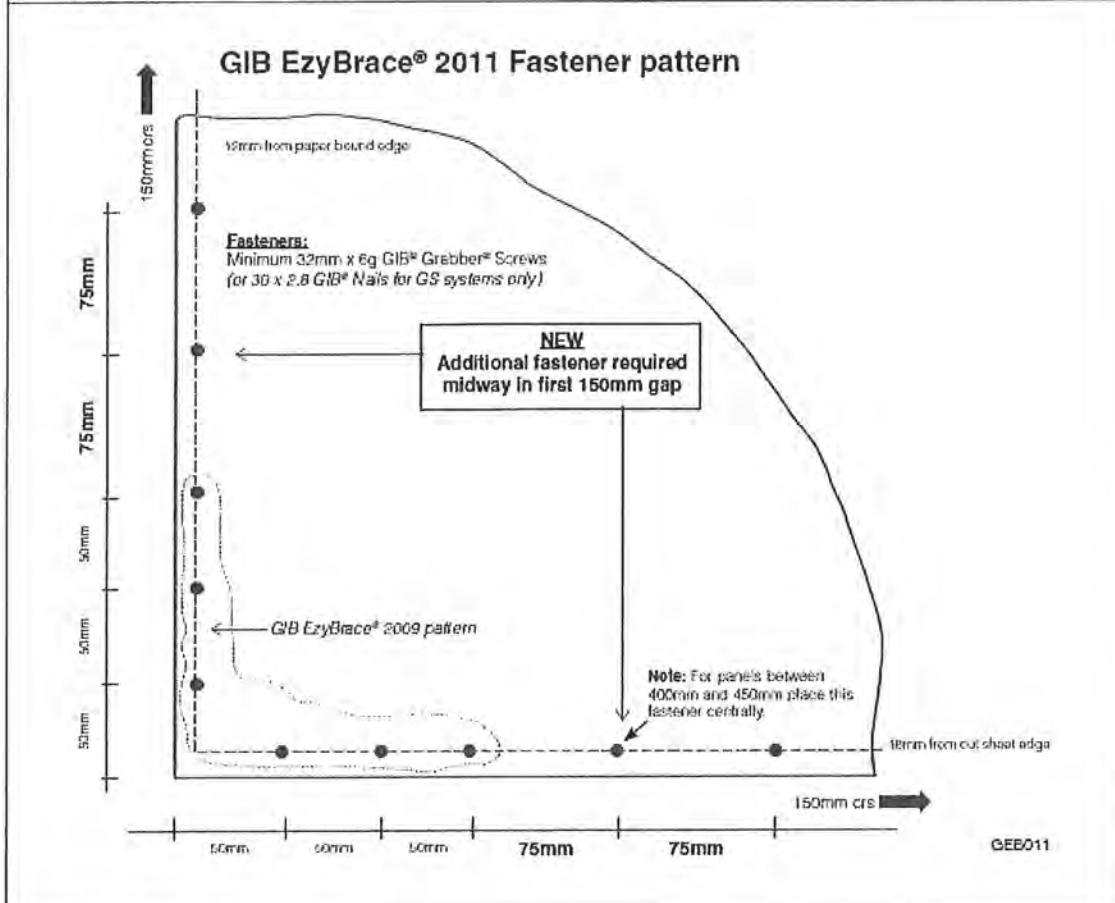
Panel Hold-down Details

GIB HandiBrac® – RECOMMENDED METHOD			
<p>Developed in conjunction with MiTek™ NZ, the GIB HandiBrac® has been designed and tested for use as a hold-down in GIB® BL and GSP bracing elements.</p> <ul style="list-style-type: none">• The GIB HandiBrac® registered design provides for quick and easy installation• The GIB HandiBrac® provides a flush surface for the wall linings because it is fitted inside the framing. There is no need to check in the framing as recommended with conventional straps• The GIB HandiBrac® is suitable for both new and retrofit construction• The design also allows for installation and inspection at any stage prior to fitting internal linings			
			
Concrete Floor		Timber Floor	
External walls	Internal walls	External walls	Internal walls
			
Position GIB HandiBrac® as close as practicable to the internal edge of the bottom plate		Position GIB HandiBrac® in the centre of the perimeter joist or bearer	
Position GIB HandiBrac® at the stud / plate junction		Position GIB HandiBrac® in the centre of floor joist or full depth solid block	
Hold-down fastener requirements			
A mechanical fastening with a minimum characteristic uplift capacity of 15kN.		12x150mm galvanised coach screw	



Revised Fastener Pattern for all four corners of GIB EzyBrace® Elements

As GIB Braceline® screws are no longer required for BL bracing elements, two additional fasteners must be installed in **all four corners** of GIB EzyBrace® GS and BL elements, as shown. Fasteners must be placed no closer than 12mm from the paper bound sheet edge and no closer than 18mm from sheet ends or cut edges.



Refer to gib.co.nz/cad for CAD details.

PERMITTED GIB® PLASTERBOARD SUBSTITUTIONS IN GIB EZYBRACE® SYSTEMS

GIB Ezybrace® Systems have been designed and tested using only the products specified. Occasionally additional properties may be required to be provided by a different GIB® Plasterboard product. The following table provides acceptable substitution options.

Specified	Permitted alternative GIB® Plasterboard products								
	GIB® Standard	GIB Ultralite®	GIB Braceline/ Noiseline®	GIB Aqualine®	GIB Toughline®	GIB Fyrelline®			
						10mm	13mm	16mm	19mm
GIB® Standard		OK	OK	OK	OK	OK	NOTE 2		
GIB Braceline®	X	X		NOTE 1	OK	X	NOTES 1 and 2		

NOTE 1 The element must be 900mm or longer. Use 32mm x 6g GIB® Grabber® drywall screws at **100mm** centres to the perimeter of the bracing element. The bracing corner fastening pattern, as illustrated above, applies to all four corners of the element. Panel hold-down fixings are required.

NOTE 2 The fastener type and length must be as required for the relevant FRR system but the fixing pattern must be as shown above.



Specification Code	Minimum Length (m)	Lining requirement
GS1-N	0.4	Any 10mm or 13mm GIB® Standard Plasterboard to one side only

WALL FRAMING

Wall framing to comply with:

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

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

BOTTOM PLATE FIXING**Timber floor**

Pair of hand driven 100 x 3.75mm nails at 600mm centres; or

Three power driven 80 x 3.15 nails at 600mm centres.

Concrete floor**INTERNAL WALL BRACING LINES**

In accordance with the requirements of NZS 3604:2011 for internal wall plate fixing or 75 x 3.8mm shot fired fasteners with 16mm discs spaced at 160mm and 300mm from end studs and 600mm centres thereafter.

EXTERNAL WALL BRACING LINES

In accordance with the requirements of NZS 3604 for external plate fixing.

WALL LINING

Any 10mm or 13mm GIB® Plasterboard lining

Sheets can be fixed vertically or horizontally.

Sheet joints shall be touch fitted.

Use full length sheets where possible.

PERMITTED SUBSTITUTION

For permitted GIB® Plasterboard substitutions refer to Page 21 in GIB Ezybrace® Systems 2011.

FASTENING THE LINING**Fasteners**

32mm x 6g GIB® Grabber® high thread screws; or 30mm GIB® Nails.

Fastener centres

50,100,150, 225, 300mm from each corner and 150mm thereafter around the perimeter of the bracing element.

For vertically fixed sheets place fasteners at 300mm centres to intermediate sheet joints.

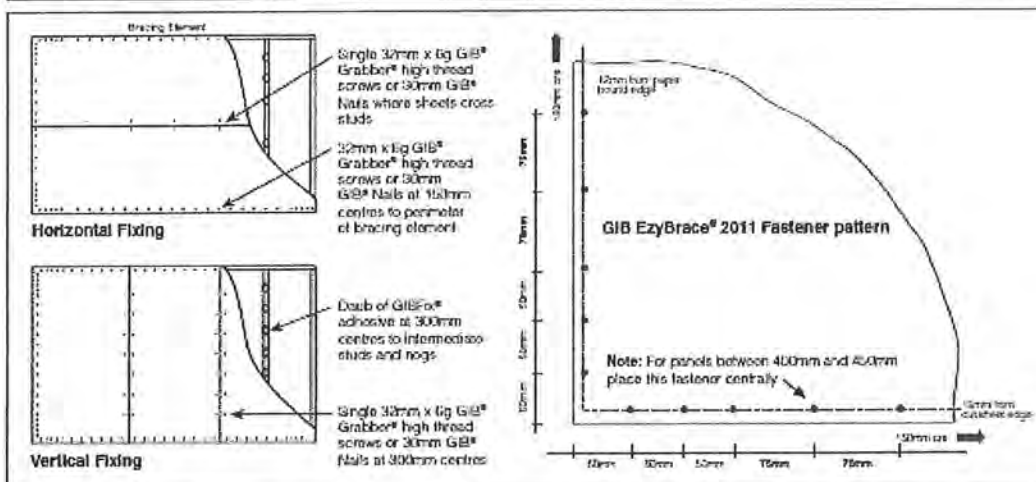
For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud.

Use daubs of GIB Fix® adhesive at 300mm centres to intermediate studs.

Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

JOINTING

All fastener heads stopped and all sheet joints paper tape reinforced and stopped in accordance with the GIB® Site Guide.



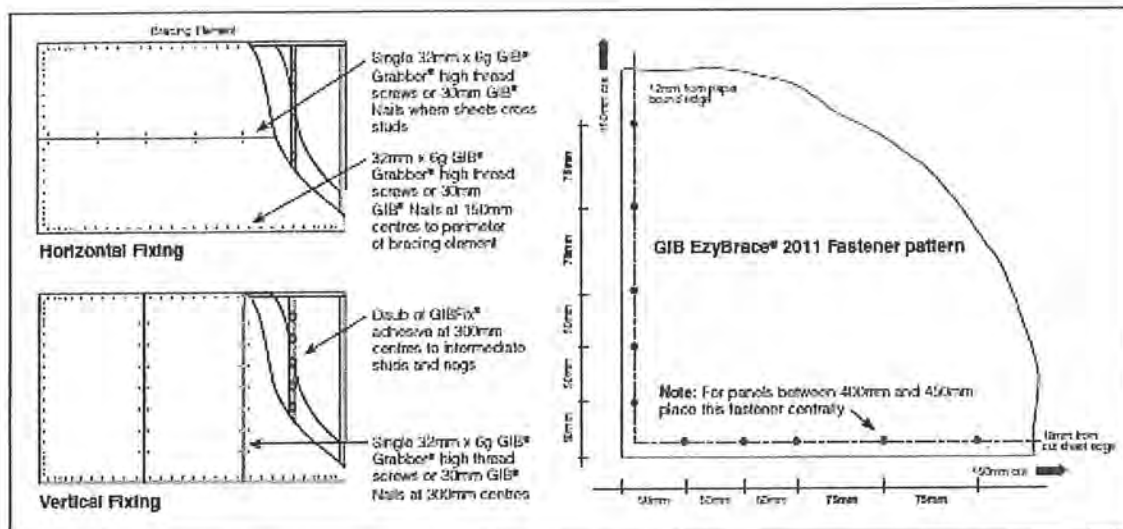
In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This Specification sheet is issued in conjunction with the publication GIB EzyBrace® Systems 2011 and has been appraised in accordance with the BRANZ Appraisal No. 294 (2011).





Specification Code	Minimum Length (m)	Lining requirement
GS2-N	0.4	Any 10mm or 13mm GIB® Standard Plasterboard fixed to each side of the wall framing.

<p>WALL FRAMING Wall framing to comply with; • NZBC B1 - Structure; AS1 Clause 3 Timber (NZS 3604:2011) • NZBC B2 - Durability AS1 Clause 3.2 Timber (NZS 3602) Framing dimensions and height as determined by NZS 3604 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.</p> <p>BOTTOM PLATE FIXING Timber Floor Pairs of hand driven 100 x 3.75mm nails at 600mm centres or Three power driven 90 x 3.15 nails at 600mm centres.</p> <p>Concrete floor INTERNAL WALL BRACING LINES In accordance with the requirements of NZS 3604 2011 for internal wall plate fixing or 75 x 3.8mm shot fired fasteners with 16mm discs spaced at 150mm and 300mm from end studs and then 600mm centres thereafter</p> <p>WALL LINING One layer 10mm or 13mm GIB® Plasterboard to each side of the wall. Sheets can be fixed vertically or horizontally. Sheet joints shall be touch fitted. Use full length sheets where possible.</p>	<p>PERMITTED SUBSTITUTION For permitted GIB® Plasterboard substitutions refer to Page 21 in GIB® Ezybrace Systems 2011</p> <p>FASTENING THE LINING Fasteners 32mm x 6g GIB® Grabber® high thread screws or 30mm GIB® Nails.</p> <p>Fastener centres 60,100,150, 225, 300mm from each corner and 150mm thereafter around the perimeter of the bracing element. For vertically fixed sheets place fasteners at 300mm centres to intermediate sheet joints. For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud. Use daubs of GIB Fix® adhesive at 300mm centres to intermediate studs. Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge</p> <p>JOINTING All fastener heads stopped and all sheet joints paper tape reinforced and stopped in accordance with the GIB® Site Guide.</p>
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Specification Code	Minimum Length (m)	Lining requirement	Other requirements
BL1-H	0.4	10mm or 13mm GIB Braceline® to one side only	Hold downs

WALL FRAMING

Wall framing to comply with:

- NZBC B1 - Structure; AS1 Clause 3 Timber (NZS 3604 2011)
- NZBC B2 - Durability AS1 Clause 3.2 Timber (NZS 3602)

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

BOTTOM PLATE FIXING

Timber Floor

Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB Ezybrace® Systems 2011 or GIB® Site Guide. Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or
Three power driven 80 x 3.15 nails at 600mm centres

Concrete floor

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

WALL LINING

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

PERMITTED SUBSTITUTION

For permitted GIB® Plasterboard substitutions refer to Page 21 in GIB Ezybrace® Systems 2011.

FASTENING THE LINING

Fasteners

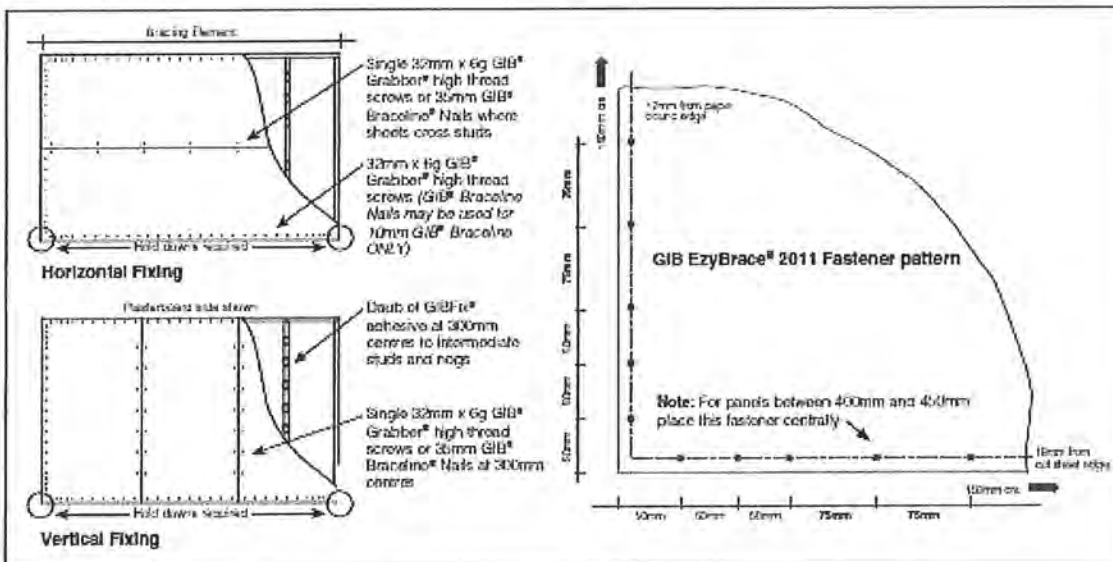
32mm x 6g GIB® Grabber® high thread screws.
(GIB Braceline® Nails may be used with 10mm GIB Braceline® only.)

Fastener centres

50,100,150, 225, 300mm from each corner and 150mm thereafter around the perimeter of the bracing element.
For vertically fixed sheets place fasteners at 300mm centres to the sheet joint.
For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud.
Use daubs of GIB Fix® adhesive at 300mm centres to intermediate studs.
Place fasteners no closer than 12mm from paper bound sheet edges and 16mm from any sheet end or out edge.

JOINTING

All fastener heads stopped and all sheet joints paper tape reinforced and stopped in accordance with the GIB® Site Guide.



Specification Code	Minimum Length (m)	Lining requirement	Other requirements
BLG-H	0.4	10mm or 13mm G/B Bracoline® to one side of the frame plus any 10mm or 13mm G/B Plasterboard to the other side	Hold downs

WALL FRAMING

Wall framing to comply with

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

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

BOTTOM PLATE FIXING

Timber Floor

Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB Easybrace® Systems 2011 or GIB® Site Guide.

Pairs of hand driven 100 x 3.75mm nails at 600mm centres;
or

Three power driven 90 x 3.15 nails at 600mm centres

Concrete floor

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

WALL LINING

One layer 10mm or 13mm GIB® Bracelene to one side of the wall plus any 10mm or 13mm GIB® Plasterboard lining to the other side. Sheets can be fixed vertically or horizontally. Sheet joints shall be touch fitted. Use full length sheets where possible.

PERMITTED SUBSTITUTION

For permitted GIB® Plasterboard substitutions refer to Page 21 in GIB Ezybrace® Systems 2011

FASTENING THE LINING

Fasteners

GIB Braceline® side

32mm x 6g GIB® Grabber® high thread screws.
(GIB Braceline® Nalla may be used with 10mm GIB Braceline® only)

Other side

32mm x 6g GIB® Grabber® high thread corewires; or
30mm GIB Nail.

Fastener centres

50, 100, 150, 225, 300mm from each corner and then 150mm thereafter around the perimeter of the bracing element.

For vertically fixed sheets place fasteners at 300mm centre to the intermediate sheet joints.

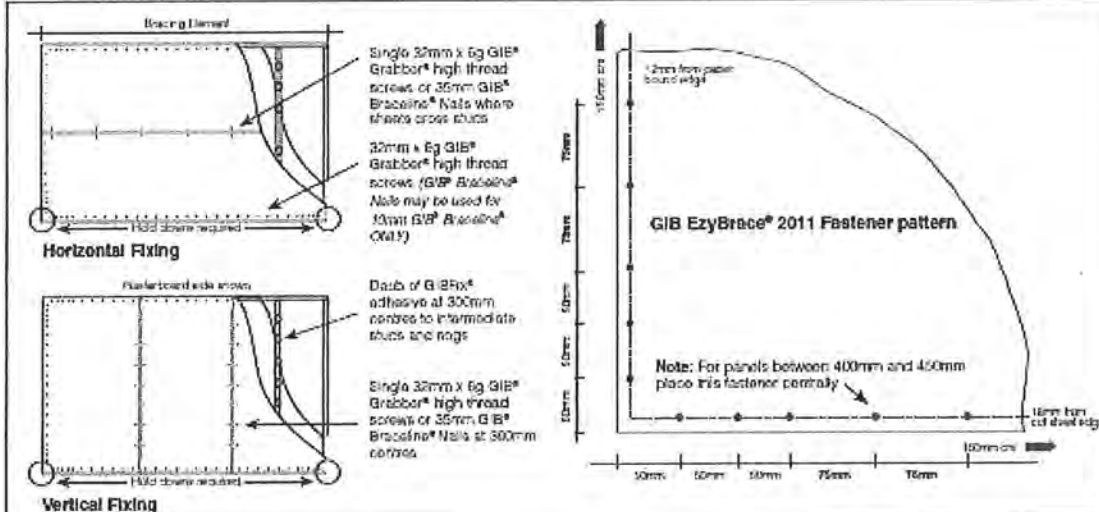
For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud.

Use dauba of GIB Fix® adhesive at 300mm centres to intermediate studs.

Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or out edge.

JOINTING

All fastener heads stopped and all chest joints paper tape reinforced and stopped in accordance with the GIB® Site Guide.





Specification Code	Minimum Length (m)	Lining requirement	Other requirements
BLP-H	0.4	10mm or 13mm GIB Braceline® to one side of the frame plus minimum 7mm Eoonly to the other side	Hold downs

WALL FRAMING

Wall framing to comply with:

- NZBC B1 - Structure AS1 Clause 3 Timber (NZS 3604:2011)
 - NZBC B2 - Durability AS1 Clause 3.2 Timber (NZS 3602)
- Framing dimensions and height as determined by NZS 3604 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING**Timber floor**

Use panel hold downs at each end of the bracing element. The GIB® HandiBrac is recommended. See details in GIB Ezybrace® Systems 2011 or GIB® Site Guide. Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or

Three power driven 90 x 3.15 nails at 600mm centres

Concrete floor

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

WALL LINING

One layer 10mm or 13mm GIB Braceline® to one side of the wall plus minimum 7mm Eoonly construction plywood manufactured to AS/NZS 2269:2004 to the other side. Plasterboard sheets can be fixed vertically or horizontally. Plywood is to be fixed vertically with edges supported. Sheet joints shall be touch fitted. Use full length sheets where possible.

PERMITTED SUBSTITUTION

For permitted GIB® Plasterboard substitutions refer to Page 21 in GIB Ezybrace® Systems 2011.

FASTENING THE LINING**Fasteners****GIB Braceline® side**

32mm x 6g GIB® Grabber® high thread screws. (GIB Braceline® Nails may be used with 10mm GIB Braceline® only)

Plywood

50 x 2.8mm Galv or Stainless steel FH nails.

Fastener centres**GIB® Plasterboard side**

50,100,150, 225, 300mm from each corner and then 150mm thereafter around the perimeter of the bracing element.

For vertically fixed sheets place fasteners at 300mm centres to the intermediate sheet joints

For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud

Use dabs of GIB®Fix adhesive at 300mm centres to intermediate studs.

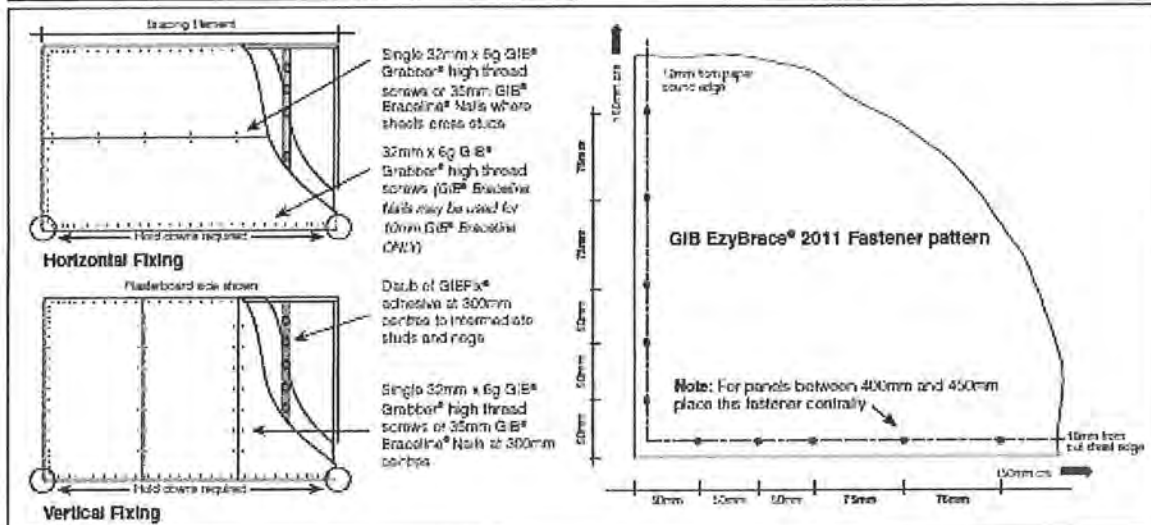
Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or out edge

Plywood side

150mm centres to the perimeter of each sheet. GIB® corner fastener pattern does not apply to the plywood side. 300mm centres to intermediate studs.

JOINTING

All fastener heads stopped and all sheet joints paper tape reinforced and stopped in accordance with the GIB® Site Guide



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Ecoply® Bracing Specification – EP1

June 2012

Single sided structural plywood brace

Specification No	Minimum Wall Length	Lining Requirements	Blism Wind	Blism Earthquake
EP1	0.6 m	7mm Ecoply®, or Ecoply Barrier one side	125	130

Framing

Wall framing must comply with:

- NZBC B1 - Structure: AS1 Clause 3 Timber (NZS3604:2011)
- NZBC B2 - Durability: AS1 Clause 3.2 Timber (NZS3602)

Framing dimensions and height are as determined by the NZS3604:2011 stud and top plate tables for load bearing and non load bearing walls. Kiln dried verified structural grade timber must be used. Machine stress graded timber, such as Laserframe®, is recommended.

Bottom Plate Fixing

Use GIB HandiBrac® hold-down connections at each end of the bracing element. Refer to installation instructions supplied with the connectors for correct installation instructions and bolt types to be used for either concrete or timber floors. Within the length of the bracing element, bottom plates are fixed in accordance with the requirements of NZS 3604:2011.

Lining

One layer 7mm Ecoply structural plywood fixed directly to framing or over cavity battens. If part sheets are used, ensure nailing at required centres is carried out around the perimeter of each sheet or part sheet. A 2-3mm expansion gap should be left between sheets.

Fastening the Ecoply

Fasteners

Fasten with 50 x 2.8 mm galvanised or stainless steel flat head nails. Place fasteners no less than 7 mm from sheet edges.

Fasteners for H3.2 CCA treated Ecoply

Where fasteners are in contact with CCA treated timber or plywood, fasteners shall be a minimum of hot dip galvanised

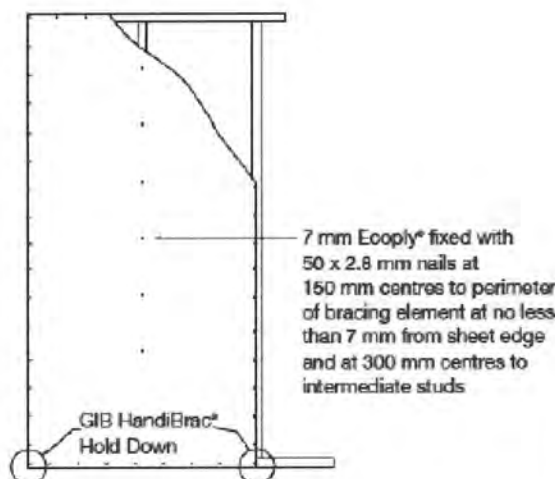
In certain circumstances stainless steel fasteners may be required. Refer to section 4 of NZS 3604:2011 for these circumstances.

Refer to Table 8 in the Ecoply Specification and Installation Guide for further fastener selection advice.

Stainless steel fasteners must be annular grooved

Fastening Centres

Fasteners are placed at 150 mm centres around the perimeter of each sheet and 300 mm centres to intermediate studs.



Ecoply® Bracing Systems are designed to meet the requirements of the NZBC and have been tested and analysed using the P21 method referenced in NZS3604:2011 listed as an acceptable solution B1/AS1 Structure. Testing was carried out using Ecoply and Laserframe S38 timber framing manufactured by Carter Holt Harvey Limited trading as Carter Holt Harvey Woodproducts New Zealand, and GIB® products manufactured by Winstone Wallboards Ltd. Substituting materials may compromise performance of the system. GIB® and GIB HandiBrac® are registered trade marks of Fletcher Building Holdings Ltd.

Ecoply® Bracing Specification – EP2

June 2012

Double sided structural plywood brace

Specification No.	Minimum Wall Length	Lining Requirements	BUSM Wind	BUSM Earthquake
EP2	0.6 m	7mm Ecoply® or Ecoply Barrier each side	140	150

Framing

Wall framing must comply with:

- NZBC B1 - Structure: AS1 Clause 3 Timber (NZS3604:2011)
- NZBC B2 - Durability: AS1 Clause 3.2 Timber (NZS3602)

Framing dimensions and height are as determined by the NZS3604 stud and top plate tables for load bearing and non load bearing walls. Kiln dried verified structural grade timber must be used. Machine stress graded timber, such as Laserframe®, is recommended.

Bottom Plate Fixing

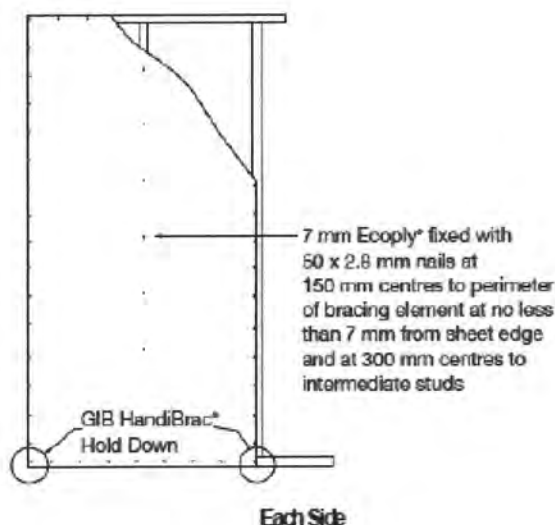
Use GIB HandiBrac® hold-down connections at each end of the bracing element. Refer to installation instructions supplied with the connectors for correct installation instructions and bolt types to be used for either concrete or timber floors. Within the length of the bracing element, bottom plates are fixed in accordance with the requirements of NZS 3604:2011.

Lining

Each Side: One layer 7mm Ecoply structural plywood fixed directly to framing. If part sheets are used, ensure nailing at required centres is carried out around the perimeter of each sheet or part sheet. A 2-3mm expansion gap should be left between sheets.

Fastening Centres

Fasteners are placed at 150mm centres around the perimeter of each sheet and 300mm centres to intermediate studs.



Fastening the Ecoply®

Fasteners

Fasten with 50 x 2.8 mm galvanised or stainless steel flat head nails. Place fasteners no less than 7 mm from sheet edges.

Fasteners for H3.2 CCA treated Ecoply

Where fasteners are in contact with CCA treated timber or plywood, fasteners shall be a minimum of hot dip galvanised

In certain circumstances stainless steel fasteners may be required. Refer to section 4 of NZS 3604:2011 for these circumstances.

Refer to Table 8 in the Ecoply Specification and Installation Guide for further fastener selection advice.

Stainless steel fasteners must be annular grooved.

Ecoply® Bracing Systems are designed to meet the requirements of the NZBC and have been tested and analysed using the P21 method referenced in NZS3604:2011 listed as an acceptable solution B1/AS1 Structure. Testing was carried out using Ecoply and Laserframe SGB timber framing manufactured by Carter Holt Harvey Limited trading as Carter Holt Harvey Woodproducts New Zealand, and GIB® products manufactured by Winstone Wallboards Ltd. Substituting materials may compromise performance of the system. GIB® and GIB HandiBrac® are registered trade marks of Fletcher Building Holdings Ltd.



Bottom plate fixings for GIB® Bracing Elements			
Brace type	Concrete slabs		Timber floors
	External wall	Internal wall	External and Internal walls
GS1-N	As per NZS 3604:2011. No specific additional fastening required	As per NZS 3604:2011. Alternatively use 75 x 3.8mm shot-fired fasteners with 16mm washers, 150mm and 300mm from each end of the bracing element and at 600mm thereafter.	Pairs of 100 x 3.75mm flat head hand driven nails or 3 / 90 x 3.15mm power driven nails at 600mm centres in accordance with NZS 3604:2011
GS2-N	Not applicable		
GSP-H BL1-H BLP-H	Intermediate fastenings to comply with NZS 3604:2011. In addition: GIB Handibrac® fixings or metal wrap-around strap fixings and bolt as illustrated on pages 19 and 20.		Pairs of 100 x 3.75mm flat head hand driven nails or 3 / 90 x 3.15mm power driven nails at 600mm centres in accordance with NZS 3604:2011.
BLG-H	Not applicable	As for GSP-N, BL1-H, BLP-H on concrete slab above	In addition: GIB Handibrac® fixings or metal wrap-around strap fixings and bolt as illustrated below.



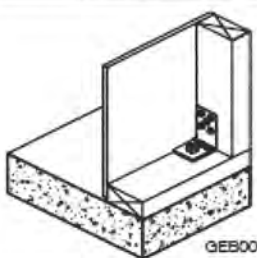
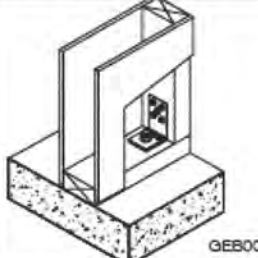
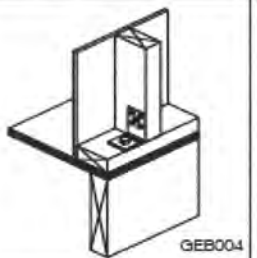
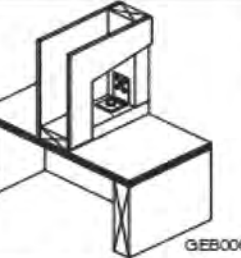
Panel Hold-down Details

GIB HandiBrac® – RECOMMENDED METHOD

Developed in conjunction with MITek™ NZ, the GIB HandiBrac® has been designed and tested for use as a hold-down in GIB® BL and GSP bracing elements.

- The GIB HandiBrac® registered design provides for quick and easy installation
- The GIB HandiBrac® provides a flush surface for the wall linings because it is fitted inside the framing. There is no need to check in the framing as recommended with conventional straps
- The GIB HandiBrac® is suitable for both new and retrofit construction
- The design also allows for installation and inspection at any stage prior to fitting internal linings

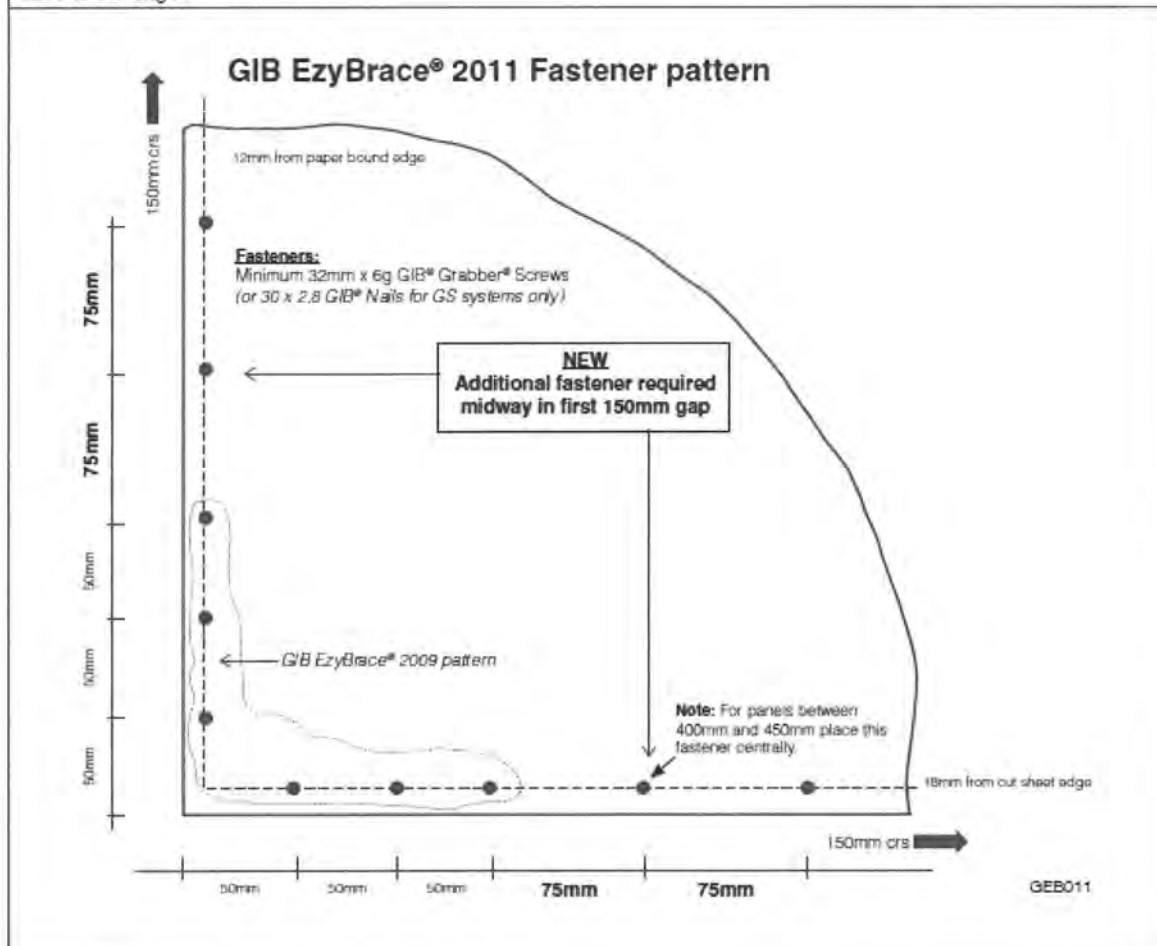


Concrete Floor		Timber Floor	
External walls	Internal walls	External walls	Internal walls
			
Position GIB HandiBrac® as close as practicable to the internal edge of the bottom plate	Position GIB HandiBrac® at the stud / plate junction	Position GIB HandiBrac® in the centre of the perimeter joist or bearer	Position GIB HandiBrac® in the centre of floor joist or full depth solid block
Hold-down fastener requirements			
A mechanical fastening with a minimum characteristic uplift capacity of 16kN.		12x150mm galvanised coach screw	

Revised Fastener Pattern for all four corners of GIB EzyBrace® Elements

As GIB Braceline® screws are no longer required for BL bracing elements, two additional fasteners must be installed in **all four corners** of GIB EzyBrace® GS and BL elements, as shown.

Fasteners must be placed no closer than 12mm from the paper bound sheet edge and no closer than 18mm from sheet ends or cut edges.



Refer to gib.co.nz/cad for CAD details.

PERMITTED GIB® PLASTERBOARD SUBSTITUTIONS IN GIB EZYBRACE® SYSTEMS

GIB Ezybrace® Systems have been designed and tested using only the products specified. Occasionally additional properties may be required to be provided by a different GIB® Plasterboard product. The following table provides acceptable substitution options.

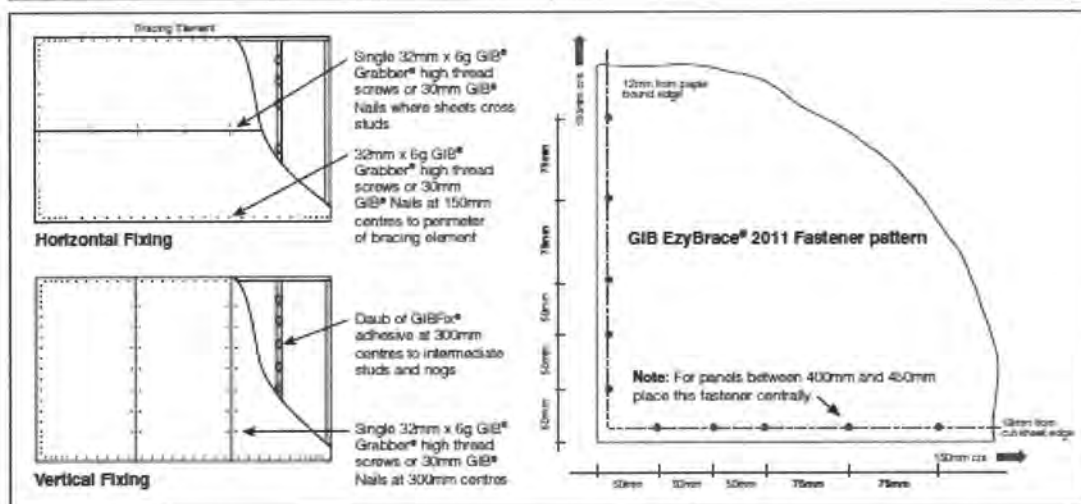
Specified	Permitted alternative GIB® Plasterboard products					GIB Fyrelite®			
	GIB® Standard	GIB Ultralite®	GIB Braceline/ Noiseline®	GIB Aqualine®	GIB Toughline®	10mm	13mm	16mm	19mm
GIB® Standard		OK	OK	OK	OK	OK	NOTE 2		
GIB Braceline®	X	X		NOTE 1	OK	X	NOTES 1 and 2		

NOTE 1 The element must be 900mm or longer. Use 32mm x 6g GIB® Grabber® drywall screws at **100mm** centres to the perimeter of the bracing element. The bracing corner fastening pattern, as illustrated above, applies to all four corners of the element. Panel hold-down fixings are required.

NOTE 2 The fastener type and length must be as required for the relevant FRR system but the fixing pattern must be as shown above.

Specification Code	Minimum Length (m)	Lining requirement
GS1-N	0.4	Any 10mm or 13mm GIB® Standard Plasterboard to one side only

All fastener heads stopped and all sheet joints paper tape reinforced and stopped in accordance with the GIB® Site Guide



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This Specification sheet is issued in conjunction with the publication GIB EzyGrace® Systems 2011 and has been appraised in accordance with the BRANZ Appraisal No. 294 (2011).





Specification Code	Minimum Length (m)	Lining requirement
GS2-N	0.4	Any 10mm or 13mm GIB® Standard Plasterboard fixed to each side of the wall framing.

WALL FRAMING

Wall framing to comply with:

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

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

BOTTOM PLATE FIXING

Timber Floor

Pairs of hand driven 100 x 3.75mm nails at 600mm centres, or

Three power driven 90 x 3.15 nails at 600mm centres.

Concrete floor

INTERNAL WALL BRACING LINES

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

WALL LINING

One layer 10mm or 13mm GIB® Plasterboard to each side of the wall.

Sheets can be fixed vertically or horizontally.

Sheet joints shall be touch fitted.

Use full length sheets where possible.

PERMITTED SUBSTITUTION

For permitted GIB® Plasterboard substitutions refer to Page 21 in GIB® Ezybrace Systems 2011

FASTENING THE LINING

Fasteners

32mm x 6g GIB® Grabber® high thread screws, or 30mm GIB® Nails

Fastener centres

50, 100, 150, 225, 300mm from each corner and 150mm thereafter around the perimeter of the bracing element.

For vertically fixed sheets place fasteners at 300mm centres to intermediate sheet joints.

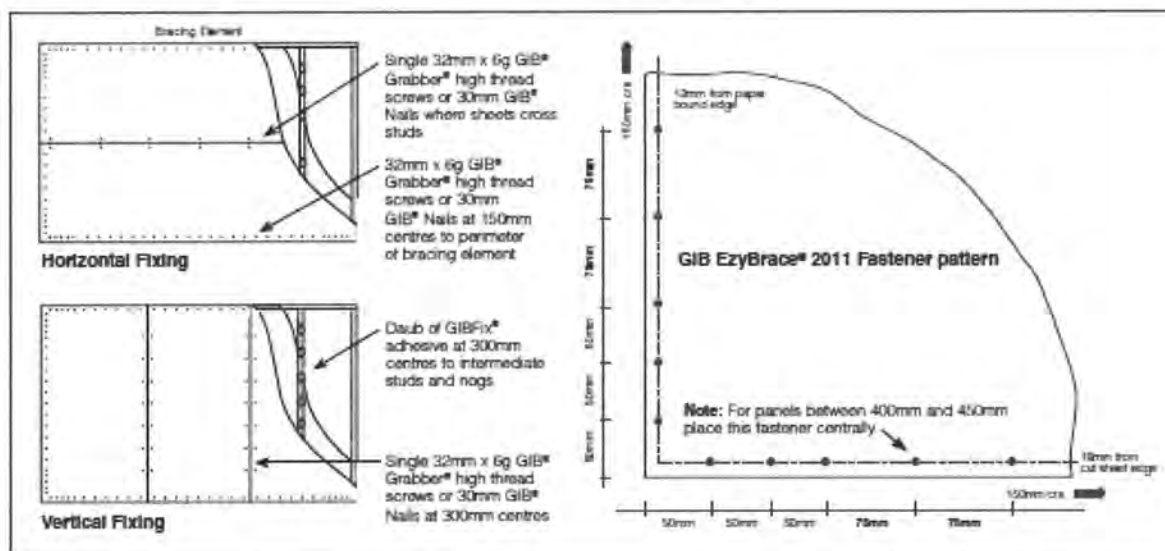
For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud.

Use daubs of GIB Fix® adhesive at 300mm centres to intermediate studs.

Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

JOINTING

All fastener heads stopped and all sheet joints paper tape reinforced and stopped in accordance with the GIB® Site Guide.





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

WALL FRAMING

Wall framing to comply with:

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

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

BOTTOM PLATE FIXING**Timber Floor**

Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB Ezybrace® Systems 2011 or GIB® Site Guide. Pairs of hand driven 100 x 3.75mm nails at 600mm centres, or
Three power driven 90 x 3.15 nails at 600mm centres

Concrete floor

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

WALL LINING

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

PERMITTED SUBSTITUTION

For permitted GIB® Plasterboard substitutions refer to Page 21 in GIB Ezybrace® Systems 2011.

FASTENING THE LINING**Fasteners**

32mm x 6g GIB® Grabber® high thread screws.
(GIB Braceline® Nails may be used with 10mm GIB Braceline® only.)

Fastener centres

50, 100, 150, 225, 300mm from each corner and 150mm thereafter around the perimeter of the bracing element. For vertically fixed sheets place fasteners at 300mm centres to the sheet joint.

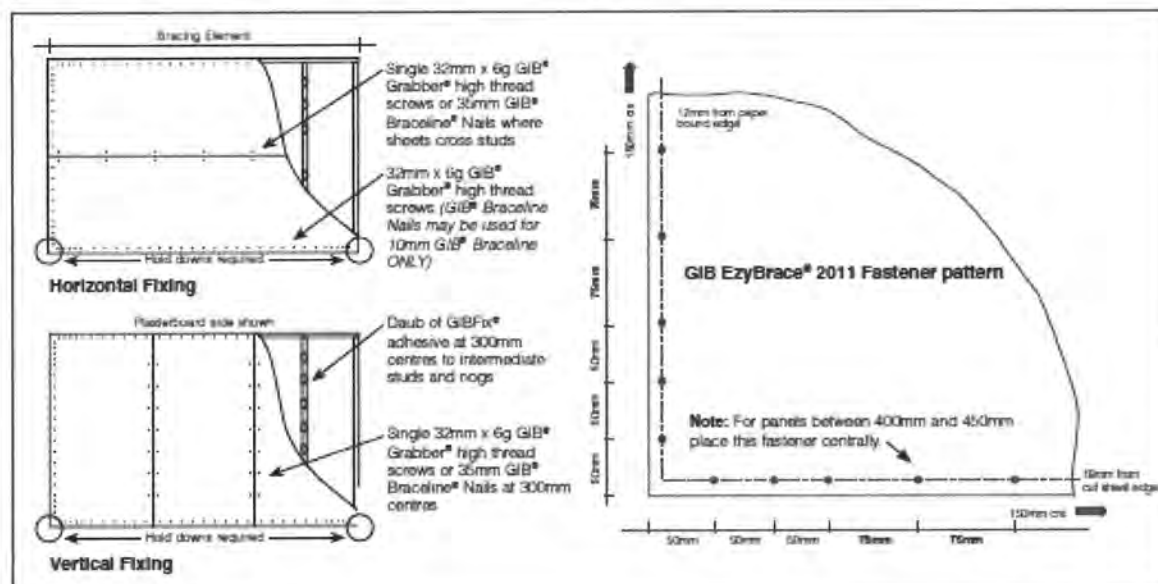
For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud.

Use daubs of GIB Fix® adhesive at 300mm centres to intermediate studs.

Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or out edge.

JOINTING

All fastener heads stopped and all sheet joints paper tape reinforced and stopped in accordance with the GIB® Site Guide.





Specification Code	Minimum Length (m)	Lining requirement	Other requirements
BLG-H	0.4	10mm or 13mm GIB Braceline® to one side of the frame plus any 10mm or 13mm GIB Plasterboard to the other side	Hold downs

WALL FRAMING

Wall framing to comply with:

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

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

BOTTOM PLATE FIXING**Timber floor**

Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB Ezybrace® Systems 2011 or GIB® Site Guide.

Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or

Three power driven 90 x 3.15 nails at 600mm centres.

Concrete floor

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

WALL LINING

One layer 10mm or 13mm GIB® Braceline to one side of the wall plus any 10mm or 13mm GIB® Plasterboard lining to the other side. Sheets can be fixed vertically or horizontally. Sheet joints shall be touch fitted. Use full length sheets where possible.

PERMITTED SUBSTITUTION

For permitted GIB® Plasterboard substitutions refer to Page 21 in GIB Ezybrace® Systems 2011.

FASTENING THE LINING**Fasteners***GIB Braceline® side*

32mm x 6g GIB® Grabber® high thread screws.
(GIB Braceline® Nails may be used with 10mm GIB Braceline® only)

Other side

32mm x 6g GIB® Grabber® high thread screws; or
30mm GIB Nails.

Fastener centres

50, 100, 150, 225, 300mm from each corner and then 150mm thereafter around the perimeter of the bracing element.

For vertically fixed sheets place fasteners at 300mm centres to the intermediate sheet joints.

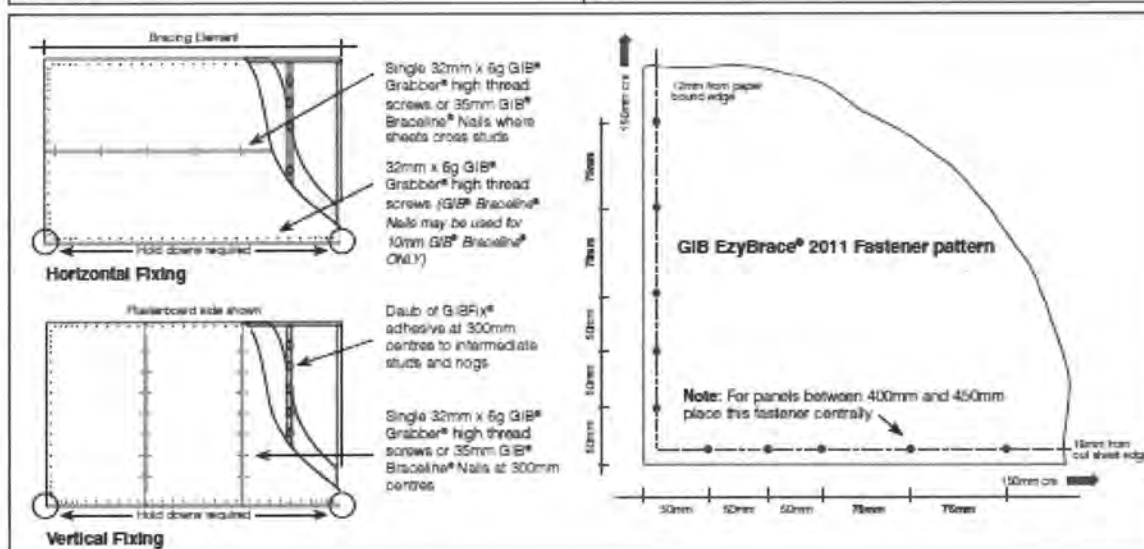
For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud.

Use daubs of GIB Fix® adhesive at 300mm centres to intermediate studs.

Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or out edge.

JOINTING

All fastener heads stopped and all sheet joints paper tape reinforced and stopped in accordance with the GIB® Site Guide.





Specification Code	Minimum Length (m)	Lining requirement	Other requirements
BLP-H	0.4	10mm or 13mm GIB Braceline® to one side of the frame plus minimum 7mm Eoonly to the other side	Hold downs

WALL FRAMING

Wall framing to comply with;

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

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

BOTTOM PLATE FIXING**Timber floor**

Use panel hold downs at each end of the bracing element. The GIB® HandiBrac is recommended. See details in GIB Ezybrace® Systems 2011 or GIB® Site Guide.

Pairs of hand driven 100 x 3.75mm nails at 600mm centres, or

Three power driven 90 x 3.15 nails at 600mm centres.

Concrete floor

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

WALL LINING

One layer 10mm or 13mm GIB Braceline® to one side of the wall plus minimum 7mm Eoonly construction plywood manufactured to AS/NZS 2269:2004 to the other side. Plasterboard sheets can be fixed vertically or horizontally. Plywood is to be fixed vertically with edges supported. Sheet joints shall be touch fitted. Use full length sheets where possible.

PERMITTED SUBSTITUTION

For permitted GIB® Plasterboard substitutions refer to Page 21 in GIB Ezybrace® Systems 2011.

FASTENING THE LINING**Fasteners***GIB Braceline® side*

32mm x 6g GIB® Grabber® high thread screws.

(GIB Braceline® Nails may be used with 10mm GIB Braceline® only)

Plywood

50 x 2.8mm Galv or Stainless steel FH nails.

Fastener centres*GIB® Plasterboard side*

50, 100, 150, 225, 300mm from each corner and then 150mm thereafter around the perimeter of the bracing element.

For vertically fixed sheets place fasteners at 300mm centres to the intermediate sheet joints.

For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud.

Use daubs of GIB®Fix adhesive at 300mm centres to intermediate studs.

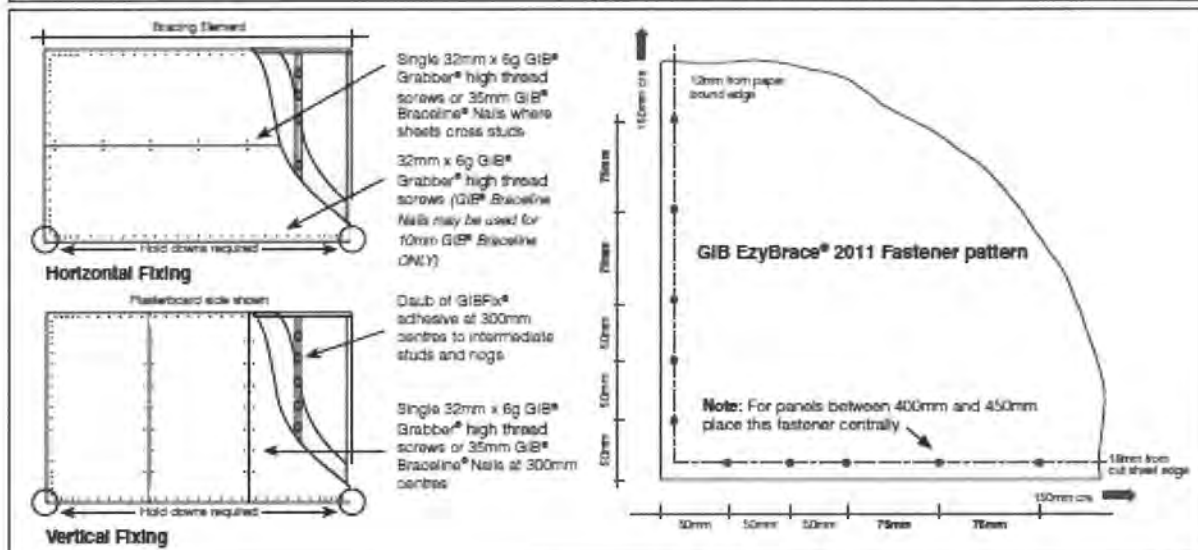
Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

Plywood side

150mm centres to the perimeter of each sheet. GIB® corner fastener pattern does not apply to the plywood side. 300mm centres to intermediate studs.

JOINTING

All fastener heads stopped and all sheet joints paper tape reinforced and stopped in accordance with the GIB® Site Guide.



LIFE Style

Aerated Wastewater Treatment System

USER GUIDE



The Hynds Lifestyle Wastewater Treatment System is an electrically powered unit that treats all household waste. The system needs to be turned on at all times.

The following information will assist in keeping the system in good health and performing efficiently.

Product

Use environmentally friendly products such as those labeled 'septic tank friendly' or purchase economically priced purpose designed products from Ecostore (0800 335 533/ www.ecostore.co.nz).

Avoid inserting the following into the system: Bleaches, strong disinfectants, milk, coffee grounds, fat, grease or oil, acids or caustics, paints, condoms, sanitary products, cigarettes, photographic chemicals and poisons.

The system performs best if the effluent load is evenly spread throughout the day.

Tips to help the system operate effectively:

- Try not to do several loads of washing on the same day.
- Try not to do washing while people are showering.
- Try not to run the washing machine and dishwasher at the same time.

Alarm Activation

If an alarm activates:

1. Check irrigation filter for blockage and clean if necessary (instructions below).
2. Ring Hynds Environmental immediately if the problem or alarm persists.

Cleaning the Irrigation Filter

Find the black plastic bulb-shaped attachment (approx. 250mm long) fitted near the tank and before the irrigation.

1. Turn off the power to the system at the main switchboard.
2. Go to the Lifestyle tank and slowly remove irrigation cap (unscrew anti-clockwise). It is important to unscrew it slowly to allow any built up pressure to be relieved.
3. Remove the internal filter disc.
4. Loosen the disc by unscrewing the top off anti-clockwise.
5. Wash the disc out with a garden hose or similar. Be sure to separate the discs and clean in-between.
6. Tighten up the disc filter hand-tight. Place it back into the filter body (it will fit either way).
7. Screw up the top of the filter housing hand-tight.
8. Wash hands with anti-bacterial soap.
9. Turn the power back on.

(Please ring Hynds Environmental if further instructions on this procedure are required)

Maintaining the Irrigation Area

- Keep the irrigation area planted and weeded.
- Maintain bark or mulch ground cover.
- Do not cut or damage the irrigation lines.
- Keep livestock, vehicles and heavy foot traffic off this area.
- Prevent surface water flowing over this area.

Hynds Environmental Systems Limited

North Island

PO Box 17388, Greenlane 1546,
 Auckland, New Zealand
 Telephone +64 9 571 0090
 Facsimile +64 9 571 0091
 Email sales@hyndsenv.co.nz

South Island

PO Box 16552, Hornby 8441,
 Christchurch, New Zealand
 Telephone +64 3 344 1370
 Facsimile +64 3 344 1375
 Email mikes@hyndsenv.co.nz

Performance Certificate



Company:	Hynds Environmental Systems Ltd
Address:	PO Box 17388, Greenlane, Auckland
Model Number:	Lifestyle "Ultimate"
Manufacturer rated daily flow (litres)	1800
Total operating capacity, including pump chamber (litres)	7200
Primary tank (litres)	3000

This is to certify that the **Lifestyle "Ultimate"** wastewater treatment system supplied by **Hynds Environmental Systems Ltd** is considered to meet the requirements of rule 13(f) of the Operative On-Site Effluent Treatment Regional Plan 2006. Therefore it may be installed within the Rotorua Lakes Catchments as a permitted activity, provided that all other requirements of rule 13 are met.

This certification relates only to the particular model described above, on the basis that the key specifications are the same as those in the model tested at the Rotorua trial facility. This includes tank and chamber volumes, re-circulation rates, and media total surface area.

For any questions about this certificate please contact Sam Weiss on 0800 368 267.

Note: In order to comply with Regional Plan requirements Environment Bay of Plenty must be provided with written confirmation that a system has been installed to the manufacturer's specifications and that it fully meets the requirements of rule 13.

A handwritten signature in black ink, appearing to be "S. Weiss", written over a horizontal line.

Sam Weiss
Project Implementation Officer
Environment Bay of Plenty

Date of Issue: 1 September 2007
Expiry date: 1 September 2012

**SUGGESTED POPULAR NEW ZEALAND NATIVES FOR PLANTING WITH
DRIP IRRIGATION SYSTEMS WITH WASTEWATER TREATMENT SYSTEMS**

SPECIES	COMMON NAME
Agathis Australis	Kauri
Alectryon Excelsus	Titoki
Arthropodium Cirratum	Renga Renga Lily
Beilschmiedia Taraire	Taraire
Carex Grasses	Sedge
Coprosma Repens	Taupata
Cordyline Australis	Cabbage Tree, Ti Kouha, Palm Lilly
Corokia Buddleioides	Korokio
Corynocarpus Laevigatus	Karaka
Cyathea Medularis	Black Tree Fern
Dacrycarpus Dacrydioides	Kahikatea, White Pine
Dodonaea Viscosa	Akeake
Hoheria Populnea	Lacebark
Knightia Excelsa	Rawarewa
Leptospermum	Manuka, Tea Tree, Kahikatoa
Meryta Sinclairii	Puka
Metrosideros Excelsa	Pohutakawa
Phormium Tenax	NZ Flax
Pittosporum Eugenioides	Lemonwood
Plagianthus Regius	Ribbonwood
Pseudopanax	Five Finger
Pseudopanax	Lancewood
Rhopalostylis Sapida	Nikau Palm
Sophora Tetraptera	Kowhai
Vitex Lucens	Puriri

Nurseries offering the above variety of plant species:

Lifestyle Nurseries - Bawden Road, Redvale

Oratia Nursery - 652 West Coast Road, Oratia

Big Tree Company - 445 Ormiston Road, Whitford

Generation Homes
PO Box 197
Waikanae

10 September 2013

COPY

Dear Building Consent Applicant / Building Owner

Request for Further Information - Building Consent: 130599

Site Address:	9 Angus Way, Paraparaumu
Legal Description:	LOT 117 DP 442630 CT 552375
Project Description:	Erection of new single storey home with attached double garage on lifestyle block. Includes septic tanks & 2x 22,000

Following checking of your Building Consent it is apparent that further information is required.

Information Needed:

- 1) Please provide contours and ground work details.
- 2) Please provide lintel for garage door opening- the pre-nailer appears to think it will receive full height brick to the gable in contradiction to the Linea board on the plans.
- 3) Please provide the following weather tight details; a) Window head, Jamb and sill, b) meter box and garage.
- 4) Bracing Calculations for very high wind zone; a) the bracing factors within the calculations do not appear to correlate to table 5.5 of NZS 3604:2011 for wind, b) the EP1 bracing values for wind appear higher than the manufacturers specifications- please revise.

We have suspended your application and will not proceed any further with its processing until the above information is received. Please send it to us by 10/10/13. If we do not receive it by this date, we may not be able to issue your Building Consent.

If you have any questions or you would like to discuss this matter, please contact me on (04) 296-4700 or 0800 486 486 referencing the Building Consent Number noted above.

Yours sincerely

Jaime Sherlock

Leon Smith

From: Alan Pye [AlanP@generation.co.nz]
Sent: Tuesday, 3 September 2013 9:47 a.m.
To: Leon Smith
Subject: 6 Angus Way
Attachments: Alan Pye.vcf

Leon,

As per our discussion last Friday when I lodged the plans for the above job, we have a time constraint with the clients funding.

They have an approval from Kiwi bank for the build subject to issue of building consent, and we proceeded with purchasing the land. However, upon the Government changing the Loan to Value ratio conditions and advising the banks that it will come into force October 1, we potentially have a problem that their loan will not proceed if Building Consent is not issued by the end of September.

I know that we will be cutting it fine with the 20 working day time limit so ask that you assist us by processing the plans as soon as possible.

I will be grateful for any help you can give.

Thanks

Kind regards

Alan Pye
Managing Director
Generation Homes - Kapiti Coast
P. +64 4 293-5816
M. 0275 181 909
www.generation.co.nz



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www.generation.co.nz



Jaime Sherlock

From: Rod Tombleson [Rod@emerge-arch.co.nz]
Sent: Wednesday, 11 September 2013 1:27 p.m.
To: Jaime Sherlock
Cc: Office; Alan Pye (alanp@generation.co.nz); Kathy McGlue (kathym@generation.co.nz)
Subject: RE: 9 Angus Way, Paraparaumu
Attachments: image001.jpg; Updated TRUSS 20130909124823654.pdf; Updated TRUSS 20130909124836642.pdf; KCDC RFIs 11-09-13.pdf; Photo G.JPG; Photo I.JPG

Hi Jamie

Please see attached further information as requested. See comments within text below for reference.
 Thanks Jamie

Kind Regards,

Rod Tombleson
 Senior Architectural Technician
 E-CAD Limited
 P: (06) 353 0217
 F: (06) 353 0218
 E: rod@emerge-arch.co.nz
 W: www.emerge-arch.co.nz



Dear Building Consent Applicant / Building Owner

Request for Further Information - Building Consent: 130599

Site Address: 9 Angus Way, Paraparaumu
Legal Description: LOT 117 DP 442630 CT 552375
Project Description: Erection of new single storey home with attached double garage on lifestyle block. Includes septic tanks & 2x 22,000

Following checking of your Building Consent it is apparent that further information is required.

Information Needed:

- 1) Please provide contours and ground work details. See revised Site Plan Sheet 3 now showing contours. I have spoken to our client Alan Pye and he advises the building will be sited on the level platform and no significant earthworks will be required other than the usual site scraping activity. The images attached show the platform to be quite level.
- 2) Please provide lintel for garage door opening- the pre-nailer appears to think it will receive full height brick to the gable in contradiction to the Linea board on the plans. See attached revised Truss design
- 3) Please provide the following weather tight details; a) Window head, Jamb and sill, b) meter box and garage. See Attached new sheet 23
- 4) Bracing Calculations for very high wind zone; a) the bracing factors within the calculations do not appear to correlate to table 5.5 of NZS 3604:2011 for wind, b) the EP1 bracing values for wind appear higher than the manufacturers specifications- please revise. See Attached revised sheets 12 & 13 item (a) resolved as discussed earlier.

We have suspended your application and will not proceed any further with its processing until the above information is received. Please send it to us by 10/10/13. If we do not receive it by this date, we may not be able to issue your Building Consent.

If you have any questions or you would like to discuss this matter, please contact me on (04) 296-4700 or 0800 486 486 referencing the Building Consent Number noted above.

12/09/2013

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Jaime Sherlock

From: Paul Rohtmets [paulrohtmets@xtra.co.nz]
Sent: Thursday, 12 September 2013 11:48 a.m.
To: Jaime Sherlock
Cc: AlanP@generation.co.nz
Subject: Foundation design at 9 Angus Way

Good morning gentlemen,

the only location where the house's proximity to the edge of the building platform may be an issue is the back corner of the section of dwelling jutting out to the left of the rest of the house (looking from the road), i.e. next to ground test location 'D'. However, the piles in that area, that are supporting the floor, will also act as 'anchors' to prevent any undermining of the foundation. Having said that, some 'frittering' of the edge of the bank by that house corner will be inevitable, due to weathering and other natural processes, so I would think that some form of minor landscaping retaining wall might eventually be installed to prevent such erosion, and maintain access, to that part of the yard around the house?

Regards,
Paul Rohtmets
Chartered Professional Engineer

4:28 pm 12/09/13 - Called Alan re. the above. He said they will do some landscaping. He will email me confirmation on what they are doing.

Leon Smith

From: Alan Pye [AlanP@generation.co.nz]
Sent: Tuesday, 3 September 2013 9:47 a.m.
To: Leon Smith
Subject: 6 Angus Way
Attachments: Alan Pye.vcf

Leon,

As per our discussion last Friday when I lodged the plans for the above job, we have a time constraint with the clients funding.

They have an approval from Kiwi bank for the build subject to issue of building consent, and we proceeded with purchasing the land. However, upon the Government changing the Loan to Value ratio conditions and advising the banks that it will come into force October 1, we potentially have a problem that their loan will not proceed if Building Consent is not issued by the end of September.

I know that we will be cutting it fine with the 20 working day time limit so ask that you assist us by processing the plans as soon as possible.

I will be grateful for any help you can give.

Thanks

Kind regards

Alan Pye
Managing Director
Generation Homes - Kapiti Coast
P. +64 4 293-5816
M. 0275 181 909
www.generation.co.nz



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Jaime Sherlock

From: Alan Pye [AlanP@generation.co.nz]
Sent: Thursday, 12 September 2013 4:39 p.m.
To: 'Paul Rohtmets'; Jaime Sherlock
Subject: RE: Foundation design at 9 Angus Way

Greetings ,

Yes Jamie, we will be extending the area around the corner of the building to provide level access around that area and will support it with either a small retaining wall or other landscaping option, as suggested in Paul email reply.

There will be surplus spoil from the water tank excavations that can be spread around that area and compacted.

Trust this meets your requirements Jamie?

Look forward to getting underway.

Cheers and thanks for your assistance in getting this through in quick time. Much appreciated.

Kind regards

Alan Pye
Managing Director
Generation Homes - Kapiti Coast
 P. +64 4 293-5816
 M. 0275 181 909
www.generation.co.nz



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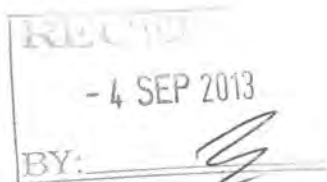


From: Paul Rohtmets [mailto:paulrohtmets@xtra.co.nz]
Sent: Thursday, 12 September 2013 11:48 a.m.
To: jamie.sherlock@kapiticoast.govt.nz
Cc: Alan Pye
Subject: Foundation design at 9 Angus Way

Good morning gentlemen,

the only location where the house's proximity to the edge of the building platform may be an issue is the back corner of the section of dwelling jutting out to the left of the rest of the house (looking from the road), i.e. next to ground test location 'D'. However, the piles in that area, that are supporting the floor, will also act as 'anchors' to prevent any undermining of the foundation. Having said that, some 'frittering' of the edge of the bank by that house corner will be inevitable, due to weathering and other natural processes, so I would think that some form of minor landscaping retaining wall might eventually be installed to prevent such erosion, and maintain access, to that part of the yard around the house?

Regards,
 Paul Rohtmets
 Chartered Professional Engineer



00051

SPECIFICATION

For the work to be done and the materials to be used for the satisfactory erection and completion of the following building project:

PROPOSED NEW RESIDENCE FOR:

BARRY AND HAYLEY VINTON

LOT 117 DP 442630

ANGUS RD

NIKAU VIEWS DEVELOPMENT

PARAPARAUMU

BY:



Documents prepared by:



1.0 PRELIMINARY AND GENERAL

1.1 SCOPE

The contract shall be for the provision of all labour, materials, plant, scaffolding, formwork and completion of the following building project proposed new residence to **LOT 117 ANGUS Rd, NIKAU VIEWS, PARAPARAUMU**

1.2 DRAWINGS

This specification shall be read with the accompanying drawings.

Job No. **EC183 sheets 01-22 inclusive.**

Should any information in this specification vary from the drawings then the contractor shall take the drawings as being correct.

Use only figured dimensions, i.e. DO NOT SCALE OFF THE DRAWINGS.

It shall be the responsibility of the contractors on site to check and verify all dimensions on site, particularly how foundation plan relates to floor plan, any discrepancies designer to be contacted immediately for verification

1.3 FEES

The contractor shall obtain the building consent and pay all fees and charges legally demandable.

1.4 INSURANCE

Before commencing work the contractor shall take out and maintain for the duration of the building contract 'Builders All Risk Insurance' for the full value of the building contract, and Public Liability Insurance.

1.5 MATERIALS AND WORKMANSHIP

All materials and manufactured items shall be new and as specified here in.
Workmanship shall be in accordance with best trade practice.

1.6 SUB-TRADES

This specification is sub divided into sun-trades for convenience only and each sub-trade is not an entire contract, sub-contractors shall be bound by all clauses of the specification that may be relevant to their performance. Each trade shall collaborate with and give all necessary assistance to the other trades.

1.7 CONSTRUCTION INSPECTION

The contractor is to construct the building in accordance with the certified plans, no changes, including materials, are to be allowed without written notification to the territorial authority.

Inspection of construction is to be carried out by the territorial authority and notice shall be given as required by the authority.

Inspection of construction is to be carried out by the territorial authority or the building certifier and notice shall be given as follows:

2 days notice as to the intended commencement of construction.

1 day's notice of the covering up or closing of any:

1. Drainage & plumbing.
2. Foundation excavations & reinforcing steel.
3. Timber required to have a specified moisture content & all other work in respect of which such notice is required as a condition of the building consent.

1.8 CODE COMPLIANCE CERTIFICATE

Upon completion of the building the owner shall as soon as practicable, advise the territorial authority, on the prescribes form, that the building has been completed to the extent required by the building consent issued, in respect of that building work, for the issue of a code compliance certificate.

completed to the extent required by the building consent issued, in respect of that building work, for the issue of a code compliance certificate.

1.1 CONCRETE WORK

The following NZ standards and documents to be referred to in this section are:

NZS 3104 Specification for concrete production
NZS 3109 Concrete construction

All concrete materials, mixing, placing, cover and reinforcing etc. shall comply with the requirements of NZSS 3109:1997.

The relevant section of building code to be complied with is:

Approved document for NZ building code External moisture E2
Verification method E2/VM1
Acceptable solution E2/AS1

The NZ Building code
B1 structural
B2 Durability
E2 External moisture
F2 Hazardous building materials

2.2 CONCRETE

All concrete shall comply with NZSS 3104:2003 Concrete production and shall be 20 Mpa at 28 days with a 20 mm nom. maximum aggregate size and 80 mm slump. Reinforcing to comply with NZSS 3109:1997 Reinforcement shall be clean, free from mill scale, dirt, loose rust, paint, oil or any other materials. Steel that has not lost its mill scale must be exposed to the weather or otherwise treated to improve its surface adhesion. All reinforcing greater than 10.5 mm dia shall be deformed bars. Laps shall be 40 dia for plain rods and 32 dia for deformed rods. Fit stirrups snugly around bars and bind with 1.6 mm soft iron wire. All reinforcing shall be grade 300 or grade 430 as specified. Max. covers to reinforcement shall be 75 mm exposed to earth and 50 mm protected by vapour barrier

2.4 FOOTINGS

Construct concrete footings as shown on the Engineers drawings. Reinforcing to be strictly as shown on these drawings and all footing are to be inspected by the Local Authority before pouring the concrete.

2.5 CONCRETE FLOOR SLABS

Floor slabs to be Firth Ribraft floor slab system to be as designed and specified as per Engineer Design and Drawings accompanied with PS1.

Lay 0.25 mm polythene DPC over 15mm sand blinding layer over 150mm minimum compacted pumice/sand hardfill base. Seal around all penetrations and take over all footing sides to the external face. Slab to be leveled to screed, cement dusted and finished with a powered float by experienced workmen to give dense even surface free from irregularities. Form recesses for external doors.

No holes or chases other than those specified are to be made in the slab without the approval of the engineer. All concrete shall be mechanically vibrated and carefully worked around the reinforcement and into the corners of the formwork.

3.0 BRICKLAYING

The following NZ standards to be referred to in this section are:

NZBC B1/AS1 Structure - General, 2.0 Masonry
NZBC B1/AS3 Structure - Small chimneys
AS/NZS 1170.2 Structural design actions - Wind actions
NZS 1170.5 Structural design actions - Earthquake actions - New Zealand
AS/NZS 2699.1 Built-in components for masonry construction - Wall ties
AS/NZS 2699.3 Built-in components for masonry construction - Lintels and shelf angles (durability requirements)
AS/NZS 2918 Domestic solid fuel burning appliances - Installation
NZS 3103 Sands for mortars and plasters
NZS 3604 Timber framed buildings
NZS 4210 Masonry construction: materials and workmanship
AS/NZS 4455 Masonry units and segmental pavers
BRANZ Masonry veneer - Good practice guide

The relevant sections of building code to be complied with are:

Approved document for NZ building code External moisture E2
Verification method E2/VM1
acceptable solution E2/AS1

The NZ Building code

B2 Durability
E2 External moisture
E3 Internal moisture
F2 Hazardous building materials

3.1 MATERIALS

Brickwork to exterior walls to be 70mm **Austral 70mm brick**

All bricks to be delivered to site free from dirt and dust and stored in a dry position, any damaged or discolored bricks are not to be used.

3.2 MORTAR

Mortar shall be composed of cement, lime and sand. All lime other than hydrated lime shall be slaked. Mortar shall be mixed in the following proportions: Cement 1, Sand 4, Lime 1 with compressive strength of 12.5 Mpa at 28 days.

3.3 WORKMANSHIP

The whole of the job is to be carried out by skilled tradesmen. In accordance with NZSS 4210:2001 and NZSS 3604:1999 Appendix F. All corners to be plumbed both ways and the courses are to be level and straight. All joints are to be weather struck exposed faces. Sills are to be bricks on the edge protruding 25 mm

3.4 TIES

To be in accordance with NZS 4210. Veneer to be secured to wall framing with 85mm 316 or 316L Stainless Steel ties at 350mm crs vertically and 600 mm crs horizontally . Wall ties shall be faced fixed to timber framing with Galv. Tapcon self threading timber screws, fix so that the fixing nails pierce. Ties to be also in the following specific locations

Within 200 mm around openings

Within the top 2 mortar courses

Within the bottom 3 mortar courses

In the bottom course where a bond breaker has been used

3.6 MAINTENANCE

Any damage to texture must be repaired as soon as possible to prevent water penetration and ensure that the high strength of properties of the fiberglass mesh is maintained. Any impact damage areas must be thoroughly cleared of any loose material and repaired with Rockote plaster. This will ensure a positive bond between the original plaster. Refer to the Rockote care maintenance guide for ongoing maintenance and solutions.

3.7 WARRANTY

The coating system shall be applied by a Rockote registered plasterer. Workmanship warranty is issued by the plasterer for 5 years for workmanship and the materials are covered by a 10 year warranty from Rockote.

JAMES HARDIE WEATHERBOARD CLADDING

1. GENERAL

This section relates to the supply and fixing of the following fibre cement products:

- James Hardie Scyon® Linea® Weatherboard cladding
- James Hardie Weatherboard cladding
- James Hardie selected soffit lining

1.1 RELATED WORK

Refer to ~ for ~.

Refer to painting section/s for the protective coating required to meet the NZBC durability requirements.

Documents

1.2 DOCUMENTS

Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC E2/AS1	External moisture
NZBC E2/VM1	Weathertightness
AS/NZS 1170.2	Structural design actions - Wind actions
AS/NZS 2908.2	Cellulose-cement products - Flat sheet
NZS 3602	Timber and wood-based products for use in building
NZS 3604	Timber-framed buildings

1.3 MANUFACTURER/SUPPLIER DOCUMENTS

James Hardie documents relating to this part of the work:

Scyon® Linea® Weatherboard technical specification

James Hardie Weatherboards technical specification

Eaves and Soffit Linings installation manual

BRANZ Appraisal 446 - Linea™ Weatherboard

BRANZ Appraisal 447 - Linea™ Weatherboard - Cavity Construction

CodeMark™ Certificate Number GM-10-30018 James Hardie Linea™

Weatherboard Direct fixed and Cavity Cladding

Manufacturer/supplier contact details

Company: James Hardie New Zealand Limited

Web: www.jameshardie.co.nz

Telephone: Ask James Hardie™ on 0800 808 868

The BRANZ appraisal is available at www.branz.co.nz.

Warranties

1.4 WARRANTY - MANUFACTURER/SUPPLIER

Provide a material manufacturer/supplier warranty:

25 years: For Scyon® Linea® Weatherboard product (refer to James Hardie™ product warranty)

15 year: For accessories supplied by James Hardie (refer to James Hardie™ product warranty)

From: Date of purchase

- Provide this warranty on the manufacturer's standard form.

Refer to the general section 1237 WARRANTIES for additional requirements.

1.5 WARRANTY - MANUFACTURER/SUPPLIER

Provide a material manufacturer/supplier warranty:

15 years: For James Hardie™ ~.

(refer to James Hardie™ product warranty)

15 year: For accessories supplied by James Hardie (refer to James Hardie™ product warranty)

From: Date of purchase

- Provide this warranty on the manufacturer's standard form.

Refer to the general section 1237 WARRANTIES for additional requirements.

1.6 WARRANTY - MANUFACTURER/SUPPLIER

Provide a material manufacturer/supplier warranty:

15 years: For Silkline® Soffit Lining / Eclipsa® Eaves Lining base sheet
(refer to James Hardie™ product warranty)

10 years: For coating on Silkline® Soffit Lining / Eclipsa® Eaves Lining
(refer to James Hardie™ product warranty)

15 year: For accessories supplied by James Hardie (refer to James Hardie™ product warranty)

From: Date of purchase

- Provide this warranty on the manufacturer's standard form.

Refer to the general section 1237 WARRANTIES for additional requirements.

Requirements

1.7 NO SUBSTITUTIONS

Substitutions are not permitted to any specified system, or associated components and products.

1.8 MAINTENANCE REQUIREMENTS

Provide relevant James Hardie maintenance requirements at completion of the work.

Requirements - Linea™ Weatherboard with CodeMark™ Certificate

1.9 QUALIFICATIONS – LINEA® INSTALLER

Installer to be experienced in the application and a;

- James Hardie Accredited Installer; or,
- A Licenced Building Practitioner; or,
- A person with a trade certificate being a current member of a Building Trade Association.

If requested provide evidence of qualification prior to commencing work.

1.10 LINEA® WEATHERBOARD INSTALLATION INFORMATION

Installer to comply with all the relevant information in;

- Linea™ Weatherboard Technical Specification (Dec 2010); and,
Branz Appraisal 446 or Branz Appraisal 447

1.11 LINEA® WEATHERBOARD INSTALLATION CHECKLIST

Installer to complete, sign and provide a James Hardie Installation Checklist (Dec 2010) incorporating the Certificate of Installation requirements of Global-Mark CodeMark Certification program. Contact James Hardie for a copy of the Installation Checklist.

Performance

1.12 PERFORMANCE, WIND

The design wind pressures are to NZS 3604, up to and including Extra High Wind Zone. James Hardie Technical Specifications are suitable for these conditions.

1.13 SPECIFIC DESIGN, WIND

The design wind pressures are to AS/NZS 1170.2, for specific design wind zone (beyond Very High Wind Zone). Only specifically designed or approved details included in the Contract Documents can be used.

2. PRODUCTS

Materials

2.1 RIGID AIR BARRIERS

Refer to section 4171HR JAMES HARDIE RIGID AIR BARRIERS.

2.2 WALL UNDERLAY

Refer to section 4161 UNDERLAYS, FOIL AND DPC.

2.3 EXTERIOR CAVITY BATTENS

Radiata pine battens, minimum 45mm wide x 18mm thick, H3.1 treated, height to match timber framing studs. To NZS 3602, Table 1, reference 1D.10, Requirements for wood-based building components to achieve a 50-year durability performance.

2.4 EXTERIOR CAVITY CLOSER/VERMIN-PROOFING

Perforated uPVC, with upstands.

2.5 SCYON® LINEA® WEATHERBOARDS

James Hardie Scyon® Linea® Weatherboards, 16mm thick, pre-primed, manufactured from a reduced density cellulose fibre cement formulation and cured by high pressure autoclaving, manufactured to AS/NZS 2908.2, tested to NZBC E2/VM1 for weathertightness and complying with the NZBC.

2.6 JAMES HARDIE WEATHERBOARDS

James Hardie Weatherboards, 7.5mm thick, pre-primed, manufactured from treated cellulose fibre, Portland cement, sand and water and cured by high

pressure autoclaving, manufactured to AS/NZS 2908.2 and complying with NZBC E2/AS1.

2.8 SOFFIT LINING

James Hardie 4.5mm Hardiesoffit™ Lining, HardieFlex™ Eaves Lining, Silkline® Soffit Lining Eclipsa™ Eaves Lining, HardieGroove™ Lining and 6mm HardieFlex™ Lining soffit manufactured from treated cellulose fibre, Portland cement, sand and water and cured by high pressure autoclaving manufactured to AS/NZS 2908.2.

Components

2.9 FASTENER TYPE

Fasteners to minimum durability requirements of the NZBC. Refer to NZS 3604, section 4, Durability, for requirements for fixing's material to be used in relation to the exposure conditions.

Exposure conditions & nail selection prescribed by NZS 3604, section 4, table 4.3, Steel items such as nails and screws used for framing and cladding.

Zone	Fixings Material
Zone D / Microclimates (incl. Geothermal)	Grade 316 Stainless
Zone B, Zone C	Hot-dipped galvanized
Bracing - All zones	Grade 316 Stainless

Check against SED (specific engineering design) requirements for microclimate conditions.

Refer to NZBC E2/AS1, Table 20, Material selection, and Table 21, Compatibility of materials in contact, for selection of suitable fixing materials and their compatibility with other materials.

2.10 SCREWS

30mm x 7 gauge stainless steel HardieDrive screws

2.11 GALVANIZED NAILS

60mm x 3.15mm diameter jolt head
75mm x 3.15mm diameter jolt head
HardieFlex™ Nail 40mm x 2.8mm diameter
HardieFlex™ Nail 50mm x 2.8mm diameter
HardieFlex™ Nail 60mm x 3.15mm diameter
HardieFlex™ Nail 75mm x 3.15mm diameter

2.12 STAINLESS STEEL NAILS

60mm x 3.15mm diameter jolt head 316 grade
75mm x 3.15mm diameter jolt head 316 grade
HardieFlex™ Nail 40mm x 2.8mm diameter 316 grade
HardieFlex™ Nail 50mm x 2.8mm diameter 316 grade
HardieFlex™ Nail 60mm x 3.15mm diameter 316 grade
HardieFlex™ Nail 75mm x 3.15mm diameter 316 grade

2.13 SOFFIT JOINTERS AND CAPPING MOULDS

Extruded uPVC jointer, 2 way jointer, capping and scotia mould.

Accessories

2.14 SEALANT

Silaflex AT-Facade sealant or similar. Refer to James Hardie technical specifications for application requirements.

3. EXECUTION

Conditions

3.1 STORAGE

Take delivery of products dry and undamaged on pallets, and keep on pallet. Protect edges and corners from damage and covered to keep dry until fixed.

3.2 HANDLING

Avoid distortion and contact with potentially damaging surfaces. Carry weatherboards in vertical position. Do not drag weatherboards across each other, or across other materials. Protect edges, corner and surface finish from damage.

3.3 SUBSTRATE

Do not commence work until the substrate is of the standard required by James Hardie for the specified finish; plumb, level and in true alignment. Moisture content of timber framing must not exceed the requirements specified by NZS 3602 to minimise shrinkage and movement after sheets are fixed.

Application - particular installations

3.4 FIRE RESISTANCE RATING, FIBRE CEMENT

Install mineral fibre insulation or glass fibre insulation fitted tightly in the timber framing cavity. Apply fire retardant wall underlay to the exterior face of the framing and fix fibre cement cladding and lining sheets, direct or on cavity. Refer to project drawings for FRR system construction details and James Hardie Fire and Acoustic Design Manuals for further information.

3.5 BRACING SYSTEM

Fix Scyon® Linea® Weatherboards to James Hardie Bracing Design Manual.

Application - generally

3.7 FIX WALL UNDERLAY

Refer to 4161 UNDERLAYS, FOIL AND DPC.

3.8 INSTALL CAVITY BATTENS

Install 18mm minimum thick cavity battens to NZBC E2/AS1: 9.0 Wall claddings, where required. Fix vertical cavity battens to wall framing studs. The battens are fixed by the cladding fixings which will penetrate the wall framing studs under the wall underlay. Seal the top of the cavity and install cavity closer/vermin-proofing at base of walls, open horizontal (or raking)

junctions, over openings (windows, meters etc). Do not use horizontal cavity battens. Use cavity spacers where fixing is required between cavity battens.

3.9 PENETRATIONS AND FLASHINGS

Confirm that exterior wall openings have been prepared ready for the installation of all window and door frames and other penetrations through the cladding. Required preparatory work includes the following:

- Wall underlay appropriately incorporated with penetration and junction flashings.
- Materials lapped in a way that water tracks down to the exterior face of the wall underlay.
- Wall underlay to openings finished and dressed off ready for the installation of window and door frames and other penetrations
- Claddings neatly finished off to all sides of openings
- Installation of flashings (those required to be installed prior to installation of penetrating elements).

3.10 INSTALL SCYON® LINEA® WEATHERBOARDS

Cut weatherboards to required lengths and fit joints off-stud using tongue and groove ends. Fit internal corners and weatherboards as per Scyon® Linea® Weatherboard technical specifications. Fit and fix external corners and joint soakers as required.

3.11 INSTALL FLASHINGS

Install flashings at all wall openings, penetrations, junctions, connections, window sills, heads and jambs to NZBC E2/AS1.

3.12 INSTALL JAMES HARDIE WEATHERBOARDS

Fit concealed soaker, internal corners and fix weatherboards as per James Hardie Weatherboard technical specifications. Fit and fix external corners and joint soakers as required. Fit metal internal corner flashings in accordance with E2/AS1, 9.5.3.4 Internal corners Fig 89.

3.13 INSTALL SOFFIT SHEETS

Cut sheets dry and ensure all edges and joints are fully supported. Nail and insert uPVC fasteners to James Hardie requirements. Fit complete with jointers and capping moulds. Refer to Eaves and Soffit Linings installation manual.

3.15 REPLACE

Replace all damaged or marked elements.

3.16 LEAVE

Leave work to the standard required for following procedures.

3.17 REMOVE

Remove debris, unused materials and elements from the site.

4. SELECTIONS

4.1 CAVITY BATTENS

Timber species: Radiata pine

Treatment: H3.1

Scyon® Linea® Weatherboards

4.2 SCYON® LINEA® WEATHERBOARDS

Location: ~
Brand/type: James Hardie Scyon® Linea® Weatherboard
Thickness: 16mm
Width: ~mm
Construction: ~
Nail pattern: ~
Nail finish: ~
Nails: ~

4.3 SCYON® LINEA® WEATHERBOARD CORNERS

Type: ~
Soaker type: ~

James Hardie Weatherboards

4.4 JAMES HARDIE WEATHERBOARDS

Location: ~
Brand/type: James Hardie ~
Thickness: 7.5mm
Width: ~mm
Construction: ~
Nail pattern: Face nail
Nail finish: ~
Nails: ~

4.5 JAMES HARDIE WEATHERBOARD CORNERS

Type: ~
Soaker type: ~

Soffits

4.7 SOFFIT SHEETS

Brand/type: James Hardie~
Thickness: ~mm
Jointer type: ~
Nails: ~

Finishing

4.8 PAINTING

Refer to painting section/s for details.

4.0 CARPENTRY

The following NZ standards and documents to be referred to in this section are:

AS/NZS 1748	Mechanically stress-graded timber
AS/NZS 1859.1	Reconstituted wood based panels - Particleboard
AS/NZS 2269.0	Plywood - Structural - Specification
NZS 3602	Timber and wood-based products for use in building
NZS 3603	Timber structures standard
NZS 3604	Timber framed buildings
NZS 3631	New Zealand national timber grading rules

BRANZ BU 453 Fasteners selection

This section covers all timber framing, wall and ceiling linings, all finishing timbers, exterior linings, weatherboards, soffit linings, barge and fascia boards.

The relevant sections of building code to be complied with are:

Approved document for NZ building code External moisture E2
verification method E2/VM1
acceptable solution E2/AS1

The NZ Building code

B1 structural

B2 Durability

E2 External moisture

E3 Internal moisture

F2 Hazardous building materials

H1 Energy efficiency

4.1 TIMBER

All timber shall be graded to sizes specified and be free from defects which render it unfit for its purpose. Timber shall come from seasoned stocks or kiln dried and stacked or as long possible before use. Framing timber shall have a maximum moisture content of 20%. All framing to exterior walls shall be SG 8 H 3 LSOP treated timber. Internal timber to be kiln dried un-treated. Exterior exposed timber shall be treated in accordance with the Timber Preservation Authority recommendations. All framing to comply with all sections of NZSS 3604:1999 and its amendments. Roof trusses and tile battens to be treated to H1.2, valley boards to be treated to H3.1 LSOP

4.2 FRAMING

All materials to be the best of their respective kinds and grades laid true to their various lines and levels and constructed in a proper tradesman like manner in accordance with the best trade practice and to comply with the local body bylaws.

4.3 DPC

Separate all exterior timber walls coming into contact with the concrete with one layer of 3 ply Malthoid DPC with a minimum lap of 75 mm.

4.4 TIMBER SCHEDULE

STRUCTURAL TIMBERS:

Top plates
Studs
Lintels
Rafters
Nogs
Ceiling joists / runners

FINISHING TIMBERS:

Pine -dressing A grade

EXTERIOR TIMBERS:

Beams
Pergola rafters
Sized as shown out of No 1 framing

4.5 WALL FRAMING

All wall framing to be SG 8 stress graded kiln dried timber framing gauged 100 x 50 or 75 x 50 to non load bearing walls as shown on the drawings. Gauge all studs plates etc. to a uniform width. Plates to in long straight lengths and are to butt jointed with Pryda 4N1O nail plates. All holes for plumbing or wiring to be not more than 24 mm but can be increased to 35 mm where not more than 3 studs drilled.

4.6 BUILDING PAPER

Building paper shall be Tekton universal building wrap. Fix paper securely with laps not less than 75 mm at all joints and edges. Support wrap with polypropylene tape straps at 300 crs.

4.7 WALL BRACING

Wall bracing to be strictly as shown on the bracing schedule and complying with NZSS 3604:2011 and as per Gib bracing systems CBI 5113 June 2011 and Ecoply EP bracing series manual July 2011

Refer to end of specification for additional nailing and fixing / hold down bolt details.

Type GS1-N to be 10 mm Gib board Horizontally or vertically fixed with fixing and gluing patterns as per Gib EzyBrace system CBI 5113 June 2011

Type GS2-N to be 10 mm Gib board Horizontally or vertically fixed with fixing and gluing patterns as per Gib EzyBrace system CBI 5113 June 2011

Type GSP-H to be 10 mm Gib board Horizontally or vertically fixed one face with min 7mm structural Ply (to AS/NZS 2269:2004) to other. Hold down spec, fixing and gluing patterns as per Gib EzyBrace system CBI 5113 June 2011 and ply fixed with 30 x 2.8 mm flat head nails at 150 mm to perimeter and 300 mm crs to intermediate framing

Type BL1-H bracing to be 10 mm Braceline Gib board one face fixed with hold down spec, fixing and gluing patterns as per Gib EzyBrace system CBI 5113 June 2011

Type BLG-H bracing to be 10 mm Braceline Gib board one face, 10mm GIB board std to other fixed with hold down spec, fixing and gluing patterns as per Gib EzyBrace system CBI 5113 June 2011

Type BLP-H bracing to be 10 mm Braceline Gib board fixed Horizontally or vertically fixed one face with min 7mm structural Ply (to AS/NZS 2269:2004) to other. Hold down spec, fixing and gluing patterns as per Gib EzyBrace system CBI 5113 June 2011 and ply fixed with 30 x 2.8 mm flat head nails at 150 mm to perimeter and 300 mm crs to intermediate framing

Type EP1 bracing to be 7 mm Plywood tan H3 grade DD. Fix plywood to framing with 30 x 2.5 mm H.D galv. clouts at 150 mm crs to perimeter and 300mm crs to intermediate studs.

All braced elements apart from GS1-N and GS2-N to have Additional hold down fixing as per Gib EzyBrace system CBI 5113 June 2011

4.8 INSULATION

Ceiling R3.2 Fiberglass insulation
Walls R2.2 Fiberglass insulation

4.9 TRUSSES

Trusses to be specifically designed in accordance with NZS 3603 treated to H1.2 and shall be fabricated in controlled factory conditions. Trusses shall be erected in accordance with the truss drawings and to be plumb and properly aligned at 900 CRS max. Anchor over top plates with no less than 2 / 100 mm x 3.75 mm skew nails plus 2 / 4.9mm Pride Z nails.

4.10 CEILING FRAMING

Frame for ceiling lining using continuous lengths of rolled formed CB35 metal battens or 75 x 40 timber fixed to underside of the trusses. Fix with 2/75 x 3.15 nails to bottom chord of truss.

4.11 ROOF BRACING

Brace roof with a diagonally opposing pair of continuous steel strips each having a capacity of 8kN. in tension, fix over the top of each rafter or truss top chord. Provide one pair per 35m² of roof plane area.

4.12 WALL LININGS

10mm Gib board to all walls, 10mm Gib 'Gib Aqualine' to all wet areas, fix sheets horizontally and nail the sheet edges with 30 x 2.5mm gib clouts at 300mm CRS 12mm from the edge and at 150mm CRS to gib board linings fixed over a wall brace and double nail at 300mm CRS to all intermediate studs and nogs. All joints to be filled with Gib bedding compound, joints taped with Gib reinforcing tape and finished with finishing compound. Apply **Gib Bullnose tape on corners** to all external corners. Walls lined with **Gib Aqualine** to be stopped with 1st and 2nd coat with **Gib AquaMix** for a level 4 finish to wallpapered walls and a level 5 finish for painted walls.

4.13 CEILING LININGS

13mm Gibraltar board to all ceilings, fix sheets by screws and adhesive. Apply daubs of adhesive at the 200 mm and 400 mm point from the sheet edges, position sheets hard up to the timber framing and double screw at the centre line of the sheet and to the sheet edges, 12 mm from the edge. Use type '8' Gypsum 32 mm x 6 gauge screws. All joints to be filled with Gib bedding compound, joints taped with Gib reinforcing tape and finished with finishing compound.

4.14 SHELVING

All shelving to cupboards to be Clarrison pre- finished metal shelving. and wardrobes

4.15 MOULDINGS

Skirting 60 x 10 pine
Jambs ex 25 mm pine
Cornice 50 mm Gib Cove - 40 x 10 to cupboards

4.16 SOFFIT LINING

4.5 mm flat Hardies Silkline with 40 x 2.5 galvanized flat head nails at 150 mm centers to perimeter and intermediate nogs, PVC jointers to sheet edges.

5.0 JOINERY

5.1 WORKMANSHIP

Workmanship to be to best of trade practice, exterior timber joinery shall have meeting faces and joints primed during assembly and shall be primed on all faces before installation.

5.2 INTERNAL DOORS

Internal doorframes to be out of ex 150 x 30 pine finger jointed to have architraves fitted. Doors to be flush panel paint quality M.D.F. doors

Hume ASC-G 1980 x 610 special doors to living dining doors

5.3 HARDWARE

Contractor is to fit all door hardware, latches and locks as required to enable operation of all doors, see addendum for specification of hardware.

6.0 ALUMINIUM JOINERY

The following NZ standards and documents to be referred to in this section are:

AS NZS 1734:1997 Aluminium alloys
NZSS 4211:1985 Specification for performance of windows.
NZSS 3504:1979 Specification for aluminium windows.
NZSS 4203:1992 general structural design and design loadings for buildings.
NZS 4223 code of practice for glazing in buildings.
Part 1:1985
Part 3:1999
Part 4:2000

Approved document for NZ building code External moisture E2
verification method E2/VM1
acceptable solution E2/AS1

The NZ Building code
B1 structural
B2 Durability
E2 External moisture
F2 Hazardous building materials

Windows and doors shall be manufactured and be a product by a WANZ member with each unit labeled as complying with NZS4211:1985 and installed in accordance with the WANZ window installation system July 2005

6.1 INSTALLATION

6.1.1 PREPARATION OF OPENING

A combination of building wrap and flexible tape to be used, Tyvek framing wrap to be turned into opening to cover full width of framing to all 4 sides. Protecto wrap flashing system self adhesive overlays to be then installed over building wrap to length of sill and dress up 200 mm to sides.

6.1.2 AIR SEAL

On the inside of the building apply a continuous bead of water resistant expandable foam as an air seal'around the entire perimeter between the window reveal and the wrapped building frame, note: do not fill the cavity, use a PEF backing rod to control depth of the seal.

6.1.3 HEAD FLASHING

The head flashing is out of aluminium and 60 mm wider than window/ door unit t, fixed directly to cavity battens and overhang each end by 30 mm.

6.1.4 FIXING

5 mm support blocks are fixed to sill and unit positioned into opening with 5 mm gap between jamb liner and sill trimmer and nominal 5 mm gap elsewhere. Use mechanical fixings only positioned at approx 150 mm from corners and at 450

mm max centers. Fixings should aligned with mullions, transoms and door strikers.

6.2 FINISH

All aluminium to be polyester powder coated 'Cordalux' powder coating colours. To architectural aluminium association specification for stoved organic finishes to 40 microns min

6.3 DIMENSIONS

Sizes as shown on the drawing to be adhered to and are nominal only allowances to be made for clearance trim only.

6.4 SASHES

All sashes shall be awning or casement hung - see elevations. Use vinyl or neoprene seals to perimeters of all sashes and glazing.

6.5 JOINTS

All joints in sashes or frames shall be mitre cut sealed and fastened with 18/8 stainless steel screws.

6.6 REVEALS

All reveals to be out of ex 25mm Tan H3 pine - paint finish, size for architraves.

6.7 GLAZING

All glazing to be sized as per NZS 4223:1985 parts I II NZS 4223 PART III: 1999 WC, ensuite and bathroom which is to have selected obscure glazing. Bathroom to have toughened safety glass grade A.

All joinery to be double glazed to provide min R value of 0.26, apart from garage windows.

7.0 METAL ROOF TILES

The following NZ standards and documents to be referred to in this section are:

NZBC E2/AS1 External moisture
NZS 3602 Timber and wood-base products for use in building
NZS 3604 Timber framed buildings
AS/NZS 4534 Zinc and zinc/aluminium-alloy coatings on steel wire

The relevant sections of building code to be complied with are:

Approved document for NZ building code External moisture E2
Verification method E2/VM1
Acceptable solution E2/AS1

The NZ Building code

B2 Durability
E2 External moisture
F2 Hazardous building materials

To entire roof area of house supply and fix **Metrotile** pressed metal tiles with profile and finish as specified on drawings. **As manufactured by Metro tiles**

Underlay - Thermakraft 215 bituminous heavy weight building paper tested to NZS 2295.

- Installers to be experienced in the installation of **Thermakraft** products and familiar with **Thermakraft** Industries technical literature and the NZMRM NZ Metal Roof and Wall Cladding – Code of Practice

- **Application - Roofing underlay & netting**

Lay 75 mm galvanized wire netting at right angles across the truss top chord and drawn taut before fixing. Tie edges of netting together with galvanized wire clips.

Lay vertically over purlins on wire netting with a 150 mm side lap. Fix securely to purlins with galvanized fixing clips. Lay underlay to avoid excessive dishing between purlins. When used vertically limit individual runs to 10 metres for bituminous based papers and 7 metres for fire retardant underlays.

Lay horizontally across the rafter/trusses starting at the gutter line with succeeding sheets in true alignment and lapping 150 mm. Scribe around and fit neatly to all penetrations. Avoid prolong exposure by installing the roof immediately. Installation to comply with NZBC E2/AS1 clause 8.1.5.1.

7.2 LAYING

Fix 50 x 50 H1.2 tile battens at centers to suit the selected tiles. Mechanically fix all tile battens to truss top chords with 1 x 10g screw 80mm long per NZS 3604 2011 for high wind zone.

7.3 VALLEYS

All valleys shall be 0.55mm coloursteel 'Endura' over ex 25mm H3.1 valley board in a straight and continuous line. Tiles shall be fixed either side of the valley and

neatly cut with a tile cutter. Any gaps that occur through the cutting shall be made bird proof with galv. ms mesh.

7.4 HIPS AND RIDGES

The hips and ridges shall be covered with **Metrotile** ridge tiles

7.5 WARRANTY

A written WARRANTY shall be provided at the completion of the job covering workmanship for 5 years and materials for 5 years.

8.0 PLUMBING

8.1 GENERAL

The following NZ standards and documents to be referred to in this section are:

Documents referred to in this section are:

NZBC G12/AS1 Water supplies

NZBC G13/AS1 Foul water - sanitary plumbing

AS 2887 Plastic waste fittings

AS/NZS 1260 PVC pipes and fittings for drain, waste and vent applications

AS/NZS 2032 Installation of PVC pipe systems

AS/NZS 3500.2 Plumbing and drainage - Sanitary plumbing and drainage

NZS 7643 Code of practice for the installation of un-plasticised PVC pipe systems

Plumbers, Gasfitters and Drainlayers Act 2006

The whole of the work shall be carried out in strict accordance with the drawings. The work is to be carried out by registered plumber. Plumbing to be to AS1 / G13 of the approved documents to the NZ building code.

The relevant sections of building code to be complied with are:

Approved document for NZ building code External moisture E2

Verification method E2/VM1

Acceptable solution E2/AS1

The NZ Building code

B2 Durability

E2 External moisture

E3 Internal moisture

F2 Hazardous building materials

G 13 Foul water

G 12 Water supplies

8.2 WATER SUPPLY

Lay on cold water supply from existing main in 19 mm Dia PVC tubing. Provide and fix stop cock in suitable position. Take 19 mm Dia Rehau polyethelene tube branches to HWC and 12 mm Dia Rehau polyethelene branches to each new shower, basin, bath, WC, tub and washing machine. All sanitary fittings shall be installed to prevent backflow into the water supply by providing an air gap of 25 mm min. between every potable water supply outlet and the overflow pipe or flood level of the fixture to which it discharges.

8.3 HOT WATER SUPPLY

All piping in connection with the hot water supply shall be Rehau polyethelene with all jointing to BS 1723. Provide and fix Rheem 180 L MAINS pressure hot water heater. Take 15mm Dia copper branches to all fittings. Temperature valve to be set to not more than 55oC. All hot water supply pipes to be insulated with lagging.

8.5 WASTE PIPES

All waste pipes to as sized on the drawings and to out of UPVC, to be as per NZS 7643:1979. Pipes to be supported at 500mm crs at supports and at floor and wall penetrations fit pipe sleeves or flexible lagging. All fittings to have a water trap to prevent foul air from entering the building, the depth of the trap shall be not less than 40 mm and located as close as possible to the fitting. All fittings to discharge directly over a gully trap.

8.6 GUTTERS & DOWNPIPES

Continuous spouting - Colorsteel fascia / gutter system to be used, discharge in 80 mm dia UPVC M.S. down pipes in positions shown on drawings.

9.0 DRAINLAYING

9.1 GENERAL

The following NZ standards and documents to be referred to in this section are:

	NZBC B1/AS1	Structure - general, 6.0 Drains
NZBC E1/AS1	Surface water	
	3.0 Drainage system materials and construction	
NZBC E2/AS1	External moisture	
	12.3 Drainage	
NZBC G13/AS2	Foul Water - drainage	
AS/NZS 1254	PVC pipes and fittings for storm and surface water applications	
AS/NZS 1260	PVC pipes and fittings for drain, waste and vent applications	
AS/NZS 2032	Installation of PVC pipe systems	
AS/NZS 2033	Installation of Polyethylene pipe systems	
AS/NZS 2566.1	Buried Flexible Pipelines - Structural Design	
AS/NZS 2566.2	Buried Flexible Pipelines - Installation	
AS/NZS 3500.2	Plumbing and drainage - Sanitary plumbing and drainage	
AS/NZS 3500.3	Plumbing and drainage - Storm water drainage	
AS/NZS 4671	Steel reinforcing materials	
AS/NZS 5065	Polyethylene and polypropylene pipes and fittings for drainage and sewerage applications	
NZS 3104	Specification for concrete production	
	Plumbers, Gasfitters and Drain layers Act 2006	

The Drainage contractor is to provide and supply, and do everything necessary to complete the drainage in accordance with the drawings. The Drainage contractor must execute all work that is shown on the drainage plan and as required to comply with the NZ building code.

The relevant sections of building code to be complied with are:

Approved document for NZ building code External moisture E2
Verification method E2/VM1
Acceptable solution E2/AS1

The NZ Building code
B1 structural
B1 Durability
E1 Surface water
G 13 Foul water
F2 Hazardous building materials

9.2 EXCAVATION

Excavate for trenches, gully traps, drains etc. to depth required for laying of sanitary and storm water drains.

Soil drains to be 100mm dia UPVC.

Storm water drains to be 100 mm dia UPVC.

All UPVC pipes to be to NZS 7649

9.3 LAYING

Start from the outfall and as work proceeds lay and solidly bed all drains to sizes and gradients required. The trench width shall be no less than 300 mm and the width of the trench at the top of the pipe shall be no more than 600 mm unless covered in concrete. Bedding materials shall be a minimum of 100 mm of clean granular non-cohesive material with a maximum particle size of 20 mm. Backfilling shall be granular bedding and selected fill placed in layers of 100 mm loose thickness and compacted. All joints shall be flexible and to comply with pipe manufacturers specifications with the invert perfectly true and concentric with the proceeding pipe. The layout is to be laid only in straight lines between bends and all junctions shall be no greater than 60°.

Soil drains connection to connect into territorial authority sewer connection

Storm water drains to discharge into buried 10 000 Litre concrete water tank with overflow into the on site soak pits as designed by the waste water engineer.

9.4 GULLY TRAPS

Gully traps to be positioned so that the top of the gully dish is no less than 50 mm below the overflow level of the lowest sanitary fixture. The construction shall be to prevent the ingress of surface water and shall the top of the gully dish 100mm above the ground or if there is paving 25mm, and it shall have a grating, a minimum pipe size of 80mm and a water seal depth of 65mm. Waste pipes discharging over the gully shall be arranged to permit easy cleaning and located at least 20mm over the water seal. The top of the water seal is to be no more than 600mm below the top of the gully trap.

9.5 VENTILATION

80mm terminal vent to be used for ventilation.

9.6 MAINTENANCE

Drains shall be provided with access points as shown on plans

10.0 ELECTRICAL

The following NZ standards and documents to be referred to in this section are:

NZBC E2/AS1 External moisture
NZBC F7/AS1 Warning systems, 3.1 Domestic smoke alarms
NZBC G4/AS1 Ventilation
NZBC G9/AS1 Electrical installations within Domestic Dwellings
AS/NZS 1125 Conductors in insulated electric cables and flexible cord
AS/NZS 1768 Lightning protection
AS 1670.6 Fire detection, warning, control and intercom systems - System design, installation and commissioning - Smoke alarms
AS/NZS 3000 Electrical installations (known as the Australian/New Zealand Wiring Rules)
AS/NZS 3008.1.2 Electrical installations - Selection of cables - Cables for alternating voltages up to and including 0.6/1 kV - Typical New Zealand installation conditions
AS/NZS 3100 Approval and test specification-general requirements for electrical equipment
AS/NZS 3112 Approval and test specification - Plugs and socket-outlets
AS/NZS 3113 Approval and test specification - Ceiling roses
AS/NZS 3190 Approval and test specification - Residual current devices (current-operated earth-leakage devices)
AS/NZS 3350 Safety of household and similar electrical appliances - General requirements
AS/NZS 3439.3 Low-voltage switchgear and control gear assemblies - Particular requirements for low-voltage switchgear and control gear assemblies intended to be installed in places where unskilled persons have access for their use - Distribution boards
AS 3786 Smoke alarms
NZS 4301.1 Intruder alarm systems - systems installed in clients premises
AS/NZS 5000.2 Electric cables - Polymeric insulated - for working voltages up to and including 450/750v
NZECP NZ Electrical Codes of Practice
NZECP 54 NZ Electrical Codes of Practice for the installation of recessed luminaires and auxiliary equipment (available at www.energysafety.govt.nz)
IEC 61643 Components for low voltage surge protection devices

The electrician shall supply and install all items necessary for the electrical wiring system complete. The whole of the work shall be carried out in accordance with the Electricity regulations 1993 and the New Zealand electrical code of practice for electrical wiring work in domestic premises NZEC 51: 1993 and the electrical contractor is to obtain all permits and pay all fees required from the supply authority, and arrange for all inspections required.

10.1 MAIN SUPPLY

The electrician is to arrange for the mains building, check conditions before tendering.

10.2 METERBOARD

Provide and set up where directed a meter board and case with necessary equipment therein neatly labeled

10.3 WIRING

All cables shall be 250 volts complying with the BSS 7 rubber insulated and PVC cable and flexible cords for the electric power and lighting. All plastic material

for switches, flush plates, light sockets and socket outlets shall be white or as directed by the owners. All wiring is to be concealed in the wall framing or in plastic conduits.

10.4 FITTINGS

Provide all socket outlets and wall switches in positions as shown on the drawings, the fittings shall PDL Clipsal 2000 series in white, socket outlets to be 201SVs with extra switch. The electrician is not to start placing any socket outlets, wall switches or lights without consulting with the owners the exact location of each fitting. Allow to wire and install for the following fittings:

- Electric hot water cylinders
- Wall oven / hob
- Range hood
- Dishwasher
- Waste disposer
- All light fittings
- Heated towel rails
- Ceiling fans

11.0 PAINTER

The following NZ standards and documents to be referred to in this section are:

AS/NZS 2311 Guide to the painting of buildings
AS/NZS 2312 Guide to the protection of structural steel against exterior atmospheric corrosion by the use of protective coatings
OSH Guidelines for the provision of facilities and general safety in the construction industry
OSH Guidelines for the management of lead-based paint
MPNZASpecification manual
MPNZAPainters hazard handbook
Health and Safety in Employment Act 1992

11.1 MATERIALS

The materials shall be premium quality delivered in unopened complete containers with makers name bearing brand name. Materials shall be applied strictly in accordance manufacturer's specifications.

11.2 WORKMANSHIP

All work to be of the highest standard performed by skilled tradesmen only and finished to the satisfaction of the owner and designer. No paint containing oil to be applied to damp surfaces and no external painting is to be done during frost or unsuitable weather. Between each coat rough patches etc. shall be sanded down to obtain a smooth surface. Any work damaged by dust or other cause is to be rubbed down and recoated. Each coat of paint is to be finished with one coat over all surfaces and allowed to dry thoroughly before a further coat is applied.

11.3 TINTS

The designer will supply the painting contractor with a colour schedule and colours are to be strictly adhered to. Any variations made from the instructions given are to be rectified at the expense of the painting contractor.

11.4 PROTECTION OF WORK

The painting contractor is to take adequate precautions during and after painting both inside and out to protect his work from dust, dirt or any other disfigurement whatsoever. He shall provide and carry out all necessary protection to the floor and walls.

11.5 HARDWARE

The locks and fasteners must be removed while painting work is in progress and prefixed on completion.

11.6 PAINTING SCHEDULE

11.6:1 CEILINGS

1st coat	Sealer/ Undercoat
2nd coat	Acrylic latex matt finish
3rd coat	Acrylic latex matt finish

11.6:2 WALLS

1st coat	Sealer/ Undercoat
2nd coat	Acrylic satin finish
3rd coat	Acrylic satin finish

10.6.3 SOFFIT

PRE FINISHED

11.6:4 SKIRTINGS / ARCHITRAVES / DOORS & JAMBS

1st coat	Interior wood primer
2nd coat	Alkyd undercoat
3rd coat	Alkyd satin finish enamel

12.0 TILING

The following NZ standards and documents to be referred to in this section are:

AS 2358	Adhesives - For fixing ceramic tiles
AS 3740	Waterproofing of wet areas within residential buildings
AS 3958.1	Ceramic tiles, 3958 - Guide to the installation of ceramic tiles
BS EN 14411	Ceramic tiles. Definitions, classification, characteristics and marking
BRANZ Good practice guide	Tiling

1. GENERAL

This section relates to the supply and setting of ceramic tiles to walls and floors, over:

- concrete substrates
- masonry substrates
- lined timber substrates

1.1 QUALIFICATIONS

Carry out tiling work using competent tilers, experienced with the materials and techniques specified.

1.2 ADHESIVES COMPATIBILITY

Adhesives selected for use on proprietary substrates or waterproof membranes to have documented compatibility approval from the respective manufacturers.

1.3 SAMPLES

Submit samples of the tiles specified, sufficient to show the pattern and the range of colour finish.

1.4 WARRANTY

Warrant this work under normal environmental and use conditions against failure of materials and execution

Warranty period: 2 years

Refer to the general section for the required form of WARRANTY AGREEMENT and details of when completed warranty must be submitted.

2. PRODUCTS

2.1 TILES

To BS EN 14411

2.2 LIQUID WATERPROOFING MEMBRANE

To AS / NZS 4858 and BRANZ Certificate 472 Ardex WPM 001 wet area waterproof membranes

2.3 CEMENT BASED SCREED

Mix of 3:1 Portland cement, wash-mix sand, gauged with liquid polymer additive to the tile manufacturer's requirements.

2.4 TILE ADHESIVE

To AS 2358.

2.5 GROUT

Cement based, compressible and to suit the particular location and use.

2.6 MOVEMENT CONTROL JOINT SEALANT

To BRANZ Good practice guide: Tiling, section 5.0

2.7 HANDLING AND STORAGE

Take delivery of packets of tiles undamaged and dry. Handle tiles with care to avoid chipping, soiling and damage. Store on hard level standings in non-traffic, non work areas that are enclosed, clean and dry.

2.8 CHECK TILES

Check tiles to ensure that they are as specified, from the same batch, of a consistent colour and pattern and sufficient to complete the work. Reject tiles that vary widely in colour or pattern. Reject tiles that are damaged.

2.9 CONFIRM LAYOUT

Before commencing work confirm the proposed layout of tiles and expansion joints and other visual considerations of the finished work.

2.10 SETTING OUT

Before commencing the setting out confirm the number and location of cut tiles. Minimise in number with no cut tiles less than half size and only at the perimeter of the work.

2.11 SUBSTRATE

Ensure that all services and accessories are in place and located to suit the tile layout, with the substrate required for tiling work. Commencement of the work means the substrate and environment are accepted by the tile layer as satisfactory.

2.12 TEMPERATURE

Do not carry out tiling where the ambient temperature is below 5°C, or onto a substrate with a temperature higher than 40°C.

2.13 TILING GENERALLY

Prepare surfaces and carry out the tiling work in accordance with AS 3958, part 1, as modified by BRANZ Good practice guide: Tiling.

2.14 CONCRETE FLOORS PREPARATION

Remove from the surfaces all contaminants such as paints, oils, release and curing compounds. Remove all projections, unevenness and loose material to leave a clean, dust and dirt-free surface.

Remove all existing finishes down to the concrete. If the exposed concrete finish is not suitable then scabble the surface to expose the coarse aggregate.

2.15 APPLYING LIQUID WATERPROOFING MEMBRANE

Apply the selected liquid waterproof membrane system to the membrane manufacturer's requirements and in accordance with AS 3740 and to BRANZ Good tiling practice, 7.0 Waterproofing interior wet areas.

2.16 INSTALL WATERPROOFING MEMBRANE

Install waterproofing membrane between the tile adhesive and the substrate. Reinforce all junctions of the waterproofing membrane to BRANZ Good tiling practice; 7.0 Waterproofing interior wet areas. Unless otherwise specified or shown on the drawings, install Ardex WPM 001 wet area waterproof membranes as follows: -

Bath

To 150 mm minimum around the sides and along walls horizontally 150 mm minimum.

Splashback to a vanity

To 300 mm minimum up wall behind the vanity.

To the floor level at least twice the width of the vanity and 500 mm min beyond it at each end.

Tiled shower walls and floor, walls to 1800 mm high

2.17 LAYING CEMENT SCREED

Apply a proprietary cement slurry bond coat over the whole of the floor to the tile manufacturer's requirements. Mix and place a 40 mm thick mortar bed over the bond coat and firmly tamp, screed and compact to the required level. Form screeds with a deviation from plane of not more than 5 mm over 3 metres.

In waterproofed areas where the cement screed has been laid over the waterproofing membrane, prepare the screed surface by applying a further waterproof coating before laying tiles.

2.18 TILE FIXING GENERALLY

Apply adhesive, prepare and fix tiles by the method required by the adhesive manufacturer and tap them firmly into place.

2.19 TILE FIXING, CONCRETE, CEMENT-BASED ADHESIVE, THIN BED

Apply and float thin bed cement-based adhesive to a minimum 3 mm bed thickness to the tile manufacturer's requirements. Rib surface with a notched trowel, press tiles and beat it into place with 3 mm joints, and to obtain required coverage of adhesive on the back of each tile.

2.20 GROUTING

Remove spacers. Prepare joints, mix and apply proprietary grout and finish off to the grout manufacturer's requirements. Grout to finish uniform in colour, smooth and without voids, pinholes or low spots.

2.21 MOVEMENT CONTROL JOINTS

Minimum width of 6 mm, carried through tile and bedding. Where substantial movement is anticipated, carry through the rigid sheet to the structure. Install joints over expansion joints in structure, at junctions between different backgrounds, where abutting other materials, at storey heights horizontally and 3.0 metres vertically, at internal corners and at junctions with floors and columns.

Ensure joints are clean, formed, filled, and the sealant inserted to the sealant manufacturer's requirements.

2.22 CLEAN

Upon completion of setting and grouting, thoroughly sponge and wash the tiles to leave clean and free of blemish. Finally polish tiles with a clean dry cloth.