# Approved Building Consent Documents

## Please Note: A copy of the stamped approved documents must be available on site for all inspections.

| INSPECTION BOOKING TIMEFRAMES<br>Telephone 03 347 2839 | | |
|---|---|---|
| **Call received** | ***Before 3pm inspection will be done*** | ***After 3pm inspection will be done*** |
| **Monday** | Wednesday | Thursday |
| **Tuesday** | Thursday | Friday |
| **Wednesday** | Friday | Monday |
| **Thursday** | Monday | Tuesday |
| **Friday** | Tuesday | Wednesday |

**CONTENTS**




firsthomes

**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545




NOTES:
Jeremy Moloney BP108395 - Design 2
Logan Roberts BP 108355 - Design 2

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

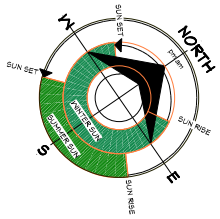
DRAWING TITLE:
CONTENTS PAGE

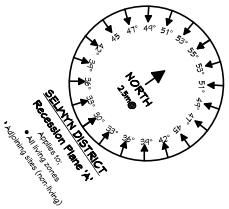
| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | N.T.S | SHEET No. | 1 OF 32 |

ALL FLOOR / PLATFORM LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCING FOUNDATIONS
ANY DISCREPANCIES TO BE REPORTED TO THE DESIGNER IMMEDIATELY

# Lot 31
# Dp 488852
# Total Area = 700sqM

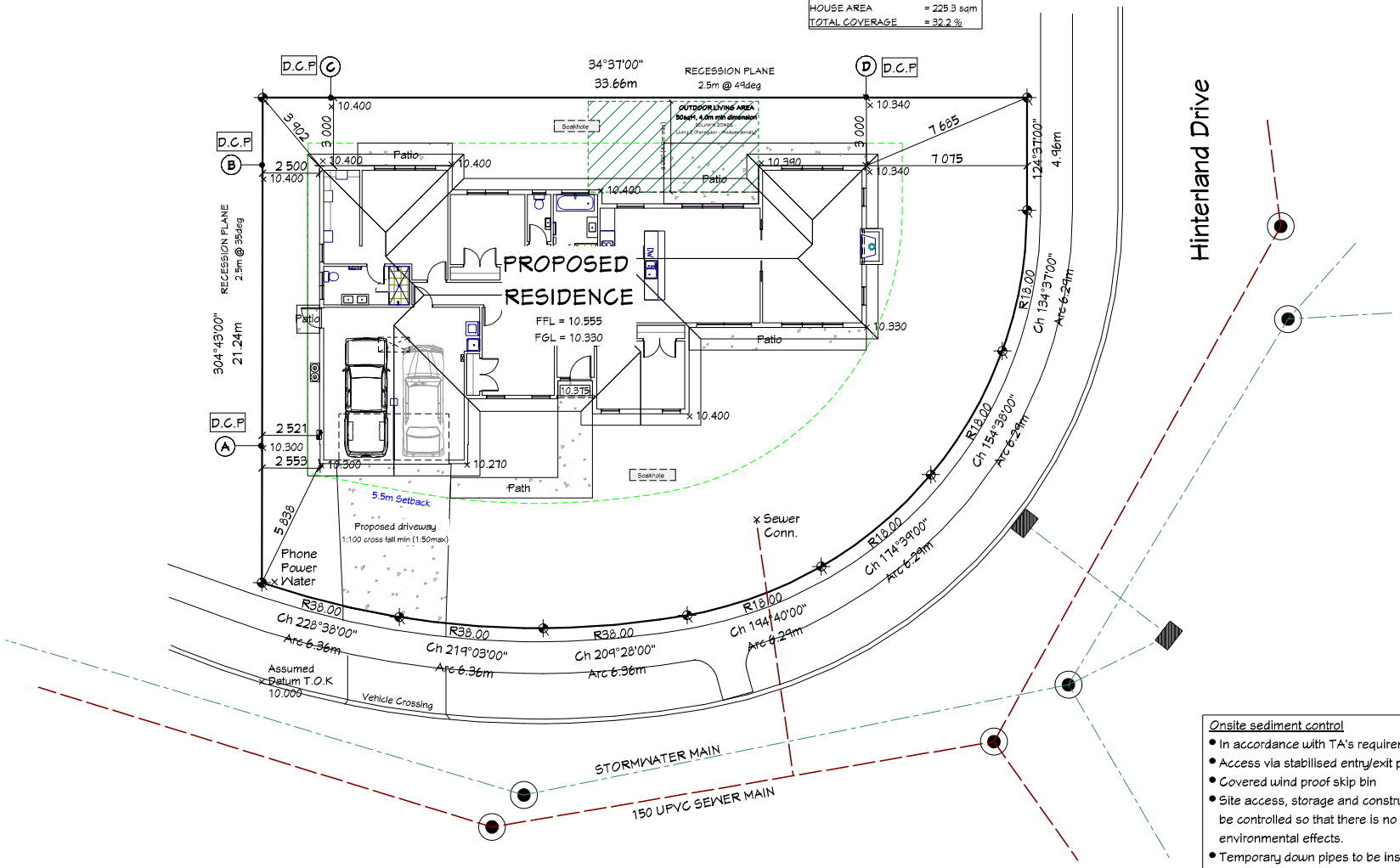
- All dimensions shown are to the foundation unless noted otherwise.
- D.C.P indicates Daylight Control Point of recession plane.
- Paved exterior surfaces, refer to the foundation plan
- The finished ground level adjoining the concrete slab-on-ground shall be formed so as to carry water away from the building, at a slope of not less than 1:25, for a distance of at least 1.0m from the building as per NZS.3604.2011.
- The flow direction of surface water follows the slope of the natural ground.




Planning Approved

| SITE COVERAGE | |
|---|---|
| SITE AREA | = 700 sqm |
| HOUSE AREA | = 225.3 sqm |
| TOTAL COVERAGE | = 32.2 % |




Onsite sediment control
- In accordance with TA's requirements.
- Access via stabilised entry/exit pad.
- Covered wind proof skip bin
- Site access, storage and construction should be controlled so that there is no adverse environmental effects.
- Temporary down pipes to be installed to control roof water run-off

Patio sizes to be confirmed onsite with clients

NOTE: Information shown on the plan is indicative only and it is the builder's responsibility to check all levels, boundaries and measurements on site prior to construction and be solely responsible thereafter. When accuracy is critical, on site location and levels should be carried out. 'The designer' is not liable for errors once construction has begun. Report any discrepancies to 'The designer'.



firsthomes
Christchurch
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
- All boundary bearings, lengths & peg locations are to be confirmed on site prior to commencing foundations. The house position is to be confirmed as correct and any discrepancies are to be reported to 'The Designer' immediately.
- Finished floor level in relation to height to boundary recession plane requirements are the responsibility of the floor layer, any discrepancies between the plan and physical site levels are the responsibility of the floor layer. 'The Designer' takes no responsibility for any error that may occur.
- Building platform to have a to have a soil bearing capacity of no less than100kPa
- Sewer & stormwater connections are to be confirmed on site prior to commencement of foundations.
- Drain layer to confirm downpipe locations prior to commencement of construction.

Public protection from onsite hazards
- Site safety fencing (when required by T.A), 2.0m(min) to prevent site hazards from harming traffic or passers-by, to restrict unauthorized entry by children - ensure fencing is difficult to be climbed, gates and doors do not project beyond site when open, and encloses the whole site.
- All building sites to have O.S.H compliant warning signs erected.
- Any hazardous equipment or materials will be stored onsite only if secured, by portable building lock up or in the house being built (after lock-up stage)
- Sites to be assessed on a individual basis by construction managers for compliance with NZBC clause F5 and if specific hazards exist then a work-site barrier must be erected.

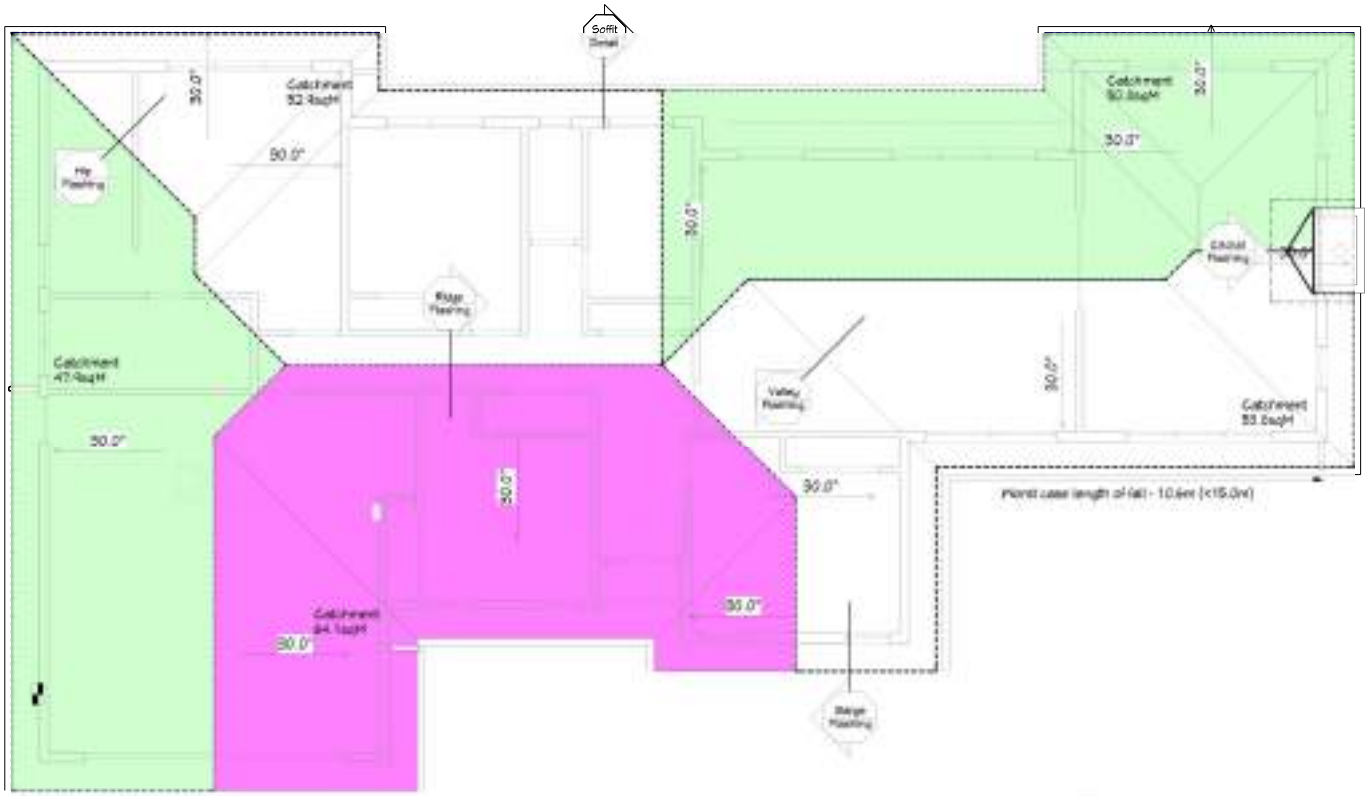
JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

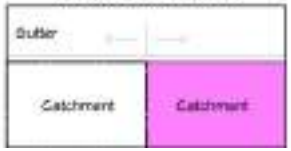
| SITE DATA: for zones up to and including | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
SITE PLAN

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:200 | SHEET No. | 2 OF 32 |




## GUTTER FALL REQUIREMENTS




Provide 1:500 fall away from catchment intersections to the downpipes


GUTTER BRACKETS maximum - 800mm c/c

CLASSIC 125 GUTTER
Material : 0.55mm Colourcoat Steel
Cross Sectional Area : 5208mm² (with free 10mm board)
Flow Capacity : 71 litres/min.
Minimum Recommended Fall : 1:500
DOWNPIPE *(non circular can be used)*
80mm dia, either P.V.C. or Colorsteel

| Rainfall Intensity, I (mm/hr) | 85 | 100 | 115 | 140 |
|---|---|---|---|---|
| Area to downpipe ellipse (m²) | 35 | 30 | 26 | 21 |
| Area to downpipe Total (m²) | 70 | 70 | 70 | 70 |

Downpipe & Gutter Areas Calculated with Roof pitch range of 25-34 deg
Refer also to Rainaway Systems Specification

## GUTTER AND DOWNPIPE INFO

firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
Where the drainage system is connected to a network utility stormwater connection, the connection shall be made in a manner that avoids damage to the stormwater and is to the approval of the network utility operator.

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

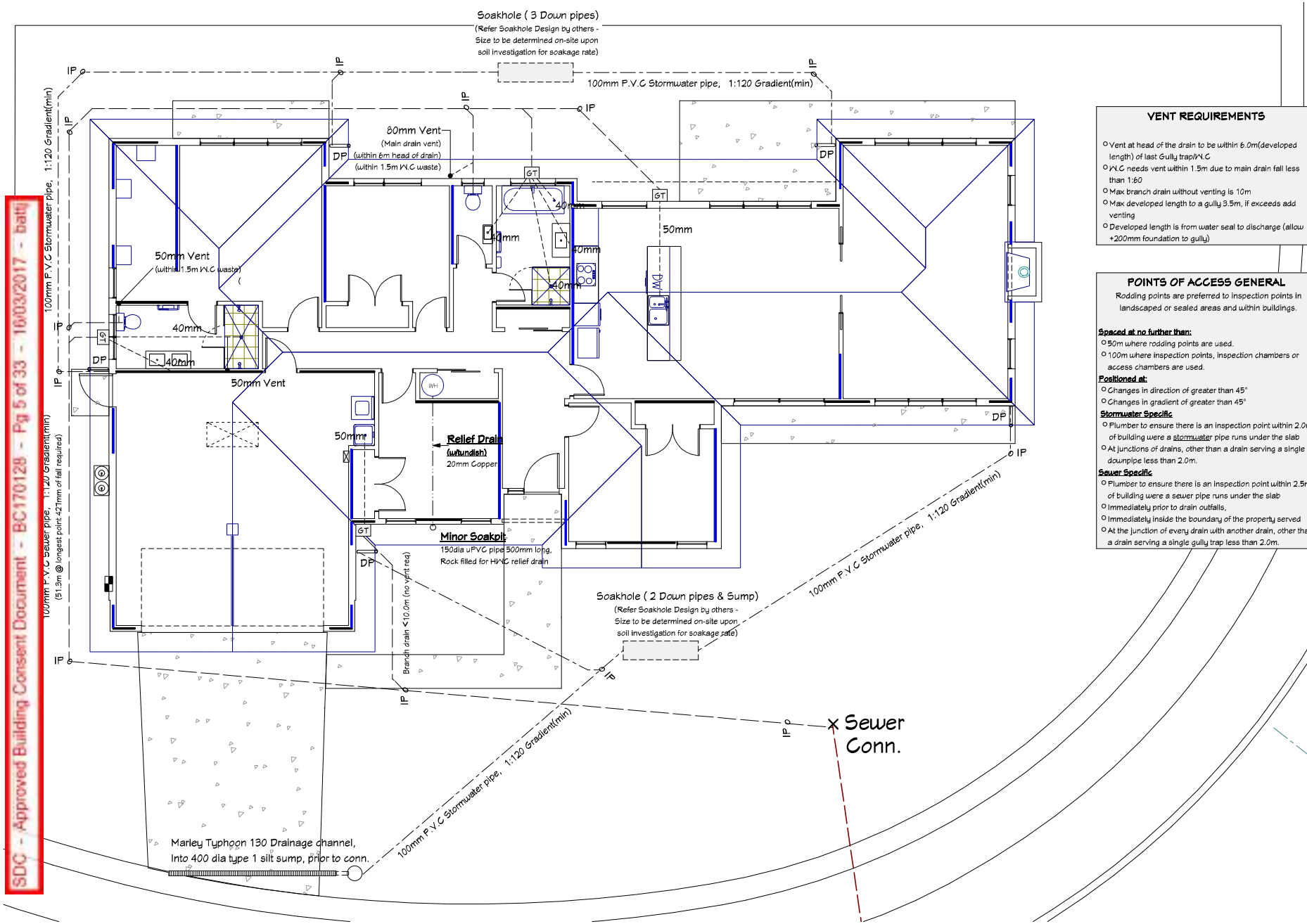
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:

| | |
|---|---|
| JOB No. 42-2016 | DESIGNED: 001 |
| DATE: 20/01/2017 | DRAWN: 004 |
| SCALE: | SHEET No. 3 OF 32 |




SDC - Approved Building Consent Document - BC170128 - Pg 5 of 33 - 16/03/2017 - batty

## KEY

- 100mm PVC STORMWATER DRAIN
- 100mm PVC SOIL DRAIN
- WASTE PIPES
- oTV TERMINAL VENT
- oIP INSPECTION POINT
- oRE RODDING EYE
- GT GULLY TRAP
- oDP DOWNPIPES

### VENT REQUIREMENTS

- Vent at head of the drain to be within 6.0m(developed length) of last Gully trap/W.C
- W.C needs vent within 1.5m due to main drain fall less than 1:60
- Max branch drain without venting is 10m
- Max developed length to a gully 3.5m, if exceeds add venting
- Developed length is from water seal to discharge (allow +200mm foundation to gully)

### POINTS OF ACCESS GENERAL

Rodding points are preferred to inspection points in landscaped or sealed areas and within buildings.

**Spaced at no further than:**
- 50m where rodding points are used.
- 100m where inspection points, inspection chambers or access chambers are used.

**Positioned at:**
- Changes in direction of greater than 45°
- Changes in gradient of greater than 45°

**Stormwater Specific**
- Plumber to ensure there is an inspection point within 2.0m of building were a stormwater pipe runs under the slab
- At junctions of drains, other than a drain serving a single downpipe less than 2.0m.

**Sewer Specific**
- Plumber to ensure there is an inspection point within 2.5m of building were a sewer pipe runs under the slab
- immediately prior to drain outfalls,
- Immediately inside the boundary of the property served
- At the junction of every drain with another drain, other than a drain serving a single gully trap less than 2.0m.

Table C2. Discharge units and fixture discharge pipe sizes

| Fixture Type | Discharge Units | Minimum Discharge pipe size (mm) | Gradient |
|---|---|---|---|
| Basin | 1 | 40 | 1:40 |
| Bath | 4 | 40 | 1:40 |
| Shower | 2 | 40 | 1:40 |
| Laundry | 5 | 50 | 1:40 |
| Kitchen sink | 6 | 50 | 1:40 |
| WC | 4 | 100 | 1:60 |

NZBC G13 AS/1.


firsthomes
Christchurch
chchsales@firsthomes.co.nz
ph. 021 575545




### NOTES:

- All boundary bearings, lengths & peg locations are to be confirmed on site prior to commencing foundations. The house position is to be confirmed as correct and any discrepancies are to be reported to 'The Designer' immediately.
- Sewer & stormwater connections are to be confirmed on site prior to commencement of foundations.
- The sewer and stormwater disposal design is the responsibility of the plumber. "The Designer" takes no responsibility for any errors that may occur. Compliance with all applicable codes are required at all times.
- Drain layer to confirm downpipe locations prior to commencement of construction.
- Holes in bracing elements may require remedial work
- It is recommended all vanity wastes put into walls to allow for the posibility of wall hung units

Onsite sediment control
- Temporary down pipes to be installed to control roof water run-off

Sink volumes must comply with NZBC:
- Laundry tub - to have a capacity to spill-level of no less than 35 litres, and be capable of fully containing a solid cylinder of 400 mm diameter and 200 mm depth
- Kitchen sink - The sink shall be capable of fully containing a solid cylinder of 300 mm diameter and 125 mm depth.

**REFER TO DRAINAGE DETAILS ALSO**
(Located on the following sheet)

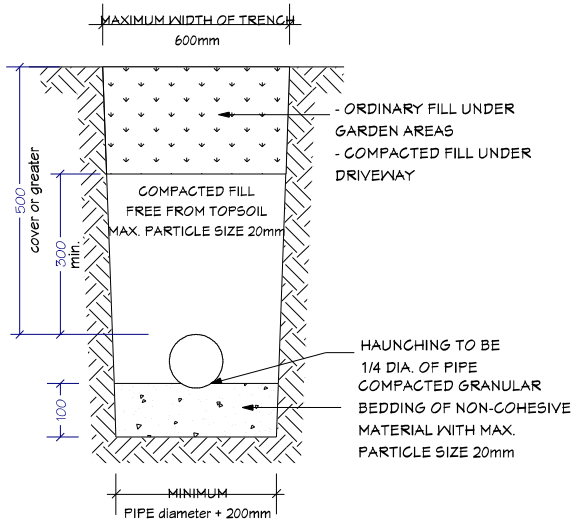
JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

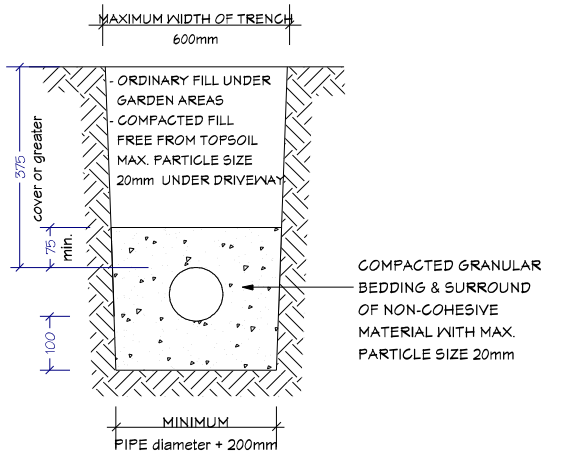
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

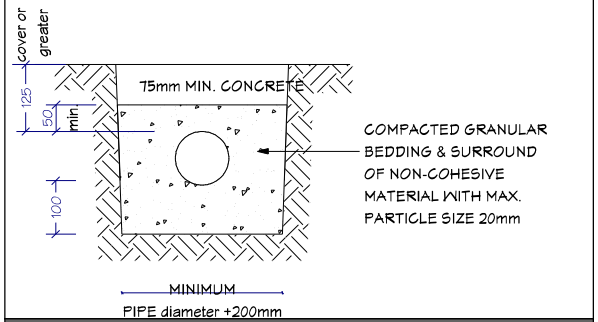
| SITE DATA: for zones up to and including | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
DRAWING PLAN

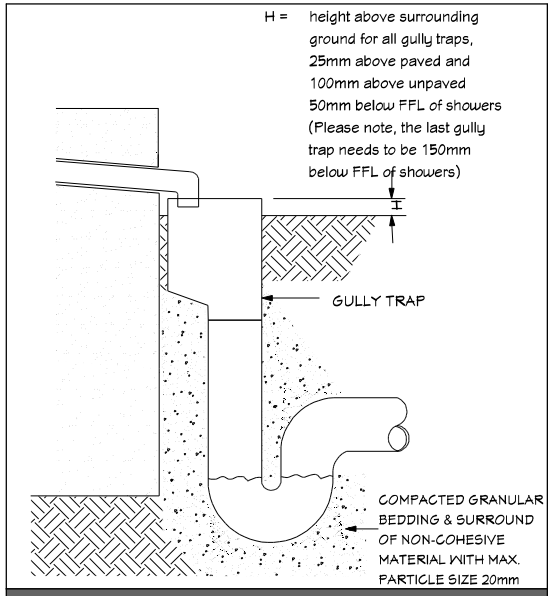
| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:100 | SHEET No. | 4 OF 32 |



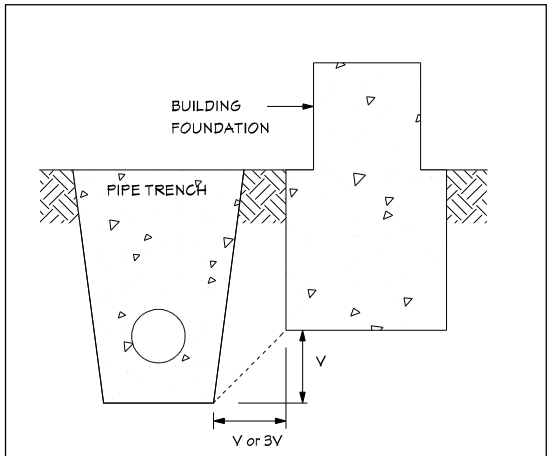



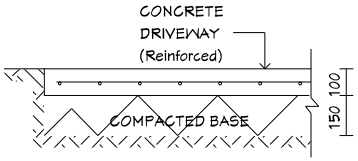

## PIPE BEDDING AND BACKFILLING



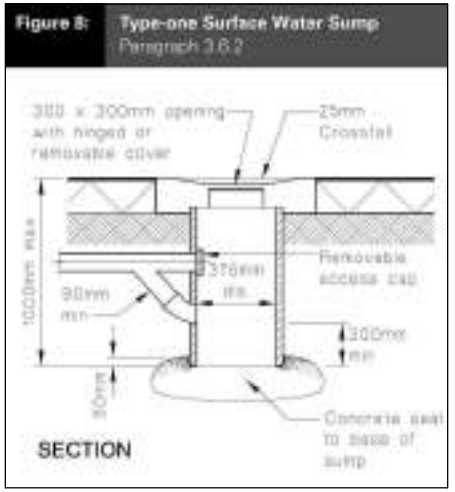

## STANDARD GULLY DETAIL




## TRENCH NEXT TO FOUNDATION




## DRIVEWAY EDGE DETAIL




firsthomes
Christchurch
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
- All details are in accordance with E1 AS1

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

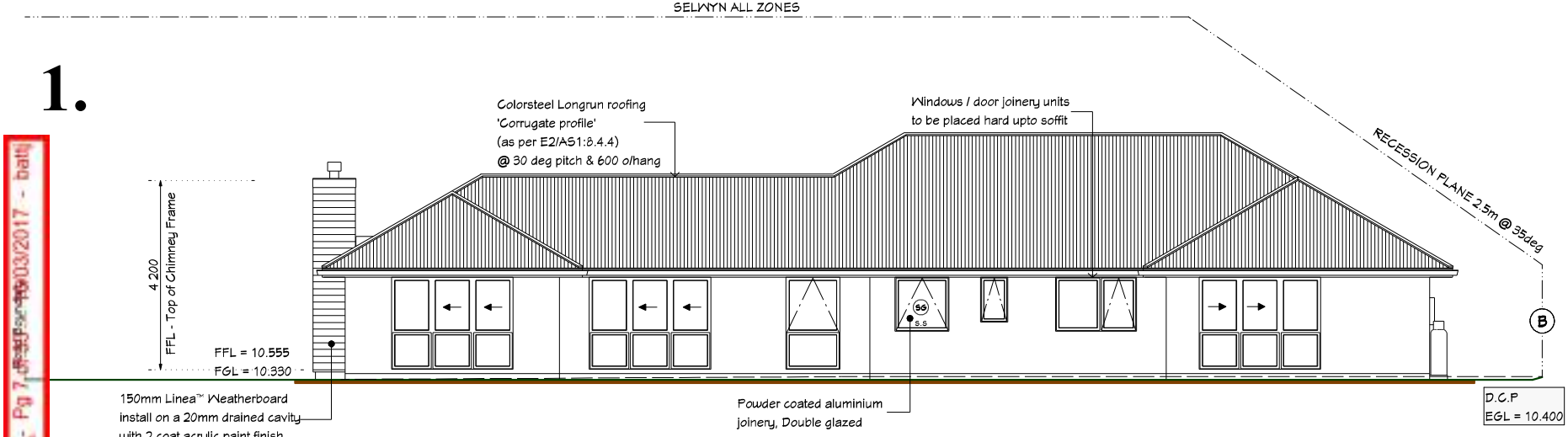
| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
DRAINAGE DETAILS

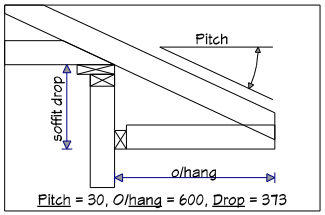
| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | N.T.S | SHEET No. | 5 OF 32 |

ALL FLOOR / PLATFORM LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCING FOUNDATIONS
**ANY DISCREPANCIES TO BE REPORTED TO THE DESIGNER IMMEDIATELY**

# 1.




## SOFFIT DROP

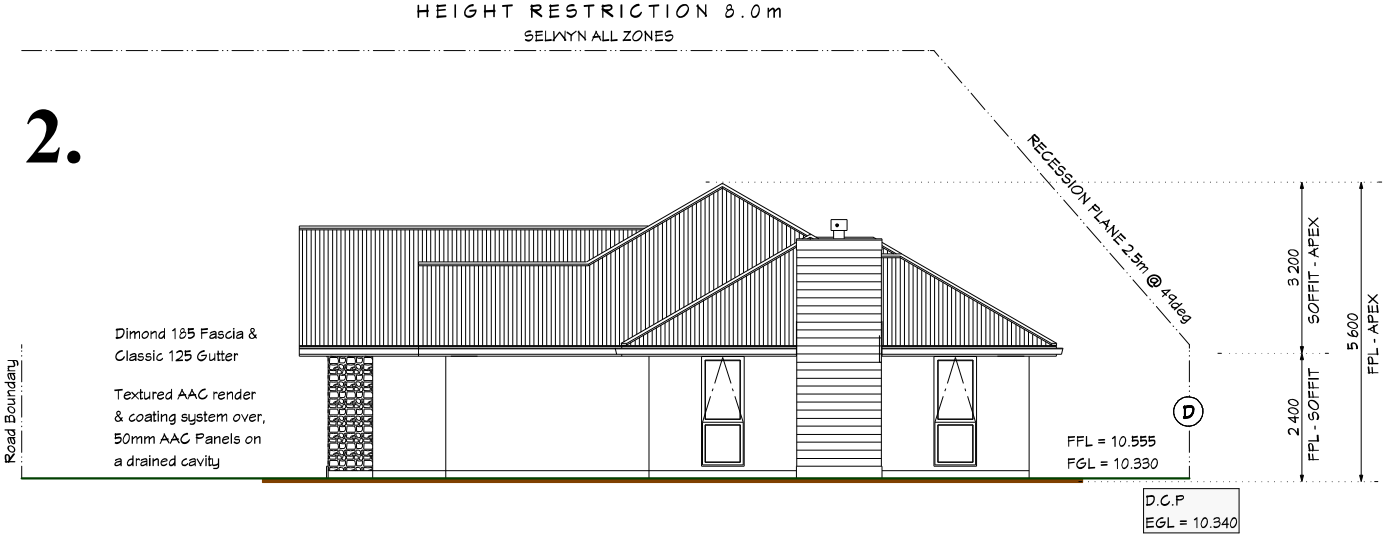



windows up to soffit based on the above assumptions with 185mm metal fascia

Table 2 Building envelope risk matrix
Paragraph 3.1.2. Figure 1

| All Walls | Risk Severity | | | | |
|---|---|---|---|---|---|
| Risk factor | Low | Med | High | Very High | Subtotals for each risk factor |
| Wind zone (per NZS 3604) | 0 | 0 | 1 | 2 | 1 |
| Number of storeys | 0 | 1 | 2 | 4 | 0 |
| Roof/wall intersection design | 0 | 1 | 3 | 5 | 5 |
| Eaves width | 0 | 1 | 2 | 5 | 5 |
| Envelope complexity | 0 | 1 | 3 | 6 | 3 |
| Deck Design | 0 | 2 | 4 | 6 | 0 |
| | | | | Total Risk Score | = 14 |

# 2.




NOTE: Windows & doors are upto



firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
- All groundlines are indicative only and must be confirmed on site prior to commencement of any site works
- Finished floor levels in relation to height to boundary recession plane requirements are the responsibility of the floor layer. Any discrepancies between the plan and the actual site levels are the responsibility of the floor layer and must be reported to "The Designer" immediately
- All claddings fixed as per manufacturers specifications

- EGL = Existing Ground Level
- FFL = Finished Floor Level
- FGL = Finished Ground Level
- GL = Ground Level
- FPL = Finished Platform Level

Safety Glazing
- All glazing is to be in accordance with the NZ Building Code Handbook and NZS.4223, Parts 1, 2, & 3 Code of Practice for Glazing in Buildings.
- All glazing panels to bathrooms and toilets to have safety glazing to the interior panel only
- All gazing to be confirmed by the manufacturer prior to construction

SG Indicates safety glass

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

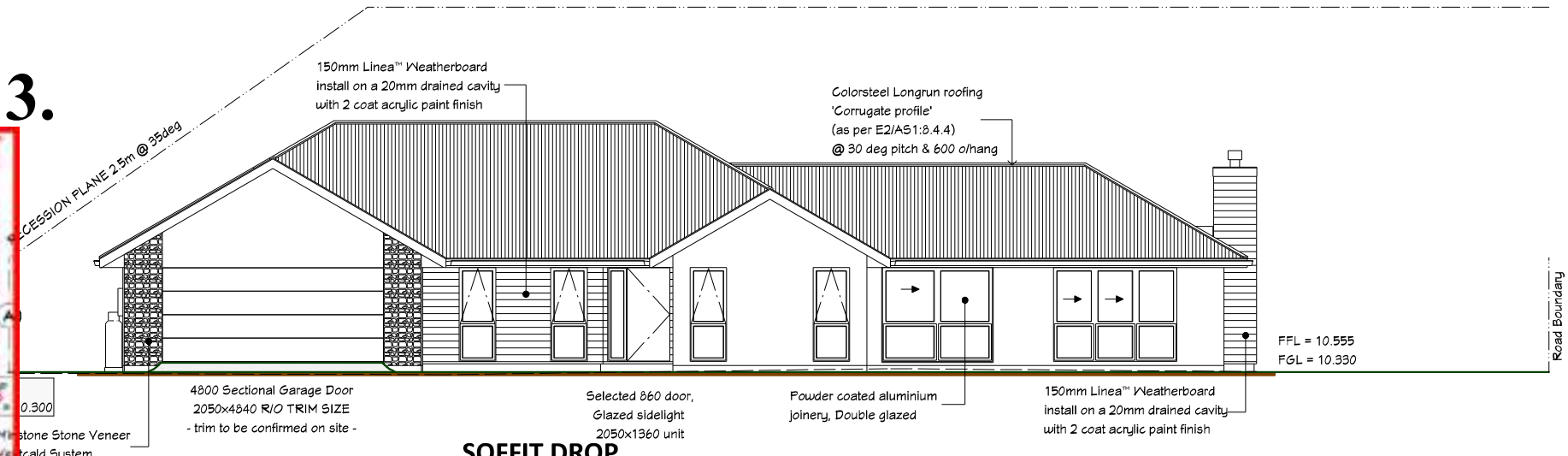
DRAWING TITLE:
ELEVATIONS 1 & 2

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:100 | SHEET No. | 6 OF 32 |

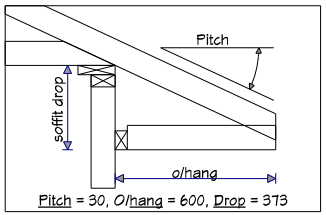
ALL FLOOR / PLATFORM LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCING FOUNDATIONS
ANY DISCREPANCIES TO BE REPORTED TO THE DESIGNER IMMEDIATELY

HEIGHT RESTRICTION 8.0m
SELWYN ALL ZONES

## 3.




SOFFIT DROP




Pitch = 30, O/hang = 600, Drop = 373

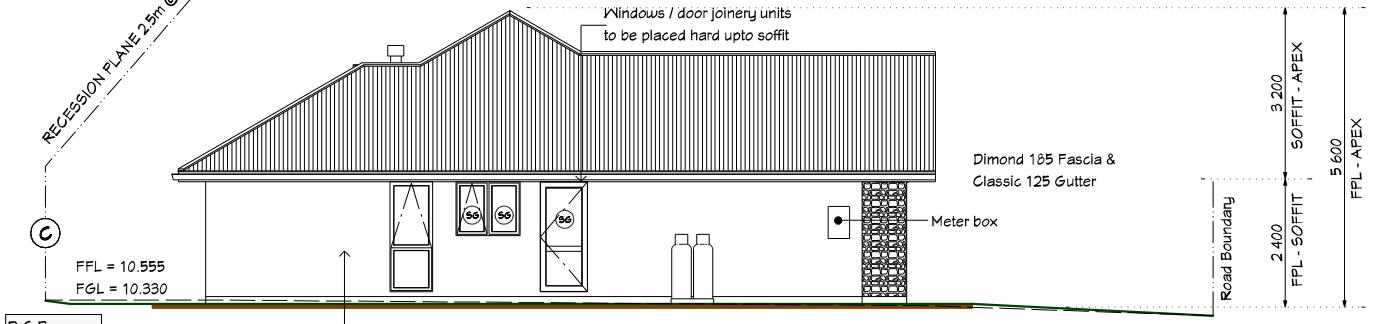
windows up to soffit based on the above assumptions with 185mm metal fascia

Table 2 Building envelope risk matrix
Paragraph 3.1.2. Figure 1

| All Walls | Risk Severity | | | | |
|---|---|---|---|---|---|
| Risk factor | Low | Med | High | Very High | Subtotals for each risk factor |
| Wind zone (per NZS 3604) | 0 | 0 | 1 | 2 | 1 |
| Number of storeys | 0 | 1 | 2 | 4 | 0 |
| Roof/wall intersection design | 0 | 1 | 3 | 5 | 5 |
| Eaves width | 0 | 1 | 2 | 5 | 5 |
| Envelope complexity | 0 | 1 | 3 | 6 | 3 |
| Deck Design | 0 | 2 | 4 | 6 | 0 |
| | | | | Total Risk Score | = 14 |

HEIGHT RESTRICTION 8.0m
SELWYN ALL ZONES

## 4.




NOTE: Windows & doors are upto soffit,



firsthomes
Christchurch
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
- All groundlines are indicative only and must be confirmed on site prior to commencement of any site works
- Finished floor levels in relation to height to boundary recession plane requirements are the responsibility of the floor layer. Any discrepancies between the plan and the actual site levels are the responsibility of the floor layer and must be reported to "The Designer" immediately
- All claddings fixed as per manufacturers specifications

- EGL = Existing Ground Level
- FFL = Finished Floor Level
- FGL = Finished Ground Level
- GL = Ground Level
- FPL = Finished Platform Level

Safety Glazing
- All glazing is to be in accordance with the NZ Building Code Handbook and NZS 4223, Parts 1, 2, & 3 Code of Practice for Glazing in Buildings.
- All glazing panels to bathrooms and toilets to have safety glazing to the interior panel only
- All gazing to be confirmed by the manufacturer prior to construction

SG Indicates safety glass

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

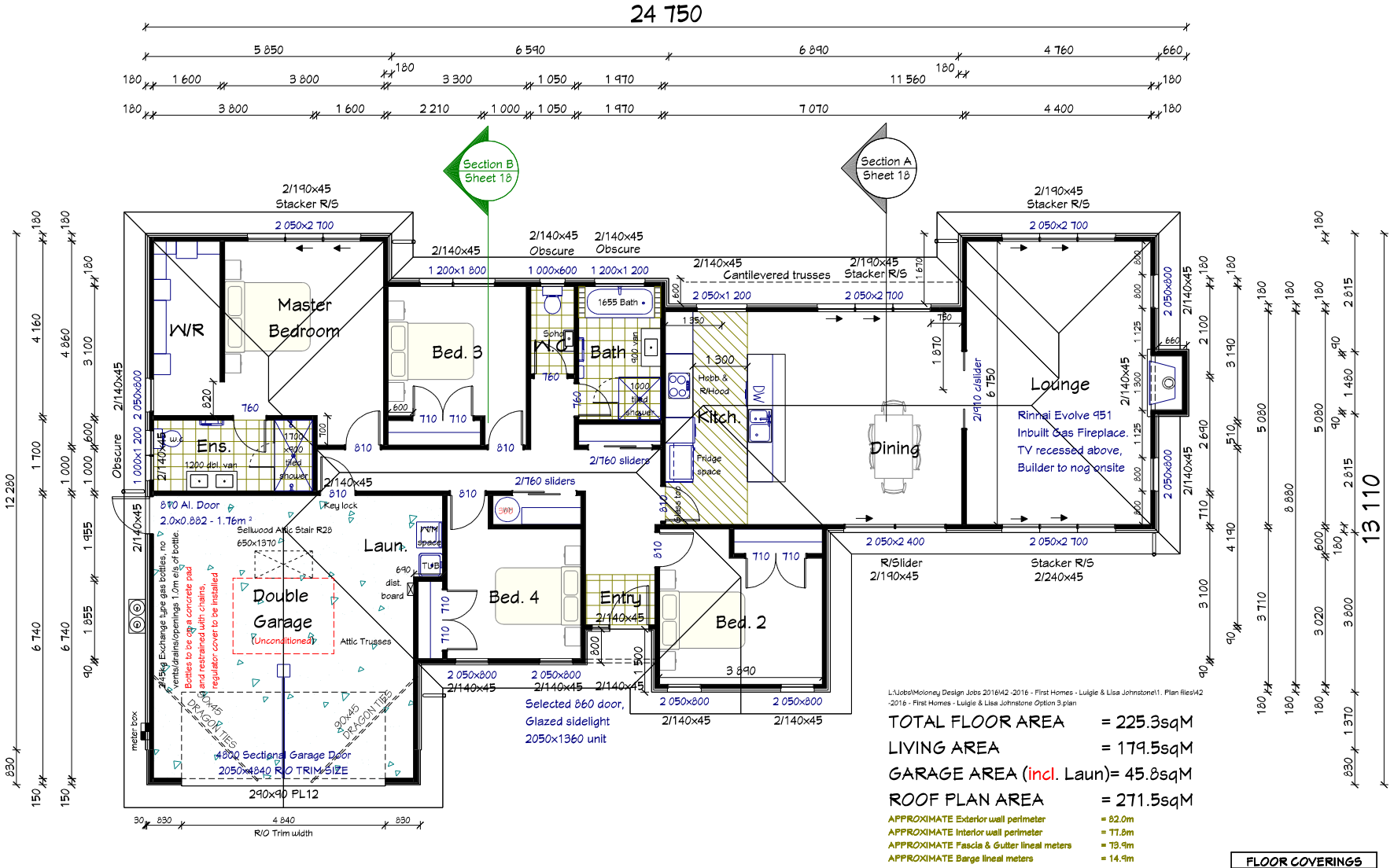
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
ELEVATIONS 3 & 4

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:100 | SHEET No. | 7 OF 32 |




FLOOR COVERINGS

= Vinyl/Laminate
= Tiles
= Carpet
= Concrete (Steel float finish)

Elevation Guide



firsthomes
Christchurch
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

90x45 H1.2, SG8 New frames

- Dimensions on this plan are to be checked by all trades prior to commencement of any works 'the designer' takes no responsibility for any errors in the dimensions shown.
- All timber frame above subfloor to have a minimum treatment of H1.2
- All lintels and beams are calculated using appropriate NZS:3604 or Mitek lintel charts. Some may require the design by Design IT software, these are noted and design provided. To be confirmed by detailers at manufacturing stage.
- R/hood & Extractors vented to soffit
- Meter box width 500mm max (brick veneer)
- Wet wall sheet linings finished with vinyl coated wall paper, semi-gloss or gloss coating and comply with NZ Building code clause E3-3.1.2
- Wet area floor finishes to be impervious and comply with NZ Building code clauses E3-3.1.1 & D1 AS1/ VM1
- Basins/Vanities and benches are to be sealed to the adjacent walls to prevent fungal growth.
- Kitchen bench finish options; Stainless steel or a decorative high pressure laminate
- Internal and external walking surfaces to comply with NZBC D1/AS1 2.1.1 - 2.1.3, and Table 2
- Refer to elevations for safety glazing

Natural lighting & Ventilation

- Natural lighting is provided via glazing to 10% of floor areas for individual rooms. Ref:G7/AS1, Clause 1.0
- Natural ventilation is provided via exterior openings of no less than 5% of floor area for individual rooms. Ref:G4/AS1, Clause 1.2 Natural ventilation

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

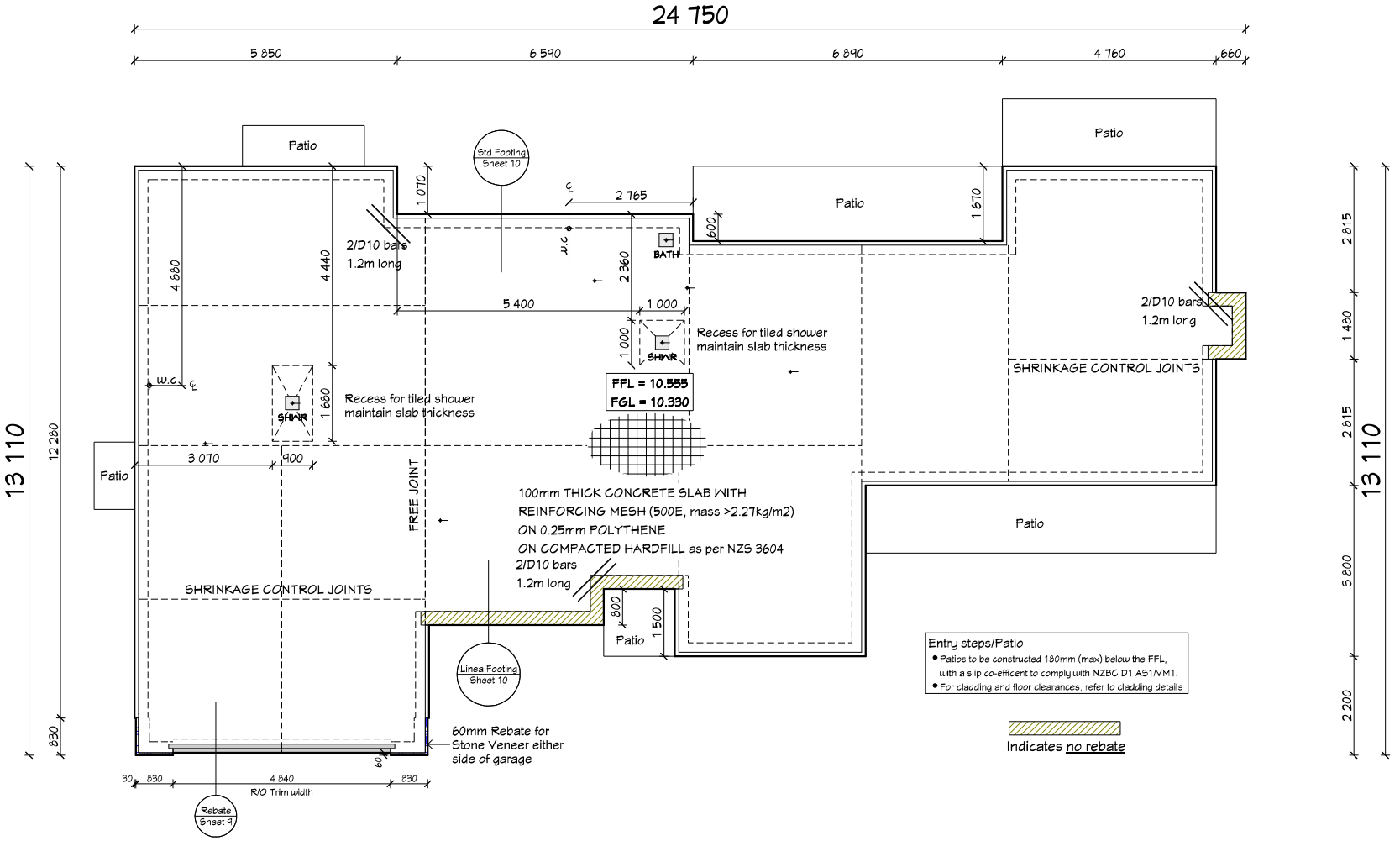
| SITE DATA: for zones up to and including | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
FLOOR PLAN

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:100 | SHEET No. | 8 OF 32 |

NOTE: The dimensions on this foundation plan / floor framing plan are to be checked by all trades prior to commencement of any works as they are an indication only and have been shown to help verify each trades own calculation ... now the floor plan 'the designer' takes no responsibility for any errors in the dimensions shown.

Do not start this foundation without the Site plan, Elevations, Floor plan and bracing plan. If pipes or services are placed within a bracing element, remedial work will be required. If interference is discovered then 'The designer' must be notified prior to commencement so that an alternative solution can be found.




**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

- The dimensions on this foundation plan / floor framing plan are to be checked by all trades prior to commencement of any works as they are an indication only and have been shown to help verify each trades own calculations from the floor plan 'the designer' takes no responsibility for any errors in the dimensions shown.
- Foundations to be on good ground soils with a consistent compaction in excess of 100kPa as confirmed by council inspection. If inspection fails, then all site works are to be carried out in accordance with a geotechnical soils investigation report in accordance with NZS:3604.2011 and related documents. Site classifications for such investigations to comply with the requirements of AS2870 and referenced documents.
- All footings to be founded in 'good ground' as per NZS:3604
- Reinforced concrete slab to be in accordance with NZS: 3604, section 7.5.8.6.4

Shrinkage control joints

a) Shrinkage control joints shall be positioned to coincide with major changes of plan.
b) Supplementary steel (2/D10 bars 1.2m long) at internal corners but not across shrinkage control joints.
c) Supplementary shrinkage control joints shall be used such that intermediate bay sizes do not exceed 6m.
d) Panels shall be formed as close as practicable to length to width ratios of between 2:1 and 1:1 and shall have a maximum length in any direction of 6 m.
e) Shrinkage control joints may be cut at an angle as long as the included angle is not less than 60°.
f) Shrinkage control joints should be positioned where possible below walls.
g) Shrinkage control joints should be positioned to avoid tiled areas, when unavoidable ensure the joint is allowed for when laying tiles, as per manufactures recommendations

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

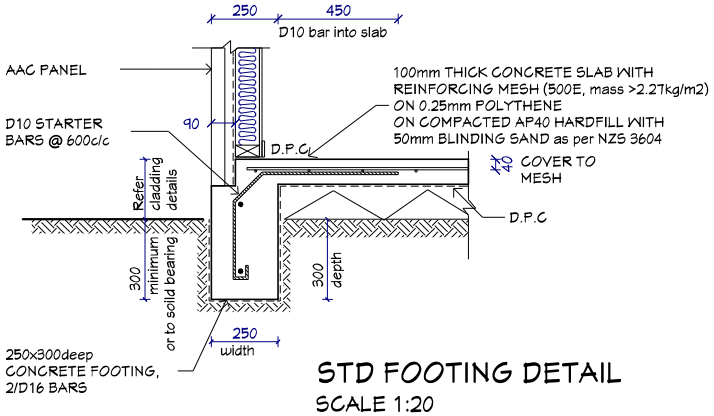
SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
FOUNDATION PLAN

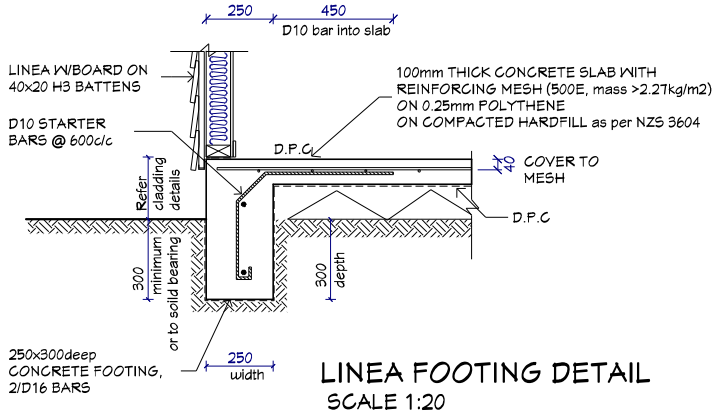
| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:100 | SHEET No. | 9 OF 32 |

GROUND TO FALL AWAY FROM BUILDING @ 1:25 MINIMUM, FOR A DISTANCE OF AT LEAST 1.0m

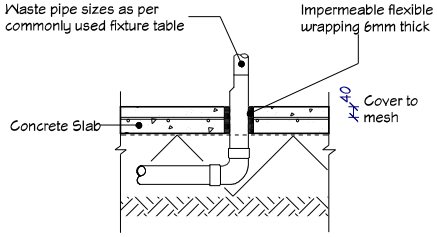



## STD FOOTING DETAIL
SCALE 1:20

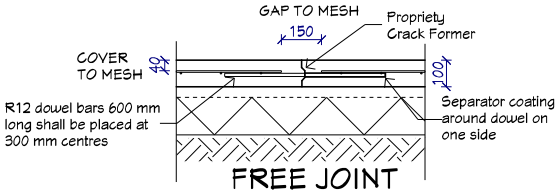
GROUND TO FALL AWAY FROM BUILDING @ 1:25 MINIMUM, FOR A DISTANCE OF AT LEAST 1.0m



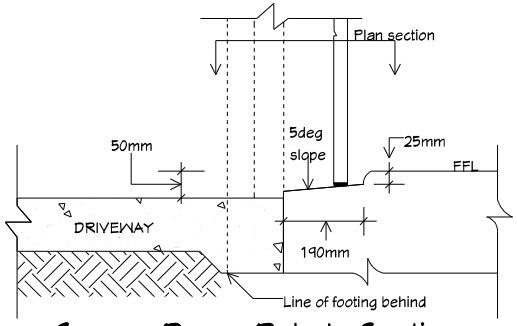

## LINEA FOOTING DETAIL
SCALE 1:20



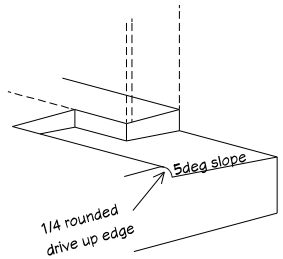

## SLAB PIPE PENETRATION
SCALE 1 : 20



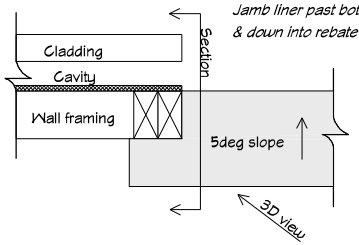

## FREE JOINT
SCALE 1 : 20




## Garage Door - Rebate Section




## Garage Door - 3D View




## Garage Door - Plan view

Amended 10-03-17
Free joint amended

Amended 10-03-17
Notes ameded

firsthomes
Christchurch
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

- The dimensions on this foundation plan / floor framing plan are to be checked by all trades prior to commencement of any works as they are an indication only and have been shown to help verify each trades own calculations from the floor plan 'the designer' takes no responsibility for any errors in the dimensions shown.
- Foundations to be on good ground soils with a consistent compaction in excess of 100kPa as confirmed by council inspection. If inspection fails, then all site works are to be carried out in accordance with a geotechnical soils investigation report in accordance with NZS:3604.2011 and related documents. Site classifications for such investigations to comply with the requirements of AS2870 and referenced documents.
- All footings to be founded in 'good ground' as per NZS:3604
- Reinforced concrete slab to be in accordance with NZS: 3604, section 7.5.8.6.4

Shrinkage control joints

a) Shrinkage control joints shall be positioned to coincide with major changes of plan.
b) Supplementary steel (2/D10 bars 1.2m long) at internal corners but not across shrinkage control joints.
c) Supplementary shrinkage control joints shall be used such that intermediate bay sizes do not exceed 6m.
d) Panels shall be formed as close as practicable to length to width ratios of between 2:1 and 1:1 and shall have a maximum length in any direction of 6 m.
e) Shrinkage control joints may be cut at an angle as long as the included angle is not less than 60°.
f) Shrinkage control joints should be positioned where possible below walls.
g) Shrinkage control joints should be positioned to avoid tiled areas, when unavoidable ensure the joint is allowed for when laying tiles, as per manufactures recommendations

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

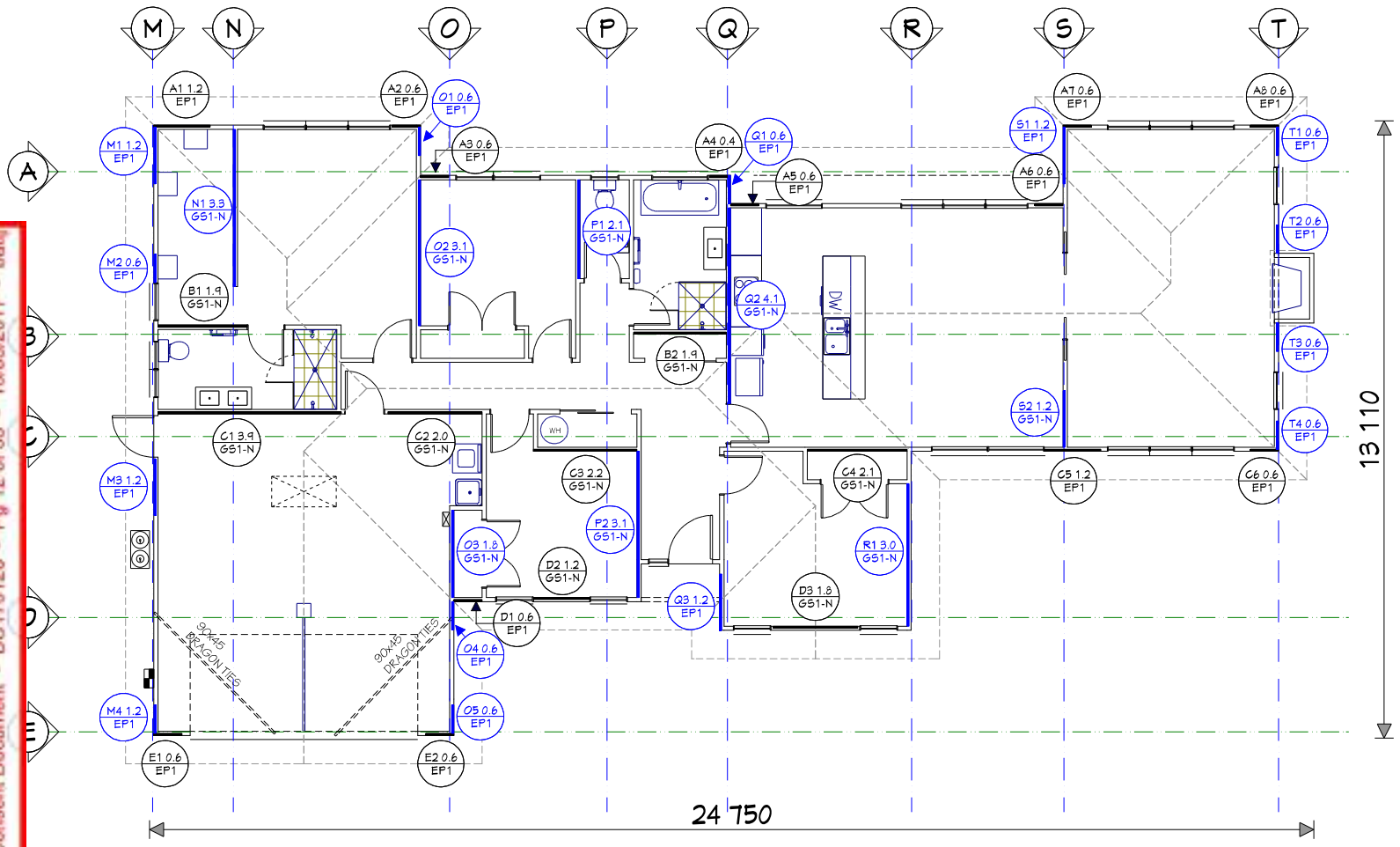
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

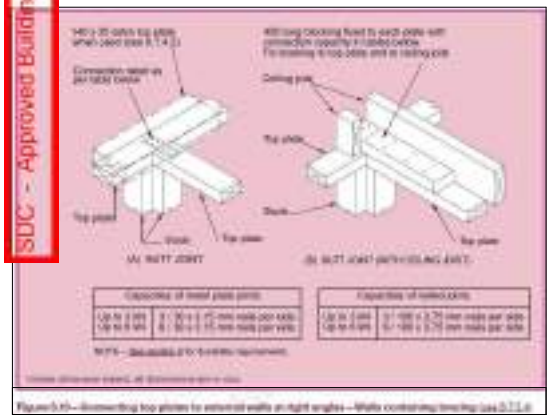
SITE DATA: for zones up to and including

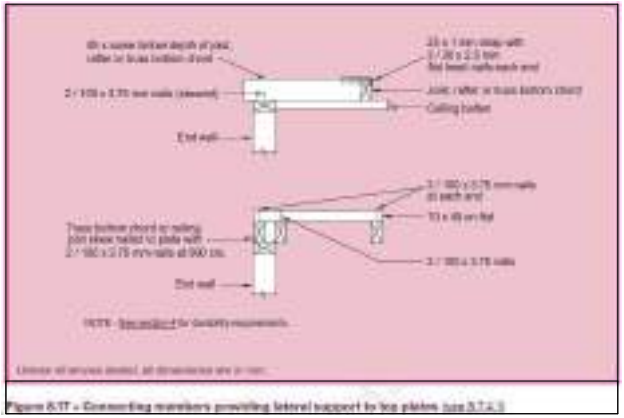
| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

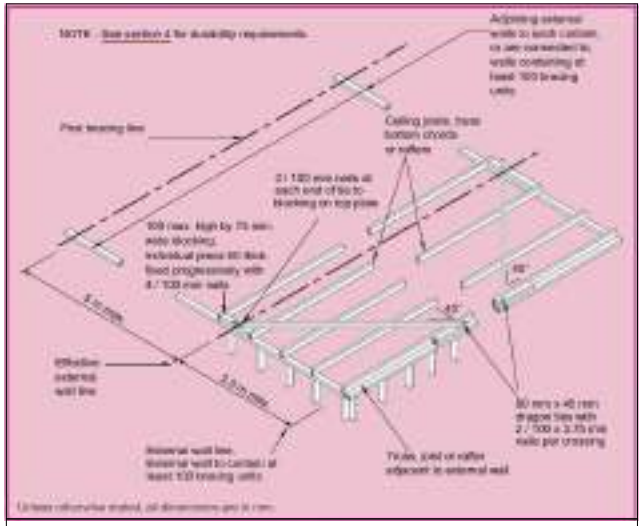
DRAWING TITLE:
FOUNDATION DETAILS. 1

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | As shown | SHEET No. | 10 OF 32 |







DRAGON TIES

SDC - Approved Building Consent Document - BC170128 - Pg 12 of 33 - 16/03/2017 - batl

Amended 10-03-17
Details added


firsthomes
Christchurch
chchsales@firsthomes.co.nz
ph. 021 575545




NOTES:

A1 1.2 GS1-N — BRACE LABEL & LENGTH; BRACE TYPE

- Brace disribution is as per NZS:3604, any bracing concerns contact 'the designer'.
- Gib braces fixed in accordance with Gib EzyBrace systems manual
- Refer to bracing details for installation and hold-downs
- Ply braces fixed in accordance with CHH Ecoply technical manual
  Ecoply bracing to be H3, CCA, DD

BRACING SOFTWARE

Bracing is calculated using the latest version of Gib easybrace. This program is developed in accordance with NZS:3604:2011.

JOB TITLE:

Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:

BRACING PLAN

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:100 | SHEET No. | 11 OF 32 |

## Bottom Plate Fixing

JUNE 2011

**Bottom plate fixings for GIB® Bracing Elements**

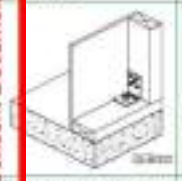
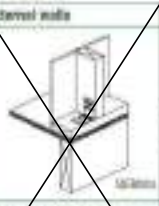
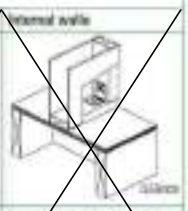
| Brace type | Concrete slabs | | Timber floors |
|---|---|---|---|
| | External wall | Internal wall | External and internal walls |
| GS1-N | As per NZS 3604:2011. No specific additional fastening required | As per NZS 3604:2011. Alternatively use 75 x 3.05mm shot-fired fasteners with 16mm washers, 150mm and 300mm from each end of the bracing element and at 600mm thereafter. | Nails 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 | 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. | | Nails 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. In addition: GIB Handibrac® fixings or metal wrap-around strap fixings and bolt as illustrated below. |
| BL1-H | | | |
| BLG-H | | | |
| BLP-H | Not applicable | As for GSP-N, BL1-H, BLP-H on concrete slab above | |

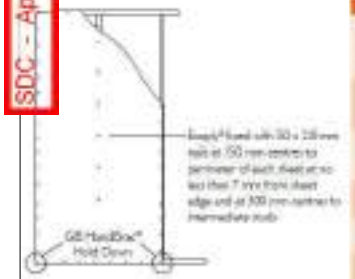
## Panel Hold-down Details

**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® BS and GIB® 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 external 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 15kN. | | 12 x 150mm galvanised coach screw. | |

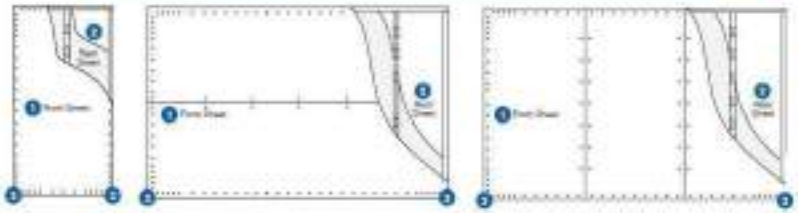



**Ecoply Brace - EP1**

| Application | Plywood Treatment | Fastener Material |
|---|---|---|
| Plywood bracing in interior spaces with no risk of exposure to weather or moisture penetration conducive to decay (all exposure zones including sea spray). | Ecoply Untreated | Hot dipped galvanised or better |
| Plywood bracing in enclosed spaces (protected from the weather) but with a risk of moisture penetration conducive to decay in exposure zones' B & C. | Ecoply H3.1 (LOSP/H3.1 CCA treated) Ecoply Barrier (rigid air barrier) | Hot dipped galvanised or better |
| Plywood bracing in enclosed spaces (protected from the weather) but with a risk of moisture penetration conducive to decay in exposure zone' D (sea spray). | Ecoply H3.1 (LOSP/H3.1 CCA treated) Ecoply Barrier (rigid air barrier) | Stainless steel |
| Cladding | Refer to Shadowclad® Specification & Installation Guide | |
| Rigid Air Barrier | Refer to Ecoply Barrier® Specification & Installation Guide | |
| Bracing or framing exposed to ground moisture in exposure zones' B & C | Ecoply H3.1 (LOSP/H3.1 CCA treated) | Hot dipped galvanised or better |
| Bracing or framing exposed to ground moisture in exposure zone' D | Ecoply H3.1 (LOSP/H3.1 CCA treated) | Stainless steel |
| Bracing in wet process buildings in all exposure zones (including sea spray) | Ecoply H3.1 (LOSP/H3.1 CCA treated) | Stainless steel |

## Construction Details

JUNE 2011



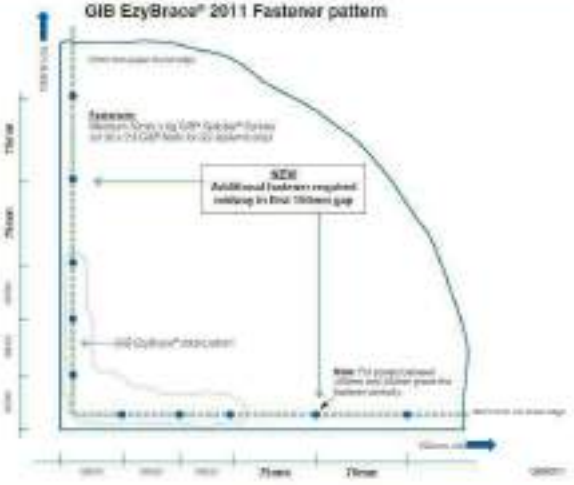
| System | Lining one side | | Lining opposite side | | Panel Hold-Down Fixings | Fastener spacing |
|---|---|---|---|---|---|---|
| | Lining | Fasteners | Lining | Fasteners | | |
| GS1-N | Any 10mm or 13mm GIB® Plasterboard | 30mm GIB® nails, or minimum 32mm x 8g GIB® Grabber® high thread screws | Not required | Not required | Not required | GIB® Plasterboard<br>Corner fastening pattern as illustrated above.<br>Fasteners at 150mm to bracing element perimeter, and:<br>• at 300mm centres to intermediate sheet joins for vertical lining, or<br>• at stud / sheet junction for horizontally lined elements, and<br>• GIB® adhesive dabs at 300mm c/s to intermediate framing.<br>*Plywood*<br>Fasteners at 150mm around the perimeter of every sheet and at 300mm centres to intermediate studs. Place fasteners no closer than 7mm from sheet edges. Plasterboard corner fastener pattern does not apply to plywood. |
| GS2-N | | | Any 10mm or 13mm GIB® Plasterboard | 30mm GIB® nails, or minimum 32mm x 8g GIB® Grabber® high thread screws | | |
| GSP-H | | Minimum 7mm Ecoply manufactured to AS/NZS 2269 | | 50mm x 2.8mm flat head galvanised or stainless steel nails | Yes, see Pages 19 and 20 | |
| BL1-H | 10mm or 13mm GIB Braceline® | minimum 32mm x 8g GIB® Grabber® high thread screws | Not required | Not required | | |
| BLG-H | | | Any 10mm or 13mm GIB® Plasterboard | 30mm GIB® nails, or minimum 32mm x 8g GIB® Grabber® high thread screws | | |
| BLP-H | | GIB Braceline® Nails may be used for 10mm GIB Braceline® ONLY | Minimum 7mm Ecoply manufactured to AS/NZS 2269 | 50mm x 2.8mm flat head galvanised or stainless steel nails | | |

**Revised Fastener Pattern for all new versions of GIB EzyBrace® Elements**

As GIB Braceline® sheets 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 40mm from sheet ends or cut edges.

**GIB EzyBrace® 2011 Fastener pattern**




**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

- Gib braces fixed in accordance with Gib EzyBrace systems manual
- Ply braces fixed in accordance with CHH Ecoply technical manual
- Ecoply bracing to be H3, CCA, DD

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

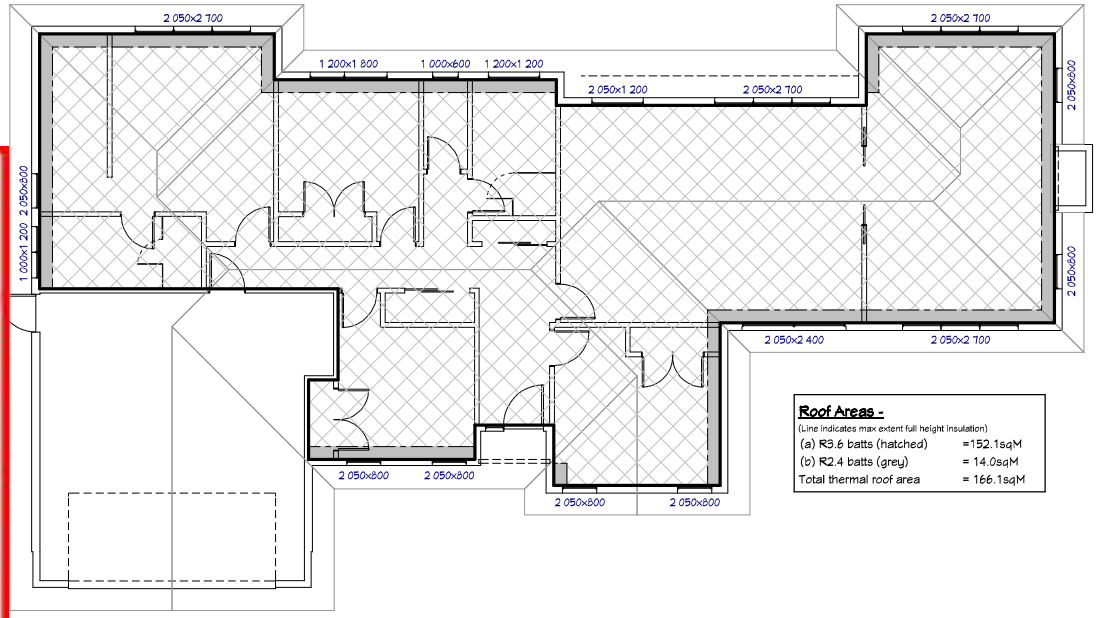
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

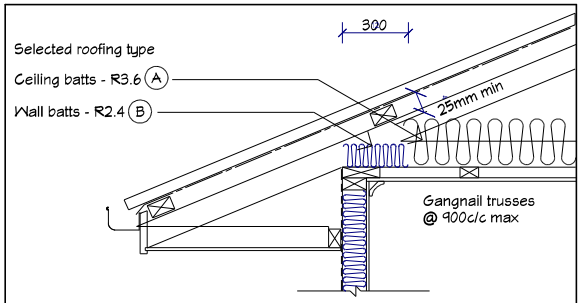
DRAWING TITLE:
BRACING DETAILS

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | N.T.S | SHEET No. | 12 OF 32 |




**Roof Areas -**
(Line indicates max extent full height insulation)

| | |
|---|---|
| (a) R3.6 batts (hatched) | =152.1sqM |
| (b) R2.4 batts (grey) | = 14.0sqM |
| Total thermal roof area | = 166.1sqM |




## PERIMETER ROOF INSULATION DETAIL

*Any roofing type*

**No insulation to be within 25mm of roof underlay**

## INSULATION CALCULATION (Timber frame)

Climate zone 1 upto and including climate zone 3
as per NZBC - Clause H1, Energy Efficiency - third edition
and NZS:4218 2009, Energy Efficiency – small building envelope

### BUILDING DESCRIPTION

All measurements are as per NZS:4218:2009 Appendix A

| Building Thermal Envelope | | | | | |
|---|---|---|---|---|---|
| **FLOORS** | | | | | |
| Concrete floor | 205.30 | 80.10 | 2.74 | 166.10 | 3.50 |
| Suspended | 0.00 | 0.00 | 5.06 | 0.00 | 5.80 |
| **WALLS** | | | | | |
| Interior wall (garage) | 11.66 | 2.42 | 28.22 | 0.00 | 2.50 |
| AAC Panels | 58.59 | 2.42 | 136.69 | 43.12 | 2.70 |
| Brick | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Weatherboard(18mm Fibre-cement) | 6.83 | 2.42 | 16.64 | 6.14 | 2.70 |
| Weatherboard(7.5mm Fibre-cement) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **ROOFS** | Area | | | | |
| Trussed (excl. skylight area) | 166.10 | | | | 3.30 |
| Rafftered (excl. skylight area) | 0.00 | | | | 5.50 |
| **GLAZING** | Actual glazing | Max glazing @ 30% | Glazing over 30% | | |
| Glazing | 47.26 | 54.36 | 0.00 | | 5.26 |
| Sky Lights | 0.00 | | | | 5.26 |

### CALCULATION FOR - Average roof insulation R-value

| | Total Area | Area % | | Actual R-value |
|---|---|---|---|---|
| Area of R3.6 batts (a) | 152.10 | 91.6% | Actual system R-value (Ar) = | 3.40 |
| Area of R2.4 batts (b) | 14.00 | 8.4% | Actual system R-value (Br) = | 2.50 |
| Total thermal roof area | 166.10 | 100.0% | Average system R-value = | 3.30 |

Example calculation: Average R-value = 1/((a%/Ar)+(b%/Br))

### REFERENCE BUILDING HEAT LOSS

R-values as per NZS:4218:2009

| Building Thermal Envelope | Area (sqM) | R-Value (min) | Heat loss (area x r-value) |
|---|---|---|---|
| Roof | 166.10 | 2.90 | 57.3 |
| Wall | 126.85 | 1.90 | 66.8 |
| Floor | 166.10 | 1.30 | 127.8 |
| Glazing ≤ 30% | 54.36 | 0.26 | 209.1 |
| Glazing > 30% | 0.00 | 0.40 | 0.0 |
| Sky Lights | 0.00 | 3.30 | 0.0 |
| **Total Heat Loss of the Reference Building** | | | 460.9 |

### PROPOSED BUILDING HEAT LOSS

R-values as per BRANZ INSULATION GUIDE - forth edition

| Building Thermal Envelope | Area (sqM) | R-Value | Heat loss (area/r-value) |
|---|---|---|---|
| Trussed (excl. skylight area) | 166.10 | 3.30 | 50.3 |
| Rafftered (excl. skylight area) | 0.00 | 0.00 | 0.0 |
| Interior wall (garage) | 28.22 | 2.00 | 14.1 |
| AAC Panels | 93.83 | 2.10 | 44.7 |
| Brick | 0.00 | 0.00 | 0.0 |
| Weatherboard(18mm Fibre-cement) | 11.90 | 2.10 | 5.7 |
| Weatherboard(7.5mm Fibre-cement) | 0.00 | 0.00 | 0.0 |
| Concrete floor | 166.10 | 1.50 | 110.7 |
| Suspended | 0.00 | 0.00 | 0.0 |
| Glazing ≤ 30% (double) | 47.26 | 0.26 | 181.8 |
| Glazing > 30% (double) | 0.00 | 0.26 | 0.0 |
| Sky Lights | 0.00 | 0.26 | 0.0 |
| **Total Heat Loss of the Proposed Building** (Must be less than or equal to the Reference Building) | | | 365.2 |

firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

Perimeter of the Thermal Envelope

REFERENCE DOCUMENTS:

- NZBC - Clause H1 compliance document
- NZS:4218, 2009
- Branz insulation guide

Lights:

All recessed lights to be Type IC Abutted & Covered in accordance with AS/NZS60598.2.2

**INSULATION**

Walls = R2.4 / fiberglass batts
Roof = R3.6 / fiberglass batts
Concrete floor = R1.3min
(Owner may nominate to increase requirements)

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

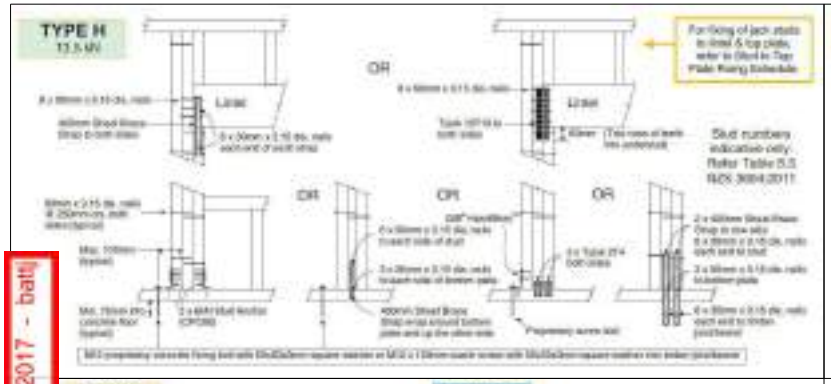
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

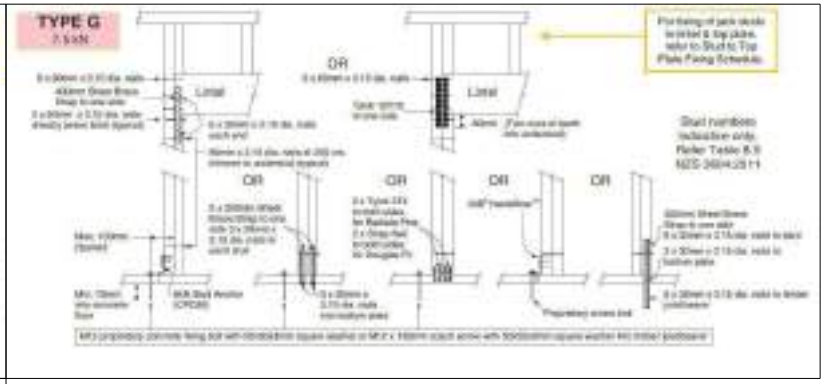
SITE DATA: for zones up to and including

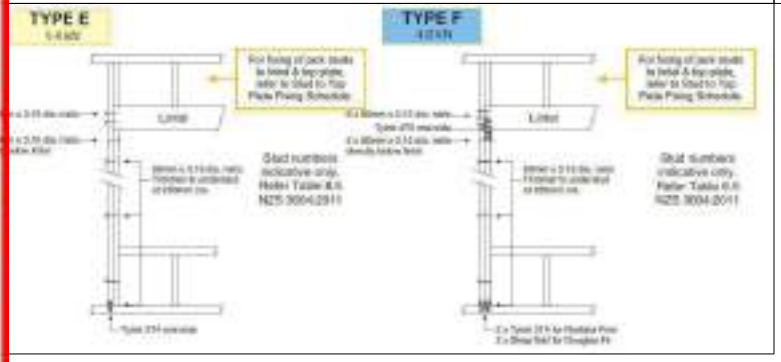
| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

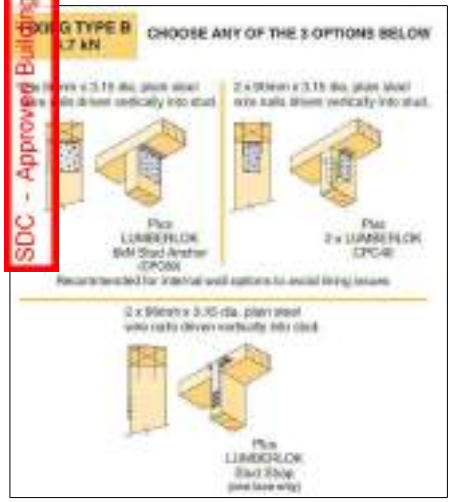
DRAWING TITLE:
INSULATION
REQUIREMENTS

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:125 | SHEET No. | 13 OF 32 |

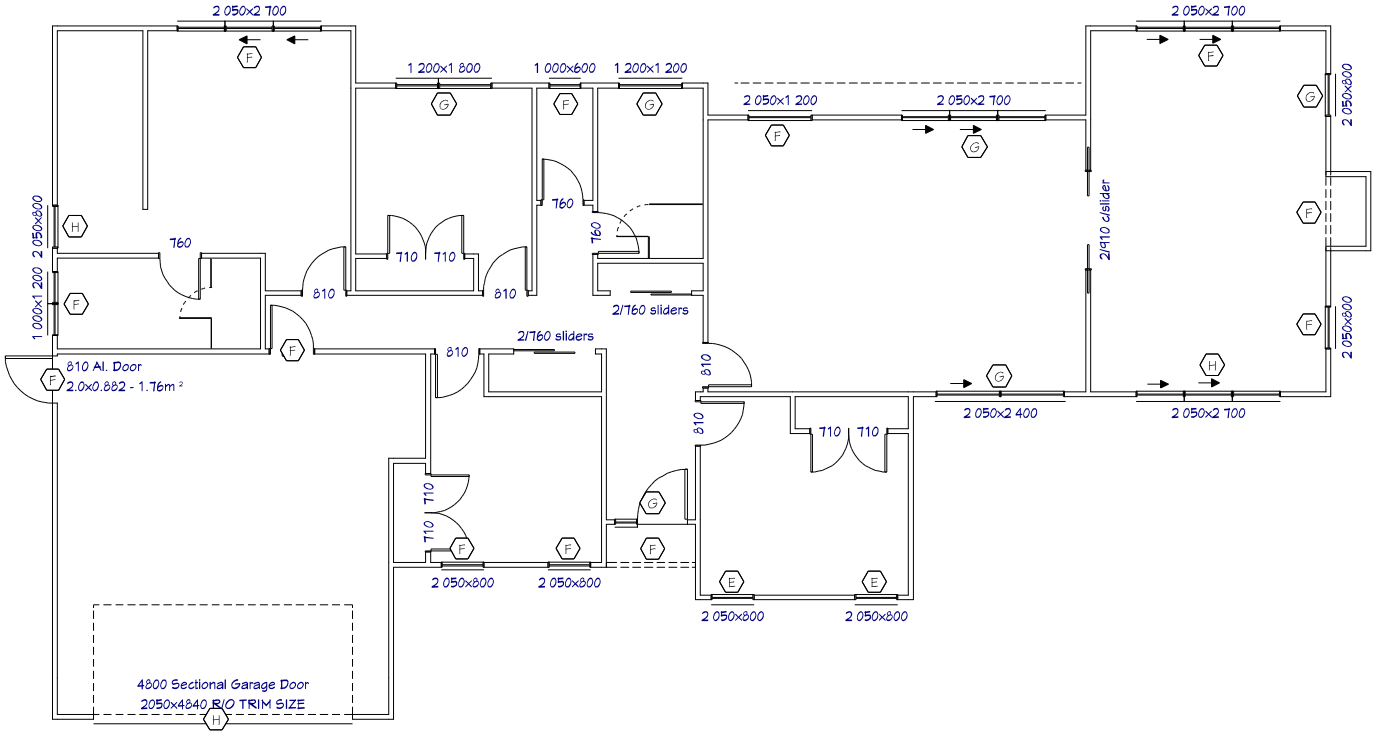



ALL LOAD BEARING STUD TO TOP PLATE FIXINGS
TYPE (B) UNLESS OTHERWISE STATED




firsthomes

**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

TOP PLATE & LINTEL FIXING:

- Lintel and stud to top plate fixings to be in accordance with either 'Lumberlok' wall fixing charts or NZS:3604

(F) LINTEL FIXING

(B) TOP PLATE FIXING

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

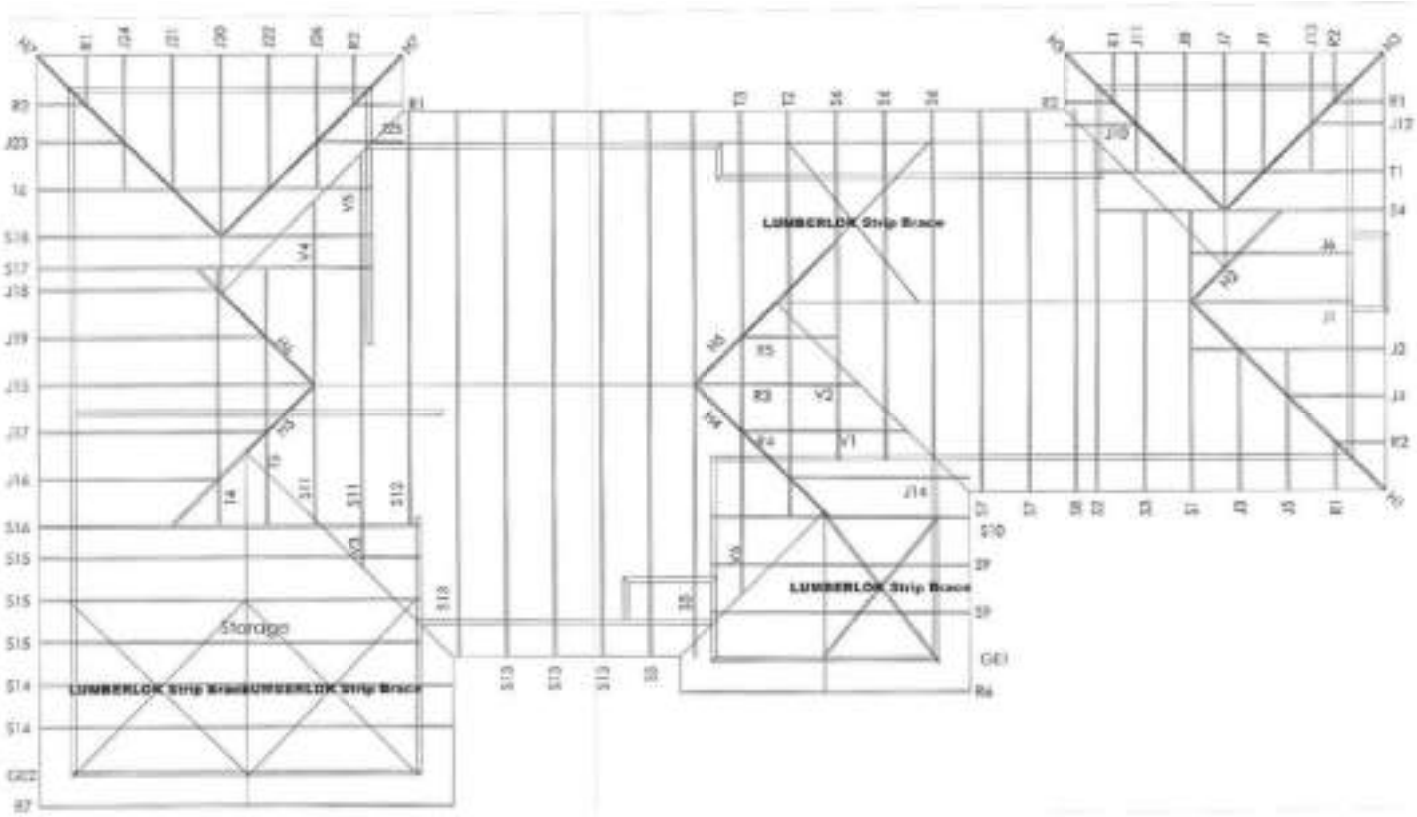
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
LINTEL & TOP PLATE FIXING REQUIREMENTS

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:100 | SHEET No. | 14 OF 32 |



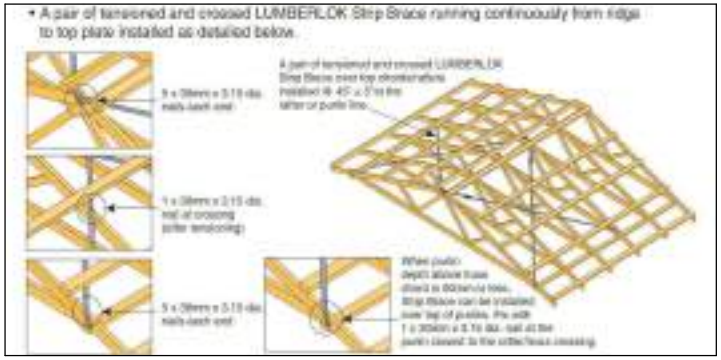

FIXING REQUIREMENTS:

All trusses to be fixed as per Mitek Truss Fixing Selection Report supplied at time of manufacture.

Purlins to be fixed with Fixing Type 'C' 2.4kN as per Lumberlok Purlin & batten fixing chart

FIXING TYPES:

Fixing Type 'C' 2.4kN = 1 Blue Screw 80mm x 10 gauge Lumberlok Blue screw




firsthomes
Christchurch
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

- All framing to be H1.2 treated kiln dried framing
- All roof framing fixed as per NZS:3604
- All fixings to be in accordance with section 4, Durability, NZS:3604

FIXING REQUIREMENTS:

All trusses to be fixed as per Mitek Truss Fixing Selection Report supplied at time of manufacture.

Purlins to be fixed with type 'C' 2.4kN as per Lumberlok Purlin & batten fixing chart. (unless noted otherwise)

FIXING TYPES:

C = 1 Blue Screw 80mm x 10 gauge Lumberlok Blue screw

- Confirm strap bracing on-site, add if required 1/50m2

*TRUSS DESIGN - REFER TO ATTACHED PS1 BY MITEK*

JOB TITLE:

Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

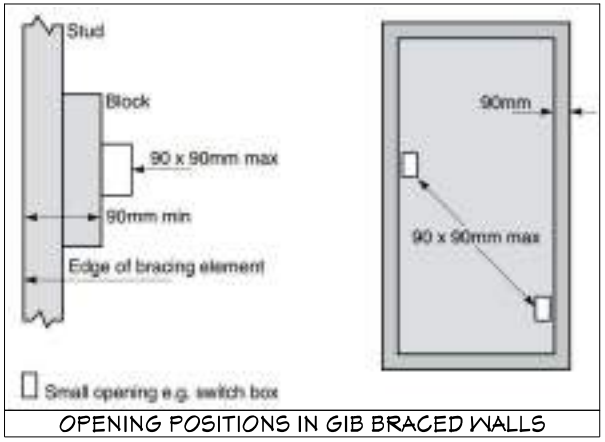
| SITE DATA: for zones up to and including | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:

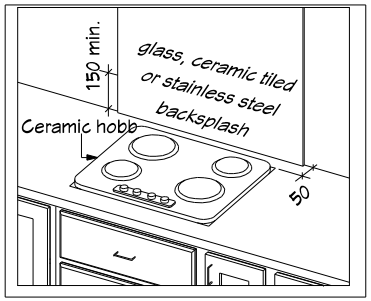
ROOF FRAMING PLAN

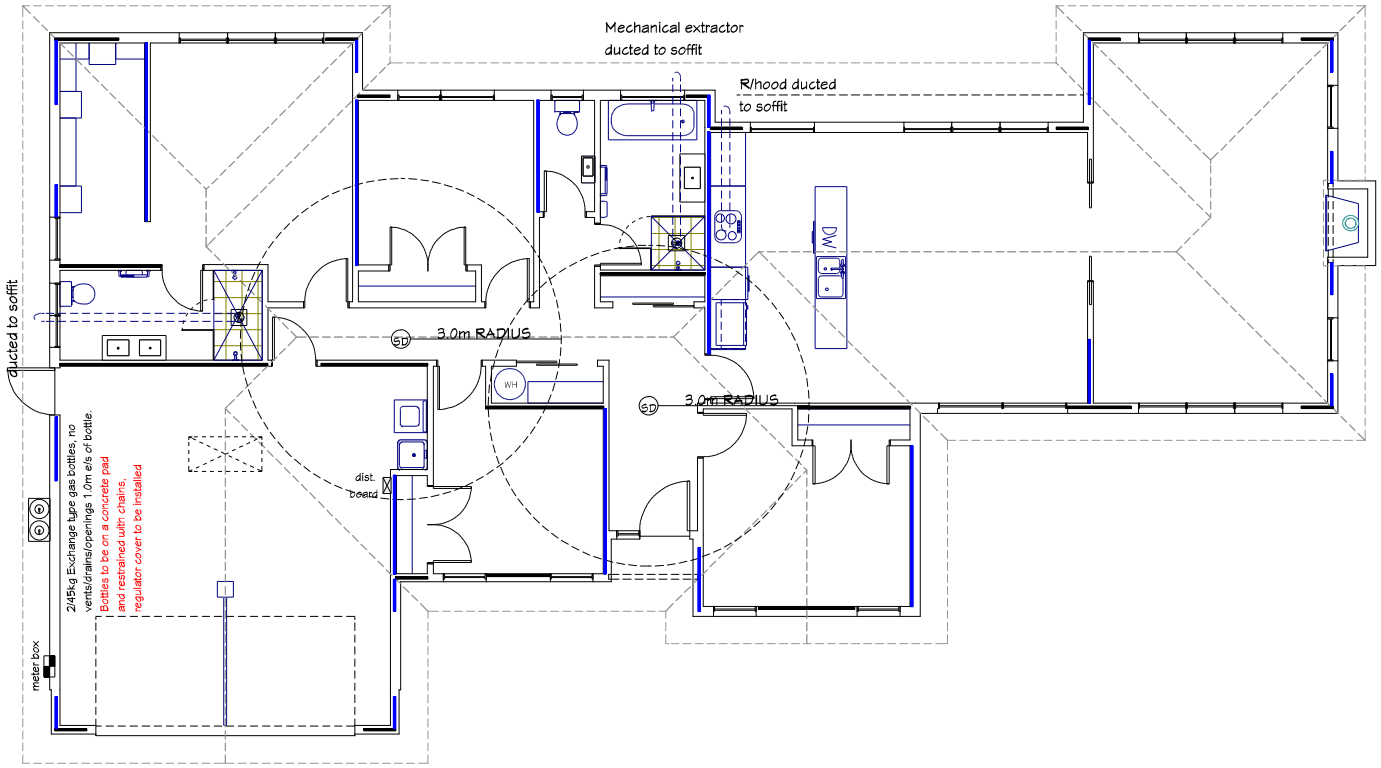
(REFER TO ATTACHED TRUSS LAYOUTS & PS1)

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:100 | SHEET No. | 15 OF 32 |




OPENING POSITIONS IN GIB BRACED WALLS




- Water storage heater control thermostat shall be set at a temperature of not less than 60°C to prevent the growth of Legionella bacteria.
- Tempering Valve to be installed as per NZBC G12, to allow for a maximum of 55°C water to be delivered to sanitary fixtures.

**ELECTRICAL KEY**

| | | |
|---|---|---|
| | RECESSED LIGHTS (All recessed lights to be CA-Rated) | No. |
| | EXTERIOR SOFFIT LIGHT | No. |
| | BAYONET | No. |
| | STRIP LIGHT | No. |
| | WALL LIGHT | No. |
| | SENSOR LIGHT | No. |
| | EXTRACTOR FAN | No. |
| | SINGLE POINT | No. |
| | DOUBLE P/POINT | No. |
| RCD | RCD POINT | No. |
| | HEATED TOWEL RAIL | No. |
| TV | TV OUTLET | No. |
| PH | TELEPHONE JACK | No. |
| 2W | 2 WAY LIGHT CIRCUIT | No. |
| | SMOKE DETECTORS *(with hush & test button)* | 2 No. |
| | METER BOX | |
| | FUSE BOX | |

- Smoke alarms required and installed in accordance with F7/AS1-3.2
- Smoke alarms are required within 3.0m of each sleeping room door (must be audible) and on each level
- Smoke alarms should preferably be fitted to the ceiling in a central position and at least 300mm away from any wall or light fitting.3.2.2
- Smoke alarms shall be listed or approved by a recognized national authority as complying with at least one of: UL 217, CAN/ULC S531, AS 3786, BS 5446: Part 1, ISO 12239 or BS EN14604.

**Electrical plan is indicative only, Owner to liaise with electrician to confirm layout. Allowances to be made for NZBC regulations**


firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545




NOTES:

Electrical notes

- Installation of all artificial lighting to comply with NZBC clause G8
- Holes in bracing elements may require remedial work
- All recessed lights to be Type IC Abutted & Covered in accordance with AS/NZS60598.2.2
- Positions of ventilation ducting is approximate only and to be confirmed by the installer.
- All sizes, locations and installations are to be as per manufacturers specifications, installer to confirm prior to commencement of construction.
- Smoke detectors should preferably be fitted to the ceiling in a central position and atleast 300mm away from any wall or light fitting.
- Water heating systems to be installed as per manufacturers specifications
- Positions of ventilation ducting is approximate only and to be confirmed by the installer.
- All sizes, locations and installations are to be as per manufacturers specifications, installer to confirm prior to commencement of construction.
- All bathrooms without openable window must have an adequate exhaust fan installed.
- Tempering Valve to be installed as per NZBC G12 Water Supplies 2nd Edition, refer figure 16. This is an acceptable method of limiting hot water temperature delivered from storage water heaters is to install a mixing device between the outlet of the water heater and the sanitary fixture
- Installation of h.w.c to comply with NZS:4305 Energy efficiency.
- Concrete slab reinforcement to be earth bonded with rod approx 400 long tied to the mesh and top rod of the perimeter where power and water enters dwelling, and to comply with NZBC Clause G9.3.1a

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

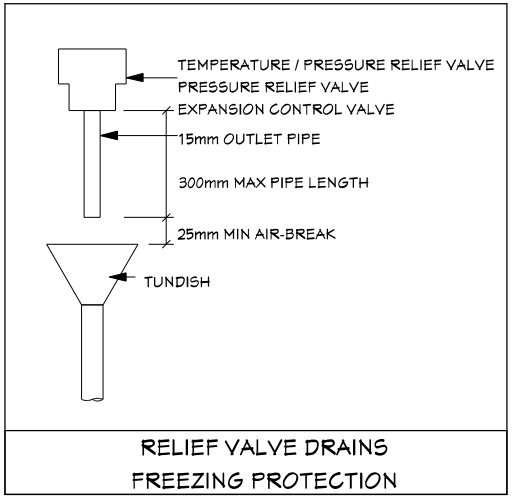
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

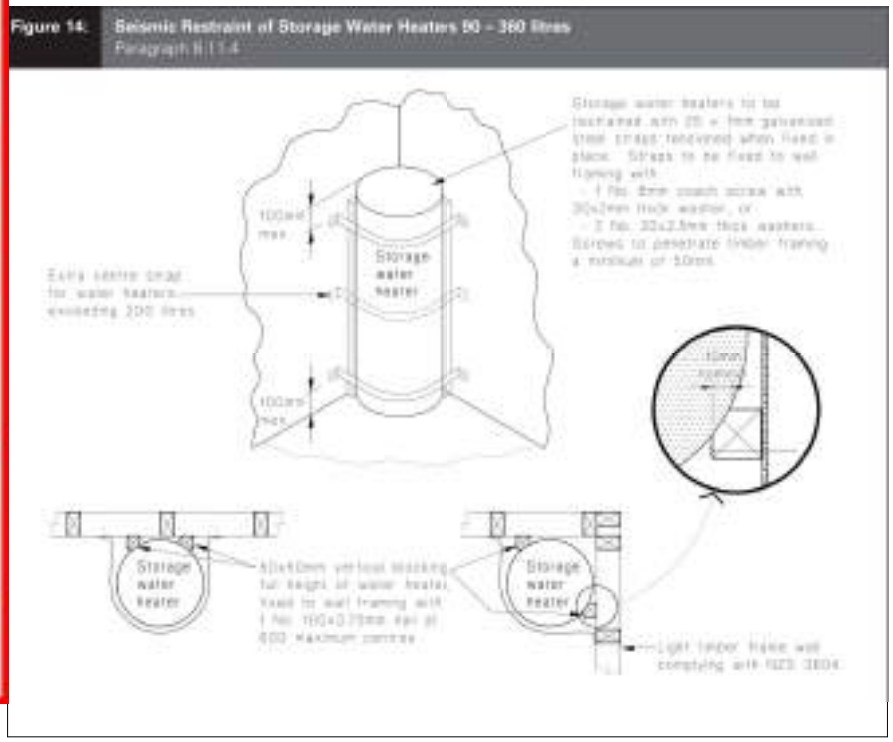
| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

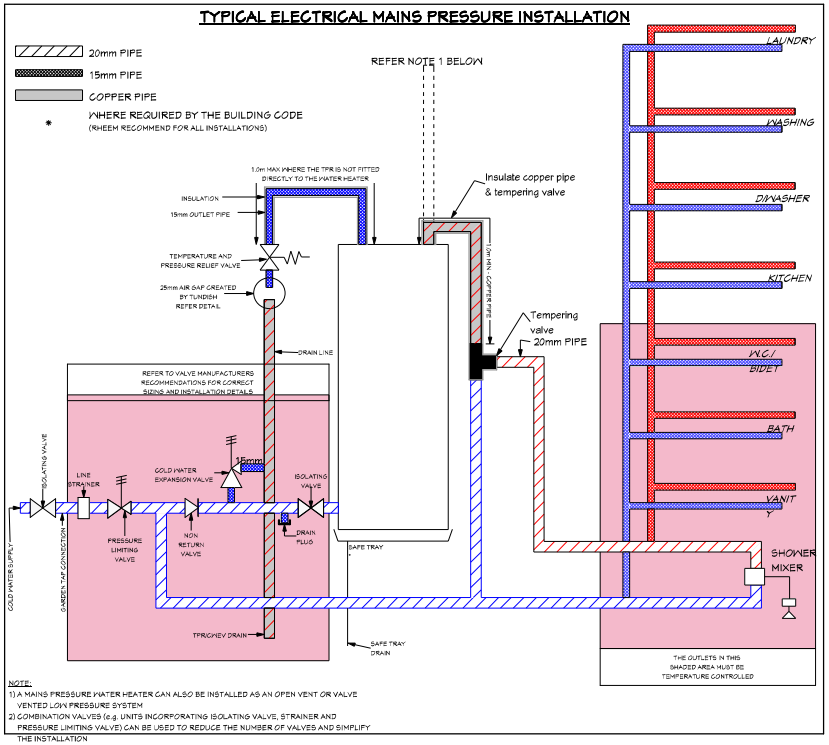
DRAWING TITLE:
ELECTRICAL PLAN

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:100 | SHEET No. | 16 OF 32 |




RELIEF VALVE DRAINS
FREEZING PROTECTION




## Max developed pipe length

To comply with both H1 and G12, a 15mm pipe at 12m max developed pipe length from the HWC to the kitchen sink meets the requirements of the acceptable solutions. As an alternative solution, an increase of up to 50% (Total 18m) can be approved, provided the pipe is insulated over its full length from the HWC with preformed closed cell foam with 13mm wall thickness.
This generic alternative solution is considered to meet the requirements of both G12 and H1"

firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
- Water heating systems to be installed as per manufacturers specifications
- Tempering Valve to be installed as per NZBC G12 Water Supplies 3rd Edition, refer figure 16. This is an acceptable method of limiting hot water temperature delivered from storage water heaters is to install a mixing device between the outlet of the water heater and the sanitary fixture
- Installation of h.w.c to comply with NZS:4305 Energy efficiency.
- Water storage heater control thermostat shall be set at a temperature of not less than 60°C to prevent the growth of Legionella bacteria.
- Tempering Valve to be installed as per NZBC G12, to allow for a maximum of 55°C water to be delivered to sanitary fixtures.

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

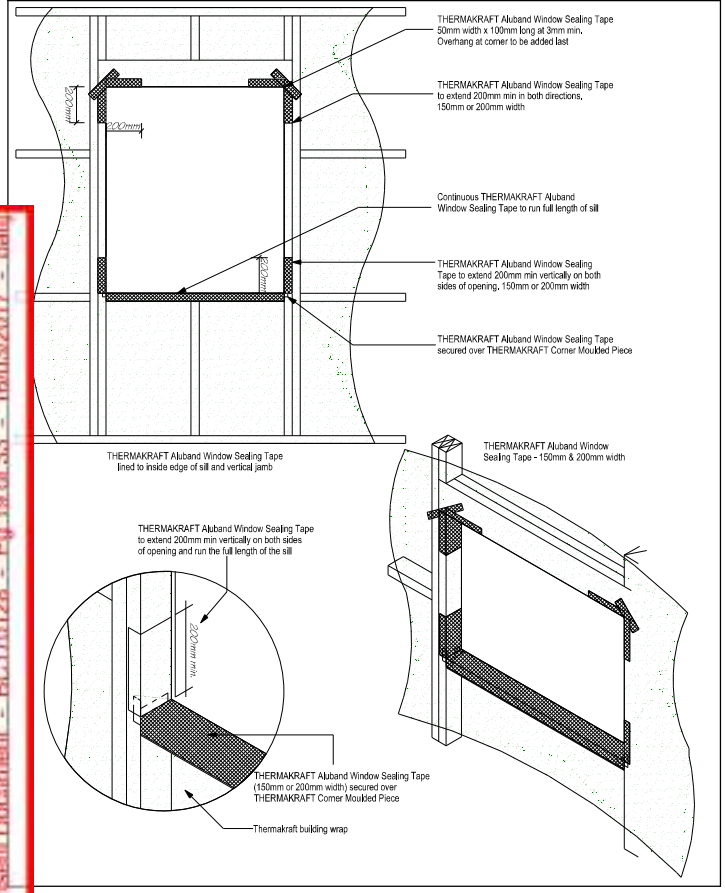
SITE DATA: for zones up to and including

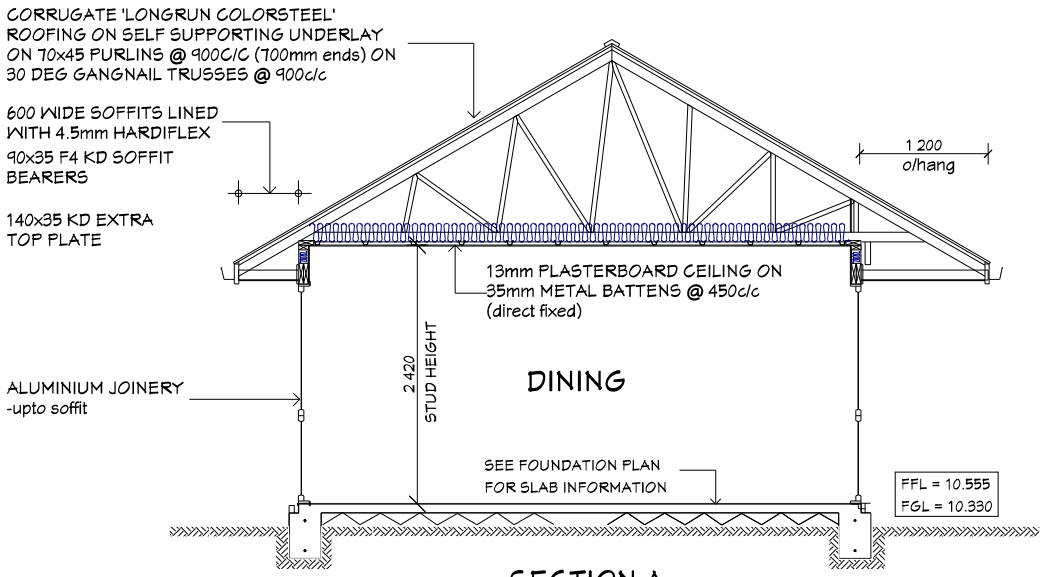
| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
WATER HEATING DETAILS

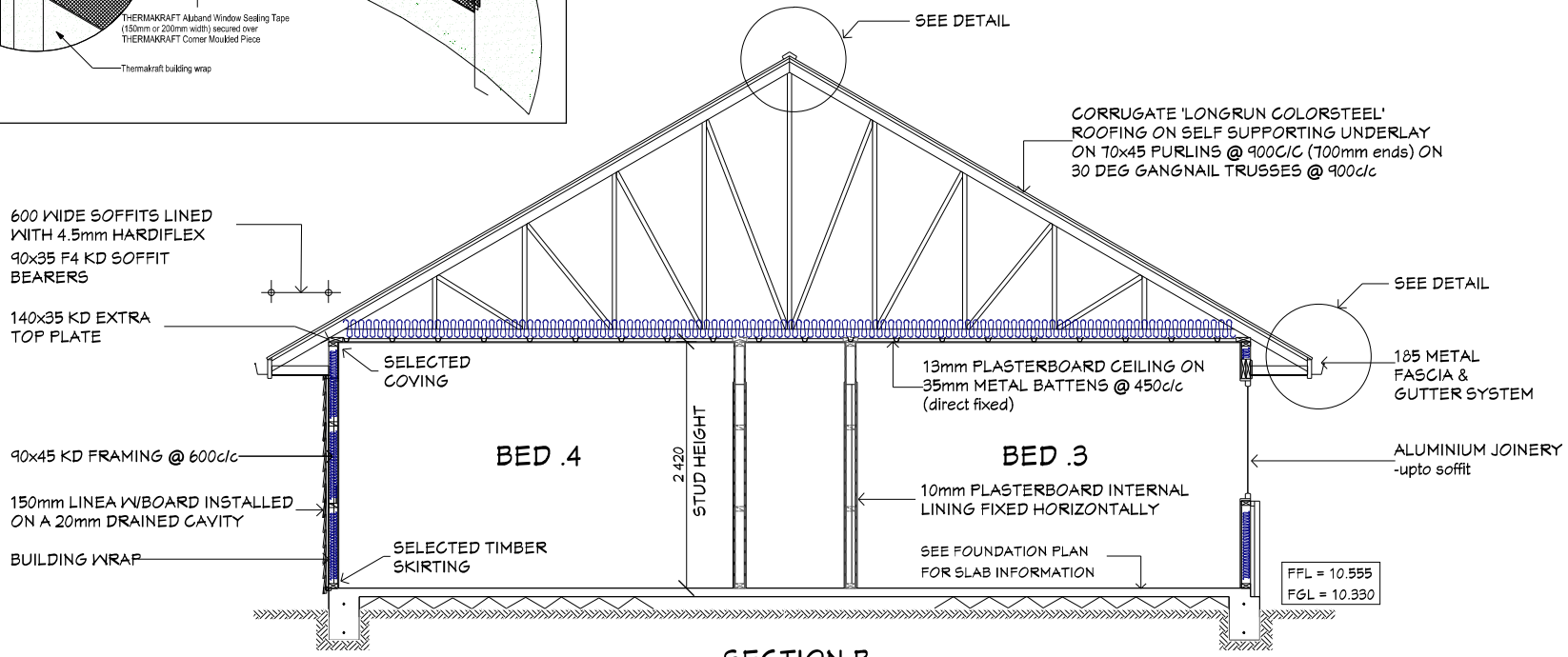
| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | N.T.S | SHEET No. | 17 OF 32 |

## BUILDING WRAP & FLASHING TAPE TO WINDOWS




## SECTION A




## SECTION B

**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

**Construction**

Roof

| | |
|---|---|
| Structure: | Mitek roof trusses |
| Cladding: | Refer elevations |
| Purlins: | 70x45 @ 900 c/c max |
| Fascia : | 185 Metal Fascia |
| Soffit: | 4.5mm Hardisoffit® lining |
| Ceiling | |
| Battens: | 35mm Metal @450mm c/c (direct fixed) |
| Lining: | 13mm Gib standard |
| Walls | |
| Structure: | 90x45 @ 600mm c/c 90X90 @ 400mm c/c (chimney) |
| Stud height: | 2420mm |
| Stud centres: | 600c/c |
| Interior lining: | 10mm Gib standard® horizontal |
| Building wrap: | Thermakraft building wrap |
| Cladding: | Refer elevations |
| Windows | |
| Frames: | Double glazed aluminim(new) |
| Reveals: | H3.1 treated reveals to aluminium joinery |

- All roof framing fixed as per NZS:3604 2011
- Flashings to be in accordance with AS1/E2
- All fixings to be in accordance with section 4, Durability, NZS:3604
- All timber frame above subfloor to have a minimum treatment of H1.2 and be graded SG8

INSULATION
Walls = R2.4 / fiberglass batts
Roof = R3.6 / fiberglass batts
Concrete floor = R1.3min
(Owner may nominate to increase requirements)

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

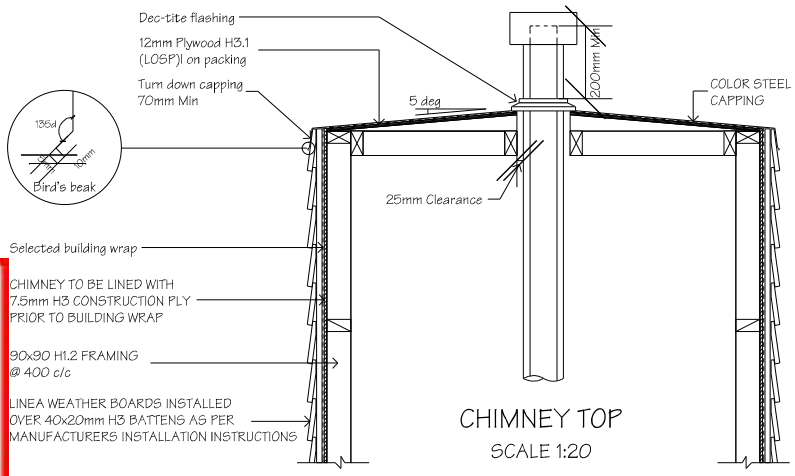
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

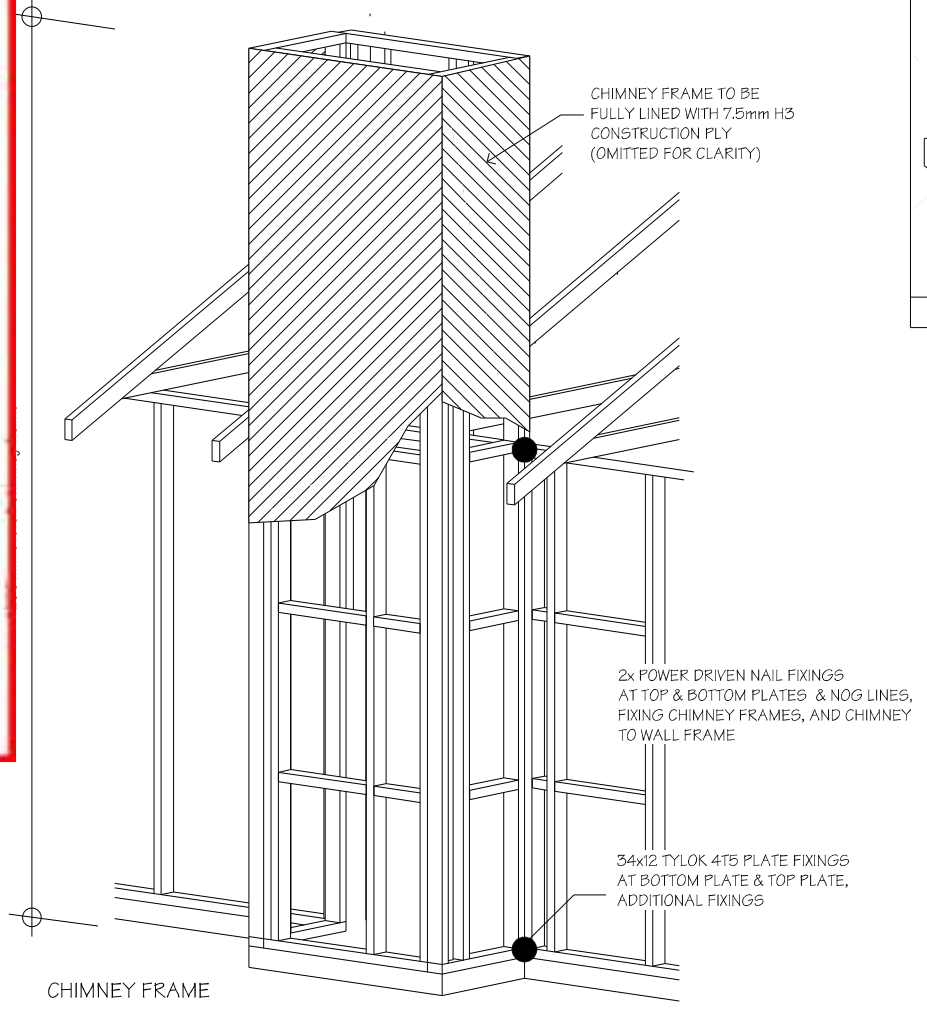
DRAWING TITLE:
CROSS SECTION

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:50 | SHEET No. | 18 OF 32 |



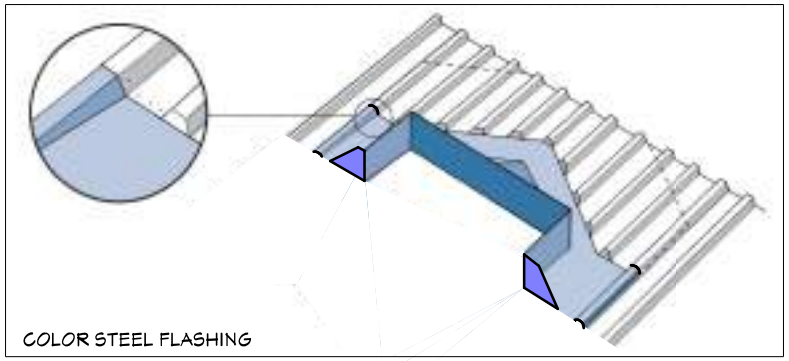

CHIMNEY TOP

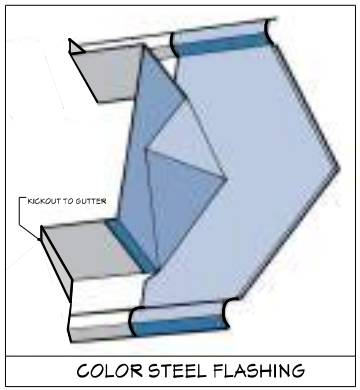
SCALE 1:20

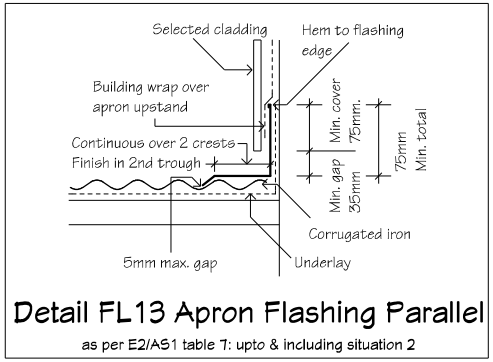



CHIMNEY FRAME

SCALE 1:20

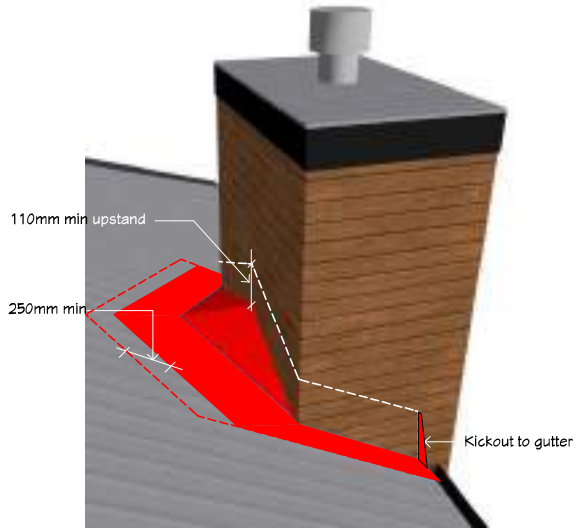



Detail FL13 Apron Flashing Parallel

as per E2/AS1 table 7: upto & including situation 2




Chimney Cricket Flashing Detail

NTS

firsthomes

**Christchurch**

chchsales@firsthomes.co.nz

ph. 021 575545



NOTES:

**Construction**

Roof

| | |
|---|---|
| Structure: | Mitek roof trusses |
| Cladding: | Refer elevations |
| Purlins: | 70x45 @ 900 c/c max |
| Fascia : | 185 Metal Fascia |
| Soffit: | 4.5mm Hardisoffit® lining |
| Ceiling | |
| Battens: | 35mm Metal @450mm c/c (direct fixed) |
| Lining: | 13mm Gib standard |
| Walls | |
| Structure: | 90x45 @ 600mm c/c<br>90X90 @ 400mm c/c (chimney) |
| Stud height: | 2420mm |
| Stud centres: | 600c/c |
| Interior lining: | 10mm Gib standard® horizontal |
| Building wrap: | Thermakraft building wrap |
| Cladding: | Refer elevations |
| Windows | |
| Frames: | Double glazed aluminim(new) |
| Reveals: | H3.1 treated reveals to aluminium joinery |

- All roof framing fixed as per NZS:3604 2011
- Flashings to be in accordance with AS1/E2
- All fixings to be in accordance with section 4, Durability, NZS:3604
- All timber frame above subfloor to have a minimum treatment of H1.2 and be graded SG8

INSULATION

Walls = R2.4 / fiberglass batts

Roof = R3.6 / fiberglass batts

Concrete floor = R1.3min

(Owner may nominate to increase requirements)

JOB TITLE:

Luigie & Lisa Johnstone

Lot 31 , DP 488852

Hinterland Drive

The Woods , Prebbleton

TERRITORIAL AUTHORITY:

Selwyn District Council

Prebbleton , Living Z

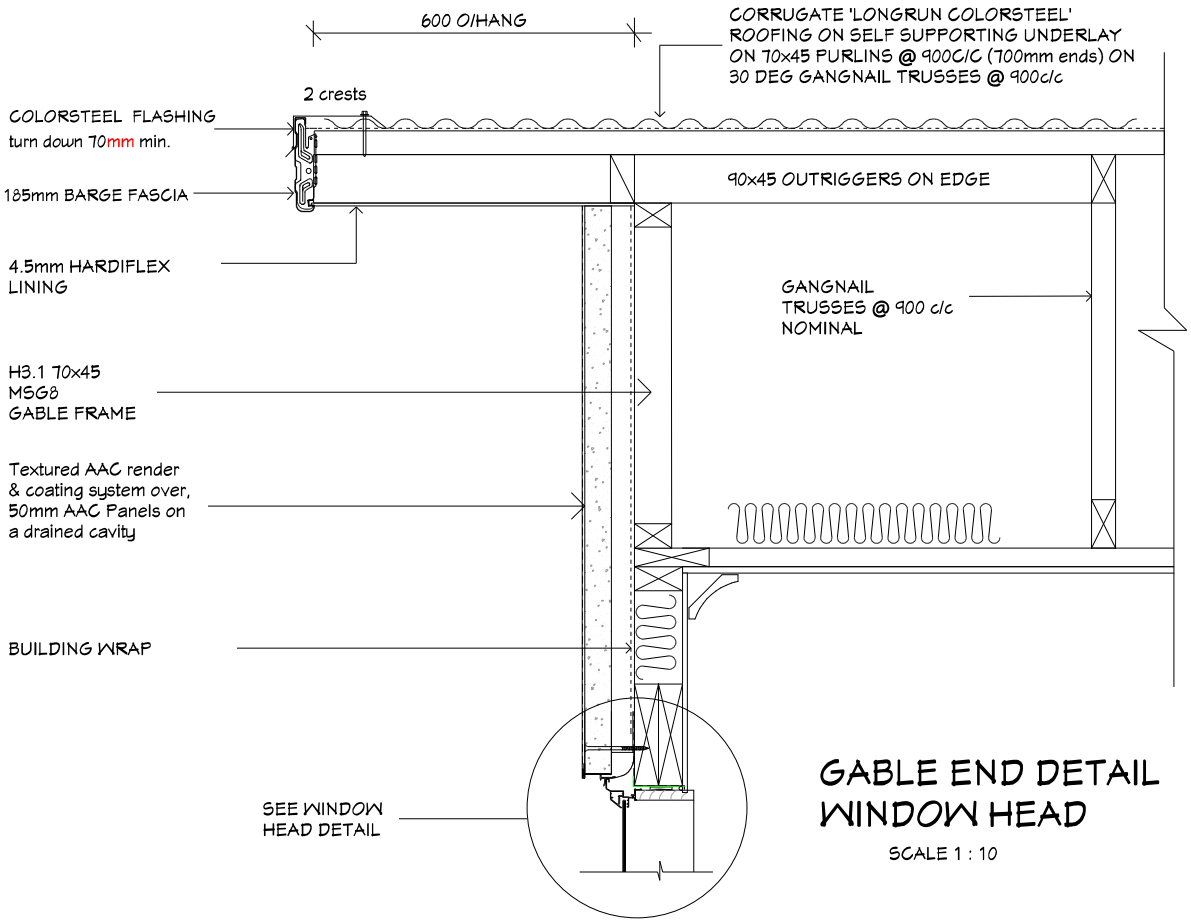
SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:

CHIMNEY DETAILS

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | As Shown | SHEET No. | 19 OF 32 |




# GABLE END DETAIL WINDOW HEAD

SCALE 1 : 10

Amended 10-03-17
SG8 added to 70x45 gable frame

firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

**Construction**

Roof

| | |
|---|---|
| Structure: | Mitek roof trusses |
| Cladding: | Refer elevations |
| Purlins: | 70x45 @ 900 c/c max |
| Fascia : | 185 Metal Fascia |
| Soffit: | 4.5mm Hardisoffit® lining |
| Ceiling | |
| Battens: | 35mm Metal @450mm c/c (direct fixed) |
| Lining: | 13mm Gib standard |
| Walls | |
| Structure: | 90x45 @ 600mm c/c<br>90X90 @ 400mm c/c (chimney) |
| Stud height: | 2420mm |
| Stud centres: | 600c/c |
| Interior lining: | 10mm Gib standard® horizontal |
| Building wrap: | Thermakraft building wrap |
| Cladding: | Refer elevations |
| Windows | |
| Frames: | Double glazed aluminim(new) |
| Reveals: | H3.1 treated reveals to aluminium joinery |

- All roof framing fixed as per NZS:3604 2011
- Flashings to be in accordance with AS1/E2
- All fixings to be in accordance with section 4, Durability, NZS:3604
- All timber frame above subfloor to have a minimum treatment of H1.2 and be graded SG8

INSULATION

Walls = R2.4 / fiberglass batts
Roof = R3.6 / fiberglass batts
Concrete floor = R1.3min
(Owner may nominate to increase requirements)

JOB TITLE:

Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

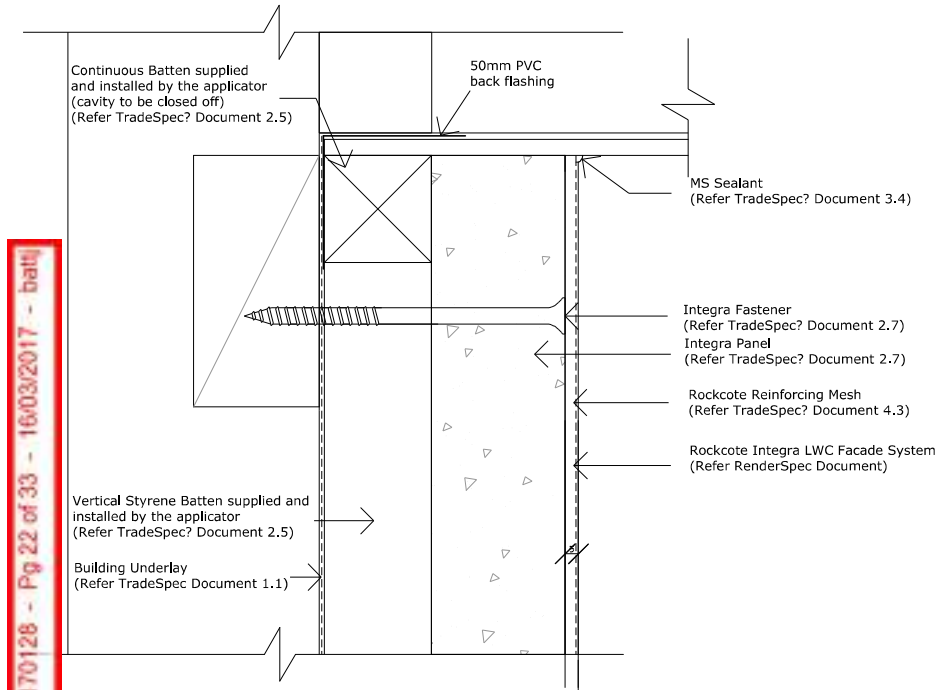
SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

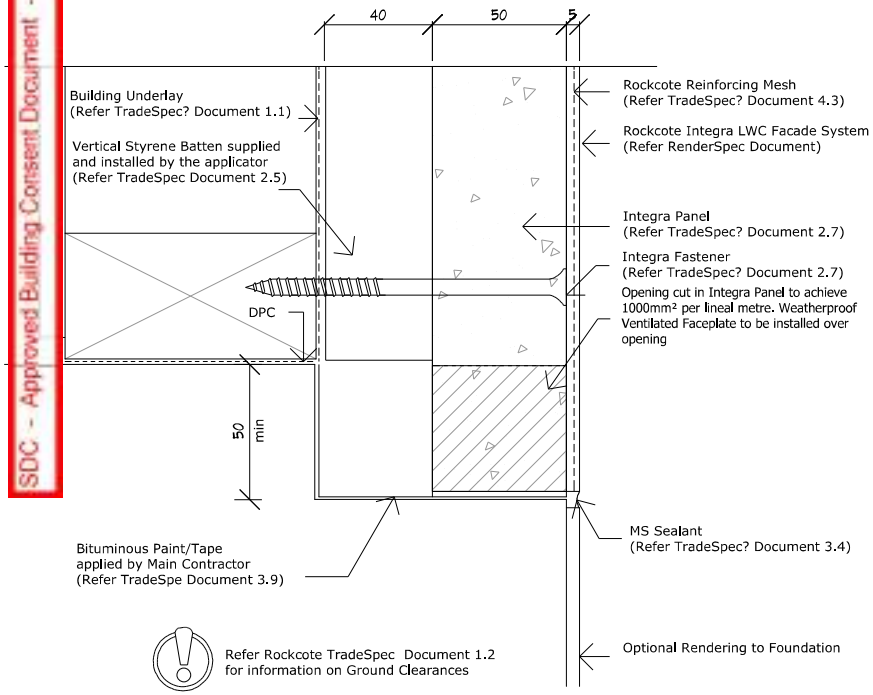
DRAWING TITLE:

GABLE DETAILS

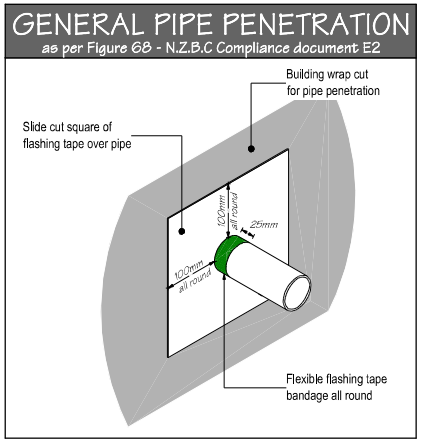
| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | As Shown | SHEET No. | 20 OF 32 |

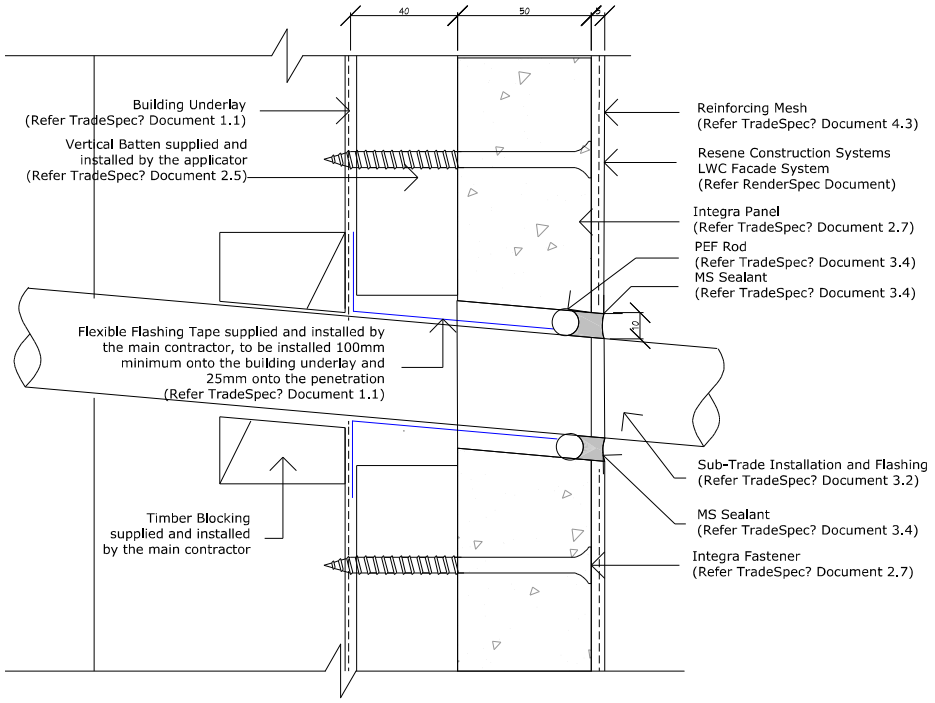



## SOFFIT




## FOUNDATION




The responsibility for the penetration is the responsibility of the main contractor, where possible and practical use a flange.

It is important that there is adequate support for the penetration in the form of timber packing. The penetration should be angled slightly away from the cladding so any moisture is diverted away from the cladding.

## PIPE PENETRATION

**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

Installation

To be installed as per manufacturers technical manual

JOB TITLE:

Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

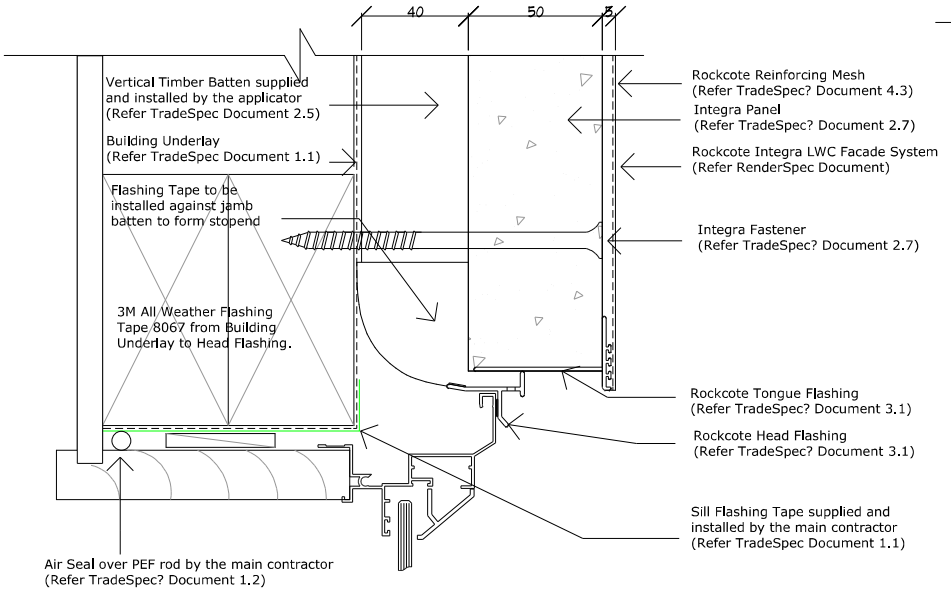
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

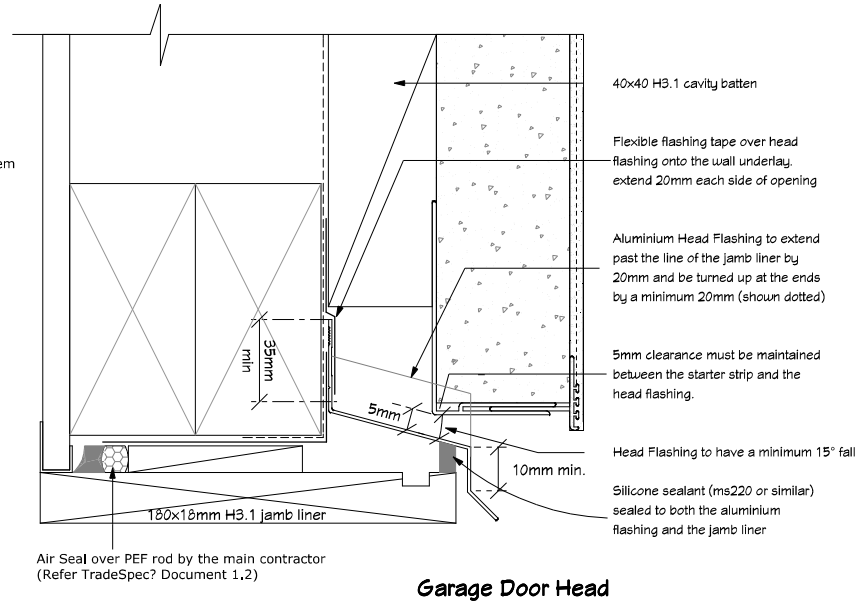
| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
CLADDING DETAILS .1
(Integra Panel)

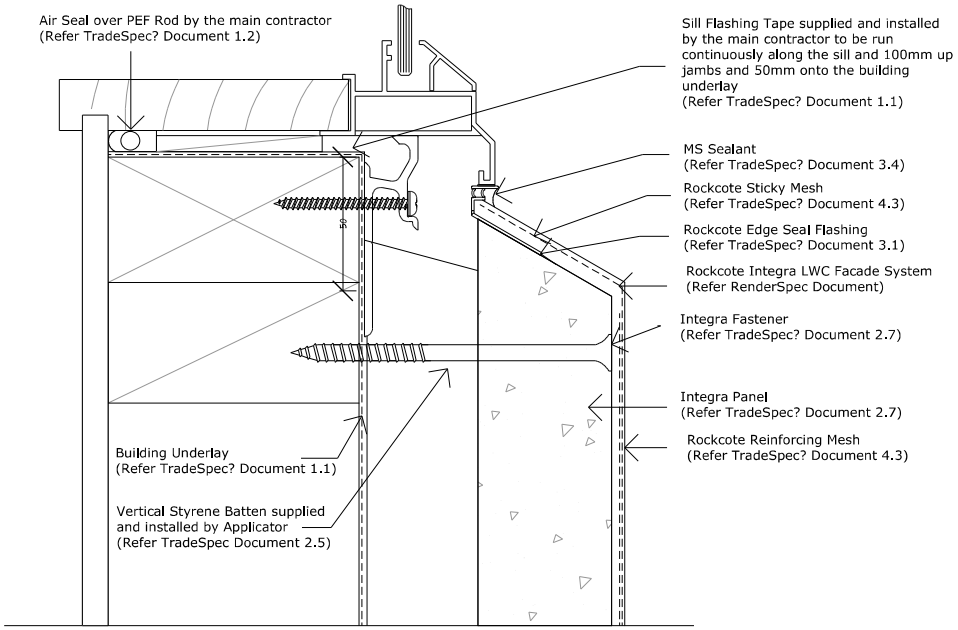
| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:2 | SHEET No. | 21 OF 32 |




## WINDOW HEAD

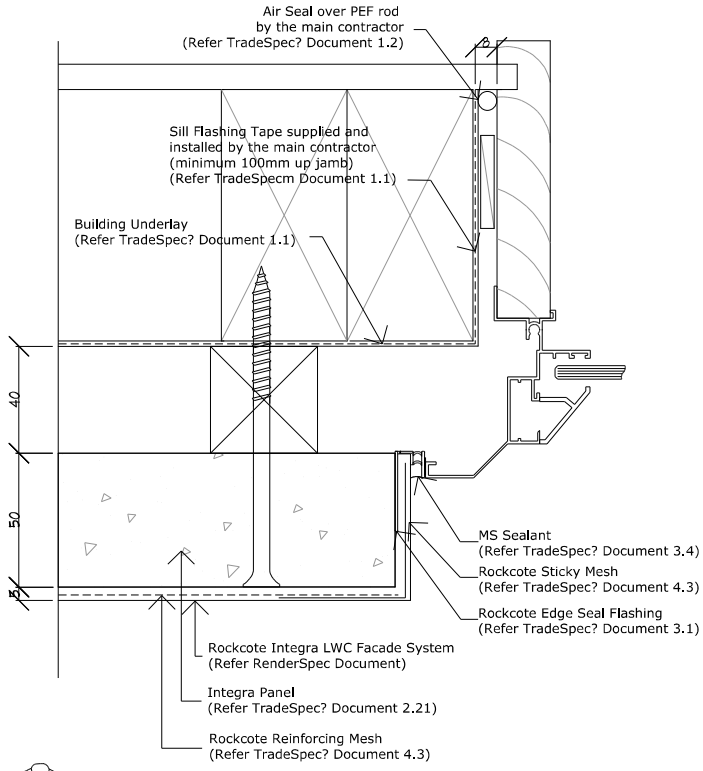



## Garage Door Head




Allow a 25mm Gap between the back of the joinery and external facing timber framing to allow the sill flashing to fit.

## WINDOW SILL




Allow a 25mm Gap between the back of the joinery and external facing timber framing to allow the jamb flashing to fit.

## WINDOW JAMB

Amended 10-03-17
Detail Added

**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
Installation
To be installed as per manufacturers technical manual

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

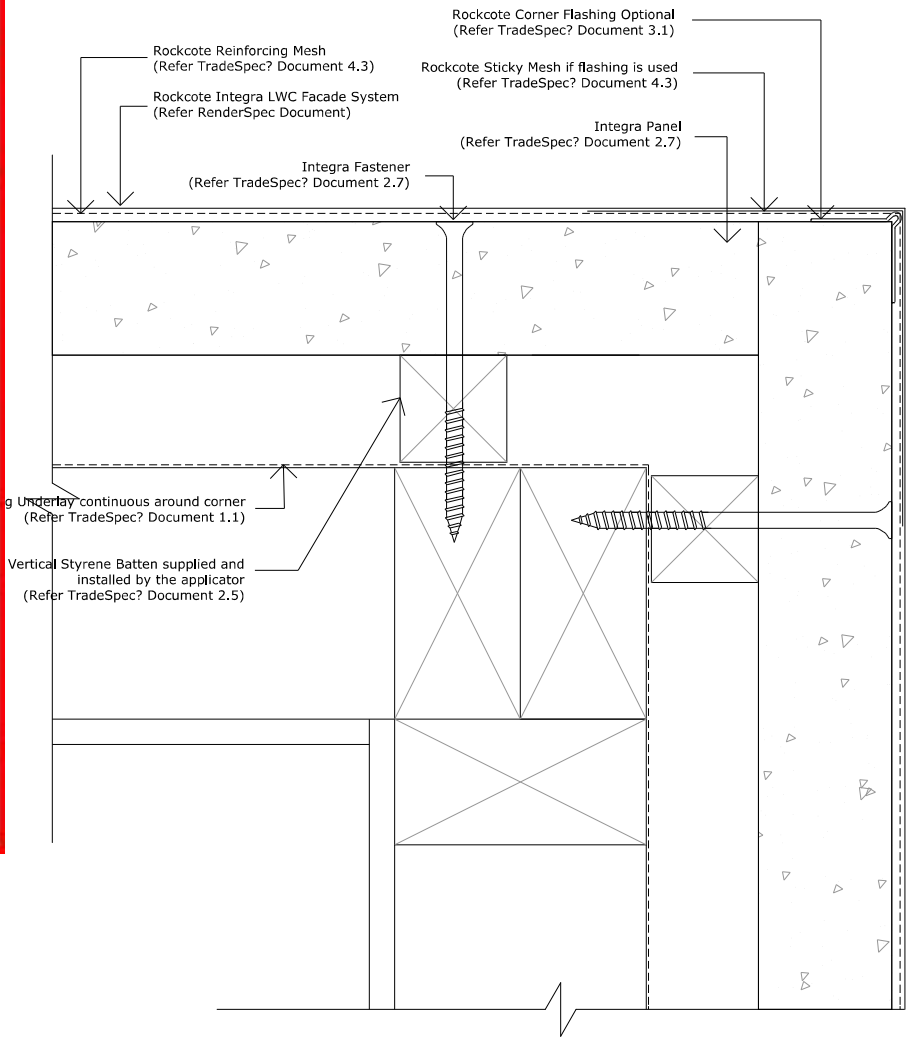
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

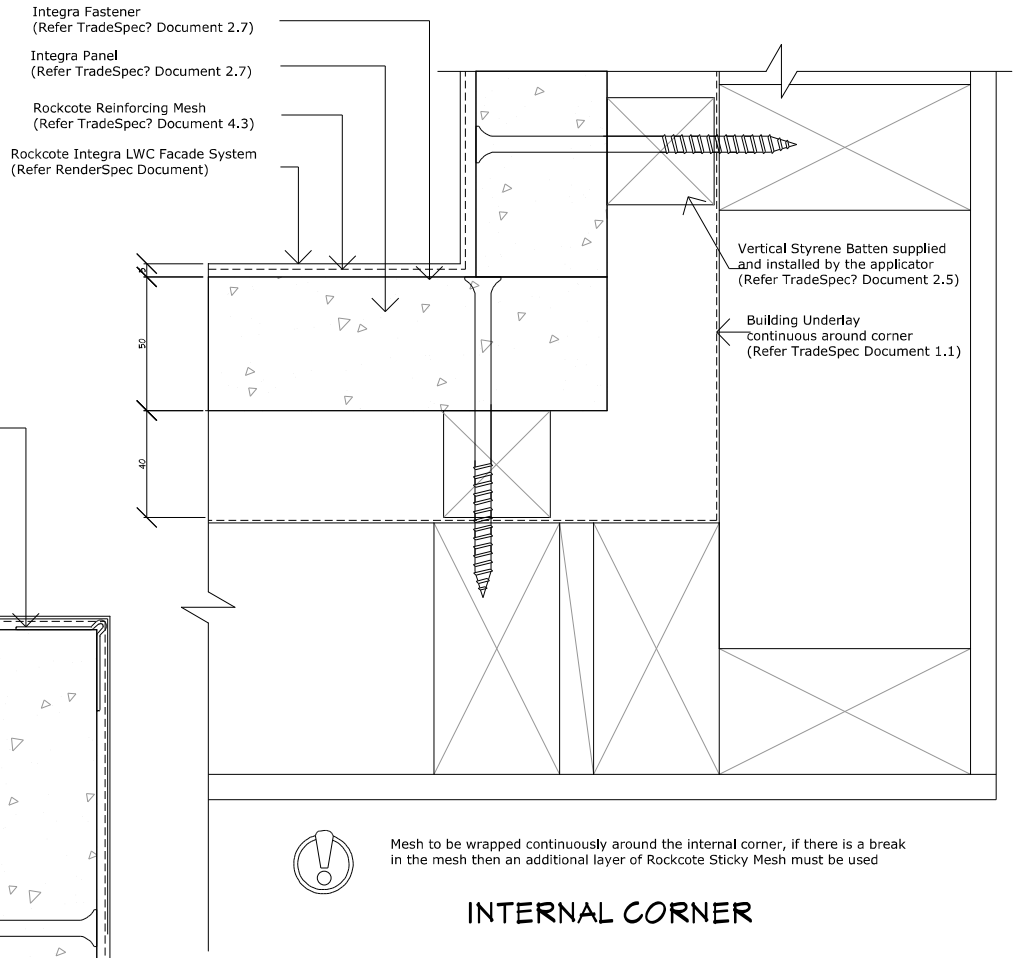
| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
CLADDING DETAILS .2
(Integra Panel)

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:2 | SHEET No. | 22 OF 32 |




EXTERNAL CORNER




Mesh to be wrapped continuously around the internal corner, if there is a break in the mesh then an additional layer of Rockcote Sticky Mesh must be used

INTERNAL CORNER

firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
Installation
To be installed as per manufacturers technical manual

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

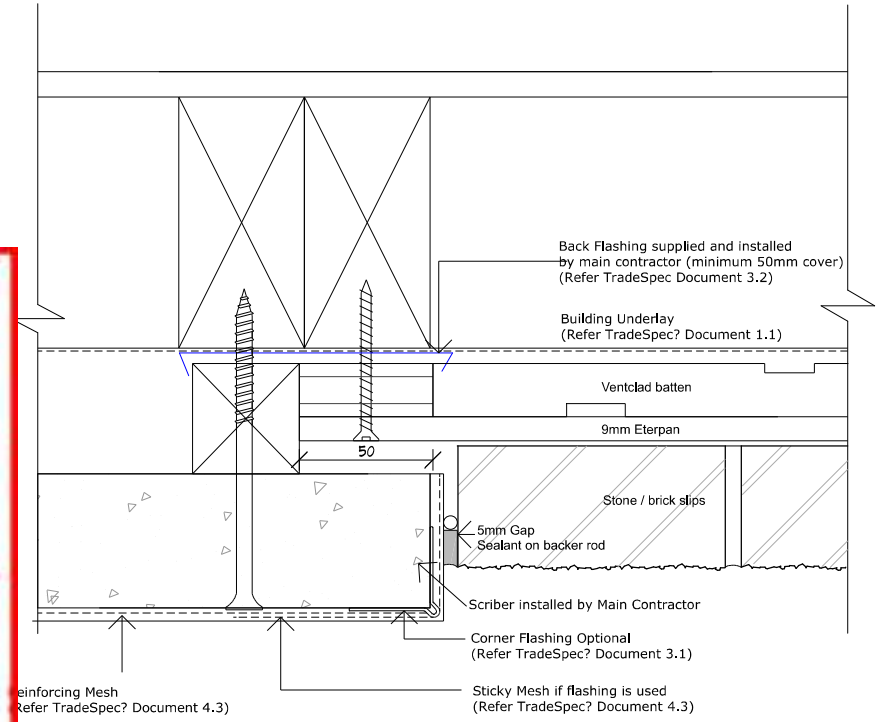
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

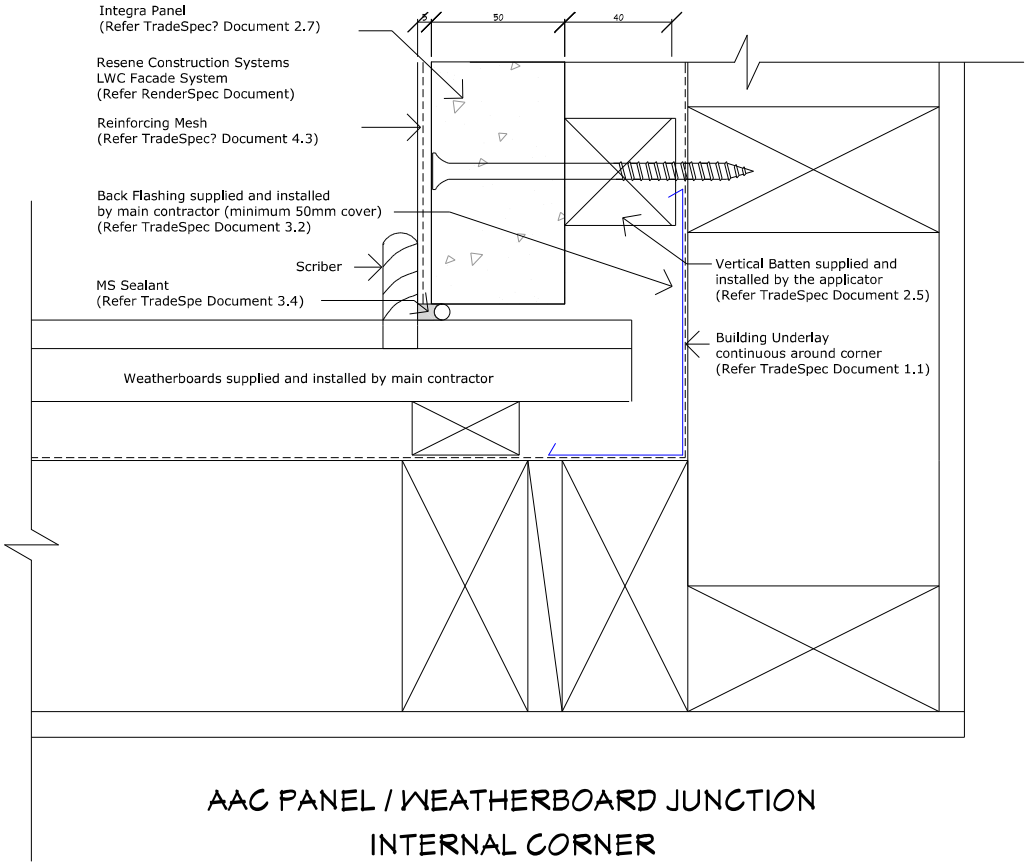
| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
CLADDING DETAILS .3
(Integra Panel)

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:2 | SHEET No. | 23 OF 32 |




## AAC PANEL / MINSTONE JUNCTION




## AAC PANEL / WEATHERBOARD JUNCTION
## INTERNAL CORNER

firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
Installation
To be installed as per manufacturers technical manual

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

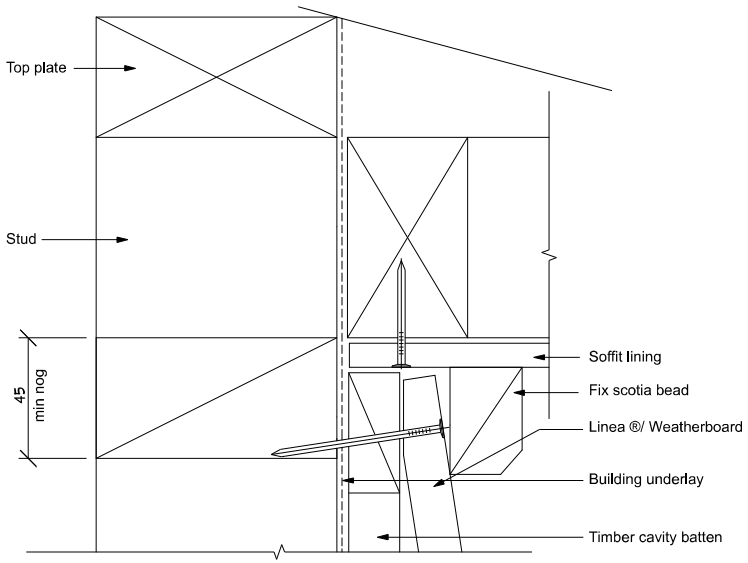
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

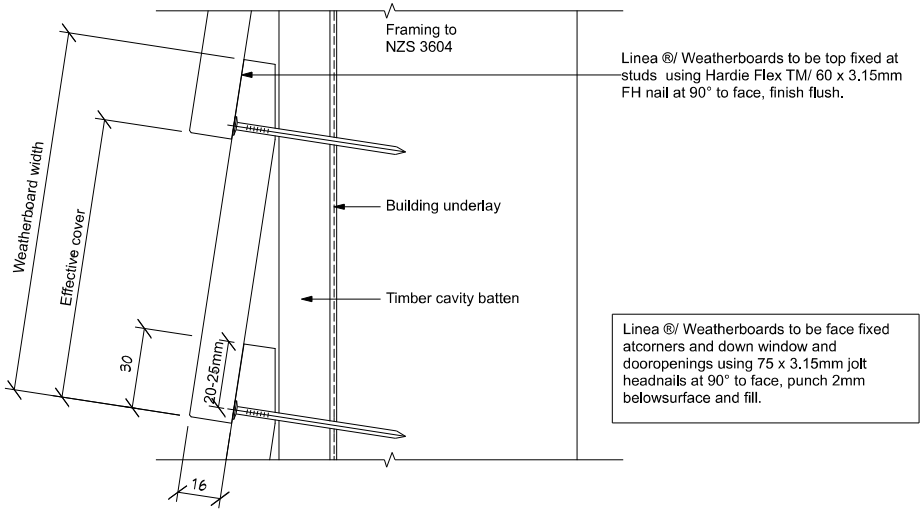
| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
CLADDING DETAILS .4
(Integra Panel)

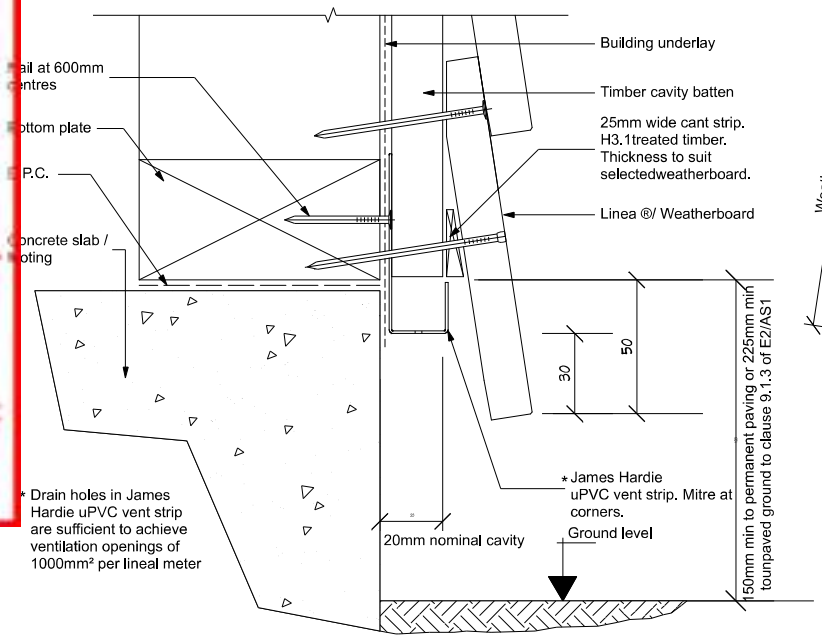
| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:2 | SHEET No. | 24 OF 32 |



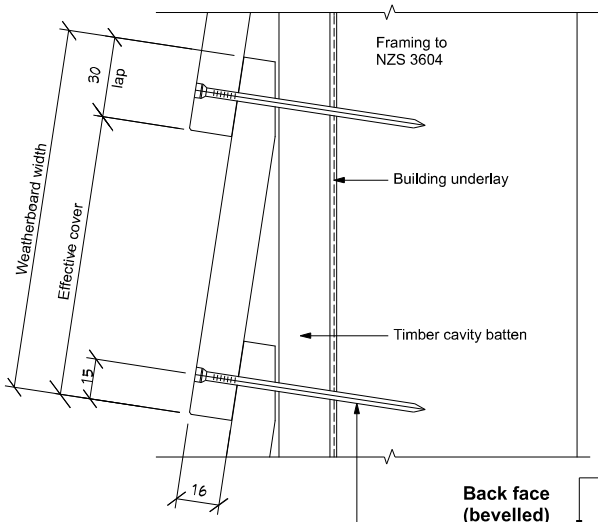

## TIMBER CAVITY SOFFIT JUNCTION
Scale 1:2



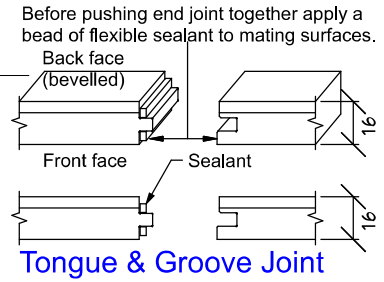

## Concealed Nailing
Scale 1:2



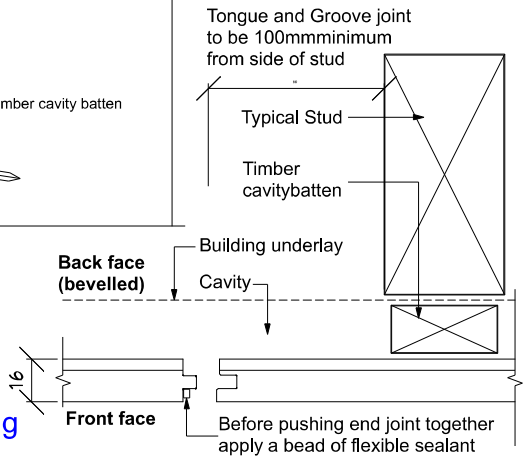

## TIMBER CAVITY FOUNDATION
Scale 1:2




## Exposed Nailing
Scale 1:2




## Tongue & Groove Joint




## Jointing Off Stud

## TIMBER CAVITY WEATHERBOARD FIXING

**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
Installation
To be installed as per manufacturers technical manual

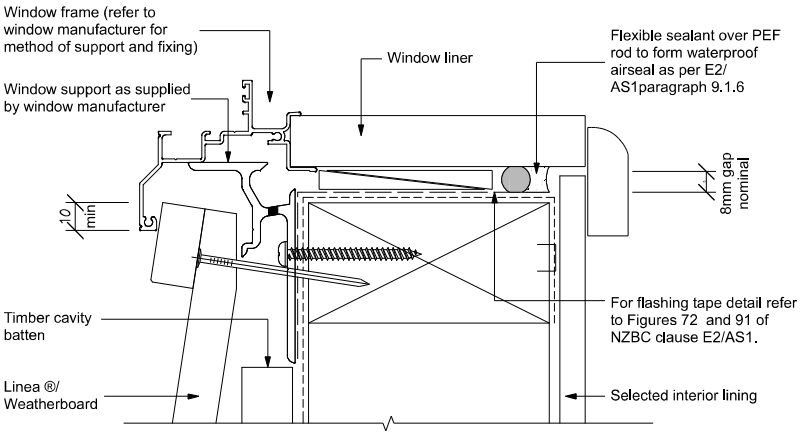
JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

| SITE DATA: for zones up to and including | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
CLADDING DETAILS .1
(Linea)

| | |
|---|---|
| JOB No. 42-2016 | DESIGNED: 001 |
| DATE: 20/01/2017 | DRAWN: 004 |
| SCALE: 1:2 | SHEET No. 25 OF 32 |



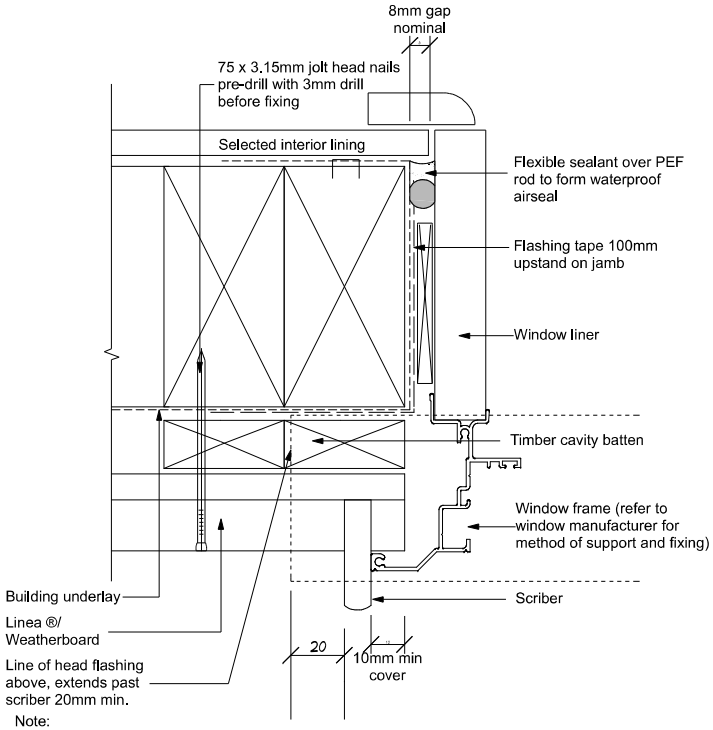

**General notes for materials selection**

1. **Flashing materials must be selected based on environmental exposure, refer to NZS 3604 and Table 20 of NZBC clause E2/AS1.**
2. **Building underlay must comply with acceptable solution NZBC clause E2/AS1.**
3. **Flashing tape must have proven compatibility with the selected building underlay / James Hardies rigid air barrier and other materials with which it comes into contact as per Table 21 of NZBC clause E2/AS1.**
4. **Sill support bars must comply with EM6, E2/VM1 and B2/AS1**

**Refer to the manufacturer or supplier for technical information for these materials.**

## TIMBER CAVITY WINDOW AND DOOR SILL WITHOUT FACINGS

Scale 1:2




Note:
When James Hardie rigid air barrier is used flashing tape to be applied to the entire window opening.

## TIMBER CAVITY WINDOW AND DOOR JAMB WITHOUT FACINGS

Scale 1:2

**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
Installation
To be installed as per manufacturers technical manual

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

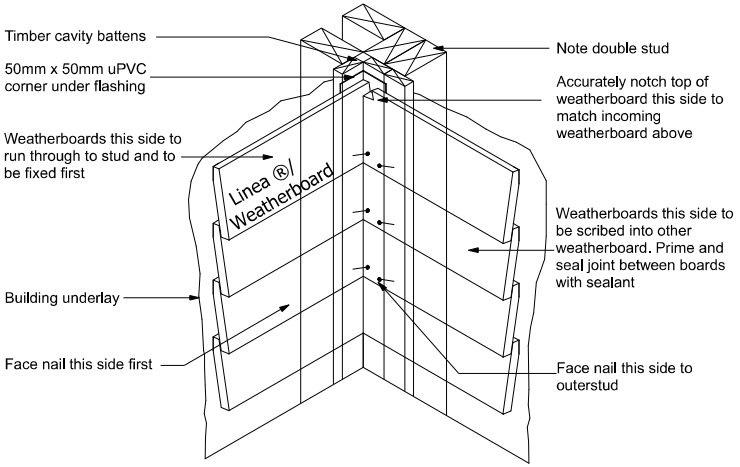
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

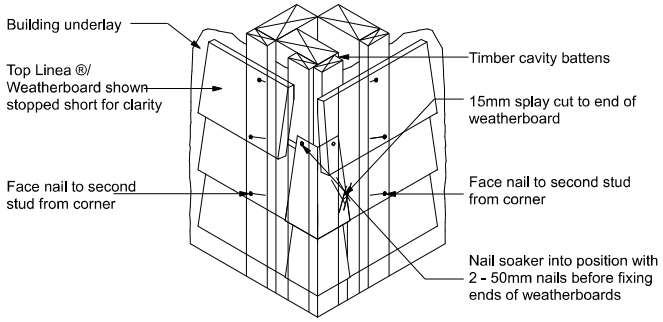
DRAWING TITLE:
CLADDING DETAILS .2
(Linea)

| | |
|---|---|
| JOB No. 42-2016 | DESIGNED: 001 |
| DATE: 20/01/2017 | DRAWN: 004 |
| SCALE: 1:2 | SHEET No. 26 OF 32 |




## TIMBER CAVITY INTERNAL CORNER

Scale 1:10




| Soaker material | Nail material |
|---|---|
| Copper | Copper or phosphor bronze |
| Aluminium | Hot dip galvanised |
| Stainless steel | Stainless steel |

## TIMBER CAVITY EXTERNAL CORNER SOAKER

Scale 1:10

firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

Installation

To be installed as per manufacturers technical manual

JOB TITLE:

Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:

CLADDING DETAILS .3

(Linea)

| | |
|---|---|
| JOB No. 42-2016 | DESIGNED: 001 |
| DATE: 20/01/2017 | DRAWN: 004 |
| SCALE: As Shown | SHEET No. 27 OF 32 |

**Note:**
**Stone or Brick slip supplier to be responsible for**
**Specification and waterproofing the Eterpan sheet joints**
**Specification and pre sealing or waterproofing of the Eterpan substrate if required**
**Specification of slip support rails or brackets if required**
**Specification and warranty of the adhesive system**

| Max. wet weight of stone 80kg/sqm |
|---|
| Studs @ 600mm crs max. nogs @ 800 crs |
| Screws to all framing @ 150crs max |

Stone / brick slips

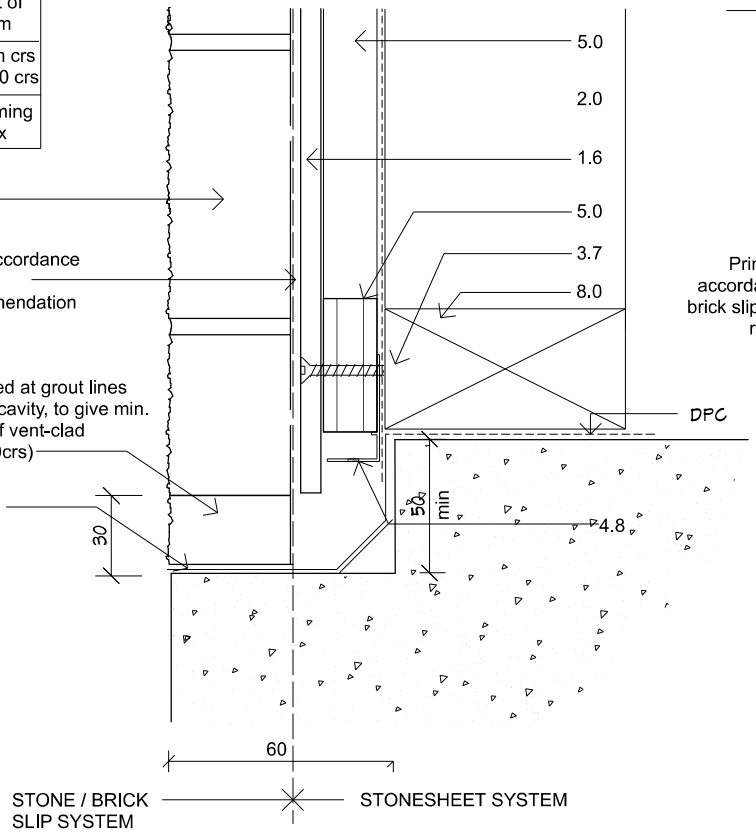
Primer and fixing in accordance with stone / brick slips manufacturersrecommendation

Weep hole slots formed at grout lines ventilation out of wall cavity, to give min. 1000mm² per meter of vent-clad (example 30x6 @ 150crs)

Coats Flintcote min.

Key to tags

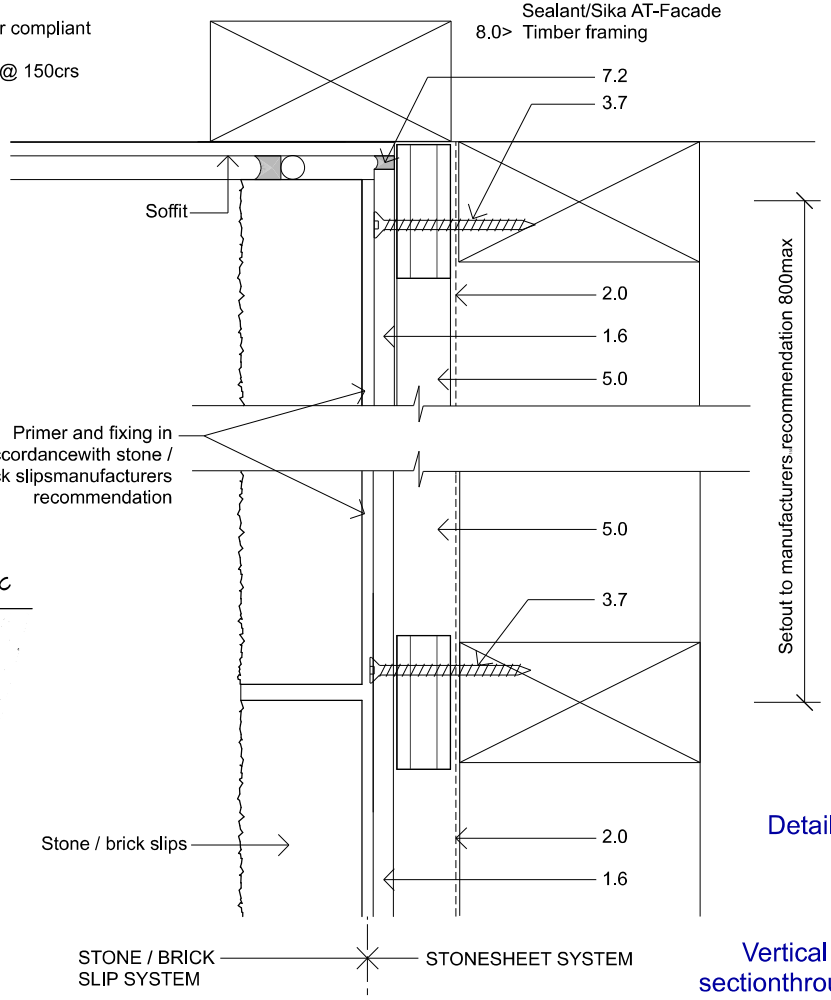
1.6> Eterpan Base 9.0mm
2.0> Building wrap or other compliant with E2/AS1, Table 23
3.7> 10g 60mm ss screws @ 150crs
4.8> Vermin barrier
5.0> VentClad batten
8.0> Timber Framing




BASE DETAIL

Key to tags

1.6> Eterpan Base 9.0mm
2.0> Building wrap or other compliant with E2/AS1, Table 23
3.7> 10g 60mm ss screws
5.0> VentClad battens
7.2> Holdfast Soudal Fix All 220 Sealant/Sika AT-Facade
8.0> Timber framing




SOFFIT DETAIL

Detail at nogs

Vertical sectionthrough exterior wall

**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
Installation
To be installed as per manufacturers technical manual

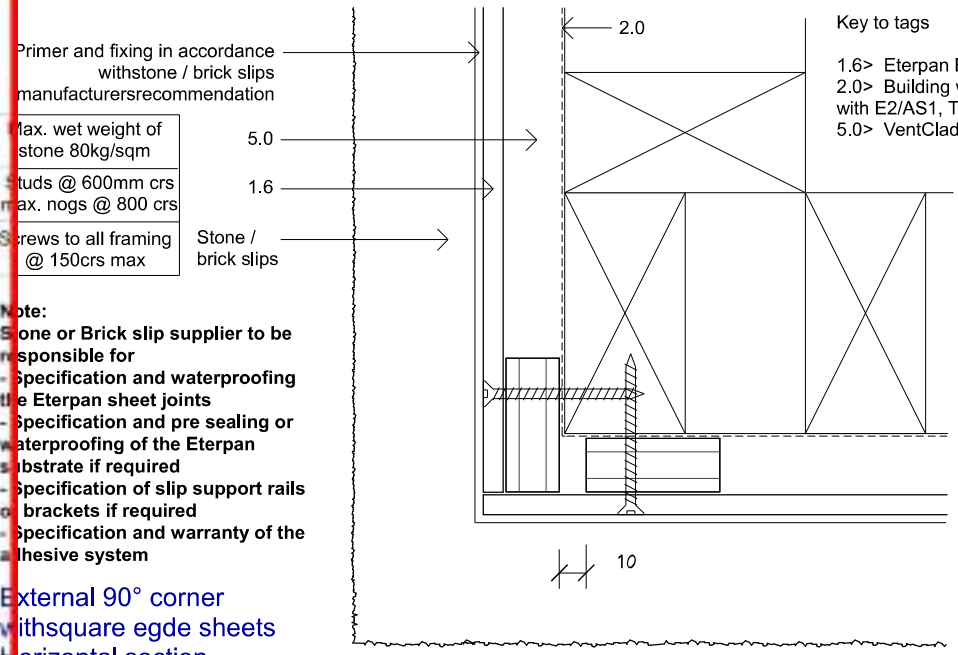
JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

| SITE DATA: for zones up to and including | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
CLADDING DETAILS .1
(Minstone)

| JOB No. 42-2016 | DESIGNED: 001 |
|---|---|
| DATE: 20/01/2017 | DRAWN: 004 |
| SCALE: 1:2 | SHEET No. 28 OF 32 |

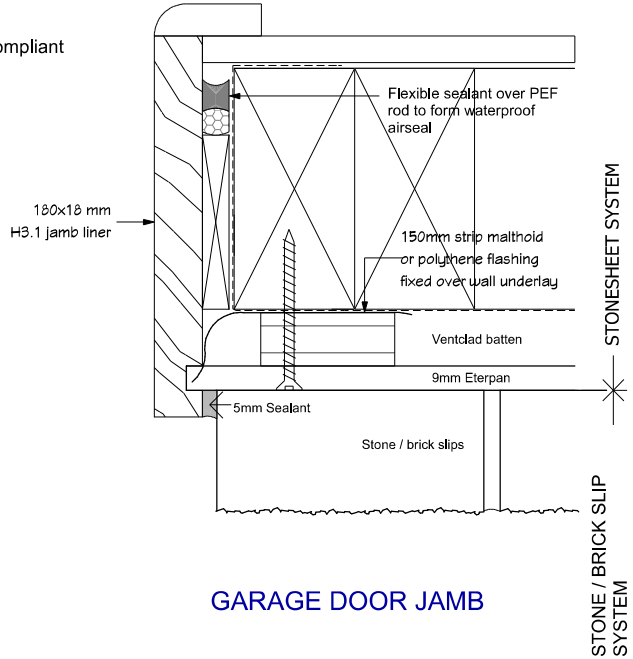



Key to tags

1.6> Eterpan Base 9.0mm
2.0> Building wrap or other compliant with E2/AS1, Table 23
5.0> VentClad batten

**Note:**
**Stone or Brick slip supplier to be responsible for**
**- Specification and waterproofing the Eterpan sheet joints**
**- Specification and pre sealing or waterproofing of the Eterpan substrate if required**
**- Specification of slip support rails or brackets if required**
**- Specification and warranty of the adhesive system**

External 90° corner withsquare egde sheets Horizontal section throughframing




GARAGE DOOR JAMB

**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:
Installation
To be installed as per manufacturers technical manual

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

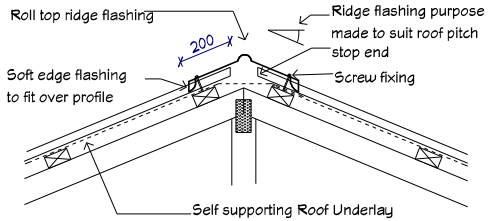
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

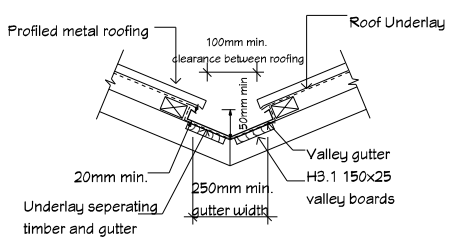
DRAWING TITLE:
CLADDING DETAILS .2
(Minstone)

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:2 | SHEET No. | 29 OF 32 |



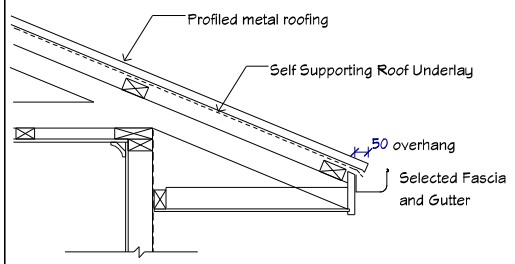

## STANDARD RIDGE DETAIL

CORRUGATE PROFILE COLORSTEELSCALE 1 : 20
as per Figure 46, NZ Building Code, Clause E2, External Moisture



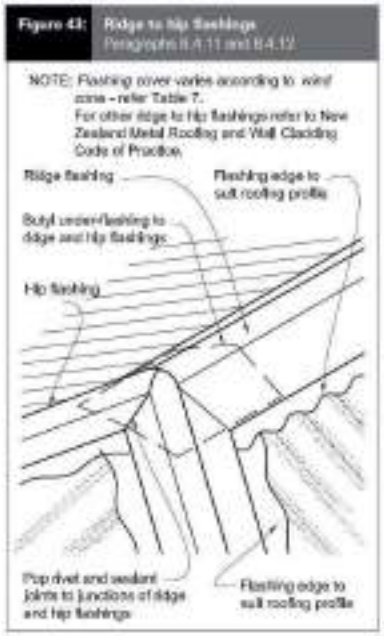

## STANDARD VALLEY DETAIL

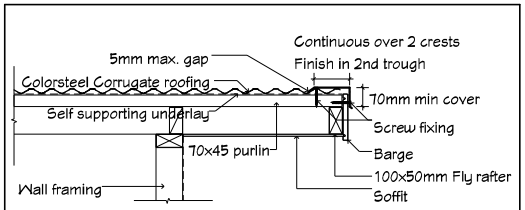
CORRUGATE PROFILE COLORSTEELSCALE 1 : 20
as per Figure 46, NZ Building Code, Clause E2, External Moisture




## STANDARD SOFFIT DETAIL

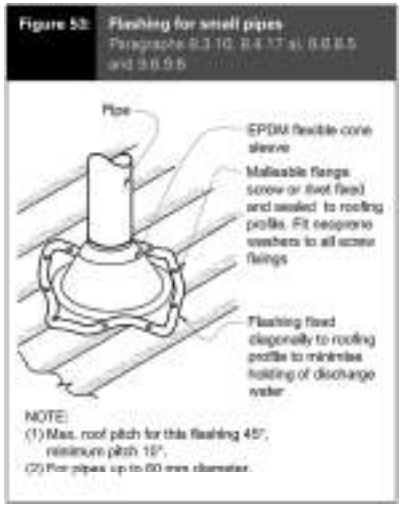
CORRUGATE PROFILE COLORSTEELSCALE 1 : 20
as per Figure 46, NZ Building Code, Clause E2, External Moisture

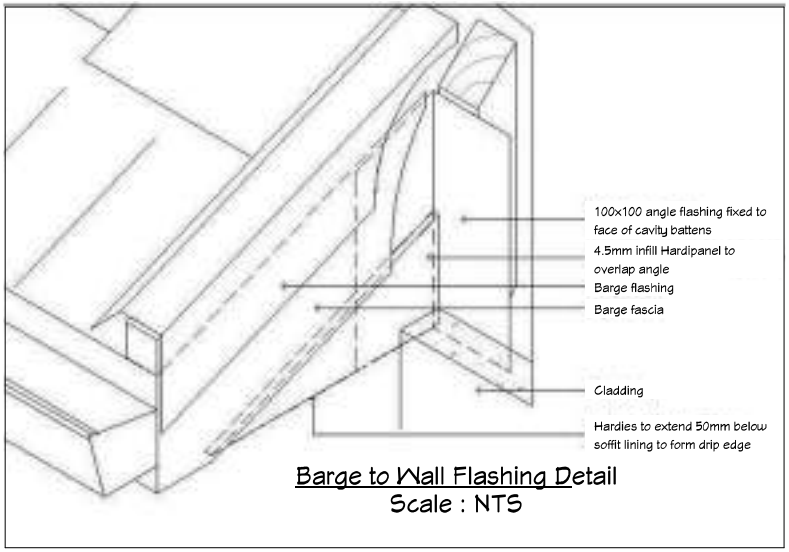



## BARGE DETAIL

PROFILED METAL COLORSTEEL SCALE 1 : 20
as per Figure 47, NZ Building Code, Clause E2, External Moisture




Barge to Wall Flashing Detail
Scale : NTS

Amended 10-03-17
Detail Added

firsthomes

**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

Installation

To be installed as per manufacturers technical manual
All roof framing fixed as per NZS3604.2011

All fixings to be in accordance with section 4 , Durability , NZS:3604.2011

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

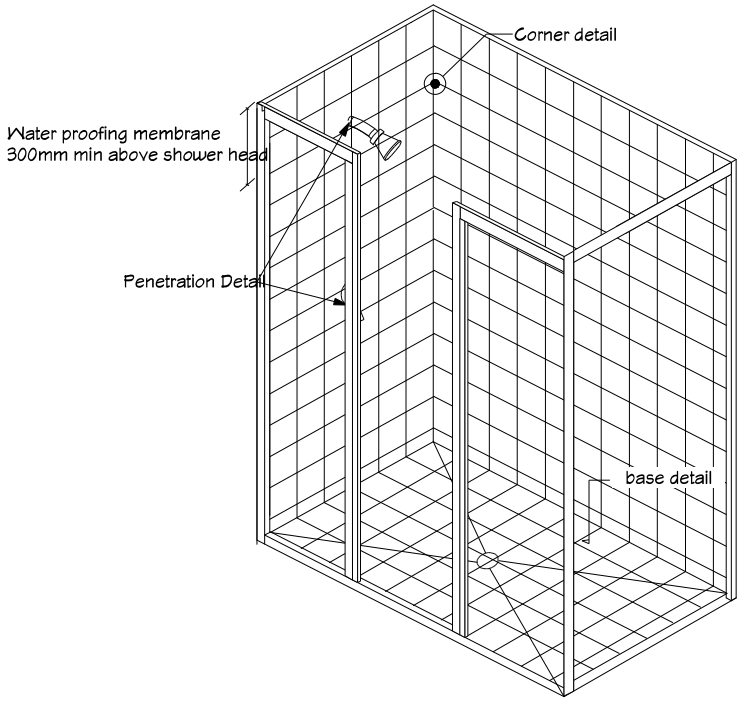
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

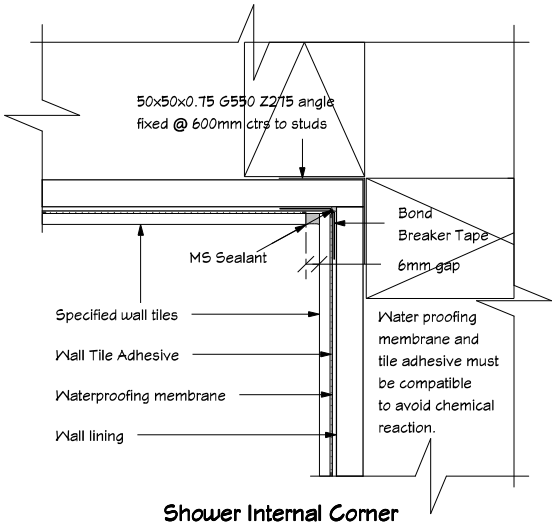
DRAWING TITLE:
ROOF DETAILS

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | As Shown | SHEET No. | 30 OF 32 |



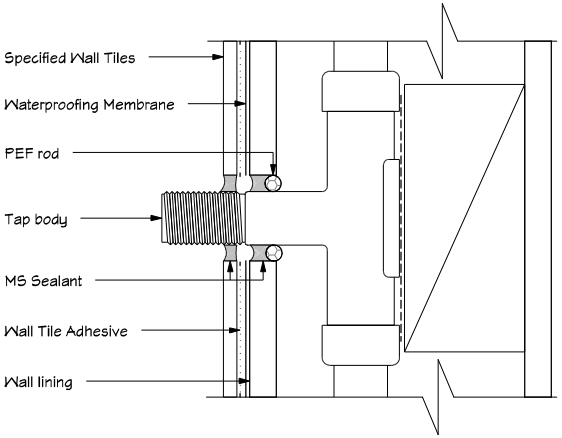

## Shower Reference

Scale 1:5




## Shower Internal Corner

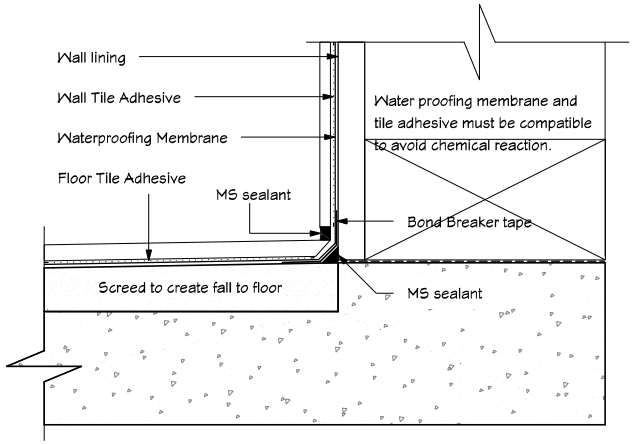
**Tiled Walls**




## Penetration Detail

**Tanked & Tiled Wall**

Water proofing membrane and
tile adhesive must be compatible
to avoid chemical reaction.




## Recessed Shower Base to Wall

**Tiled Floor & Wall**

firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

- All details and installation to be in accordance with E3
- Details in accordance with manufacturers specifications, refer to these before and during installation.
- All fixings to be as per NZS3604:2011 and comply with Section 4, Durability, NZS:3604:2011
- Water proofing system to be Monoflex Tile Adhesive over "Cureflex" waterproof membrane
- If shower liner finishes less than 300mm above shower spout, then finish sheet linings above with vinyl coated, or semi-gloss/gloss coating. Ref: E3/AS1 3.1.2 f)

**Wet area / water splash floor & wall options**

Due to the finish variations required by the owner from time to time, the list below is provided as suitable options for floor coverings in watersplash areas.

- Tiled - Ceramic or stone tiles having 6% maximum water absorption, waterproof grouted joints, and bedded with an adhesive specified by the tile manufacturer as being suitable for the tiles, substrate material and the environment use.
- Cement based solid plaster or concrete having a steel trowel or polished finish, "semi-gloss" or "gloss" paint must be used if paint finish required.
- Timber/timber based products such as particleboard sealed with waterproof applied coatings.
- Sheet linings finished with vinyl coated wall paper, semi-gloss or gloss coating. (wall only)
- Integrally waterproof sheet material (e.g. polyvinylchloride "vinyl") with sealed joints. (wall only)
- Any other material that compiles with NZBC E3 clauses 3.1.1, 3.1.2 & D1 AS1/VM1

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

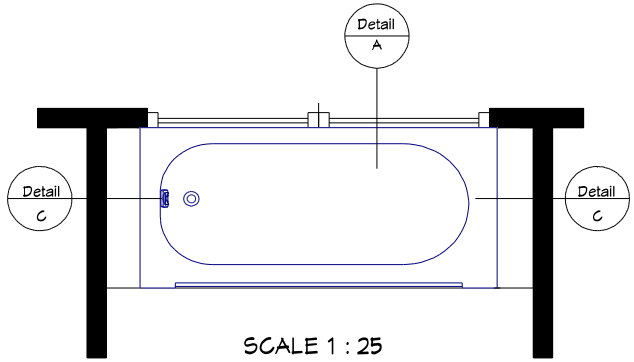
TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

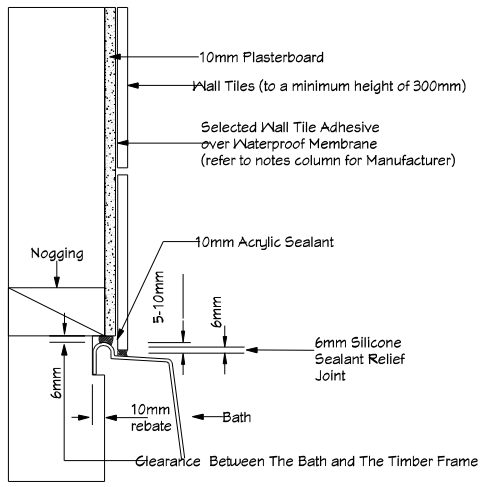
| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
WET AREA DETAILS
SHOWER DETAILS

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:5 | SHEET No. | 31 OF 32 |

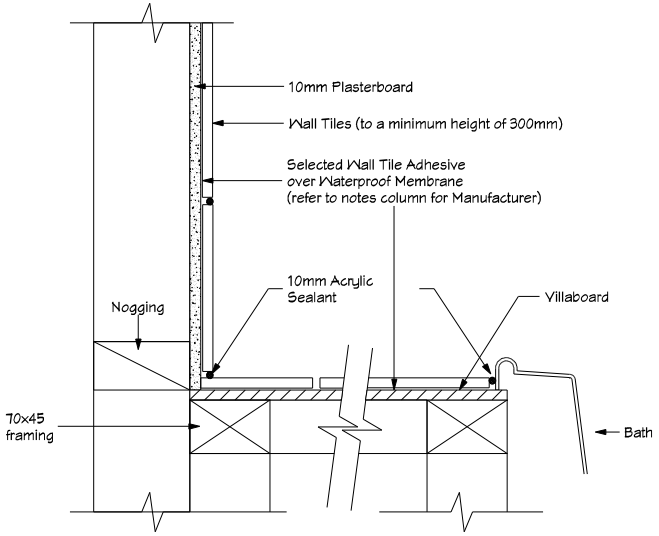



SCALE 1 : 25




BATH / WALL JUNCTION
DETAIL A

SCALE 1 : 5




BATH / WALL JUNCTION
DETAIL C

SCALE 1 : 5

firsthomes
**Christchurch**
chchsales@firsthomes.co.nz
ph. 021 575545



NOTES:

- All details and installation to be in accordance with E3
- Details in accordance with manufacturers specifications, refer to these before and during installation.
- All fixings to be as per NZS3604:2011 and comply with Section 4, Durability, NZS:3604:2011
- Water proofing system to be Monoflex Tile Adhesive over "Cureflex" waterproof membrane
- If shower liner finishes less than 300mm above shower spout, then finish sheet linings above with vinyl coated, or semi-gloss/gloss coating. Ref: E3/AS1 3.1.2 f)

**Wet area / water splash floor & wall options**

Due to the finish variations required by the owner from time to time, the list below is provided as suitable options for floor coverings in watersplash areas.

- Tiled - Ceramic or stone tiles having 6% maximum water absorption, waterproof grouted joints, and bedded with an adhesive specified by the tile manufacturer as being suitable for the tiles, substrate material and the environment use.
- Cement based solid plaster or concrete having a steel trowel or polished finish, "semi-gloss" or "gloss" paint must be used if paint finish required.
- Timber/timber based products such as particleboard sealed with waterproof applied coatings.
- Sheet linings finished with vinyl coated wall paper, semi-gloss or gloss coating. (wall only)
- Integrally waterproof sheet material (e.g. polyvinylchloride "vinyl") with sealed joints. (wall only)
- Any other material that compiles with NZBC E3 clauses 3.1.1, 3.1.2 & D1 AS1/VM1

JOB TITLE:
Luigie & Lisa Johnstone
Lot 31 , DP 488852
Hinterland Drive
The Woods , Prebbleton

TERRITORIAL AUTHORITY:
Selwyn District Council
Prebbleton , Living Z

SITE DATA: for zones up to and including

| | |
|---|---|
| Ground Bearing: | Ref. geo. |
| Sub-soil Classification: | E |
| Wind Zone: | High (NZS:3604) |
| Earthquake Zone: | 1 (NZS:3604) |
| Exposure Zone: | C (NZS:3604) |
| Climate Zone: | 3 |
| Rainfall Intensity: | 55mm/hr |
| Snowload: | 1.0kPa (open ground) |

DRAWING TITLE:
WET AREA DETAILS
BATH DETAILS

| | | | |
|---|---|---|---|
| JOB No. | 42-2016 | DESIGNED: | 001 |
| DATE: | 20/01/2017 | DRAWN: | 004 |
| SCALE: | 1:5 | SHEET No. | 32 OF 32 |