

move.

Council Records

These records were obtained in August 2022. NPDC is currently undergoing a review of the property search report content. As such the documentation provided by the NPDC may not be a complete full record. We suggest you get your own professional advice on the provided content and in fact any NPDC files for this property.



Te Kaunihera-ā-Rohe o Ngāmotu

NEW PLYMOUTH DISTRICT COUNCIL

newplymouthnz.com

Code Compliance Certificate

Form 7, Section 95, Building Act 2004

The Building

Street Address of building: 20 Keene Drive BELL BLOCK, NEW PLYMOUTH 4312

Legal Description of land where building is located: Lot 46 DP 471582

Current, lawfully established use: Dwelling

Year first constructed: 2015

The Owner

Name of owner: Bradley Craig DENT

Natalie Joy BRIEN

Contact Person: A1 HOMES TARANAKI

Phone number: 027 255 1007

Facsimile number: -

Email address: brd.servicesltd@gmail.com

Mailing Address: Bradley Craig DENT

20 Keene Drive

BELL BLOCK 4312

Building Work

Building Consent number:

BC15/118185

Description of work:

**single level dwelling with four bedrooms and
attached double garage**

Issued by:

New Plymouth District Council

Code Compliance

The building consent authority named below is satisfied, on reasonable grounds, that –

(a) the building work complies with the building consent.

This is a final code compliance certificate issued in respect of all of the building work under the above building consent.

CODE COMPLIANCE CERTIFICATE


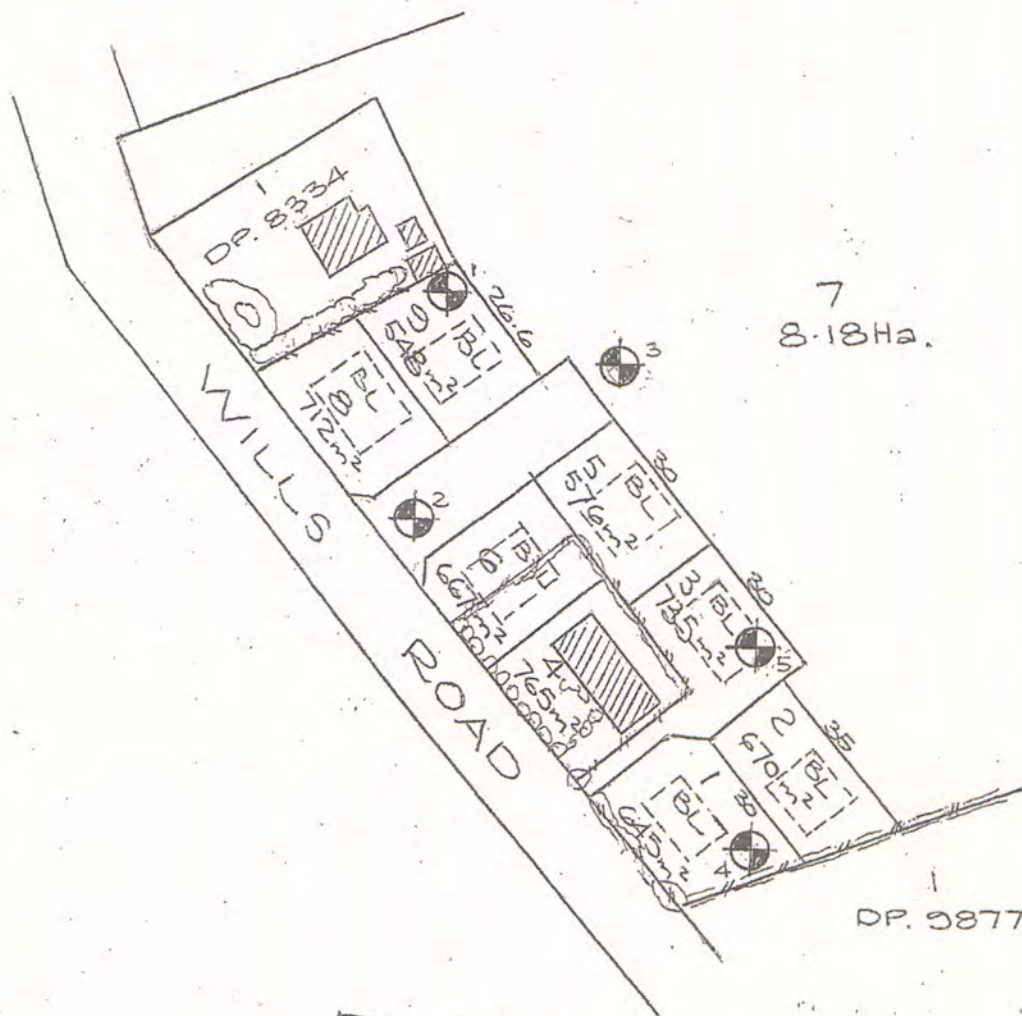
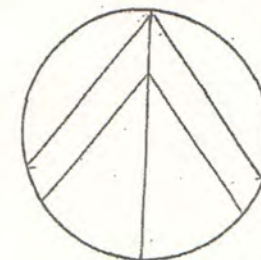
Building Administration Officer

On behalf of: New Plymouth District Council Building Consent Authority

Date Issued: 26 September 2016

PLANS

BC15/118185

 EXISTING HOUSE

PLAN

1370

No	Revisions	Date	App

Designed	BAC	Print Date
Drawn	BAC	23
Checked	BAC	5
Approved	BAC	02
File	812	
Scales	1 in 1370	

ORIGINAL DRAWING SIZE - A3

Client **TUFFERMANS**
SURVEYORS LTD
PO Box 193
NEW PLYMOUTH

NAKI DEVELOPMENTS
SUBDIVISION
52 WILLS ROAD
BELL BLOCK.

Sheet Title

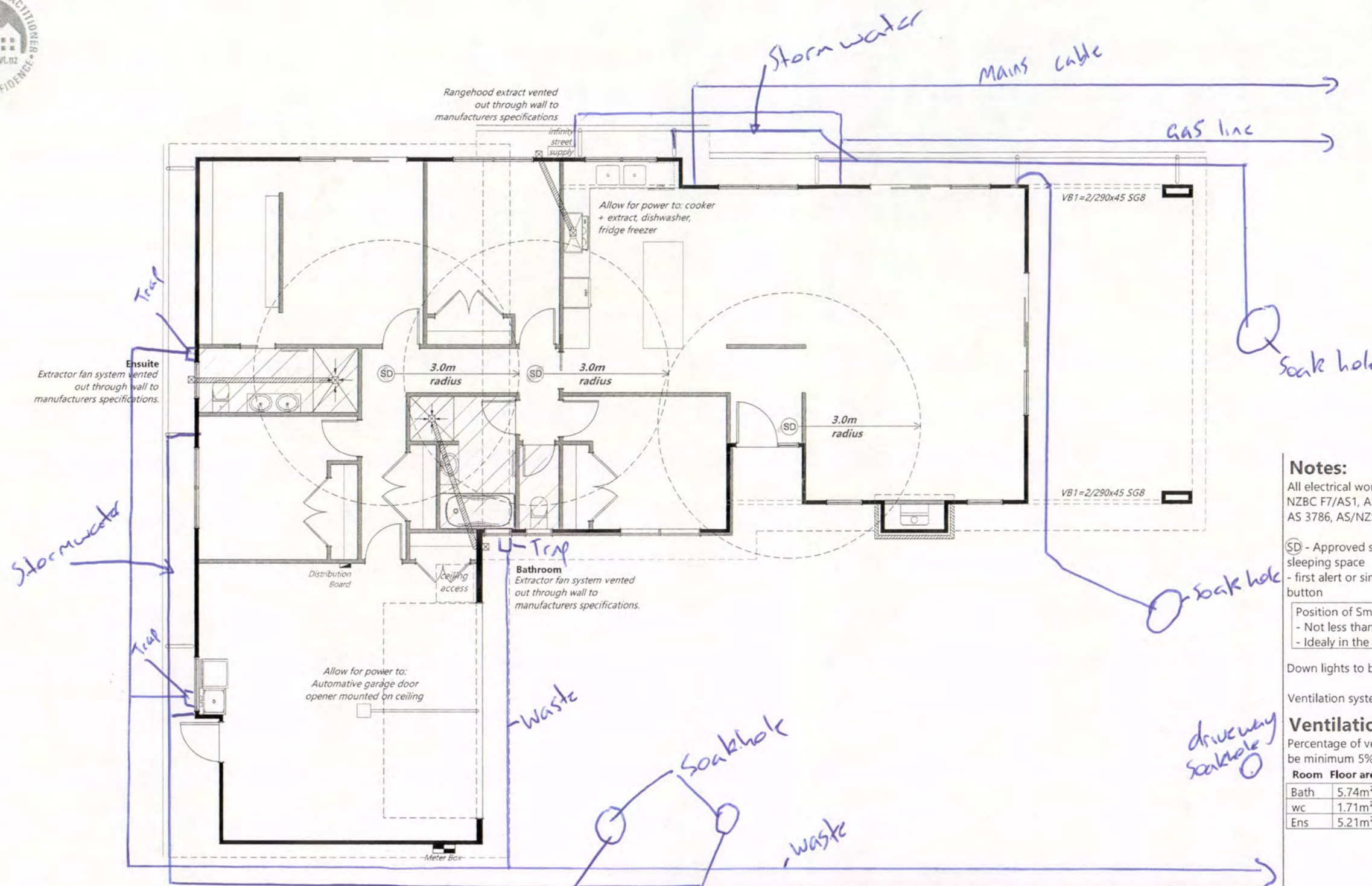
SITE PLAN

Job Number	Sheet	Rev
812	01	
	of	shs

B_AC SERVICES

Brian Cleaver
16 Lismore Street
New Plymouth
Phone 06 758 4470
Mobile 025 421 843

NPDC Approved for
13 MAY 2015
Building Consent



Notes:

All electrical work & items to comply with;
NZBC F7/AS1, AS/NZS 3000, AS/NZS 3008,
AS 3786, AS/NZS 5000.2: 2006

SD - Approved smoke detectors required within 3.0m of any sleeping space
- first alert or similar. smoke alarms to have both a test & hush button

Position of Smoke detectors:
- Not less than 200mm from a wall
- Ideally in the centre of ceiling where possible (hallways)

Down lights to be CA 80 or CA 135 Rated (max 1 per 5m²).

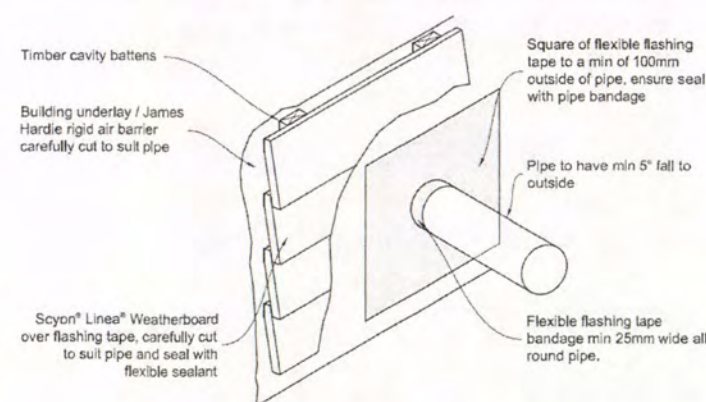
Ventilation system to vent ducts & r/hood to soffit outlet

Ventilation of Sanitary rooms

Percentage of ventilated opening to be minimum 5% of room floor area

Room	Floor area	Window opening	Percentage
Bath	5.74m ²	800x600 = 0.48m ²	8.3%
wc	1.71m ²	800x600 = 0.48m ²	28.1%
Ens	5.21m ²	800x800 = 0.64m ²	12.3%

Figure 47: Timber cavity pipe penetration



Client Details : NC429
Brad Dent & Natalie Brien

Address:
20 Keene Drive
Bell Block

New Design

Electrical Plan

Scale: 1:100
Date: 2/04/2015
Rev: Sheet no: 21

Drawn: DS
Wind: High
Earthq: 1
Check: N.Davis
Exposure: C
Snow: NO

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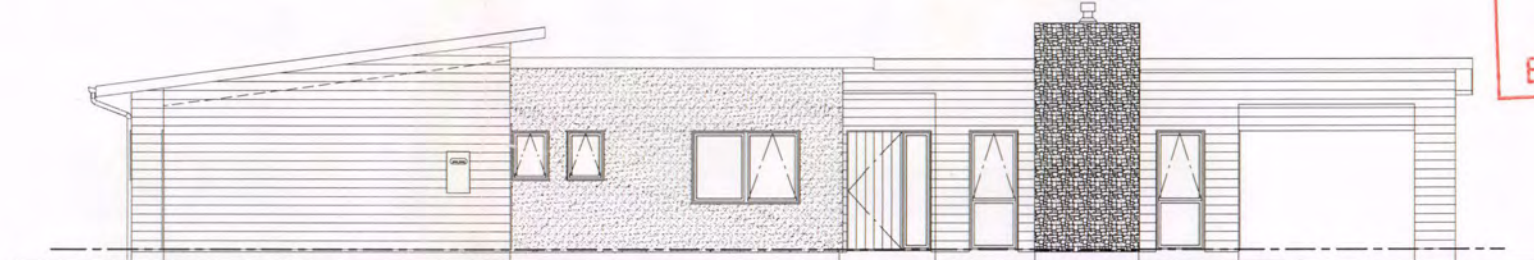
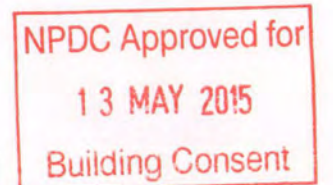
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6415/118185



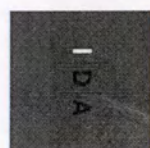
Proposed New Home For

Brad Dent & Natalie Brien
20 Keene Drive
Bell Block

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DESIGN ARCHITECTURE

NZBC F5: Construction and Demolition Hazards

Acceptable Solution F5/AS1

1.0 Work-Site Barriers

1.0.1 The necessity for barriers will depend mainly on the site location.
The need will be greater in areas with high levels of pedestrian traffic (i.e. in Central Business Districts), than in industrial or rural areas.
Barriers are not necessary for domestic dwellings up to 2 storeys above ground level unless specific hazards exist.

At all work-sites hazard evaluation will take account of:

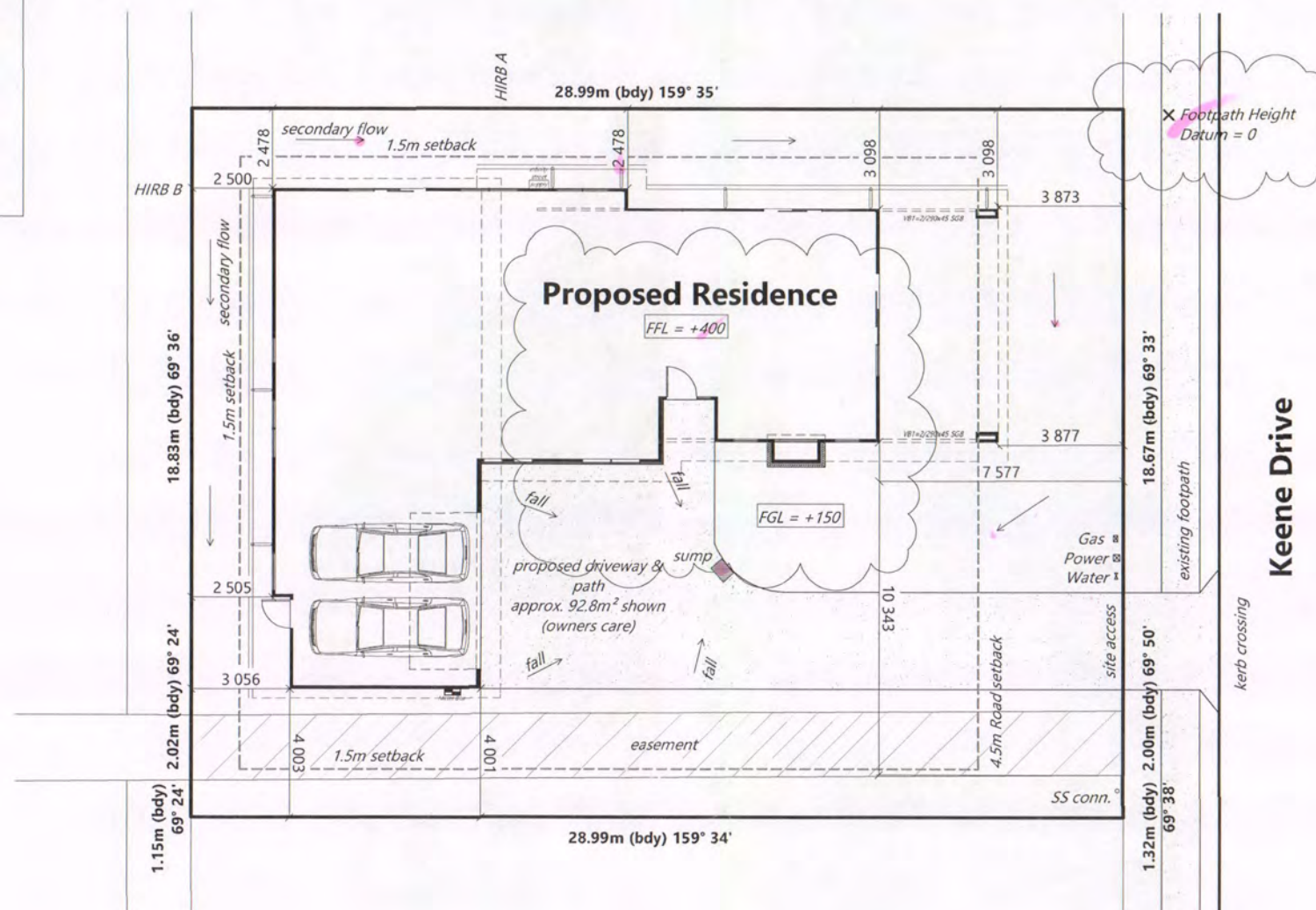
1. Pedestrian counts adjacent to the site.
2. Car parking adjacent to the site.
3. Location of neighbouring buildings.
4. Presence of neighbouring work-sites or recreation areas.
5. Proximity to schools or early childhood centres.
6. Proximity to housing.
7. The depth of a water hazard.
8. The period of time for which ponded water will be present.
9. The accessibility and 'visibility' of the site.

1.0.2 If a work-site is not completely enclosed, and unauthorised entry by children is likely, it is acceptable for specific hazards to be fenced only when workers are absent from the immediate vicinity.

1.1 Site fences and hoardings

1.1.1 Fences and hoardings shall extend at least 2.0 m in height from ground level on the side accessible to the public.

1.1.2 An acceptable fence may be constructed with galvanised chainlink netting having a maximum sized grid of 50 mm x 50 mm. Post spacing shall be a maximum of 2.5 m, and the gap between the bottom of the fence and ground no greater than 100 mm.



Finished Floor Level (FFL) shall be:

- a) For sites level with or above the road, no less than 150 mm above the road crown on at least one cross-section through the building and roadway
- b) For sites below the road, no less than 150 mm above the lowest point on the site boundary

Cautionary Notes:

BUILDING CONTRACTOR TO ASSESS SITE TO ENSURE DAYLIGHTING & BUILDING RESTRICTIONS ARE COMPLIED WITH.
NO LIABILITY FOR ENCROACHMENT SHALL BE HELD BY DESIGNER IF SITE IS NOT SURVEYED BY A REGISTERED SURVEYOR PRIOR TO COMMENCEMENT OF FOUNDATIONS.

Construction Notes:

Before building is erected on site, all rubbish, noxious matter and organic matter shall be removed from the area to be covered by the building.
Ensure final building platform & finished ground have an even fall away from building to ensure water not be allowed to accumulate in buildings subfloor.
Any fill to be dry & approved by engineer & compacted down in accordance with NZS.3604.2011

Contractor to

- confirm ground has adequate bearing to comply with NZS 3604: 2011
- locate all service connections points on site prior to commencement of works. Check invert levels or pipes and manholes.
- confirm plumbing route and fixture positions on site prior to commencement of works.
- locate all electrical and water services on site.
- confirm on site all boundary bearings, lengths & peg locations on site prior to commencement of works, to ensure house position is correct.

HIRB = Height in Relation to Boundary

Sediment Control:

- No building work will be started on this project until the construction of an approved stormwater outfall has been completed for this proposed Lot
- All erosion and sediment control structures are to be inspected and maintained daily
- Prevent any backfill or debris from washing onto council or neighbouring properties
- All ground cover vegetation outside the immediate building area to be preserved during the building phase
- All erosion and sediment control measures are to be installed prior to commencement of earthworks
- Stockpiles of clay and materials are to be covered with impervious sheeting
- Roof water downpipes to be connected to the main stormwater system as soon as roof sheathing & spouting is installed

Lot: 46
DP: 448621
Site Area: 638m²
Floor Area: 223.8m²
(incl. cover Entry & Patio area)

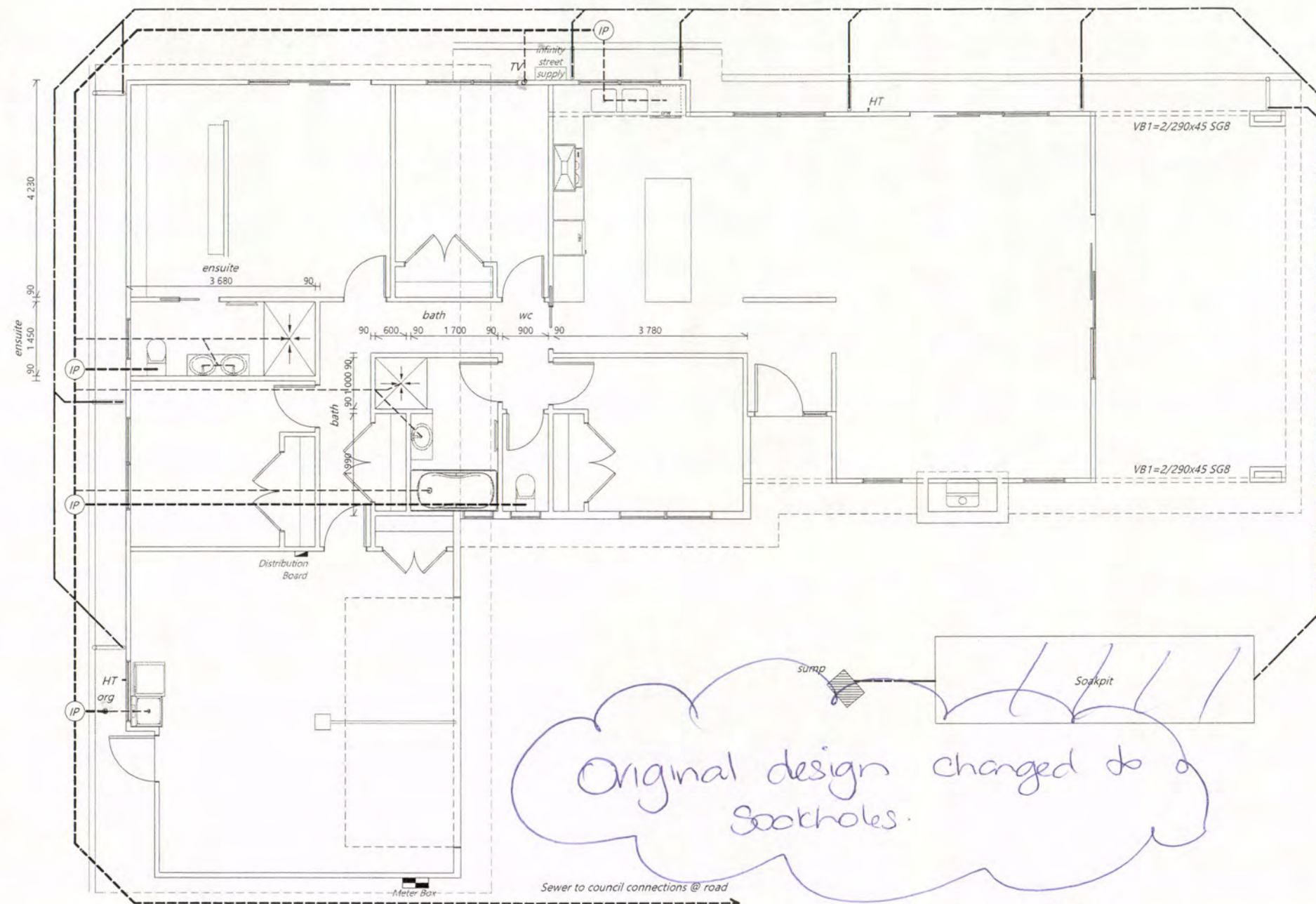
Site Coverage: 35.1% (max 40%)
Front Yard: 8.03% (max 35%)
Maximum Building Ht: 9m
Territorial Authority: New Plymouth D.C.
Planning Zone: Residential A

NPDC Approved for
13 MAY 2015
Building Consent

Client Details: Brad Dent & Natalie Brien
Address: 20 Keene Drive
Bell Block
NC429
New Design

Site Plan
Scale: 1:200
Date: 12/05/2015
Sheet no: 2
Call 0800 A1homes
214663
www.A1homes.co.nz

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Construction Notes:

Plumbing to AS/NZS:3500.2.2 (min 1:60 pipe gradient) by qualified tradesman.
Contractor to locate all service connections on site prior to earthworks confirm all boundary setbacks & restrictions comply with current regulations prior to commencement of foundations.
All waste pipes PVC. Sizes, fall, venting & discharge to be confirmed by NZ qualified plumber. Confirm positions of available services cabling etc on site prior to any excavation

Water supply:

Internal water pipes to Polybutylene.
All pipework and pipes exposed to freezing to be lagged with closed cell foam - Closed cell foam polymer insulation or fibre glass insulation which is preformed to the shape of the pipe and not less than 13 mm thick, is acceptable material for preventing pipes less than or equal to 40 mm diameter from freezing. Any insulation material that absorbs moisture shall be protected in a waterproof membrane.

Fixture unit rating:

= 33 units
Water Closet - 6 (x2)
Bath - 4
Basin - 1 (x2)
Dishwasher - 3
Shower - 2 (x2)
Laundry tub - 5
Kitchen sink - 3

TABLE 3.5

SIZE AND RATING OF VENTS

Size of vent pipe DN	Fixture units discharging to drain	Vent rating
40	>1	0.5
50	>10	1
65	>30	2
80	>175	3
100	>400	6

NB: DN80 minimum vent when connected to septic tank

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Plumbing Legend as per AS/NZS 3500

Symbol	Item	Symbol	Item
IP	Inspection point	---	DN100 PVC SS pipe, DN100 min water closets (ref specs) min 1:60 gradient
Downpipe		---	DN100 PVC SW pipe, min 1:120 gradient
HT	Hose Tap	---	min PVC fixture waste pipe sizes: DN40 basins, single head showers, baths, sinks, dishwasher & ldy tubs, DN50 multiple heads showers, DN65 unvented branch drains exceeding 2.5m long (max 5 fixture unit rating) DN65 to all wastes discharging directly into drain under slab min 1:40 gradient. 20mm HWC vent drain (copper)
Org	Overflow relief gully		
oTV	Terminal vent		

Water supply pipe (from water tank or council mains) = DN20

Client Details:
Brad Dent & Natalie Brien
Address:
20 Keene Drive
Bell Block

NC429

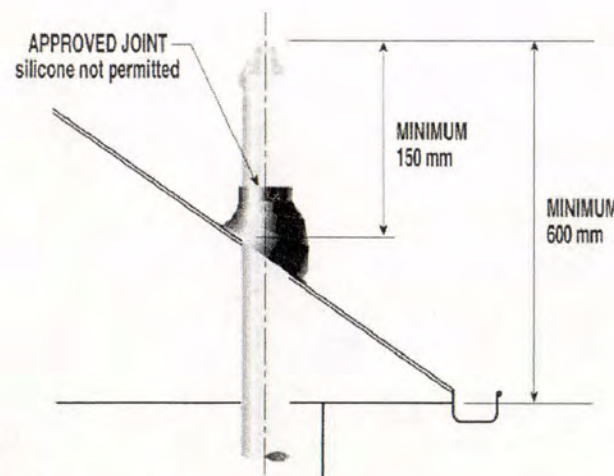
Drainage Plan

Scale: 1:100
Date: 2/04/2015
Rev: 3

Drawn: DS
Earth: 1
Check: N.Davis
Exposure: C
Snow: NO

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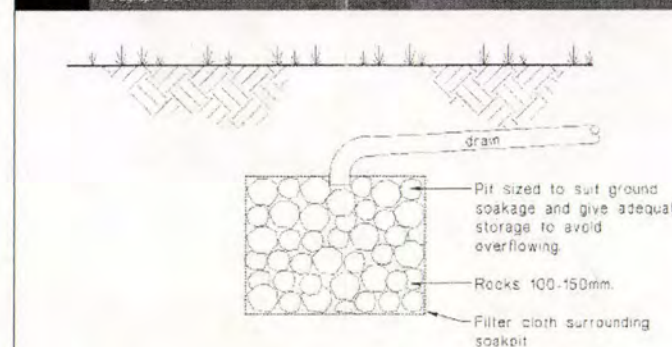
DESIGN ARCHITECTURE

Soakpit calculation

Roof Area: 276m²
Sealed driveway Area: 54m²
Total Stormwater catchment area = 300m²

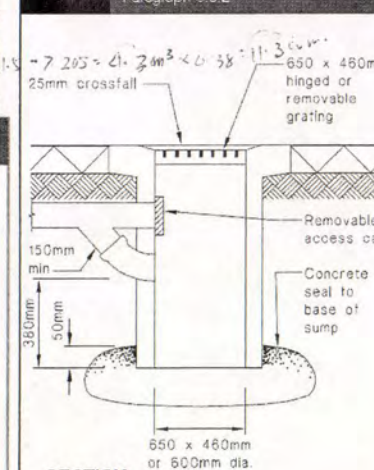
$R_c = 10 \times 0.9 \times 42.6 \text{ mm (rainfall intensity)} \times 0.03 \text{ (catchment area)}$
 $R_c = 11.5 \text{ m}^3$
 $2.882 / 0.38 \text{ (boulder capacity)} = 30.26 \text{ m}^3 \text{ pit required}$
 $1.7 \times 6.2 \times 2.9 \text{ deep} = 30.57 \text{ m}^3 \text{ pit}$

Figure 13: Soak Pit for Surface Water Disposal
Paragraph 9.0.4



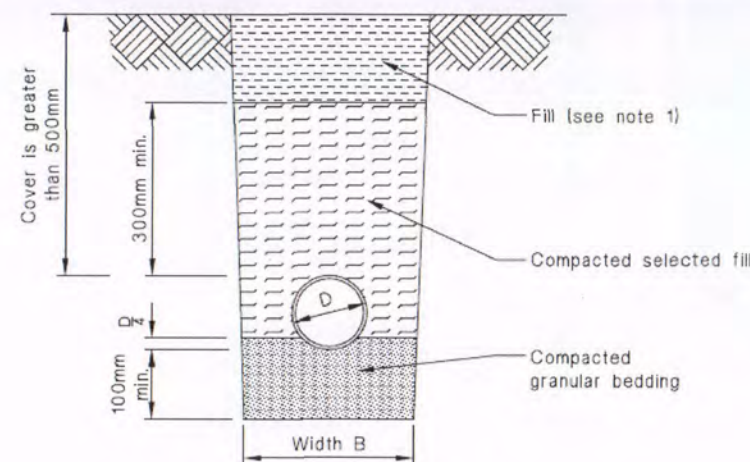
(a) Rock soak pit

Figure 9: Type-two Surface Water Sump
Paragraph 3.6.2

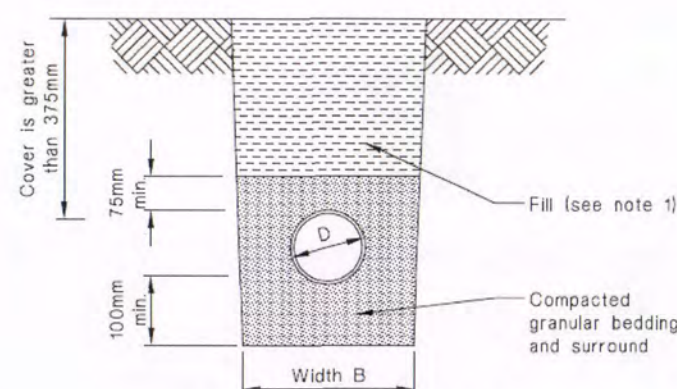


SECTION

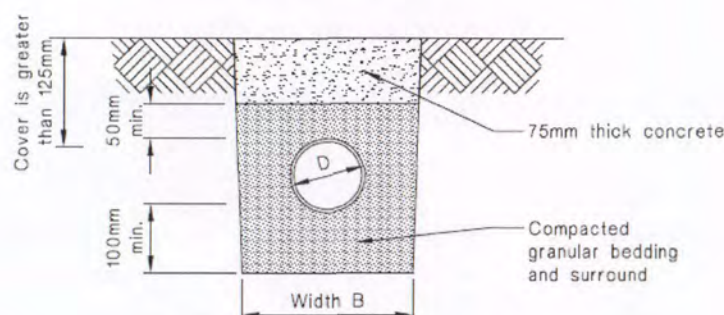
Figure 13: Bedding and Backfilling
Paragraphs 3.9.2, 3.9.4 and 3.9.5



(a) Cover greater than 500 mm
Bedding type 'B' of NZS 4452



(b) Cover greater than 375 mm
Bedding type 'D' of NZS 4452



(c) Cover greater than 125 mm

NOTE:

1. Fill shall be:
 - Ordinary fill where drains are located below gardens and open country.
 - Compacted selected fill where the drains are located below residential driveways and similar areas subjected to light traffic.

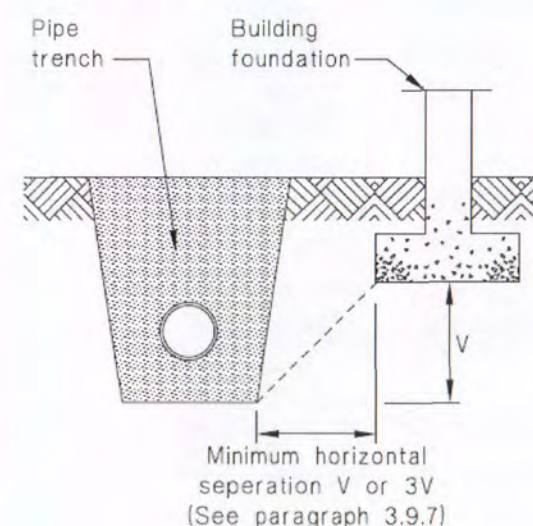
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13 MAY 2015
Building Consent

Proximity of trench to building:

3.9.7 Proximity of trench to building

For light timber frame and concrete masonry buildings founded on good ground and constructed in accordance with NZS 3604 or NZS 4229, pipe trenches which are open for no longer than 48 hours shall be located no closer than distance 'V' (see Figure 14) to the underside of any building foundation. Where the trench is to remain open for periods longer than 48 hours, the minimum horizontal separation shall increase to 3V in all ground except rock.

Figure 14: Relationship of Pipe Trench to Building Foundation
Paragraph 3.9.7



NZBC: E1 Surface water:

3.9 Bedding and backfilling

3.9.1 General

NZBC B1 requires all drains be constructed to withstand the combination and frequency of loads likely to be placed upon them without collapse, undue damage, undue deflection or undue vibration.

In addition, adequate support needs to be provided to prevent gradients becoming less than those required as a result of:

- a) Differential settlement, or
- b) Deflection of an unsupported span.

3.9.2 Bedding and backfilling

Figure 13 gives acceptable solutions for the bedding and backfilling of the drainage pipes except where:

- a) The trench is located within or above peat, or
- b) Scouring of the trench is likely due to unstable soils, or
- c) The horizontal separation between any building foundation and the underside of the pipe trench is less than that required by Paragraph 3.9.7, or
- d) The cover H to the pipe is more than 2.5 m.

3.9.3 Trench slope

Where the slope of the trench is 1 in 8 or greater, anti-scour blocks shall be provided.

These anti-scour blocks shall be:

- a) Constructed from 150 mm thick concrete (17 MPa),
- b) Keyed into the sides and floor of the trench by 150 mm,
- c) Extended to 300 mm above the drain or to ground level where the drain cover is less than 300 mm, and
- d) Spaced at:
 - i) 7.5m centres for trench slopes between 1 in 8 and 1 in 5, or
 - ii) 5.0m centres for trench slopes greater than 1 in 5.

3.9.4 Trench width

The width B of the trench shall be no less than the pipe diameter D plus 200 mm.

Trench width at the top of the pipe shall be no more than 600 mm unless the pipe(s) in the trench are covered with concrete, as shown in Figure 13 (c).

3.9.5 Acceptable materials

Acceptable fill materials shown in Figure 13 are:

- a) Bedding material of clean granular noncohesive material with a maximum particle size of 20 mm, or
- b) Selected compacted fill of any fine-grained soil or granular material which is free from topsoil and rubbish and has a maximum particle size of 20 mm, or
- c) Ordinary fill which may comprise any fill or excavated material.

3.9.6 Placing and compacting

- a) Granular bedding and selected fill shall be placed in layers of no greater than 100 mm loose thickness and compacted.
- b) Up to 300 mm above the pipe, compaction shall be by tamping by hand using a rod with a pad foot (having an area of 75 ± 25 mm by 75 ± 25 mm) over the entire surface of each layer to produce a compact layer without obvious voids.
- c) More than 300 mm above the pipe, compaction shall be by at least four passes of a mechanical tamping foot compactor (whacker type) with a minimum weight of 75 kg.

Client Details :		NC429	
Brad Dent & Natalie Brien			
Address:			
20 Keene Drive			
Bell Block			
		New Design	
Bedding and Backfilling		Scale: N.T.S.	Sheet no: 4
Drawn: DS	Check: N.Davis	Call 0800 A1homes	
Wind: High	Earthq: 1	214663	
Exposure: C	Snow: NO	www.A1homes.co.nz	

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Always cross reference the foundation plan with the floor plan prior to setting out.
In the case of ANY discrepancies, call designer for clarification (07) 578 7345

Engineer Design Chimney & Patio

Plans to be read in conjunction with 'West Point Engineers'
design and Producer Statement - in case of discrepancies
engineer design shall take precedence

DC Approved for
13 MAY 2015
Building Consent

Cautionary Notes:

Always cross reference the foundation plan with the floor plan prior to setting out

The contractor shall accurately locate the position of all public drains on site prior to starting work. If any discrepancies are found in these drawings then the contractor must contact A1 Homes before proceeding with any further works.

Construction Notes:

The site requirements of this NZS 3604: 2011 are concerned with soil conditions under or adjacent to the building.
If a site does not comply with the definition of good ground, the foundations shall be the subject of specific engineering design (SED) and investigation as appropriate.

All foundations shall bear upon solid bottom in undisturbed good ground material or upon firm fill for which a certificate of suitability has been issued under NZS 4431

Where good ground is at a depth greater than 0.6 m, the excavation between the good ground and the foundation base may be filled with mass concrete having a minimum strength of 10 MPa at 28 days.

Granular fill material complying with 7.5.3.2 shall be placed and compacted in layers of 150 mm maximum thickness, over the area beneath the proposed ground slab, so that the total thickness of granular base is not less than 75 mm nor more than 600 mm.

Compact each layer until the material is tightly bound together and does not visibly deform under the weight of a pressed adult heel. SED is required if filling is in excess of 600 mm.

7.5.3.2

Granular fill material shall be composed of rounded gravel, crushed rock, scoria or approved material.

(a) Not more than 5 % shall pass through a 2.2 mm sieve with the exception of the conditions in 7.5.3.3;

(b) 100 % shall pass either:

(i) A 19 mm sieve for any fill thickness; or

(ii) A 37.5 mm sieve for a fill thickness exceeding 100 mm.

Where it can be demonstrated that site conditions ensure that capillary water is unlikely to reach the underside of the slab, then the requirements of 7.5.3.2(a) can be waived.

Min. 5mm - 25mm max. sand blinding to cover hardfill to ensure the vapour barrier is protected from any granular protrusions. Conc. floor to comply with NZS.3109, surface tolerances, & NZS.3114, maximum deviations of 3mm

Shrinkage control joints - 3mm wide x 25mm deep saw cuts to form bays NZS3604:2011 - Section 7: floors 7.5.8.6.4

The bay dimensions formed by either construction or shrinkage control joints shall be limited to a maximum length:width ratio of 2:1. Maximum bay dimensions in exposed concrete, vinyl or tiled areas to be 6m x 6m.

Steel reinforcing within concrete floors and walls of rooms that contain a bath or shower must be bonded to the earth system as per AS/NZS 3000:2007 Electrical Installations. See clause 5.6.2.5

Confirm layout & fittings of kitchen & bathrooms etc before foundation commences

Client Details :
Brad Dent & Natalie Brien

Address:
20 Keene Drive
Bell Block

NC429

New Design

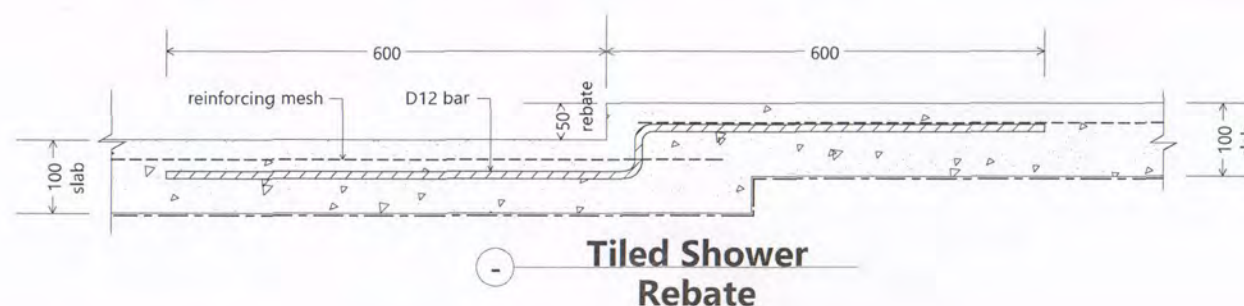
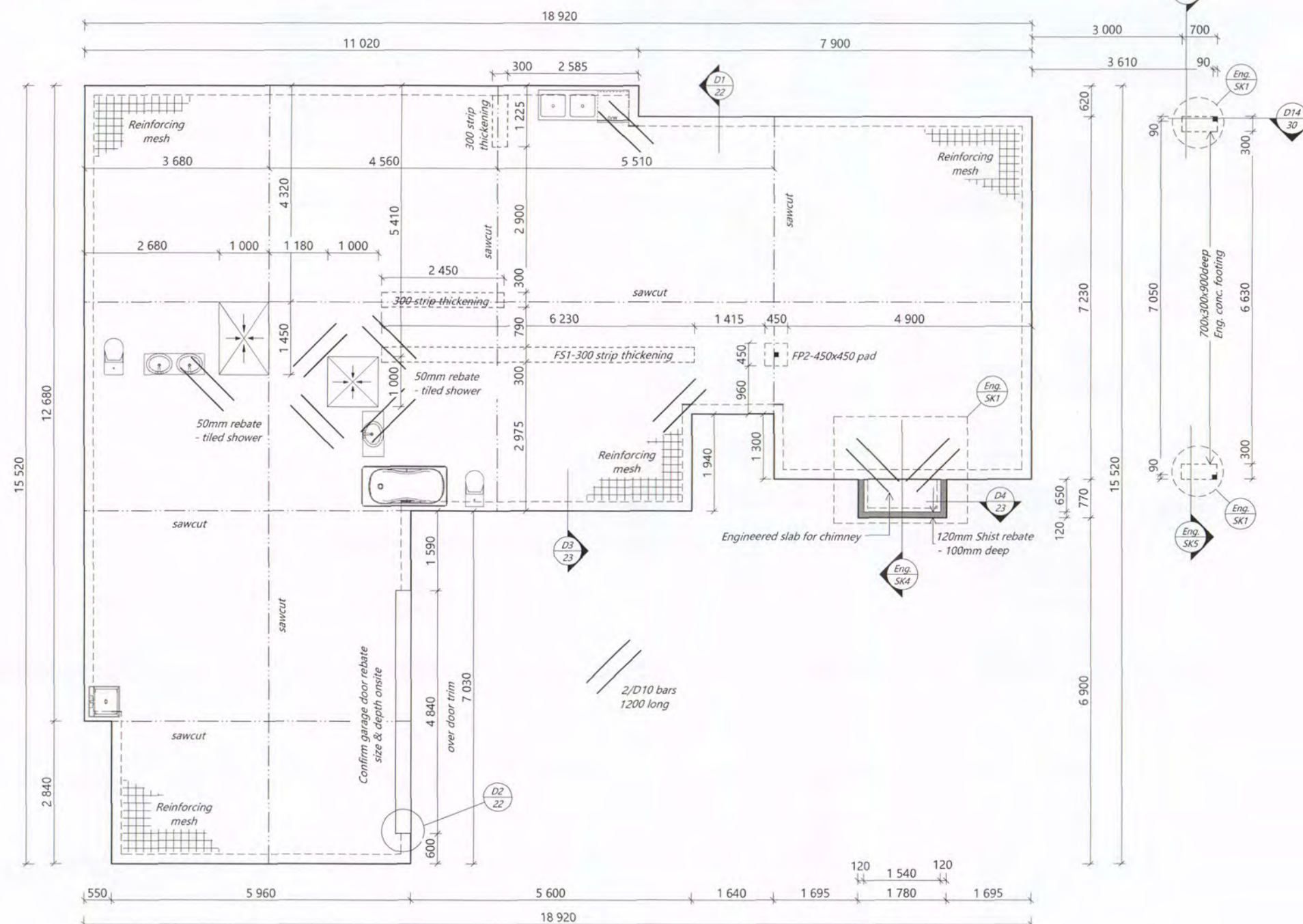
Foundation Plan

Scale: 1:100 Date: 2/04/2015 Sheet no: 5
Rev: 1

Drawn: DS Check: N.Davis
Wind: High Earth: 1 Exposure: C Snow: NO

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Slab Thickening & Stud Requirement Table

CONSTRUCTION SPECIFICATIONS

Max. truss crs. @ 1200mm, Min. truss crs. @ 600mm.
Assume walls are fully lined on at least one face.
Assume full bearing on top plate (i.e. no eccentric loading).



TRUSS BEARING REACTION	SLAB THICKENING DETAIL		STUD REQUIREMENTS		
	CONCENTRATED LOAD	UNIFORM DIST. LOAD	STUD HEIGHT	STUD REQUIREMENTS	
Bearing reaction up to & including 10 kN	STANDARD reinforced slab floor as per NZS 3604:2011	STANDARD reinforced slab floor as per NZS 3604:2011	2400	Refer to NZS 3604:2011	
			2700		
			3000		
			STUD HEIGHT	NO. OF STUD UNDER TRUSS	MIN. TIMBER SIZE
Bearing reaction up to & including 20 kN	TYPE FP1 375 x 375 PAD	TYPE FS1 300 STRIP THICKENING	2400	2	90 x 35
			2700	2	90 x 45
			3000	3	90 x 45
			STUD HEIGHT	NO. OF STUD UNDER TRUSS	MIN. TIMBER SIZE
Bearing reaction up to & including 30 kN	TYPE FP2 450 x 450 PAD	TYPE FS2 450 STRIP THICKENING	2400	3	90 x 45
			2700	3	90 x 45
			3000	4	90 x 45

TIMBER SPECIFICATIONS

Timber properties based on NZS 3603:1993 Amendment No.4 March 2005.
Minimum grade specified is SG8 unless otherwise noted.
For SG6 use the studs for the next highest category.
i.e. - For loads up to 10 kN select studs from the 20 kN table.
- For loads up to 20 kN select studs from the 30 kN table.
- For loads above 20 kN Special Design is required.

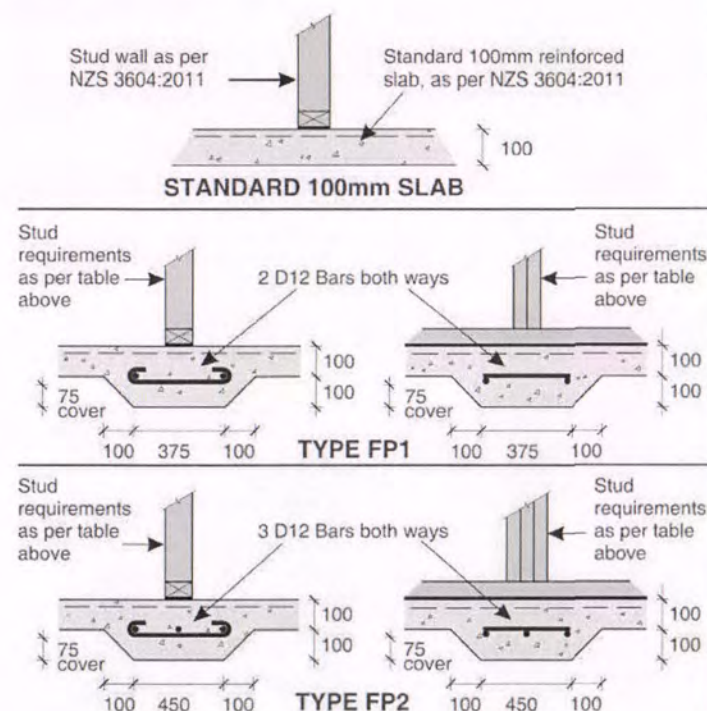
* Note: The stud requirement for 20 kN & 30 kN bearing reactions can be applied to external walls as well.

Slab Thickening Details

CONCRETE PAD

OPTIONS

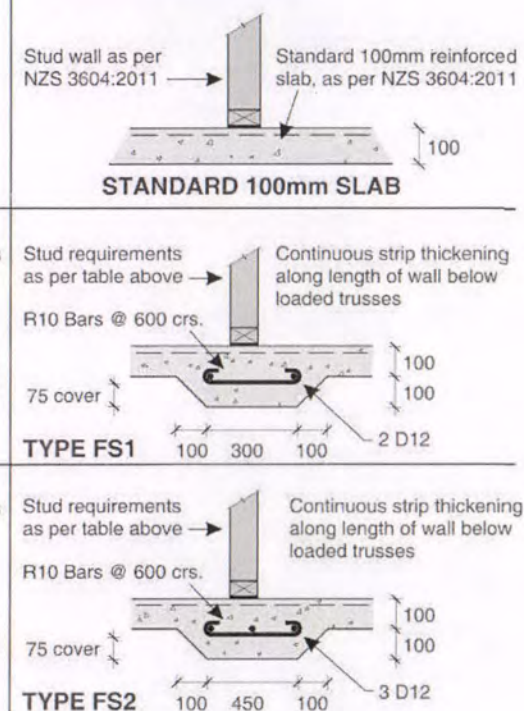
(for concentrated loads)



CONTINUOUS CONCRETE

THICKENING OPTIONS

(for uniformly distributed loads)



NOTE: FP = Foundation Pad FS = Foundation Strip

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Client Details :				NC429
Brad Dent & Natalie Brien				
Address:				
20 Keene Drive				
Bell Block				
New Design				
Slab Thickenings		Scale: N.T.S.	Date: 2/04/2015	Sheet no: 6
Drawn: DS	Check: N.Davis			
Wind: High	Earthq: 1	Exposure: C	Snow: NO	
Call 0800 A1homes 214663 www.A1homes.co.nz				

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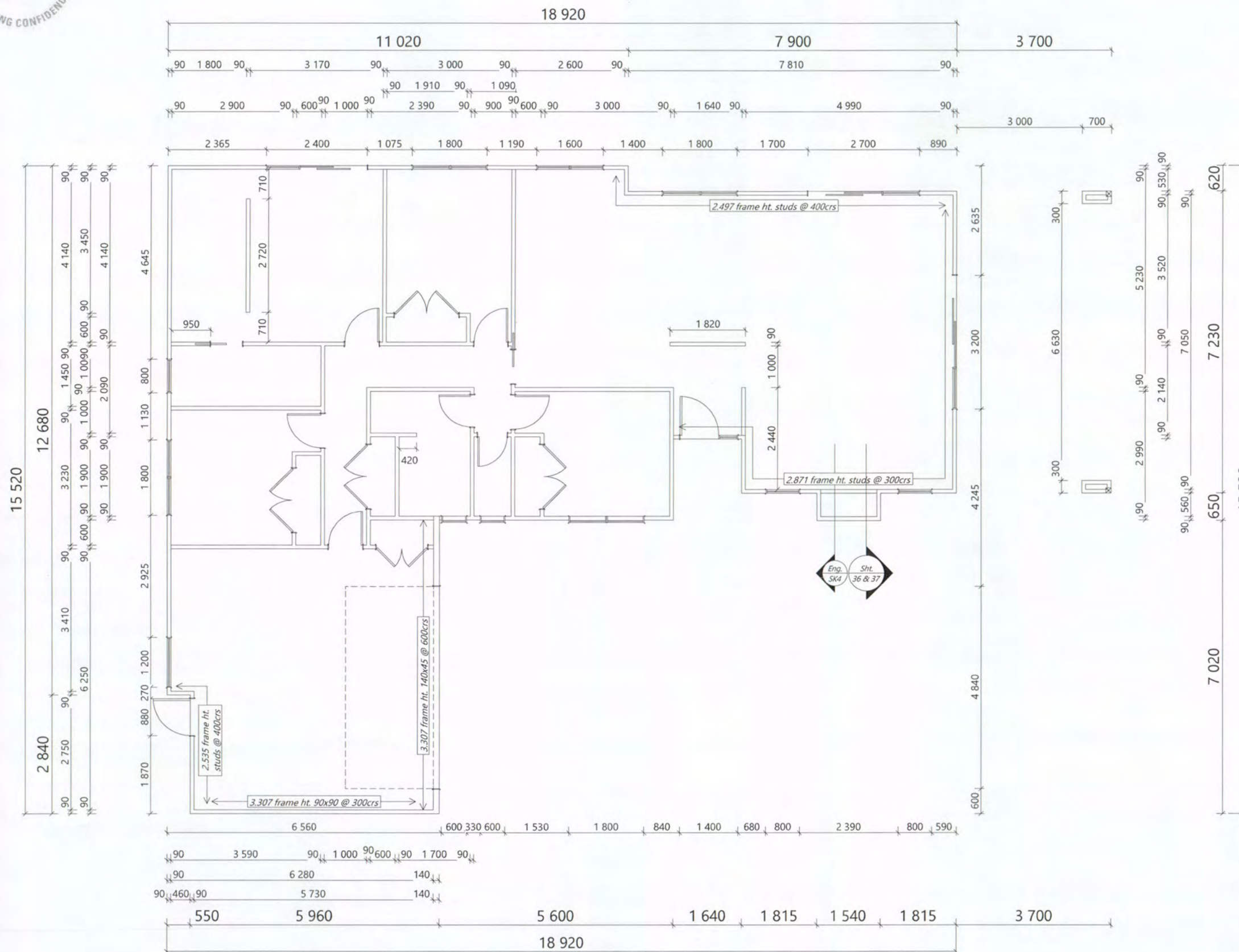
Always cross reference the foundation plan with the floor plan prior to setting out.
In the case of ANY discrepancies, call designer for clarification (07) 578 7345

Cautionary Notes:

Always cross reference the foundation plan with the floor plan prior to setting out

Joinery sizes shown are box sizes & are preliminary only.
Site measure and confirm all joinery sizes, reporting to designer any changes, PRIOR to ordering joinery. No liability shall be held by designer for incorrect supply of joinery.

Refer to all written dimensions, DO NOT scale off drawings.



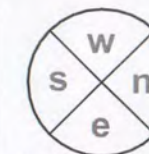
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Client Details :				NC429	
Brad Dent & Natalie Brien					
Address:					
20 Keene Drive					
Bell Block					
New Design					
Framing Plan		Scale:	Date: 2/04/2015	Sheet no : 7	
		1:100	Rev:		
Drawn: DS		Check: N.Davis		Call 0800 A1homes	
Wind: High	Earthq: 1	Exposure: C	Snow: NO	214663	
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NZS 5261:2003 Gas Hob Installation
Cut out for hob: min. 60mm from back of bench top.
Overhead clearances: not less than 600mm from the highest part of hob to range hood
Side clearances: Where dimension from periphery of nearest burner to any vertical combustible surface is less than 200 mm, surface shall be protected to a min. height of 150 mm above hob for full dimension (width or depth) of cooking surface area.
Horizontal surface shall be greater than 10 mm below surface of hob.
Protection of combustible surfaces: 5mm thick ceramic tiles or graphic glass is suitable to protect 10mm Gib board.

G3/AS1
1.1.3 Food preparation surfaces shall be easily maintained in a hygienic condition. Stainless steel, decorative high pressure laminate, and tiles are examples of suitable materials for these surfaces.

1.6 Wall linings
Wall linings adjacent to appliances and facilities shall have surfaces that can be easily maintained in a hygienic condition. Stainless steel, decorative high pressure laminate, tiles, wallboards with painted or applied impervious coatings or films, are examples of suitable materials for these surfaces.



Cautionary Notes:

Always cross reference the foundation plan with the framing plan prior to setting out

Joinery sizes shown are box sizes & are preliminary only.
Site measure and confirm all joinery sizes, reporting to designer any changes, PRIOR to ordering joinery. No liability shall be held by designer for incorrect supply of joinery.

Refer to all written dimensions, DO NOT scale off drawings.

Construction Notes:

Gas hotwater & cooking with vented r/hood. Ensure gas appliance installation complies to NZS 5261: 2003. Polybutylene water supply pipes. Hot water supply pipes shall be thermally insulated to comply with H1/AS1 5.0
The delivered hot water temperature at any sanitary fixture used for personal hygiene shall not exceed 55°C

Gas via street supply

gas water heater: 300mm from any opening door or window, 75mm from down pipes, 500mm fuse or electric box, 1000mm from gas bottles, 300mm from wall or corner, 1500mm from ground.
(gas fitter to confirm)

Tapered edge joints in ceilings
To reduce the risk of cracks caused by substrate movement, back-blocking of tapered edge joints is required in the following situations.

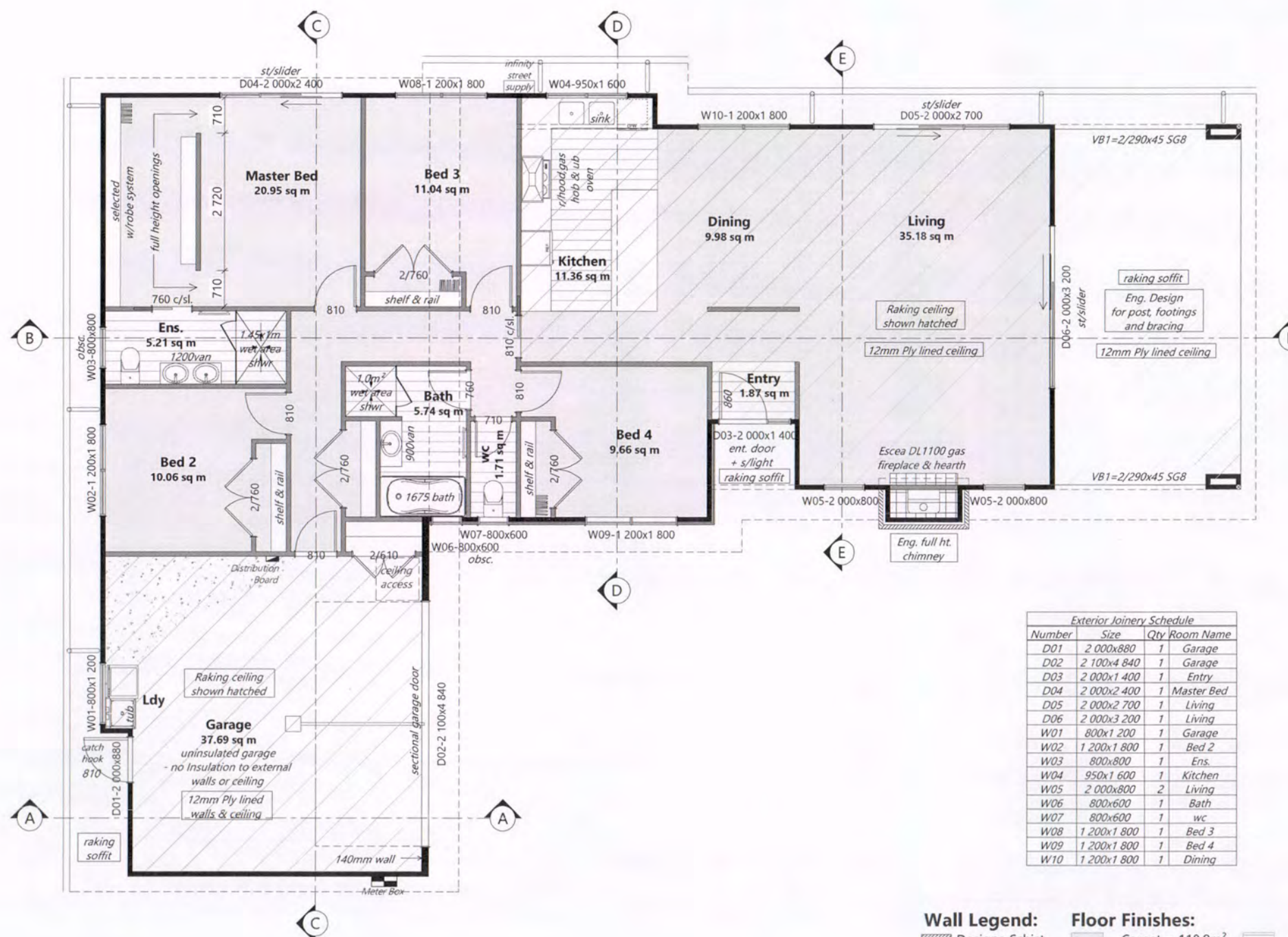
- When timber battens have been used:
- Any area containing 3 or more tapered joints
- When steel battens have been used:
- Any area containing 6 or more tapered joints

Please confirm layout & fittings of kitchen & bathrooms etc before foundation commences

Gas fireplace:

- installed to manufacturers specifications

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Exterior Joinery Schedule			
Number	Size	Qty	Room Name
D01	2 000x880	1	Garage
D02	2 100x4 840	1	Garage
D03	2 000x1 400	1	Entry
D04	2 000x2 400	1	Master Bed
D05	2 000x2 700	1	Living
D06	2 000x3 200	1	Living
W01	800x1 200	1	Garage
W02	1 200x1 800	1	Bed 2
W03	800x800	1	Ens.
W04	950x1 600	1	Kitchen
W05	2 000x800	2	Living
W06	800x600	1	Bath
W07	800x600	1	wc
W08	1 200x1 800	1	Bed 3
W09	1 200x1 800	1	Bed 4
W10	1 200x1 800	1	Dining

Wall Legend:

Designa Schist
Rockcote 40EPS
Linea

Floor Finishes:

Carpet = 118.9m²
Master Bed
Bed 2
Bed 3
Bed 4
Living
Dining
Hallways, cupd.s & wdrbs

Wet Area = 25.89m²
Bathroom
Ensuite
wc
Kitchen
Entry
Concrete = 38.0m²
Garage
Laundry

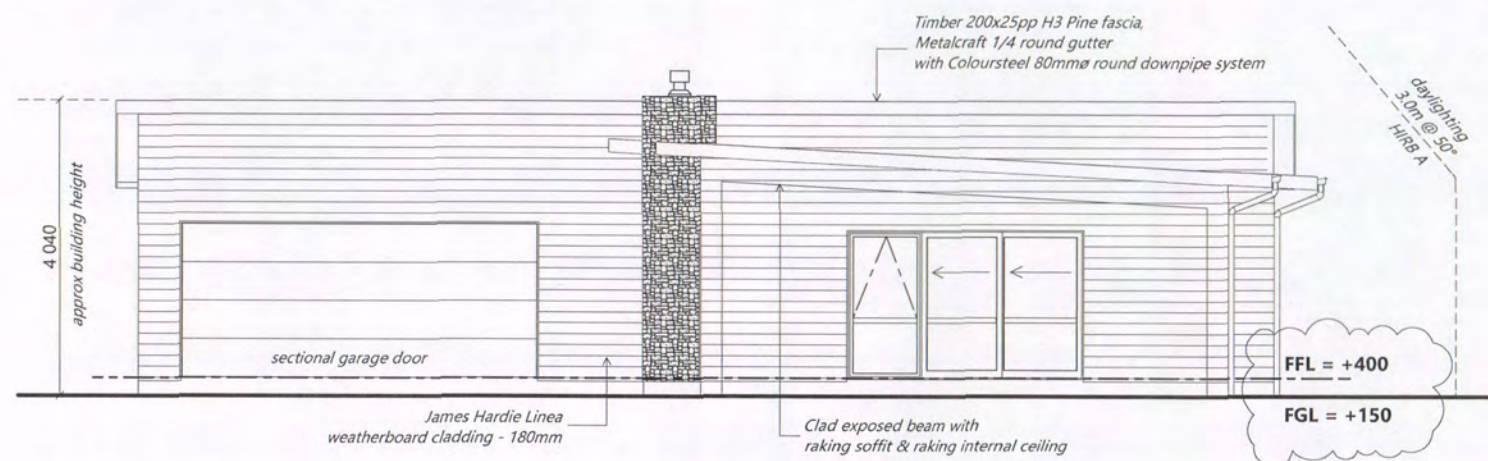
Floor Area:
= 194.23sqm o/frame
= 195.04sqm o/brick

Client Details :
Brad Dent & Natalie Brien
Address:
20 Keene Drive
Bell Block

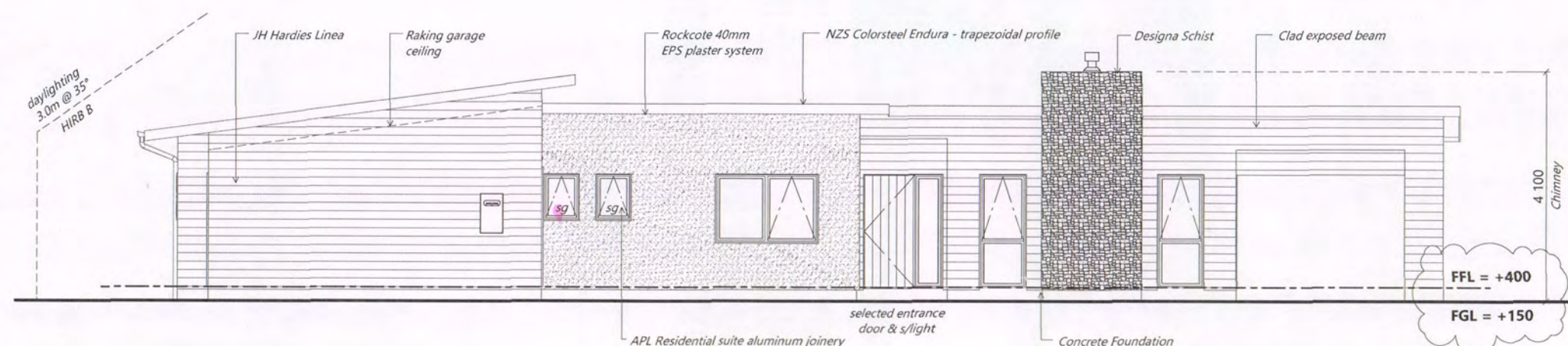
NC429

New Design

Floor Plan				Scale:	Date: 2/04/2015	Sheet no : 8
				1:100	Rev:	
Drawn: DS		Check: N.Davis		Call 0800 A1homes 2 1 4 6 6 3 www.A1homes.co.nz		
Wind:	Earthq:	Exposure:	Snow:			
High	1	C	NO			
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North



East

Cautionary Notes:

BUILDING CONTRACTOR TO ASSESS SITE TO ENSURE DAYLIGHTING & BUILDING RESTRICTIONS ARE COMPLIED WITH.
NO LIABILITY FOR ENCROACHMENT SHALL BE HELD BY DESIGNER IF SITE IS NOT SURVEYED BY A REGISTERED SURVEYOR PRIOR TO COMMENCEMENT OF FOUNDATIONS.

Construction Notes:

Glazing in accordance with NZS 4223 & 2008 plus amendments
All glazing clear float except for obscure glass to bathrooms & wc
Double glazing to all window and door joinery excluding garage
sg = Safety glass

Aluminium joinery head heights to be 2.0m (excludes entry box unit).
Refer to floor plan for door & window sizes. Joinery schedule & sizes to be confirmed by pre-cut manufacturer & joinery fabricator PRIOR to manufacture by way of communication via e-mail, phone or other.

HIRB = Height in Relation to Boundary

Safety restrictor stays:

ss = safety stays
- a restrictor fitted to limit the maximum opening so that a 100mm ø sphere cannot pass through

Window restrictors are required to outward opening windows that may protrude into walk paths
- Refer to Site plan for 'walk paths'

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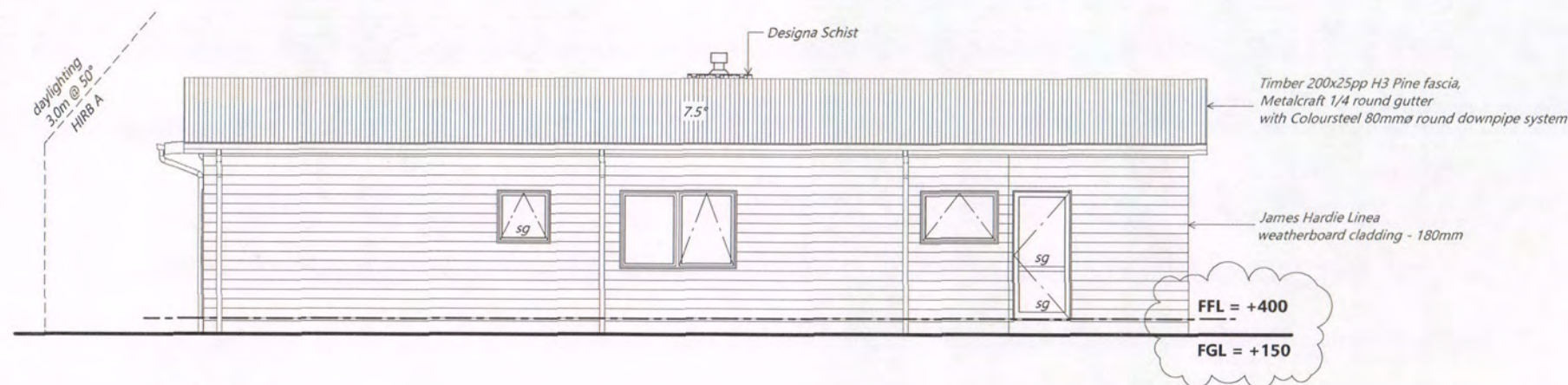
Building Envelope Risk Matrix

All Elevations		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	V. High risk	5
Eaves width	High risk	2
Envelope complexity	High risk	3
Deck design	Low risk	0
Total Risk Score: 11		

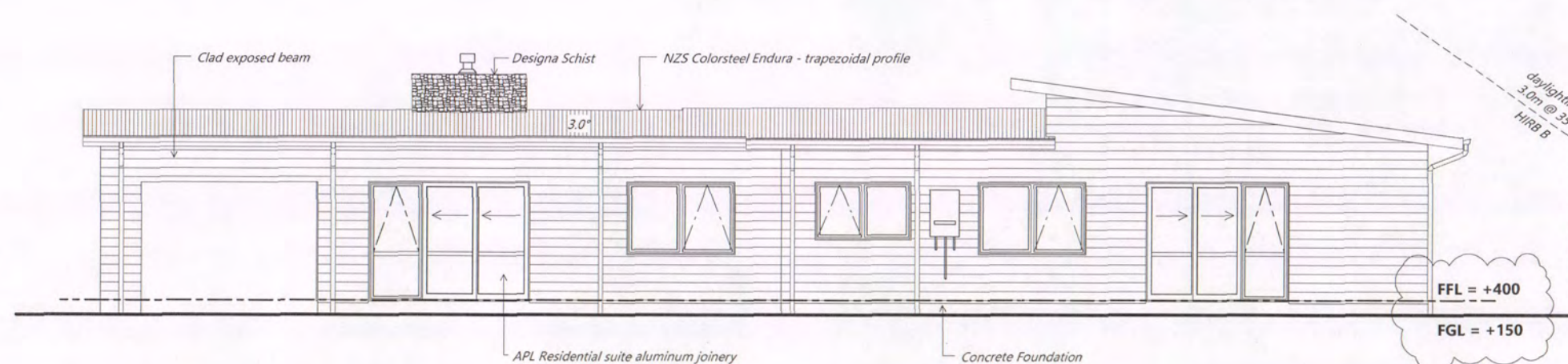
Client Details : NC429
Brad Dent & Natalie Brien
Address:
20 Keene Drive
Bell Block

Elevations		Scale:	Date: 12/05/2015	Sheet no :
Drawn: DS	Check: N.Davis	1:100	Rev:	9
Wind: High	Earthq: 1	Exposure: C	Snow: NO	
Call 0800 A1homes 214663 www.A1homes.co.nz				

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South



West

Cautionary Notes:

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Construction Notes:

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All glazing clear float except for obscure glass to bathrooms & wc
Double glazing to all window and door joinery excluding garage
sg = Safety glass

Aluminium joinery head heights to be 2.0m (excludes entry box unit).
Refer to floor plan for door & window sizes. Joinery schedule & sizes to be confirmed by pre-cut manufacturer & joinery fabricator PRIOR to manufacture by way of communication via e-mail, phone or other.

HIRB = Height in Relation to Boundary

Safety restrictor stays:

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- a restrictor fitted to limit the maximum opening so that a 100mm ø sphere cannot pass through

Window restrictors are required to outward opening windows that may protrude into walk paths
- Refer to Site plan for 'walk paths'

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Building Envelope Risk Matrix

All Elevations		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	V. High risk	5
Eaves width	High risk	2
Envelope complexity	High risk	3
Deck design	Low risk	0
Total Risk Score: 11		

Client Details : NC429
Brad Dent & Natalie Brien
Address:
20 Keene Drive
Bell Block

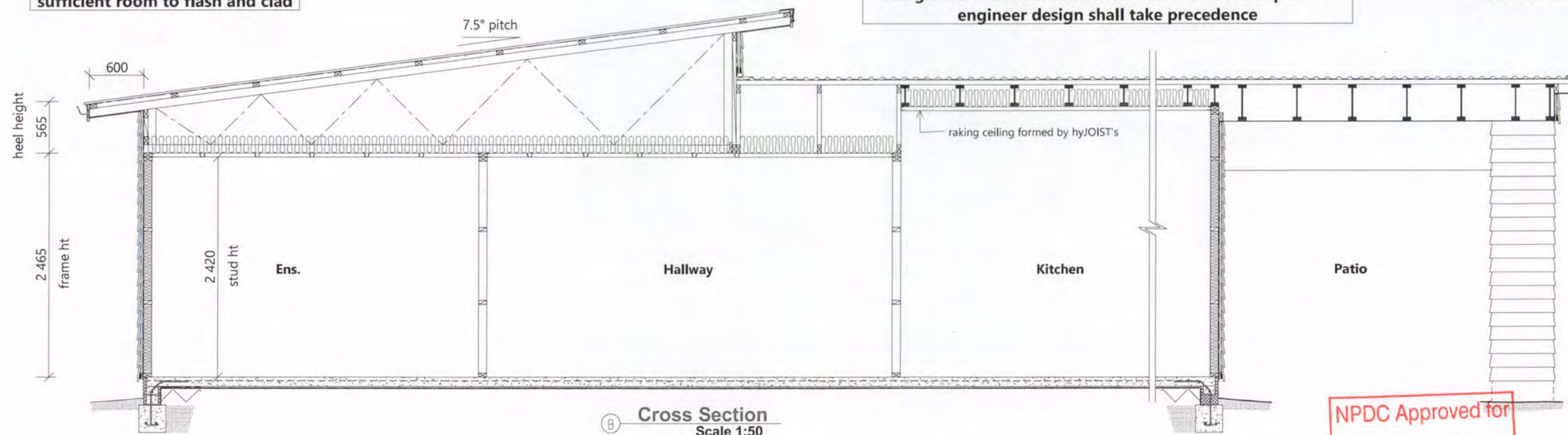
Elevations		Scale:	Date: 12/05/2015	Sheet no :
Drawn: DS	Check: N.Davis	1:100	Rev:	10
Wind: High	Earthq: 1	Exposure: C	Snow: NO	
Call 0800 A1homes 214663 www.A1homes.co.nz				

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NOTE TO PRENAIL:
 Minimum 390mm required
 between top chords to allow
 sufficient room to flash and clad

Engineer Design Chimney & Patio

Plans to be read in conjunction with 'West Point Engineers'
 design and Producer Statement - in case of discrepancies
 engineer design shall take precedence



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Foundations & Slabs

100mm thick conc. slab, SE62 500E reinforcing mesh, min 225mm lap on 0.25 polythene.

Min. 5mm - 25mm max. sand blinding to cover hardfill to ensure the vapour barrier is protected from any granular protrusions
 Malthoid under all bottom plates, overlapping timber by min. 6mm.

External Walls (SG8)

90x45 H1.2 frame + 90x45 top plate, 2.4m studs @ 600crs max, nogs @ 800crs, up to 2.7m studs @ 400crs, up to 3.0m studs @ 300crs & up to 3.6m 90x90 @ 300crs. Garage wall 140x45 3.3m studs @ 600crs

James Hardie Scyon Linea Weatherboard:

The following framing must be provided for cavity construction method:

- When studs are at 600mm centres the nogs must be provided at 800mm centres maximum.
- When studs are at 400mm centres the nogs may be provided at 1200mm centres maximum.
- Double studs are required at internal corners.
- Extra packers may be required at external corners.
- Extra studs are required for aluminium internal corner sections.

MARSHALL WATERPROOFING Tekton building wrap to all exterior frames, including gable ends.

Standard 10mm gib linings throughout, except wet areas. Fixed to comply with the latest Winstones Gib Manual - level 4 paint finish

Wall framing behind cavities

Where stud spacings are greater than 400 mm, and flexible wall underlays only are used, an intermediate means of restraining the flexible wall underlay and insulation from bulging into the drained cavity shall be installed.

An acceptable method to achieve this is using one of the following:

- intermediate cavity batten between the studs.
- 75mm galvanised mesh.
- Polypropylene tape or galvanized wire at 300 mm centres fixed horizontally and drawn taut

Bottom plate fixing: Refer to Ramset table

External Cladding

James Hardie 180 LINEA weatherboards installed, flashed and finished to the latest James Hardie specifications and in accordance with NZBC: E2/AS1 External Moisture. Merchant to include all flashings & fixings as required by cladding system.

Cavity battens (ex50x20 H3.1 timber cavity battens fixed to studs):

- be minimum 18mm thick.
- be minimum as wide as the width of studs.
- be fixed by the cladding fixings to the main framing through the building underlay.
- until claddings are fixed the battens need only to be tacked to framing. (Batten fixing is required temporarily to keep them straight on the wall during construction.)

The cavity battens are installed as described below:

- Fix cavity battens to studs at maximum 600mm centres.
- Battens should be fixed with 40 x 2.8mm nails at 800mm centres maximum

Rockcote 40mm EPS Plaster system on ex50x25 H3.1 cavity battens, installed, flashed and finished to the latest Manufacturers specifications and in accordance with NZBC: E2/AS1 External Moisture. Merchant to include all flashings & fixings as required by cladding system.

Austral Designa Schist veneer in strict accordance with manufacturers specifications & NZBC: E2/AS1 External Moisture. Weep holes @ max 800crs to top and base course of bricks and as required @ joinery. Ensure weep holes are free of excess mortar.
 Fit vertical control joints @ 8.0m max crs to any wall over 10m long.

External Joinery

Aluminium joinery installed to comply with NZBC: E2/AS1.

Pre-primed jambs, architraves.

Approved window sealing tape to all openings.

Protecto Tape flashing tape over flashing fixings. Do not fix cladding through flashings.

Glazing to comply with NZS:4223. & 2008 amendments.

Internal Walls (SG8)

90x45 H1.2 frame + 90x45 top plate, studs @ 600crs max, nogs @ 800crs.

Standard 10mm gib linings throughout, except wet areas. Fixed to comply with the latest Winstones Gib Manual.

Bottom Plate Fixing: Ramset HD875 drive pin + washer (or equivalent) @ 600crs

Wet Areas

Floor finish: BATHROOM, ENSUITE, WC, LAUNDRY, KITCHEN, ENTRY
 Non-slip tiles over waterproofed floor. Minimum slip resistance co-efficient for level surface between 0.25 - 0.50 acceptable in accordance with NZBC: D1/AS1 Access.

Tiler to waterproof floor & wall to comply with NZBC: E3/AS1 Internal Moisture. Approved waterproofer (nominated by tiler) applied to manufacturers instructions, non-slip ceramic tiles laid over with even grout lines. Use flexible MS sealant to internal corners, wall & floor - tiler to supply producer statement for waterproofing & tiling (Contractor/Owner to confirm finish)

Wall & Ceiling finish: BATHROOM, ENSUITE

GIB Aqualine: 10mm to walls and (13mm to) ceilings 1/coat GIB Sealer with 2/coats semi-gloss or gloss, acrylic enamel paint.

Ceilings

Rondo battens fixed to trusses as per manufacturers specifications @ 600crs. Ensure battens are straight prior to lining. 13mm Gib linings with 32mm x 6g GIB® Grabber™ Screws @ 600crs. Glue daubs to be minimum of 200mm from centre screw. Do not screw where you glue. 32mm x 6g GIB® Grabber™ Screws @ 200crs around the perimeter. Gib stopping to level 4 paint finish. 1/850sq ceiling access to roof space. 12mm ply in Garage, Living and Patio

Insulation

R3.2C pink Batts insulation to all ceilings, except garage.

Maintain a 25mm gap clearance between the insulation and roof underlay

R2.2W pink Batts insulation to all exterior wall cavities excluding garage, however including walls between house & garage. Friction fitted.

Roof (SG8)

Pre-fabricated GANGNAIL 3 & 7.5° pitch H1.2 trusses @ 900crs - galv wire netting with Thermakraft 215 self supporting underlay laid horizontally with min 150mm lap.

hyJOIST's to raking ceiling areas

Purlin spacings - End Span - 600mm, Intermediate Span - 900crs.

Fixing - Type T - 1/10g self-drilling screw, 80mm long purlin/truss connection (2.4KN fixing)

Lumberlok strip brace & tensioners tightened firmly across roof planes.

Roof Cont. (SG8)

Longrun colorsteel roofing as per elevations. Roofing fixed with compatible roofing nails or screws and sealing washers, by qualified persons with flashings as required to all junctions - flashings fixed with compatible roofing screws and sealing washers

Fixing pattern = T1 fixing pattern = fix every crest

Note: every sheet of roof cladding to span at least 3 supports)

8.4.8 Fixings: (Trapezoidal)

Fixings shall be as shown in Tables 11, 12, 14 and 15, and shall be a minimum 12-gauge screw, as shown in Figure 39, which complies with Class 4 of AS 3566: Part 2.

8.4.8.1 Fixing requirements

Fixings shall:

- Be fixed through crests,
- Penetrate purlins by a minimum of 40 mm for nail fixings and 30 mm for screw fixings,
- Include sealing washers of:
 - neoprene (having a carbon black content of 15% or less by weight),
 - profiled washer and EPDM washer where required to allow for expansion of the profiled metal roof cladding.

Soffit

4.5mm Hardiflex soffit lining fixed to underside of truss top chord extensions.

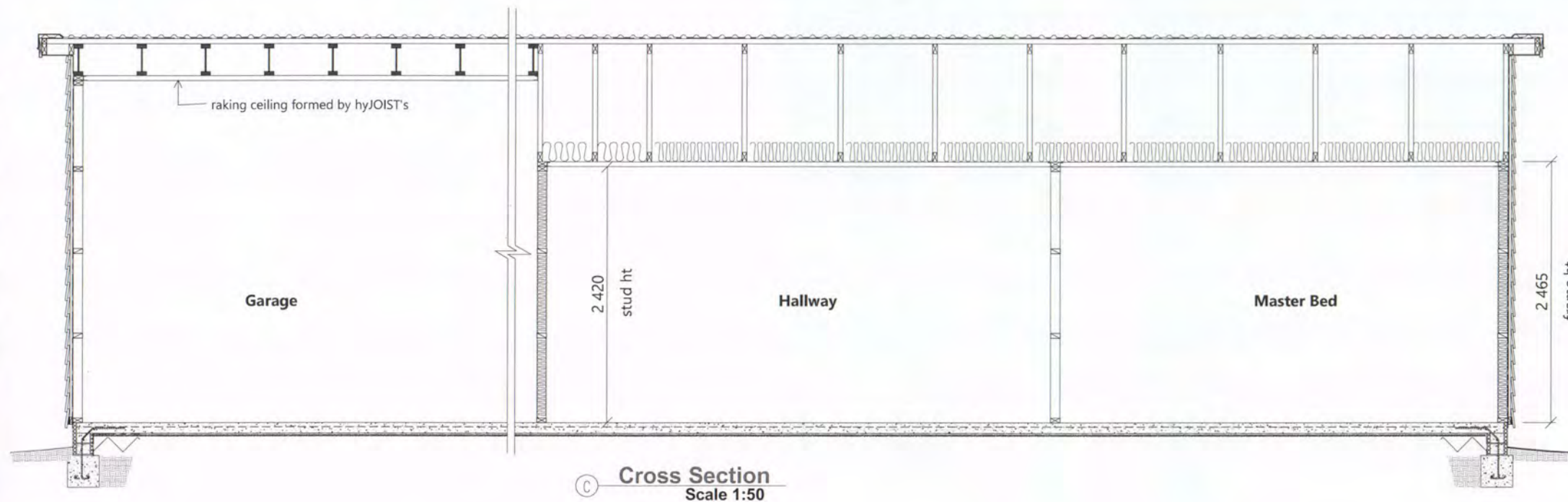
Refer to roof plan for eave widths, 25x19pp soffit mould.

200x25pp Fascia with Colorsteel spouting & Downpipe system.

Client Details :				NC429
Brad Dent & Natalie Brien				
Address:				
20 Keene Drive				
Bell Block				
				New Design
Cross Section & Plan Notes		Scale:	Date: 2/04/2015	Sheet no: 11
		1:50	Rev:	
Drawn: DS	Check: N.Davis	Call 0800 A1homes		
Wind: High	Earthq: 1	Exposure: C	Snow: NO	214663
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Engineer Design Chimney & Patio

Plans to be read in conjunction with 'West Point Engineers'
design and Producer Statement - in case of discrepancies
engineer design shall take precedence



Exposure Notes:

Note: Exposure Zone C
(exposure environments as defined by NZS 3604 : fig 4.2 & table 4.1)

Fixings & Fastenings (excludes nails and screws):
Nail Plates - In 'closed' & 'roof space' environments = continuously coated galv. steel
Wire Dogs & Bolts - In 'closed' & 'roof space' environments = hot-dip galv. steel
All other structural fixings - In 'closed' environments = mild steel (uncoated, non-galvanized)

All other structural fixings (except fabricated brackets (1))
- In sheltered environments = hot-dip galv. steel
- In exposed environments = type 304 stainless steel

Nails & screws used for framing & cladding:
Non-structural cladding (15 year durability) = galv. steel
Framing in 'closed' areas including roof spaces = mild steel (3)
Framing in 'exposed or sheltered' areas = galv. steel (3)

*1. - "fabricated brackets" shall be made from 5mm (minimum thickness) mild steel and shall be hot-dip galv.
*3. - steel fixings and fastenings in contacts with timber treated with copper-based timber preservatives (H3.2 or higher) shall be minimum of type 304 stainless steel (exposed and Sheltered environments), and hot-dip galv. steel (all other locations)

Minimum concrete strength after 28 days shall be:
17.5 MPa OR 20 MPa exposed to weather

Concrete Masonry:

(a) comply with the provisions of NZS 4210
(b) Minimum cover to steel reinforcement from an uncoated masonry external face 50mm
(c) Minimum grout strength 20MPa

Fixing Materials: (as per Acceptable Solution E2/AS1) - for definitions refer to E2/AS1

Hidden/Exposed
Aluminium, or Bronze, or type 304 stainless steel
Nails = galv. steel
Screws = galv. steel, Painted or unpainted to AS 3566: Part 2
Sheltered:
Aluminium, or Bronze, or type 304 stainless steel
Screws = galv. steel, Painted or unpainted to AS 3566: Part 2

* The use of stainless steel fixings is not recommended by steel manufacturers for use with coated steel in severe marine and industrial environments, as they are considered to cause deterioration

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Client Details : NC429
Brad Dent & Natalie Brien
Address:
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Bell Block

New Design
Cross Section & Plan
Scale: 1:50 Date: 2/04/2015 Sheet no: 12
Rev:
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Timber Moisture Content:

Table 4 – Allowable moisture content (%)⁽¹⁾ at time of installation or in the case of framing timber at time of enclosure

Use category level of finish	Air-conditioned or centrally heated buildings	Intermittently heated buildings ⁽²⁾	Unheated buildings
1 Timber to which linings are attached to achieve a "level of finish" 4 to 5	8 – 18	12 – 18	12 – 18
2 Enclosed framing (including roof trusses) to achieve a "level of finish" 0 to 3	12 – 18	12 – 24	12 – 24
3 Load-bearing lintels and beams	8 – 18	12 – 20	12 – 20
4 Weatherboards, exterior joinery and finishing timbers	14 – 18	14 – 18	14 – 18
5 Flooring exposed to ground atmosphere	10 – 14	12 – 16	14 – 18
6 Interior joinery and finish, furniture, corestock	8 – 12	10 – 14	12 – 16
7 Flooring not exposed to ground atmosphere	8 – 12	10 – 14	12 – 16

NOTE –

(1) Allowable ranges of moisture content are specified on the basis that 90 % of pieces shall be within the specified range, the remainder shall be within a further 2 % moisture content above or below. The moisture content of individual boards shall be normally distributed within the range allowed. In special circumstances, e.g. flooring exposed in rooms with large window area, the upper limits may be reduced.

(2) Buildings periodically heated by open fires, electric heaters, etc., such as most domestic buildings.

Acceptable Solution E2/AS1 10.0 Construction Moisture

10.1 Moisture in materials

Moisture contained in the building structure at completion of construction shall not be permitted to damage the building elements.

Construction moisture includes the moisture contained in:

- Timber products as a result of a treatment or manufacturing process,
- Green timber, and timber or other materials that have been exposed to the weather, and
- Concrete, mortar or plaster that is not completely cured.

10.2 Maximum acceptable moisture contents

The maximum moisture contents shall be:

- For timber framing at the time of installing interior linings, the maximum acceptable moisture content shall be the lesser of:
 - 20% for insulated buildings, 24% for non-insulated buildings, or
 - as specified in NZS 3602,
- For timber weatherboards and exterior joinery, 20% at the time of painting,
- For reconstituted wood products, 18% at all times, and
- For concrete floors, sufficiently dry to give a relative humidity reading of less than 75% at the time of laying fixed floor coverings.

• Where nail popping, joint peaking and ridges formed by stud warping and twisting are undesirable on the finished surfaces within 12 months of installation of wall linings, kiln dried timber shall be used, or alternatively the timber framing shall be dried to less than 18 % moisture content before wall linings are installed.

• Where timber framing is installed green or kiln dried timber that is wetted and allowed to dry, those members which are likely to deflect under their own weight shall be propped until they dry below a moisture content of 20 %.

Microclimatic Considerations:

In addition to exposure zones, evidence of local environmental effects (microclimates), and those produced by the erection of a structure or installation of equipment, shall be considered.

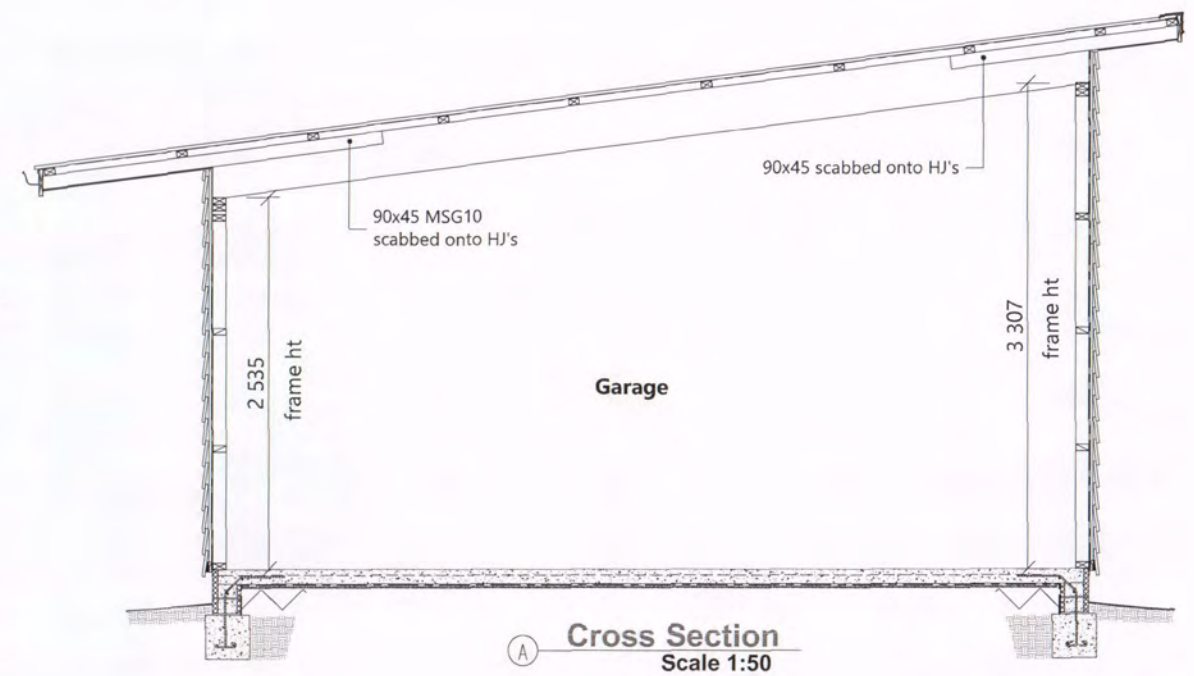
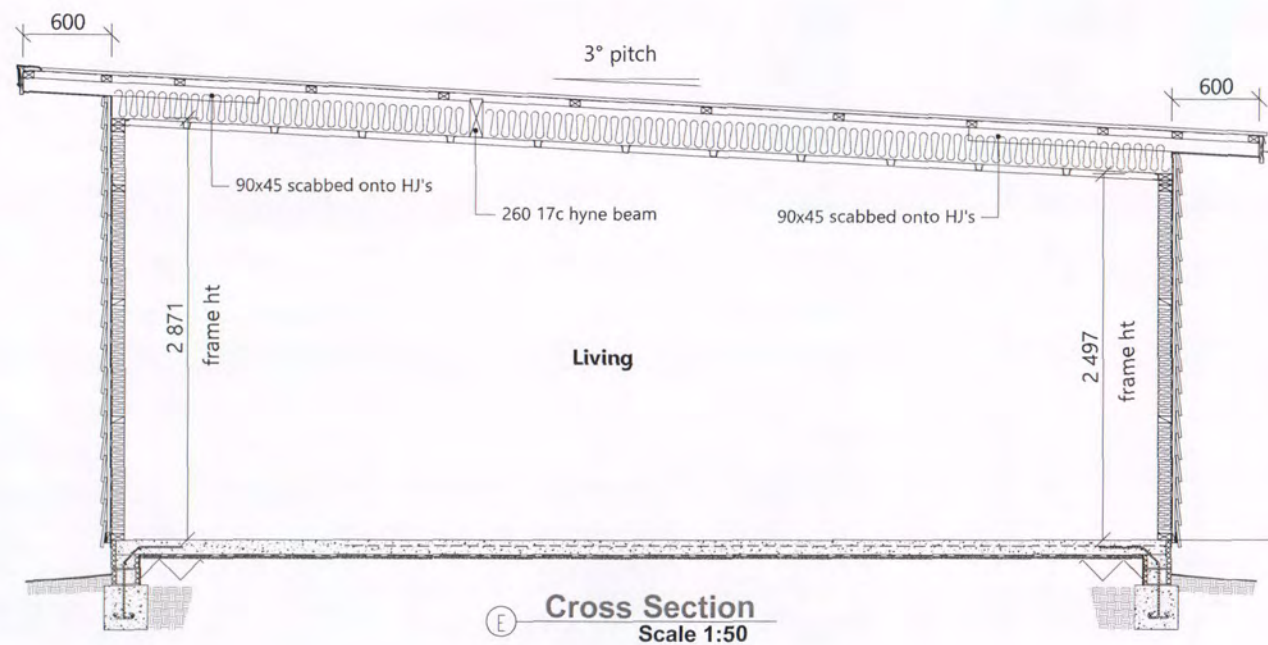
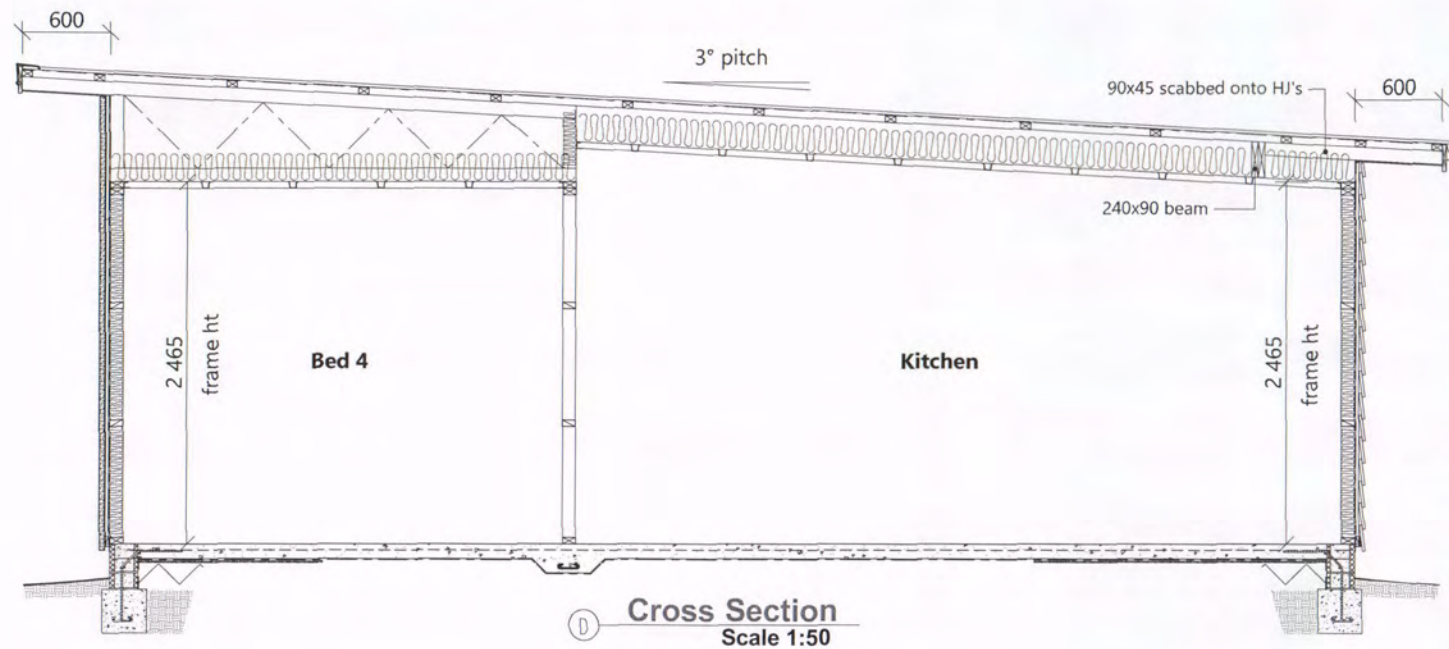
Significant acceleration of the corrosion of structural fasteners and fixings beyond what could be expected from the geographical location can occur in the following circumstances:

- Industrial contamination & corrosion atmospheres;
- Contamination from agricultural chemicals or fertilisers; and
- Geothermal hot spots. Hot spots are defined as being within 50m of a bore, mud pool, steam vent, or other source.

Microclimatic conditions (a) to (c) require specific engineer design.

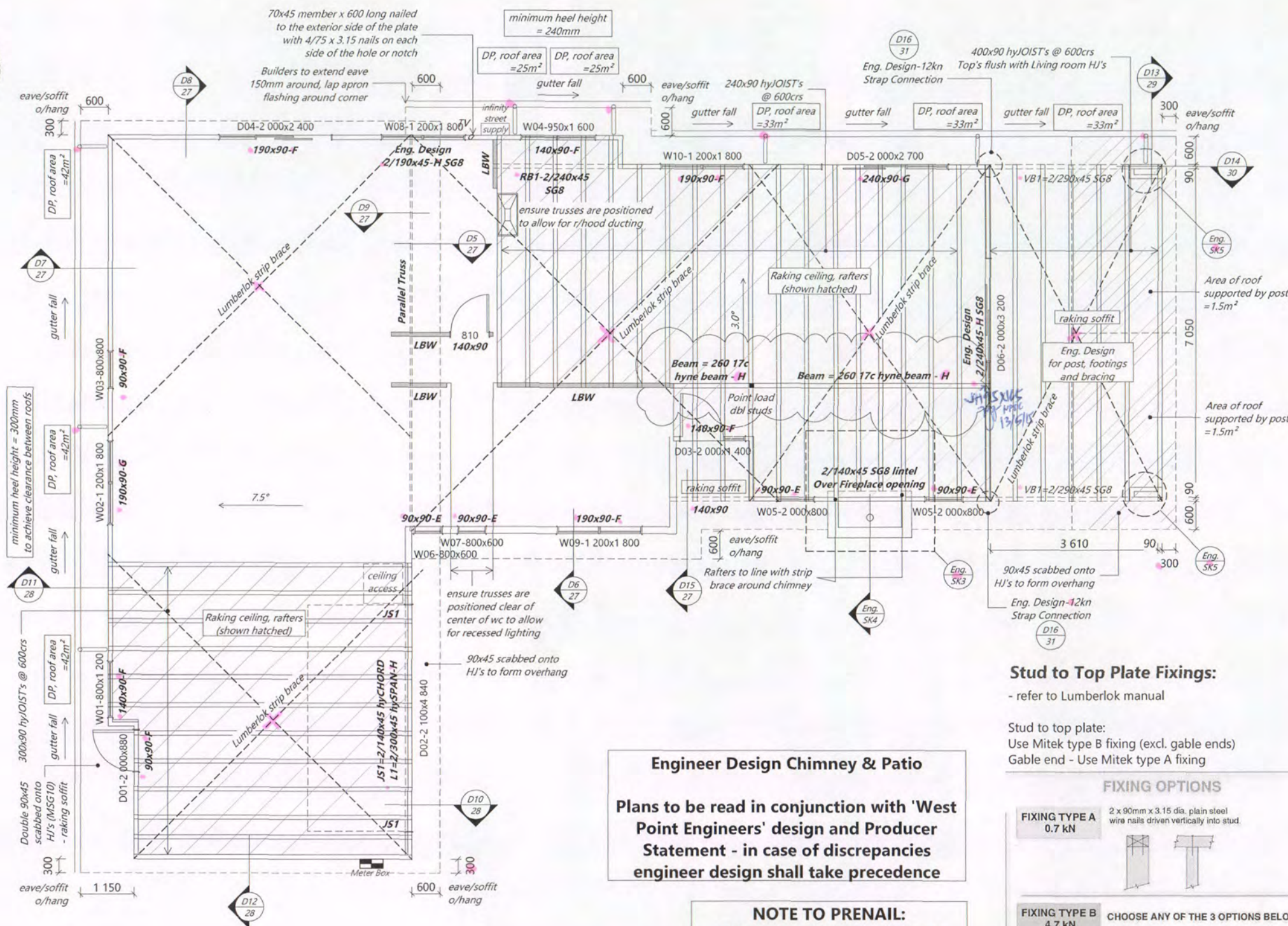
Engineer Design Chimney & Patio

Plans to be read in conjunction with 'West Point Engineers'
design and Producer Statement - in case of discrepancies
engineer design shall take precedence



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13 MAY 2015
Building Consent

Client Details :				NC429
Brad Dent & Natalie Brien				
Address:				
20 Keene Drive				
Bell Block				
New Design				
Cross Sections		Scale:	Date: 2/04/2015	Sheet no :
A, D & E		1:50	Rev:	13
Drawn: DS	Check: N.Davis	Call 0800 A1homes		
Wind: High	Earthq: 1	Exposure: C	Snow: NO	214663
www.A1homes.co.nz				
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Engineer Design Chimney & Patio

Plans to be read in conjunction with 'West Point Engineers' design and Producer Statement - in case of discrepancies engineer design shall take precedence

NOTE TO PRENAIL:
Minimum 390mm required between top chords to allow sufficient room to flash and clad

Table 5: Downpipe Sizes for Given Roof Pitch and Area
Paragraph 4.2.1

Downpipe size (mm) (minimum internal sizes)	0-25°	Roof pitch		
		25-35°	35-45°	45-55°
		Plan area of roof served by the downpipe (m²)		
63 mm diameter	60	50	40	35
74 mm diameter	85	70	60	50
100 mm diameter	155	130	110	90
150 mm diameter	350	290	250	200
65 x 50 rectangular	60	50	40	35
100 x 50 rectangular	100	80	70	60
75 x 75 rectangular	110	90	80	65
100 x 75 rectangular	150	120	105	90

Cautionary Notes:

This layout is preliminary. Read in conjunction with final PS1 & pre-cut design & documents. Truss manufacturer to inform designer of any further load bearing footing / slab thickenings (piles or bearer lines) that are required to support roof loads. If a discrepancy occurs contact I Design Architecture immediately on 07 578 7345

Construction Notes:

Ensure that all downpipes are positioned clear of Joinery units

Fixings:

- refer to Lumberlok manual

Lintel Key:

190x90 - G ← Fixing

← Size

Trimming Studs:

JS1 = Jamb studs

- refer to CHH Design IT calcs and PS1

Refer to following page for trimming stud requirements

All Lintels GREATER than 1.8m span require an additional trimming stud

Rondo Clip System:

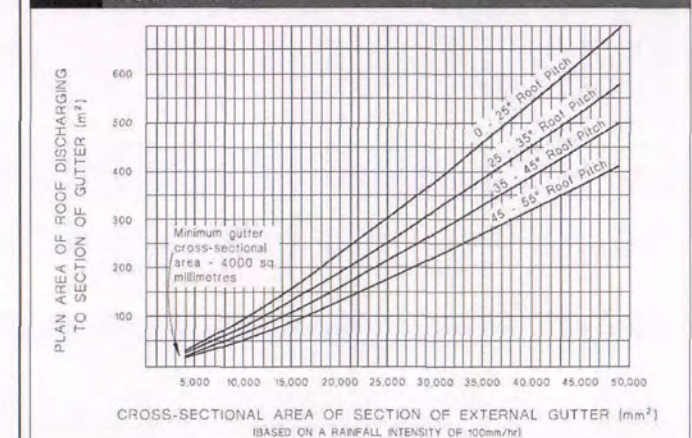
Bottom chord restraints required at 1.800crs

Gutter Calculation

Spouting: Metalcraft Quarter Round Gutter
Cross Sectional Area = 4880mm²

Catchment area of roof = 42m²

Figure 15: Cross-sectional Area of External Gutter
Paragraphs 5.1.2 and 5.1.3



Stud to Top Plate Fixings:

- refer to Lumberlok manual

Stud to top plate:

Use Mitek type B fixing (excl. gable ends)

Gable end - Use Mitek type A fixing

FIXING OPTIONS

FIXING TYPE A
0.7 kN

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.

FIXING TYPE B
4.7 kN

CHOOSE ANY OF THE 3 OPTIONS BELOW

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.

Plus LUMBERLOK 6kN Stud Anchor (CPC40)

Plus 2 x LUMBERLOK CPC40

Recommended for internal wall options to avoid lining issues

2 x 90mm x 3.15 dia. plain steel wire nails driven vertically into stud.

Plus LUMBERLOK Stud Strap (one face only)

Note:

To calculate the number of B type fixings required, divide the wall length by the stud centres, add 1 to this figure and locate this number of fixings as evenly as possible along the wall length. This figure includes the start and end studs in each wall length.

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Client Details:

Brad Dent & Natalie Brien

Address:

20 Keene Drive
Bell Block

NC429

Roof Plan

Scale: 1:100
Date: 12/05/2015
Rev: 14

Drawn: DS
Wind: High
Earthq: 1
Check: N.Davis
Exposure: C
Snow: NO

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NZS 3604:2011 8.5.2 Trimming studs

A trimming stud shall be provided to each side of any opening as follows;

- must be the same width as the studs in the wall
- whether single or double, shall not contain holes, notches, checks, or cuts in the middle third of their length.
- Where a doubling stud which provides support for a lintel is shorter by 400 mm or more than the full stud height, its thickness shall not be included as contributing to the thickness of trimming studs from table 8.5

Table 8.5 – Trimming studs (see 8.5.2.1)

Maximum clear width of opening (span of lintel)	Stud thickness required for 600 mm spaced studs	Thickness of trimming studs*
(a) Single storey, top storey or non-loadbearing walls		
(m)	(mm)	(mm)
1.8	35	45
	45	45
	70	90
	90	115
3.0	35	45
	45	70
	70	90
	90	135
3.6	35	70
	45	90
	70	140
	90	180
4.2	35	105
	45	135
	70	210
	90	270
(b) Any other location		
0.9	35	45
	45	70
	70	90
	90	135
1.8	35	70
	45	70
	70	115
	90	135
3.0	35	70
	45	90
	70	140
	90	180

* For brick veneer openings add extra stud for fixing veneer ties.
NOTE – To use this table:
(1) Enter the row corresponding to the lintel span being considered.
(2) From the second column, select the thickness of the studs required for the body of the wall, assuming that they are spaced at 600 mm.
(3) Read the trimming stud thickness from the right side column.

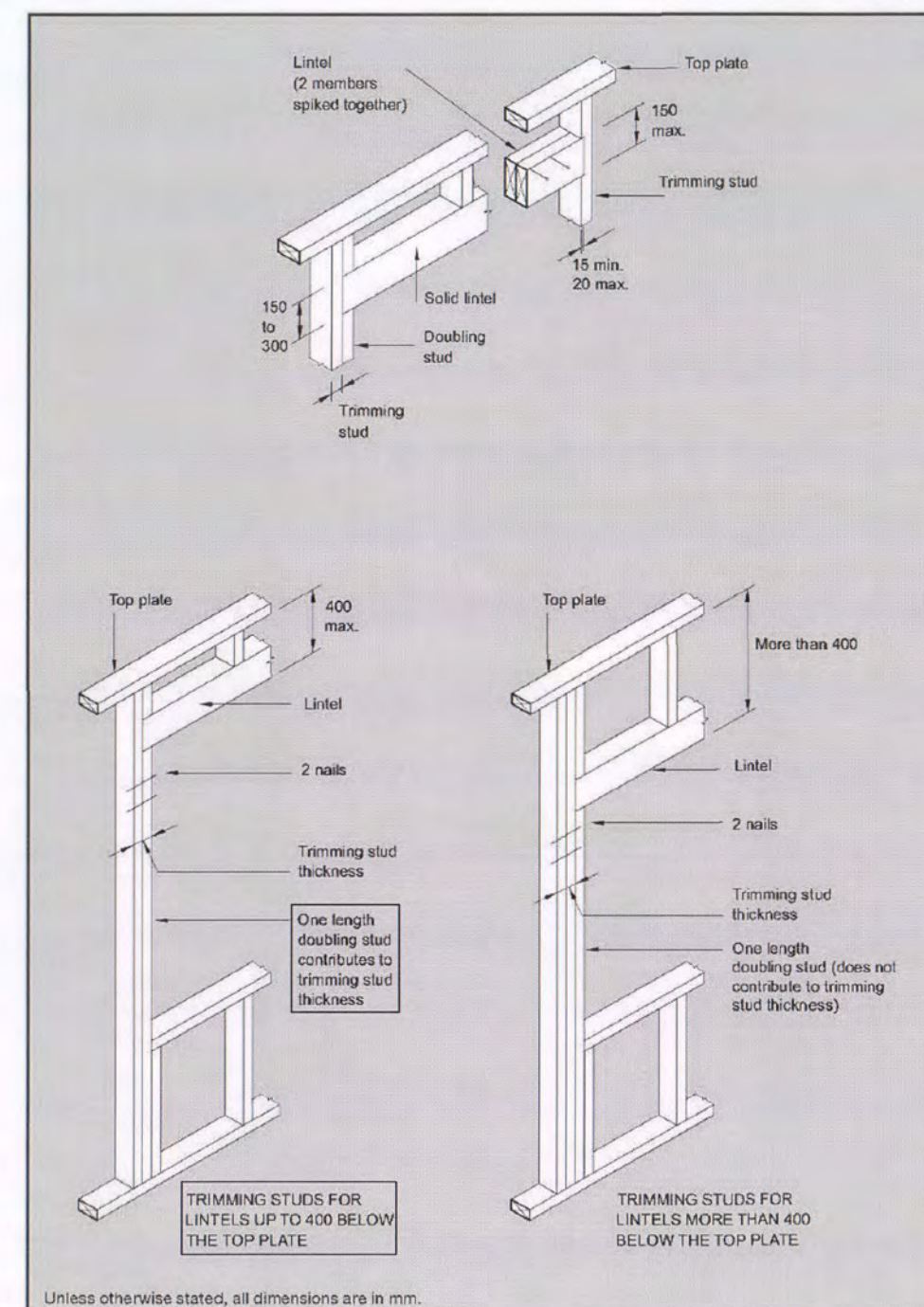


Figure 8.5 – Trimming studs and lintels (see 8.5.2.1)

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13 MAY 2015
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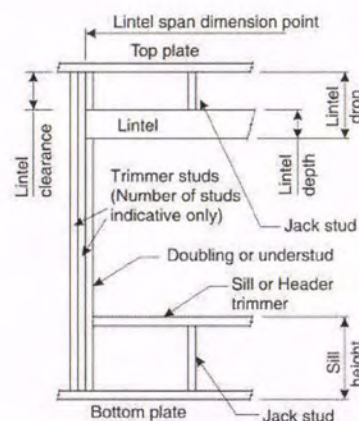
Client Details :		NC429	
Brad Dent & Natalie Brien			
Address:			
20 Keene Drive			
Bell Block			
		New Design	
Trimming Studs		Scale: N.T.S.	Sheet no: 15
Drawn: DS	Check: N.Davis	Date: 2/04/2015	Rev: 1
Wind: High	Earthq: 1	Exposure: C	Snow: NO
		Call 0800 A1homes 214663 www.A1homes.co.nz	
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LINTEL FIXING SCHEDULE ALTERNATIVE TO TABLE 8.14 & FIGURE 8.12 NZS 3604:2011

NOTE:

- All fixings are designed for vertical loads only. Dead loads include the roof weight and standard ceiling weight of 0.20 kPa.
- Refer to Table 8.19 NZS 3604:2011 for nailing schedule to resist horizontal loads.
- These fixings assume the correct choice of rafter/truss to top plate connections have been made.
- All fixings assume bottom plate thickness of 45mm maximum. Note: TYLOK options on timber species.
- Wall framing arrangements under girder trusses are not covered in this schedule.
- All timber selections are as per NZS 3604:2011.

DEFINITIONS



Lintel Supporting Girder Trusses:

Roof Tributary Area	Light Roof Wind Zone				Heavy Roof Wind Zone			
	L	M	H	EH	L	M	H	EH
8.6 m²	G	G	H	G	G	G	H	G
11.6 m²	G	H	H	G	G	H	H	G
12.1 m²	G	H	H	G	G	H	H	G
15.3 m²	H	H	-	G	H	H	-	G
19.1 m²	H	-	-	H	H	-	-	H
20.9 m²	H	-	-	H	H	-	-	H
21.8 m²	H	-	-	H	H	-	-	H
34.3 m²	-	-	-	H	-	-	-	H

Notes:

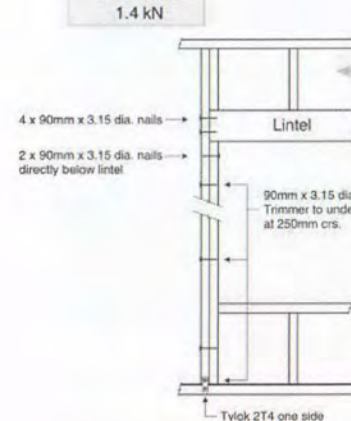
- Roof Tributary Area = approx. 1/2 x (Total roof area on girder and rafter trusses supported by lintel)
- Assumed girder truss is at mid-span or middle third span of lintel
- Use similar fixings for both ends of lintel
- All other cases require specific engineering design

SELECTION CHART FOR LINTEL FIXING

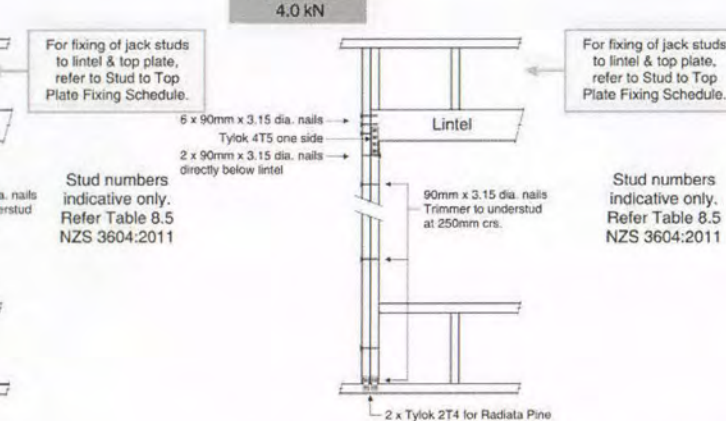
Lintel Span	Loaded Dimension (See Fig. 1.3 NZS 3604:2011)	Light Roof Wind Zone					Heavy Roof Wind Zone				
		L	M	H	VH	EH	L	M	H	VH	EH
0.7	2.0	E	E	E	E	F	E	E	E	E	E
	3.0	E	E	E	E	F	E	E	E	E	F
	4.0	E	E	F	F	F	E	E	F	F	F
	5.0	E	F	F	F	F	E	E	F	F	F
	6.0	E	F	F	G	G	E	E	F	F	G
0.9	2.0	E	E	E	E	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	E	F	F	F	E	E	F	F	F
	5.0	E	F	F	F	F	E	E	F	F	F
	6.0	E	F	F	G	G	E	E	F	F	G
1.0	2.0	E	E	E	E	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	F	F	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
1.2	2.0	E	E	E	E	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	F	F	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
1.5	2.0	E	E	E	E	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	F	F	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
2.0	2.0	E	E	E	E	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	F	F	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
2.4	2.0	E	E	E	E	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	F	F	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
3.0	2.0	E	E	E	E	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	F	F	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
3.6	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	H	H	-	E	F	G	H	H
	5.0	F	G	H	-	-	E	F	G	H	-
	6.0	F	G	H	-	-	E	F	G	H	-
4.2	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	F	G	H	-	-	E	F	G	H	-
	6.0	F	G	H	-	-	E	F	G	H	-
4.5	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	F	G	H	-	-	E	F	G	H	-
	6.0	F	G	H	-	-	E	F	G	H	-
4.8	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	F	G	H	-	-	E	F	G	H	-
	6.0	F	G	H	-	-	E	F	G	H	-

LINTEL FIXING OPTIONS

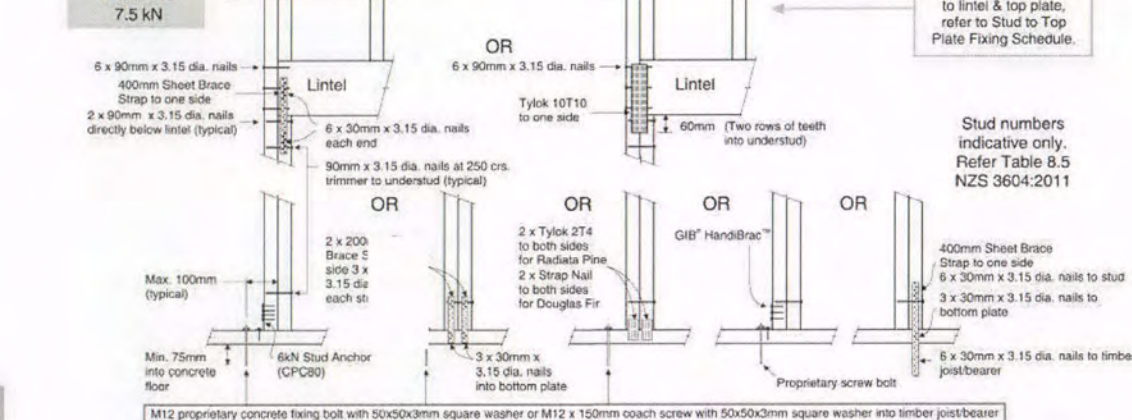
TYPE E 1.4 kN



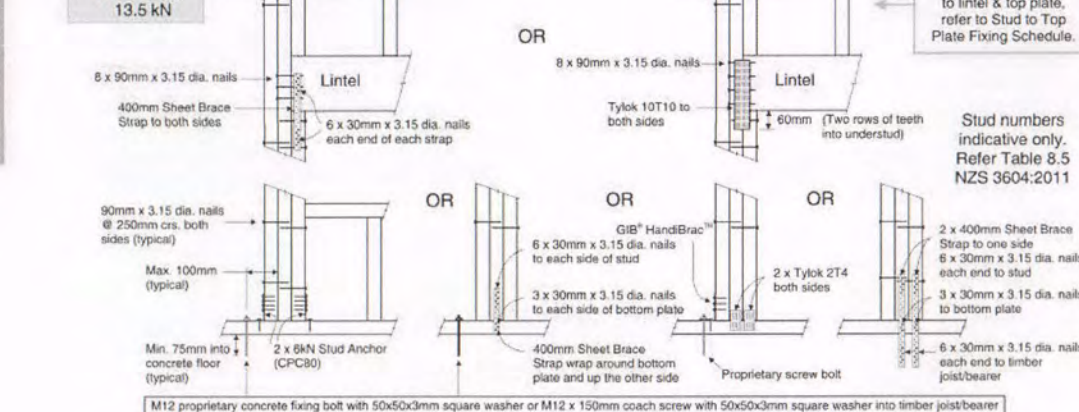
TYPE F 4.0 kN



TYPE G 7.5 kN



TYPE H 13.5 kN



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Client Details : NC429
Brad Dent & Natalie Brien
Address:
20 Keene Drive
Bell Block

New Design

Lintel Fixing Schedule

Scale: N.T.S. Date: 2/04/2015 Sheet no: 16
Rev: 1

Call 0800 A1homes
214663
www.A1homes.co.nz

Drawn: DS Check: N.Davis
Wind: High Earth: 1 Exposure: C Snow: NO

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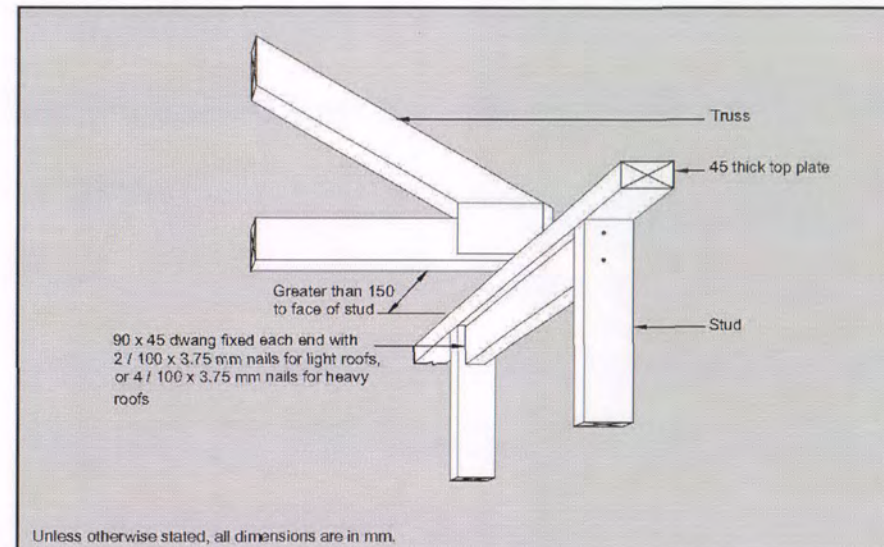


Figure 8.13 – Strengthening top plate (see 8.7.1.1 and table 8.16)

Joints in plates:

Joints in top plates shall be made only over supports being either a stud or blocking.

Joints in the top plate of a wall that does not contain any wall bracing elements (either in line or at wall intersections), shall be halved and nailed at the joints, see figure 8.14 (A), or be butted over blocking and nailed, see figure 8.14 (B), or be provided with an alternative fixing, having a capacity in tension or compression of 3 kN.

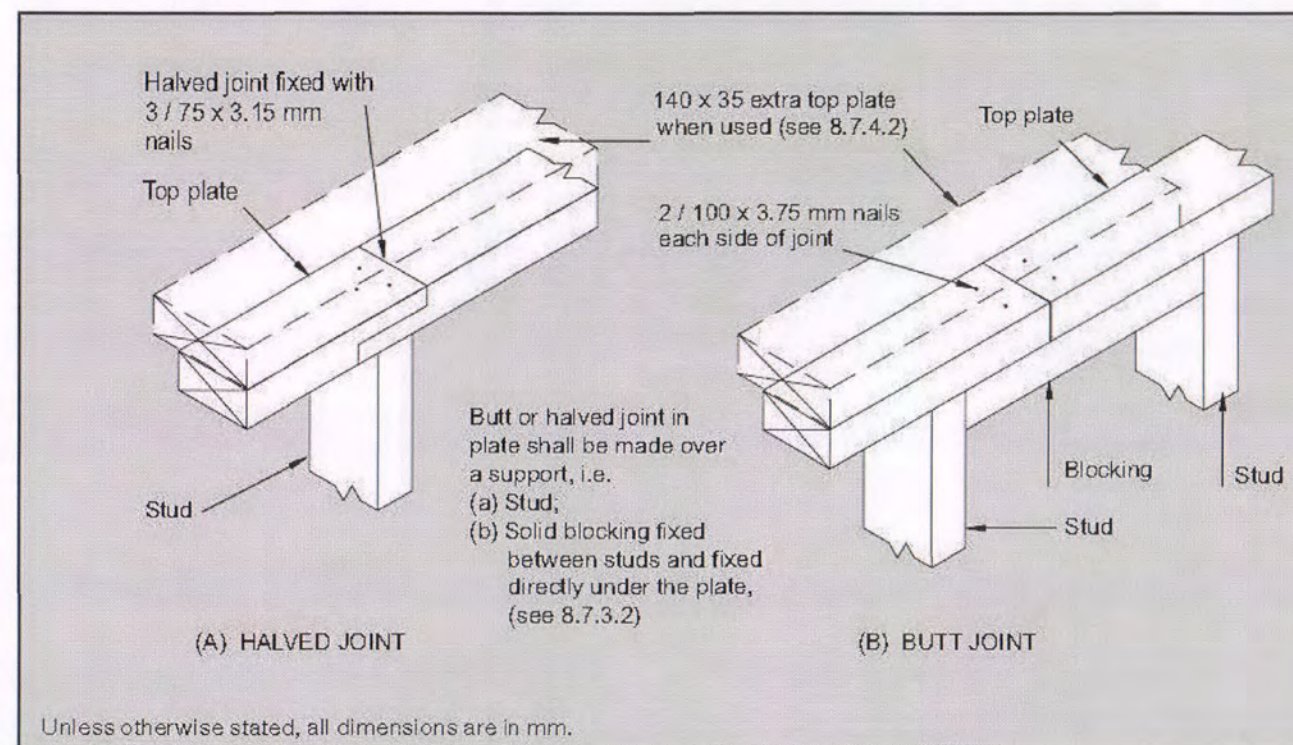


Figure 8.14 – Connecting top plates – Walls not containing bracing (see 8.7.3.2)

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13 MAY 2015
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Client Details :				NC429
Brad Dent & Natalie Brien				
Address:				
20 Keene Drive				
Bell Block				
New Design				
Top Plate Jointing		Scale: N.T.S.	Date: 2/04/2015	Sheet no: 17
Drawn: DS		Check: N.Davis		
Wind: High	Earthq: 1	Exposure: C	Snow: NO	
Call 0800 A1homes 214663				
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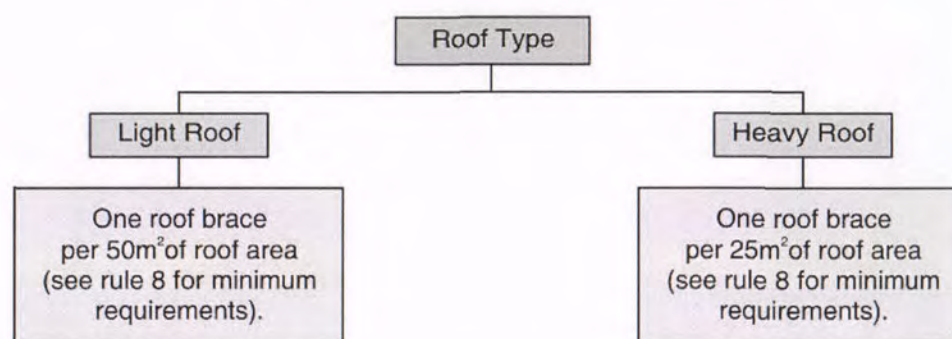
LUMBERLOK®

ROOF BRACING SPECIFICATION AS PER NZS 3604:2011

10/2011

- ★ Covers roof bracing requirements to resist horizontal loads as set out in NZS 3604:2011 Section 10.
- ★ A definitive guide to the description and installation of Roof Plane Braces and Roof Space Braces.

Roof Bracing Requirements



Roof Bracing - Rules & Definitions

- The bracing described in this brochure covers both framed roofs and fully trussed roofs.
- Roof planes less than 6m² (e.g. dormers & porches) do not require bracing.
- Roof braces can consist of either i) Roof Plane Brace or ii) Roof Space Brace or combination of the two.
- Roof braces are not required on roofs where sarking is installed as per NZS 3604:2011 Clause 10.4.4 or where a ceiling diaphragm is installed and is attached to the rafters.
- Roof area is the actual plan area of the roof and includes overhangs.
- A hip or valley rafter running continuously from ridge to top plate can be classed as one roof plane brace.
- A pair of crossed LUMBERLOK Strip Brace (preferred for ease of installation) can be classed as one roof plane brace and shall be installed as detailed in this brochure.
- There must be at least one roof plane brace in each roof plane. Each ridge line shall have a minimum of two roof braces.
- Every design effort should be made to distribute the roof braces as evenly as possible over the entire roof area and run alternately in opposite directions.



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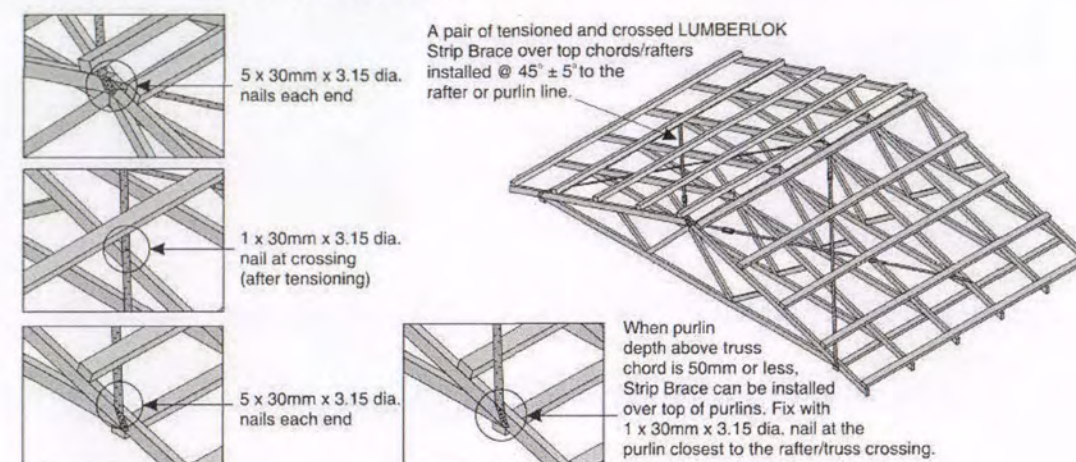
Roof Bracing Options

i) ROOF PLANE BRACE

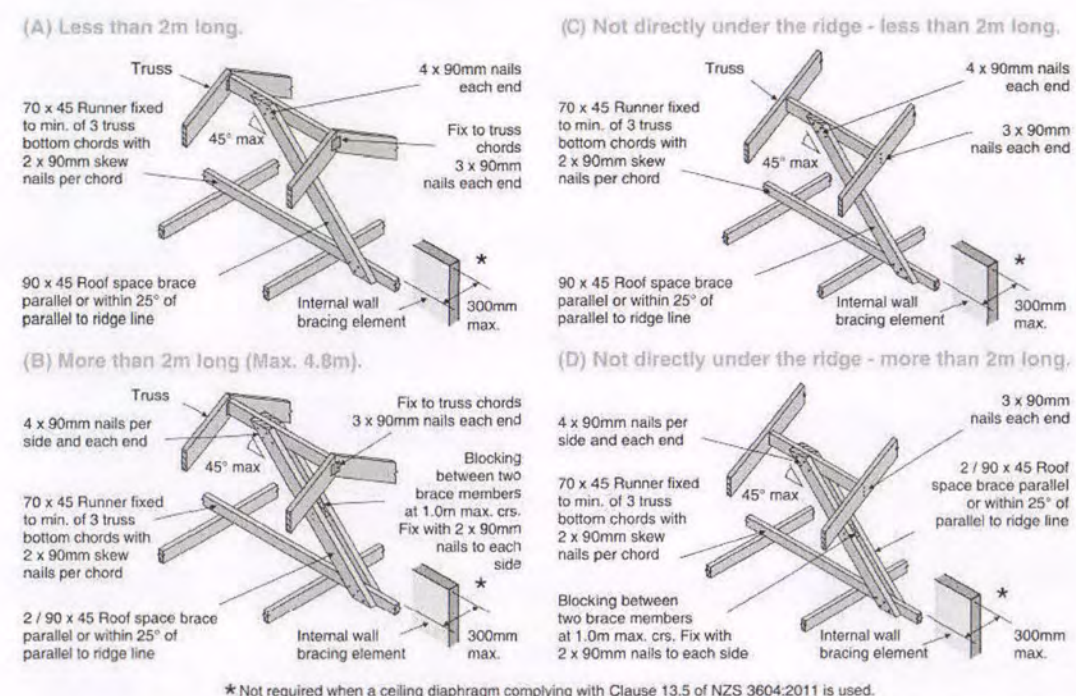


Each roof plane brace can be:

- A hip or valley rafter running continuously from ridge to the top plate in accordance with NZS 3604:2011 Clauses 10.2.1.3.2 or 10.2.1.3.3
- OR
- A pair of tensioned and crossed LUMBERLOK Strip Brace running continuously from ridge to top plate installed as detailed below.



ii) ROOF SPACE BRACE



* Not required when a ceiling diaphragm complying with Clause 13.5 of NZS 3604:2011 is used.

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MiTek New Zealand Limited

AUCKLAND
PO Box 58-014, Botany 2163
Phone: 09-274 7109
Fax: 09-274 7100

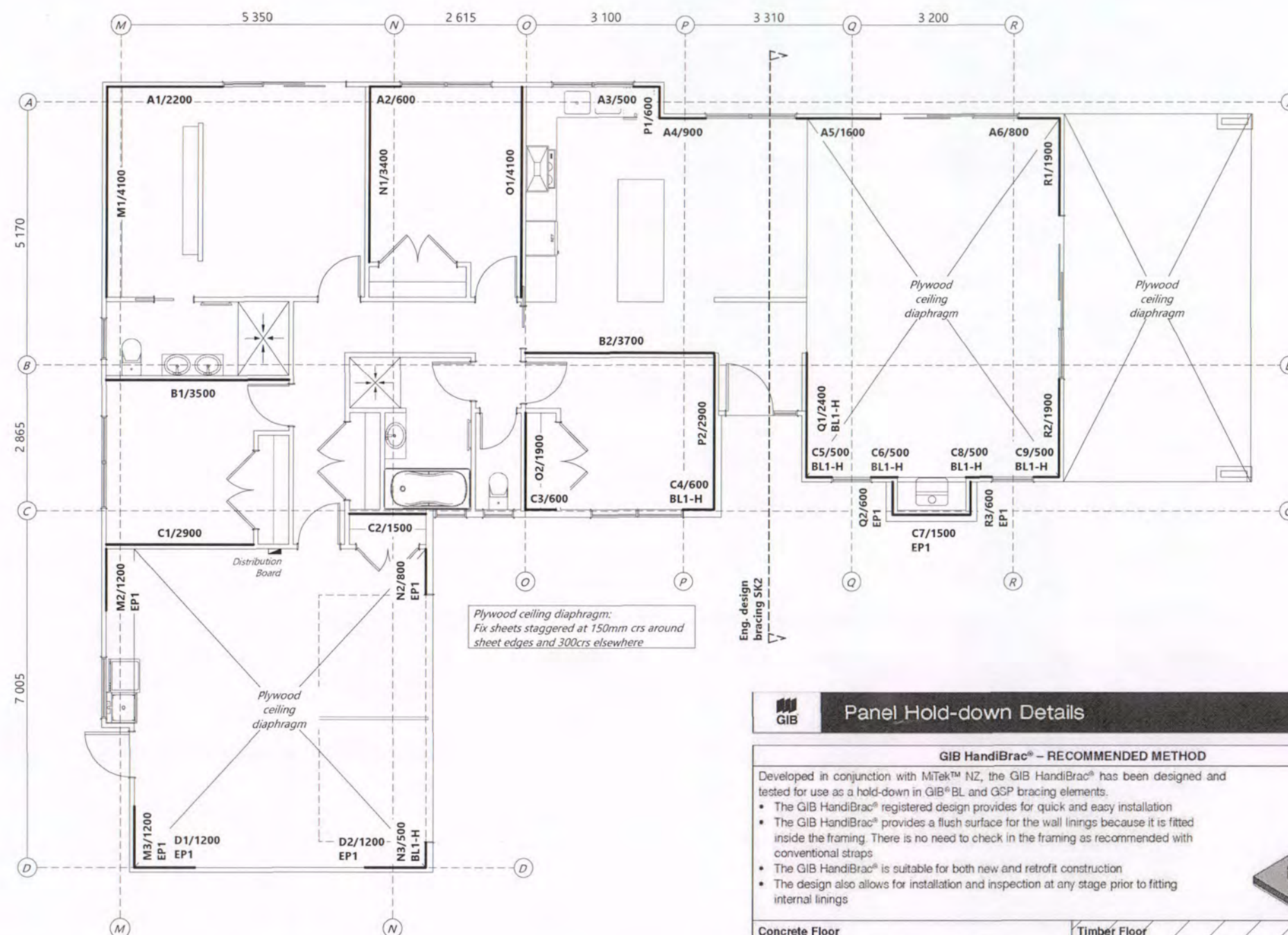
CHRISTCHURCH
PO Box 8387, Riccarton 8440
Phone: 03-348 9691
Fax: 03-348 9314

www.mitek.co.nz

GANG-NAIL® LUMBERLOK® BOWMAC®

Client Details :		NC429	
Brad Dent & Natalie Brien			
Address:			
20 Keene Drive			
Bell Block			
		New Design	
Roof Bracing		Scale: N.T.S.	Date: 2/04/2015 Sheet no: 18
Drawn: DS	Check: N.Davis		
Wind: High	Earthq: 1	Exposure: C	Snow: NO
Call 0800 A1homes		2 1 4 6 6 3	
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All braces are GS1-N, unless otherwise stated



Cautionary Notes:

ALL GIB® BRACES FIXED IN ACCORDANCE WITH THE LATEST WINSTONES GIB BRACING MANUAL & GIB SITE GUIDE

Bracing Element Table

Brace Type	
GS1-N	10mm GIB std plasterboard on one side, min. length 0.4m
BL1-H	10mm GIB BRACELINE on one side, min. length 0.4m + GIB Handibrac hold down ea. end
EP1	7mm Ecoply or Ecoply Barrier one side, min. length 0.6m + Use GIB Handibrac® hold-down connections at each end
All braces are GS1-N, unless otherwise stated	

Label No.

A1 / 1800

Brace Length

Openings in Bracing Elements

(as per GIB Ezybrace System)

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

Connecting top plates to external walls:

Each wall that contains one or more wall bracing elements shall be connected at the top plate level, either directly, or through a framing member in the line of the wall, to external walls at right angles to it. - Refer to following page.

Ply ceiling diaphragm:

Fix sheets staggered at 150mm crs around sheet edges and 300mm crs elsewhere

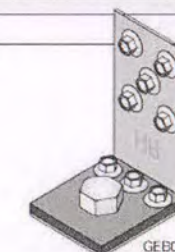



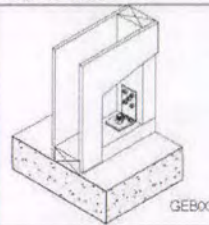
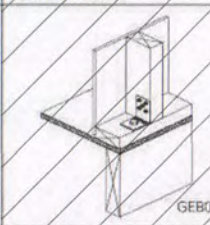
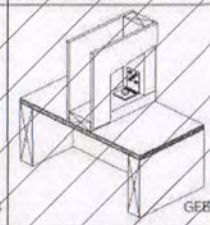
Panel Hold-down Details

GIB Handibrac® - RECOMMENDED METHOD

Developed in conjunction with MiTek™ NZ, the GIB Handibrac® has been designed and tested for use as a hold-down in GIB® BL and GSP bracing elements.

- The GIB Handibrac® registered design provides for quick and easy installation
- The GIB Handibrac® provides a flush surface for the wall linings because it is fitted inside the framing. There is no need to check in the framing as recommended with conventional straps
- The GIB Handibrac® is suitable for both new and retrofit construction
- The design also allows for installation and inspection at any stage prior to fitting internal linings



Concrete Floor		Timber Floor	
External walls	Internal walls	External walls	Internal walls
			
Position GIB Handibrac® as close as practicable to the internal edge of the bottom plate	Position GIB Handibrac® at the stud / plate junction	Position GIB Handibrac® in the centre of the perimeter joist or bearer	Position GIB Handibrac® in the centre of floor joist or full depth solid block

Hold-down fastener requirements

A mechanical fastening with a minimum characteristic uplift capacity of 15kN. 12x150mm galvanised coach screw

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Client Details : NC429
Brad Dent & Natalie Brien
Address:
20 Keene Drive
Bell Block

New Design

Bracing Plan

Scale: 1:100 Date: 2/04/2015 Sheet no: 19

Drawn: DS Check: N.Davis
Wind: High Earthq: 1 Exposure: C Snow: NO

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Connecting top plates to external walls:

For single-storey buildings the connection in line of the top plate of a wall that contains one or more wall bracing elements shall be jointed according to the bracing capacity of the highest-rated individual wall bracing elements as follows:

- (a) Bracing capacity not exceeding 100 bracing units: A 3 kN connection as shown in figure 8.15;
- (b) Bracing capacity exceeding 100 bracing units: A 6 kN connection as shown in figure 8.15.
- (c) Wall top plates to which ceiling diaphragms are attached: A 6 kN connection as shown in figure 8.15

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

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

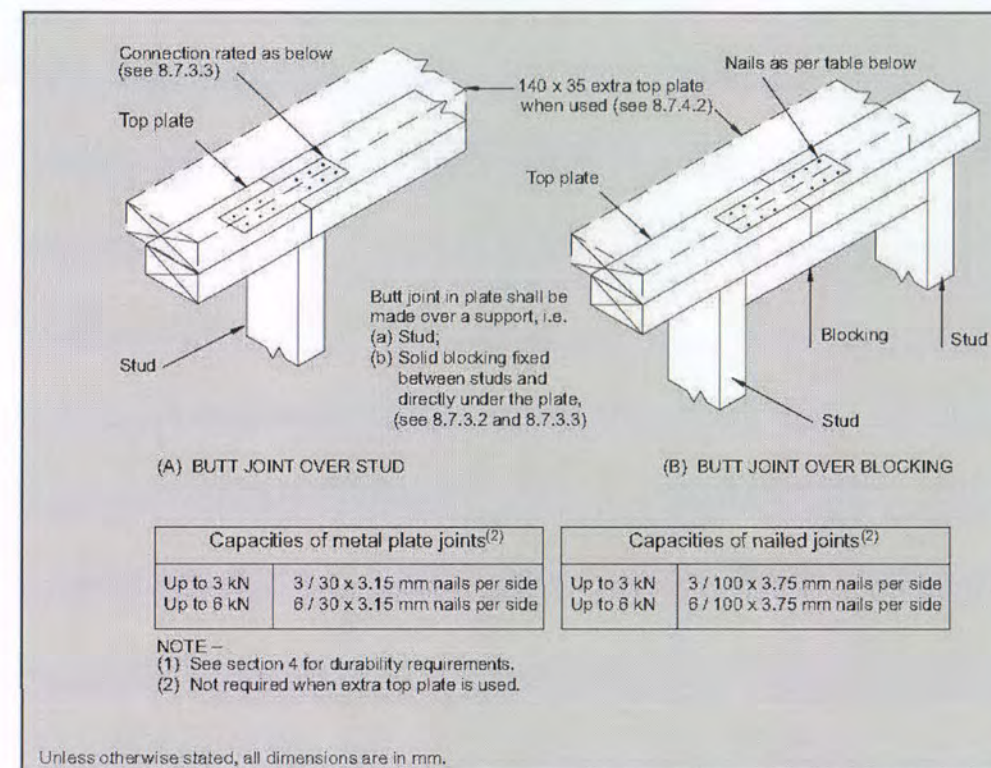


Figure 8.15 – Connecting top plates in line – Walls containing bracing (see 8.7.3.3)

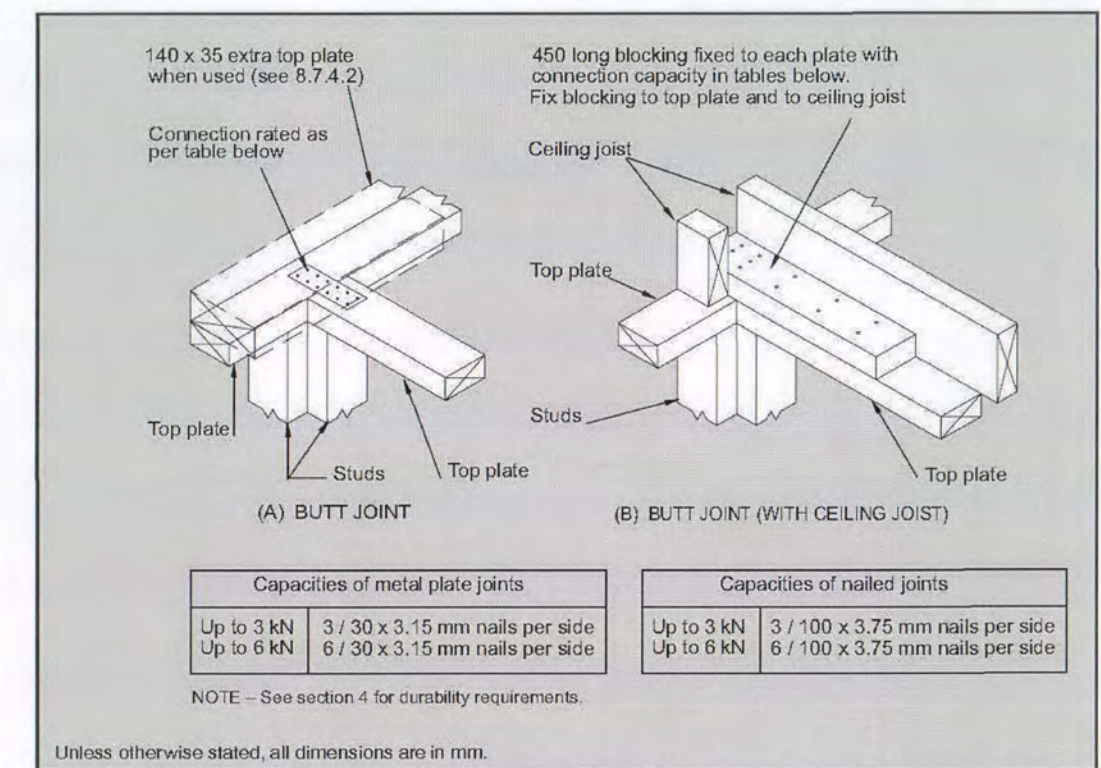


Figure 8.16 – Connecting top plates to external walls at right angles – Walls containing bracing (see 8.7.3.4)

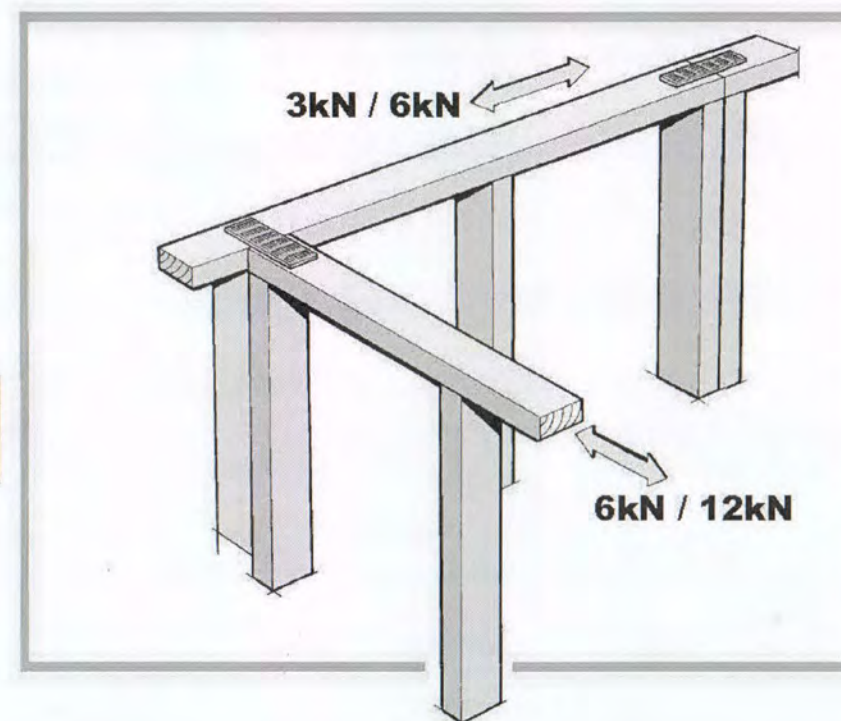
LUMBERLOK® TOP PLATE JOINTING AS PER CLAUSE 8.7.3 NZS 3604:2011

Top Plates at Right Angles

Connection capacity	LUMBERLOK Connector
6 kN	Tylok 6T10 OR 2 x Strap Nails
12 kN	2 x Sheet Brace Straps fixed with 6 x LUMBERLOK Product Nails 30mm x 3.15 dia. per end per strap (24 nails total)

Top Plates in Line

Connection capacity	LUMBERLOK Connector
3 kN	Tylok 6T5 OR Strap Nail
6 kN	Tylok 6T10 OR 2 x Strap Nails



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Address:					
20 Keene Drive					
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				New Design	
Top Plate Connections		Scale: N.T.S.	Date: 2/04/2015	Sheet no: 20	
Drawn: DS	Check: N.Davis				
Wind: High	Earthq: 1	Exposure: C	Snow: NO		
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Notes:

All electrical work & items to comply with;
NZBC F7/AS1, AS/NZS 3000, AS/NZS 3008,
AS 3786, AS/NZS 5000.2: 2006

SD - Approved smoke detectors required within 3.0m of any sleeping space
- first alert or similar. smoke alarms to have both a test & hush button

Position of Smoke detectors:
- Not less than 200mm from a wall
- Ideally in the centre of ceiling where possible (hallways)

Down lights to be CA 80 or CA 135 Rated (max 1 per 5m²).

Ventilation system to vent ducts & r/hood to soffit outlet

Ventilation of Sanitary rooms

Percentage of ventilated opening to be minimum 5% of room floor area

Room	Floor area	Window opening	Percentage
Bath	5.74m ²	800x600 = 0.48m ²	8.3%
wc	1.71m ²	800x600 = 0.48m ²	28.1%
Ens	5.21m ²	800x800 = 0.64m ²	12.3%

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Bell Block

NC429

New Design

Electrical Plan

Scale: 1:100 Date: 2/04/2015 Sheet no: 21
Rev:

Drawn: DS Check: N.Davis
Wind: High Earth: 1 Exposure: C Snow: NO

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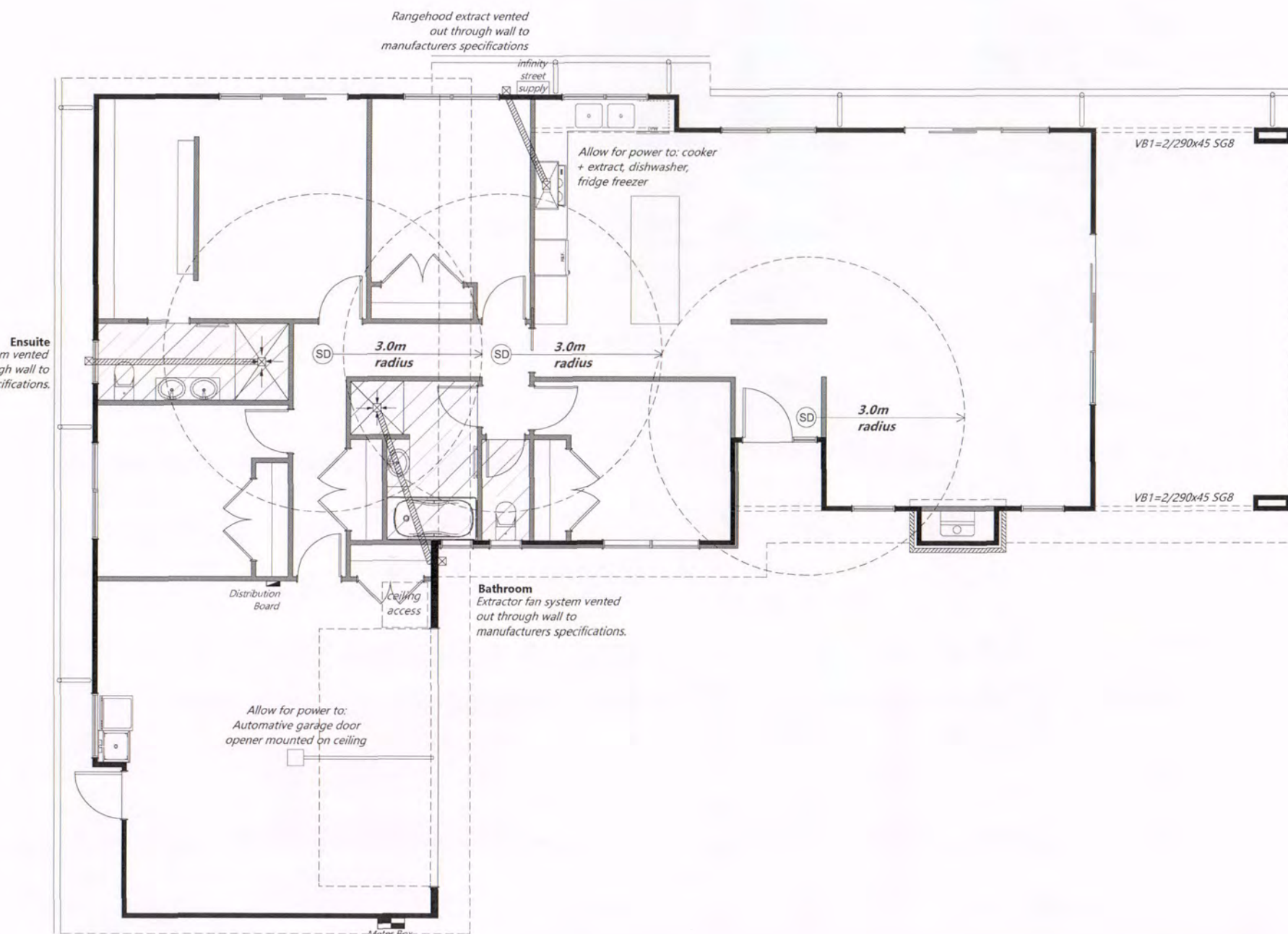
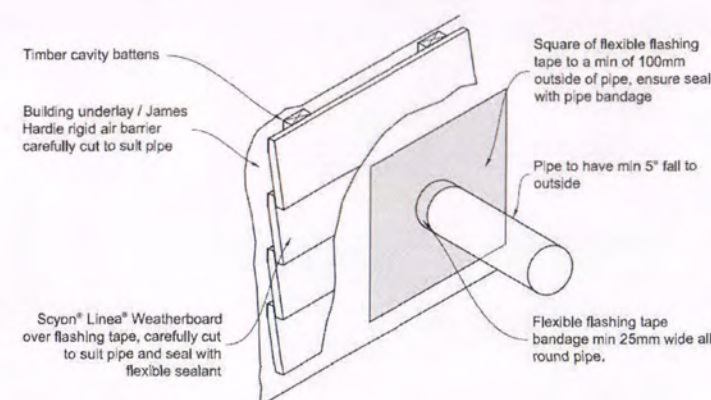


Figure 47: Timber cavity pipe penetration



Engineer Design Chimney & Patio

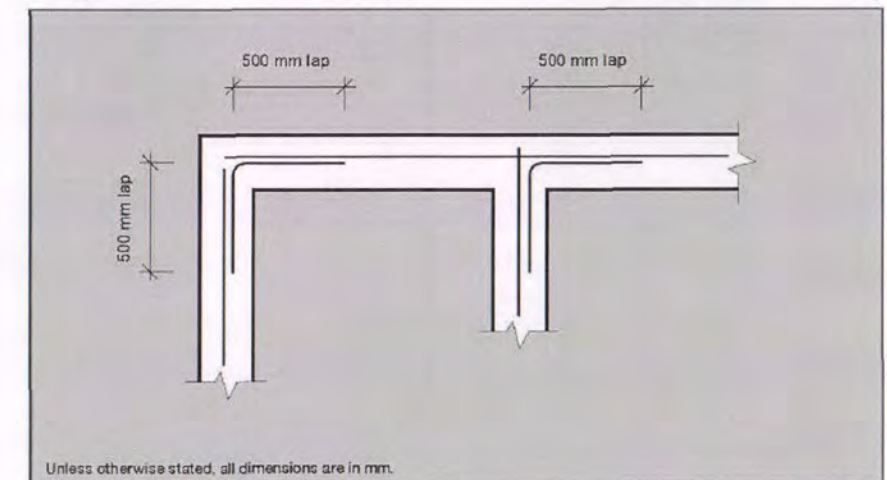
Plans to be read in conjunction with 'West Point Engineers' design and Producer Statement - in case of discrepancies engineer design shall take precedence

Ramset™ BOTTOM PLATE FIXING SOLUTIONS 2013

Meets NZS 3604:2011 Requirements | 90 x 45 Bottom Plate |

Bottom Plate Durability

Bottom Plate Location	Fixing Requirements			Installation		
	Bottom Plate Fixing Requirement	Concrete Strength (min.)	Floor Edge Type	Max Spacing	Fastener	Min Edge Distance (FROM CUT/EDGE)
External Wall	NZS3604:2011	17.5 MPa	Concrete	900 mm	12120BPAG ¹	55 mm
			Masonry Block	600 mm	T12140GH ¹	
	Proprietary Bracing Systems (15 kN)	17.5 MPa	Concrete	900 mm	AS12150GH + RPBA	
			Masonry Block	600 mm	AS12150GH + RPBA	
Internal Wall	NZS3604:2011	17.5 MPa	N/A	900 mm	12120BPAG ¹	N/A
				600 mm	8x75 Drive Pin & Washer	
	Proprietary Bracing Systems (15 kN)	17.5 MPa	N/A	900 mm	12120BPAG ¹ + RPBA	N/A
					T12140GH ¹ + RPBA	



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20 Keene Drive
Bell Block

NC429

New Design

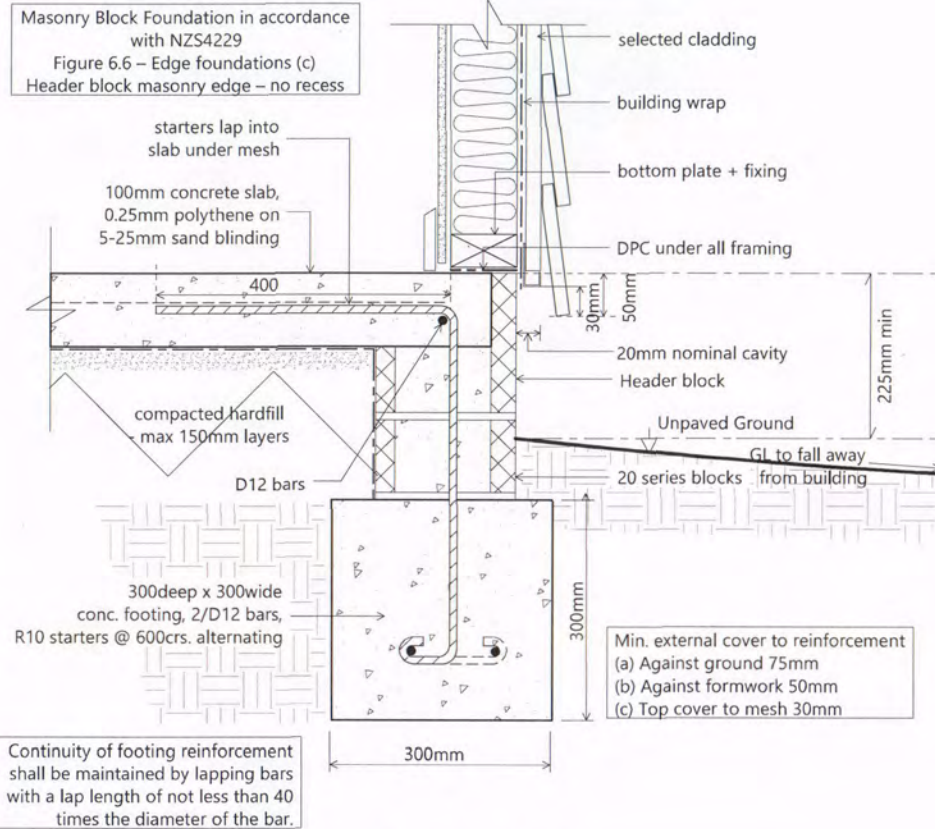
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Drawn: DS
Wind: High
Earthq: 1
Check: N.Davis
Exposure: C
Snow: NO

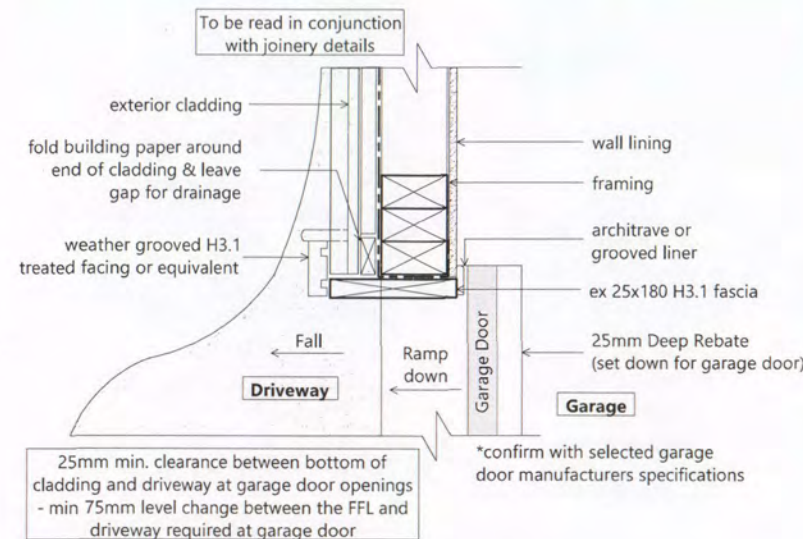
Scale: 1:10
Date: 2/04/2015
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D1
05
Foundation
(Linea)



D2
05
Garage Door Rebate
(plan view)

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Figure 65: Levels and garage openings
Paragraphs 9.1.3, 9.1.3.4, 9.2.5, Table 18

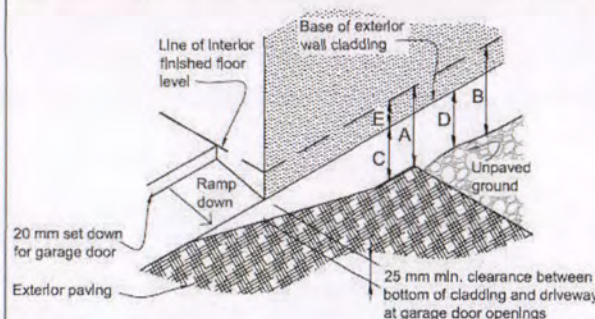


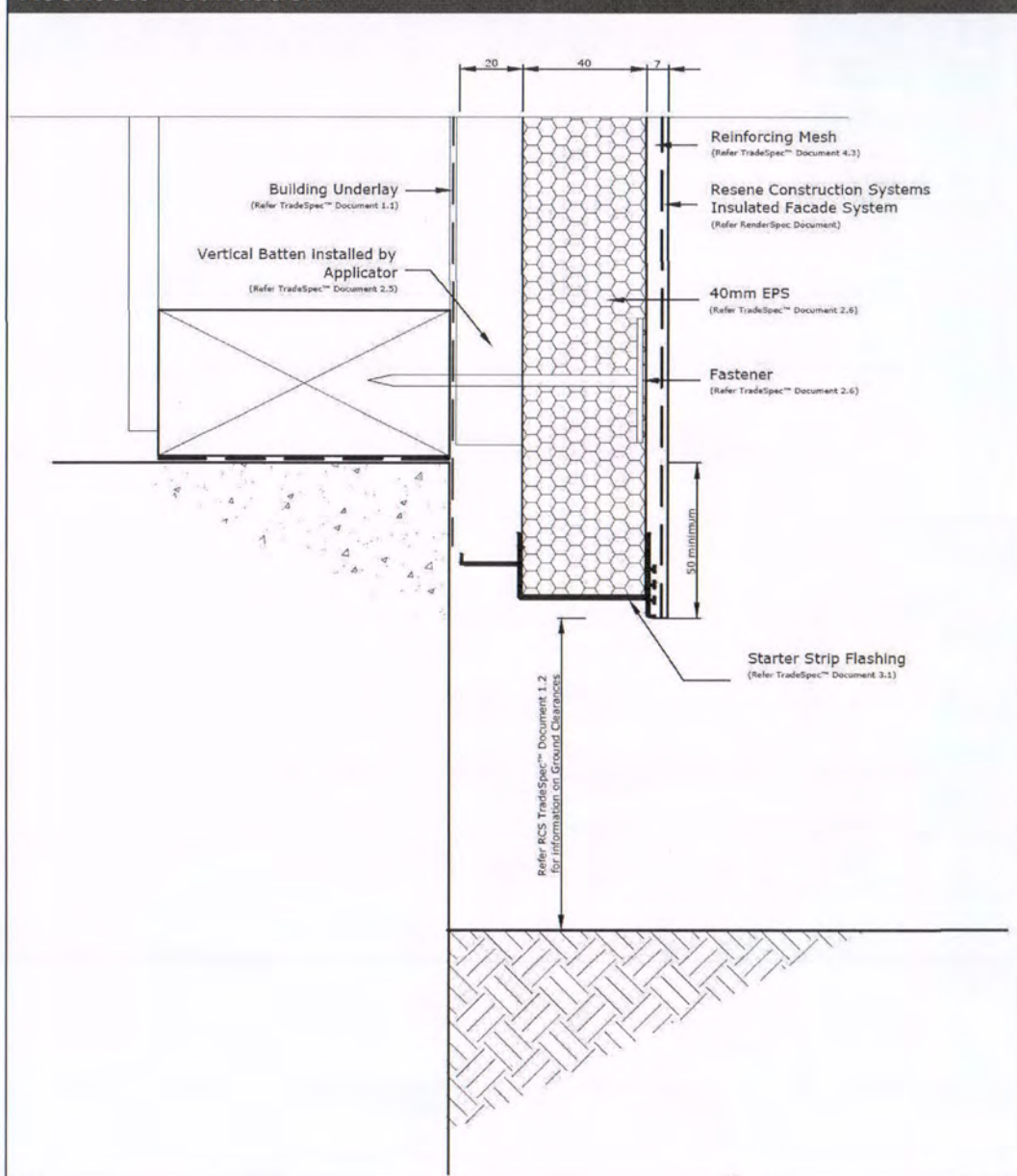
Table 18: Minimum clearances
Paragraphs 9.1.3, 9.1.3.1, 9.1.3.2, 9.1.3.3, 9.1.3.4, 9.1.3.5 and 9.2.7

Minimum clearances (mm)	Masonry veneer		Other claddings				
	A	B	A	B	C	D	E
Concrete slab	100	150	150	225	100	175	50
Timber floor	Refer Note 1)		100	175	502)		

NOTE: 1) Refer to NZS 3604 for requirements.

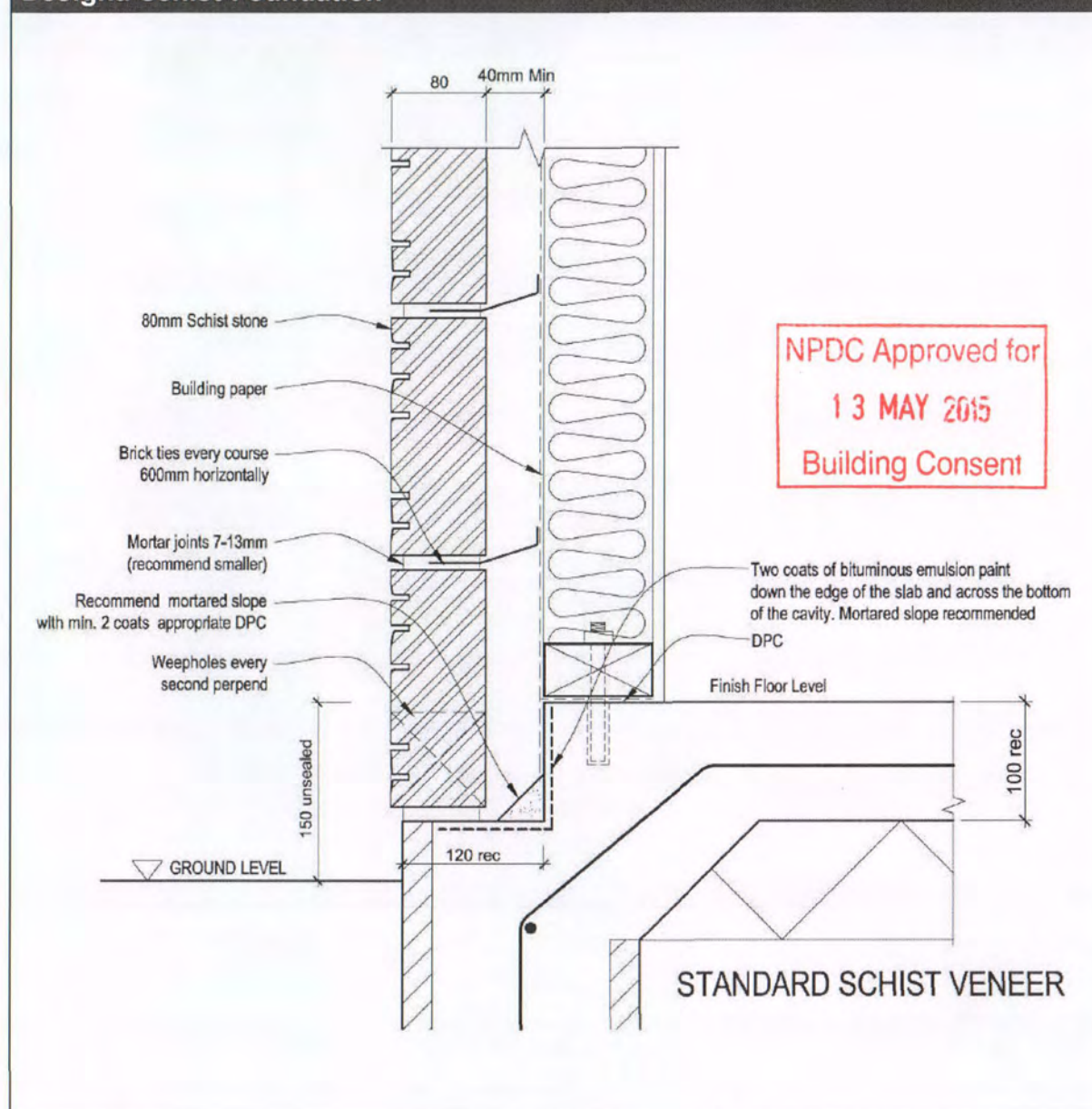
2) Cladding to extend minimum 50 mm below bearer or lowest part of timber floor framing.

Rockcote Foundation



D3
05 Foundation
(Rockcote)

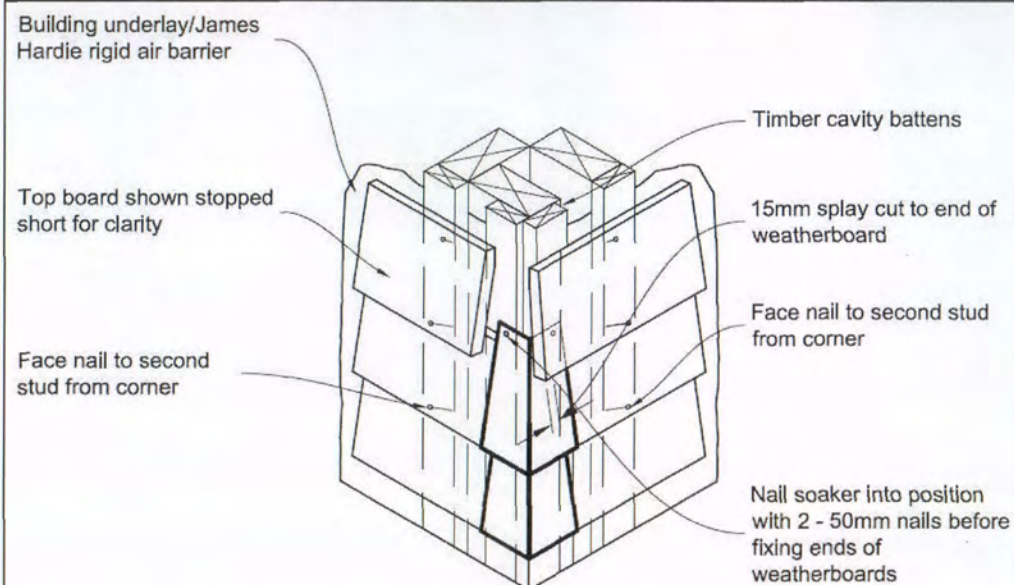
Designa Schist Foundation



D4
05 Foundation
(Designa Schist)

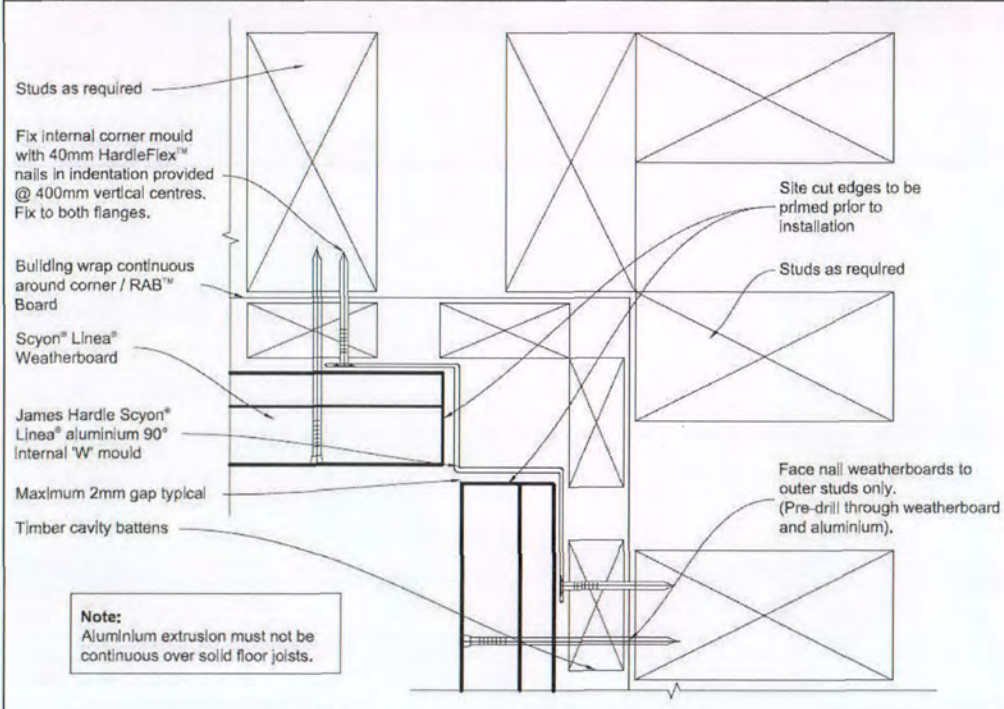
Client Details :				NC429
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Address:				
20 Keene Drive				
Bell Block				
New Design				
Foundation Details		Scale:	Date: 2/04/2015	Sheet no :
N.T.S		Rev:		23
Drawn: DS	Check: N.Davis	Call 0800 A1homes		
Wind: High	Earthq: 1	Exposure: C	Snow: NO	2 1 4 6 6 3
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JH Linea External Corner Soakers

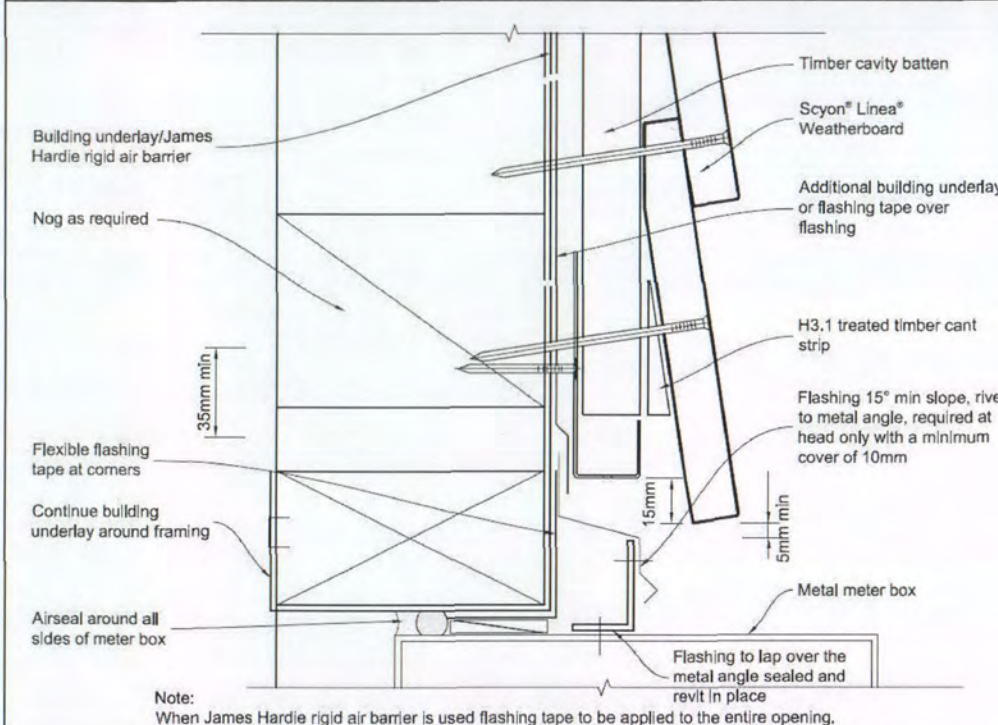


Soaker material	Nail material
Copper	Copper or phosphor bronze
Aluminium	Hot dip galvanised
Stainless steel	Stainless steel

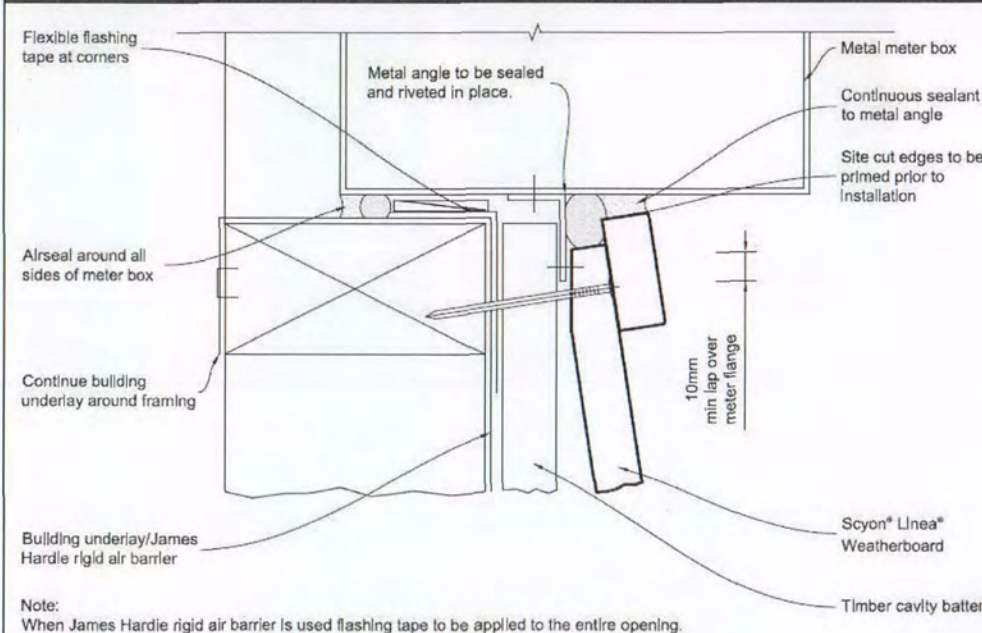
JH Linea 'W' Flashing Internal Corner



JH Linea Meter Box Head



JH Linea Meter Box Sill



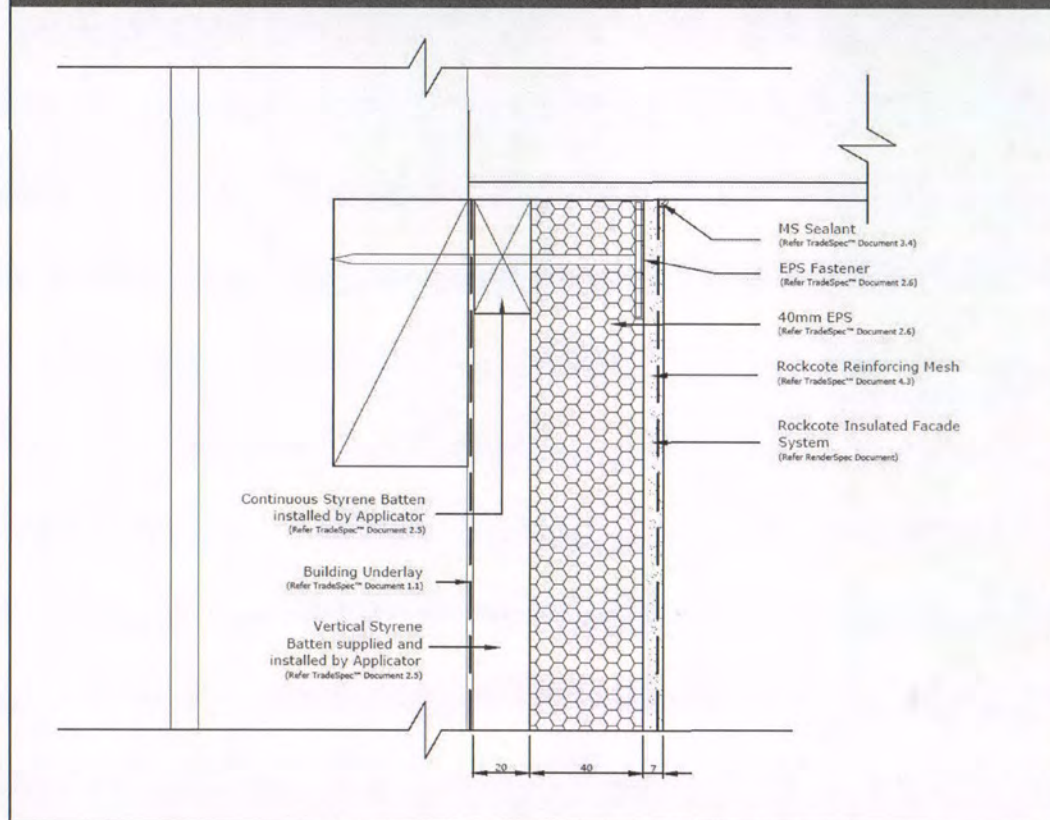
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Internal 'W' Mould 90°	301184	2700 long	Etch Primed Aluminium
------------------------	--------	-----------	-----------------------

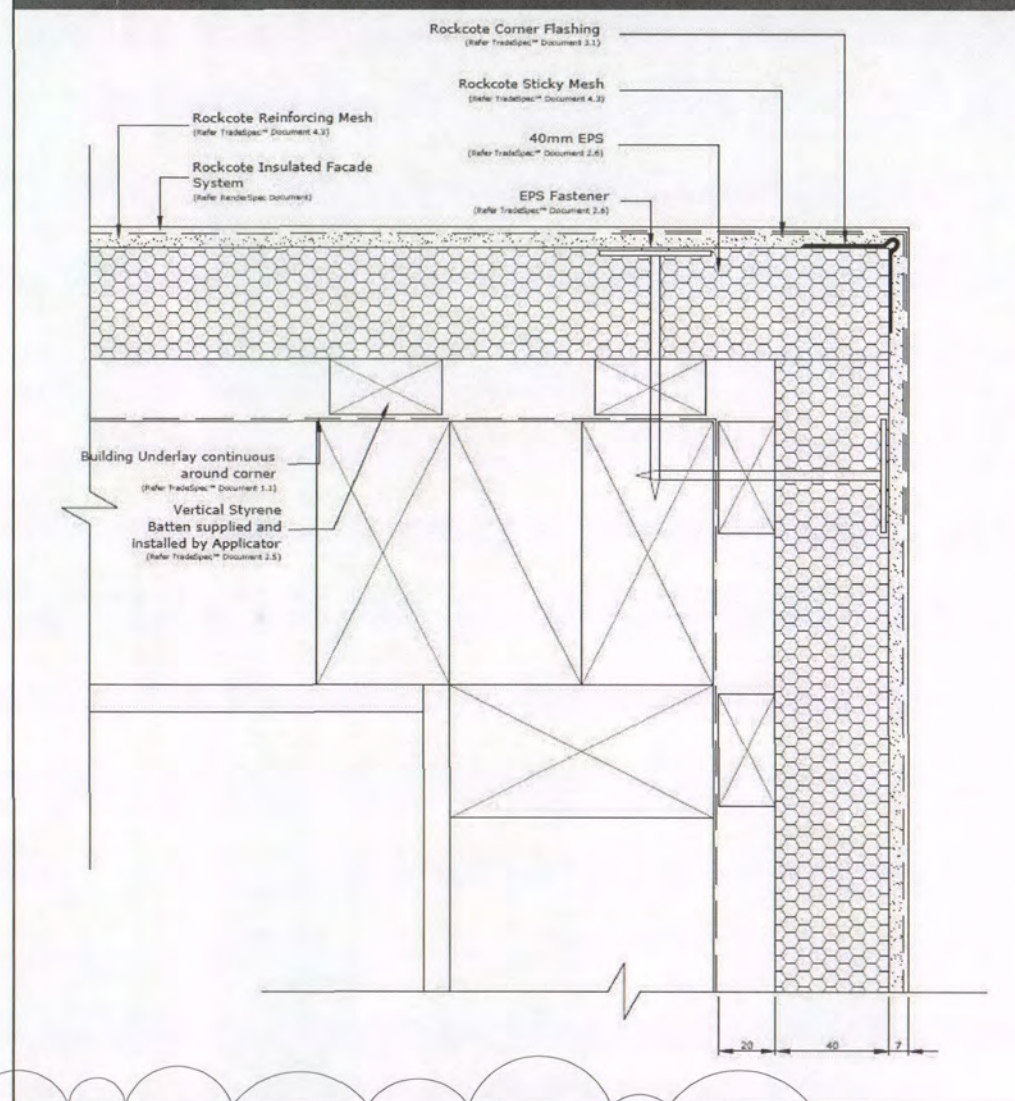
Client Details :		NC429	
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		New Design	
Cladding Details		Scale: N.T.S	Sheet no: 24
Drawn: DS	Check: N.Davis	Date: 2/04/2015	
Wind: High	Earthq: 1	Exposure: C	Snow: NO
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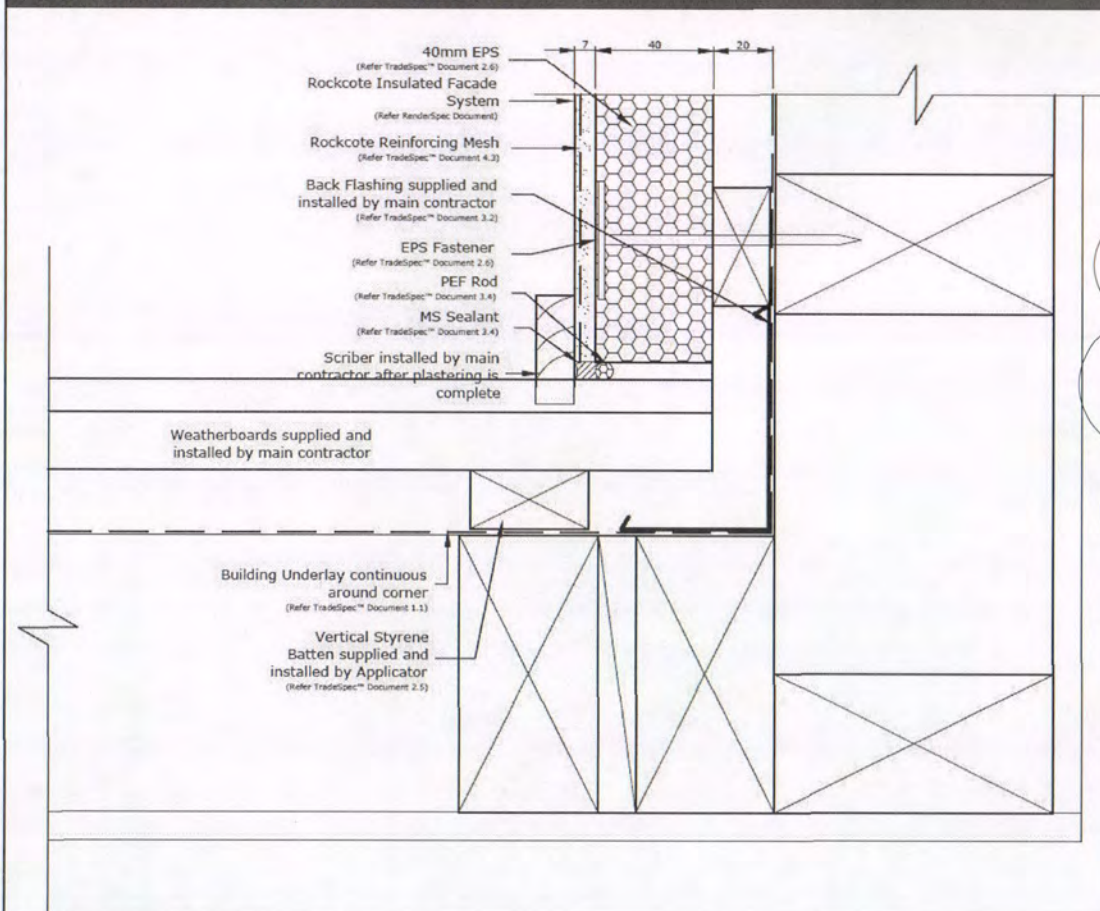
Rockcote soffit



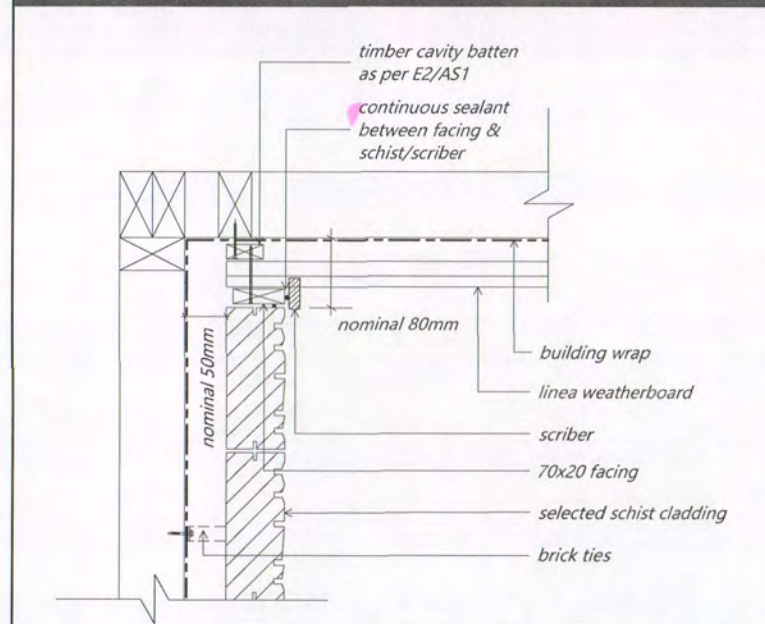
Rockcote Internal Corner



Rockcote to Linea Internal Corner



Designa Schist to Linea Internal Corner

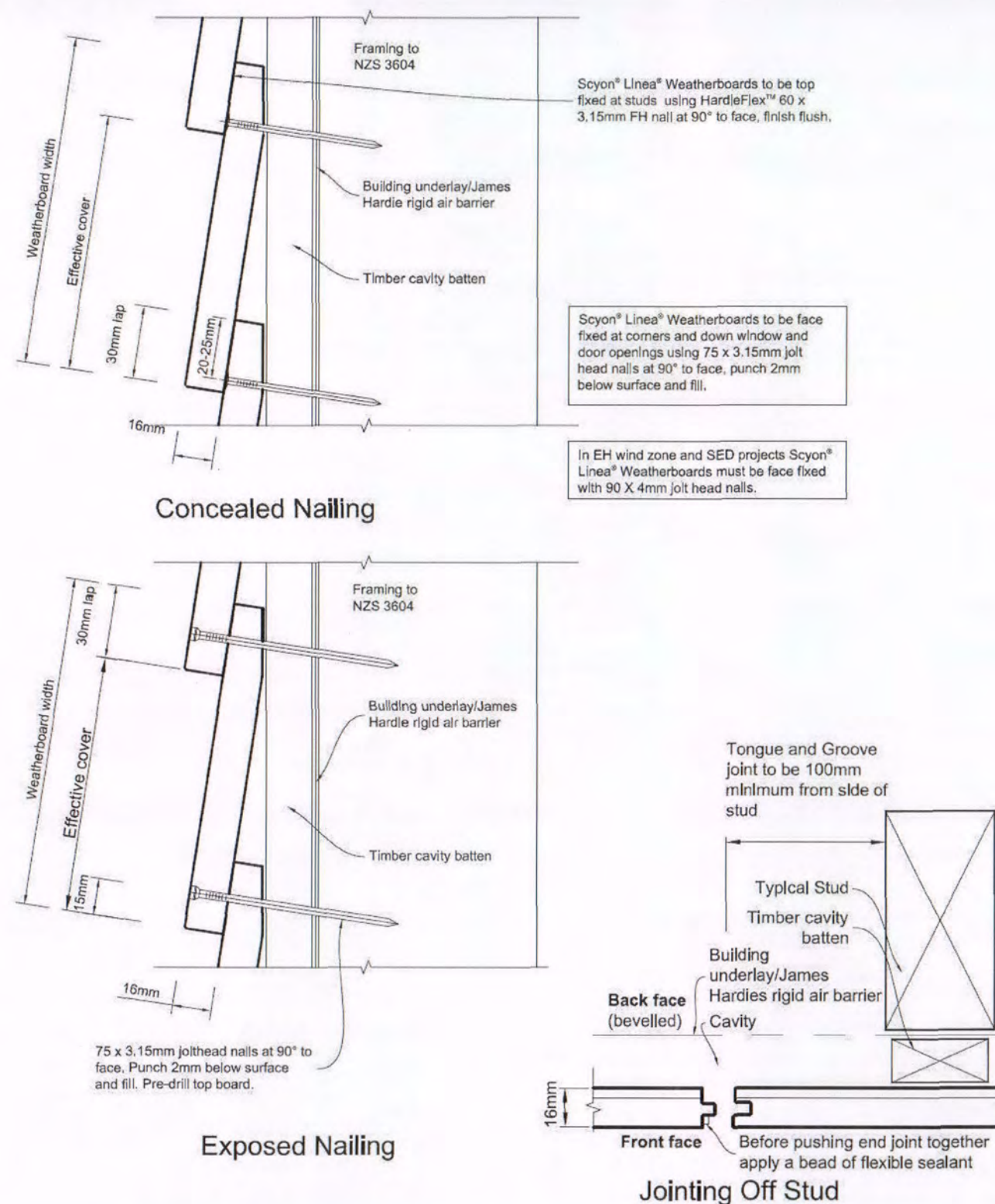


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Cladding Details		Scale:	Date: 12/05/2015	Sheet no : 25	
Wind: High		Earthq: 1	Exposure: C	Snow: NO	
Drawn: DS		Check: N.Davis		Call 0800 A1homes 214663	
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Figure 29: Timber cavity weatherboard fixing



Jointing:

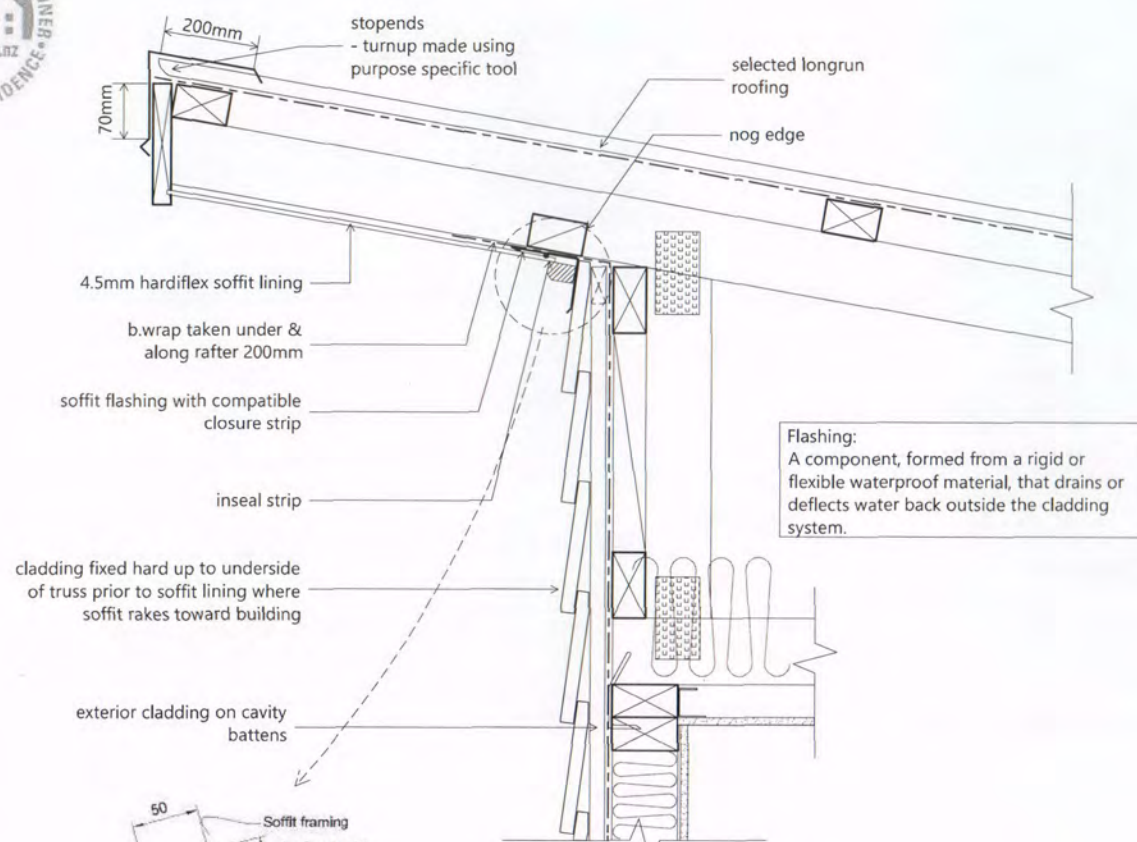
The ends of Scyon Linea Weatherboards are jointed off-stud by means of a tongue and groove joint. Tongue and groove joints may be located centrally between studs but no closer than 100mm from the edge of a stud. The joints must be staggered by 600mm minimum. Sealant must be provided in the tongue and groove joint.

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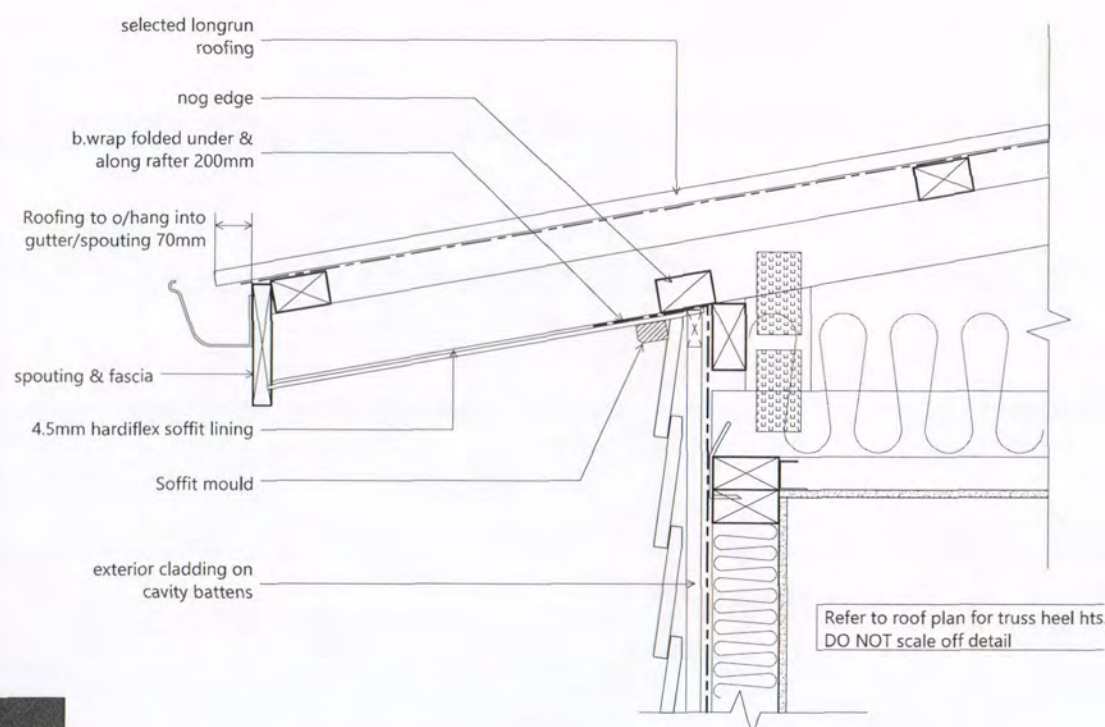
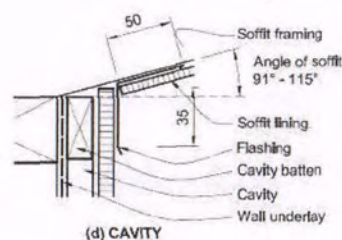
Client Details :				NC429	
Brad Dent & Natalie Brien					
Address:					
20 Keene Drive					
Bell Block					
Cladding Details				New Design	
				Scale: N.T.S	Date: 2/04/2015 Rev:
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Wind: High	Earthq: 1				

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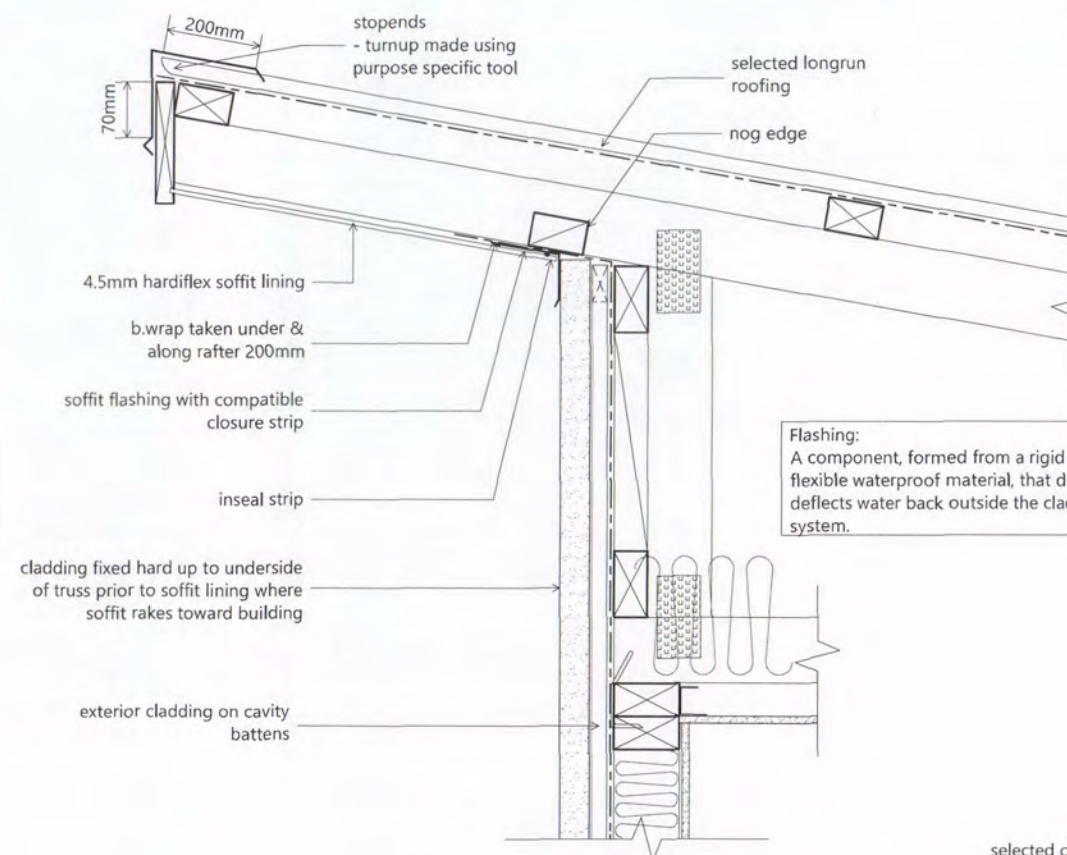


D5
 14
Raking Upper
 (Linea)



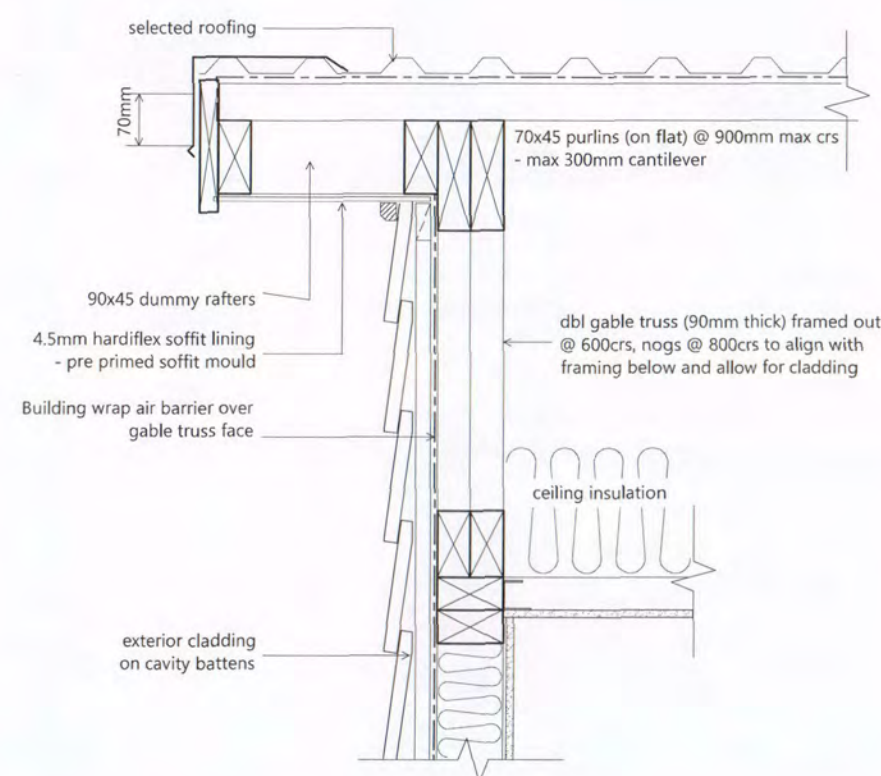
D7
 14
Raking Lower
 (Linea)

Refer to roof plan for truss heel hts.
 DO NOT scale off detail

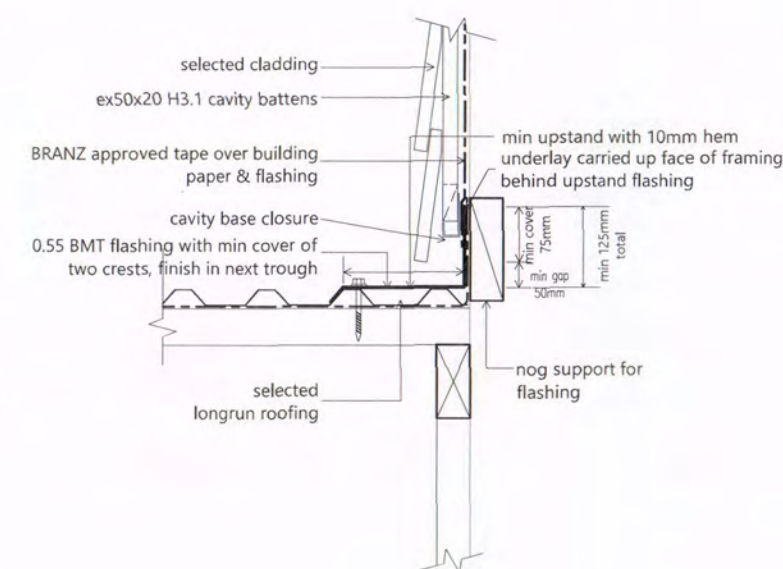


D6
 14
Raking Upper
 (Rockcote)

Flashing:
 A component, formed from a rigid or flexible waterproof material, that drains or deflects water back outside the cladding system.

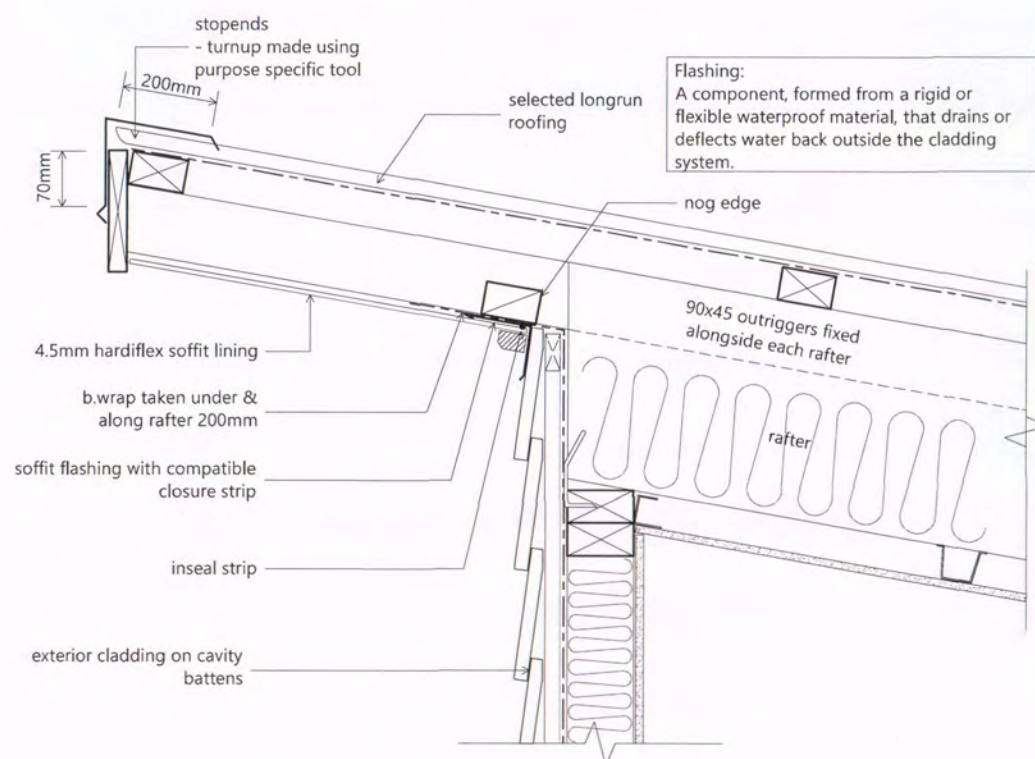


D8
 14
Gable Eave
 (Linea)

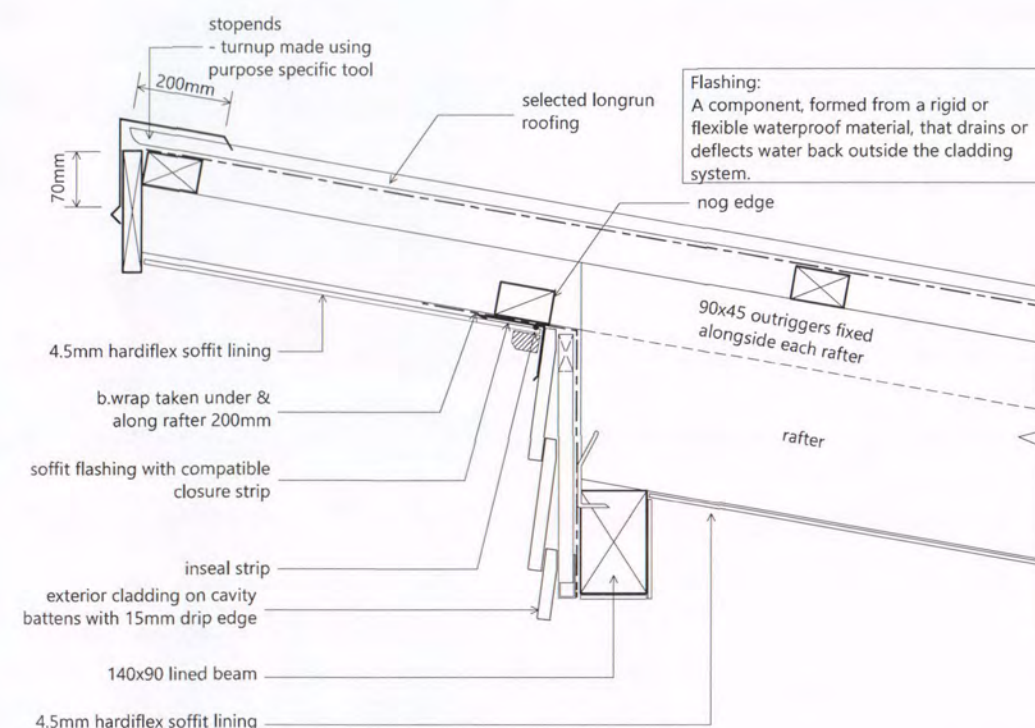


D9
 14
Apron Flashing
 (Linea)

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Brad Dent & Natalie Brien					
Address:					
20 Keene Drive					
Bell Block					
				New Design	
Roof Details			Scale:	Date: 2/04/2015	Sheet no :
			1:10	Rev:	27
Drawn: DS	Check: N.Davis	Call 0800 A1homes 2 1 4 6 6 3 www.A1homes.co.nz			
Wind: <i>High</i>	Earth: <i>1</i>				Exposure: <i>C</i>
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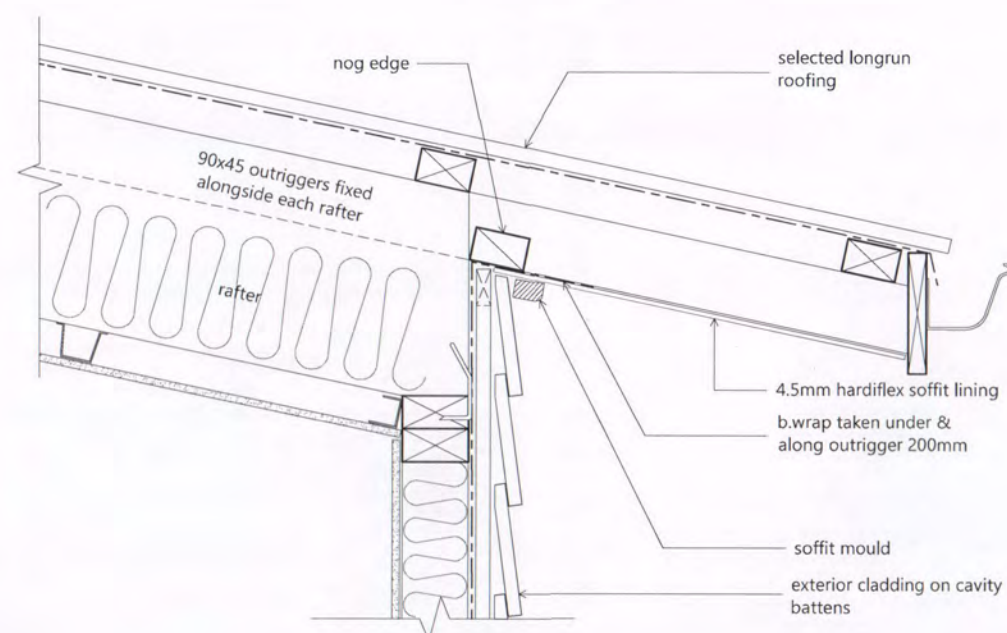


D10
14 **Raking Upper Rafter**

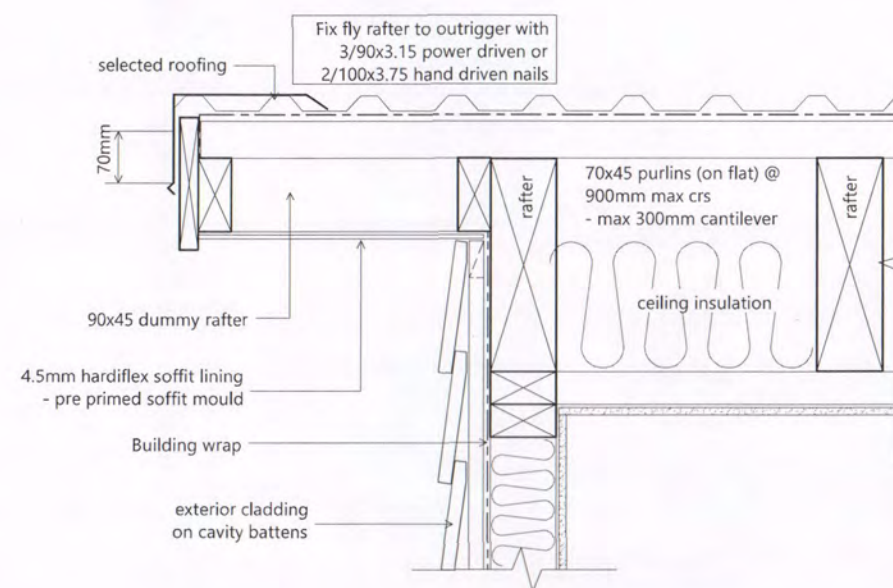


D15
14 **Raking Entry**

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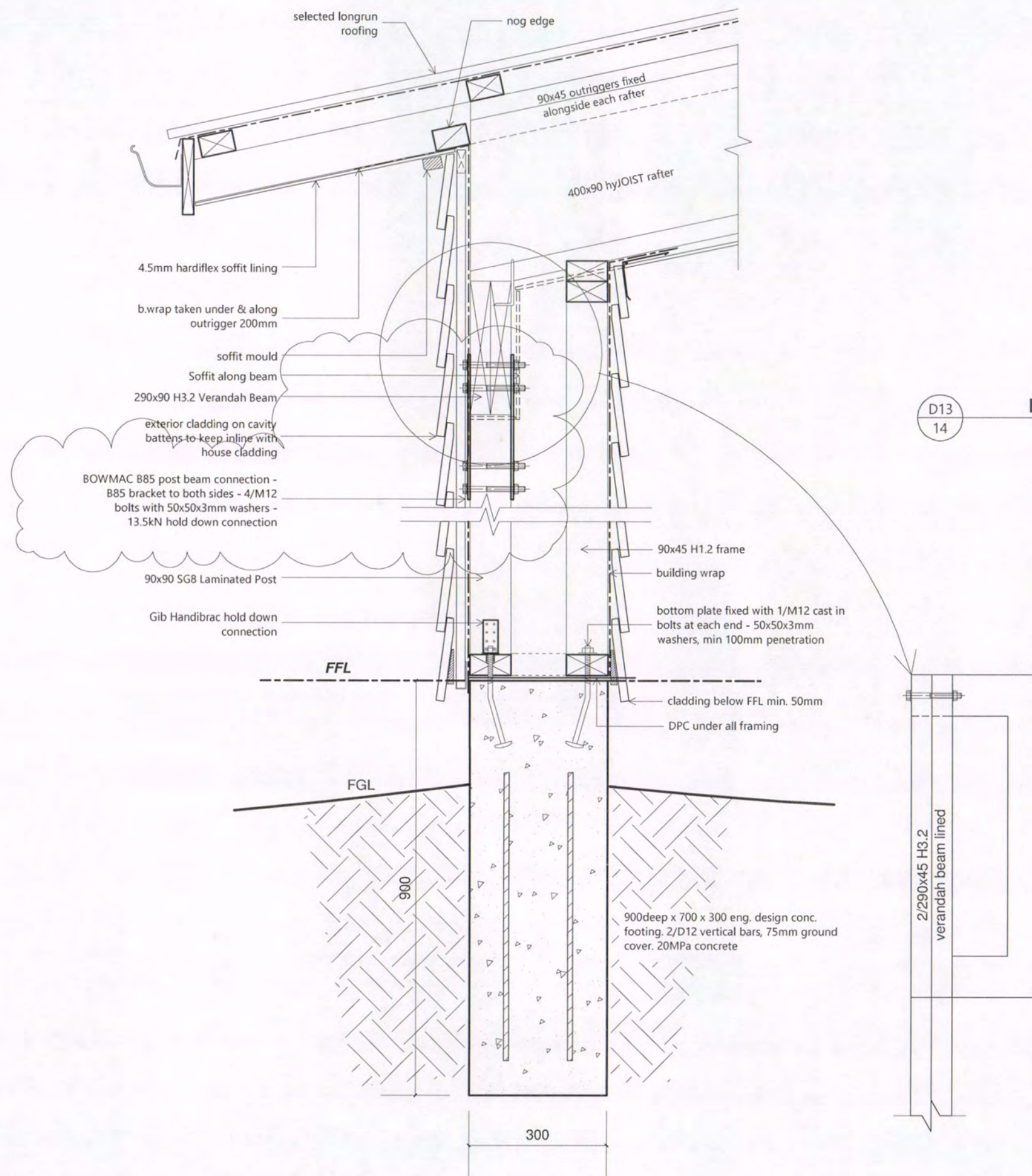
D11
14 **Raking Lower Rafter**



D12
14 **Gable Eave Rafter**

Client Details :				NC429
Brad Dent & Natalie Brien				
Address:				
20 Keene Drive				
Bell Block				
New Design				
Roof Details		Scale:	Date: 2/04/2015	Sheet no :
		1:10	Rev:	28
Drawn: DS	Check: N.Davis	Call 0800 A1homes		
Wind: High	Earthq: 1	214663		
Exposure: C	Snow: NO	www.A1homes.co.nz		

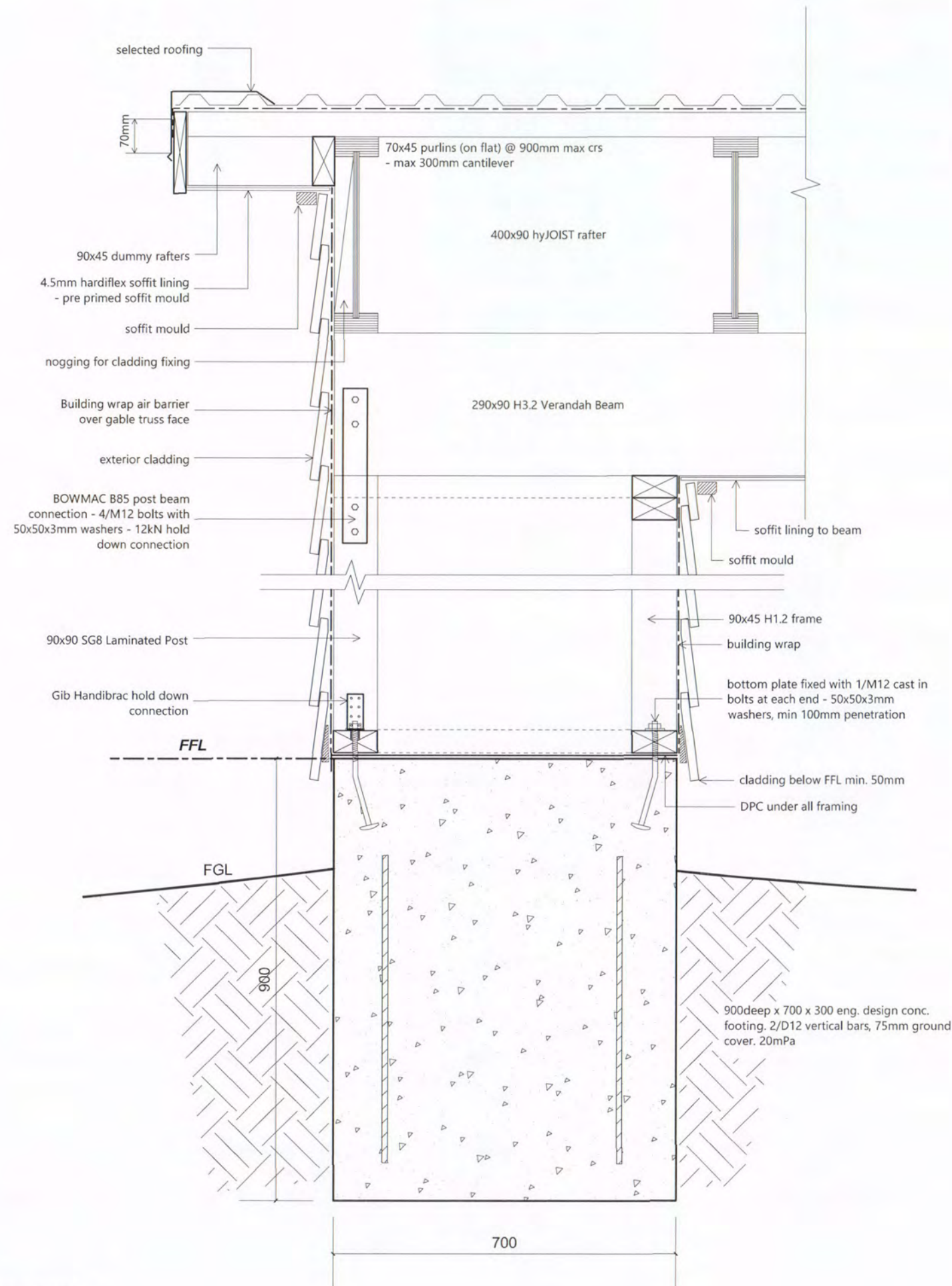
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				New Design		
Roof Details				Scale:	Date: 12/05/2015	Sheet no :
				1:10	Rev:	29
Drawn: DS	Check: N.Davis	Call 0800 A1homes 214663 www.A1homes.co.nz				
Wind: <i>High</i>	Earthq: <i>1</i>					Exposure: <i>C</i>

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D14
14

Patio Column

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20 Keene Drive				
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New Design				
Roof Details		Scale:	Date: 2/04/2015	Sheet no :
		1:10	Rev:	30
Drawn: DS	Check: N.Davis	Call 0800 A1homes		
Wind: High	Earthq: 1	Exposure: C	Snow: NO	214663
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Figure 28: Timber cavity soffit detail

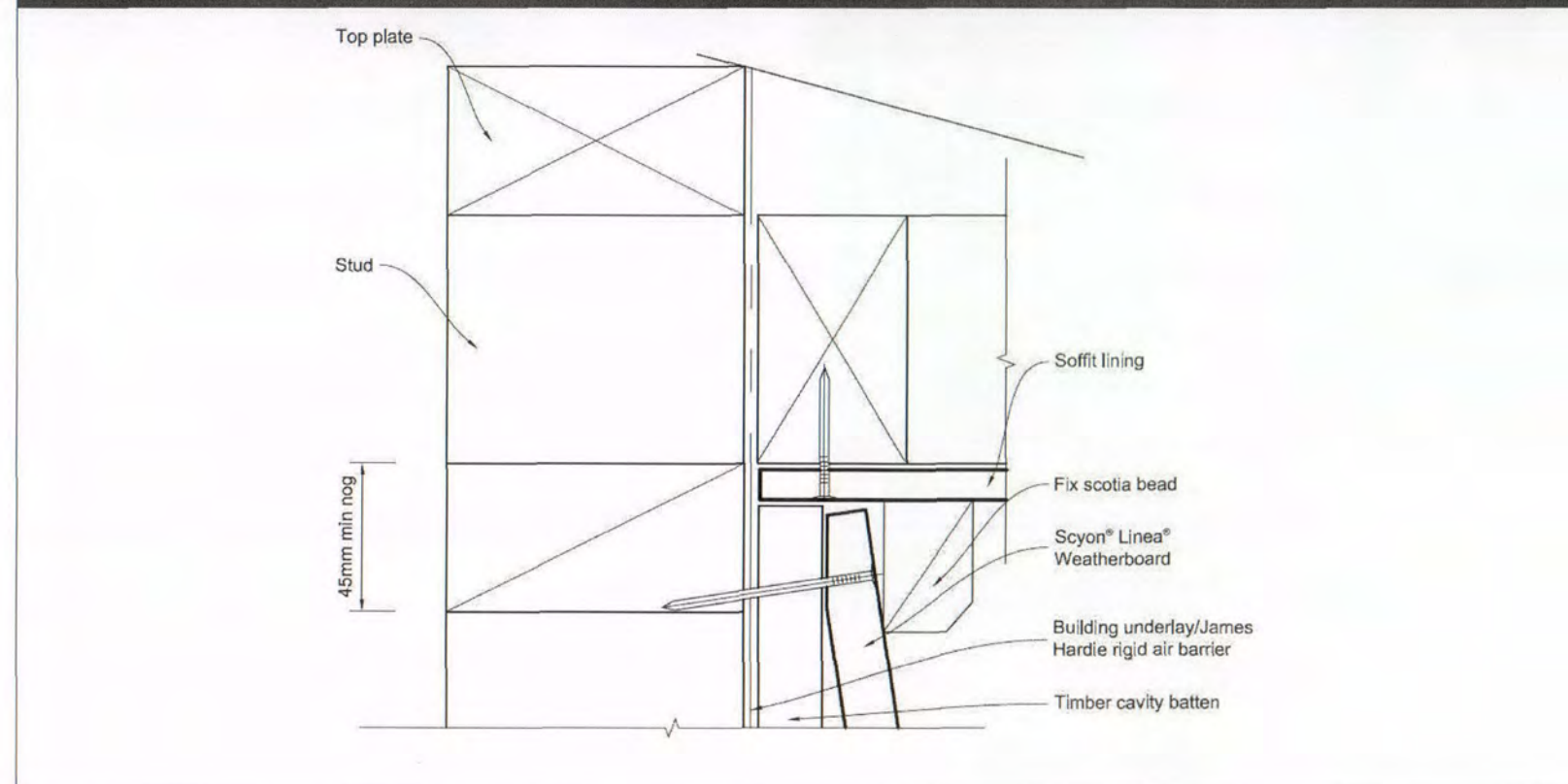
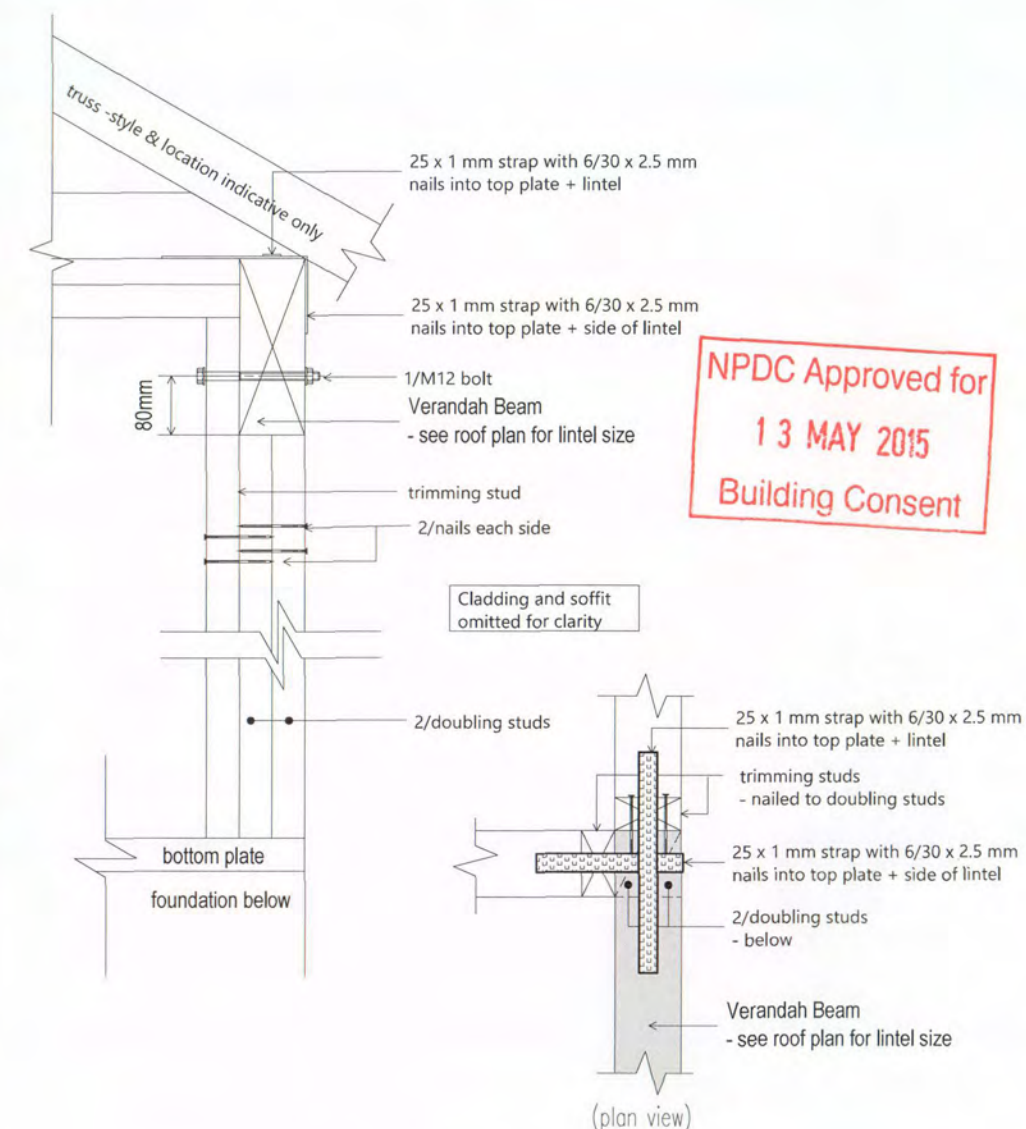
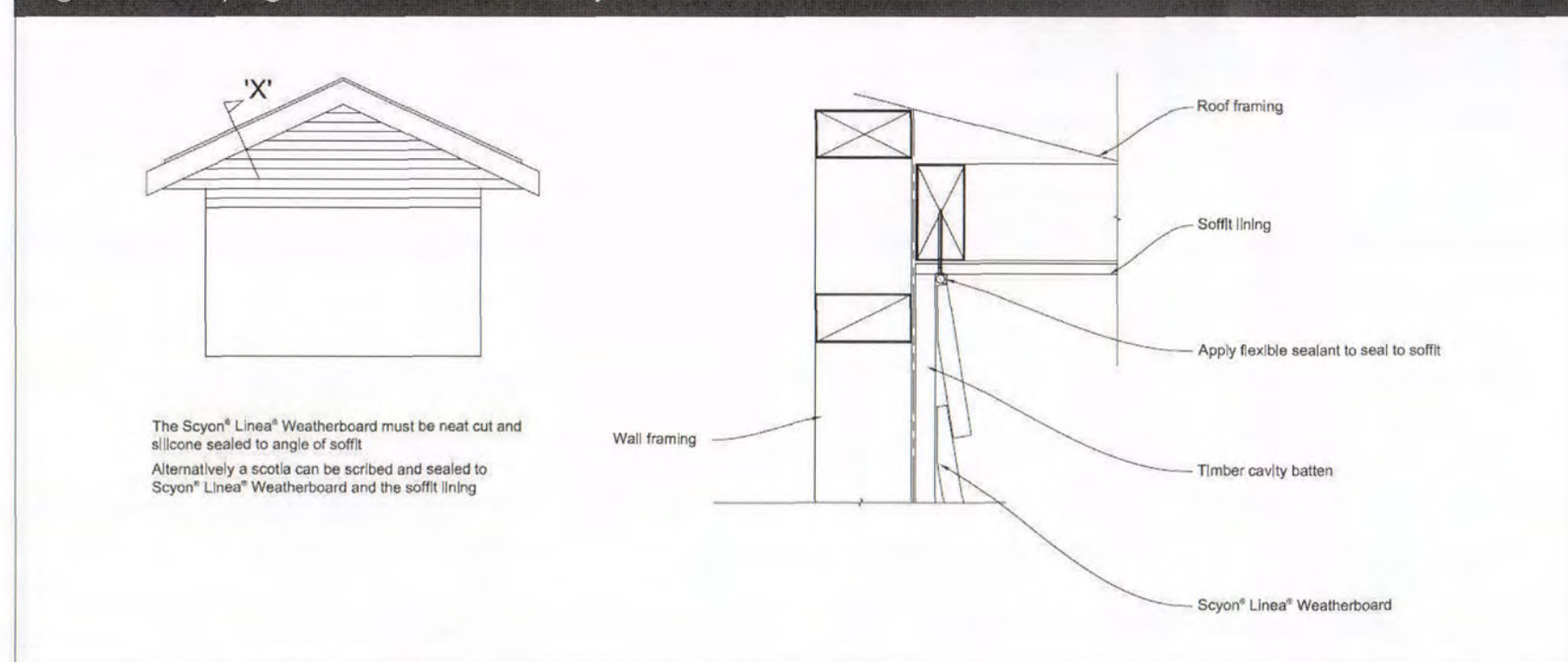


Figure 58: Sloping soffit to weatherboard junction



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D16
 14

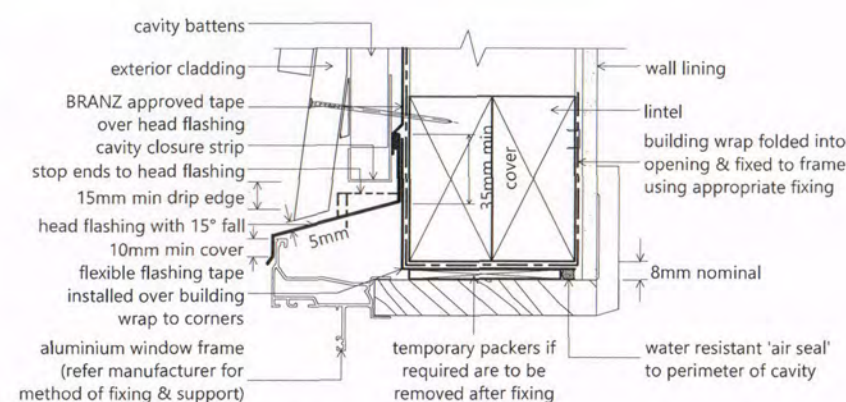
Beam Corner Detail

12Kn Connection (2 x 6Kn straps)

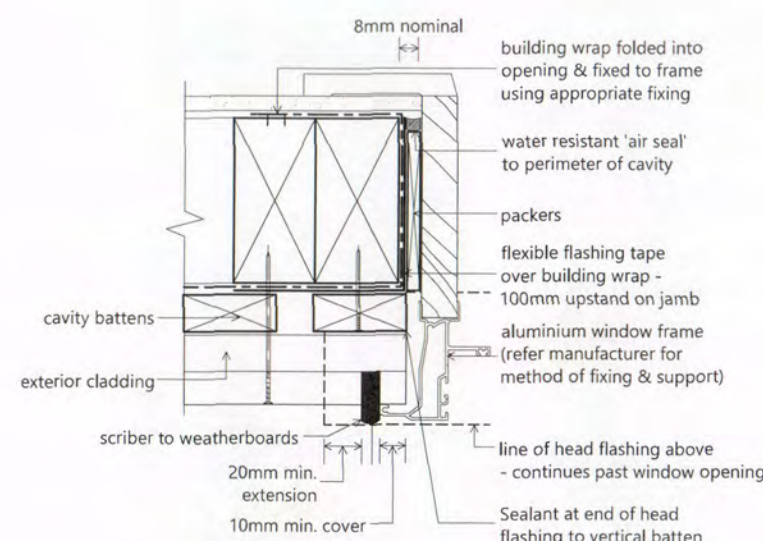
Client Details :				NC429
Brad Dent & Natalie Brien				
Address:				
20 Keene Drive				
Bell Block				
New Design				
Roof Details		Scale:	Date: 2/04/2015	Sheet no : 31
		1:10	Rev:	
Drawn: DS	Check: N.Davis			
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Figure 72B: General window and door opening with drainage cavity
Paragraphs 9.1.5, 9.1.9.3, 9.1.10.2, Figures 73C, 76, 85, 86, 91, 99, 116 and 128

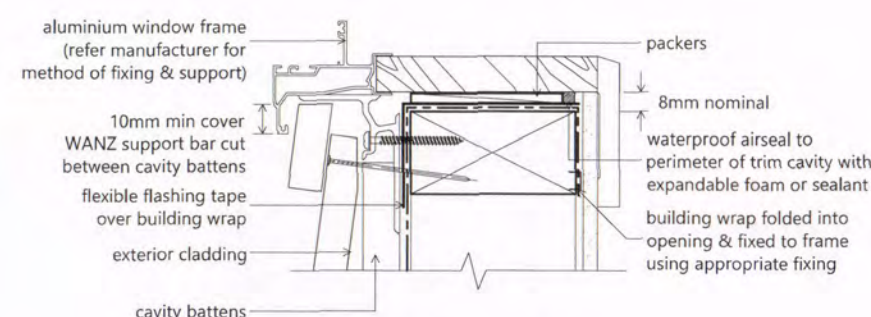
NOTE:
(1) Detailed cladding omitted for clarity, refer to specific claddings.
(2) Head to be treated similarly with continuous wall underlay and flexible tape at corners.
(3) Refer individual cladding details for jamb flashings.



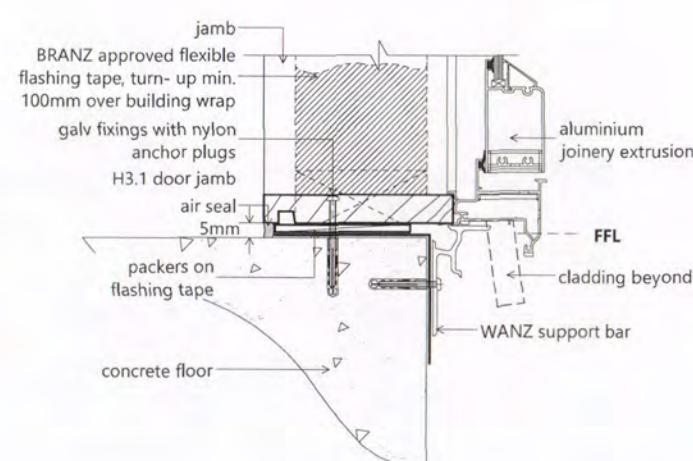
Window Head



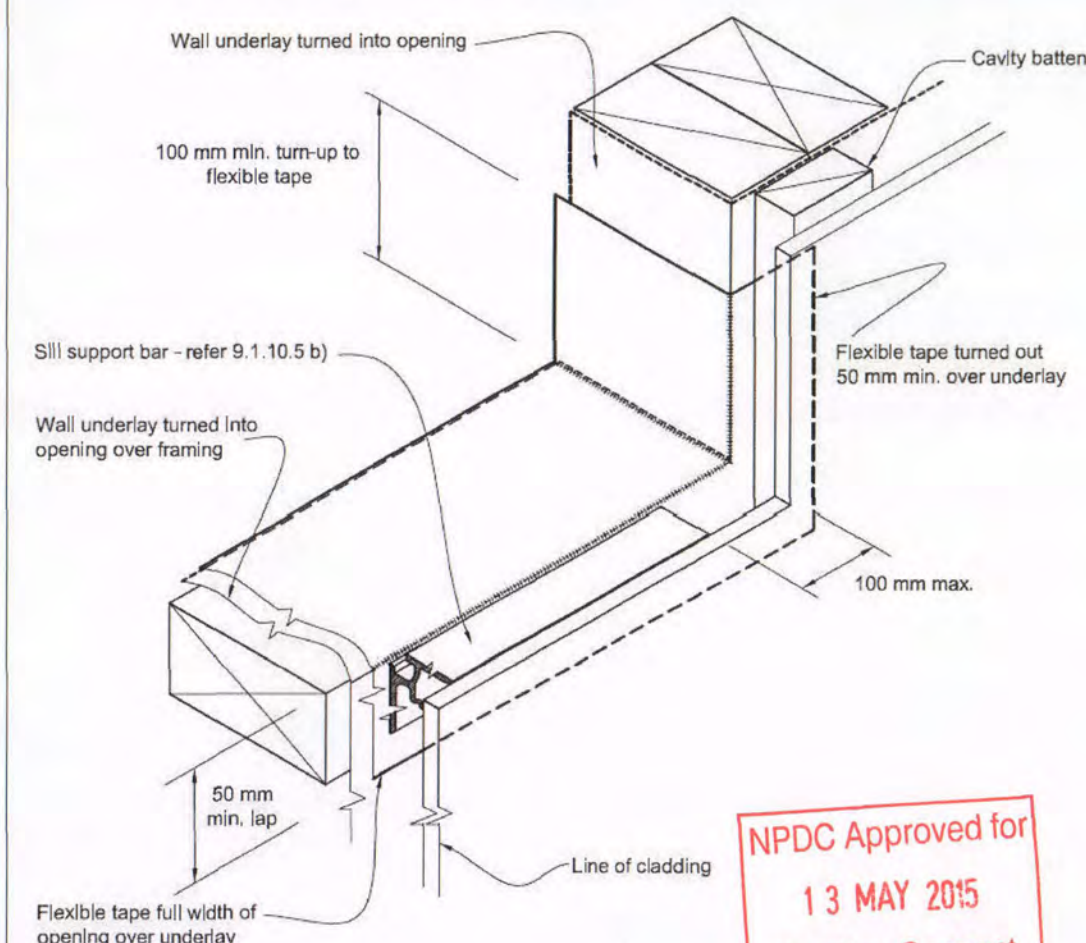
Window Jamb



Window Sill



Door Sill



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Flexible air seals;

The air seal shall be installed over a closed cell polyethylene foam (PEF) backing rod, or similar and made of self-expanding polyurethane foam

Backing rods are used for self-expanding polyurethane foam as there is a danger foam will expand to the outside of the wall and form a moisture bridge to the interior.

9.1.10.8 Attachments for windows and doors

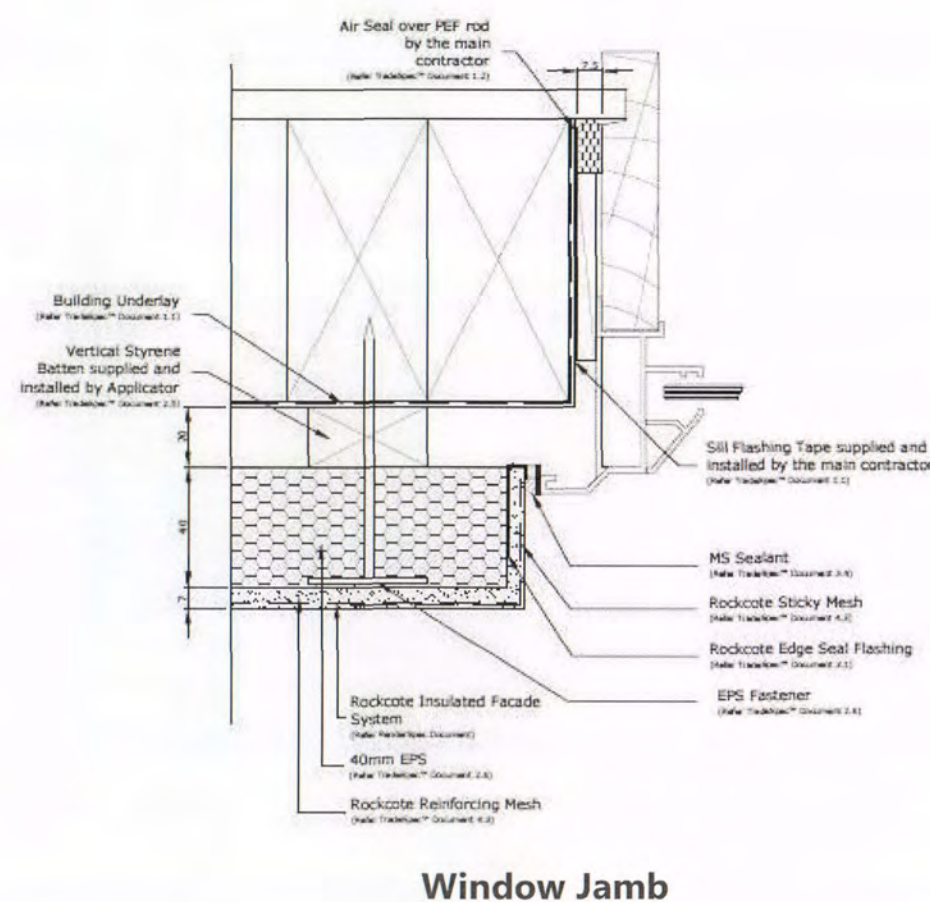
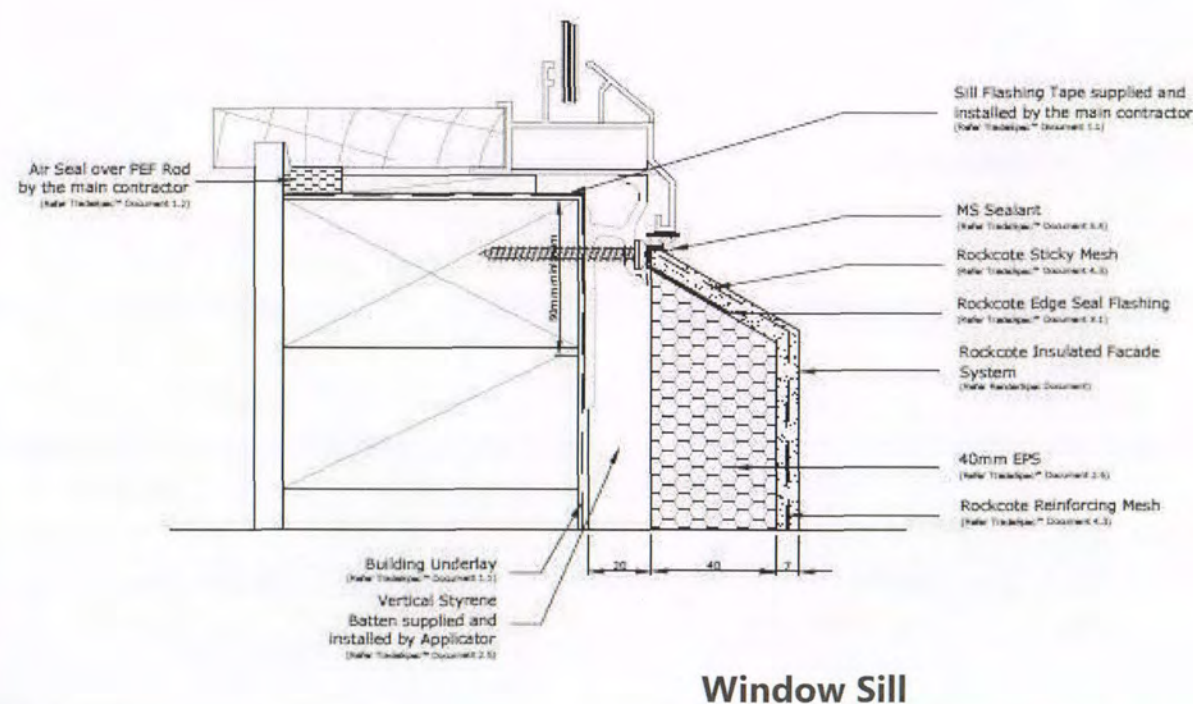
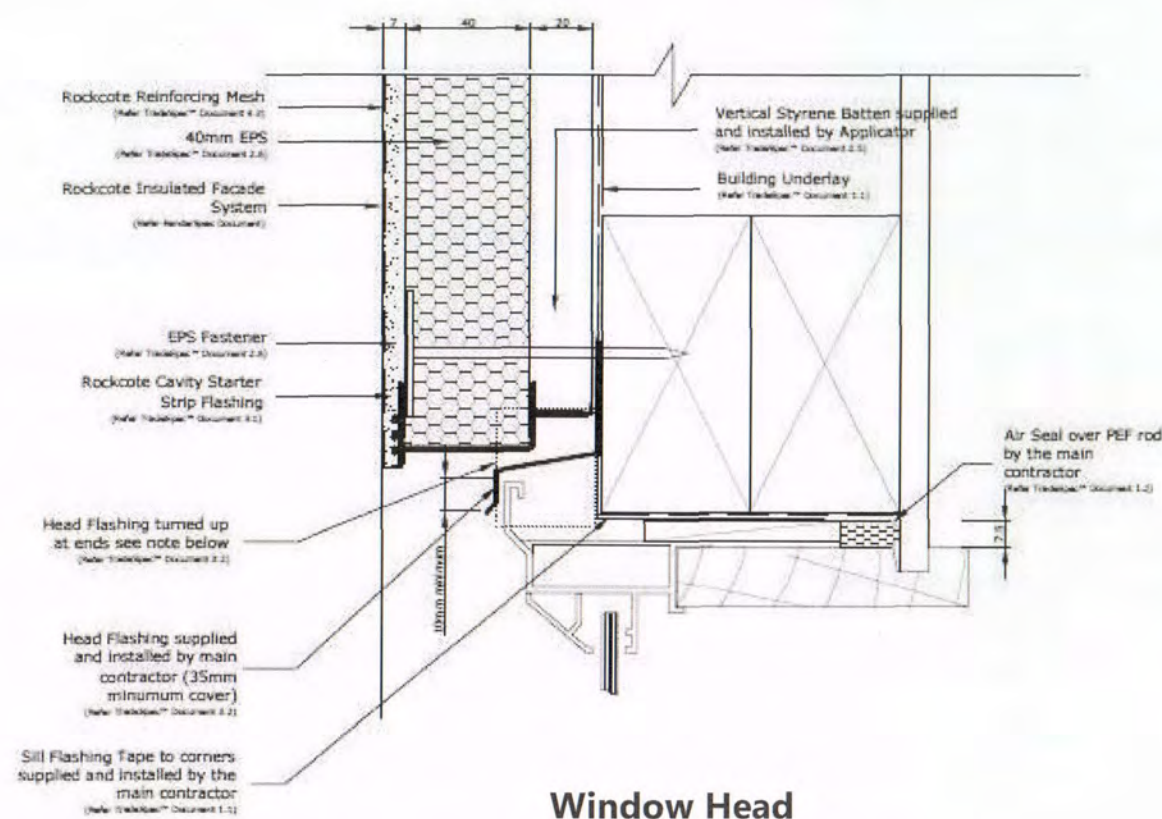
Install windows and doors using pairs of minimum 75 x 3.15 galvanised jolt head nails or 8 gauge x 65 mm stainless steel screws, through reveals into surrounding framing at:

- Maximum 450 mm centres along sills, jambs and heads, and
 - Maximum 150 mm from reveal ends.
- Install packers between reveals and framing at all fixing points, except between head reveals and lintels.

Flashing tape must be proven compatibility with selected building underlay and other building materials with which it comes into contact as per table 21 of 'E2/AS1'

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Address:				
20 Keene Drive				
Bell Block				
				New Design
Joinery Details		Scale:	Date: 2/04/2015	Sheet no: 32
Drawn: DS	Check: N.Davis	1:5	Rev:	
Wind: High	Earthq: 1	Exposure: C	Snow: NO	
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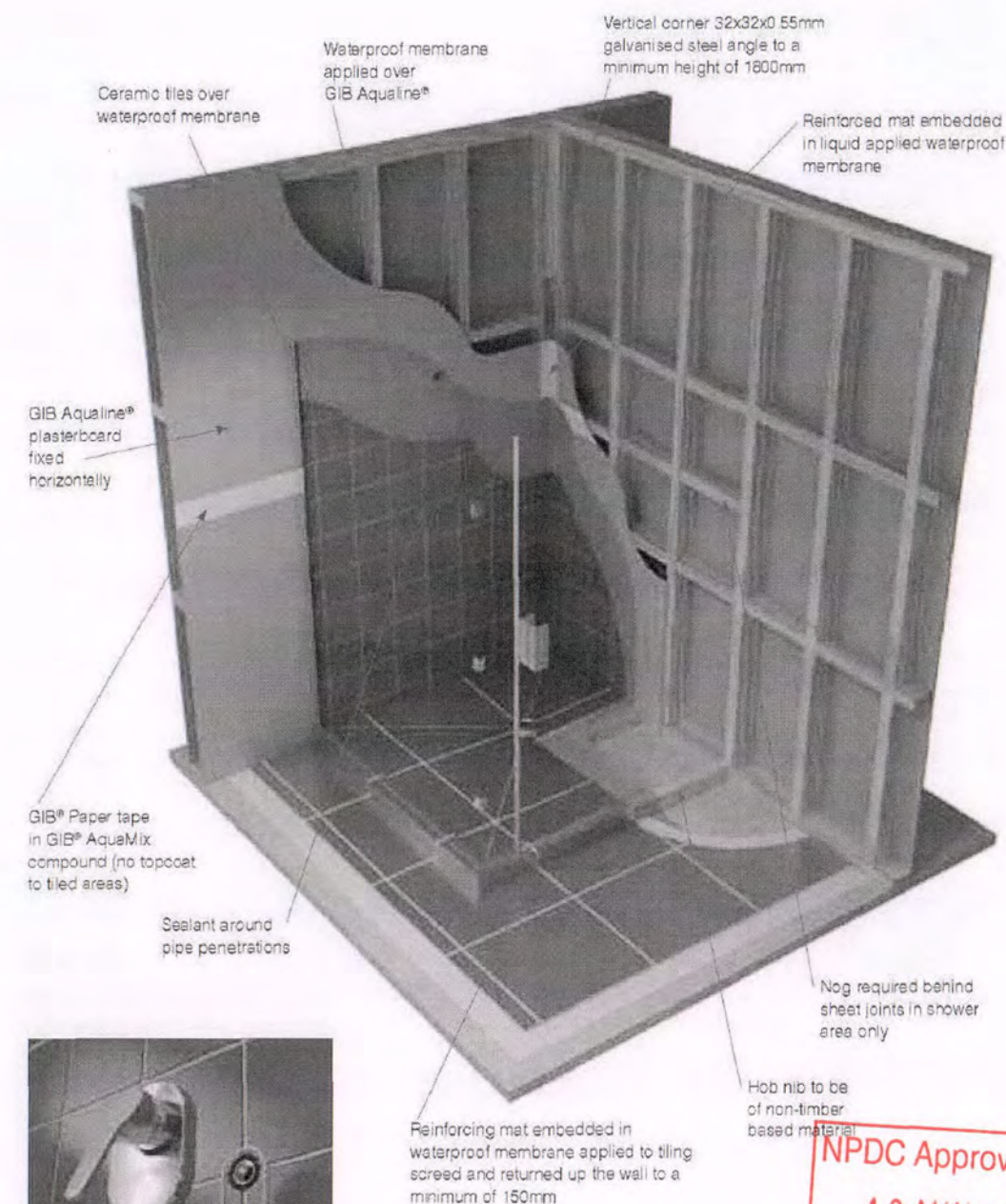
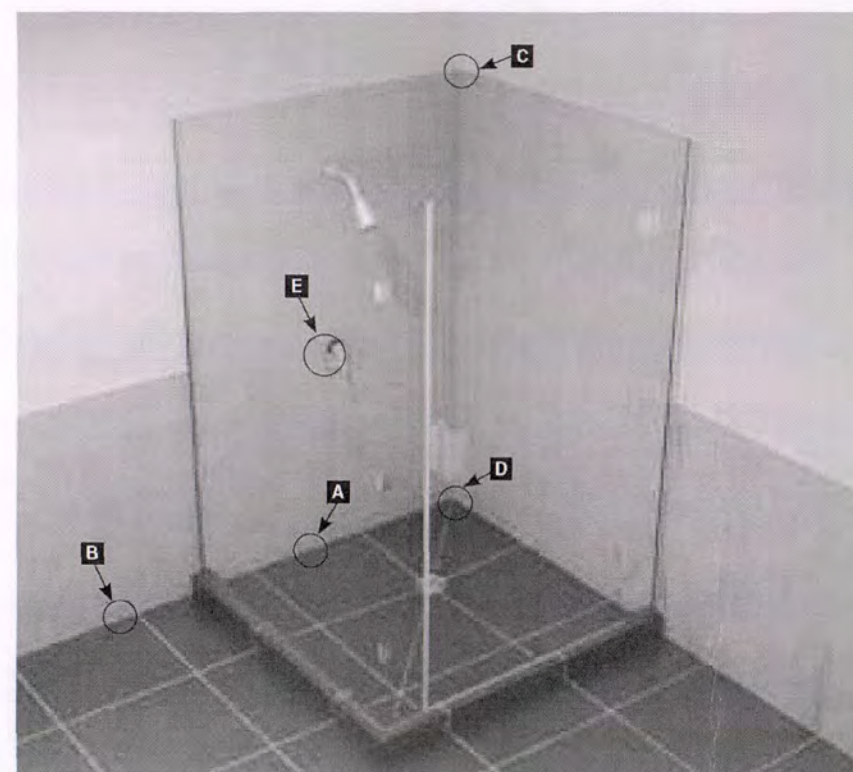
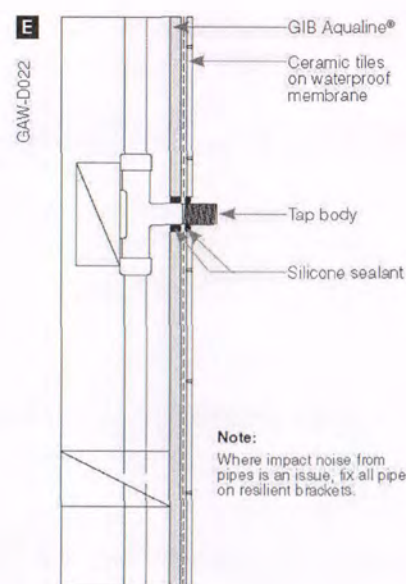
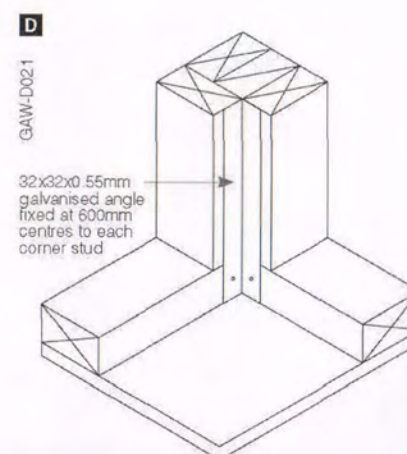
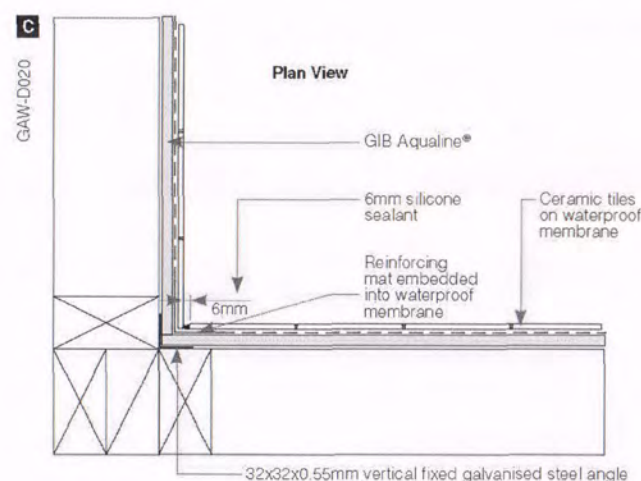
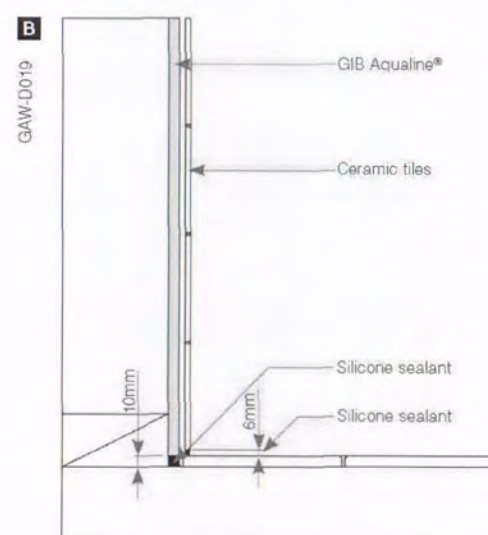
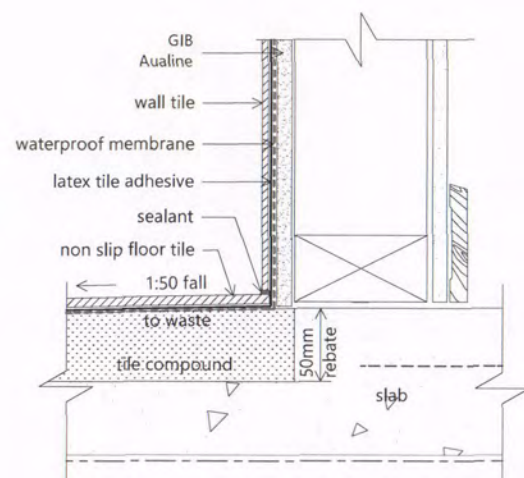
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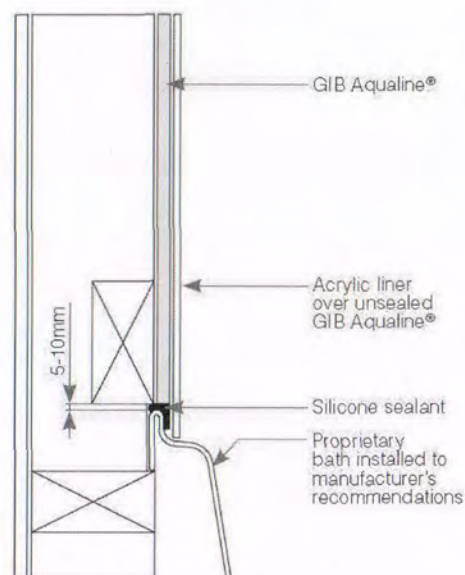


Run a bead of silicone sealant around the mixer unit on the tiles extending below the bottom of the pipe aperture.

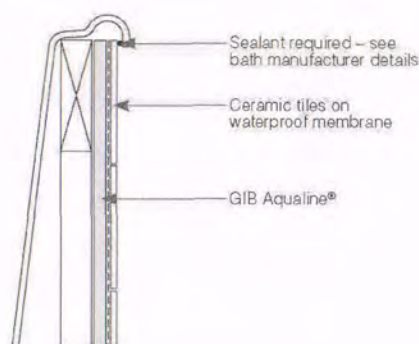
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For typical details, see the following pages.

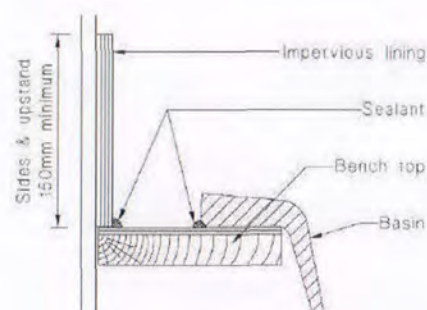
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Brad Dent & Natalie Brien						
Address:						
20 Keene Drive						
Bell Block						
Wet Area Details				Scale:	Date: 2/04/2015	Sheet no :
				N.T.S	Rev:	34
Drawn: DS	Check: N.Davis	Call 0800 A1homes 214 663 www.A1homes.co.nz				
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Bath to Wall Junction



Bath to Floor Junction



Tub, Sink and Basin Junction

GIB AQUALINE® WET AREA SYSTEMS – FRAMING AND LINING INSTALLATION



Tiled Walls

MARCH 2007

Important: See page 6 and 7 for waterproof membrane requirements.

Wall Framing

Framing dimensions and spacing must comply with the requirements of NZS 3604:1999 or relevant NZ Standard.

- Prior to lining in tiled areas (shower cubicles and shower over bath only) the internal corners shall be reinforced with a minimum 32 x 32 x 0.55mm galvanised metal angle. Each side of the angle shall be fastened to the framing with 30mm galvanised clouts at 300mm centres
- Steel stud systems do not generally require nogs except as below:
 - Adjacent to each pipe penetration and behind sink and tub flashings
 - Between all studs above bath flanges and preformed shower bases
- For impact protection in shower cubicles or shower over bath situations it is important that all sheet joints are made on solid framing. This may require either vertical fixing of the GIB Aqualine® or the installation of some additional nogs.

Fasteners

- For 10mm GIB Aqualine® use minimum 25mm x 6g GIB® Grabber® Drywall Screws
- For 13mm GIB Aqualine® use minimum 32mm x 6g GIB® Grabber® Drywall Screws.

Fastener Centres

- GIB® Grabber® Drywall Screws at 100mm centres to perimeter of wall and to all intermediate studs
- Adhesive is not to be used in place of mechanical fastenings.

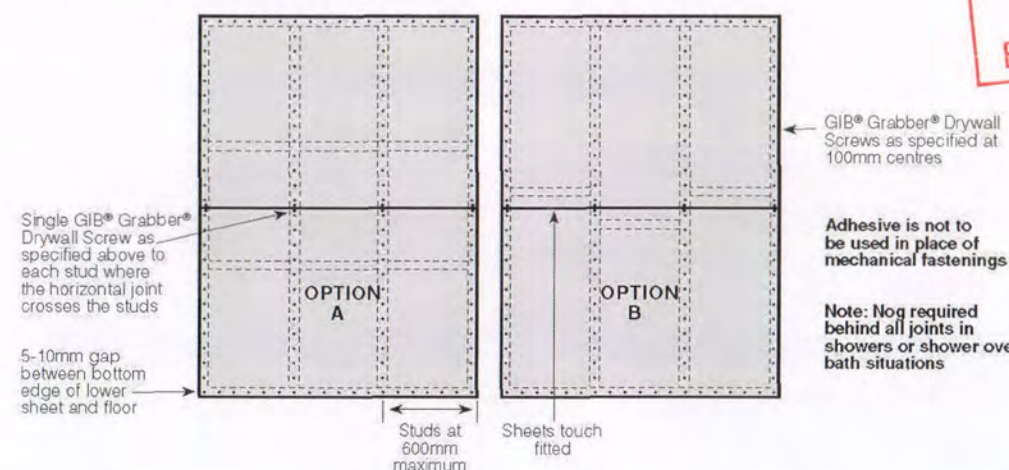
Lining

- 10mm or 13mm GIB Aqualine® is suitable for use on timber framing and for tile weights up to 20kg/m²
- 13mm GIB Aqualine® must be used for tile weights between 20 and 32kg/m² and when light steel framing has been used
- GIB Aqualine® may be fixed vertically or horizontally
- Provide a 5-10mm gap at the wall/floor junction
- Provide a 5-10mm gap between the bottom edge of the GIB Aqualine® and any bath rim or preformed shower base to allow for placement of sealant
- GIB Aqualine® sheets shall be touch fitted
- Where the framing or fastener centres required for tiled areas are closer than those specified for GIB® Fire Rated and GIB® Noise Control Systems, the tiling specification shall prevail. Where relevant, check that fastener lengths comply with the requirements of GIB® Fire Rated Systems or GIB® Noise Control Systems.

Jointing

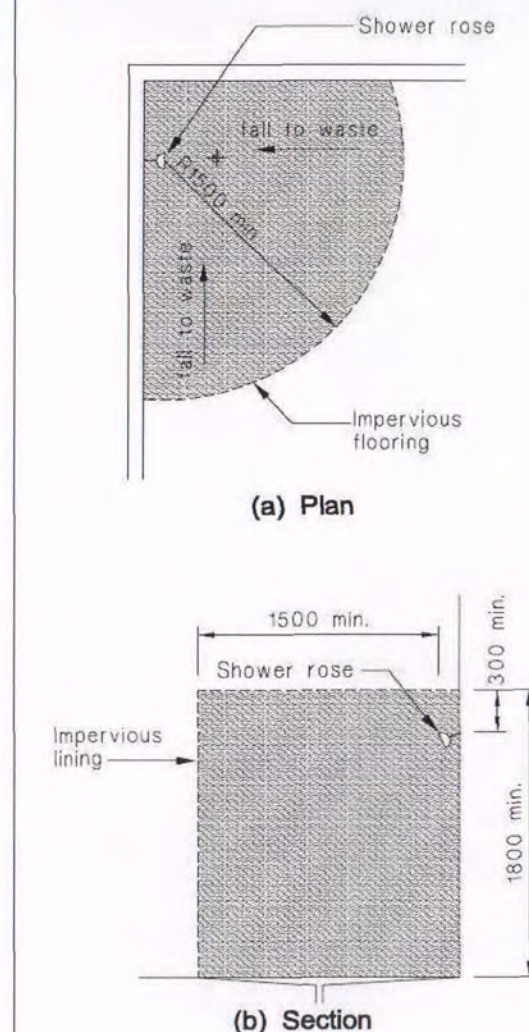
- Jointing shall be carried out in accordance with instructions in the *GIB® Site Guide*
- Water resistant GIB® AquaMix is recommended for the first two coats
- No top coat is required.

Fastening the Linings – Horizontal Fixing in Tiled Areas



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Figure 5: Wall and Floor Coverings to Unenclosed Showers
 Paragraphs 3.3.1 and 3.3.5

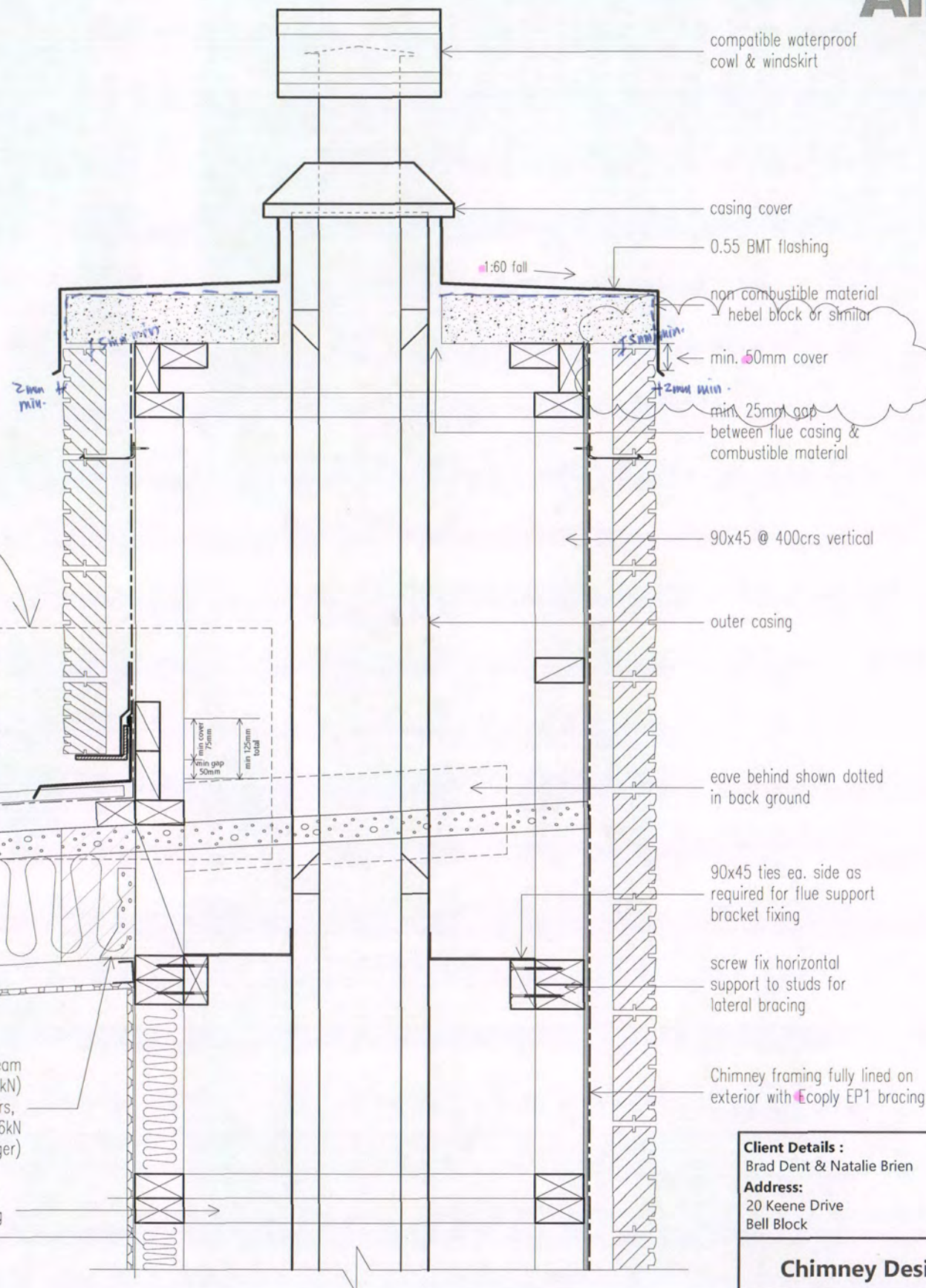
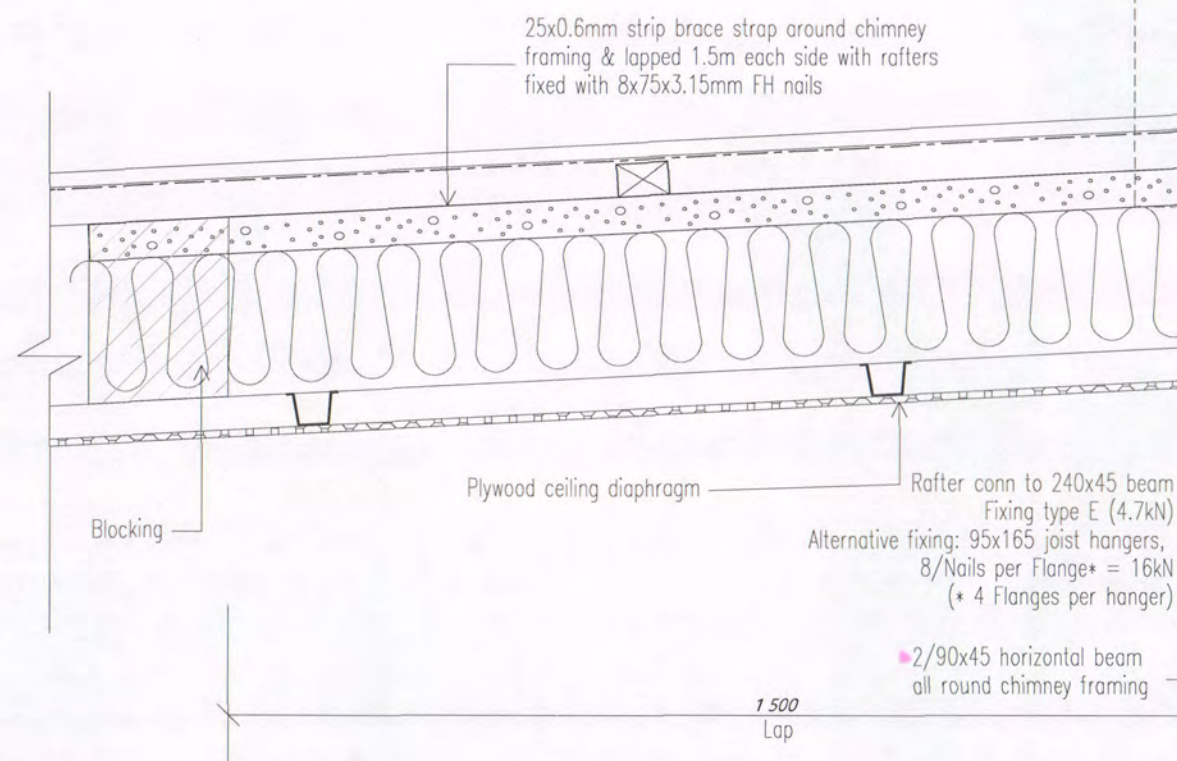
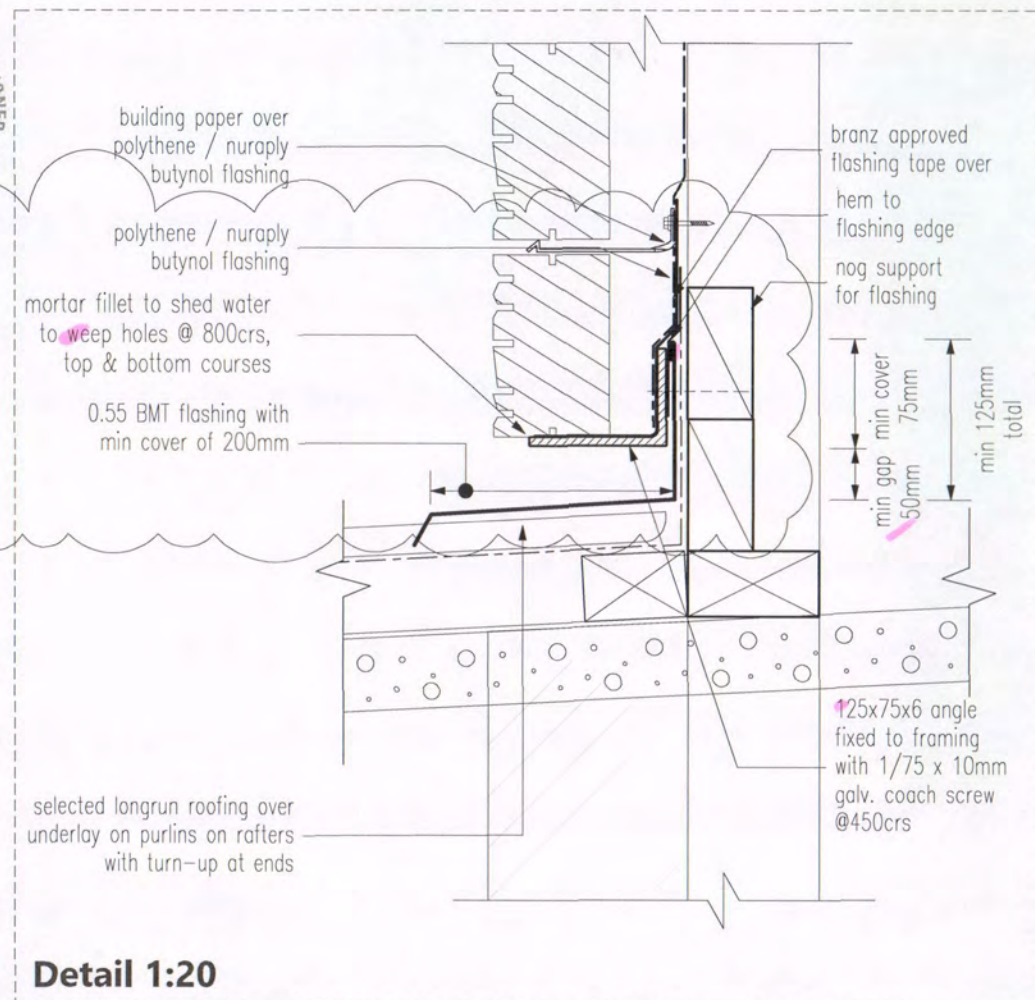


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Note:

GIB Aqualine® is suitable for tiling to full height of walls, but if a wall is to be partially tiled (i.e. half high), only the area of wall under the tiles needs to be fixed as above. The remainder of the wall may be fixed as for non-tiled area (see page 10 & 11).

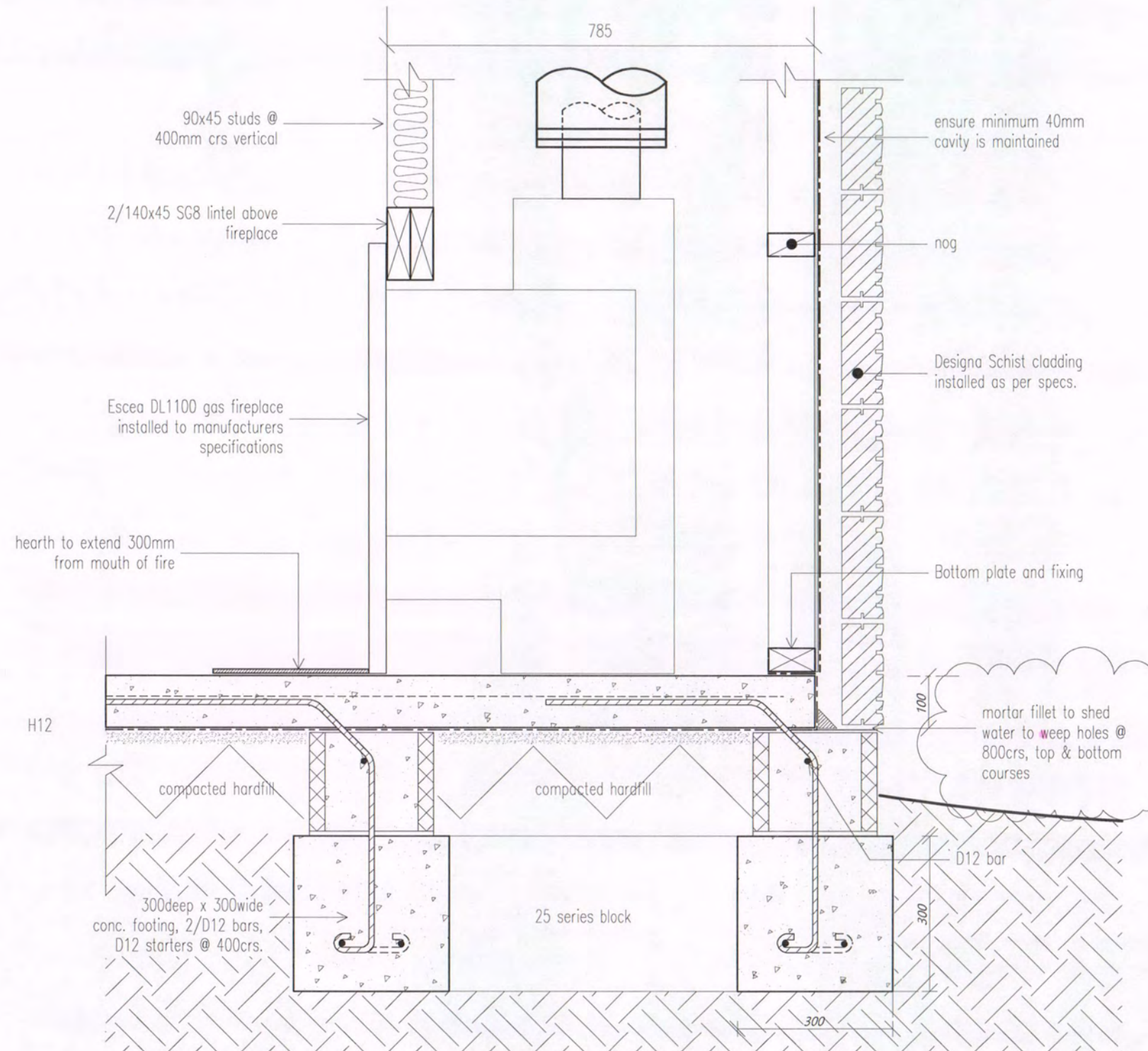


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Chimney Design				Scale: As shown	Date: 12/05/2015	Sheet no : 36
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Chimney Foundation 1:10

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Chimney Design			Scale: As shown	Date: 12/05/2015	Sheet no : 37
			Rev:		
Drawn: DS	Check: N.Davis	Call 0800 A1homes 2 1 4 6 6 3 www.A1homes.co.nz			
Wind: <i>High</i>	Earthq: <i>1</i>				
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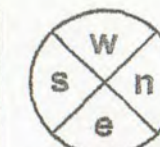
1. [X] IP socht
2. Data.
3. NDM
4. 35 Resessed.
5. TV socht
6. Sngl sec
7. Fiber in Ph in.

Goose deer
Fridge
Wood
Hob Gas
oven
Micro
Dish
Waste.
Inkling
Heckling

NZS 5261:2003 Gas Hob Installation
Cut out for hob: min. 60mm from back of bench top.
Overhead clearances: not less than 600mm from the highest part of hob to range hood
Side clearances: Where dimension from periphery of nearest burner to any vertical combustible surface is less than 200 mm, surface shall be protected to a min. height of 150 mm above hob for full dimension (width or depth) of cooking surface area.
Horizontal surface shall be greater than 10 mm below surface of hob.
Protection of combustible surfaces: 5mm thick ceramic tiles or graphic glass is suitable to protect 10mm Gib board.

G3/AS1
1.1.3 Food preparation surfaces shall be easily maintained in a hygienic condition. Stainless steel, decorative high pressure laminate, and tiles are examples of suitable materials for these surfaces.

1.6 Wall linings
Wall linings adjacent to appliances and facilities shall have surfaces that can be easily maintained in a hygienic condition. Stainless steel, decorative high pressure laminate, tiles, wallboards with painted or applied impervious coatings or films, are examples of suitable materials for these surfaces.



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Cautionary Notes:

Always cross reference the foundation plan with the framing plan prior to setting out

Joinery sizes shown are box sizes & are preliminary only.
Site measure and confirm all joinery sizes, reporting to designer any changes, PRIOR to ordering joinery. No liability shall be held by designer for incorrect supply of joinery.

Refer to all written dimensions, DO NOT scale off drawings.

Construction Notes:

Gas hotwater & cooking with vented r/hood. Ensure gas appliance installation complies to NZS 5261: 2003. Polybutylene water supply pipes. Hot water supply pipes shall be thermally insulated to comply with H1/AS1 5.0

The delivered hot water temperature at any sanitary fixture used for personal hygiene shall not exceed 55°C

Gas via street supply

gas water heater: 300mm from any opening door or window, 75mm from down pipes, 500mm fuse or electric box, 1000mm from gas bottles, 300mm from wall or corner, 1500mm from ground.
(gas fitter to confirm)

Tapered edge joints in ceilings

To reduce the risk of cracks caused by substrate movement, back-blocking of tapered edge joints is required in the following situations.

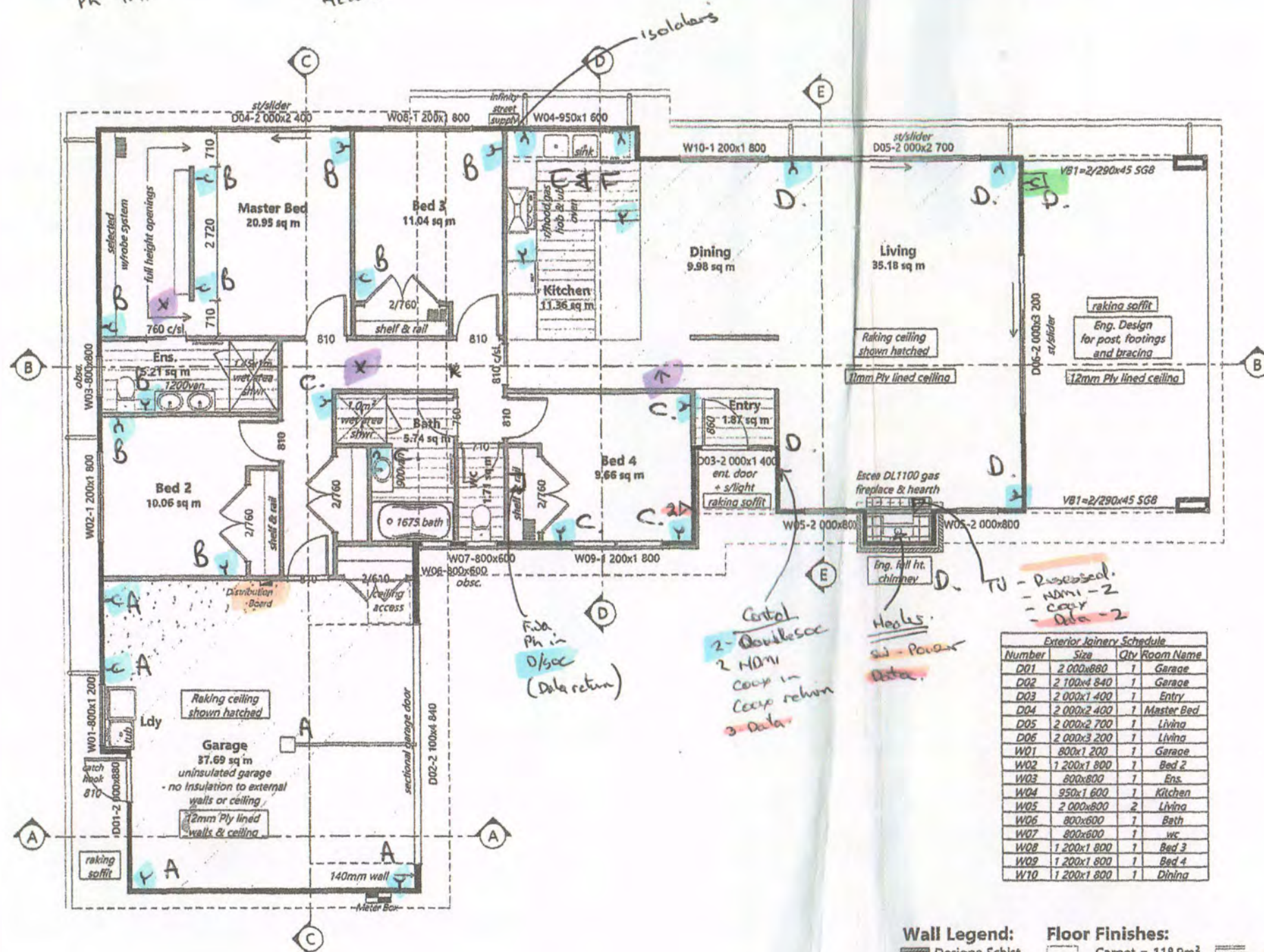
- When timber battens have been used:
Any area containing 3 or more tapered joints
- When steel battens have been used:
Any area containing 6 or more tapered joints

Please confirm layout & fittings of kitchen & bathrooms etc before foundation commences

Gas fireplace:

- installed to manufacturers specifications

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Exterior Joinery Schedule			
Number	Size	Qty	Room Name
D01	2 000x880	1	Garage
D02	2 100x1 840	1	Garage
D03	2 000x1 400	1	Entry
D04	2 000x2 400	1	Master Bed
D05	2 000x2 700	1	Living
D06	2 000x3 200	1	Living
W01	800x1 200	1	Garage
W02	1 200x1 800	1	Bed 2
W03	800x800	1	Ens.
W04	950x1 600	1	Kitchen
W05	2 000x800	2	Living
W06	800x600	1	Bath
W07	800x600	1	WC
W08	1 200x1 800	1	Bed 3
W09	1 200x1 800	1	Bed 4
W10	1 200x1 800	1	Dining

Wall Legend:
Designa Schist
Rockcote 40EPS
Linea

Floor Finishes:
Carpet = 118.9m²
Master Bed
Bed 2
Bed 3
Bed 4
Living
Dining
Hallways, cupd.s & wdrbs

Wet Area = 25.89m²
Bathroom
Ensuite
wc
Kitchen
Entry
Concrete = 38.0m²
Garage
Laundry

Floor Area:
= 194.23sqm o/frame
= 195.04sqm o/brick

Client Details: NC429
Brad Dent & Natalie Brien
Address:
20 Keene Drive
Bell Block

New Design
Scale: 1:100 Date: 2/04/2015 Sheet no: 8
Drawn: DS Check: N.Davis
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11. + OUTSIDE D/LT IP.
26. - Down light.
3. - Pendent
3. + Kitchen Pendent light
2. - UP DN wall
2. - mirror lt
2. - Bedside
1. - TWIN SHIM LT.
(P) - future

2. (P) Fan/light.
3. (P) 5' TWIN LED.
2. (P) 30.0 LED
1. (P) Sensor 360

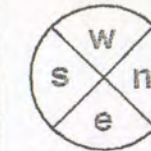
NZS 5261:2003 Gas Hob Installation
Cut out for hob: min. 60mm from back of bench top.
Overhead clearances: not less than 600mm from the highest part of hob to range hood
Side clearances: Where dimension from periphery of nearest burner to any vertical combustible surface is less than 200 mm, surface shall be protected to a min. height of 150 mm above hob for full dimension (width or depth) of cooking surface area.
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G3/AS1

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(gas fitter to confirm)

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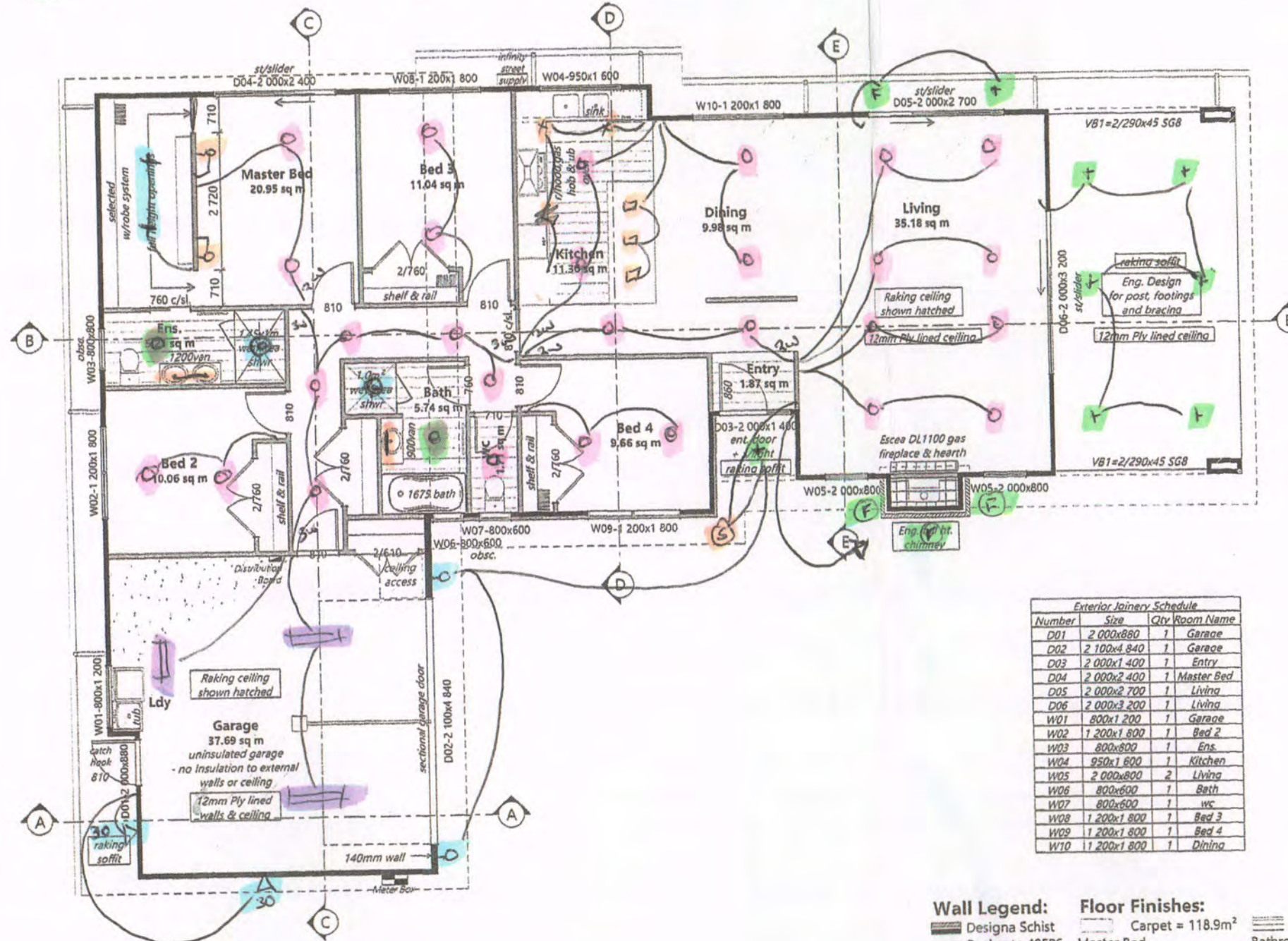
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Any area containing 3 or more tapered joints
- When steel battens have been used:
Any area containing 6 or more tapered joints

Please confirm layout & fittings of kitchen & bathrooms etc before foundation commences

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- installed to manufacturers specifications

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D04	2 000x2 400	1	Master Bed
D05	2 000x2 700	1	Living
D06	2 000x3 200	1	Living
W01	800x1 200	1	Garage
W02	1 200x1 800	1	Bed 2
W03	800x800	1	Ens.
W04	850x1 600	1	Kitchen
W05	2 000x800	2	Living
W06	800x600	1	Bath
W07	800x600	1	wc
W08	1 200x1 800	1	Bed 3
W09	1 200x1 800	1	Bed 4
W10	1 200x1 800	1	Dining

Wall Legend:

- Designa Schist
- Rockcote 40EPS
- Linea

Floor Finishes:

- Carpet = 118.9m²
- Master Bed
- Bed 2
- Bed 3
- Bed 4
- Living
- Dining
- Hallways, cupd.s & wdrbs

Wet Area = 25.89m²

- Bathroom
- Ensuite
- wc
- Kitchen
- Entry

Concrete = 38.0m²

- Garage
- Laundry

Floor Area:

= 194.23sqm o/frame

= 195.04sqm o/brick

Client Details:

Brad Dent & Natalie Brien

Address:

20 Keene Drive
Bell Block

New Design

Floor Plan		Scale:	Date:	Sheet no:
		1:100	2/04/2015	8
Drawn:	DS	Check:	N.Davis	
Wind:	Earthq:	Exposure:	Snow:	
High	1	C	NO	
Call 0800 A1homes 214663				
www.A1homes.co.nz				

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THESE PLANS HAVE BEEN

SUPERSEDED

REPLACEMENT PLANS WILL BE IN
THE APPROVED OFFICE COPY.

BC: 118185 ADDRESS: 20 Keene Drive

Amendment No & Date of Amendments that these superseded plans relates to are:

1. **AMENDMENT**

6.

01 050816

2.

7.

3.

8.

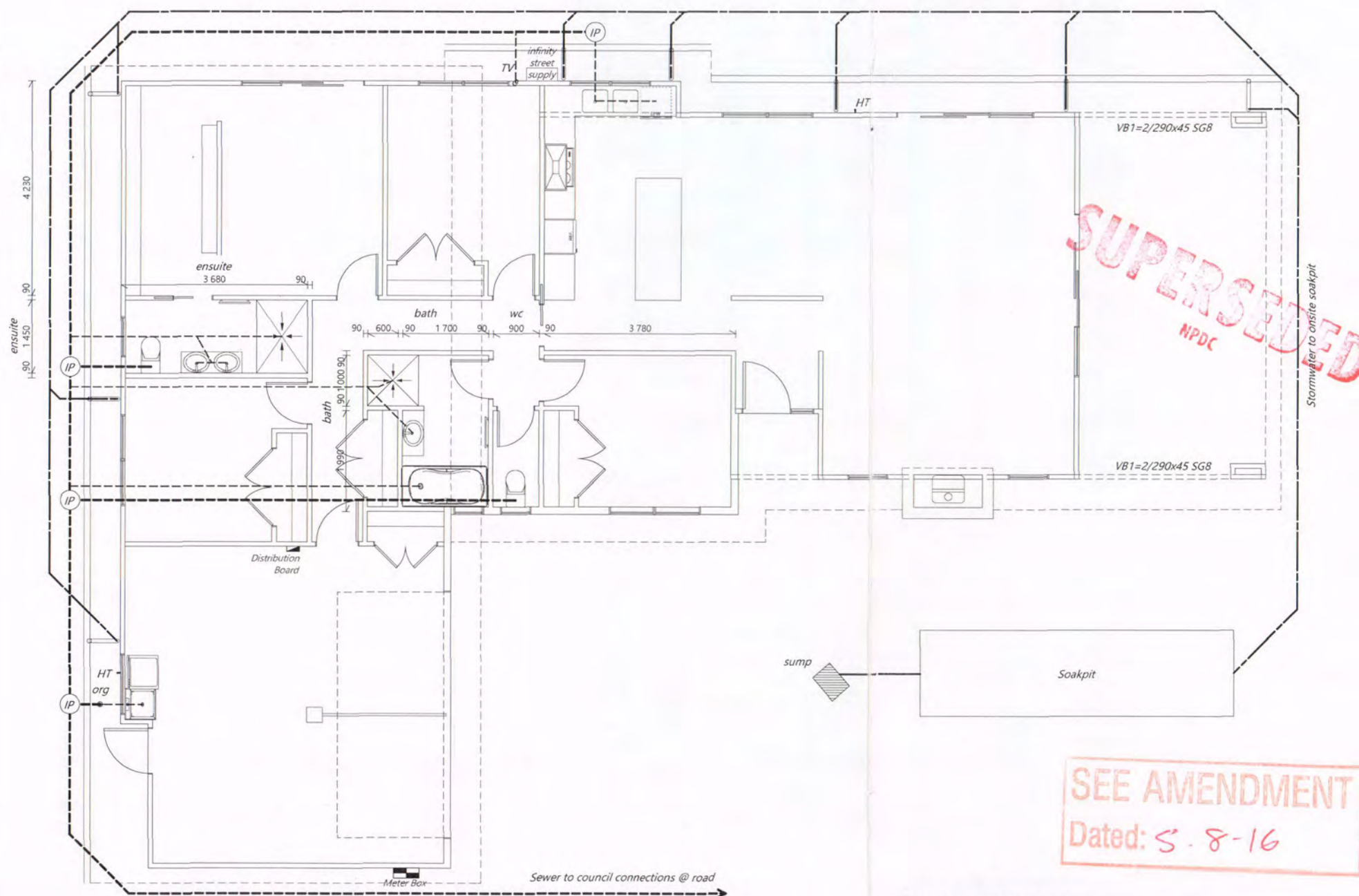
4.

9.

5.

10.

THESE ARE TO BE **KEPT AND
SCANNED** AT THE END OF THE
PROJECT FOR FUTURE REFERENCE



Construction Notes:

Plumbing to AS/NZS:3500.2.2 (min 1:60 pipe gradient) by qualified tradesman.
 Contractor to locate all service connections on site prior to earthworks confirm all boundary setbacks & restrictions comply with current regulations prior to commencement of foundations.
 All waste pipes PVC. Sizes, fall, venting & discharge to be confirmed by NZ qualified plumber. Confirm positions of available services cabling etc on site prior to any excavation

Water supply:

Internal water pipes to Polybutylene.
 All pipework and pipes exposed to freezing to be lagged with closed cell foam - Closed cell foam polymer insulation or fibre glass insulation which is preformed to the shape of the pipe and not less than 13 mm thick, is acceptable material for preventing pipes less than or equal to 40 mm diameter from freezing. Any insulation material that absorbs moisture shall be protected in a waterproof membrane.

Fixture unit rating:

= 33 units
 Water Closet - 6 (x2)
 Bath - 4 Shower - 2 (x2)
 Basin - 1 (x2) Laundry tub - 5
 Dishwasher - 3 Kitchen sink - 3

NPDC Approved for
 13 MAY 2015
 Building Consent

TABLE 3.5

SIZE AND RATING OF VENTS

Size of vent pipe DN	Fixture units discharging to drain	Vent rating
40	>1	0.5
50	>10	1
65	>30	2
80	>175	3
100	>400	6

NB: DN80 minimum vent when connected to septic tank

Plumbing Legend as per AS/NZS 3500

Symbol	Item	Symbol	Item
IP	Inspection point	---	DN100 PVC SS pipe, DN100 min water closets (ref specs) min 1:60 gradient
—	Downpipe	---	DN100 PVC SW pipe, min 1:120 gradient
HT	Hose Tap	---	min PVC fixture waste pipe sizes: DN40 basins, single head showers, baths, sinks, dishwasher & ldy tubs, DN50 multiple heads showers, DN65 unvented branch drains exceeding 2.5m long (max 5 fixture unit rating) DN65 to all wastes discharging directly into drain under slab min 1:40 gradient. 20mm HWC vent drain (copper)
org	Overflow relief gully		
oTV	Terminal vent		

Water supply pipe (from water tank or council mains) = DN20

Client Details: NC429

Brad Dent & Natalie Brien

Address:
 20 Keene Drive
 Bell Block

New Design

Drainage Plan

Scale: 1:100
 Date: 2/04/2015
 Rev: Sheet no: 3

Drawn: DS Check: N.Davis
 Wind: High Earth: 1 Exposure: C Snow: NO
 Call 0800 A1homes 214 663
 www.A1homes.co.nz

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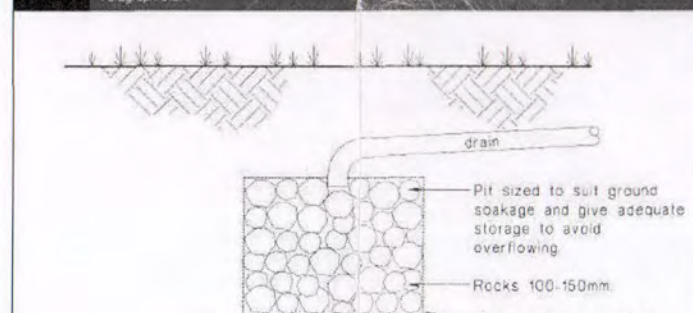
Soakpit calculation

Roof Area: 276m²
 Sealed driveway Area: 54m²
 Total Stormwater catchment area = 300m²

$R_c = 10 \times 0.9 \times 42.6 \text{ mm (rainfall intensity)} \times 0.03 \text{ (catchment area)}$
 $R_c = 11.5 \text{ m}^3$
 $2.882 / 0.38 \text{ (boulder capacity)} = 30.26 \text{ m}^3 \text{ pit required}$

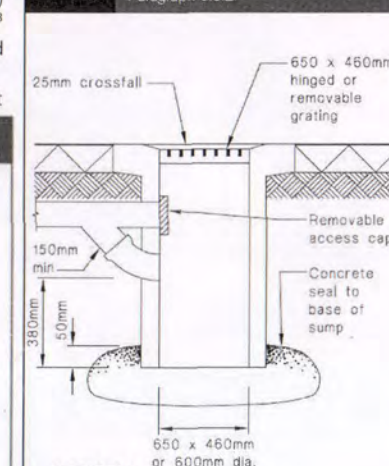
$1.7 \times 6.2 \times 2.9 \text{ deep} = 30.57 \text{ m}^3 \text{ pit}$

Figure 13: Soak Pit for Surface Water Disposal Paragraph 9.0.4

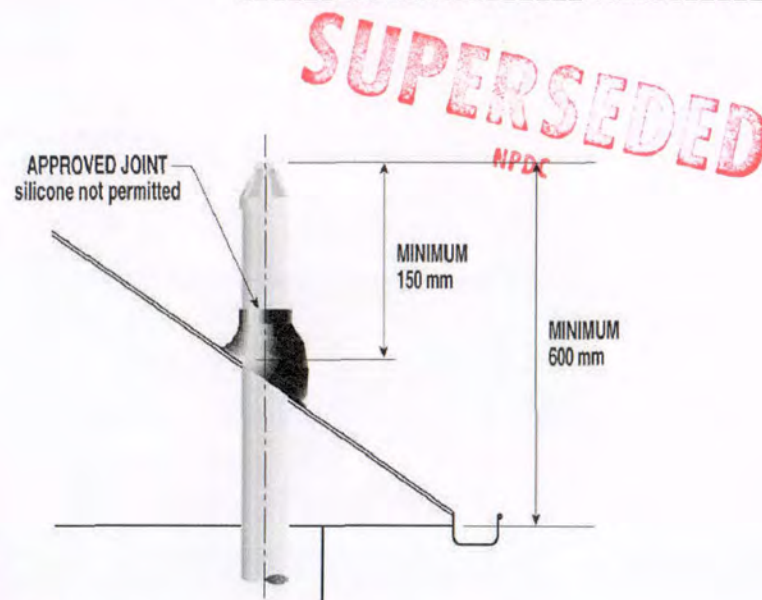


(a) Rock soak pit

Figure 9: Type-two Surface Water Sump Paragraph 3.6.2



SECTION



DESIGN ARCHITECTURE

