

Approved Building Consent Documents

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

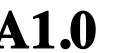
Selwyn District Council
Approved Building Consent Document

BC142284 - Pg 1 of 25

11/11/2014

battj

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



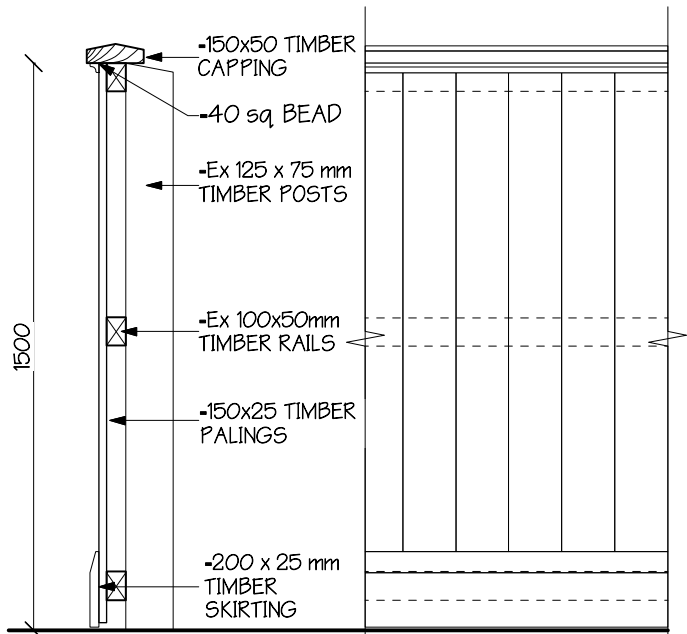


LANDSCAPE PLAN

Scale: 1:200

LANDSCAPING NOTES:
-LAWN LAYOUT IS INDICATIVE ONLY (TO BE CONFIRMED BY OWNER ON SITE)
-BASIC SHRUB LAYOUT TO BE CONFIRMED BY OWNER ON SITE

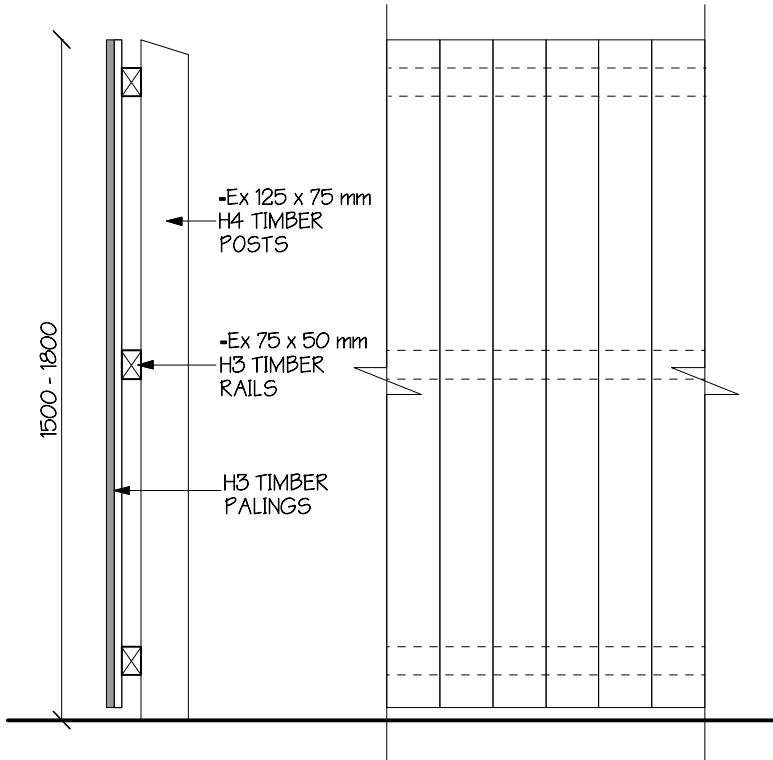
SURFACE FINISHES & AREAS		
DRIVEWAY	EXPOSED AGGREGATE	33.85 sqm
SERVICE COURT	PLAIN CONCRETE	25.42 sqm
ENTRY PATH	EXPOSED AGGREGATE	14.94 sqm
PATIOS	EXPOSED AGGREGATE	20.05 sqm
1.8m STD. FENCE		74.40 m
1.5m MERV. FENCE		3.00 m
LAWN		230.68 sqm



MERIVALE FENCE SECTION - SINGLE SIDED

SCALE N / A

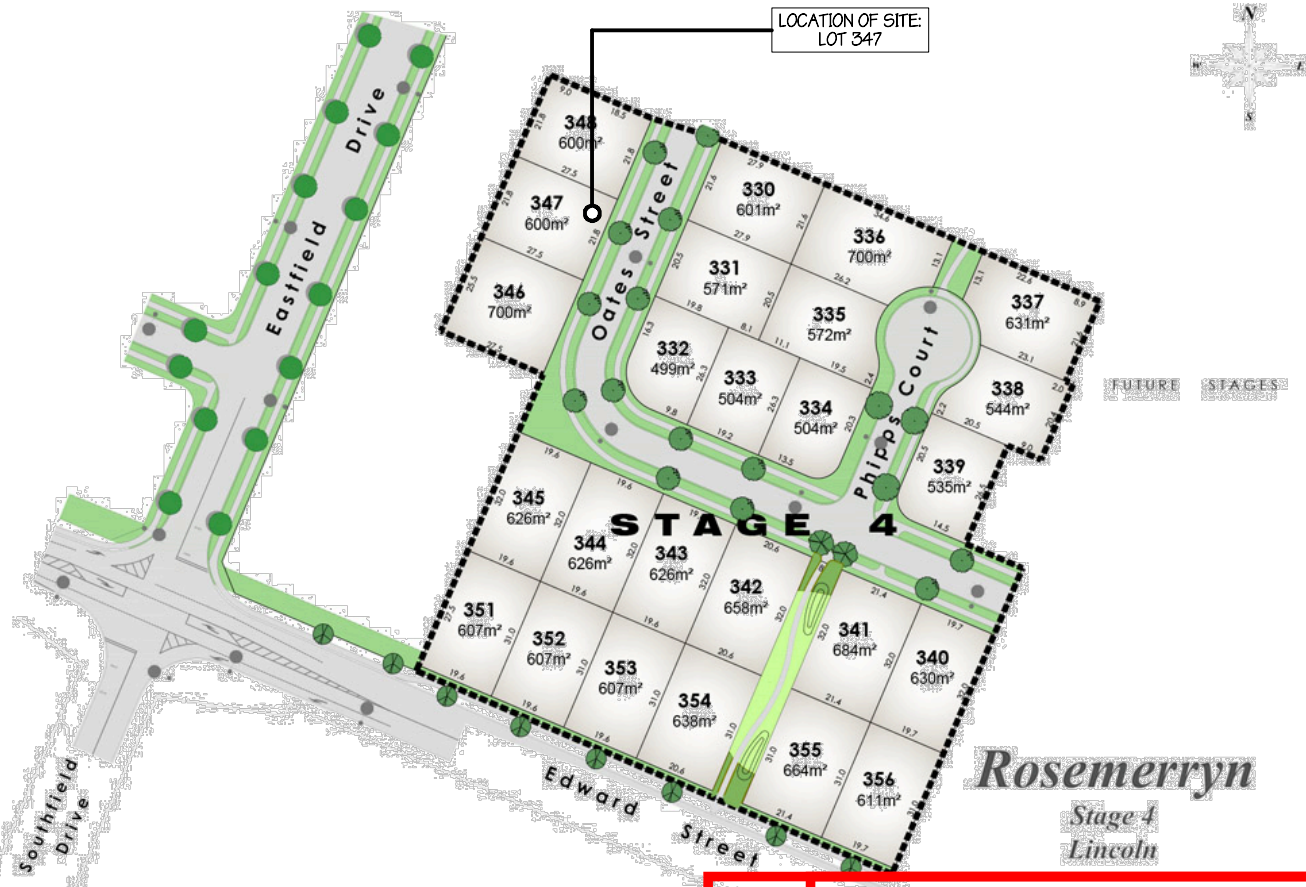
HORNCastle HOMES LTD.



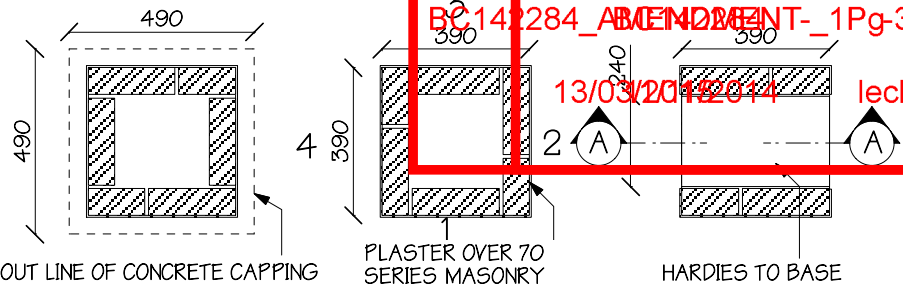
FENCE SECTION - STD

Scale: 1:20

26/11/14
DRIVEWAY DRAINAGE ADDED

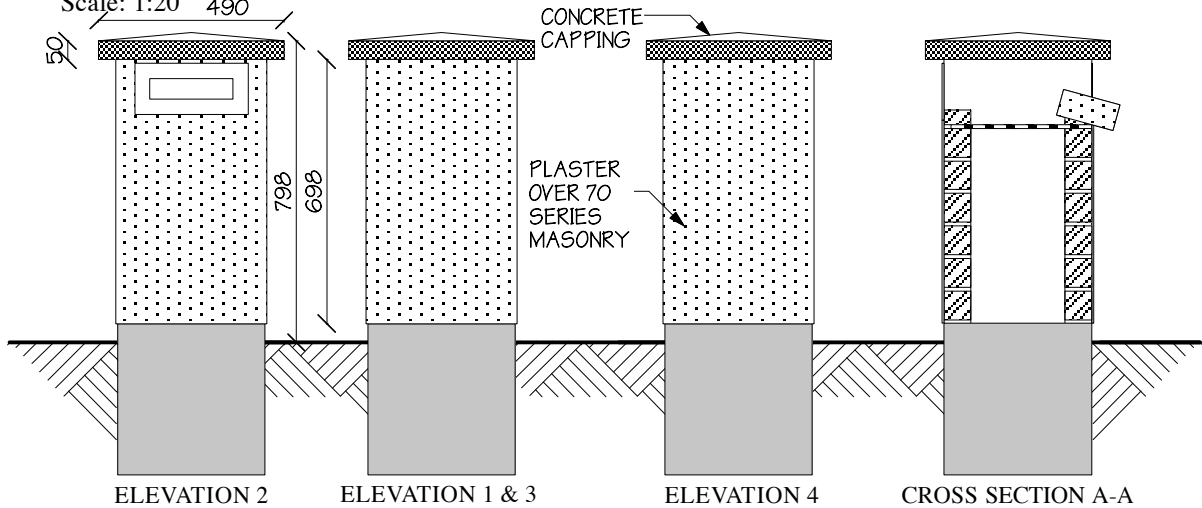


LOCATION PLAN NTS



PLAN - PLASTER OVER MASONRY LETTERBOX

Scale: 1:20



ELEVATIONS & CROSS SECTION - PLASTER OVER MASONRY LETTERBOX

Scale: 1:20

ENSUITE GULLY TRAP TO BE THE
OVERFLOW RELIEF GULLY FOR THE
SYSTEM AS PER NZBC G13/AS2
3.3.2

- AAV — AIR ADMITTANCE VALVE
- IP — INSPECTION POINT
- RP — RODDING POINT

40mm — PIPE SIZE
@ 1:40 — GRADIENT
(3.1m) — DEVELOPED LENGTH

-REFER TO DETAILS FOR PIPE
WORK THRU SLAB & THRU
FOUNDATIONS.

-100mm DIA FOUL WATER PIPE FOR ALL TOILETS.

-WHERE DRAINS ARE LAID AT GRADIENTS OF 1:80 OR LESS, VERIFIABLE LEVELLING DEVICES SHALL BE USED TO ENSURE UNIFORM AND ACCURATE GRADIENTS.

- TERMINAL VENT PIPE IS TO BE A MINIMUM DIAMETER OF 80mm IN ACCORDANCE WITH CLAUSE 4.2.1 OF G13/AS2.

-WASTE PIPES SHALL BE SUPPORTED IN ACCORDANCE WITH CLAUSE 6.2 AND 6.3 OF G13/AS1.

-BEDDING & BACKFILLING OF DRAINS IS TO FULLY COMPLY WITH FIGURE 7.2 OF G13/AS2.

- READ PLAN IN CONJUNCTION WITH ENGCO - ENGINEERING DRAWINGS S1 - S5.



Scale: 1:20

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FOUNDATION PLAN

Scale: 1:100

26/11/14
DRIVEWAY DRAINAGE ADDED

Job Engineer
Job Surveyor

ENGCO CONSULTING ENGINEERS
MAINLAND SURVEYING

Horncastle
HOMES 

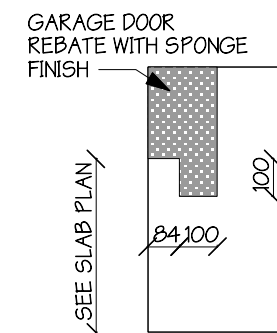
	DESIGN
	D. HILLIER
	DRAWN
	J. HUDSON

Issue Date = Sun, 10 Nov 2013 11:56:49 AM • VW-17.0.5 for Mac

CHECK	DATE	PAGE REVISION DATE	A2.0
*****	12/5/14	04/03/15	
LOT 347-TURNKEY-ROSEMERRYN-J4284.VWX			

A2.0

-REFER TO ENGINEERING DETAILS FOR PIPE PENETRATION DETAILS



Scale: 1:100

Diagram illustrating the construction details of a circular manhole cover assembly. The assembly consists of the following layers and dimensions:

- Top Layer:** A layer of material (likely concrete or stone) with a maximum width of 600mm.
- Bedding Layer:** A layer of material (likely concrete or stone) with a minimum thickness of 75mm.
- Compacted Granular Bedding and Surround:** A layer of material (likely compacted granular bedding and surround) with a minimum thickness of 100mm.
- Surround:** A layer of material (likely 14mm chip or AP20) surrounding the bedding layer.
- Manhole Cover:** A circular cover with diameter D and width B .
- Fill:** A layer of material (likely fill) above the bedding layer, labeled "FILL (SEE NOTE 1)".
- NOTE:** COVER IS GREATER THAN 375mm.

NOTE:

1. FILL SHALL BE:
 -ORDINARY WHERE DRAINS ARE LOCATED BELOW GARDENS AND OPEN COUNTRY
 -COMPACTED SELECTED FILL WHERE THE DRAINS ARE LOCATED BELOW RESIDENTIAL DRIVEWAYS AND SIMILAR AREAS SUBJECT TO LIGHT TRAFFIC
2. WIDTH 'B' SHALL BE THE PIPE DIAMETER + 200mm

BEDDING TYPE 'D' OF NZS 7643
COVER GREATER THAN 375mm

Diagram illustrating the construction of a manhole structure, showing layers and dimensions:

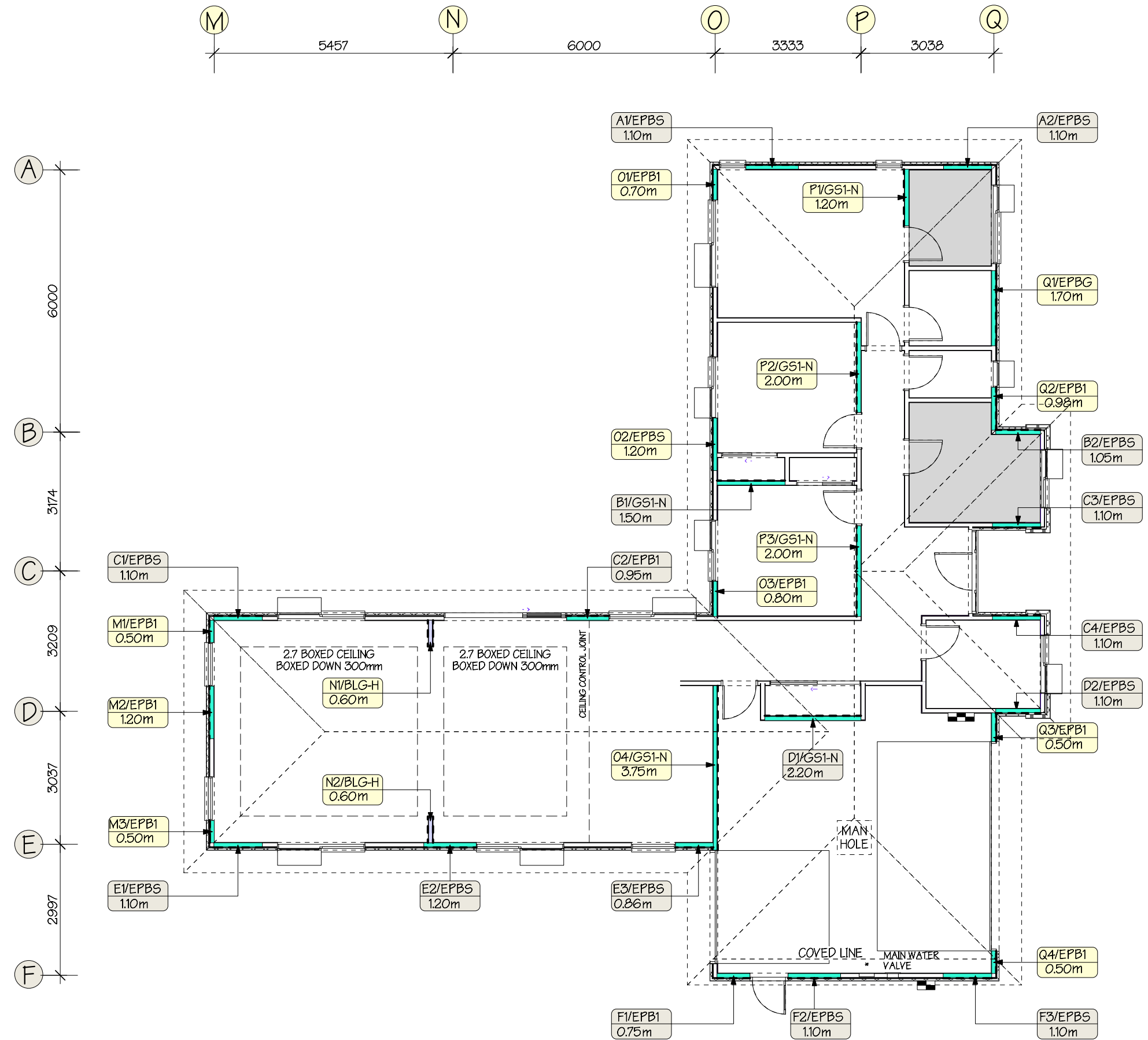
- Top layer: 13/03/2015/2014 (likely a date or identifier).
- Layer below: FILL (SEE NOTE 1).
- Layer below: COMPACTED SELECTED FILL.
- Bottom layer: COMPACTED GRANULAR BEDDING, 14mm CHIP OR AP20.
- Dimensions:
 - Top width: 600mm MAX.
 - Height of top section: 300mm MIN.
 - Height of bottom section: 100mm MIN.
 - Bottom width: WIDTH 'B'.
 - Bottom layer thickness: D/4.
- Overall height: COVER IS GREATER THAN 500mm.

NOTE:

NOTE:

1. FILL SHALL BE:
 -ORDINARY WHERE DRAINS ARE LOCATED BELOW GARDENS AND OPEN COUNTRY
 -COMPACTED SELECTED FILL WHERE THE DRAINS ARE LOCATED BELOW RESIDENTIAL DRIVEWAYS AND SIMILAR AREAS SUBJECT TO LIGHT TRAFFIC
 2. WIDTH 'B' SHALL BE THE PIPE DIAMETER + 200mm

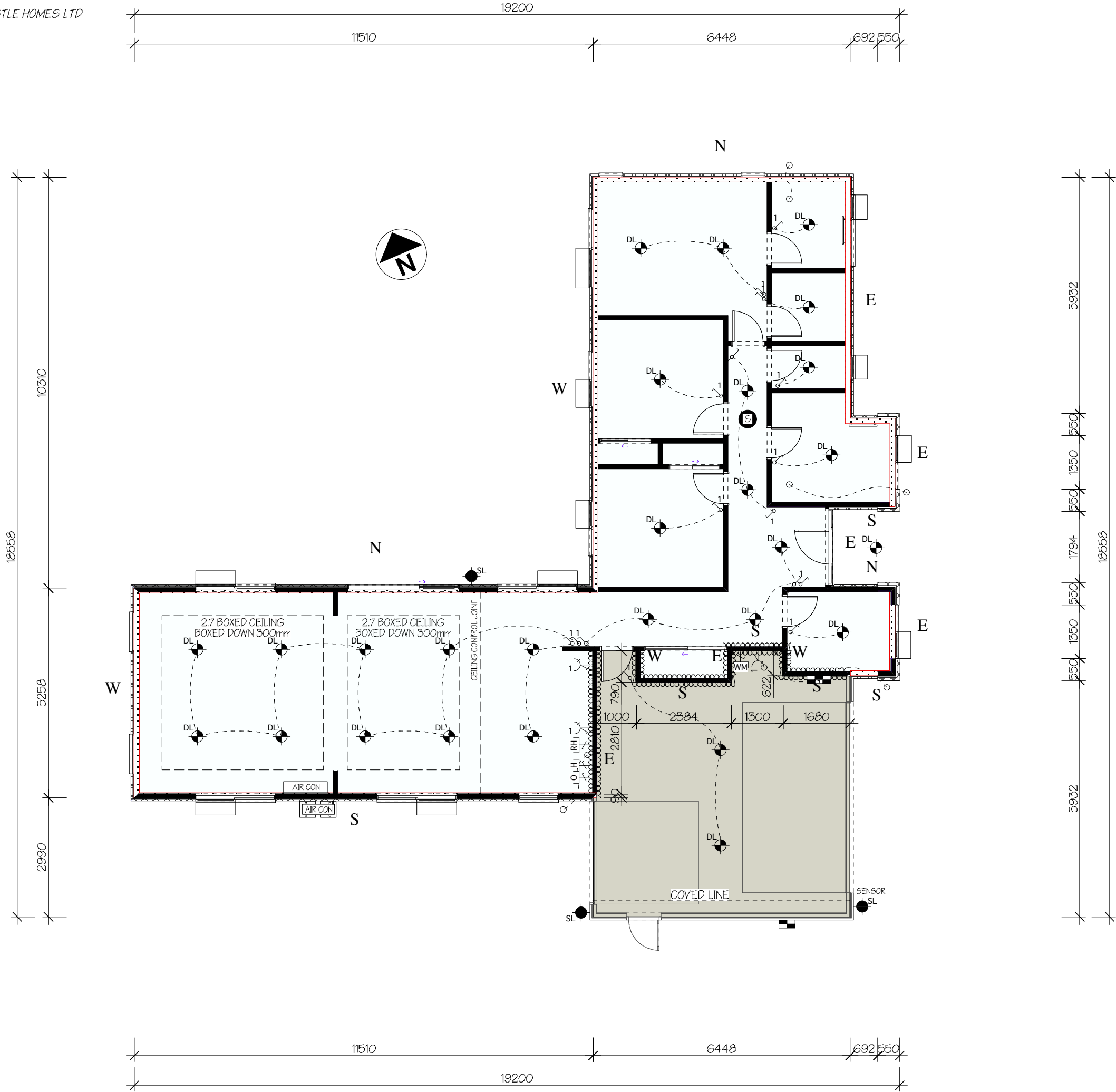
BEDDING TYPE 'B' OF NZS 7643
COVER GREATER THAN 500mm



BRACING PLAN PLAN
Scale: 1:100

PLATE FIXING TABLE		
EXTERNAL BRACED WALLS		
EPB1 - FIXED WITH HANDIBRAC AT EACH END OF BRACING ELEMENT		
EPBS - FIXED WITH THROUGHBOLTS @ 900crs AS PER NZS 3604		
EPBG - FIXED WITH HANDIBRAC AT EACH END OF BRACING ELEMENT		
OTHERS - EXTERNAL NON BRACED WALLS TO BE FIXED WITH THROUGHBOLTS @ 900crs		
INTERNAL BRACED WALLS		
GS1-N - FIXED WITH 75 x 3.8mm SHOT FIRED FASTENERS WITH 16mm DISCS SPACED AT 150mm AND 300mm FROM END STUDS AND 600mm CENTRES THEREAFTER.		
OTHERS- NON BRACED INTERNAL WALLS MAY BE SHOT FIRED.		
BLG-H - FIXED WITH HANDIBRAC AT EACH END OF BRACING ELEMENT		
NOTE: INTERNAL BRACING WALLS TO BE CONNECTED AT TOP PLATE LEVEL, EITHER DIRECTLY OR THROUGH A FRAMING MEMBER IN LINE WITH THE WALL, TO EXTERNAL WALLS AT RIGHT ANGLES.		
Selwyn District Council Approved Building Consent Document		
BRACING LINE REQUIREMENT CALC'S		
NUMBER OF BRACING LINES ACROSS (M.N)	6	
NUMBER OF BRACING LINES ALONG (A.B)	11/11/2014	
TOTAL BRACING UNITS REQ ACROSS	1216.44	1033.23
TOTAL BRACING UNITS REQ ALONG	1033.12	1033.23
MIN UNITS PER LINE ACROSS	121.64	103.32
MIN UNITS PER LINE ALONG	88.62	86.10
NOTE : USE THE GREATER OF THE FOLLOWING		
- FIGURES ABOVE		
- OR 15 BU'S X BUILDING LINE LENGTH		
- 100 BU'S MINIMUM		

BRACING KEY	
	= WET AREA
	= BRACING UNIT TO ONE WALL FACE
	= BRACING UNIT TO BOTH WALL FACES



INSULATION & ELECTRICAL KEY:	
	INSULATION (GGE INT. WALL)
	RECESSED DOWNLIGHT
	SPOT LIGHT
	TWO WAY SWITCH
	ONE WAY SWITCH (SINGLE)
	RANGE HOB (ISOLATION SWITCH REQ'D)
	OVEN IN WALL (ISOLATION SWITCH REQ'D)
	RANGEHOOD (ISOLATION SWITCH REQ'D)
	WASHING MACHINE (10amp SOCKET OUTLET)
	SINGLE SWITCHED SOCKET
NOTE:	
-LIGHTING INDICATIVE ONLY, LAYOUT TO BE CONFIRMED BY OWNER ON SITE	
-ALL ROOMS WITH METAL CEILING BATTENS NEED TO BE LINKED TOGETHER WITH METAL STRAP INS EARTHED BACK TO FUSE BOARD	
CEILING: R3.6 PINK BATTS ULTRA	
WALLS: R2.6 PINK BATTS ULTRA	
ROOF: R0.26 STYROFOAM INSULATING	
GARAGE INT. WALL: R2.6 PINK BATTS	
STANDARD GLAZING UNITS USED:	
ALL DOUBLE GLAZED UNITS COMPLY WITH TABLE G2 NZS 4218:2004 & MEET 0.26 (msa	
°C/W)	
STANDARD UNIT	
4mm GLASS /12mm AIR GAP /4mm GLASS	
SLIDER PANEL	
5mm GLASS /8mm AIR GAP /5mm GLASS	
SAFETY PANEL	
4mm TOUGHENED /8mm AIR GAP /6.38mm LAMINATE	
RECESSED DOWNLIGHT:	
HALOGEN	
HD109TC : REFER TO SPECIFICATION FOR COMPLIANCE DOCUMENT CERTIFICATE.	

AREA OF REDUCED BATTS THICKNESS

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11/11/2013 battj

FLOOR AREA OVER FOUNDATION

184.51 sq m	inc Garage
STUD HEIGHT	2442mm
PERIMETER =	80.56 m
SLAB AREA =	184.01 sq m
ROOF AREA OVER EAVES =	230.73 sqm
INT WALL LENGTH (90)=	56.75 m
GARAGE AREA =	39.78 sq m

STUD SIZES
STUDS HAVE BEEN SIZED USING 3604 : 2011 TABLE 8.2 & 8.4
-EXT = 90x45 SG8 @ 600crs
-INT LB = 90x45 SG8 @ 600crs
-INT NONLB = 90x45 SG8 @ 600crs

LINTEL SIZES
ALL LINTELS HAVE BEEN SIZED BY TRUSS & FRAME MAUFACTURE UNLESS STATED ON PLAN.
-SG8 LINTELS HAVE BEEN SIZED USING 3604 : 2011
-hyONE & hy90 LINTELS ARE SIZED BY TRUSS MANUFACTURE USING designIT SOFTWARE OR MAUNALS.

A/150	= 150x90 hy90
B/200	= 200x90 hy90
C/300	= 300x90 hy90

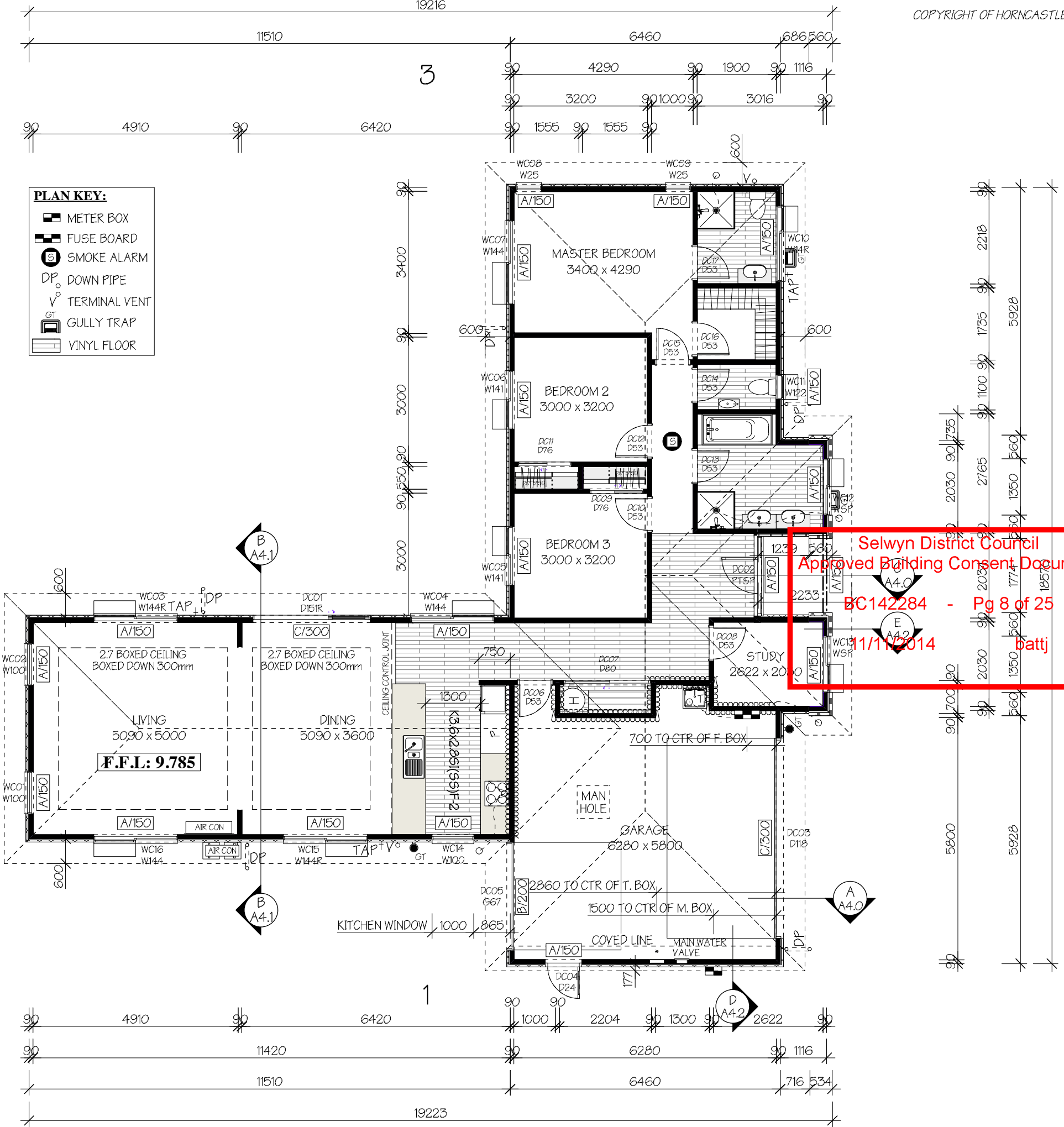
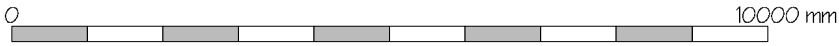
NOTES:

- ALL DIMENSIONS TO TIMBER FRAMING; NOT TO FINISHED ROOM SIZES
- SEE FOUNDATION PLAN FOR LOAD BEARING WALLS
- BATT INSULATION BETWEEN HABITABLE & NON-HABITABLE SPACES
- PROTECTION FOR STEEL FIXINGS & FASTENINGS: FIXINGS & FASTENINGS EXCLUDING NAILS SHALL HAVE ADDITIONAL CORROSION PROTECTION IN ACCORDANCE WITH NZS3604:2011 TABLE 4.1 (F)(a)
- MECHANICAL VENTILATION IN HOUSING REMOVING MOISTURE SHALL BE VENTED OUTSIDE (INCLUDES WET AREAS & COOKER HOODS. REFER TO NZBC G4/AS11.3.c.ii.) MECHANICAL VENTILATION TO BE 150 DIA 230 CU M/H IN LINE FAN DUCTED TO SOFFIT.
- SMOKE ALARMS TO BE INSTALLED TO AS1670.6 REQUIREMENTS. EQUIPMENT TO COMPLY WITH AS3786.
- JOINTS BETWEEN FIXTURES & WALL LININGS: WHERE BATHS, BASINS, TUBS, OR SINKS ABUT IMPERVIOUS LININGS, THE JOINT BETWEEN FIXTURE & LINING SHALL BE SEALED TO PREVENT WATER PENETRATION TO CONCEALED SPACES OR BEHIND LININGS
- SHOWERS ARE ENGLEFIELD TRAY AND LINERS. SHOWERS FITTED WITH 6mm MILLENIUM REVERSIBLE FRAMELESS PIVOT DOOR WITH TOUGHENED SAFTEY GLASS
- HWC TO HAVE COPPER RELIEF VALVE & DRAIN TO OUTSIDE
- HOT WATER PIPE TO KITCHEN;
- DEVELOPED LENGTH > 12m
- NOMINAL PIPE SIZE 15mm
- ALL PIPING POLYBUTYLENE
- INSULATE TO NZBC G12/AS1
- 65 DIA. ROUND DOWNPIPE, 88 x 137mm GUTTERS
- MULTILINE QUAD GUTTER BY STEEL AND TUBE HAS A CROSS SECTIONAL AREA OF 6850mm2
- 20mm POLY BEHIND ALL RECESSED BOXES
- 25mm REBATE IN SLAB FOR GARAGE DOOR SPONGE FINISH
- IT IS THE BUILDERS RESPONSIBILITY TO CHECK THE GARAGE DOOR REBATE SIZES BEFORE POURING.
- MAN HOLE TO BE 600x600 min
- CABIN HOOK TO BE FITTED TO GARAGE BACK DOOR IF LAUNDRY IS IN GARAGE WITH NO OPENING WINDOW
- CEILING WITH METAL BATTENS NEED TO BE LINKED TO EACH OTHER AND EARTHED

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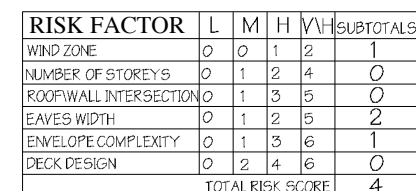
FLOOR PLAN

Scale: 1:100



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battj

Job Engineer	ENGCO CONSULTING ENGINEERS	Horncastle HOMES	DESIGN	D. HILLIER	CHECK	12/5/14	Issue Date = Sun, 10 Nov 2013 11:56:49 AM • VW-17.0.5 for Mac
Job Surveyor	MAINLAND SURVEYING	J. HUDSON	PRAWN				PAGE REVISION DATE
LOT 347-TURNKEY-ROSEMERRY-N-J4284 .vwx							A2.4



<u>INTERNAL WALLS & CEILING</u>	
SG8 KILN DRIED PINUS RADIATA	
EXTERNAL WALLS:	H12 TREATED
INTERNAL WALLS :	H12 TREATED
ALL BEAMS & LINTELS:	H12 TREATED
ALL FRAMES TO HAVE :	H12 BOTTOM PLATE
TRUSSES & EAVE FRAMING:	H12 TREATED
ECOPLY BARRIER:	H32 TREATED
WINDOW & DOOR REVEALS :	H31 TREATED
VALLEY BOARDS:	H12 TREATED
PURLINS:	H12 TREATED
GARAGE DOOR REVEALS:	H31 TREATED
CAVITY BATTENS:	H31 TREATED

-GRADE 'A' SAFETY GLAZING IN ALL BATHROOMS WHERE GLAZING IS UNDER OR WITHIN 2m OF FLOOR LEVEL, TO ALL GLASS PANELS WHICH ARE OVER 0.5m WIDE & WITHIN 0.5m TO FLOOR LEVEL, AND TO ALL PANELS WHICH ARE GREATER THAN 1m HIGH, AND ALL DOOR PANELS WHICH ARE GREATER THAN 0.75m². (NZS-4223)

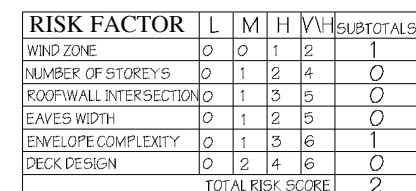
 = SAFETY GLAZING.

-ALL DOORS AND ALL WINDOWS OVER 600mm TO BE FITTED WITH SUPPORT BARS. BARS & FITTING POSITION TO BE SUPPLIED BY ALUMINIUM SUPPLIER (9.110.5 v).

-S.S = SAFETY STAYS FITTED TO WINDOW.

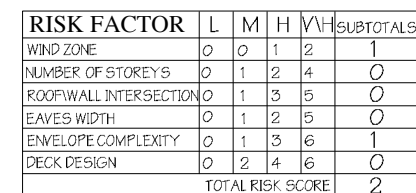
-ECOPLY BARRIER IS USED TO WRAP THIS DWELLING, SIZE REVEAL TO SUIT

- TRUSS TO BE CANTILEVERED TO MAINTAIN THE STANDARD SOFFIT HEIGHT
- G.I - ROCKCOTE CONTROL JOINTS UNDER ALL FULL LENGTH OPENINGS

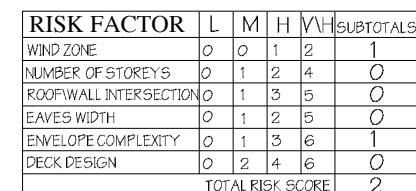


ID	MODEL	WIDTH mm	HEIGHT mm	GLAZED AREA sqm	VENTILATION AREA sqm
DC01	D15R	2800 mm	2115 mm	4.34 sqm	3.65 sqm
DC02	PTSP	1924 mm	2115 mm	1.69 sqm	1.73 sqm
DC03	D118	4780 mm	2115 mm	0.00 sqm	19.67 sqm
DC04	D24	875 mm	2115 mm	0.94 sqm	1.52 sqm
DC05	G67	2580 mm	2115 mm	0.00 sqm	10.54 sqm
DC06	D53	840 mm	2050 mm	0.00 sqm	1.53 sqm
DC07	D80	2080 mm	2050 mm	0.00 sqm	1.95 sqm
DC08	D53	840 mm	2050 mm	0.00 sqm	1.53 sqm
DC09	D76	1280 mm	2050 mm	0.00 sqm	1.15 sqm
DC10	D53	840 mm	2050 mm	0.00 sqm	1.53 sqm
DC11	D76	1280 mm	2050 mm	0.00 sqm	1.15 sqm
DC12	D53	840 mm	2050 mm	0.00 sqm	1.53 sqm
DC13	D53	840 mm	2050 mm	0.00 sqm	1.53 sqm
DC14	D53	840 mm	2050 mm	0.00 sqm	1.53 sqm
DC15	D53	840 mm	2050 mm	0.00 sqm	1.53 sqm
DC16	D53	840 mm	2050 mm	0.00 sqm	1.53 sqm
DC17	D53	840 mm	2050 mm	0.00 sqm	1.53 sqm

ID	MODEL	WIDTH mm	HEIGHT mm	GLAZED AREA sqm	VENTILATION AREA sqm
WC01	W100	1000 mm	2000 mm	1.60 sqm	1.34 sqm
WC02	W100	1000 mm	2000 mm	1.60 sqm	1.34 sqm
WC03	W144R	2000 mm	2000 mm	3.43 sqm	1.34 sqm
WC04	W144	2000 mm	2000 mm	3.43 sqm	1.34 sqm
WC05	W141	1400 mm	2000 mm	2.33 sqm	0.94 sqm
WC06	W141	1400 mm	2000 mm	2.33 sqm	0.94 sqm
WC07	W144	2000 mm	2000 mm	3.43 sqm	1.34 sqm
WC08	W25	600 mm	2000 mm	1.07 sqm	0.00 sqm
WC09	W25	600 mm	2000 mm	1.07 sqm	0.00 sqm
WC10	W14R	1800 mm	600 mm	0.88 sqm	0.37 sqm
WC11	W122	600 mm	600 mm	0.25 sqm	0.36 sqm
WC12	W5P	1350 mm	2000 mm	2.23 sqm	0.90 sqm
WC13	W5P	1350 mm	2000 mm	2.23 sqm	0.90 sqm
WC14	W100	1000 mm	2000 mm	1.60 sqm	1.34 sqm
WC15	W144R	2000 mm	2000 mm	3.43 sqm	1.34 sqm
WC16	W144	2000 mm	2000 mm	3.43 sqm	1.34 sqm



Scale: 1:100



Scale: 1:100

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Notes

1. CORRUGATED COLORSTEEL CLADDING
2. COLOURSTEEL GUTTER & FASCIA
3. INTEGRA PLASTER
4. DOUBLE GLAZED ALUMINIUM FRAMED WINDOWS & DOORS
5. AUSTRAL BRICK SCHIST VENEER CLADDING

Notes

1. COLORSTEEL CORRUGATED ON H12 75x45 PURLINS @ 900 crs max WITH THERMAKRAFT 215 BITUMINOUS SELF SUPPORTING ROOFING UNDERLAY.

2. TRUSSES TO BE DESIGNED AND CERTIFIED BY APPROVED MANUFACTURER. TRUSSES @ 900 crs max

3. PURLIN FIXING: 1/10g SELF-DRILLING SCREW 80mm LONG. ALT. FIXING CAPACITY 2.4kN

4. COLORSTEEL GUTTER & FASCIA SYSTEM

5. 4.5mm HARDIEFLEX TO UNDERSIDE OF SOFFIT BEARER WITH PVC JOINTERS

6. DOUBLE 90x45 TOP PLATE
7. USG 23mm METAL CEILING BATTENS DIRECT FIXED TO EACH TRUSS @ 600crs

8. H3.1 GARAGE DOOR REVEAL

9. SECTIONAL GARAGE DOOR & TRACKS

10. GARAGE DOOR REBATE WITH SPONGE FINISH. REFER TO SLAB PLAN FOR REBATE SIZE

11. R3.6 CLASSIC CEILING BATTS (180mm)

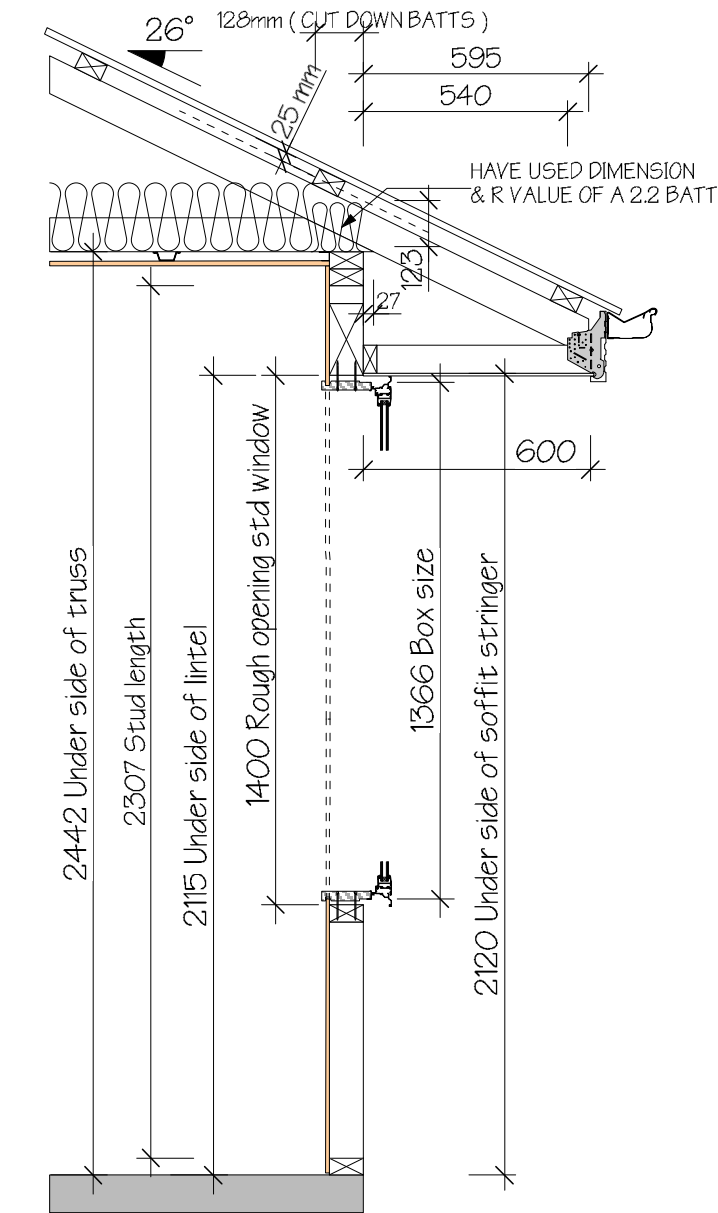
12. 10 mm GIBRALTER BOARD LINING TO WALLS; GLUE & SCREW FIX (FINISH TO LEVEL 4)
13. DOUBLE GLAZED POWDER COATED ALUMINIUM FRAMED WINDOWS & DOORS WITH H3.1 TIMBER REVEALS

14. H12 90x45 SG8 KILN DRIED LASER FRAME FRAMING. STUDS @ 600crs WITH 7mm H3.2 ECOPLY BARRIER. 2 ROWS OF DWANGS

15. 13 mm GIBRALTER BOARD LINING TO CEILING. GLUE & SCREW FIX (FINISH TO LEVEL 4)

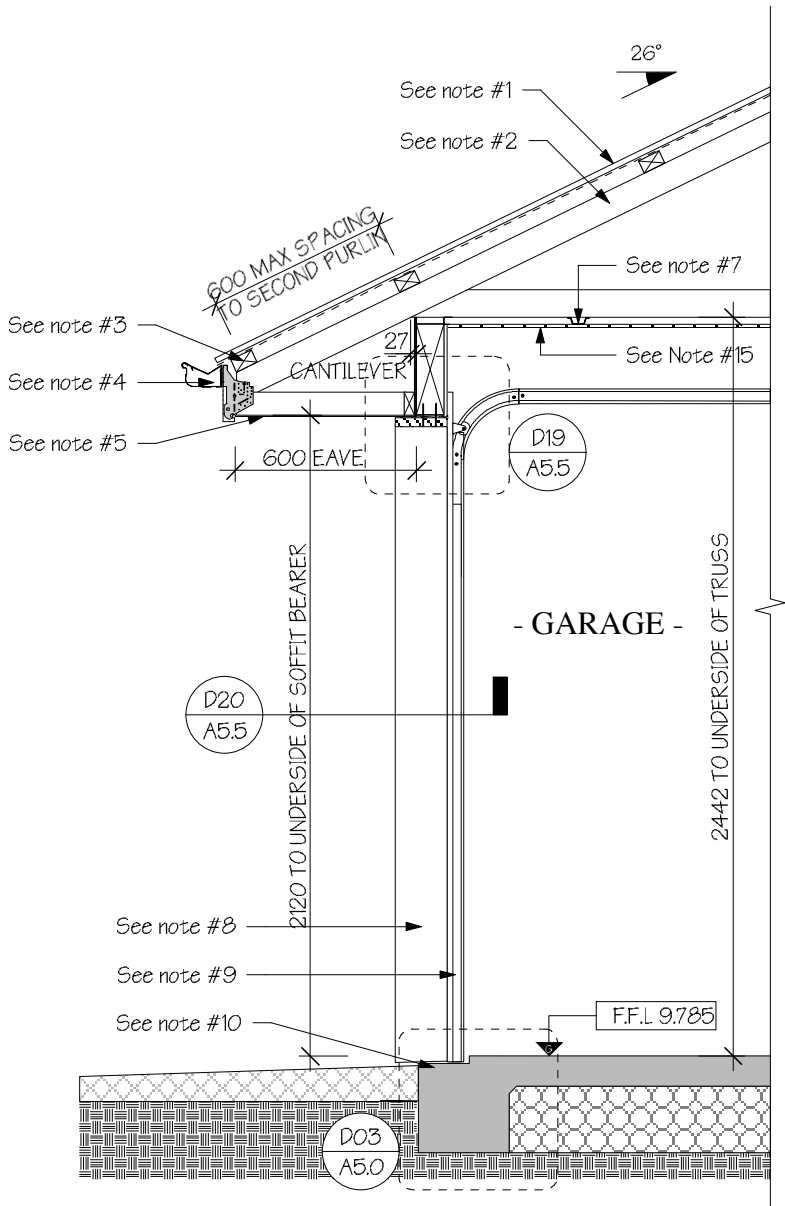
16. 80mm AUSTRAL DESIGNA SCHIST BRICK, MORTAR JOINTS 7-13mm RECOMMENDED 10mm. 115mm BRICK TIES @ 600 CRS HORIZONTALLY.

17. ANTI-SLIP FINISH COMPLIANT WITH NZBC D1/A51: TABLE 2 TO ENTRY PATH

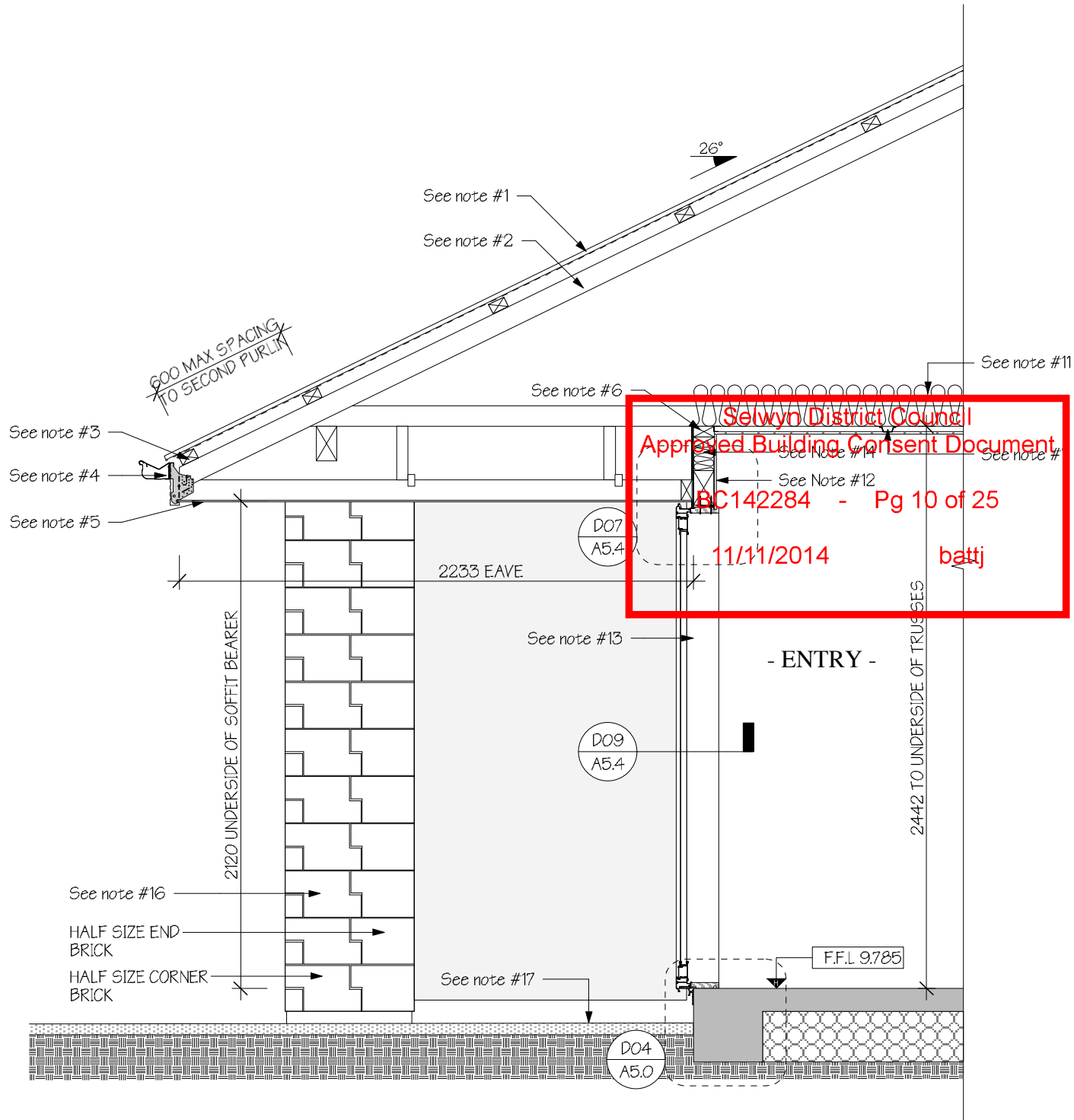


2442 FRAME HT
METAL ROOF

Scale: 1:20 METAL BATTENS



A - A CROSS SECTION
GARAGE
Scale 1 : 25



C - C CROSS SECTION
ENTRY
Scale 1 : 25

Notes

1. COLORSTEEL CORRUGATED ON H12 75x45 PURLINS @ 900 crs max WITH THERMAKRAFT 215 BITUMINOUS SELF SUPPORTING ROOFING UNDERLAY.

2. TRUSSES TO BE DESIGNED AND CERTIFIED BY APPROVED MANUFACTURER. TRUSSES @ 900 crs max

3. PURLIN FIXING: 1/10g SELF-DRILLING SCREW 80mm LONG. ALT. FIXING CAPACITY 2.4kN

4. COLORSTEEL GUTTER & FASCIA SYSTEM

5. 4.5mm HARDIEFLEX TO UNDERSIDE OF SOFFIT BEARER WITH PVC JOINTERS
6. R3.6 CLASSIC CEILING BATTS (180mm)

7. USG 23mm METAL CEILING BATTENS DIRECT FIXED TO EACH TRUSS @ 600crs

8. 13 mm GIBRALTER BOARD LINING TO CEILING. GLUE & SCREW FIX (FINISH TO LEVEL 4)

9. H12 90x45 SG8 KILN DRIED LASER FRAME FRAMING. STUDS @ 600crs WITH 7mm H3.2 ECOPLY BARRIER. 2 ROWS OF DWANGS

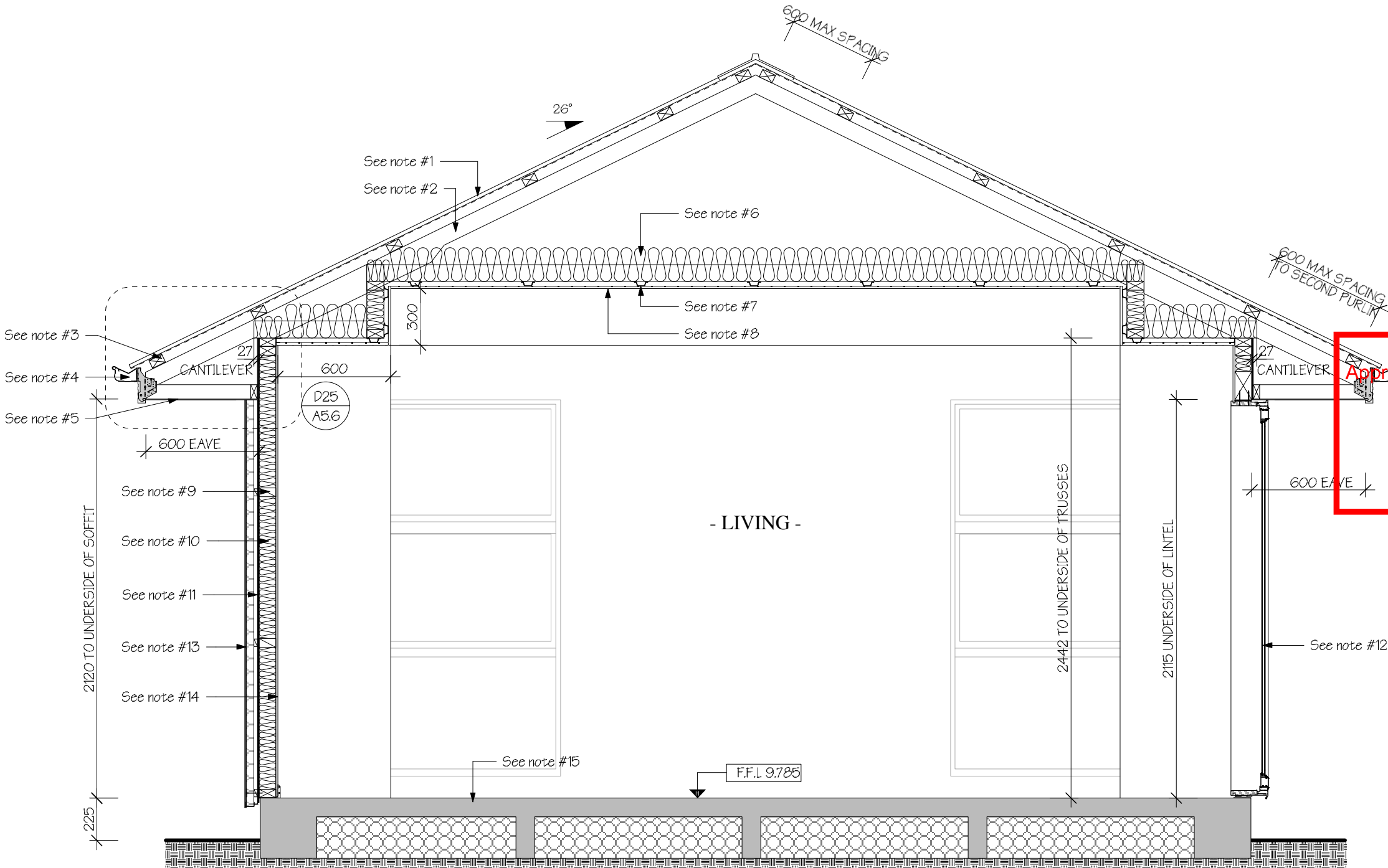
10. R2.6 ULTRA WALL BATTS (90mm)
11. H3.2 7mm ECO PLY BARRIER FIXED WITH GALV FLAT HEAD NAILS @ 150mm crs TO ALL SHEET EDGES AND 300mm crs TO CENTER OF SHEETS. BASE OF SHEET TO OVER HANG SLAB BY 25mm.

12. DOUBLE GLAZED POWDER COATED ALUMINIUM FRAMED WINDOWS & DOORS WITH H3.1 TIMBER REVEALS

13. ROCKCOTE INTEGRA CAVITY PLUS RENDER SYSTEM OVER 50mm INTEGRA PANEL ON 20mm VERTICLE STYRENE BATTENS.

14. 10 mm GIBRALTER BOARD LINING TO WALLS; GLUE & SCREW FIX (FINISH TO LEVEL 4)

15. ENGINEERED FOUNDATION - RIB RAFT - REFER TO ATTACHED ENGINEERED DESIGN FOR DETAILS



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B - B CROSS SECTION
Scale 1 : 25

Notes

1. COLORSTEEL CORRUGATED IRON ON H12 75x45 PURLINS @ 900 crs max WITH THERMAKRAFT 215 BITUMINOUS SELF SUPPORTING ROOFING UNDERLAY.

2. TRUSSES TO BE DESIGNED AND CERTIFIED BY APPROVED MANUFACTURER. TRUSSES @ 900 crs max

3. PURLIN FIXING: 1/10g SELF-DRILLING SCREW 80mm LONG. ALT. FIXING CAPACITY 2.4kN

4. COLORSTEEL GUTTER & FASCIA SYSTEM

5. 4.5mm HARDIEFLEX TO UNDERSIDE OF SOFFIT BEARER WITH PVC JOINTERS
6. 13 mm GIBRALTER BOARD LINING TO CEILING. GLUE & SCREW FIX (FINISH TO LEVEL 4)

7. USG 23mm METAL CEILING BATTENS DIRECT FIXED TO EACH TRUSS @ 600crs

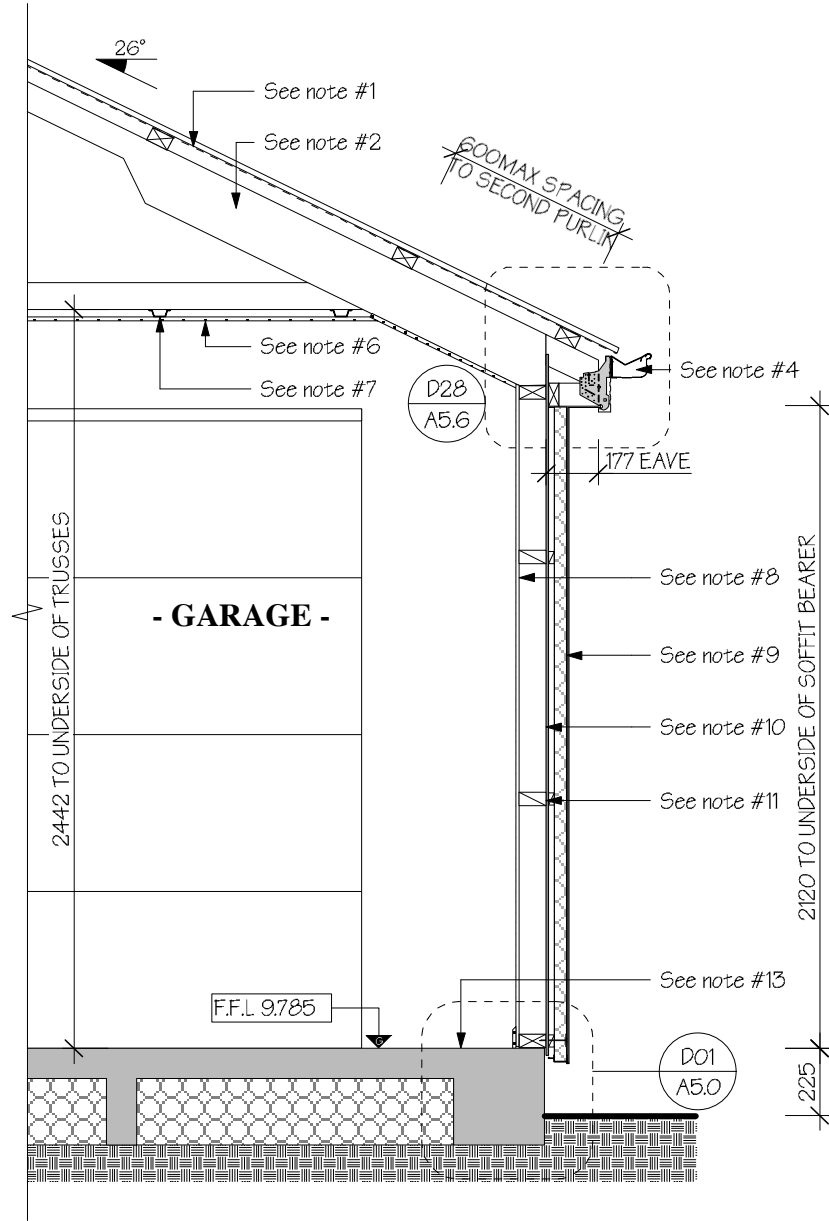
8. 10 mm GIBRALTER BOARD LINING TO WALLS; GLUE & SCREW FIX (FINISH TO LEVEL 4)

9. ROCKCOTE INTEGRA CAVITY PLUS RENDER SYSTEM OVER 50mm INTEGRA PANEL ON 20mm VERTICLE STYRENE BATTENS.

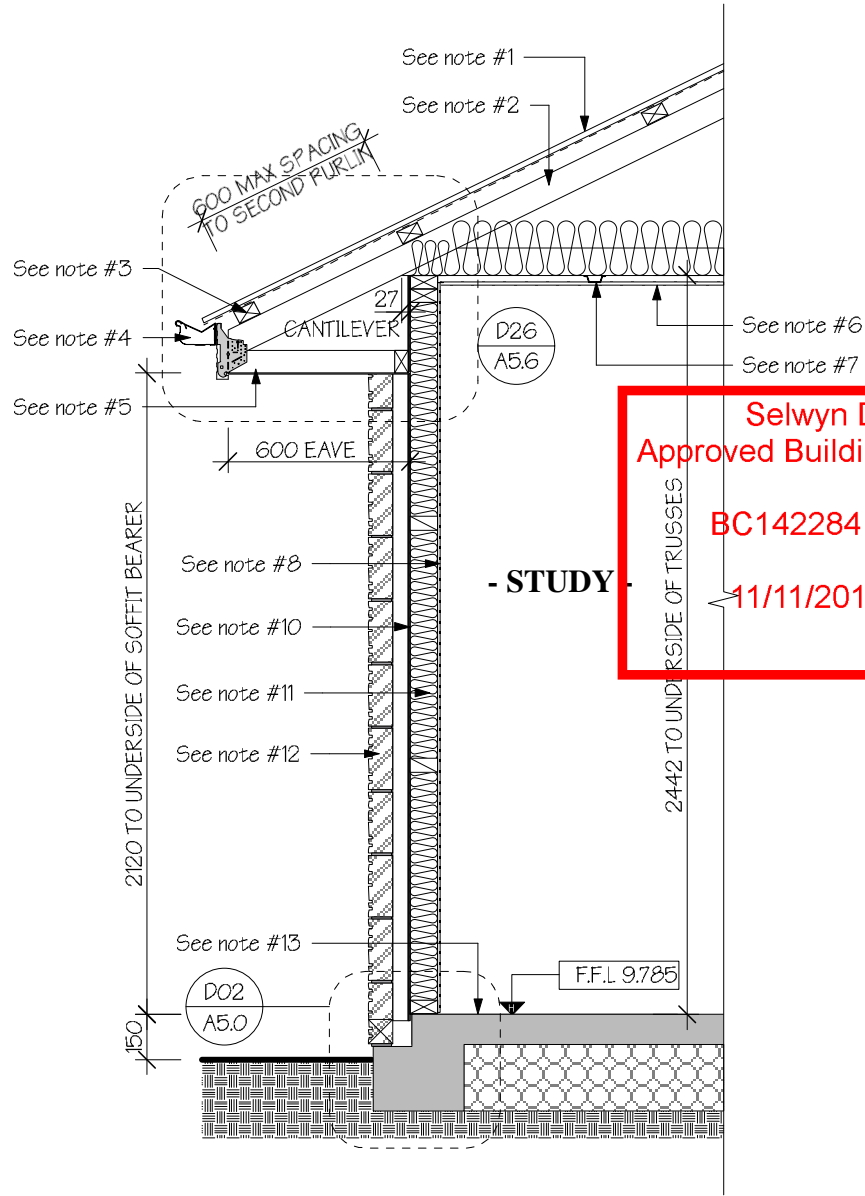
10. H3.2 7mm ECO PLY BARRIER FIXED WITH GALV FLAT HEAD NAILS @ 150mm crs TO ALL SHEET EDGES AND 300mm crs TO CENTER OF SHEETS. BASE OF SHEET TO OVER HANG SLAB BY 25mm.
11. H1.2 90x45 SG8 KILN DRIED LASER FRAME FRAMING. STUDS @ 600crs WITH 7mm H3.2 ECOPLY BARRIER. 2 ROWS OF DWANGS

12. 80mm AUSTRAL DESIGNA SCHIST BRICK, MORTAR JOINTS 7-13mm RECOMMENDED 10mm. 115mm BRICK TIES @ 600 CRS HORIZONTALLY.

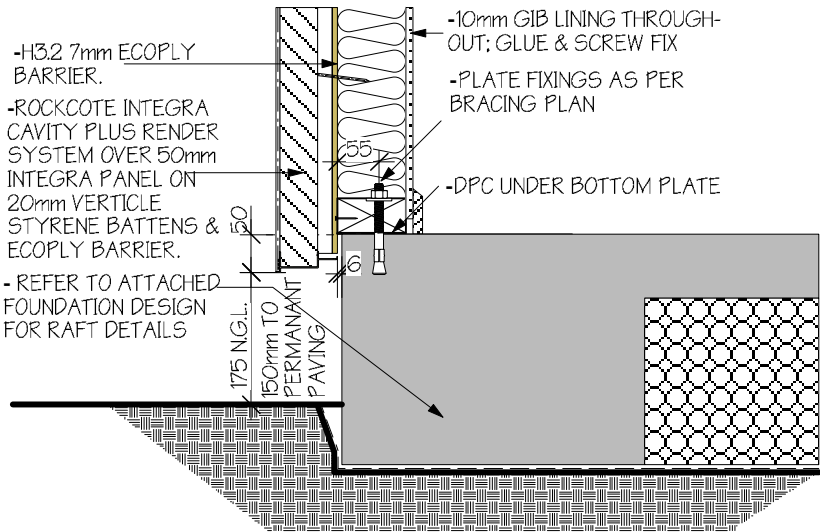
13. ENGINEERED FOUNDATION - RIB RAFT - REFER TO ATTACHED ENGINEERED DESIGN FOR DETAILS



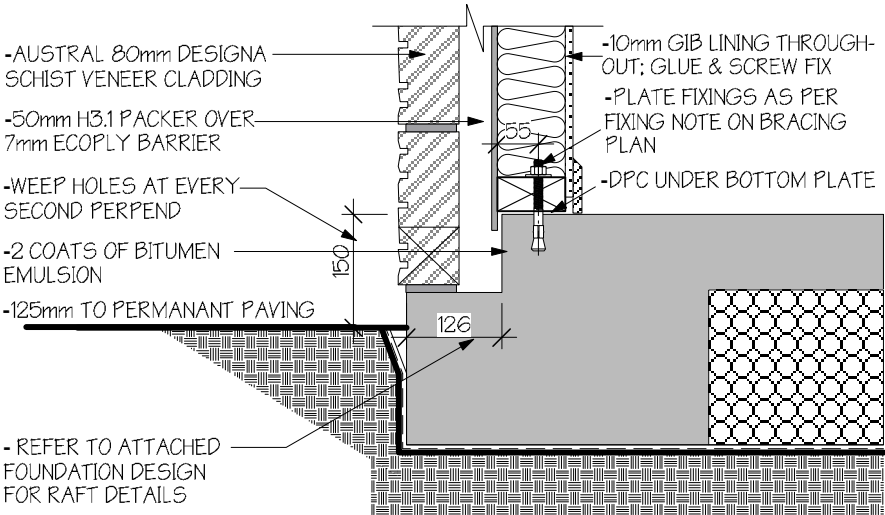
D - D CROSS SECTION
COVE MEMBER
Scale 1 : 25



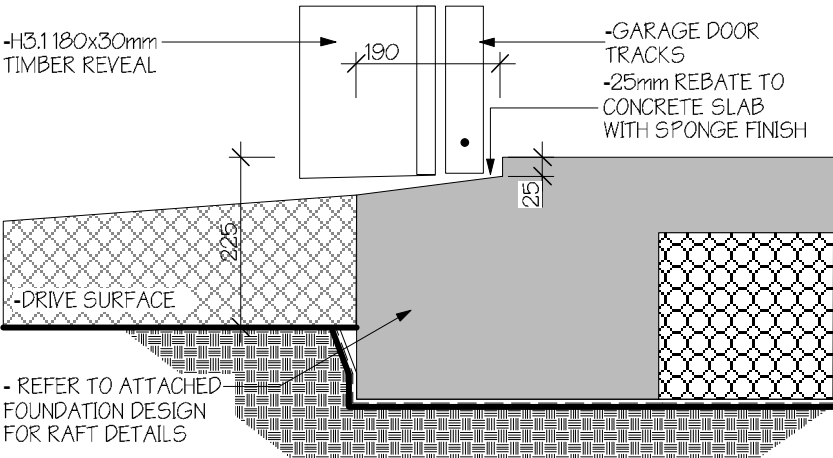
E - E CROSS SECTION
Scale 1 : 25



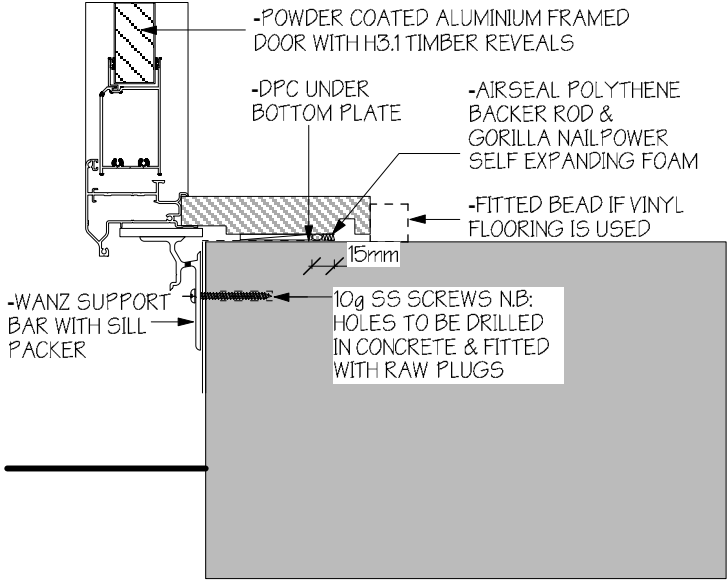
D01
A4.2
INTEGRA FOUNDATION
Scale: 1:10



D02
A4.2
SCHIST VENEER FOUNDATION*
Scale: 1:10

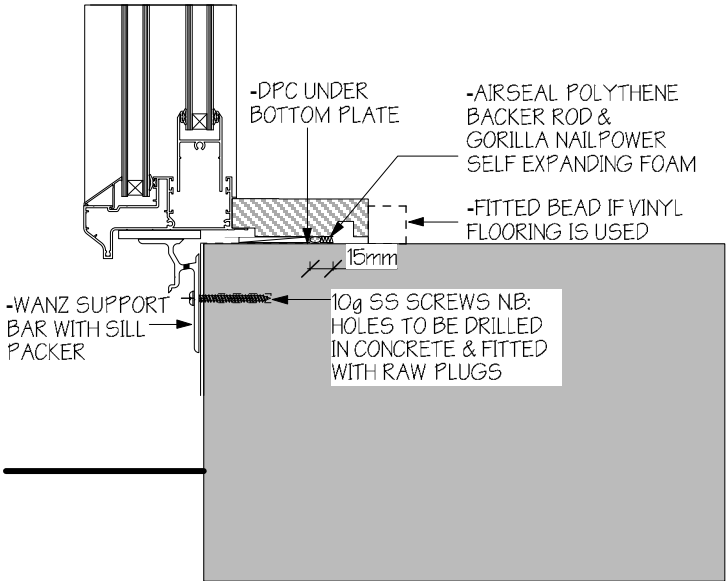


D03
A4.0
GARAGE DOOR REBATE
Scale: 1:10



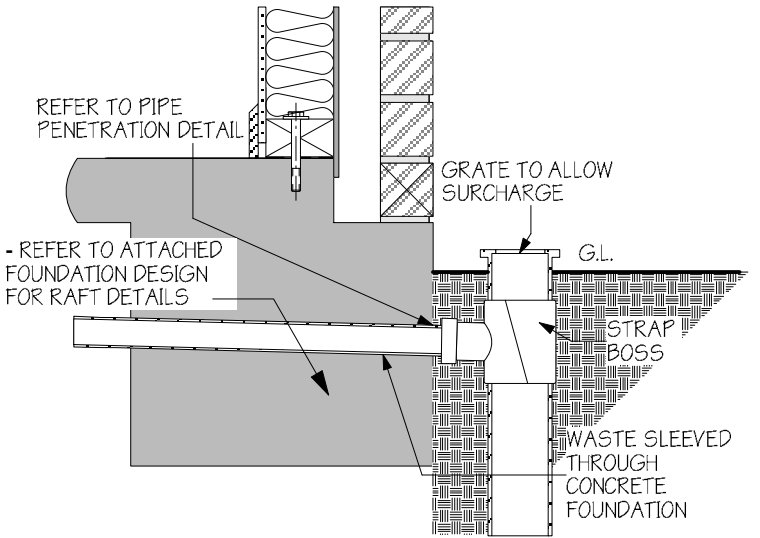
NOTE:
-FIXING OF SUPPORT BAR TO STRUCTURE, USE 10g SS SCREWS IN RAW PLUGS

D04
A4.0
ENTRY DOOR SILL *
Scale: 1:5



NOTE:
-FIXING OF SUPPORT BAR TO STRUCTURE, USE 10g SS SCREWS IN RAW PLUGS

D05
A3.0
SLIDING DOOR SILL *
Scale: 1:5

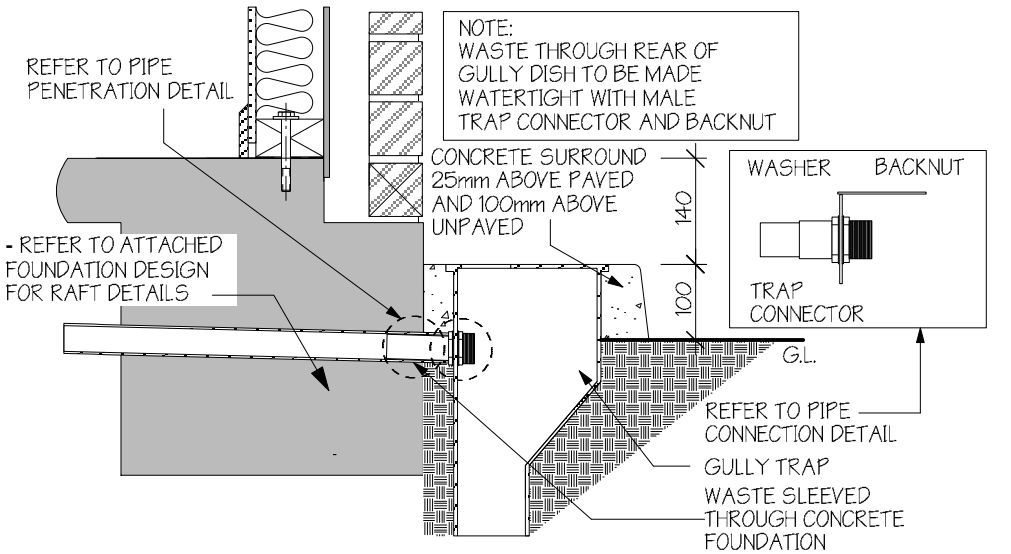


**WASTE DISCHARGING *
TO SINGLE GULLY**
Scale: 1:10

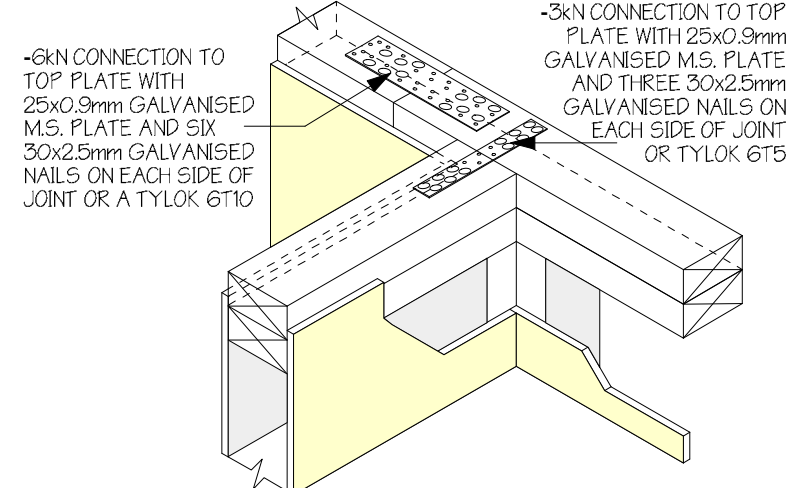
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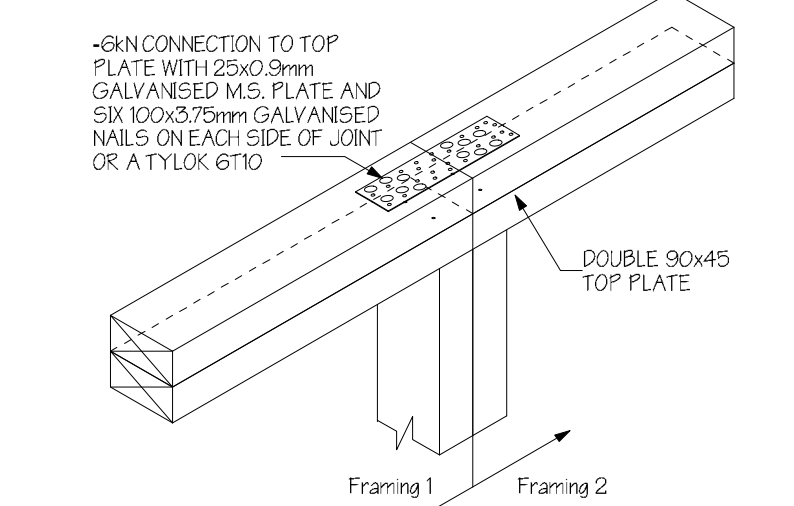
WASTE DISCHARGING TO REAR OF GULLY*
Scale: 1:10



-THE TOP PLATE OF A WALL THAT CONTAINS ONE OR MORE WALL BRACING ELEMENTS SHALL BE JOINTED ACCORDING TO THE RATING OF THE HIGHEST RATED INDIVIDUAL WALL BRACING ELEMENT AS FOLLOWS:
A) RATING NOT EXCEEDING 100 BRACING UNITS: A 3kN CONNECTION AS SHOWN OR BY AN ALTERNATIVE FIXING OF 3kN CAPACITY IN TENSION OR COMPRESSION ALONG THE PLATE;
B) RATING EXCEEDING 100 BRACING UNITS: A 6kN CONNECTION AS SHOWN OR BY AN ALTERNATIVE FIXING OF 6kN CAPACITY TENSION OR COMPRESSION ALONG THE PLATE.

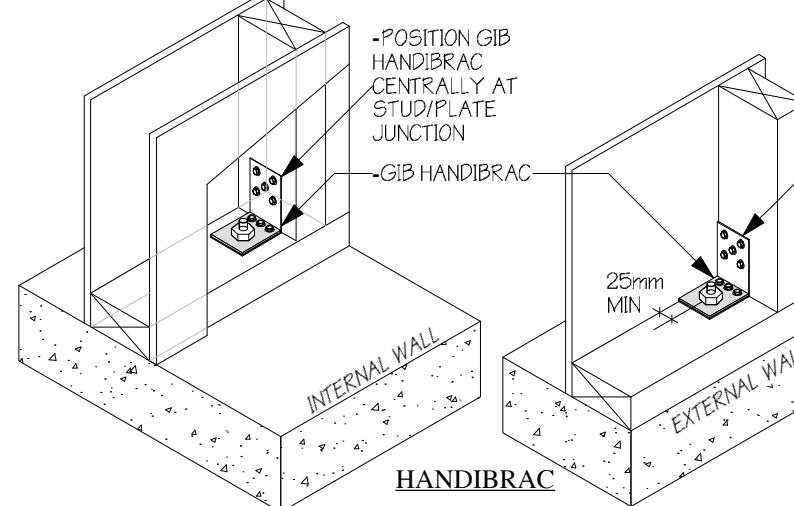
TOP PLATE CONNECTIONS

Scale: N / A



TOP PLATE TO STUD CONNECTION

Scale: 1:10

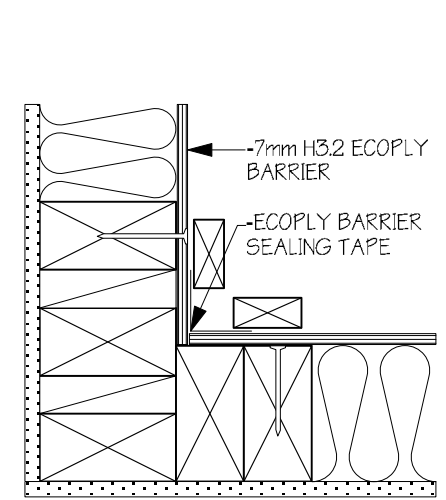


*HOLD DOWN FASTENER REQUIREMENTS: 10x140mm HILTI HUS-H SCREW WITH 8x TEK SCREWS (8mm AF). HILTI HUS-H SCREWS ACHIEVING THE MINIMUM UPLIFT CAPACITY OF 15kN. NOTE: FOR EP BRACING: EPB1, EPBG, BL1-H, BLG-H & BLP-H ONLY

PANEL HOLD DOWN: INTERNAL / EXTERNAL WALL

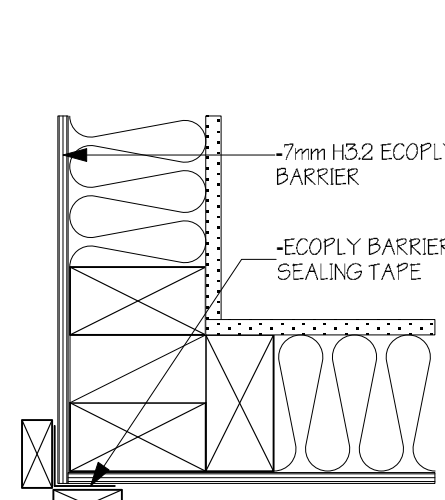
Scale: N / A

HORNCastle HOMES LTD.



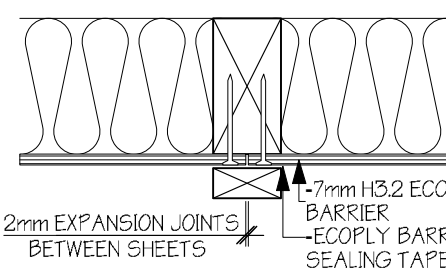
ECOPLY INT. CNR

Scale: 1:5



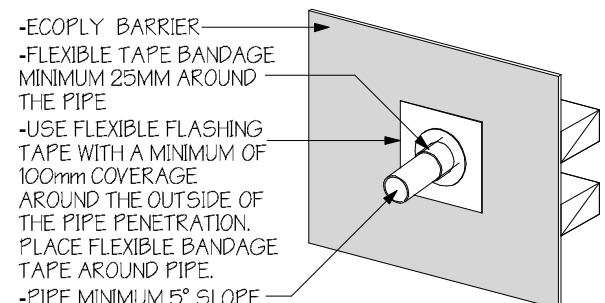
ECOPLY EXT. CNR

Scale: 1:5



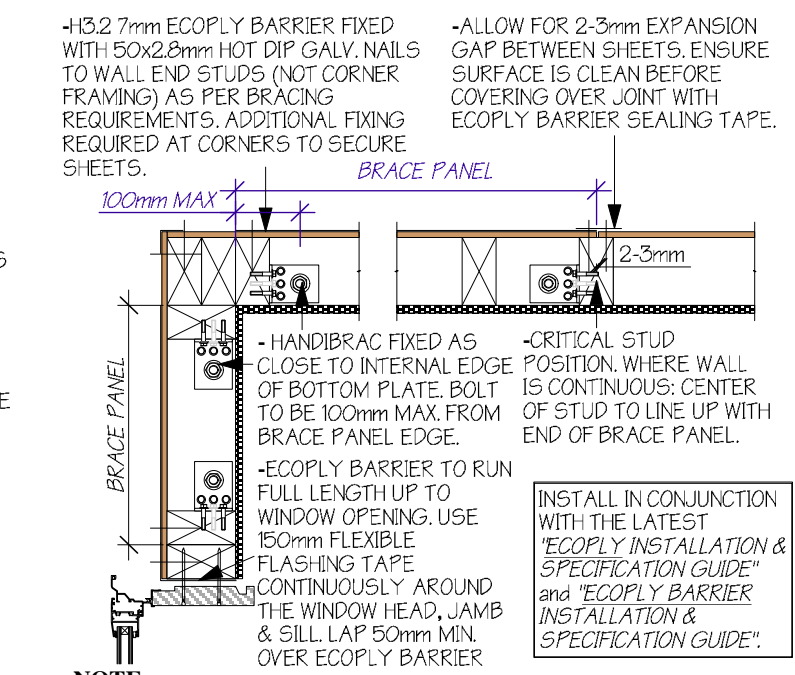
ECOPLY VERT. JNT.

Scale: 1:5



GENERAL PIPE PENETRATION

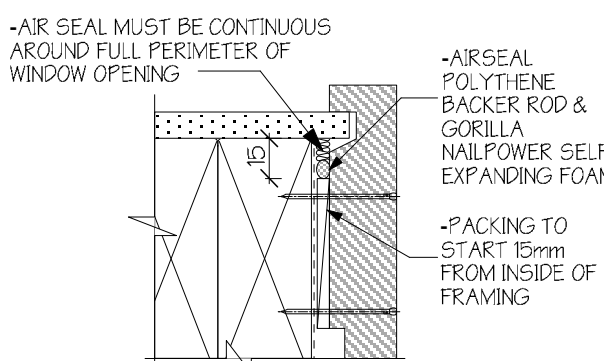
Scale: 1:10



NOTE:
AT WINDOW/ DOOR OPENINGS, BRACE PANELS TO BE MEASURED 45mm SHORT OF WINDOW/ DOOR OPENING. 1200mm ECOPLY BARRIER SHEET LENGTH = 1110mm MAXIMUM BRACE PANEL LENGTH AT EXT. CORNERS.

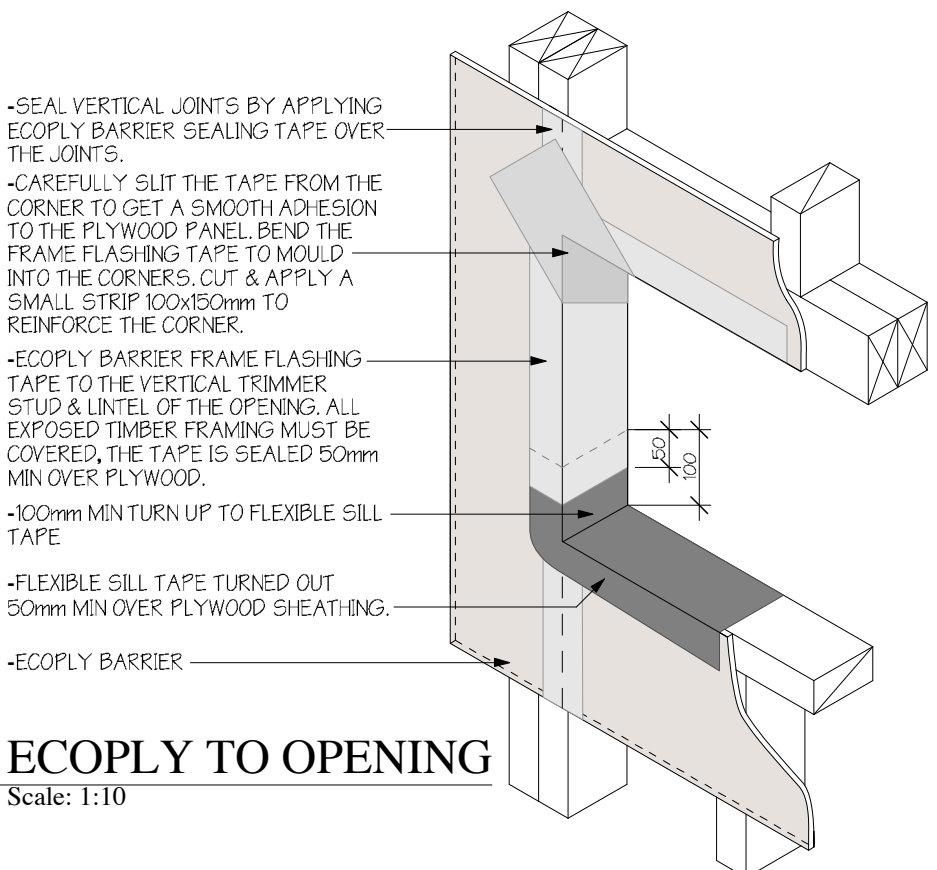
ECOPLY BARRIER DETAIL

Scale: Actual Size



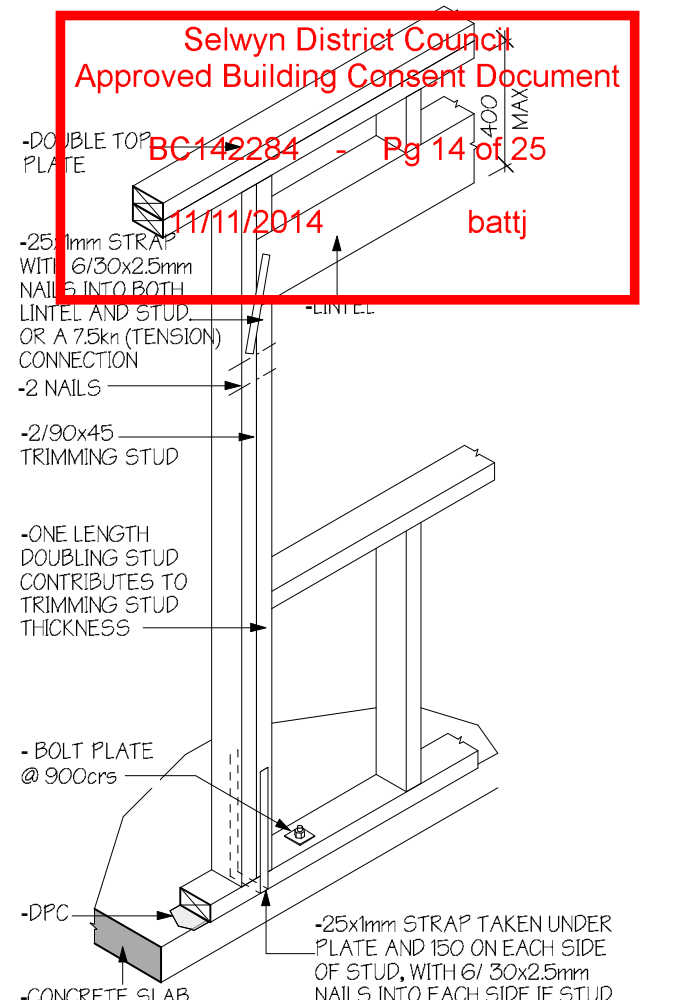
AIR SEAL DETAIL*

N.T.S



ECOPLY TO OPENING

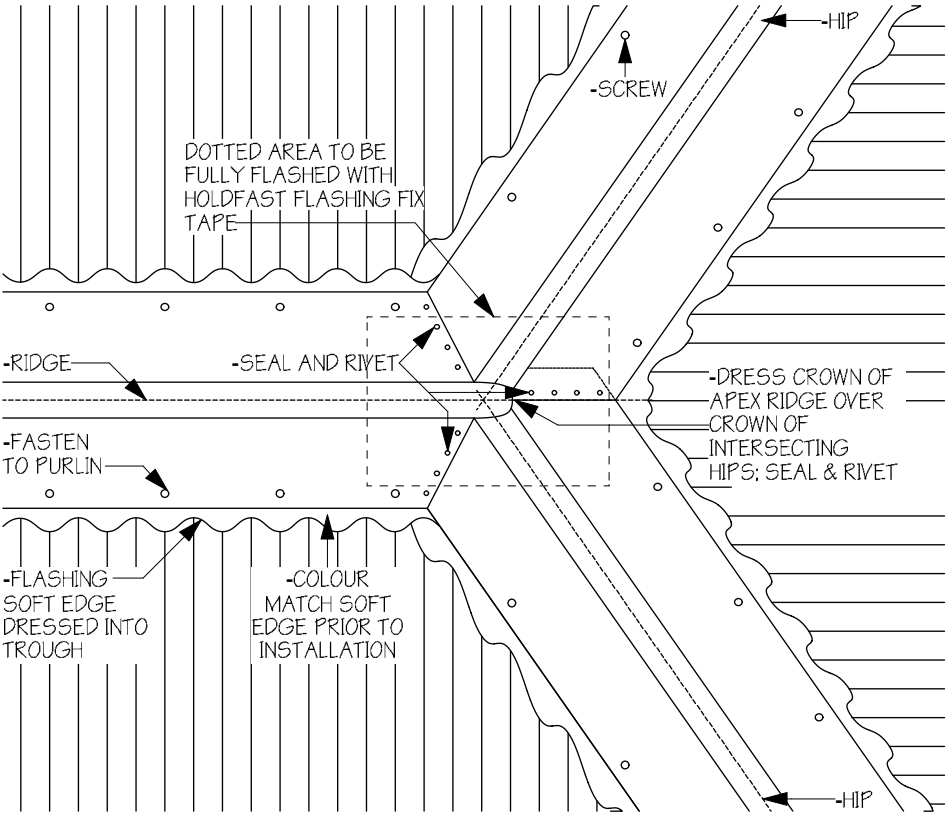
Scale: 1:10



LINTEL FIXING 2442 FRAME ht

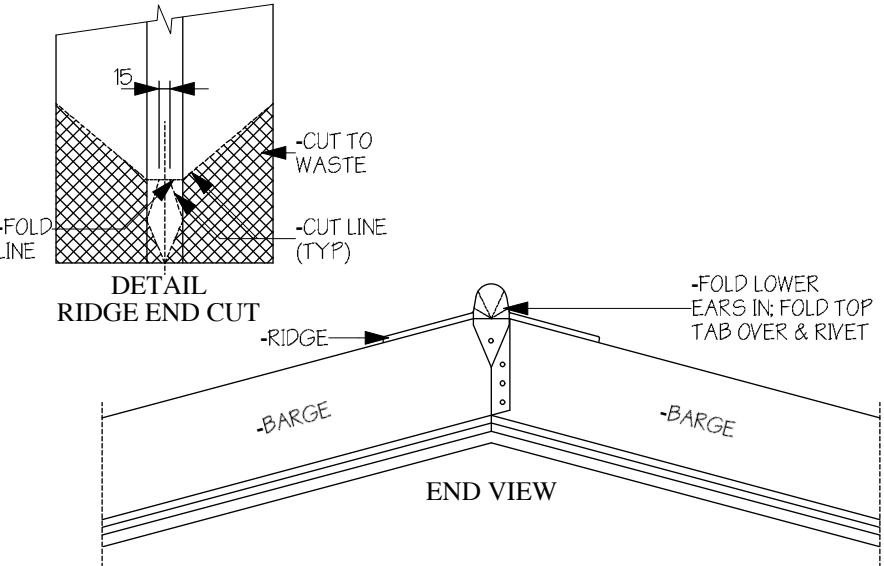
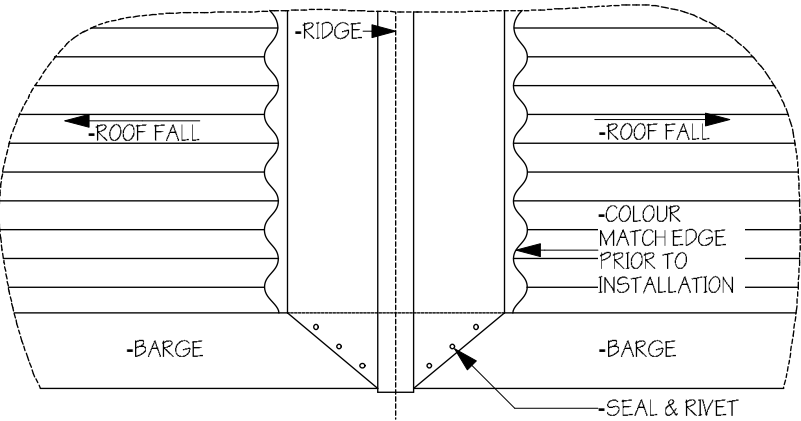
Scale: 1:10

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LONGRUN HIP

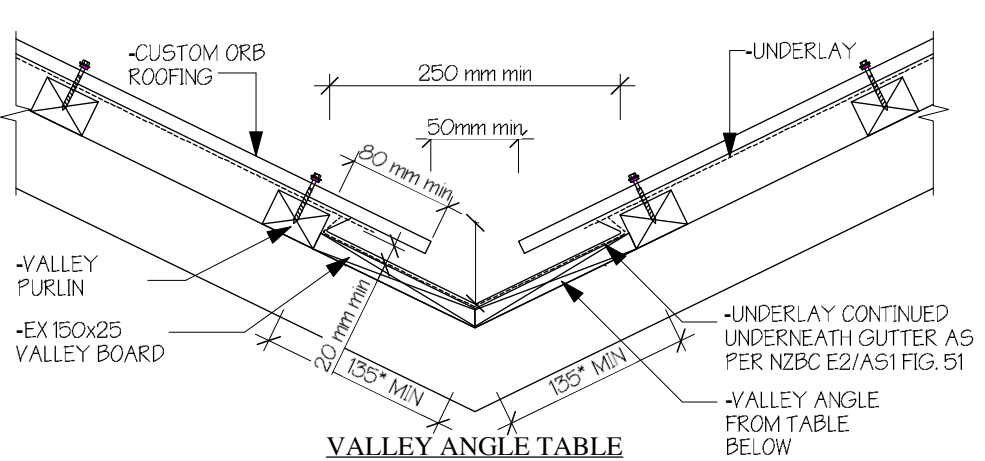
Scale: 1:10



LONGRUN RIDGE END

Scale: 1:10

HORNCastle HOMES LTD.



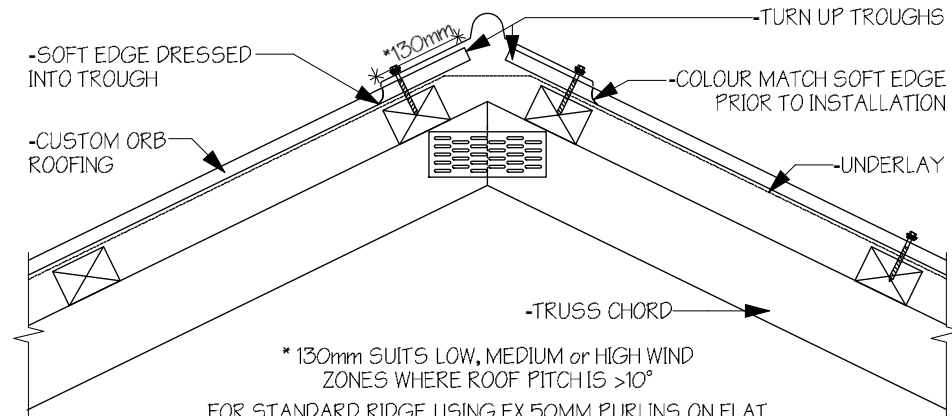
VALLEY ANGLE TABLE

ROOF PITCH	5	10	15	20	25	30	35	45	60
VALLEY ANGLE	173	166	159	152	145	139	132	120	104

NOTE: *DIMENSIONS SUITABLE FOR 25M<CATCHMENT AT 12°. FOR LARGER CATCHMENTS OR LOWER PITCHES DESIGN AS FOR INTERNAL GUTTER.

LONGRUN VALLEY

Scale: 1:10

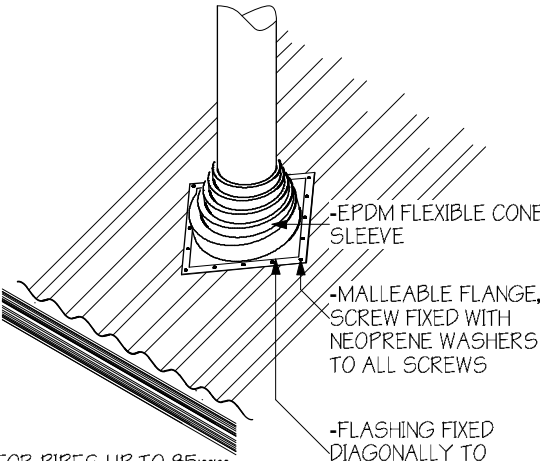


* 130mm SUITS LOW, MEDIUM or HIGH WIND ZONES WHERE ROOF PITCH IS >10°

FOR STANDARD RIDGE USING EX 50MM PURLINS ON FLAT

LONGRUN RIDGE

Scale: 1:10

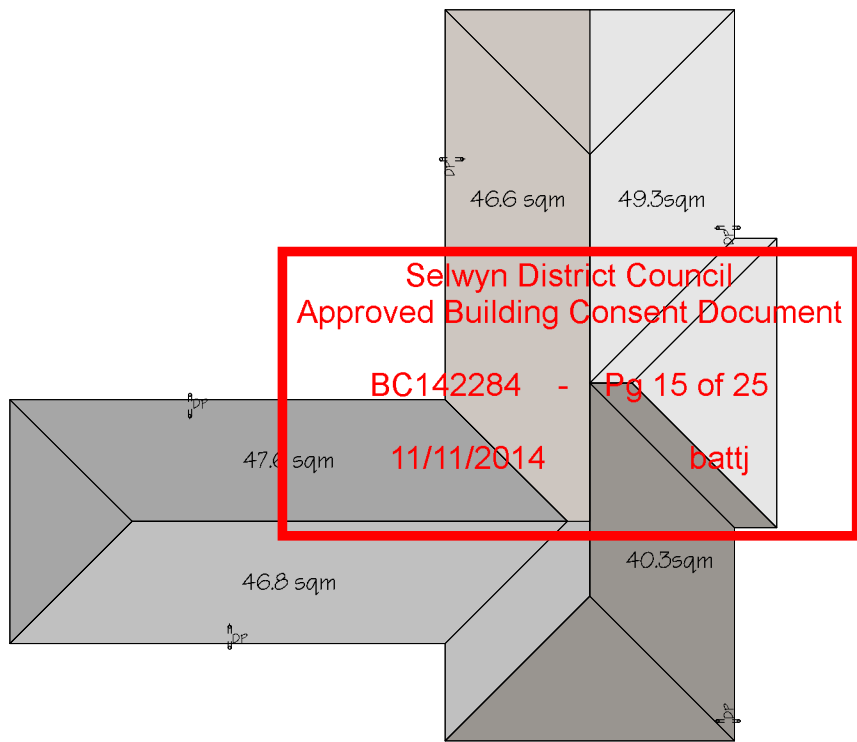


NOTE:
-SUITABLE FOR PIPES UP TO 85mm
-45° MAX ROOF PITCH, 10° MIN ROOF PITCH IF BASE OF FLANGE COVERS ONE OR MORE COMPLETE TROUGHS.

FLASHING FOR SMALL PIPES

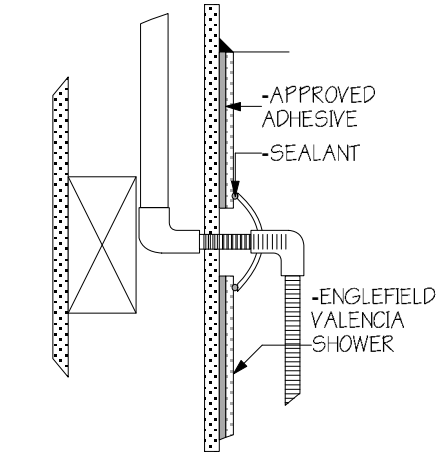
Scale: 1:10

D06
A3.0

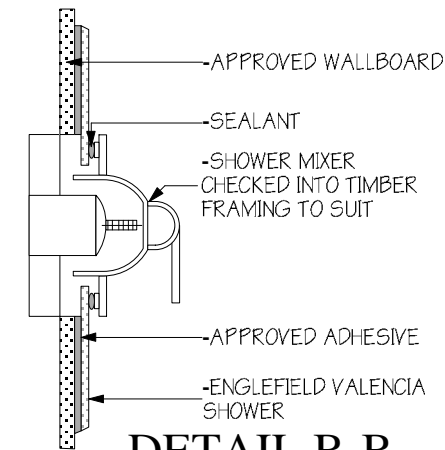


ROOF AREA PER DOWNPIPE PLAN 1 : 200

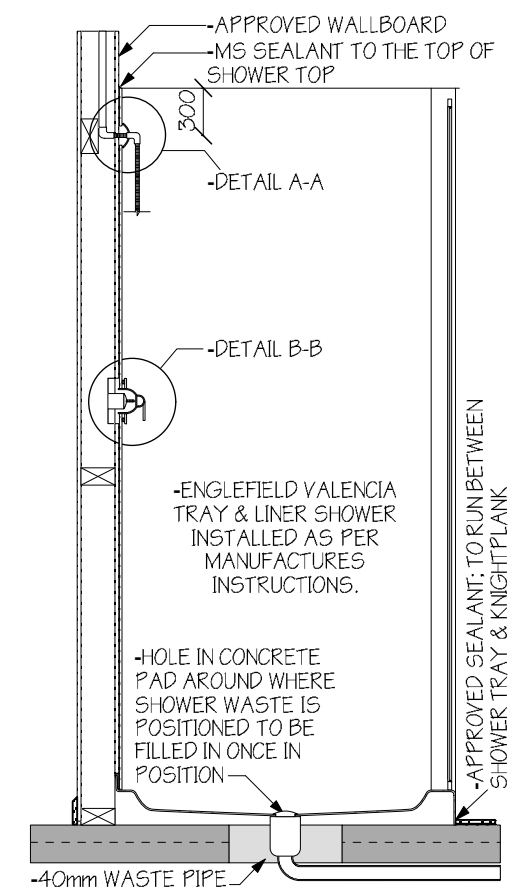
NOTE:
-EACH 65MM DIA. ROUND UPVC DOWNPIPE TAKING A MAX. PLAN ROOF AREA OF 509SQM.
-GUTTER TAKING A MAX. CROSS SECTIONAL AREA OF 7000SQM IN ACCORDANCE WITH E1/AS1 TABLE 5 AND FIGURE 15.



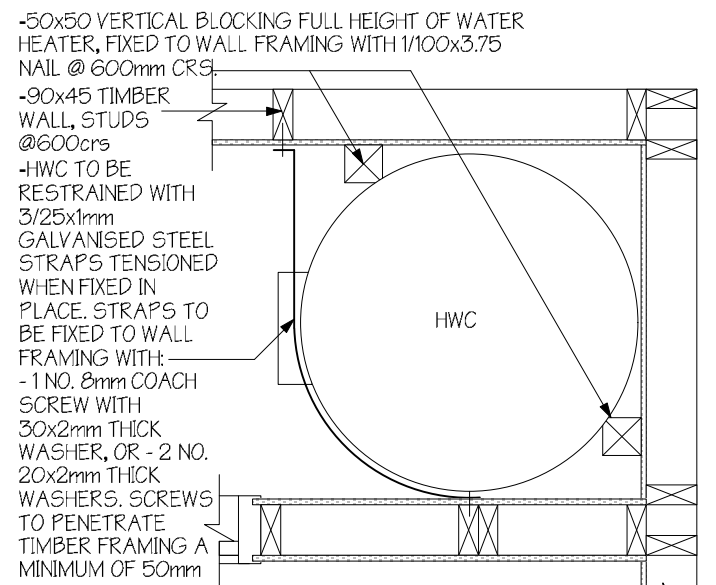
DETAIL A-A
Scale: 1:5



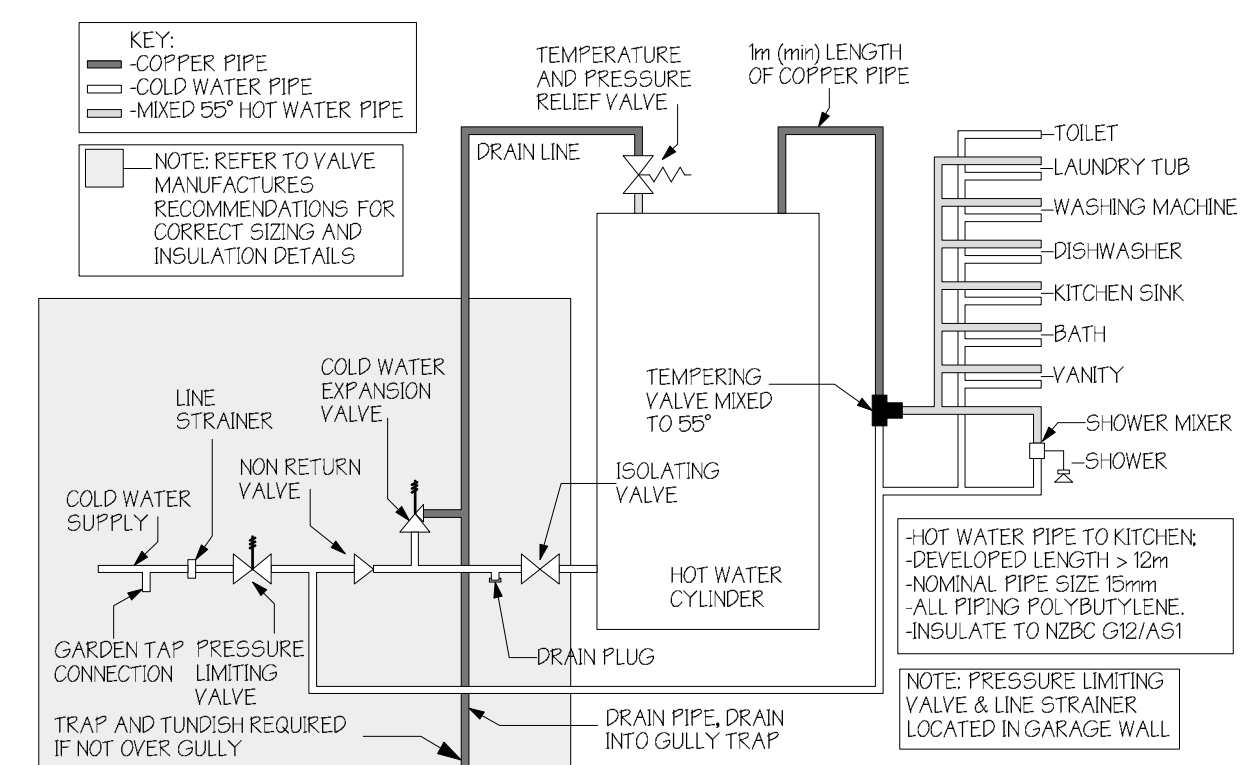
DETAIL B-B
Scale: 1:5



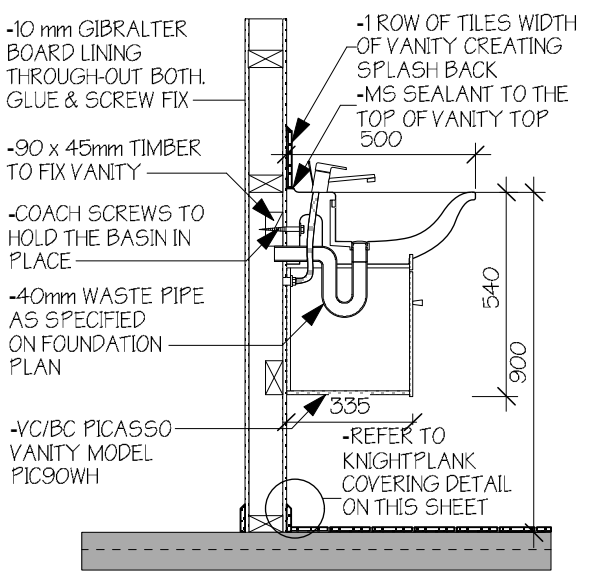
SHOWER CROSS SECTION
Scale: 1:20



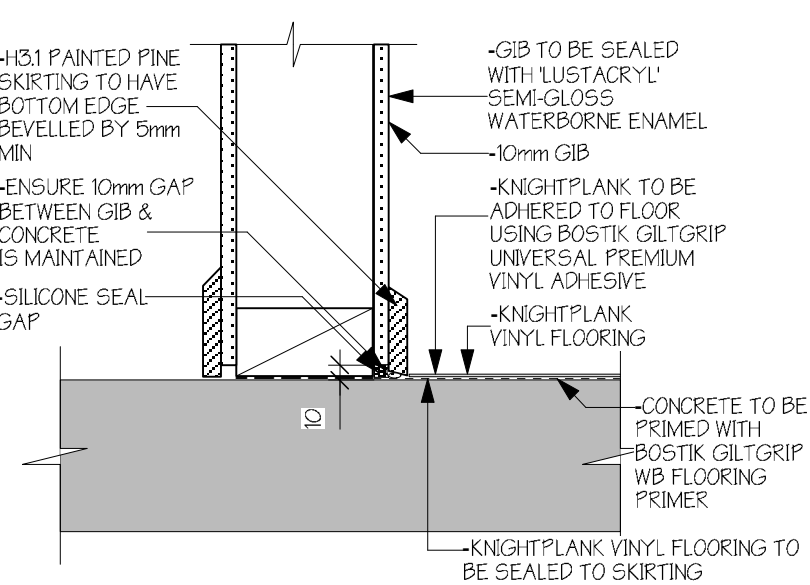
H.W.C. RESTRAINT
Scale: 1:10



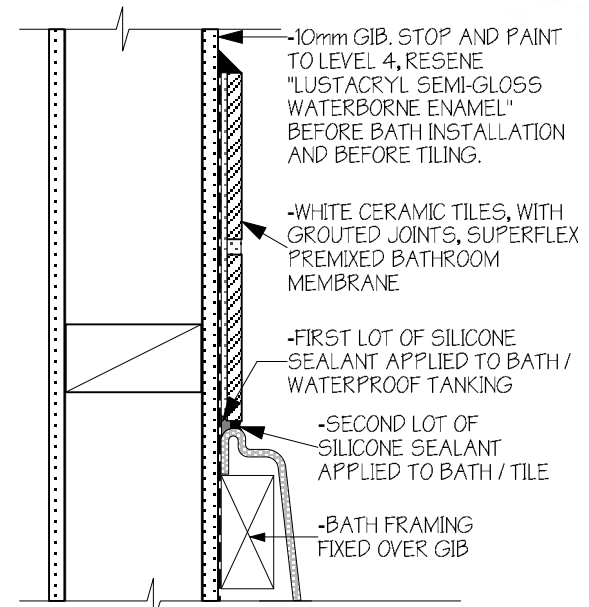
TYPICAL MAINS PRESSURE INSTALLATION
Scale: 1:20



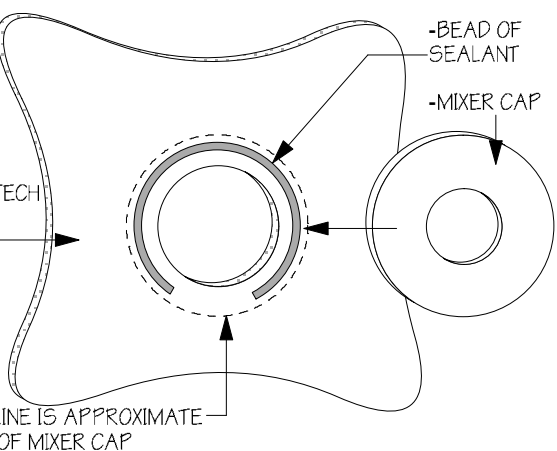
VANITY CROSS SECTION
Scale: 1:20



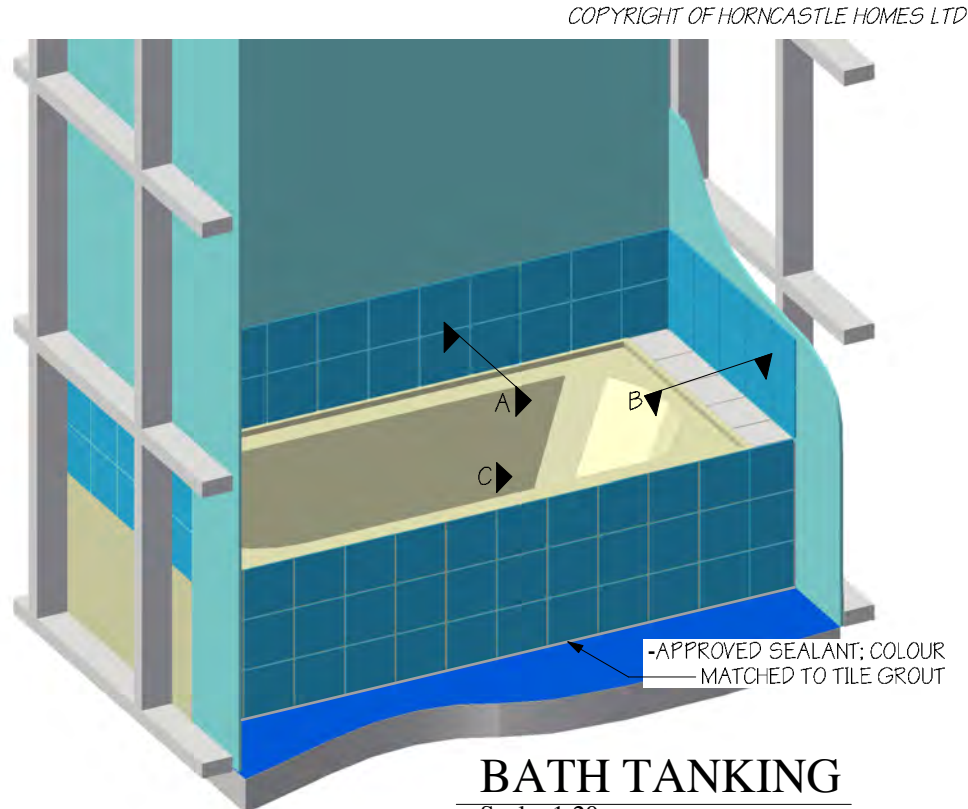
KNIGHT PLANK TO WALL JOINT
Scale: 1:5



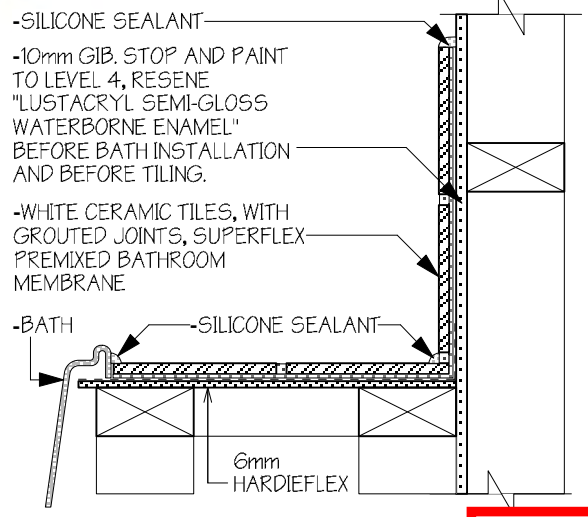
BATH TO WALL JUNCTION
Scale: 1:5



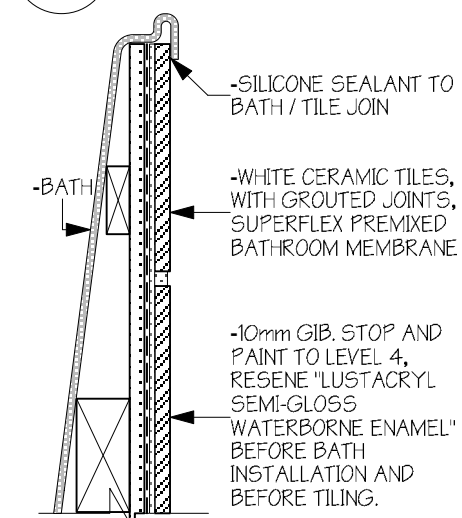
MIXER CAP
Scale: 1:5



BATH TANKING
Scale: 1:20

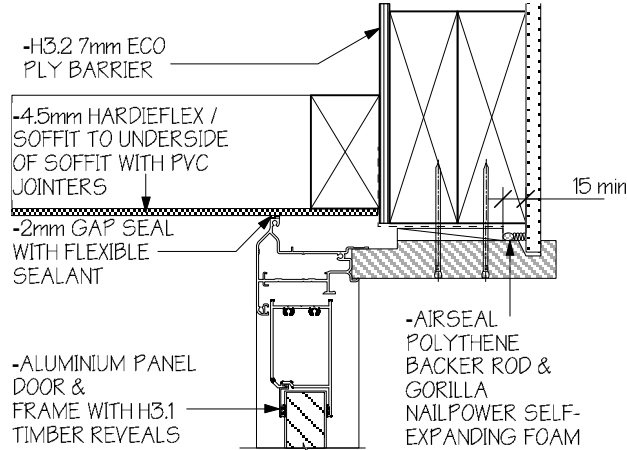


END OF BATH
Scale: 1:5



BATH TILE EDGE
Scale: 1:5

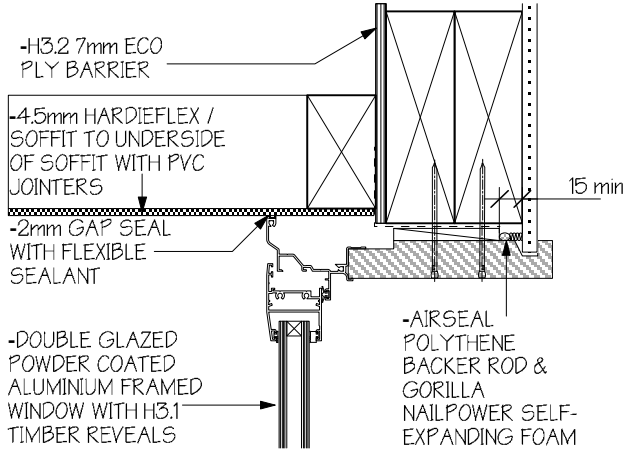
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D07
A4.0

ENTRY DOOR HEAD*

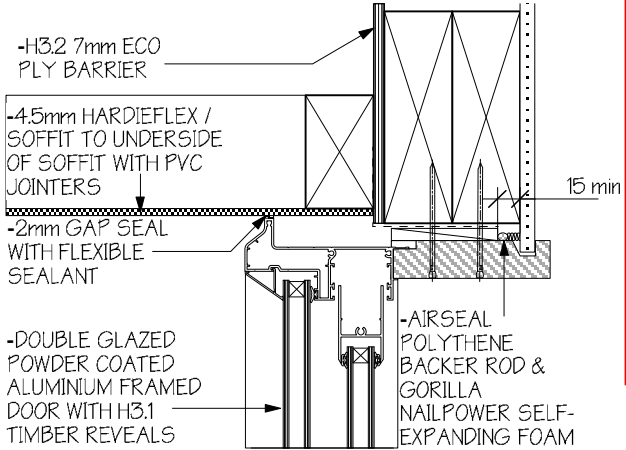
Scale: 1:5



D10
A3.0

WINDOW HEAD*

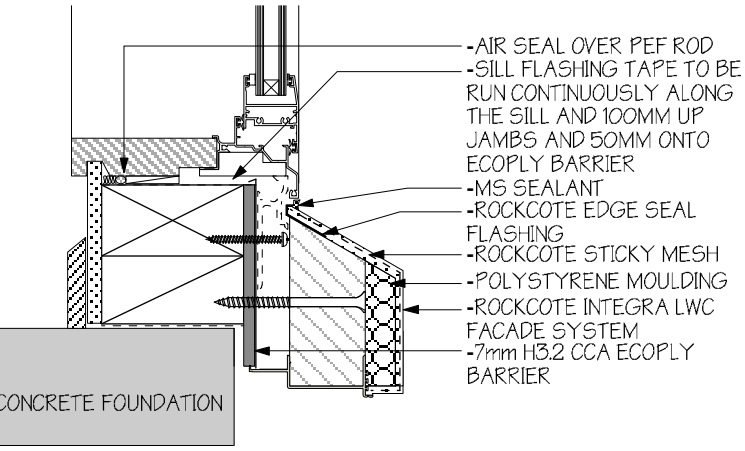
Scale: 1:5



D13
A3.0

SLIDING DOOR HEAD*

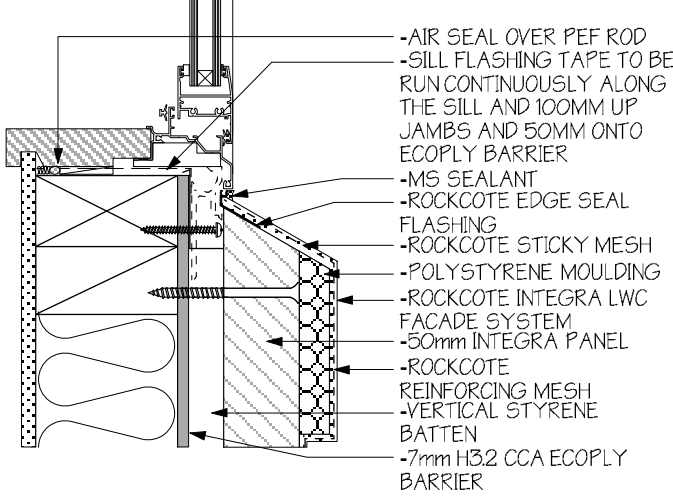
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D08
A3.0

ROCKCOTE WINDOW SILL

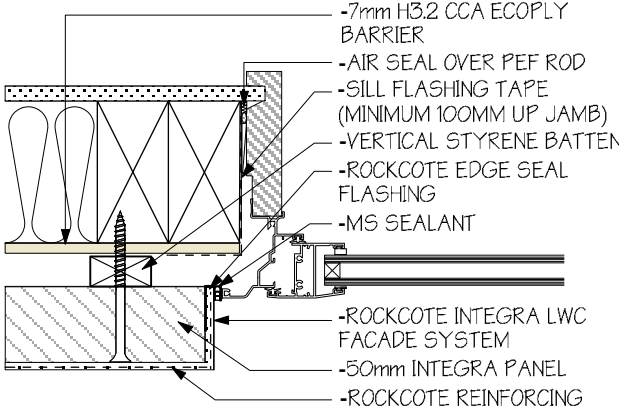
Scale: 1:5



D11
A3.0

ROCKCOTE WINDOW SILL

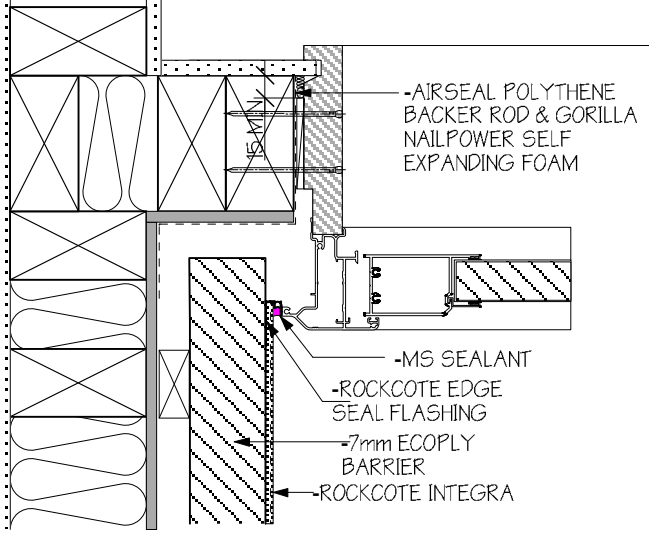
Scale: 1:5



D14
A3.0

ROCKCOTE WINDOW JAMB

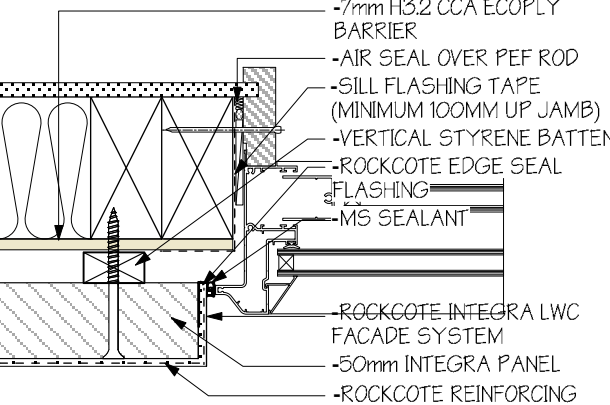
Scale: 1:5



D09
A4.0

ENTRY DOOR JAMB *

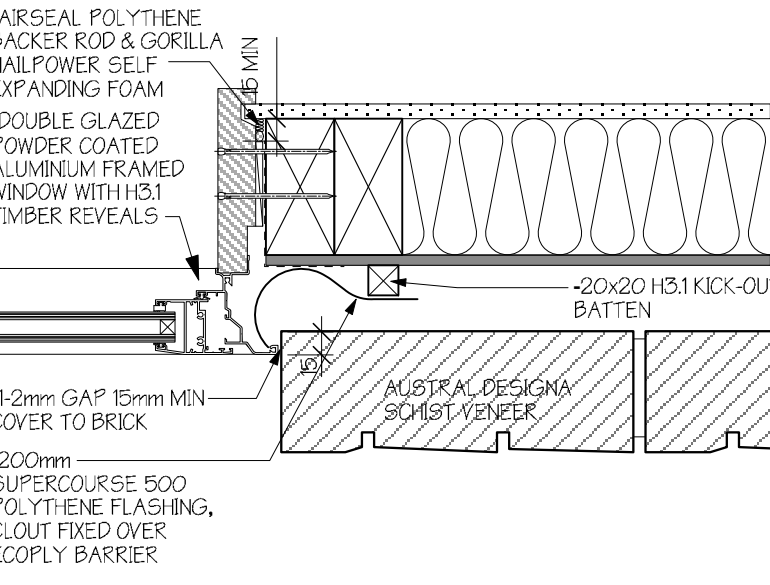
Scale: 1:5



D12
A3.0

SLIDING DOOR JAMB

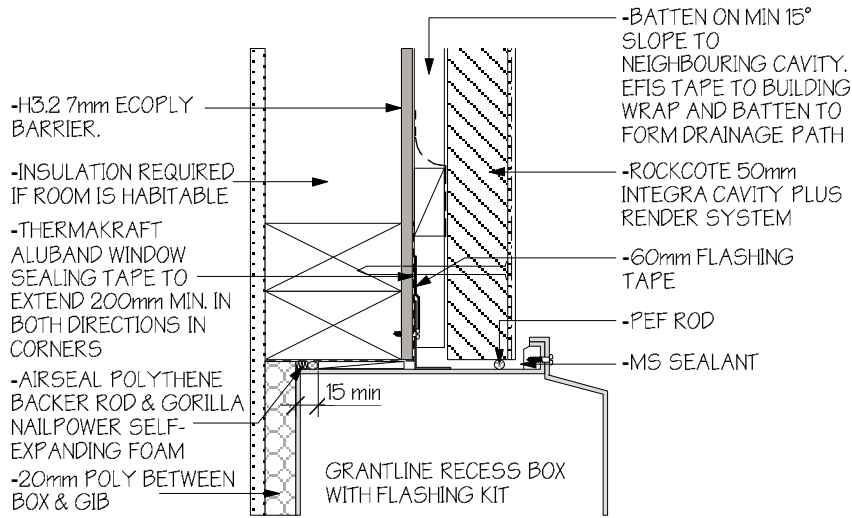
Scale: 1:5



D15
A3.0

SCHIST WINDOW JAMB*

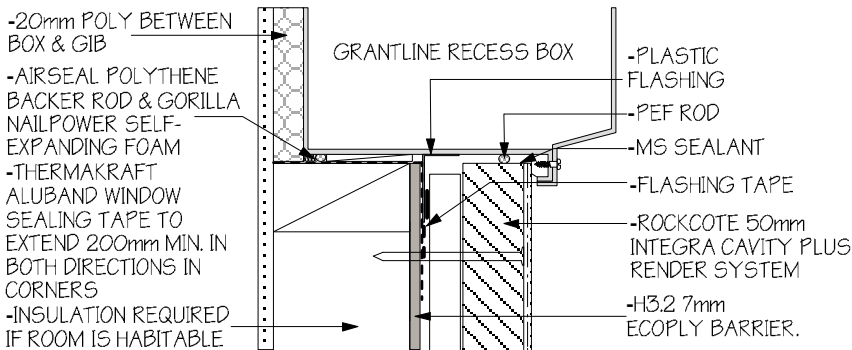
Scale: 1:5



D16
A3.0

RECESS METER BOX HEAD*

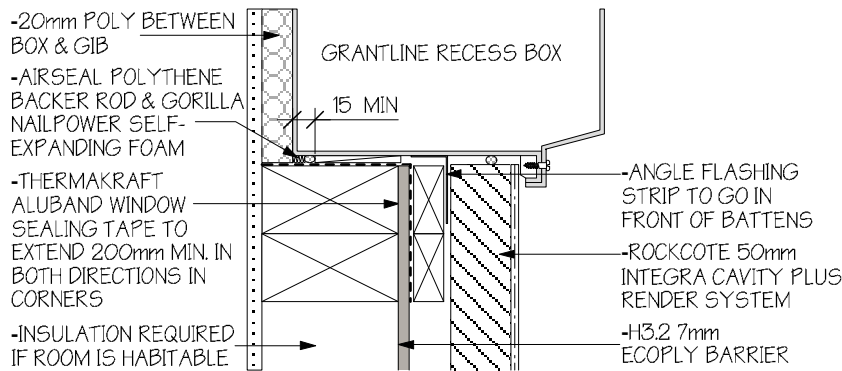
Scale: 1:5



D17
A3.0

RECESS METER BOX SILL*

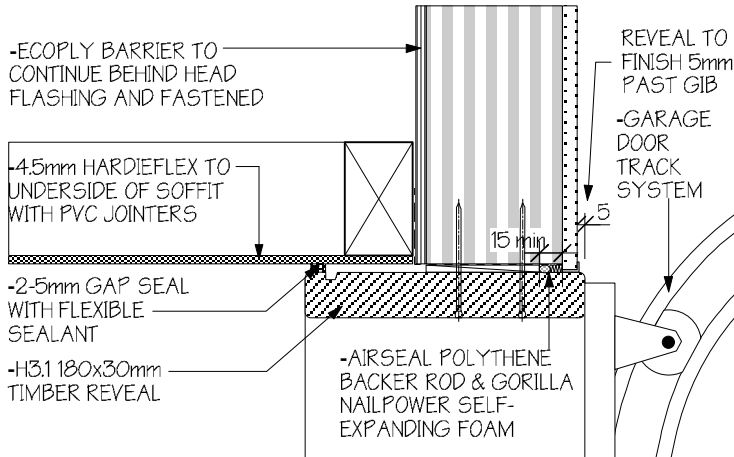
Scale: 1:5



D18
A3.0

RECESS METER BOX JAMB*

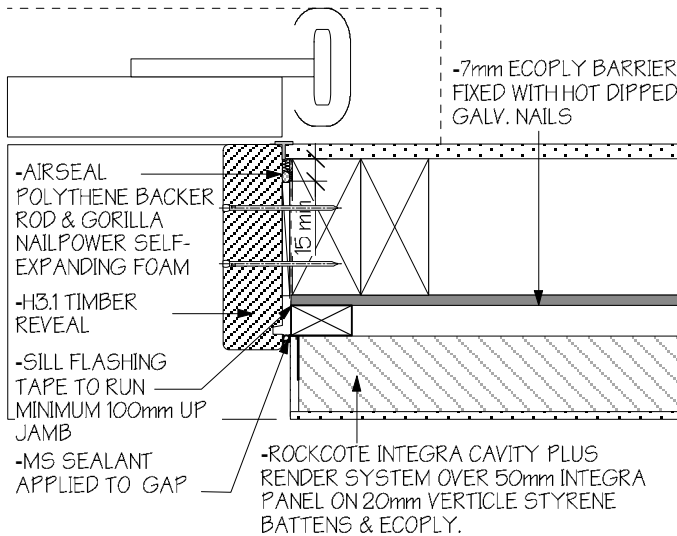
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D19
A4.0

GARAGE DOOR HEAD

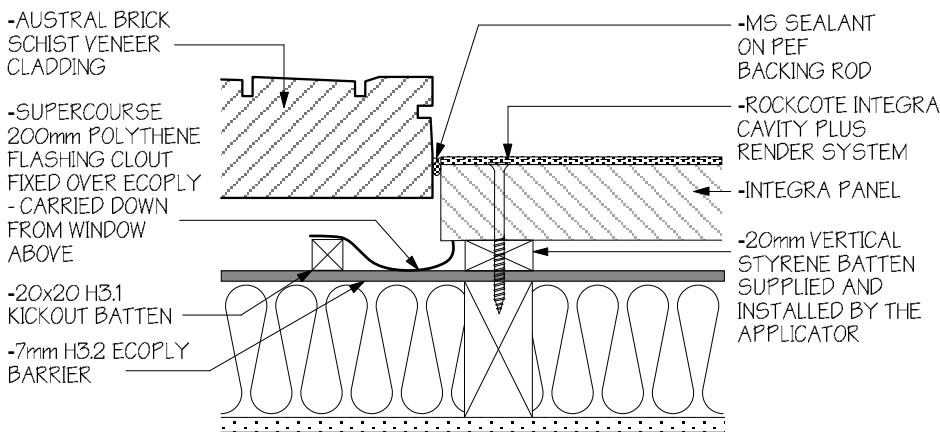
Scale: 1:5



D20
A4.0

GARAGE DOOR JAMB

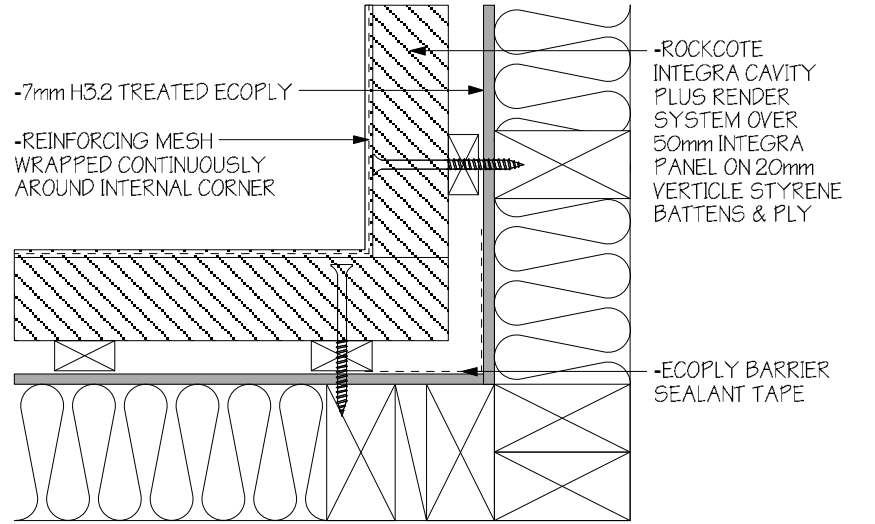
Scale: 1:5



D21
A3.0

SCHIST TO ROCKCOTE JUNCTION

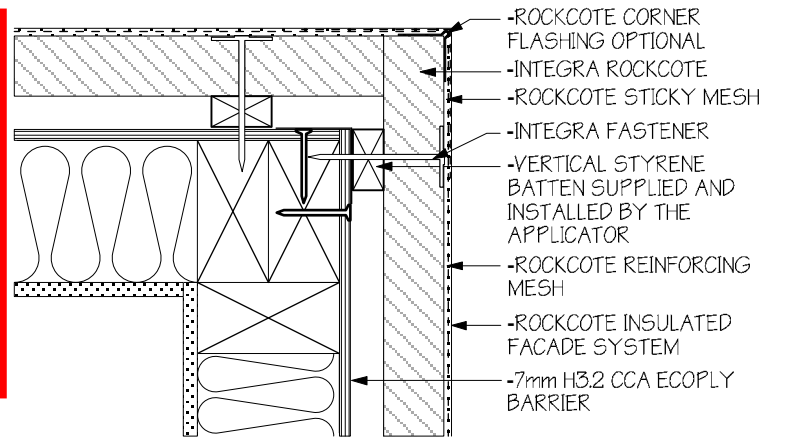
Scale: 1:5



D22
A3.0

ROCKCOTE INTERNAL CNR

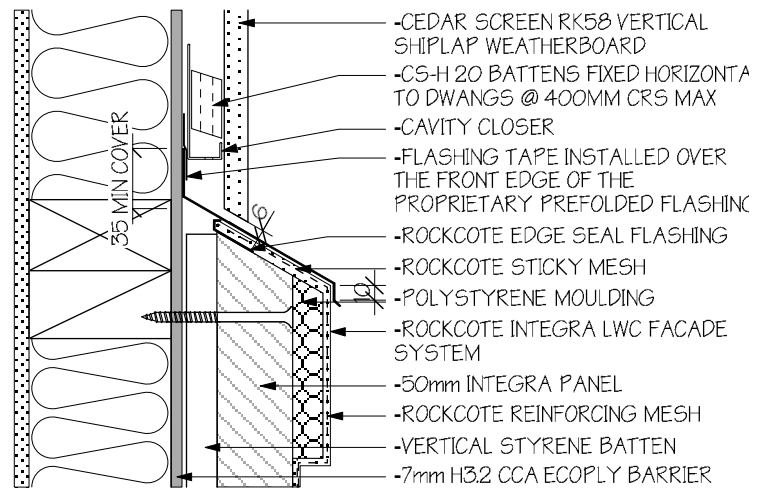
Scale: 1:5



D23
A3.0

ROCKCOTE EXT. CNR

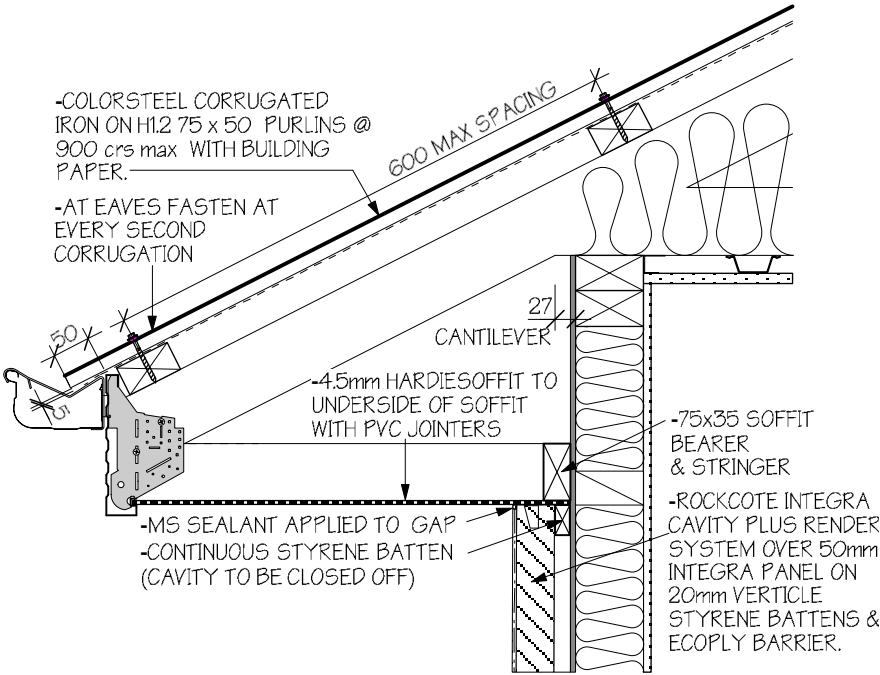
Scale: 1:5



D24
A3.0

ROCKCOTE/CEDAR SILL

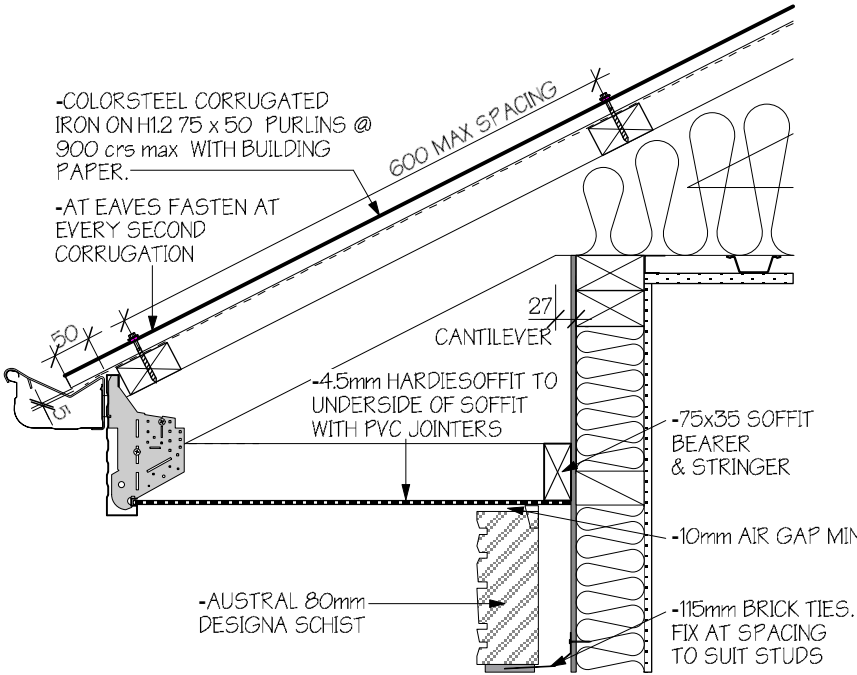
Scale: 1:5



D25
A4.1

INTEGRA TO SOFFIT *

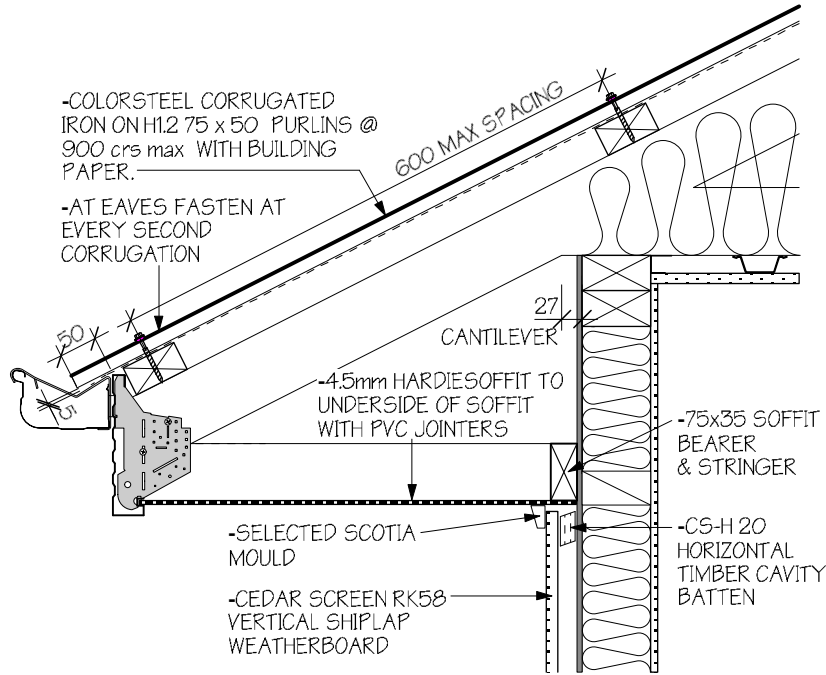
Scale: 1:10



D26
A4.2

SCHIST TO SOFFIT *

Scale: 1:10



D27
A3.0

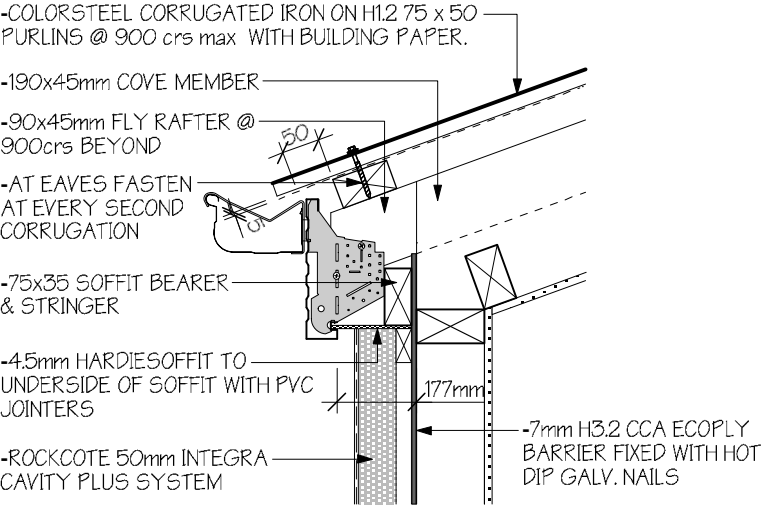
CEDAR TO SOFFIT

Scale: 1:10

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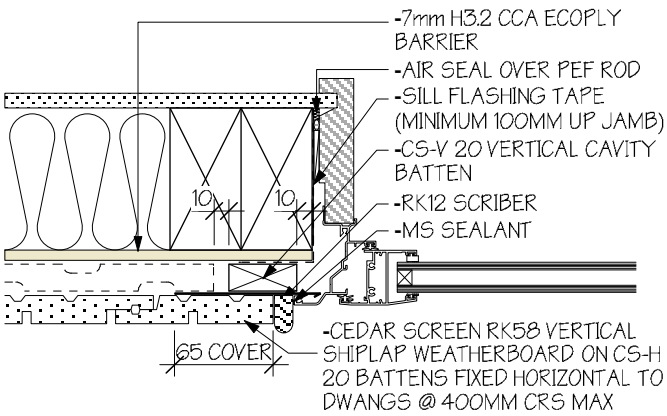
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D28
A4.2

COVED TRUSS - ROCKCOTE

Scale: 1:10



D29
A3.0

CEDAR WINDOW JAMB

Scale: 1:5

Insulation Calculation Table

10/09/2013m

Stud height (STH)2.442 m

Perimeter (- GARAGE) (P)89.55m

Floor Area (-Garage) (A)144.73 sq m

Total Wall Area (STH x P)218.67 sq m

Roof Area144.73 sq m

Wall Area (- Windows)165.44 sq m

Wall Areas (LENGTH x STH)

LENGTHAREA (GROSS)

North21.20m48.69 sq m

East17.21m39.77 sq m

South20.18m47.05 sq m

West17.00m39.12 sq m

Window areas

WALL AREA NETTWINDOW AREA/WALL

North32.21 sq m16.49 sq m

East28.72 sq m11.05 sq m

South35.17 sq m11.88 sq m

West25.31 sq m13.82 sq m

Total area53.23 sq m

% Glazing / Total Wall Area24.34 %

East, South, West Combined %36.74 sq m

Windows E + W + S125.94 sq m

Walls E + W + S29.17 %

% Glazing E + W + S

If both are under 30% use the Schedule Method

Under Floor Insulation1.62

Area/Perimeter Ratio

* If ratio is under 2.5 underfloor poly is required for horncastle construction methods

* If ratio is under 1.9 foundation design needs redesigned

Note: See table page 89 of branz insulation guide

MIN INSULATION REQUIREMENTS (CONSTRUCTION VALUES)

ROOF R3.3

WALLS R2.0

FLOOR R1.3

GLAZING R0.26

* SEE GLAZING NOTE FOR COMPLIANCE

* SEE LIGHTING NOTE FOR CA LIGHT COMPLIANCE

Calculation Method

Stud Height2.442 m

Total Wall Area89.55 m x 2.44 m = 218.67 sq m

Floor & Roof Area (EXT GARAGE)144.73 sq m

Area of Glazing174.64 sq m12141 sq m = 53.23 sq m

% Glazing / Wall Area53.23 sq m / 218.67 sq m = 24.34 %

Wall Area less Window & Doors218.67 sq m - 53.23 sq m = 165.44 sq m

Area of reduced Insulation7.36 sq m

Area of Ceiling less reduction137.37 sq m

Reference Building CONSTRUCTION VALUES

HL AROOF + BROOF + AWALL + AFLOOR + AGLAZING

3.3 3.3 2.0 1.3 0.26

HL 137 + 7 + 165 + 145 + 53

3.3 3.3 2.0 1.3 0.26

HL 42 + 2 + 83 + 111 + 205 = 443

Proposed Building CONSTRUCTION VALUES

HL AROOF + BROOF + AWALL + AFLOOR + AGLAZING

3.4 2.3 2.1 1.4 0.26

HL 137 + 7 + 165 + 145 + 53

3.4 2.3 2.1 1.4 0.26

40 + 3 + 79 + 103 + 205 = 430

HL Proposed < HL Referenced

430 < 443

GOOD

HORNCastle HOMES LTD.

JOB Details

box 1

Name

Street and NumberOATES STREET, ROSEMERRY N

Lot and DP NumberLot 347 DP 472675

City/Town/DistrictLINCOLN

Location of Storey: SINGLE (delete one)

Building height to apex4.2 m

Roof height above eaves2.1 m

Stud height2.442 m

Average roof pitch26 °

Roof weightLight

Cladding weightMedium

Room in roof spaceN

Subsoil ClassificationD

Snow Load0.428 kpa

Gross Building

Plan Area GPA=184.51 m2

No:When the average roof pitch is over 25 degrees, use the eaves length and width to determine BL and BW.

No:For heavy roofs use the roof plan at eaves level to determine GPA.

Wind Zone

box2

Region: A

Roughness: * Urban

Exposure: * Sheltered

Topography: * T1

W

Open

Exposed

T2

T3

T4

Wind Zone: Low (0.5)

From Table Medium (0.7)

5.4 : 2011 * High (1.0)

Very high (1.3)

Extra high (1.6)

Specific Design

Along 55

Across 60

Factor: 1

Earthquake

box3

From figure Eq1 select Earthquake Zone: 1 2 3 4

BU's required Wind

box4

From Table W1A/B

W Along = 55.00 BU's/m

W Across = 60.00 BU's/m

Total Wind load,

W ALONG:

W Along x BW = 1063.419 BU's

W ACROSS:

W Across x BL = 1216.438 BU's

BU's required Earthquake

box5

From Table EQ1

E= 5.60 BU's/m2

Note : For a room in the roof space use E+3

Total earthquake load, EQ ALONG and EQ ACROSS:

E x GPA BU's= 1033.23 BU's

Along

Lower

Bracing Line

Bracing Elements Provided

Wind

Earthquake

1234

5W6W

5W6W

Minimum BUs Required

Bracing Element No.

Bracing Type

Length Element (m)

Rating BU/m (m) W

BU's Achieved (BU/m x L) W

Rating BU/m (m) EQ

BU's Achieved (BU/m x L) EQ

100

A1

EPBS

1.1

80

88

80

88

100

A2

EPBS

1.1

80

88

80

88

100

B1

GSI-N

1.5

70

105

60

90

198

B2

EPBS

1.05

80

84

80

84

198

C1

EPBS

1.1

80

88

80

88

198

C2

EPB1

0.95

95

90.25

105

99.75

198

C3

EPBS

1.1

80

88

80

88

100

C4

EPBS

1.1

80

88

80

88

100

D1

GSI-N

2.2

70

154

60

132

174

D2

EPBS

1.1

80

88

80

88

174

E1

EPBS

1.1

80

88

80

88

174

E2

EPBS

1.2

80

96

80

96

100

E3

EPBS

0.86

95

81.7

105

90.3

100

F1

EPB1

0.75

95

71.25

105

78.75

100

F2

EPBS

1.1

80

88

80

88

100

F3

EPBS

1.1

80

88

80

88

Totals Achieved

W

1474.2

EQ

1462.8

From Shee Totals Required

W

1063.419

EQ

1033.23

Wreq/ EQreq =

1029

Across

Lower

Bracing Line

Bracing Elements Provided

Wind

Earthquake

1234

5W6W

5W6W

Minimum BUs Required

Bracing Element No.

Bracing Type

Length Element (m)

Rating BU/m (m) W

BU's Achieved (BU/m x L) W

Rating BU/m (m) EQ

BU's Achieved (BU/m x L) EQ

152

M1

EPB1

0.5

80

40

95

47.5

121

M2

EPB1

1.2

80

96

80

96

121

M3

EPB1

0.5

80

40

95

47.5

121

N1

BLG-H

0.5

110

55

115

57.5

200

N2

BLG-H

0.5

110

55

115

57.5

200

O1

EPB1

0.7

80

56

95

66.5

200

O2

EPBS

1.2

80

96

80

96

200

O3

EPB1

0.8

80

64

95

76

121

O4

GSI-N

3.75

70

262.5

60

225

121

P1

GSI-N

1.2

70

84

60

72

121

P2

GSI-N

2

70

140

60

120

121

P3

GSI-N

2

70

140

60

120

280

Q1

EPBG

1.7

150

255

150

255

280

Q2

EPB1

0.98

80

78.4

80

78.4

280

Q3

EPB1

0.5

80

40

95

47.5

280

Q4

EPB1

0.5

80

40

95

47.5

Totals Achieved

W

1541.9

EQ

1509.9

From Shee Totals Required

W

1216.438

EQ

1033.23

Wreq/ EQreq =

1.177

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11/10/2014

5att

Job Engineer

ENGCO CONSULTING ENGINEERS

Job Surveyor

MAINLAND SURVEYING

Horncastle HOMES

DESIGN

D. HILLIER

CHECK

J. HUDSON

DATE

12/5/14

PAGE REVISION DATE

Issue Date = Sun, 10 Nov 2013 11:56:49 AM • VW-17.0.5 for Mac

LOT 347-TURNKEY-ROSEMERRY N-J4284 .vwx

A6.0

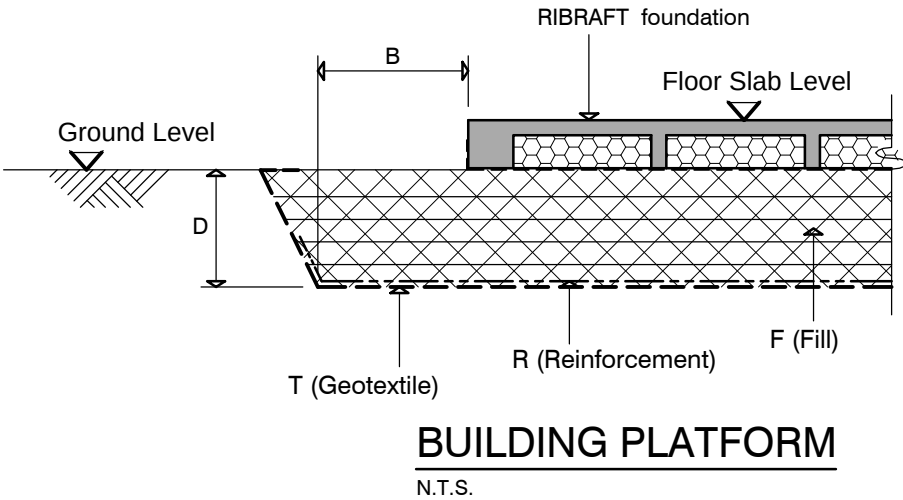
GENERAL

- 1. These drawings are not to be used for construction until the plan (sheet S2) is signed by the main contractor
- 2. Do not scale. refer any discrepancies to the architect/engineer.
- 3. These drawings are to be read in conjunction with the Architects & Engineers drawings.
- 4. The builder shall be responsible for any damage to works during construction.
- 5. The sand blinding layer shall be 20mm min. & 50mm max. to aid levelling & to prevent rocking of pods.
- 6. Vapour barrier to be 0.25mm (250 micron) polythene complying with NZS 4229. / NZS 3604
- 7. Finished ground level adjacent to slab to be protected from wind, water erosion and undermining.

FOUNDATIONS

- 1. For assumed allowable bearing capacity refer to calculations/installer guide. Unless otherwise noted in documentation
- 2. If there is any doubt about the integrity of the material on which the slab is to be founded - a FIRTH representative must be notified immediately.

GEOTECHNICAL REQUIREMENTS:
Refer Lewis & Barrow "Geotechnical Investigation" - Ref. 21619, Lot 347, Stage 4 Rosemerryn Subdivision, Lincoln - 24th June 2014.



ORIGINAL SIZE = A3
CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE COMMENCING WORK

CONCRETE

- 1. All workmanship & materials to conform to NZS 3109, NZS 4210 & local authority regulations.
- 2. Minimum covers to reinforcement:
 - Exposed to earth - 75mm.
 - Protected by vapour barrier - 50mm.
 - Not exposed to weather except for a brief period during construction - 25mm.
- 3. No holes or chases other than those specified are to be made in the slab without the approval of the Engineer.
- 4. All concrete shall be 20 MPa FIRTH RP2019TC2 Fibre mix grade with 20mm nominal maximum aggregate size & 80mm slump & shall comply with NZS 3109.
- 5. All concrete to be mechanically vibrated & carefully worked around the reinforcement & into the corners of the formwork.

INSPECTIONS

- 1. Inform ENGCO consulting 48 hours in advance of any inspections required for code compliance certification.
Contact ENGCO - Ph. 03 366 7955 & quote ENGCO Ref. No.

INSPECTIONS REQUIRED

- 1. 4 x N.D. tests are required on finished compacted surface if depth of fill is greater than 400mm.

Pre-pour of foundations & slab.

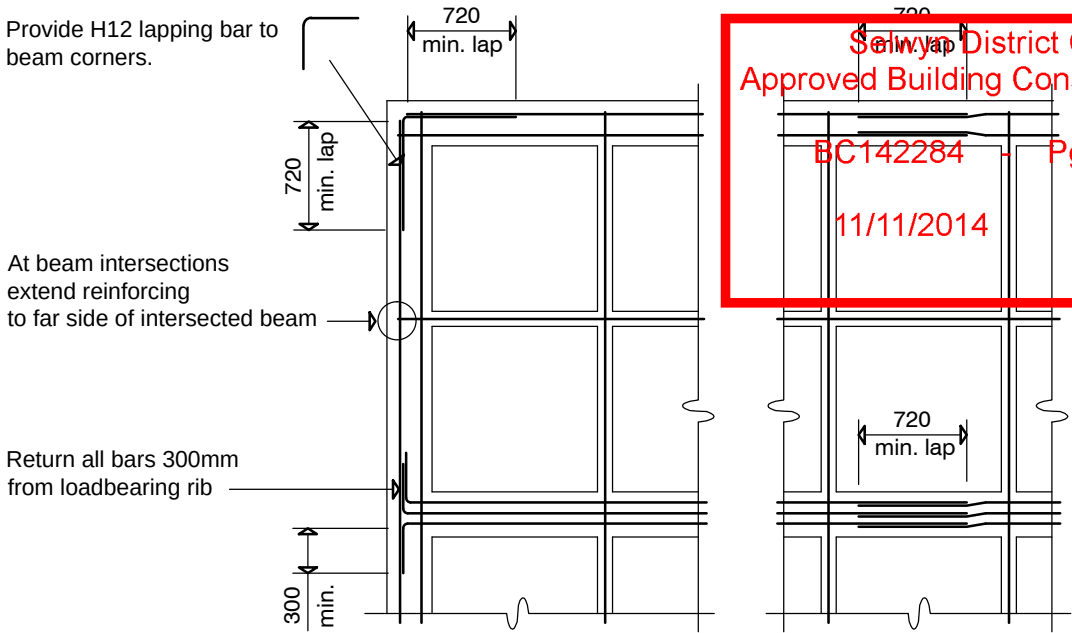
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13/03/2015 leckea

BUILDING PLATFORM TABLE:	
B	1000mm
D	400mm
T	N/A
R	N/A
F	AP65 fill. - 95% Dry Density. Compact in 150mm layers max.

F.L. shall be 225mm min. above G.L.
Refer to Architects drawings.

STEEL

- 1. All reinforcing shall be New Zealand sourced and conform to AS/NZS 4671 :2001 in grade 300 or grade 500E.
- 2. All bends to be made cold without fracture.
- 3. All reinforcing shall be deformed type unless otherwise stated.
- 4. Grade 500E deformed bars shall be designated 'H', Grade 300 deformed bars shall be designated 'D' and Grade 300 round bars shall be designated 'R'
- 5. Minimum bar splice 720mm. (or unless otherwise noted)
- 6. All reinforcement to be fixed & tied where necessary in its specified position.
- 7. Welding of steel is not permitted
- 8. Spacers:
 - Edge at 1200mm ctrs (one on edge & two on corners, typically).
 - Internal one on each side of pod (typically).
 - 65mm or similar mesh chair to be used as necessary.
- 9. All mesh shall comply with AS/NZS 4671 & shall conform with elongation requirements exceeding 10%.
- 10. All Mesh shall lap a minimum of 225 m.m. Or 1 grid + 50mm (Which ever is greater)



TYPICAL CORNER STEEL & MIN. LAPPING REQUIREMENTS
N.T.S.

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REVISIONS

A	15.08.14	CONSENT ISSUE
ENGCO CONSULTING - STRUCTURAL ENGINEERS		
DESIGNED: R.Kanapathippillai DRAWN: D. FLETCHER		
SCALE: NTS DATE: 15.08.14		
DWG NO.	OF	FILE NO.
S1 ^A	5	14-040.53



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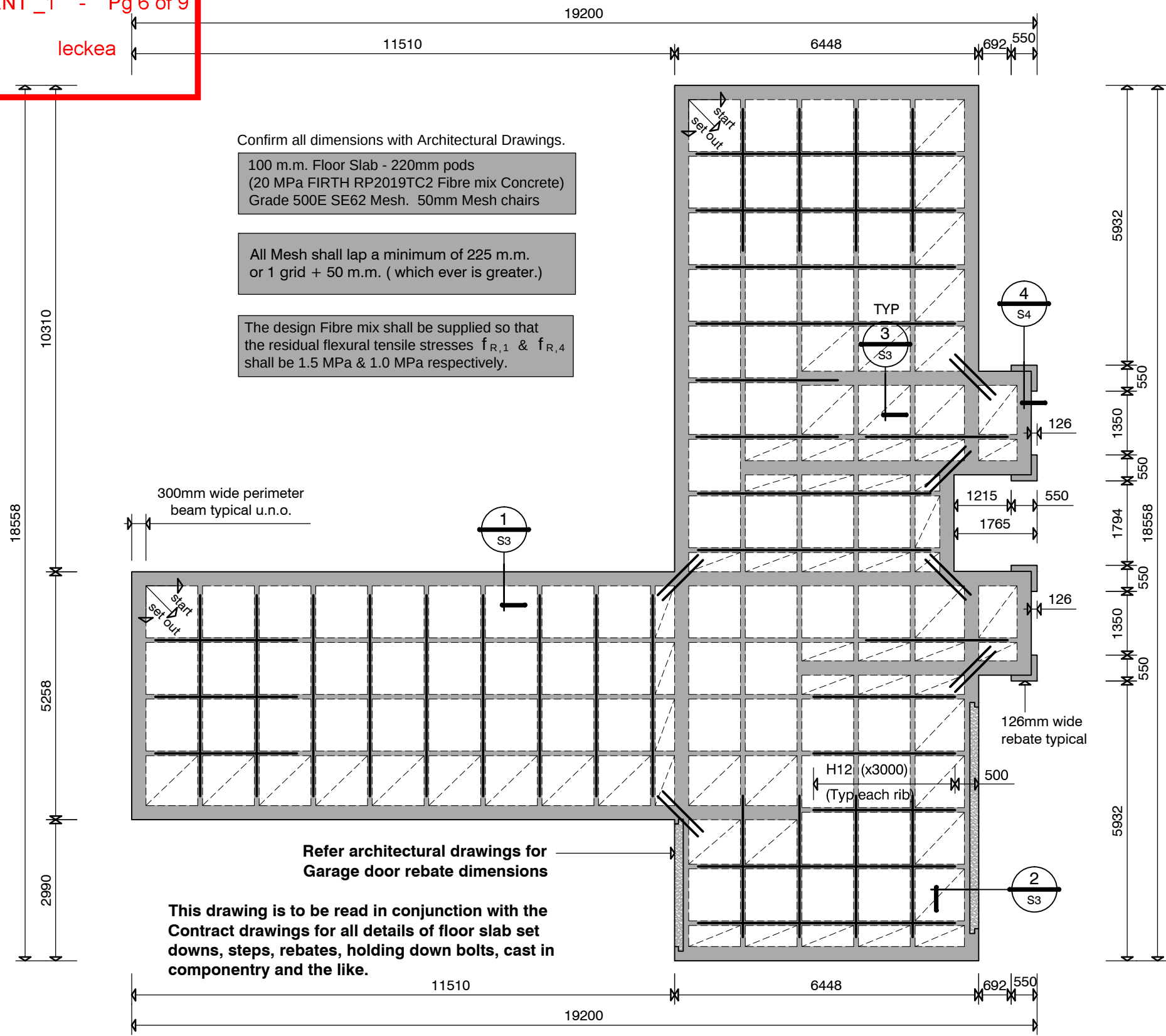


JOB TITLE:
HORNCastle HOMES Ltd.
LOT 347
ROSEMERRYN
LINCOLN

SHEET TITLE:
GENERAL NOTES

13/03/2015

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PERIMETER BEAM REINFORCING NOTES:

Unless noted otherwise Perimeter Foundation Beam to be 300 wide x 320 deep Reinforced with (2) H12 to bottom & (2) H12 to U/s of SE62 G500 E Mesh. Each 100 m.m. rib to have H12 to bottom. Internal 300 m.m. wide floor beam thickenings to have (2) H12 to bottom & (2) H12 to U/s of mesh. Refer Typical Sections - Drawing S3, S4 & S5

GENERAL NOTES:

Locations shown of internal floor beam thickenings are indicative only. It shall be the responsibility of the Contractor to ensure that they are located under the load bearing walls to which they pertain. This drawing is to be read in conjunction with the Contract drawings for all details of floor slab set downs, steps, rebates, holding down bolts, cast in componentry and the like. Shrinkage control joints, where the option is chosen, shall be 20mm deep and cut after hardening but no later than 24 hours in Summer and 48 hours in Winter. Where used, such joints shall be positioned to coincide with major changes in the floor plan. Where concrete is to be exposed or have a thin, brittle, overlay and control joints are chosen, the maximum bay size shall be 6.000m and shall have a length to width ratio of 2:1. Where used, control joints should be positioned over 100mm internal ribs wherever possible and where they coincide with a load bearing floor beam thickening they should be positioned directly above one edge of the beam. Under no circumstance should pipework for services be run longitudinally in 100mm ribs. Similarly they should not be run along perimeter foundations nor internal floor beam thickenings. Vertical or horizontal penetrations through the foundation edge beam or floor beam thickenings must be made through the middle third of the member - refer Firth Ribraft Technical Solutions manual for specific information. Vertical penetrations should not be made through 100 mm ribs.

This slab is to be constructed on a site prepared under the supervision of a CP Engineer and certified as being suitable for the design requirements of this slab as noted in the accompanying PS-1.

KEY:	
	Full pod (2) H12 (x1200) at 150 centres. 75mm edge cover
	Cut pod (as required)

REVISIONS

C	27.11.14	GARAGE DOOR REBATES REVISED
B	14.10.14	DIMENSIONS REVISED
A	15.08.14	CONSENT ISSUE

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S2 ^C	5	14-040.53

ORIGINAL SIZE = A3
CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE COMMENCING WORK



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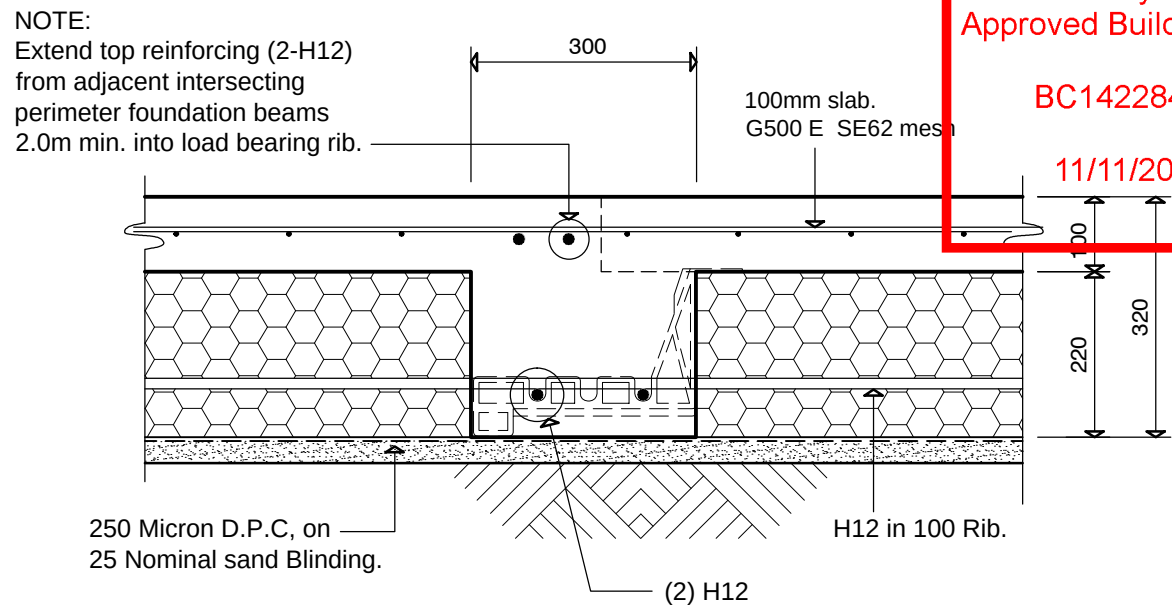
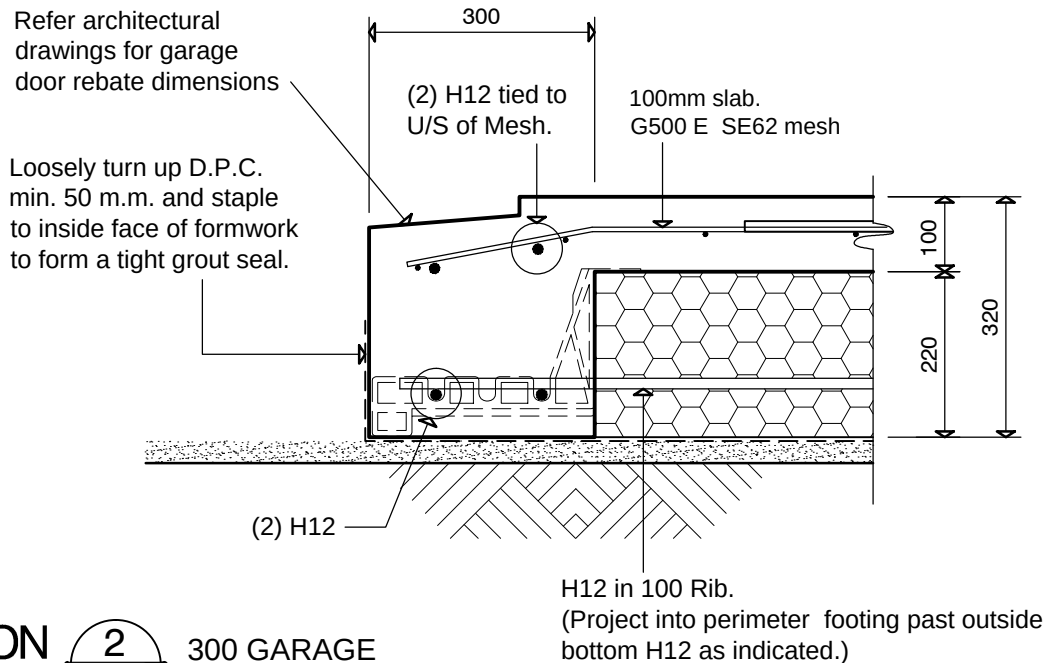
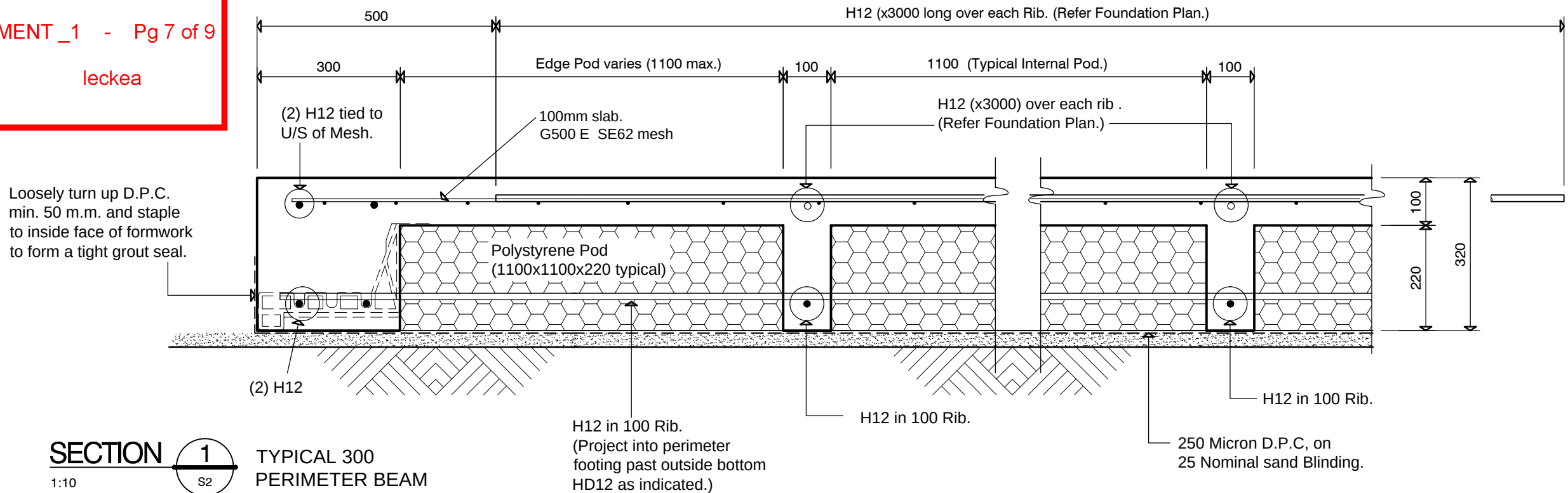


HORNCastle
HOMES

JOB TITLE:
HORNCastle HOMES Ltd.
LOT 347
ROSEMERRY LN
LINCOLN

SHEET TITLE:
RIBRAFT LAYOUT
FOUNDATION PLAN

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ORIGINAL SIZE = A3

CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE COMMENCING WORK



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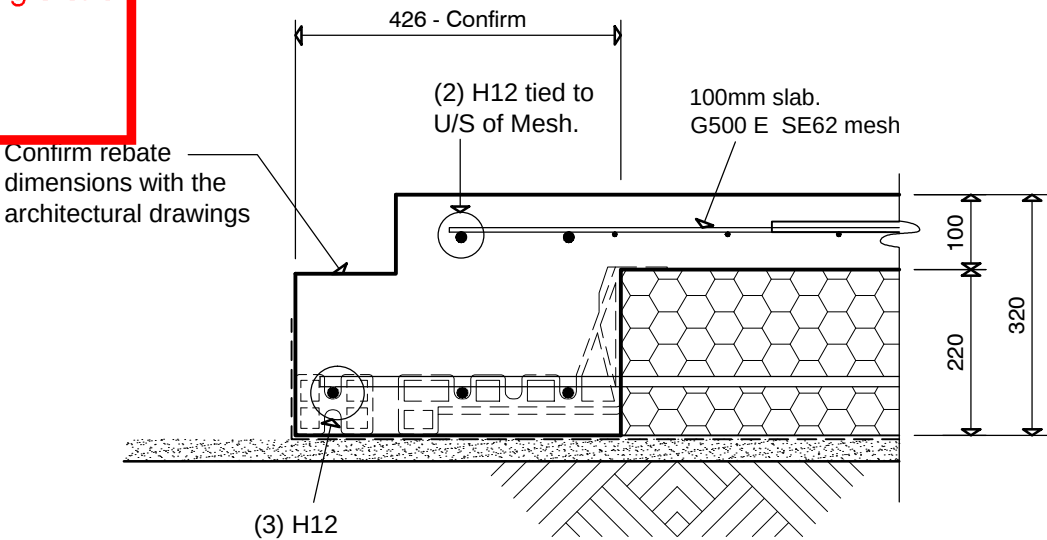
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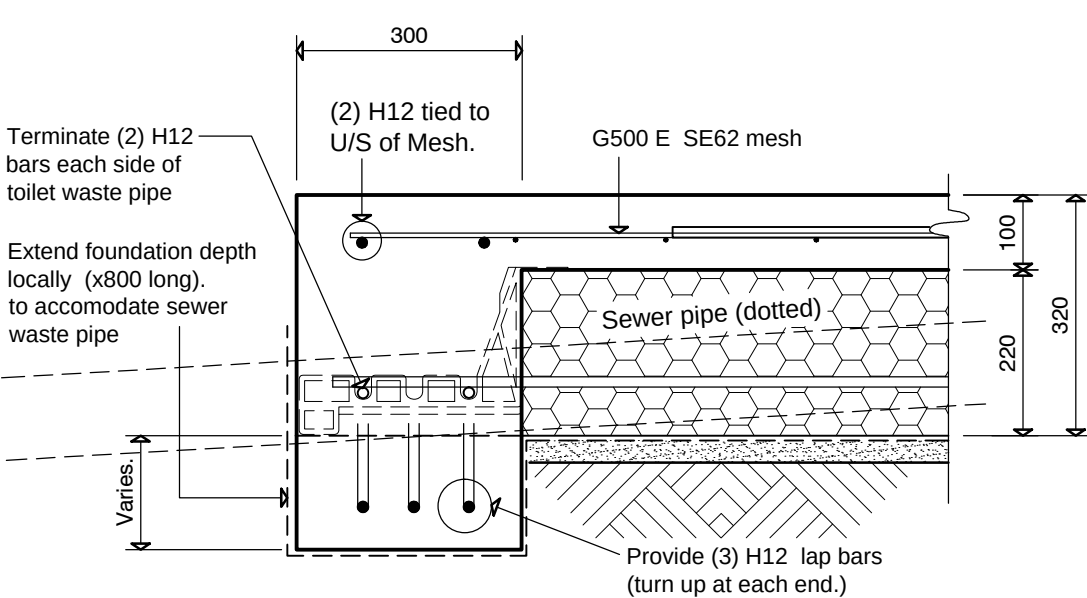
TYPICAL
FOUNDATION SECTIONS

REVISIONS

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S3 A	5	14-040.53



SECTION 4
1:10 S2 426 WIDE PERIMETER BEAM (with rebate)



TYPICAL SECTION:
LOCALISED DEEEPENING OF FOUNDATION BEAM TO ACCOMODATE TOILET WASTE PIPE

ORIGINAL SIZE = A3
CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE COMMENCING WORK



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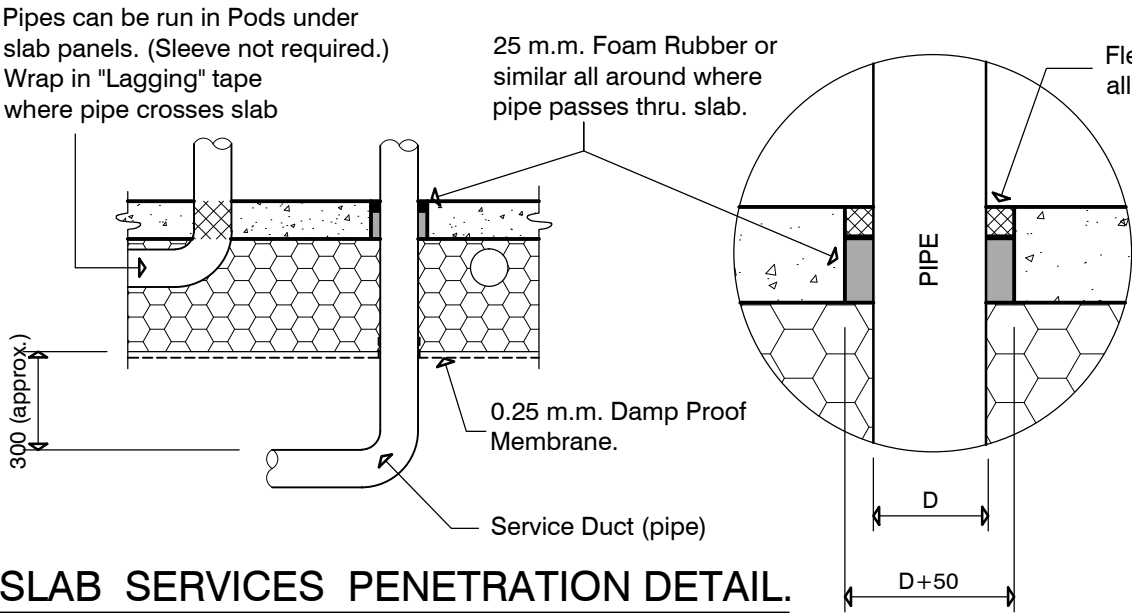


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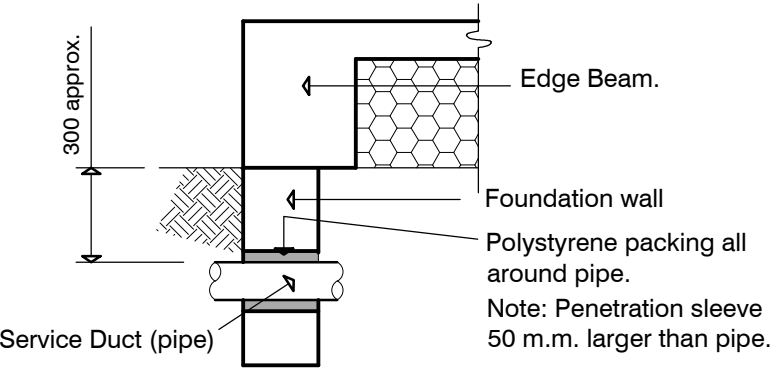
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LOT 347
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SHEET TITLE:
TYPICAL
FOUNDATION SECTIONS

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S4 ^A	5	14-040.53



SLAB SERVICES PENETRATION DETAIL.
1:20

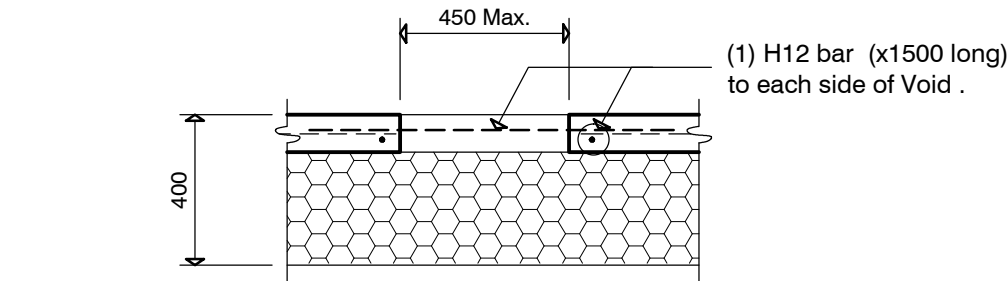


FOUNDATION SERVICES PENETRATION DETAILING.
1:20

Ideally, services ducts shall be conveyed underground to their plan location then brought up through the polystyrene pod and the concrete floor slab, but this may not always be possible. Services shall not be placed within any concrete except to cross that section of concrete i.e. services shall not run along ribs or edge beams. The maximum diameter of the services shall be as outlined in table below.

MAXIMUM DIAMETER OF PIPE SERVICES		
ELEMENT	VERTICAL SERVICES	HORIZONTAL SERVICES
300mm wide edge beam	50mm in a duct 50mm larger diameter than pipe	50mm in a duct 50mm larger diameter than pipe, unless detailed as per note 1.
500mm localised wide edge beam	100mm in a duct 50mm larger diameter than pipe	50mm in a duct 50mm larger diameter than pipe, see note 1.
300mm wide internal load bearing rib	50mm in a duct 50mm larger diameter than pipe	50mm in a duct 50mm larger diameter than pipe, see note 1.
100mm wide internal rib	Nil	50mm in a duct 50mm larger diameter than pipe, see note 1.
Slab	110mm in a duct 50mm larger diameter than pipe or for large services 450mm square see also note 2.	Nil

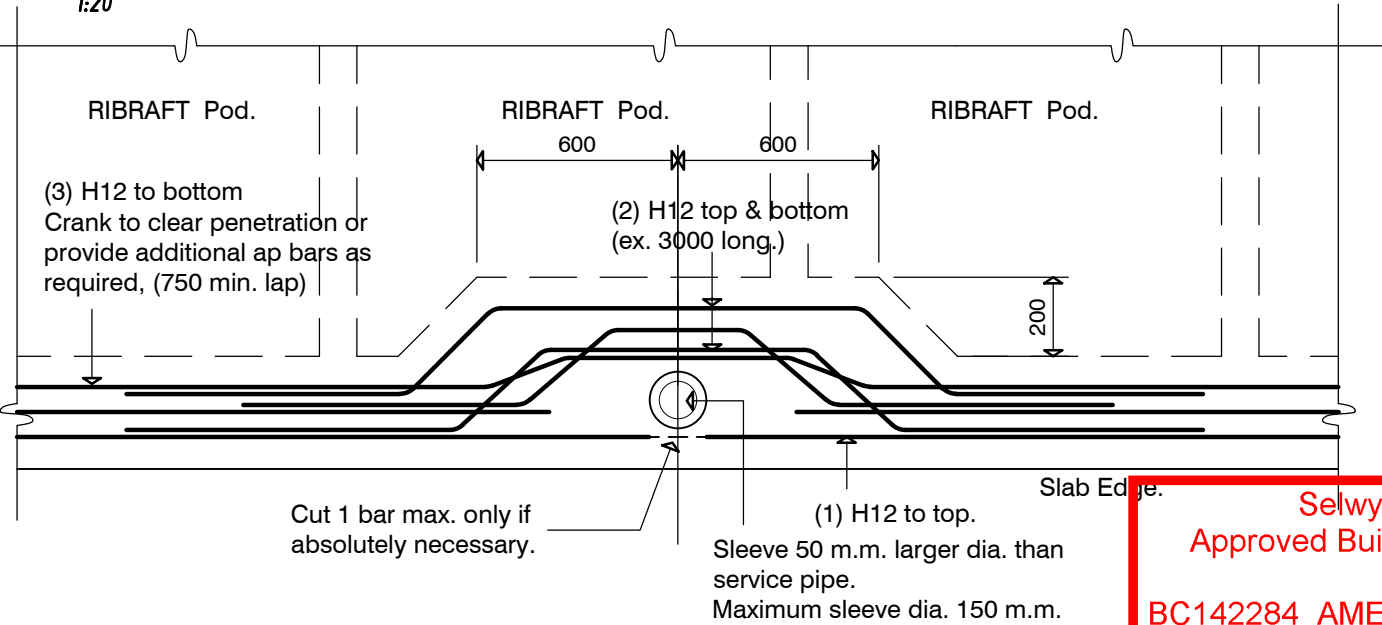
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LARGE SLAB PENETRATION DETAIL.
1:20

PIPE NOTE:
No separation required where pipes are fully contained within slab. Sleeve all drains that pass through the base of the slab.

PENETRATIONS NOTE:
Where penetrations through Floor Slab exceed 500 m.m. Square, Crack Control Bars will be required.



TYPICAL DETAIL.
1:20

LOCALISED INCREASE IN WIDTH AT EDGE BEAM WHERE VERTICAL SERVICES OF UP TO 100 m.m. DIA ARE REQUIRED

ORIGINAL SIZE = A3
CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE COMMENCING WORK

(1) The need for a duct 50mm larger than the service diameter can be deleted when the pipe work does not cross the interface between the bottom of the RibRaft system and the ground at any point along its length. An example would be services laid within the plane of the pods and passing through the edge beam and discharging to a gully trap or similar. In these cases the diameter of the service can be increased to a maximum of 100mm and a service duct is not required. The pipe work shall be wrapped in Lagging tape where it crosses concrete elements to prevent adhesion between the concrete and pipe work.

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REVISIONS

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S5	5	14-040.53