Statement re provision of information here

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We cannot guarantee its accuracy as we have not checked, audited, or reviewed the information and all intending purchasers are advised to seek their own advice as to the information contained in this document.

To the maximum extent permitted by law we do not accept any responsibility to any party for the accuracy or use of the information herein.

Waimakariri District Council
215 High Street
Private Bag 1005
Rangiora 7440, New Zealand
Phone 0800 965 468

Form 7
Code Compliance Certificate BC250662

Section 95, Building Act 2004

The building

Street address of building: 34 Stackwood Avenue WOODEND
Legal description of land where building is located: LOT 958 DP 589336 0.051000 Ha
Valuation number: 2161410382
Building name:
Location of building within site/block number:
Level/unit number: 1
Current, lawfully established, use: Housing - Detached dwellings
Year first constructed: 2026

The owner

Name of owner: Toner Construction Limited
Contact person: Brittany Toner
Mailing address: 36 Orlando Crescent Waimairi Beach Christchurch 8083
Street address/registered office:
Phone number: Landline: Mobile:0212362617
Email address: blossom11793@gmail.com
First point of contact for communications with the council/building consent authority: LMS Drafting & Design

Building work

Building consent number: BC250662
Issued by: Waimakariri 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

Monica McCracken
Auditor Code Compliance

On behalf of Waimakariri District Council
Date: 7 July 2026

BC No: 250662

SITE DETAILS:

34 STACKWOOD AVENUE

WOODEND

LEGAL:

LOT 958

AS BUILT TRUSS LAYOUT REQUIRED –
This must be received by the Building Unit **AT LEAST** 10 WORKING DAYS PRIOR to the Structure Pre-Roof Pre-Wrap Inspection

Truss "As-Built" Designs may be sent to:
buildinginfo@wmk.govt.nz

Approved Building Consent Documents and Plans

(Full set)

On Site Copy

- These plans and specifications must be kept on site during construction, and made available to the building officer on request. Failure to do so will mean an automatic failure of the building inspection and will necessitate re-booking the inspection at the applicant's expense.
- All boundary survey pegs must be located and flagged by the owner before work is commenced.

Inspections

For bookings or building enquiries please phone the Building Unit on:

03 311 8906

or

Email inspection bookings to: bcbooking@wmk.govt.nz

- Please refer to your inspection schedule for details of inspections to be carried out.
- At least 2-3 full working days' notice should be given when booking an inspection.
- Please be advised that it may not always be possible to carry out the inspection within the time frame you require.
- Provision is to be made to allow access.
- The Code Compliance Certificate will be issued once the:
  - Final inspection has been carried out and passed.
  - Audit of WDC building consent file has been completed.
  - Payment of any outstanding invoices, including Development Contributions, are received.

BC250662
Compacted Hardfill - pre DPM - Engineer to inspect also
Foundation / Floor Slab - Engineer to inspect also. Includes standalone footing
Structure Pre Roof Pre Wrap -
Building Wrap & Sill Tape -
Cavity Battens & Flashings -
Sheet Cladding Exterior Early Installation -
AAC-AAC Panel Part Installed -
Pre Plaster & Flashings -
Drains -
Preline & Plumbing -
Prestopping -
Wet Area Tanking -
Final -

Please give at least 2-3 full working days' notice for the next required inspection, please be advised that it may not always be possible to carry out the inspection within the time frame you require.

BC250662

STRUCTURAL DRAWINGS

34 STACKWOOD AVENUE
WOODEND
CANTERBURY

IMPORTANT NOTES TO BUILDER / MAIN CONTRACTOR:

1) PLEASE NOTIFY PROJECT STRUCTURE 14 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, A PRESTART MEETING BETWEEN DESIGNER ENGINEER AND BUILDER OR MAIN CONTRACTOR IS REQUIRED.

DRAWING INDEX

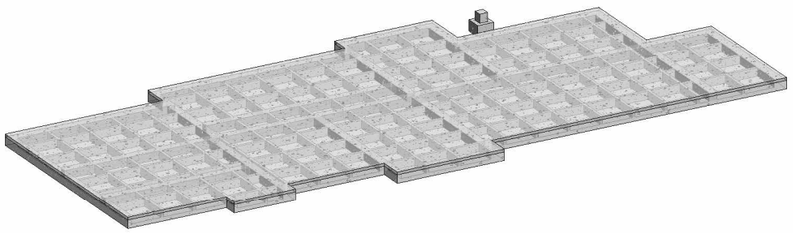
SHEET	SHEET TITLE	REVISION
S001	COVER SHEET	A
S002	GENERAL STRUCTURAL NOTES	A
S003	RIBRAFT STANDARD DETAILS	A
S100	FOUNDATION PLAN	A
S300	FOUNDATION DETAILS	A

SECTION 37 OF THE BUILDING ACT
APPLIES TO THIS CONSENT

A RESOURCE CONSENT IS REQUIRED FOR THIS PROJECT

Until The Resource Consent Has Been Granted Refer To The Special
Conditions Of The Building Consent For The Extent Of Work, If Any,
That Can Be Carried Out.

WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
in accordance with
Building Act 2004, clause 49
Building Regulations 1992, clause 3
5/08/2025 Chrisk



STRUCTURAL DESIGN - 3D PICTORIAL

Inspection Schedule

PROJECT STRUCTURE CONSULTING ENGINEERS

Date Issued: **26 June 2025**

Job No: **J003236**
Job Name: **34 Stackwood Ave**
Client: **Brittany Toner**
Job Address: **34 Stackwood Ave, Ravenswood, Woodend**
Refer to: **Attached PS1, architectural and structural plans**

Important Note:

48 hours notice is required for inspections. Call PSL on 0800 921 002
Inspections can be carried out simultaneously, where possible, depending on progress.
Standard designs as per NZS 3604:2011 Timber Framed Buildings and NZS 4229:1999 Concrete Masonry Buildings to be inspected by others unless specified
This Inspection Schedule is to be read in conjunction with the attached Producer Statement PS1 Design

Inspections to be completed	PSL to Complete Inspection	Others to Complete Inspection	Notes / Date Inspection Completed
Foundation: Inspection of foundation excavation and confirmation of the existing bearing capacity of the ground, prior to placing compacted hardfill	**No**		
Foundation: Review of ND testing results to be supplied to PSL for approval prior to placement of foundation boxing	**Yes**		ND Test to be completed by others
Foundation: Inspection of foundations steel reinforcement prior to foundation concrete pour	**Yes**		

For inspections, please phone 0800 002 921 or email admin@prostruct.co.nz

PLANS TO BE REPRODUCED IN COLOUR

FOR CONSENT

Project Structure Ltd
Level 3, 8 Nelson St.
Riccarton, Christchurch
Web: www.prostruct.co.nz
Ph: 0800 002 921
Email: info@prostruct.co.nz

48 HOURS NOTICE IS REQUIRED FOR SITE INSPECTIONS. CALL TO ARRANGE

CREATED	TB	06/25				
DESIGNED	TB	06/25				
DRAWN	DB	06/25				
CHECKED	BH	06/25				
APPROVED	BH	06/25				
PLOT DATE STAMP: 1/07/2025 3:25:12 pm			A	FOR CONSENT	BH	26/06/2025
			REF	DESCRIPTION	BY	DATE

PROJECT / CLIENT: **BRITTANY TONER**

STRUCTURAL DESIGNER: **PROJECT STRUCTURE LTD.**

PROJECT LOCATION: **34 STACKWOOD AVENUE WOODEND CANTERBURY**

SHEET TITLE: **COVER SHEET**

DUAL SCALES SHOWN: **A1 / A3**

DRAWING NUMBER: **S001**

JOB No. **J003236**

REVISION **A**

GENERAL NOTES & LIMITATIONS OF USE

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION TO THE PROJECT WHICH MAY INCLUDE (BUT NOT LIMITED TO); ARCHITECTURAL DRAWINGS, ARCHITECTURAL & STRUCTURAL SPECIFICATIONS, INSPECTION SCHEDULES, GEOTECHNICAL REPORTS, SPECIALIST SYSTEM DESIGN (ie: HVAC, FIRE) AND ANY OTHER 3rd PARTY DOCUMENTATION FOR SPECIALIST DESIGNERS ENGAGED ON THE PROJECT.
2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING FROM DRAWINGS. USE FIGURED DIMENSIONS ONLY. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION OR FABRICATION.
3. ANY DISCREPANCIES ENCOUNTERED ON SITE WITH THE DESIGN SHALL BE REFERRED TO THE DESIGN ENGINEER IMMEDIATELY FOR RESOLUTION BEFORE PROCEEDING WITH CONSTRUCTION OR FABRICATION OF COMPONENTS.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION AND MAINTENANCE OF ALL TEMPORARY WORK TO ENSURE ADEQUATE STRENGTH AND STABILITY OF THE STRUCTURE AND GROUND DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL ENSURE SAFE WORK PRACTICES ON SITE IN ACCORDANCE WITH ALL APPLICABLE HEALTH & SAFETY CODES, RELEVANT STANDARDS AND LEGISLATION.
6. WHERE PROPRIETARY PRODUCTS ARE SPECIFIED IN THE STRUCTURAL DRAWINGS SUBSTITUTIONS MAY ONLY BE MADE IF APPROVED BY THE ENGINEER.
7. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE NZ BUILDING CODE, CURRENT CODES OF PRACTICE AND ANY LOCAL TERRITORIAL AUTHORITY REQUIREMENTS.
8. STANDARD ENGINEERING ABBREVIATIONS MAY HAVE BEEN USED IN THE DRAWINGS, COMMON ABBREVIATIONS ARE AS SHOWN BELOW:

ALT	ALTERNATE	MIN	MINIMUM
APPROX.	APPROXIMATE	N/A	NOT APPLICABLE
B	BOTTOM	NF	NEAR FACE
BOS	BOTTOM OF STEEL	NTS	NOT TO SCALE
CHS	CIRCULAR HOLLOW SECTION	OD	OUTSIDE DIAMETER
CONC.	CONCRETE	PCD	PITCH CIRCLE DIAMETER
COS	CHECK ON SITE	PCP	PRECAST PANEL
CRS	CENTERS	PFC	PARALLEL FLANGE CHANNEL
CJ	CONSTRUCTION JOINT	R	PLAIN ROUND BAR (300E)
CL	CENTER LINE	RB	REIDBAR (500E)
D	DEFORMED BAR (300E)	REF	REFER
DPC	DAMP PROOF COURSE	REBAR	REINFORCING BAR
DPM	DAMP PROOF MEMBRANE	RHS	RECTANGULAR HOLLOW SECTION
DIA	DIAMETER	RL	REDUCED LEVEL
DIM	DIMENSION	SFL	STRUCTURAL FLOOR LEVEL
DP	DOWNPIPE	SHS	SQUARE HOLLOW SECTION
DRG / DWG	DRAWING	SIM	SIMILAR
EA	EQUAL ANGLE	SJ or SC	SAWN CONTROL JOINT
EF	EACH FACE	SOP	SET OUT POINT
EJ	EXPANSION JOINT	S/S	STAINLESS STEEL
ELEV	ELEVATION	SSL	STRUCTURAL SLAB LEVEL
EW	EACH WAY	STIFF	STIFFENER
EX	EXISTING	STGD	STAGGERED
FF	FAR FACE	STRPS	STIRRUPS
FFL	FINISHED FLOOR LEVEL	STRS	STARTERS
FGL	FINISHED GROUND LEVEL	T	TOP
FW	FILLET WELD	T/S	TOPSIDE
FWAR	FILLET WELD ALL AROUND	THK	THICK
GALV	GALVANISED	TOC	TOP OF CONCRETE
GL	GROUND LEVEL	TOF	TOP OF FOOTING
Gr	GRADE	TOS	TOP OF STEEL
HD	DEFORMED BAR (500E)	TOW	TOP OF WALL
H.D. GALV	HOT DIP GALVANISED	TYP	TYPICAL
HR	PLAIN ROUND BAR (500E)	U/S	UNDERSIDE
ID	INSIDE DIAMETER	UA	UNEQUAL ANGLE
IL	INVERT LEVEL	UB	UNIVERSAL BEAM
Lg	LONG	UC	UNIVERSAL COLUMN
MAX	MAXIMUM	UNO	UNLESS NOTED OTHERWISE

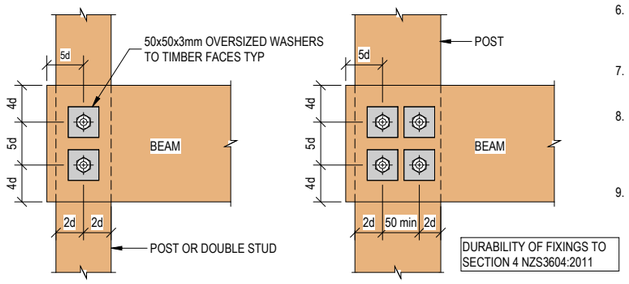


FIGURE 1: MINIMUM DISTANCES FOR BOLTS IN TIMBER (U.N.O)
"d" DENOTES Ø OF BOLT IN mm

PLANS TO BE REPRODUCED IN COLOUR

FOUNDATIONS, EXCAVATIONS & BACKFILL

1. READ THE STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE GEOTECHNICAL REPORT OR SOIL TESTS FOR ASSUMED GROUND BEARING CAPACITIES.
2. FOUNDATION SYSTEMS:

   2a) NZS3604:2011 COMPLIANT FOUNDATIONS
   UNLESS SPECIFIED OR DETAILED OTHERWISE 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. REFER TO NOTE 4 BELOW AND TO CLAUSE 3.1.3 NZS3604:2011 FOR DETERMINATION OF GOOD GROUND.

   2b) SPECIFICALLY ENGINEERED DESIGN (S.E.D.) FOUNDATIONS SYSTEMS
   WHERE FOUNDATION SYSTEMS ARE SPECIFICALLY DESIGNED BASED ON SITE SPECIFIC SOIL PARAMETERS THEN GEOTECHNICAL REQUIREMENTS WILL BE AS NOTED ON THE DRAWINGS, ANY SUCH GEOTECHNICAL NOTES DIRECTLY SHOWN ON THE DRAWINGS SHALL ALWAYS TAKE PRECEDENCE OVER ANY OTHER GENERAL NOTES IN THIS SECTION.
3. ALL EXCAVATIONS AND PLACING OF HARDFILL TO BE CARRIED OUT IN DRY CONDITIONS. IF DEWATERING IS REQUIRED THE SITE SHALL BE MAINTAINED IN A DEWATERED CONDITION FOR THE DURATION OF THE FOUNDATION WORK. MANAGE ON SITE STORAGE OF FILL TO MINIMIZE SURFACE PONDING IN THE EVENT OF RAIN.
4. GRANULAR FILL SHALL BE PLACED IN ACCORDANCE WITH NZS 4431:2022 AND TO THE GENERAL REQUIREMENTS AS OUTLINED BELOW.
   - 4.1) WHERE COMPACTED HARDFILL IS TO BE PLACED BELOW A BUILDING USE A SUITABLE AP40 OR AP65 GRAVEL WITH A MAXIMUM DRY DENSITY OF AT LEAST 2150kg/m³. ALLOW FOR A 10-25mm MAX. SAND BLINDING FOR WHERE DPM SHEETS ARE TO BE INSTALLED OVER THE HARDFILL BASE.
   - 4.2) PLACE AND COMPACT THE FILL MATERIAL IN LAYERS OF 150mm MAXIMUM THICKNESS USING A LARGE SELF-DRIVEN PLATE COMPACTOR (DO NOT TRACK ROLL WITH AN EXCAVATOR).
   - 4.3) THE FILL MATERIAL IS TO BE DENSITY TESTED USING A NUCLEAR DENSOMETER (ND) TO ENSURE FILL IS COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY (MDD). A READING OF 6 ND TESTS ARE TO BE CARRIED OUT FOR EVERY 400mm LIFT AND 95% OF SUCH READINGS TO EXCEED THE GREATER OF THE MDD or 2150kg/m³.
   - 4.4) THE CONTRACTOR IS TO OBTAIN THE MAXIMUM DRY DENSITY CERTIFICATE FOR THE FILL MATERIAL AND SUPPLY IT TO THE ENGINEER WITH THE ND TEST RESULTS.
   - 4.5) FAILURE TO UNDERTAKE THESE STEPS MAY RESULT IN FILL MATERIAL BEING LIFTED AND PLACED AGAIN AT THE CONTRACTORS EXPENSE.

TIMBER FRAMING

1. ALL TIMBER FRAMING TO BE SG8 IN ACCORDANCE WITH NZS3622:2004 UNLESS NOTED OTHERWISE. DO NOT ACCEPT DAMAGED, FAULTY OR DEFECTIVE MATERIALS.
2. LIGHT TIMBER FRAMING CONSTRUCTION TO COMPLY WITH NZS3604:2011 AND OR ANY SPECIFIC ENGINEERED DESIGN OR APPROVED PROPRIETARY DESIGN TABLES.
   WHERE IN DOUBT FOR WHICH A STANDARD DETAIL FROM NZS3604:2011 CAN NOT BE APPLIED CONTACT THE ENGINEER FOR RESOLUTION IMMEDIATELY.
3. DURABILITY OF FIXINGS AND FASTENERS IN ACCORDANCE WITH SECTION 4 of NZS3604:2011 AND TO THE ARCHITECTS SPECIFICATIONS.
4. DURABILITY OF FRAMING AND HAZARD CLASS TREATMENT OF TIMBER IN ACCORDANCE WITH NZS3602:2003 AND TO THE ARCHITECTS SPECIFICATIONS.

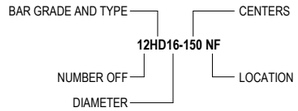
   GENERALLY MINIMUM REQUIREMENTS;
   - 4.1) ALL TIMBER MEMBERS IN GROUND CONTACT SHALL HAVE H5 LEVEL OF TREATMENT TO AS/NZS1604.
   - 4.2) ALL TIMBER MEMBERS EXPOSED TO EXTERIOR WEATHER CONDITIONS AND DAMPNESS BUT NOT IN GROUND CONTACT SHALL HAVE H3.2 LEVEL OF TREATMENT TO AS/NZS1604.
   - 4.3) ALL TIMBER MEMBERS PROTECTED FROM THE WEATHER (ie: ENCLOSED TIMBER) BUT EXPOSED TO GROUND ATMOSPHERE SHALL HAVE H1.2 LEVEL OF TREATMENT TO AS/NZS1604

   FOR FURTHER INFORMATION AND THE TREATMENT REQUIREMENTS OF ALL OTHER CASES REFER TO TABLE 1, NZS3602:2003.
5. WHERE H5 TIMBER PILES HAVE BEEN CUT AFTER TREATMENT REFER TO CLAUSE 6.4.3.3 NZS3604:2011 FOR REQUIRED BRUSH TREATMENT TO CUT SURFACES. THE SURFACE SHALL NOT BE CUT FOR FIXINGS AND OTHER PURPOSES CLOSER THAN 150mm TO THE FINISHED GROUND LEVEL.
6. BOLTING
   ALL BOLTS TO TIMBER FRAMING TO BE GRADE 4.6 WITH 50x50x3mm OVERSIZED WASHERS TO TIMBER FACES. MINIMUM EDGE DISTANCES AS PER FIGURE 1.
7. NOTCHES AND HOLES IN TOP PLATES
   GENERALLY REFER TO SECTION 8.7.5 NZS3604:2011.
8. NOTCHES AND HOLES IN FLOOR JOISTS
   GENERALLY REFER TO SECTION 7.1.7 NZS3604:2011, SPECIFIC ENGINEERING DESIGN MAY NEED TO BE UNDERTAKEN WHEN OUTSIDE OF THESE STATED LIMITATIONS. AVOID RUNNING PLUMBING THROUGH FLOOR JOISTS UNLESS SPECIFICALLY DESIGNED FOR.
9. NOTCHES AND HOLES IN STUDS
   GENERALLY REFER TO CLAUSE 8.5.1.6 NZS3604:2011

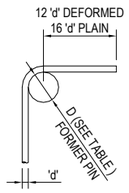
WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
in accordance with
Building Act 2004, clause 49
Building Regulations 1992, clause 3
5/08/2025 Chrisk

REINFORCEMENT

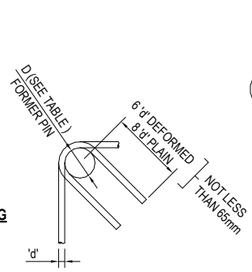
1. THE ENGINEER SHALL BE INFORMED, WHEN FIXING OF REINFORCEMENT IS COMPLETE TO ALLOW INSPECTION BEFORE PLACEMENT OF CONCRETE WHERE STIPULATED IN THE INSPECTION SCHEDULE.
2. ALL WORK TO BE CARRIED OUT BY A COMPETENT REBAR STEEL CONTRACTOR OR LBP BUILDER LICENSED IN THIS SKILL. THE CONTRACTOR SHALL REMAIN RESPONSIBLE FOR BENDING SCHEDULES, REBAR SHOWN IN THESE DRAWINGS ARE DIAGRAMMATIC ONLY TO ILLUSTRATE DESIGN INTENT.
3. FOR REINFORCEMENT LAP LENGTHS REFER TO THE APPROPRIATE TABLES IN SECTIONS 'REINFORCED MASONRY' OR 'REINFORCED CONCRETE'.
4. REINFORCEMENT DESIGNATIONS ON THE DRAWINGS ARE AS FOLLOWS:



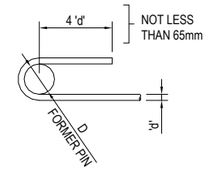
5. WELDING OF REINFORCEMENT IS NOT PERMITTED UNDER ANY CIRCUMSTANCES UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER VIA A WRITTEN SITE INSTRUCTION.
6. ADEQUATELY SUPPORT AND SECURE REINFORCEMENT IN POSITION AGAINST DISPLACEMENT AND MAINTAIN MINIMUM SPECIFIED CLEAR CONCRETE COVER TO REINFORCEMENT.
   TOLERANCES ON CONCRETE COVER SHALL BE IN ACCORDANCE WITH NZS3109.
7. BENDING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH NZS 3101 & NZS 3109 AND AS SHOWN IN THE FIGURES AND TABLES BELOW;



STANDARD LEG



STANDARD TIE OR STIRRUP ANCHORAGE



STANDARD HOOK

MINIMUM BEND DIAMETER OF REINFORCING BARS				
STEEL GRADE	BAR SIZE (mm) 'd'	MINIMUM DIAMETER OF BEND FOR MAIN BARS	MINIMUM DIAMETER OF BEND FOR STIRRUPS AND TIES	
			PLAIN BARS	DEFORMED BARS
300E or 500E	6-20	5d	2d	4d
	24-40	6d	3d	6d

PROPRIETARY FIXINGS

(EPOXY FIXED ANCHORS, MECHANICAL ANCHORS, TIMBER CONNECTORS & FIXINGS)

1. ALL PROPRIETARY ANCHORS OR FIXINGS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS USING THE PRODUCTS SPECIFIED IN THE DRAWINGS.
2. NO SUBSTITUTION OF OTHER PRODUCTS FROM THE DRAWINGS OR SPECIFICATIONS IS PERMITTED UNLESS WRITTEN APPROVAL IS MADE BY THE DESIGN ENGINEER OF PROJECT STRUCTURE LTD.
3. A PS3 MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER FOR ANCHORS OR CONNECTORS HIGHLY CRITICAL TO THE STRUCTURAL PERFORMANCE OF THE BUILDING.
4. WHERE INCORRECT OR SUB STANDARD PRODUCTS ARE USED THE ENGINEER MAY REQUEST DESTRUCTIVE TESTING / LOAD TESTING OR FURTHER DESIGN AND CONSTRUCTION MONITORING, ALL OF WHICH ARE AT THE CONTRACTOR EXPENSE TO ENSURE THE ORIGINAL DESIGN OBJECTIVES ARE MET.

REINFORCED CONCRETE

1. ALL CONCRETE WORK TO BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF NZS 3101, NZS 3109 AND ANY OTHER REFERENCED STANDARDS.
   WHERE STRUCTURAL DESIGN SHOWN EXCEEDS THE MINIMUM REQUIREMENTS OF THESE STANDARDS THE STRUCTURAL DESIGN & DRAWINGS SHALL ALWAYS TAKE PRECEDENCE OVER THE MINIMUM REQUIREMENTS DEFINED IN THESE STANDARDS.
2. NO CONCRETE SHALL BE PLACED UNTIL PROJECT STRUCTURE LTD HAS INSPECTED THE REINFORCING STEEL. THE INSPECTION DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO ENSURE THAT ALL WORK IS IN ACCORDANCE WITH THE NZ BUILDING CODE, RELEVANT STANDARDS AND CONTRACT DOCUMENTS.
3. MINIMUM REQUIRED CHARACTERISTIC CONCRETE GRADES ARE AS SPECIFIED IN THE DRAWINGS.
4. CONCRETE GRADES ARE AS SPECIFIED AS '28 DAY SPECIFIED COMPRESSIVE STRENGTHS' AS DEFINED IN NZS 3109. ALL SUPPLY AND PRODUCTION SHALL BE IN ACCORDANCE WITH NZS 3104. CONCRETE BATCH STRENGTH CERTIFICATES MAY BE REQUESTED AT THE DISCRETION OF THE DESIGN ENGINEER AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THEM WHERE REQUESTED. IF NO STRENGTH CERTIFICATES CAN BE PROVIDED THEN THE CONTRACTOR SHALL TAKE CORE SAMPLES OF THE CONCRETE AND HAVE THEM TESTED AT A CERTIFIED TEST FACILITY AT THEIR OWN COST.
5. ALL REINFORCING STEEL SHALL BE GRADE 300E OR 500E IN COMPLIANCE WITH AS/NZS 4671.
   THE REPLACEMENT OF REINFORCEMENT WHICH HAS BEEN DETAILED ON THE STRUCTURAL DRAWINGS WITH AN EQUIVALENT STRENGTH REINFORCING OF DIFFERENT GRADE IS NOT PERMITTED UNDER ANY CIRCUMSTANCES.
6. ALL VISIBLE CONCRETE SURFACE FINISHES ARE TO BE CONFIRMED WITH THE ARCHITECT, REFER TO NZS 3114 FOR FURTHER INFORMATION OF FINISHING.
7. MINIMUM COVER TO STEEL REINFORCEMENT SHALL BE AS SHOWN BELOW UNLESS SPECIFIED OTHERWISE IN THE DRAWINGS AND IN ACCORDANCE WITH NZS 3101.

ELEMENT	MIN. COVER
CONCRETE CAST DIRECTLY AGAINST GROUND	75mm
CONCRETE CAST AGAINST GROUND AND PROTECTED BY A DPM	50mm
CONCRETE CAST AGAINST FORMWORK	50mm
ANY CONCRETE SLAB OR WALL SURFACE EXPOSED TO WEATHER	50mm
TOP OF A CONCRETE SLAB PROTECTED FROM WEATHER	30mm

8. NO REINFORCEMENT WIRE TIES SHALL PROJECT INTO THE MINIMUM CONCRETE COVER.
9. ALL REINFORCEMENT MUST BE CLEAN AND FREE FROM MUD, LOOSE RUST, MILL SCALE, CONCRETE LAITANCE, OIL OR ANY OTHER CONTAMINANTS AT THE TIME CONCRETE IS PLACED.
10. ALL REINFORCEMENT SHALL BE ADEQUATELY SECURED AGAINST DISPLACEMENT AT INTERSECTIONS BY THE USE OF IRON WIRE TIES WITH A DIAMETER GREATER THAN 1.25mm OR BY APPROVED CLIPS. ALL REINFORCING SUPPORTS SHALL MAINTAIN THE CORRECT POSITION OF THE REINFORCEMENT DURING PLACEMENT AND VIBRATION OR COMPACTION OF THE CONCRETE.
11. ALL CONSTRUCTION JOINTS SHALL BE TYPE-B CONSTRUCTION JOINTS PREPARED IN ACCORDANCE WITH NZS 3109. METHODS WHICH AVOID SCABBLING ARE PREFERRED FOR INTENTIONALLY ROUGHENING THE CONCRETE SURFACE AT CONSTRUCTION JOINTS.
12. UNLESS OTHERWISE SHOWN MESH IN FLOOR SLABS SHALL BE LAPPED THE GREATER OF
    - 225mm (CLAUSE 7.5.8.3, NZS3604:2011)
    - AS PER MANUFACTURER'S SPECIFICATIONS
13. THE DEVELOPMENT OF PLAIN BARS SHALL RELY ON HOOKS IN ACCORDANCE WITH NZS3101.
14. SPLICE LAP LENGTHS ARE TO BE IN ACCORDANCE WITH NZS3101 AND TO THE VALUES AS SHOWN BELOW. STAGGER LAPS WHERE POSSIBLE, WHERE LAPS CANNOT BE STAGGERED REFER TO ENGINEER FOR GUIDANCE. WHERE OFFSET SPLICES ARE REQUIRED THE INCLINED PORTION OF THE BAR SHALL NOT EXCEED A 1 IN 6 CRANK.

* LAP LENGTHS (mm) - DEFORMED BARS							
CONCRETE STRENGTH	BAR GRADE	BAR DIAMETER 'd'					
		10	12	16	20	25	32
20MPa	300E	440	530	700	870	1110	1400
	500E	730	880	1170	1460	1820	2330
25MPa	300E	390	470	620	780	1010	1250
	500E	650	790	1040	1300	1630	2090
30MPa	300E	390	430	570	720	890	1140
	500E	600	720	960	1190	1490	1900
35MPa	300E	390	400	530	660	830	1050
	500E	560	660	870	1110	1380	1760
40MPa	300E	390	390	490	620	770	990
	500E	520	620	830	1030	1290	1640

*ALLOWANCE HAS BEEN MADE IN THIS TABLE FOR A MULTIPLIER OF x1.3 FACTOR FOR 'TOP BARS' ie: FOR WHICH 300mm OF FRESH CONCRETE IS CAST BELOW THE MEMBER. (REFER TO CLAUSE 8.6.3.2, NZS3101.1:2006). FOR SLABS OR FOUNDATIONS LESS THAN 300mm THICK TOTAL THICKNESS TABULATED VALUES SHOWN CAN BE REDUCED BY A FACTOR OF 1/1.3.

FOR CONSENT

Project Structure Ltd
Level 3, 8 Nelson St.
Riccarton, Christchurch
Web: www.prostruct.co.nz
Ph: 0800 002 921
Email: info@prostruct.co.nz

PROJECT STRUCTURE CONSULTING ENGINEERS

48 HOURS NOTICE IS REQUIRED FOR SITE INSPECTIONS. CALL TO ARRANGE

CREATED	TB	06/25				
DESIGNED	TB	06/25				
DRAWN	DB	06/25				
CHECKED	BH	06/25				
APPROVED	BH	06/25				
PLOT DATE STAMP: 1/07/2025 3:25:12 pm			A	FOR CONSENT	BH	26/06/2025
			REF	DESCRIPTION	BY	DATE

PROJECT / CLIENT: **BRITTANY TONER**

STRUCTURAL DESIGNER: **PROJECT STRUCTURE LTD.**

PROJECT LOCATION: **34 STACKWOOD AVENUE WOODEND CANTERBURY**

SHEET TITLE: **GENERAL STRUCTURAL NOTES**

DUAL SCALES SHOWN: A1 / A3

DRAWING NUMBER: **S002**

JOB No. **J003236**

REVISION **A**

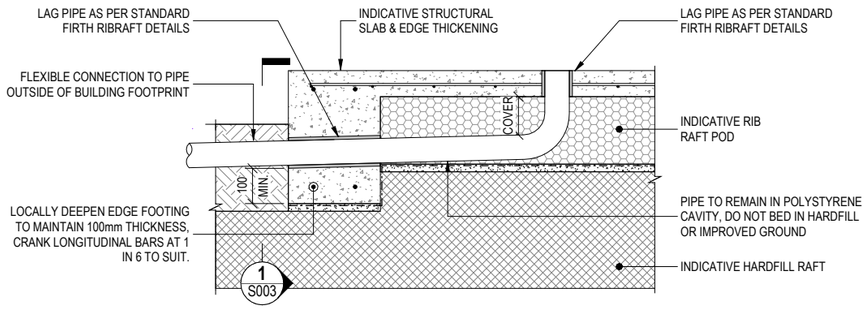
FOUL WATER: PIPE LENGTH RUN TABLES

MAXIMUM PIPE RUN DISTANCE FOR 220mm PODS *			
PIPE DIAMETER	GRADIENT	MAX DISTANCE (100mm COVER)	MAX DISTANCE (80mm COVER)
40	1 IN 40	3200	4000
50	1 IN 40	2800	3600
65	1 IN 40	2200	3000
80	1 IN 40	1600	-
	1 IN 60	2400	-
100	1 IN 60	1200	-

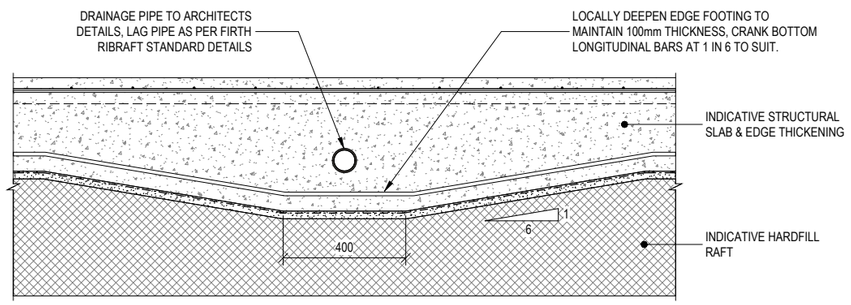
MAXIMUM PIPE RUN DISTANCE FOR 300mm PODS *			
PIPE DIAMETER	GRADIENT	MAX DISTANCE (100mm COVER)	MAX DISTANCE (80mm COVER)
40	1 IN 40	6400	7200
50	1 IN 40	6000	6800
65	1 IN 40	5400	6200
80	1 IN 60	7200	-
100	1 IN 60	6000	-

* TABLE NOTES:

1. PIPES UNDERNEATH SLABS TO BE RUN IN THE POLYSTYRENE CAVITY AND NOT IN IMPROVED GROUND OR HARDFILL UNDER ANY CIRCUMSTANCE.
2. MINIMUM FALLS OF PIPES TO BE IN ACCORDANCE WITH TABLE 4 G13/AS1.
3. PIPES SHALL EXIT AT FOUNDATION PERIMETER THICKENINGS AS DETAILED ON THIS SHEET.
4. FOR Ø80 OR Ø100 PIPES THE COVER TO THE TOP OF THE PIPE AT THE POINT AT WHICH IT MEETS THE SLAB SHALL BE GREATER THAN OR EQUAL TO 100mm. FOR SMALLER PIPES THIS COVER CAN BE REDUCED TO 80mm.
5. THESE TABLES ARE PROVIDED FOR GUIDANCE, WHERE IN DOUBT CONSULT THE ENGINEER.



EDGE FOOTING DEEPENING ON TC1 & TC2 SITES ONLY



TYPICAL EDGE FOOTING DEEPENING TO ACCOMMODATE DRAINAGE PIPES

1 / S003 **SECTION**
SCALE 1 : 10 (A1), 1:20 (A3)

PLANS TO BE REPRODUCED IN COLOUR

3.9.4 Re-entrant Corner Steel

Two HD12 bars (Grade 500E), 1200mm long tied to the top of the mesh at 200mm centres, with 50mm cover to the internal corner as detailed in Figure 7 (this steel is to help reduce the width of cracks that may develop at this location)

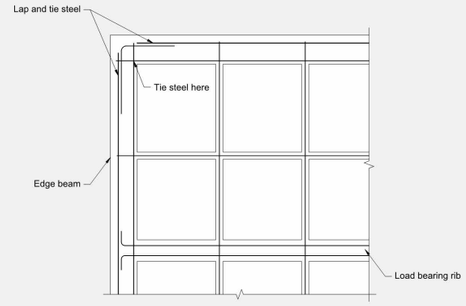


Figure 8 Corner steel layout

STANDARD CORNER BAR DETAILS

REPRODUCED FROM FIRTH TECHNICAL MANUAL

Figure 14 Localised Increase In Width At Edge Beam Where Vertical Service Up To 100mm Diameter Are Required

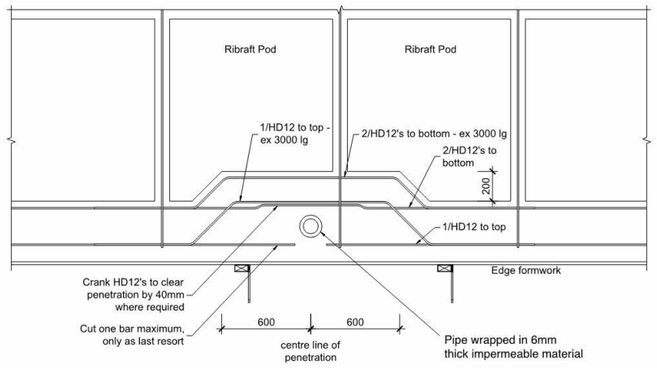
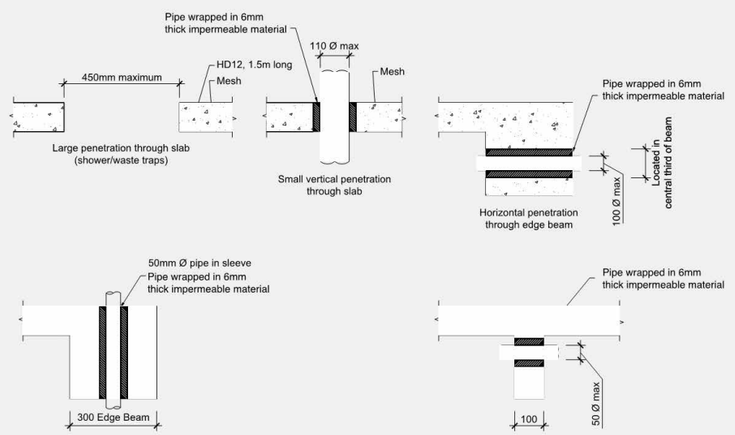


Figure 13 Example of Detailing Requirements For Services



STANDARD PIPE PENETRATION DETAILS

REPRODUCED FROM FIRTH TECHNICAL MANUAL

FOUNDATION NOTES

1. FOR GENERAL STRUCTURAL NOTES REFER TO SHEETS S002 - S003.
2. CONFIRM ALL SETOUT DIMENSIONS FROM ARCHITECTURAL PLANS. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE PRIOR TO ANY CONSTRUCTION OR FABRICATION. USE FIGURED DIMENSIONS ONLY AND AVOID SCALING FROM PLANS. REFER TO DESIGNERS IMMEDIATELY IF ANY DISCREPANCIES ARE ENCOUNTERED.
3. ALL REINFORCEMENT IS TO BE DUCTILITY CLASS E, IN ACCORDANCE WITH NZS 4671. ALL SLAB REINFORCING SHALL CONSIST OF WELDED GRADE 500E MESH SHEETS IN ACCORDANCE WITH B1/AS1.
4. ALL TIMBER TO BE SEPARATED FROM CONCRETE FOUNDATIONS OR MASONRY WITH MALTHOID DPC OR SIMILAR APPROVED EQUIVALENT.
5. REFER TO ARCHITECT FOR CONFIRMATION OF CONCRETE FINISHES GENERALLY; FOUNDATIONS = F3
   SLAB = U2
6. FIXING OF BOTTOM PLATES TO SLABS/WALLS SHALL BE IN ACCORDANCE WITH SECTION 6&7 OF NZS3604:2011.
7. DURABILITY OF ANY SUBFLOOR FRAMING & FIXINGS NOT DETAILED SHALL BE TO THE ARCHITECTS DETAILS AND IN ACCORDANCE WITH ALL REQUIREMENTS FROM SECTION 4, NZS3604:2011.

IMPORTANT NOTE:
STEEL FIXINGS OR FASTENERS INTO TIMBER TREATED WITH COPPER BASED PRESERVATIVES (ie: H3.2, H5) MUST BE ***TYPE 304 STAINLESS STEEL*** AS A MINIMUM, REFER TO CLAUSE 4.4.4 NZS3604:2011.

RIBRAFT NOTES

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2. ALL CONCRETE TO RIBRAFT FLOORS SHALL BE AN APPROVED FIRTH STEEL FIBRE MIX WITH A CHARACTERISTIC STRENGTH OF 25MPa.
3. POLYSTYRENE SPACERS SHALL NOT BE USED AS BAR CHAIRS. ONLY FIRTH RIBRAFT POLYSTYRENE PODS ARE TO BE USED UNDER SLAB.
4. ALL PIPES SHALL BE LAID WITHIN THE PODS AND NOT IN ANY "IMPROVED GROUND" OR HARDFILL / BACKFILLED GROUND. ALL PIPE PENETRATIONS SHALL BE CARRIED OUT IN ACCORDANCE WITH FIGURE 13 OF FIRTH RIBRAFT TECHNICAL MANUAL (JAN 2020). ALSO REFER TO DRAWING SHEET S004.
5. ONLY SAW CUTS AS SHOWN ARE PERMITTED IN TC2 AND TC3 SITES DUE TO THEM POSSIBLY WEAKENING THE FOUNDATION SYSTEM.
6. 2-HD12 SIDE BARS ARE TO BE INSTALLED AT ANY RE-ENTRANT CORNERS IN ACCORDANCE WITH FIGURE 3 OF THE FIRTH RIBRAFT TECHNICAL MANUAL.
7. IN ADDITIONAL TO 'STANDARD CORNER BAR DETAILS' AS SHOWN ON SHEET S004, CORNER BARS ARE ALSO REQUIRED AT ALL INTERNAL MAIN RIB INTERSECTIONS. (ie: 300mm OR 400mm WIDE RIBS).

WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
in accordance with
Building Act 2004, clause 49
Building Regulations 1992, clause 3
5/08/2025 Chrisk

GEOTECHNICAL REPORT
FOUNDATION DESIGN IS BASED ON THE FOLLOWING GEOTECHNICAL REPORT:

BY: SUBTERRA
REF: 2025-0565 REV A
DATE: 14/04/2025

INSPECTIONS
REFER TO DRAWING SHEET S001 FOR REQUIRED INSPECTIONS.
48 HOURS ADVANCED NOTICE TO THE ENGINEER IS REQUIRED.

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NZS3604 CLASSIFICATIONS

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EXPOSURE ZONE	= ZONE C
WIND REGION	= REGION A
WIND ZONE	= HIGH
SNOW ZONE	= N4
TECHNICAL LAND CATEGORY	= TC2

FOR CONSENT

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PROJECT STRUCTURE CONSULTING ENGINEERS

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DESIGNED	TB	06/25
DRAWN	DB	06/25
CHECKED	BH	06/25
APPROVED	BH	06/25

PLOT DATE STAMP: 1/07/2025 3:25:13 pm

REF	DESCRIPTION	BY	DATE
A	FOR CONSENT	BH	26/06/2025

PROJECT / CLIENT: **BRITTANY TONER**

STRUCTURAL DESIGNER: **PROJECT STRUCTURE LTD.**

PROJECT LOCATION: **34 STACKWOOD AVENUE WOODEND CANTERBURY**

SHEET TITLE: **RIBRAFT STANDARD DETAILS**

DUAL SCALES SHOWN A1 / A3

DRAWING NUMBER: **S003**

JOB No. **J003236**

REVISION **A**

BC250662

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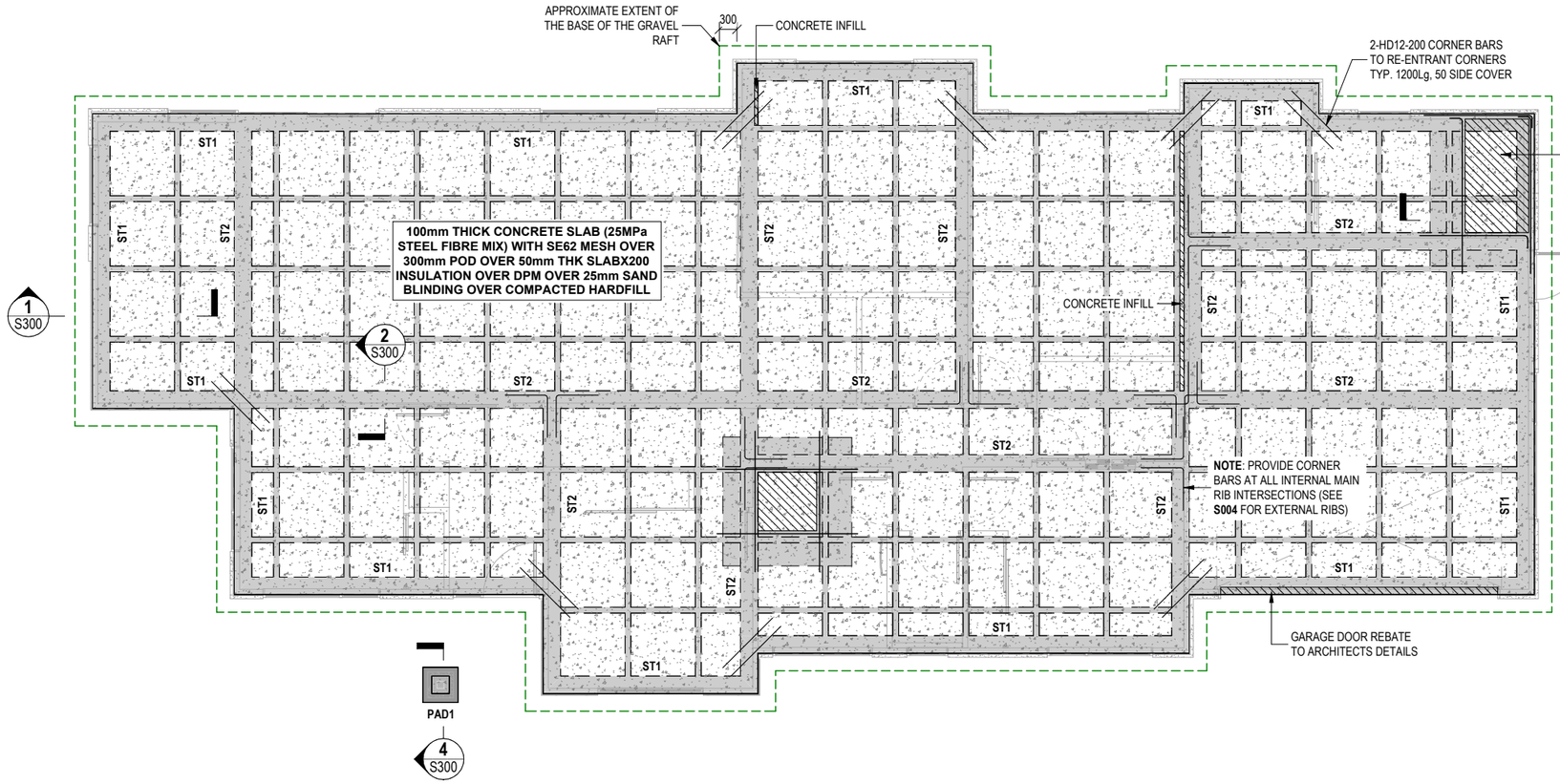

FOUNDATION PLAN
SCALE 1 : 50 (A1), 1:100 (A3)

FOUNDATION NOTES

1. FOR GENERAL STRUCTURAL NOTES REFER TO SHEETS S002 - S003.
2. CONFIRM ALL SETOUT DIMENSIONS FROM ARCHITECTURAL PLANS. CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE PRIOR TO ANY CONSTRUCTION OR FABRICATION. USE FIGURED DIMENSIONS ONLY AND AVOID SCALING FROM PLANS. REFER TO DESIGNERS IMMEDIATELY IF ANY DISCREPANCIES ARE ENCOUNTERED.
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GEOTECHNICAL REPORT
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BY: SUBTERRA
REF: 2025-0565 REV A
DATE: 14/04/2025

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EXPOSURE ZONE	= ZONE C
WIND REGION	= REGION A
WIND ZONE	= HIGH
SNOW ZONE	= N4
TECHNICAL LAND CATEGORY	= TC2

SLAB THICKENING SCHEDULE

MARK	TYPE
ST1	300x300Dp EDGE THICKENING, 2-HD12 T & B
ST2	300x300Dp INTERNAL THICKENING, 2-HD12 T & B

FOR CONSENT

PLANS TO BE REPRODUCED IN COLOUR

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APPROVED	BH	06/25

PLOT DATE STAMP: 1/07/2025 3:25:14 pm

REF	DESCRIPTION	BY	DATE
A	FOR CONSENT	BH	26/06/2025

PROJECT / CLIENT: **BRITTANY TONER**

STRUCTURAL DESIGNER: **PROJECT STRUCTURE LTD.**

PROJECT LOCATION: **34 STACKWOOD AVENUE WOODEND CANTERBURY**

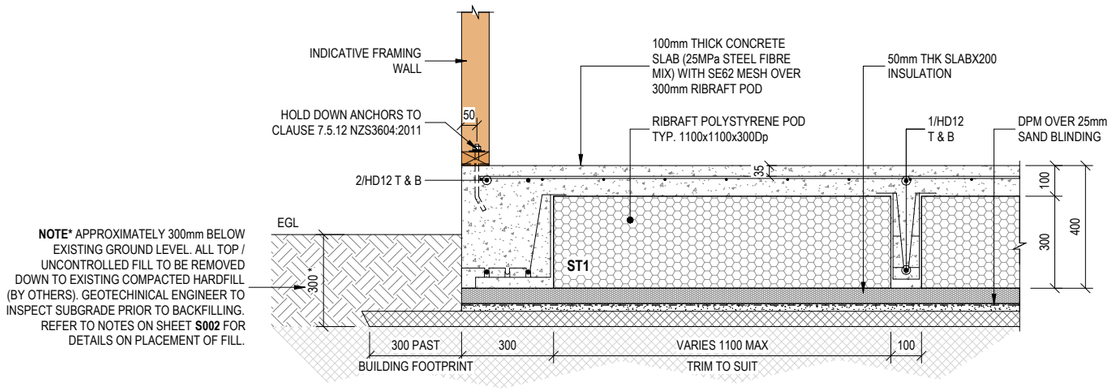
SHEET TITLE: **FOUNDATION PLAN**

DUAL SCALES SHOWN: **A1 / A3**

DRAWING NUMBER: **S100**

JOB No. **J003236**

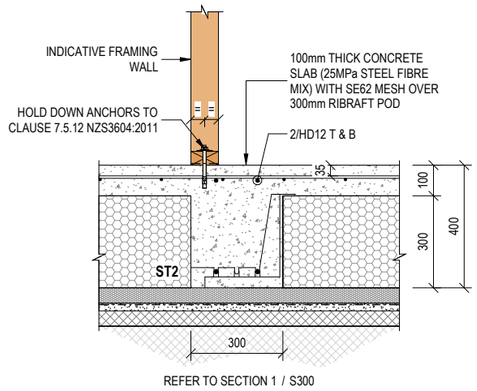
REVISION **A**



NOTE* APPROXIMATELY 300mm BELOW EXISTING GROUND LEVEL. ALL TOP / UNCONTROLLED FILL TO BE REMOVED DOWN TO EXISTING COMPACTED HARDFILL (BY OTHERS). GEOTECHINICAL ENGINEER TO INSPECT SUBGRADE PRIOR TO BACKFILLING. REFER TO NOTES ON SHEET **S002** FOR DETAILS ON PLACEMENT OF FILL.

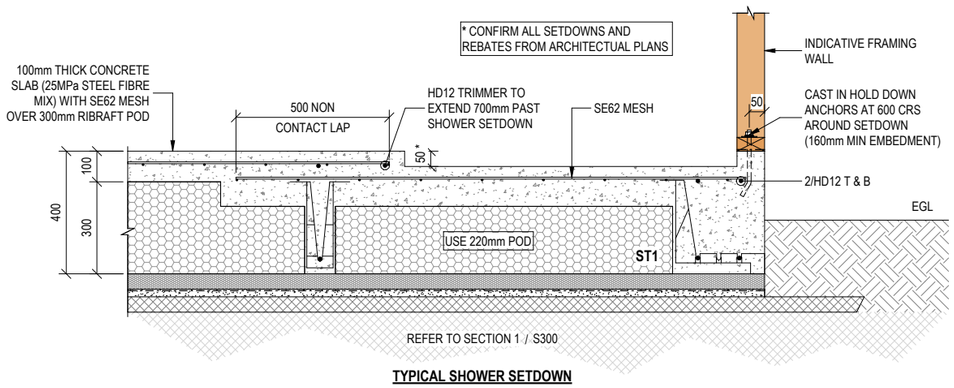
ST1 TYPICAL EDGE THICKENING & INTERNAL RIB

1 / S100 SECTION
SCALE 1 : 10 (A1), 1:20 (A3)



ST2 TYPICAL INTERNAL THICKENING

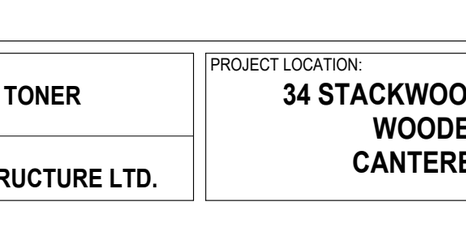
2 / S100 SECTION
SCALE 1 : 10 (A1), 1:20 (A3)



TYPICAL SHOWER SETDOWN

3 / S100 SECTION
SCALE 1 : 10 (A1), 1:20 (A3)

* OR AS REQUIRED FOR MINIMUM CLEARANCE, REFER TO ARCHITECTURAL DRAWINGS.



4 / S100 SECTION
SCALE 1 : 10 (A1), 1:20 (A3)

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WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
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5/08/2025 Chrisk

GEOTECHNICAL REPORT
FOUNDATION DESIGN IS BASED ON THE FOLLOWING GEOTECHNICAL REPORT:

BY: SUBTERRA
REF: 2025-0565 REV A
DATE: 14/04/2025

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WIND REGION	= REGION A
WIND ZONE	= HIGH
SNOW ZONE	= N4
TECHNICAL LAND CATEGORY	= TC2

PLANS TO BE REPRODUCED IN COLOUR

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PROJECT / CLIENT: **BRITTANY TONER**

STRUCTURAL DESIGNER: **PROJECT STRUCTURE LTD.**

PROJECT LOCATION: **34 STACKWOOD AVENUE WOODEND CANTERBURY**

SHEET TITLE: **FOUNDATION DETAILS**

DUAL SCALES SHOWN **A1 / A3**

DRAWING NUMBER: **S300**

JOB No. **J003236**

REVISION **A**

Building Consent

Date: Wednesday, 2 July 2025
Designed by: LS

BC250662

Toner Residence

Lot 958 Ravenswood Woodend

	SHEET	SHEET NAME	REV
PLANS			
	A101	Sediment & Fencing Plan	
	A102	Site Plan	
	A103	Floor Plan	
	A104	Set Out Plan	
	A105	Foundation Plan	
	A106	Drainage Plan	
	A107	Framing Plan	
	A108	Lintel Fixing Requirements	
	A109	Roof Plan	
	A110	Bracing Plan	
	A111	Bracing Schedule	
	A112	Bracing Requirements	
	A113	Internal Wall Bracing Requirements	
	A114	Lighting/Electrical Plan	
	A115	Window & Door Layout	
	A116	Window Schedule	
	A117	Internal Door Schedule	
	A118	Window & Door Penetration	
ELEVATIONS			
	A201	Elevations	
	A202	Elevations	
SECTIONS			
	A301	Section A	
	A302	Part Section B	
	A303	Part Section B	
	A304	Section C	
DETAILS			
	A401	Foundation Details	
	A402	Drainage Details	
	A403	Details 06 HWC	
	A404	Cladding Details	
	A405	Cladding Details	
	A407	Roof Details	
	A407	Roof Details	
	A408	Shower Details	
	A409	Tile Details	
	A410	HWC Details	
	A411	Truss Design	
	A412	Truss Design	

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5/08/2025 Chrisk

LMS DRAFTING+DESIGN
02108232226 / luke@lmsdraftinganddesign.co.nz / www.lmsdraftinganddesign.co.nz

Lot 958 Ravenswood

DECOMMISSIONING SEDIMENT FENCES:
Stabalise the catchment area before removing the silt fence and accumulated sediment.
Ensure accumulated sediment is disposed of correctly.
Back fill the trench, then re-grade and stabilise the disturbed area.
Main Contractor to oversee all decommisioning

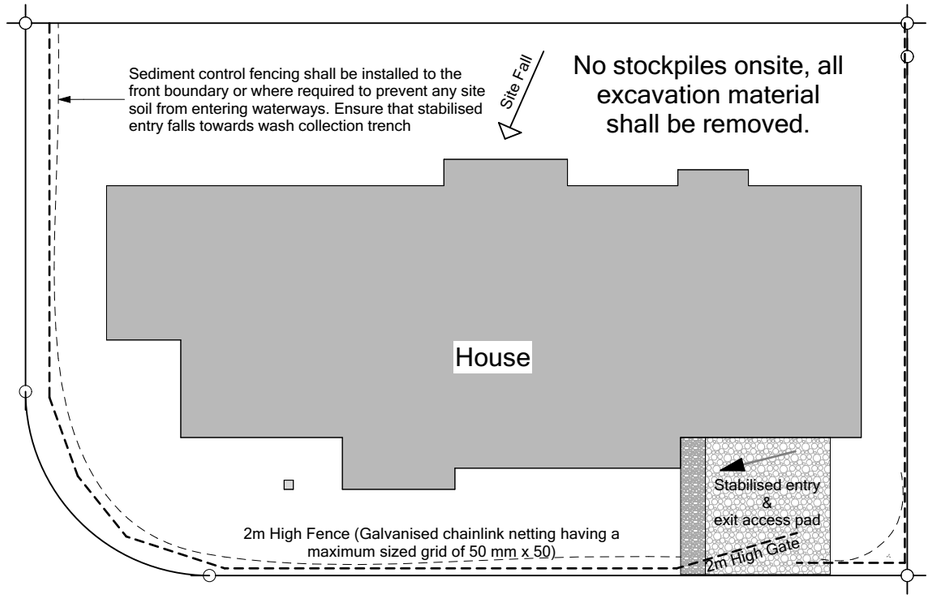
SITE FENCING:
Allow to install a temporary construction barrier. The fencing
shall be at least 2.0 in height from existing ground level on all
sides accessible to the public this is to be istalled prior to all
construction work being carried out and shall be maintained for
the duration of the dwelling construction.Typical fence construction may be galvanised chain link netting having a maximum sized grid of 50 mm x 50 mm. Post spacing shall be a maximum of 2.5m with a gap between the lower edge of the fence and ground no greater than 100 mm.

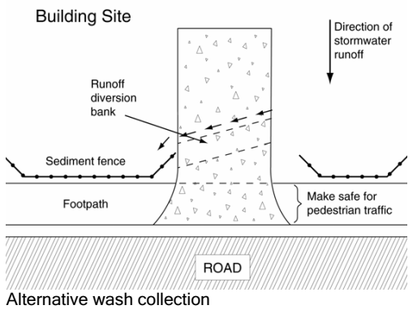
SEDIMENT CONTROL:
All sediment control to comply with NZBC E1 and Erosion and Sediment Control Plan by ECAN.
Refer to esccanterbury.co.nz/project/detailed-plan for further information.

Refer to supporting documents for sediment control checksheets

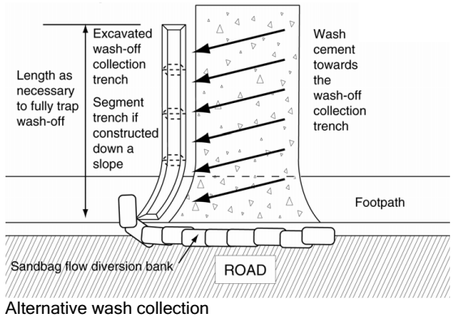
Main Contractor to oversee all sediment control

Roof water downpipes shall be connected to the permanent underground drainage system as soon as practical after the roof is installed





Alternative wash collection



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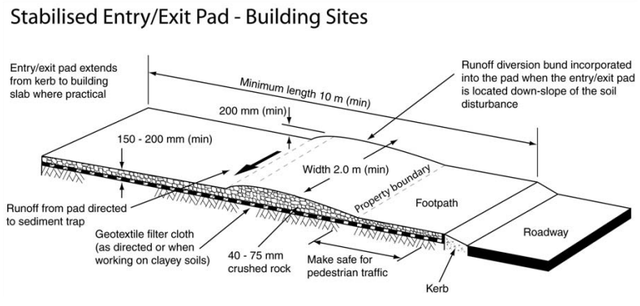

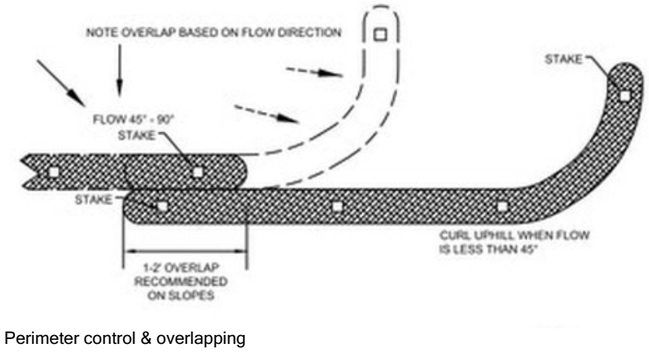

Perimeter control & overlapping

Pyramid installation staking

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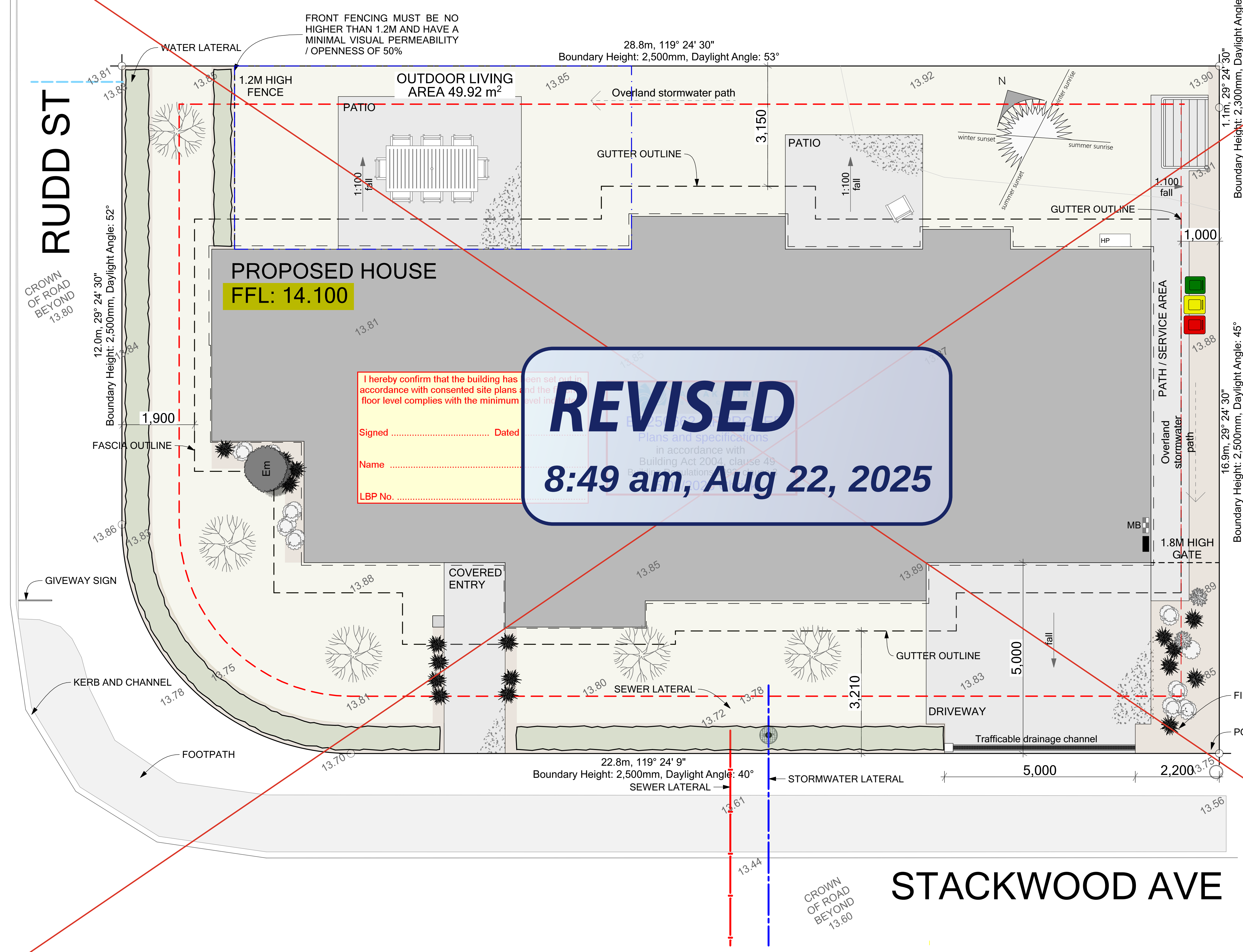
Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Sediment & Fencing Plan

DATE: 2/07/2025
ISSUE: Building Consent
SCALE: NTS
DRAWN BY: AD

REV:
A101

Building Consent BC250662
Received 5/8/2025


RUDD ST
CROWN OF ROAD BEYOND 13.80
WATER LATERAL
FRONT FENCING MUST BE NO HIGHER THAN 1.2M AND HAVE A MINIMAL VISUAL PERMEABILITY / OPENNESS OF 50%
28.8m, 119° 24' 30"
Boundary Height: 2,500mm, Daylight Angle: 53°
1.2M HIGH FENCE
OUTDOOR LIVING AREA 49.92 m²
PATIO
Overland stormwater path
3,150
GUTTER OUTLINE
1:100 fall
N
winter sunset
winter sunrise
summer sunrise
summer sunset
1.1m, 29° 24' 30"
Boundary Height: 2,300mm, Daylight Angle: 45°
1:100 fall
HP
1,000
12.0m, 29° 24' 30"
Boundary Height: 2,500mm, Daylight Angle: 52°
PROPOSED HOUSE
FFL: 14.100
1,900
FASCIA OUTLINE
Em
PATH / SERVICE AREA
Overland stormwater path
16.9m, 29° 24' 30"
Boundary Height: 2,500mm, Daylight Angle: 45°
MB
1.8M HIGH GATE
GIVEWAY SIGN
COVERED ENTRY
KERB AND CHANNEL
SEWER LATERAL
3,210
5,000
fall
DRIVEWAY
Trafficable drainage channel
FIBRE
POWER
FOOTPATH
22.8m, 119° 24' 9"
Boundary Height: 2,500mm, Daylight Angle: 40°
SEWER LATERAL
STORMWATER LATERAL
5,000
2,200
CROWN OF ROAD BEYOND 13.60
STACKWOOD AVE
13.81
13.83
13.85
13.85
13.92
13.90
13.91
13.81
13.84
13.88
16.92
13.86
13.83
13.88
13.85
13.89
13.75
13.78
13.81
13.80
13.78
13.72
13.83
13.70
13.75
13.61
13.56
13.44
I hereby confirm that the building has been set out in accordance with consented site plans and the finished floor level complies with the minimum level indicated
Signed .... Dated
Name ....
LBP No. ....
REVISED
8:49 am, Aug 22, 2025

SITE DESCRIPTION:
LOT: 958
DP: 589336
SITE AREA: 510m²

WIND ZONE: High
EARTHQUAKE ZONE: 2
EXPOSURE ZONE: C
SNOW LOADING ZONE: N4

BUILDING DESCRIPTION:

AREA OVER CLADDING: 217.40 m²
AREA OVER FOUNDATION: 212.58 m²
AREA OVER ROOF:268.4M²

TOTAL SITE COVERAGE: 52.6%

General Site Note:
Dimensions to foundation

Refer to drainage plan for more detailed drainage

Site to be fully fenced before commencing construction, fence to comply with NZBC clause F5/AS1 part 1

Finished Floor Level:
Heights are in terms of New Zealand Vertical Datum 2016. Origin of Levels UA 84/8 (AG2C), RL 10.412.

Shall be at least 225mm above the finished level of the surrounding ground immediately adjacent to the building and no less than 150mm above the road crown on at least one cross-section through the building and roadway.

Legend:
MB: Meter Box

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Site Plan SUPERCEDED

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:

A102

RUDD ST

CROWN OF ROAD BEYOND 13.80

WATER LATERAL

FRONT FENCING MUST BE NO HIGHER THAN 1.2M AND HAVE A MINIMAL VISUAL PERMEABILITY / OPENNESS OF 50%

28.8m, 119° 24' 30"
Boundary Height: 2,500mm, Daylight Angle: 53°

1.2M HIGH FENCE

OUTDOOR LIVING AREA 49.92 m²

PATIO

1:100 fall

Overland stormwater path

GUTTER OUTLINE

3,150

PATIO

1:100 fall

N

winter sunrise

summer sunrise

winter sunset

summer sunset

1:100 fall

GUTTER OUTLINE

1,000

HP

PROPOSED HOUSE
FFL: 14.100

PATH / SERVICE AREA

Overland stormwater path

12.0m, 29° 24' 30"
Boundary Height: 2,500mm, Daylight Angle: 52°

1,900

FASCIA OUTLINE

Em

MB

1.8M HIGH GATE

16.9m, 29° 24' 30"
Boundary Height: 2,500mm, Daylight Angle: 45°

1.1m, 29° 24' 30"
Boundary Height: 2,300mm, Daylight Angle: 45°

GIVEWAY SIGN

COVERED ENTRY

GUTTER OUTLINE

5,000

fall

3,210

DRIVEWAY

KERB AND CHANNEL

SEWER LATERAL

FIBRE

POWER

Trafficable drainage channel

FOOTPATH

22.8m, 119° 24' 9"
Boundary Height: 2,500mm, Daylight Angle: 40°

SEWER LATERAL

STORMWATER LATERAL

4,500

2,450

CROWN OF ROAD BEYOND 13.60

STACKWOOD AVE

SITE DESCRIPTION:

LOT: 958
DP: 589336
SITE AREA: 510m²

WIND ZONE: High
EARTHQUAKE ZONE: 2
EXPOSURE ZONE: C
SNOW LOADING ZONE: N4

BUILDING DESCRIPTION:

AREA OVER CLADDING: 217.40 m²
AREA OVER FOUNDATION: 212.58 m²
AREA OVER ROOF:268.4M²

TOTAL SITE COVERAGE: **52.6%**

General Site Note:
Dimensions to foundation

Refer to drainage plan for more detailed drainage

Site to be fully fenced before commencing construction, fence to comply with NZBC clause F5/AS1 part 1

Finished Floor Level:
Heights are in terms of New Zealand Vertical Datum 2016. Origin of Levels UA 84/8 (AG2C), RL 10.412.

Shall be at least 225mm above the finished level of the surrounding ground immediately adjacent to the building and no less than 150mm above the road crown on at least one cross-section through the building and roadway.

Legend:
MB: Meter Box

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Site Plan

DATE: 13/08/2025
ISSUE: Resource Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:
A102

GENERAL NOTE:
-Electric Solar Ready 300l HWC
-Electric Hob

Antislip floor coverings on all access routes (both external and internal), to comply with NZBC D1/AS1 Table 2 (except surface areas inside entries as dry areas)

All down lights inside insulation envelope to be CA rated

Bathroom / Ensuite to have an inline auto extraction fan to provide a flow rate of at least 25l/s. The kitchen extraction fan shall provide a rate of at least 50l/s (including associated ducting)

C/AS1 COMPLIANCE:
-Escape routes comply with Table 3.3.1.1 as they are less than 35m.
-External fire spread is not relevant to this project due to the separation between the building and the boundary being over 1m and no eaves are being constructed within 650mm of the boundary.
-Interconnected smoke alarms are to be positioned within each bedroom, living space and hallway as shown on the Floor plan. Fire alarms shall be within 10m of each other in any direction and must not be farther than 5m from any wall.

KITCHEN NOTE:
All surface finishes to the kitchen joinery, walls, etc. to comply with the requirements of NZBC G3. Kitchen layout to be confirmed prior to construction refer to the kitchen plan
provided by others

WET AREA WATERPROOFING NOTES:

FLOORS
- Ensuite & Bathroom floors shall have ceramic or stone tiles having a 6% max, water absorption, waterproof grouted joints, and bedded with an adhesive specified by the tile manufacturer as being suitable for the tiles, substrate material and the environment of use.
Tiles shall be installed over a suitable waterproof membrane extending over the entire floor and 75mm min up floor / wall junction. Water stops must be installed at doorways as per "COP- Internal Wet-area Membrane Systems". Refer to supporting documents for further information.
- Kitchen, Bathroom, Mudroom & Laundry shall have selected waterproof flooring material

WALLS
- Baths shall have a waterproofing membrane extending at least 150mm above and beyond the top of the side and ends of the bath.
- Tiled showers shall have a waterproof membrane extending 300mm min. above the shower head and 1800mm min. above FFL. As well as extend 50mm past the glass shower screen.
- Vanity shall have 150mm min. high tiled upstand. Tiles shall be ceramic or stone tiles having a 6% max, water absorption, waterproof grouted joints, and bedded with an adhesive specified by the tile manufacturer as being suitable for the tiles, substrate material and the environment of use.

SHOWER NOTE:
Tiled showers shall have 10mm Grade A toughened safety glass & shower screens

SMOKE ALARM NOTE:
Interconnected smoke alarms shall be installed and powered by non-removable long life battery. Test and hush buttons to comply with F7/AS1

HWC NOTE:
300l Hot water cylinder with seismic restraints and tempering valve set to 50^{0}c as per NZBC G12 section 6.14.1. HWC shall be secured to the wall framing using 3/25x1mm Galv steel straps with 8mm coach screw with 30x2mm washers. Screws to penetrate framing a minimum of 50mm. Refer to supporting documents for more detail. Install an expansion chamber and ensure a safe tray is installed below the HWC as per the requirements of G12 AS1 NZBC section 5.2.3 page 24.

INTERNAL LOADBEARING WALL:
Refer to Truss manufacturer for all internal load bearing walls

WINDOW & DOOR NOTE:
Refer to window and door layout for positions

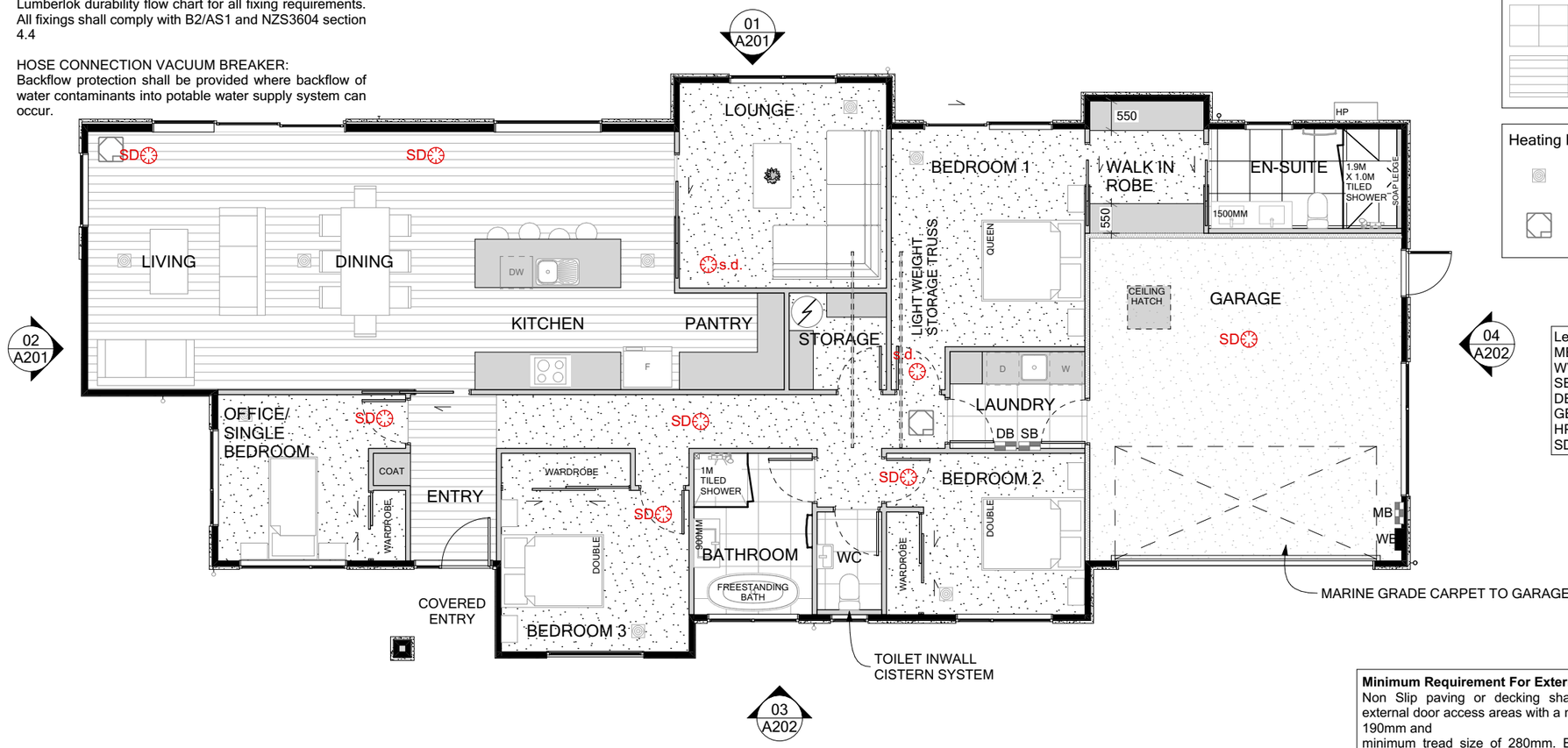
FRAMING NOTE:
Refer to Sections for framing treatment & schedule. All framing shall comply with NZS3604:2011.

CEILING ACCESS NOTE:
Access shall be provided to the ceiling space with an opening of at least 600mm x 500mm with 600mm in height between the top of the ceiling joist and other roof members.

LINTEL FIXING NOTE:
Please refer to the as-built truss design for all lintel fixing requirements and sheet A108 for further information.

DURABILITY NOTE:
Please refer to the supporting documents at the Lumberlok durability flow chart for all fixing requirements. All fixings shall comply with B2/AS1 and NZS3604 section 4.4

HOSE CONNECTION VACUUM BREAKER:
Backflow protection shall be provided where backflow of water contaminants into potable water supply system can occur.



WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
in accordance with
Building Act 2004, clause 49
Building Regulations 1992, clause 3
5/08/2025 Chrisk

Building Consent BC250662
Received 5/8/2025

Floor Area:
212.58 m^2
(over framing)

Framing Note:

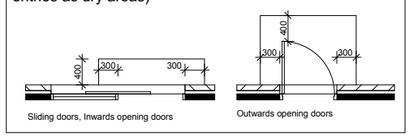
Stud height 2.420m
Double top plate height 2.455m

Flooring Legend
- Concrete
- Carpet
- Tiles
- Planking

Heating Legend
- Heat Duct
- Air Return

Legend:
MB: Meter Box
WV: Water Valve
SB: Switch Board
DB: Data Board
GB: Gas Water Heater
HP: Heat Pump Unit
SD: Smoke Detector

Minimum Requirement For External Access Note:
Non Slip paving or decking shall be provided at all external door access areas with a maximum step down of 190mm and
minimum tread size of 280mm. Below is the minimum size of area
required to the external doors. Antislip floor coverings on all access routes (both external and internal), to comply with NZBC D1/AS1 Table 2 (accept surface areas inside entries as dry areas)



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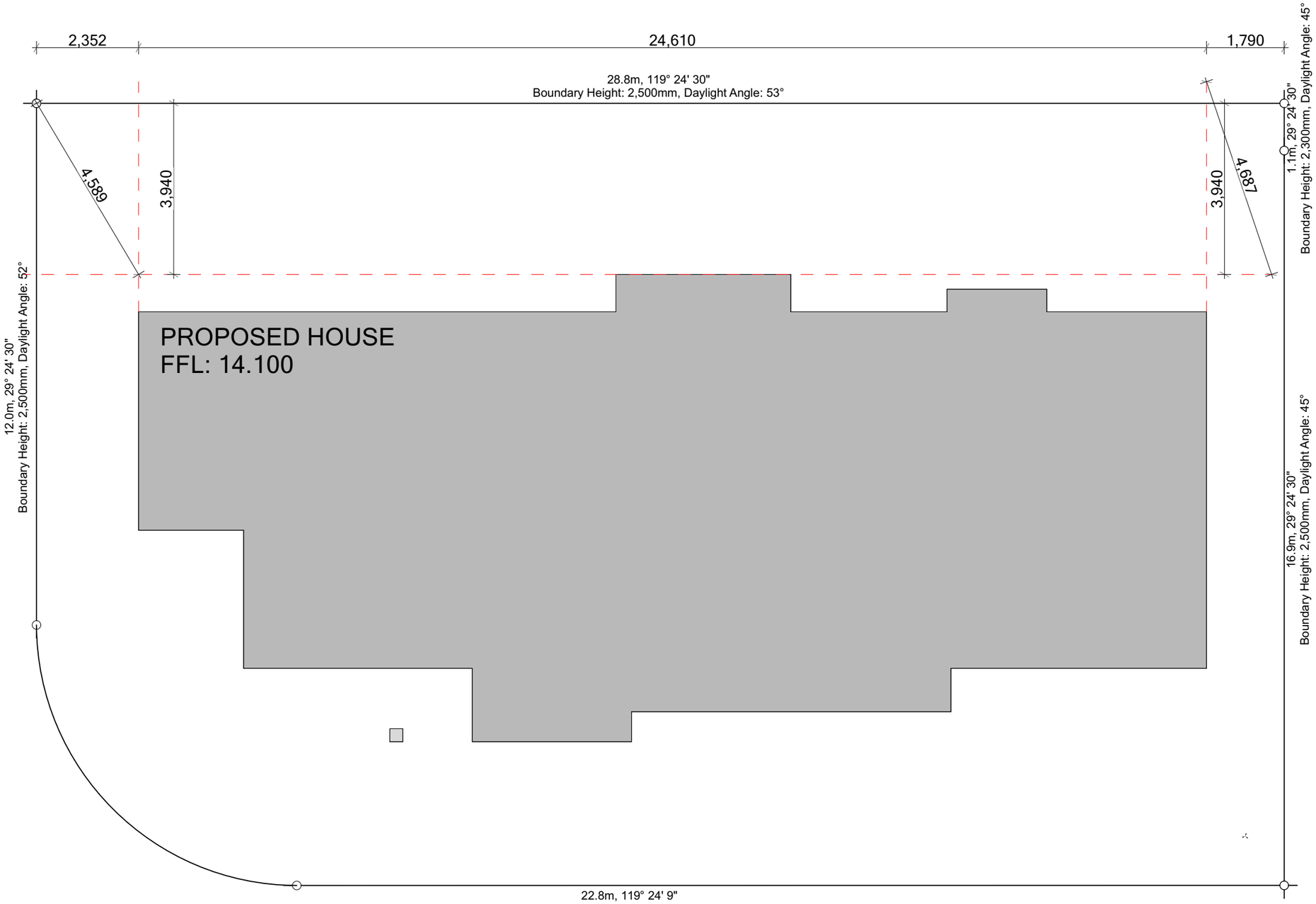
Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Floor Plan

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:
A103

Building Consent BC250662
Received 5/8/2025



WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
in accordance with
Building Act 2004, clause 49
Building Regulations 1992, clause 3
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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Set Out Plan

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:
A104

WAIMAKARIRI DISTRICT COUNCIL

BC250662 APPROVED
Plans and specifications
in accordance with
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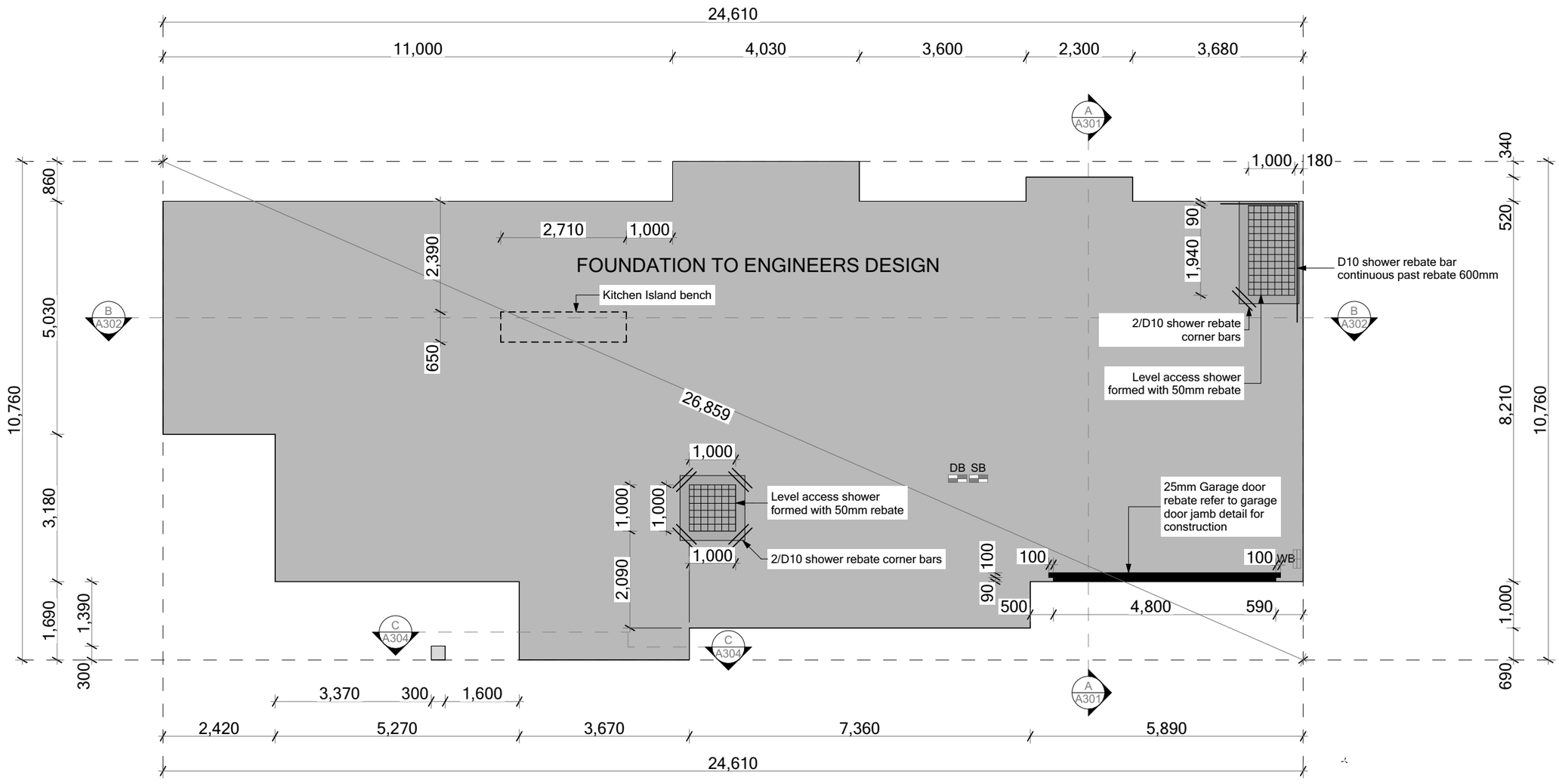
5/08/2025 Chrisk



EARTH SLAB REINFORCING MESH NOTE:

Steel mesh must be earthed. Option, Earth with 16mm REO rod brought up into garage wall below meter box and wire to slab mesh. At pre-wire stage connect a clamp & piece of wire to the rod & earth it to the meter box

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Foundation Plan

DATE: 2/07/2025
ISSUE: Building Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:
A105

Building Consent BC250662
Received 5/8/2025

AS/NZS 3500.2
DRAINAGE AND PLUMBING

LEGEND:
- Foul Water pipe
- Foul Water Pipe
- Water Feed Pipe
- Stormwater Pipe 1:120 fall min.
- Tundish Drain Pipe
- DP 80mm uPVC Downpipes #7 in total
- Overflow Relief Gully
- AAV Air Admittance Valve
- TV 50mm Terminal Vent
- BV 50mm Branch Vent
- FV 40mm Fixture Vent
- tap> Water Tap
- ip Inspection Point
- M Water Meter
- Sink with built in 15lt/min overflow
- HWC 300ltr Electric hot water cylinder on safe tray with 40mm dn. Drain and 20mm diameter. Copper overflow relief valve to terminate at foundation wall into garden with anti vermin flaps.

GENERAL NOTE:
Confirm all waste positions on site with the selected fixtures

STANDARDS NOTE:
All plumbing and drainage shall be as per AS/NZS 3500.2. Upon completion testing shall be done as per section 15.

POTABLE WATER NOTE:
Water supply shall be installed as per NZBC G12/AS1 testing upon completion shall be done as per section 7.5. Backflow protection shall be provided where backflow of water and contaminants into potable water supply system can occur. Refer to Floor Plan for hose connection vacuum breaker note.Cold water supply system shall also be installed to avoid the likelihood of becoming unintentionally heated. Refer to G12/AS1 Para 7.3.1 for guidance.

STORMWATER NOTE:
Stormwater drainage shall comply with NZBC/E1 figures 13 & 14. Refer to supporting documents for details of construction.

FOUL WATER NOTE:
Foul water drainage shall comply with AS/NZS 3500.2 Table 3.4.1. Bedding and backfilling shall comply with AS/NZS 3500.2 Sections 3.5, 3.6, 3.7 and 3.8. Refer to supporting documents for details of construction.

VENTING NOTES:
- Branch vents shall be installed at a length of less than 10m and down stream from the head of the main or branch drain this shall be confirmed on site during installation.
- Branch vents sized in accordance with AS/NZS 3500.2 Table 8.5.2.1
- All vents shall be installed in wall framing with top plate stiffener and terminate through roof cladding with Dektite rubber boot flashing

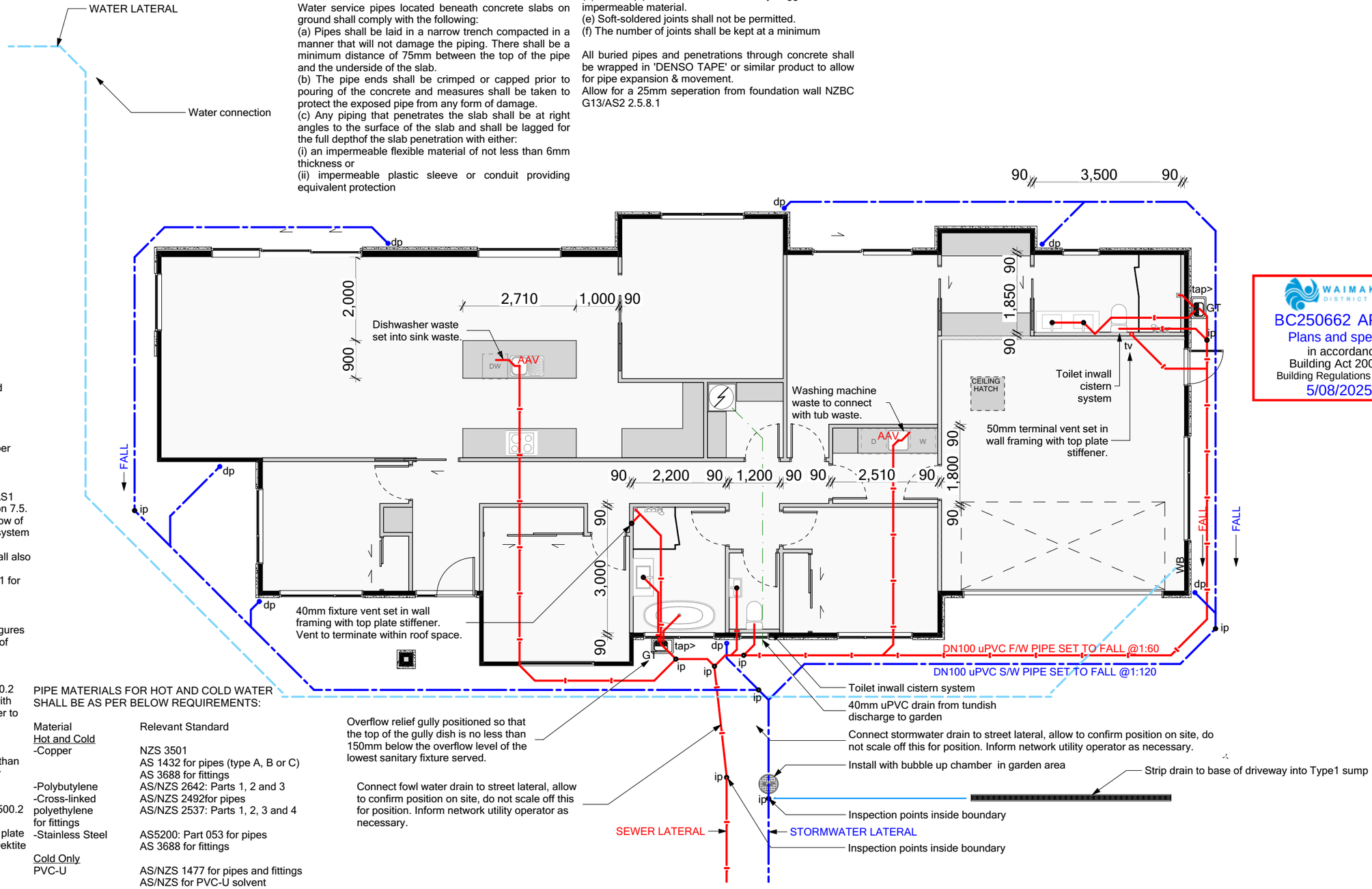
HWC REQUIREMENTS:
Safe tray below HWC with 40Ø drain to garden with vermin gate. Pressure relief valves from cylinder to discharge to Allproof HWC Tundish fitted to cylinder safe tray.

FIXTURE PIPE SIZES & GRADIENTS:
WC - Ø100mm @ 1:60
All remaining fixture pipes shall be 65Ø @ 1:40

NOTE:
Water service pipes located beneath concrete slabs on ground shall comply with the following:
(a) Pipes shall be laid in a narrow trench compacted in a manner that will not damage the piping. There shall be a minimum distance of 75mm between the top of the pipe and the underside of the slab.
(b) The pipe ends shall be crimped or capped prior to pouring of the concrete and measures shall be taken to protect the exposed pipe from any form of damage.
(c) Any piping that penetrates the slab shall be at right angles to the surface of the slab and shall be lagged for the full depthof the slab penetration with either:
(i) an impermeable flexible material of not less than 6mm thickness or
(ii) impermeable plastic sleeve or conduit providing equivalent protection

NOTE:
(d) Metal pipes shall be continuously lagged with an impermeable material.
(e) Soft-soldered joints shall not be permitted.
(f) The number of joints shall be kept at a minimum

All buried pipes and penetrations through concrete shall be wrapped in 'DENSO TAPE' or similar product to allow for pipe expansion & movement.
Allow for a 25mm seperation from foundation wall NZBC G13/AS2 2.5.8.1



PIPE MATERIALS FOR HOT AND COLD WATER SHALL BE AS PER BELOW REQUIREMENTS:

Material	Relevant Standard
Hot and Cold	
-Copper	NZS 3501 AS 1432 for pipes (type A, B or C) AS 3688 for fittings
-Polybutylene	AS/NZS 2642: Parts 1, 2 and 3
-Cross-linked polyethylene for fittings	AS/NZS 2492for pipes AS/NZS 2537: Parts 1, 2, 3 and 4
-Stainless Steel	AS5200: Part 053 for pipes AS 3688 for fittings
Cold Only	
PVC-U	AS/NZS 1477 for pipes and fittings AS/NZS for PVC-U solvent cements and priming liquids
Polyethylene	AS/NZS 4130 for pipes AS/NZS 4129 for fittings

Note: Cross-linked polyethylene pipes used for hot water shall have a nominal pressure rating of PN16 or PN20.

WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
in accordance with
Building Act 2004, clause 49
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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Drainage Plan

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:
A106

Floor Area:
212.58 m^2
(over framing)

FRAMING NOTE:

Stud height 2.420m
Double top plate height 2.455m

FRAMING NOTE:
Refer to the cross section for framing schedule. All remaining framing shall comply with NZS3604:2011

INTERNAL LOADBEARING WALL:
Refer to Truss manufacturer for all internal load bearing walls

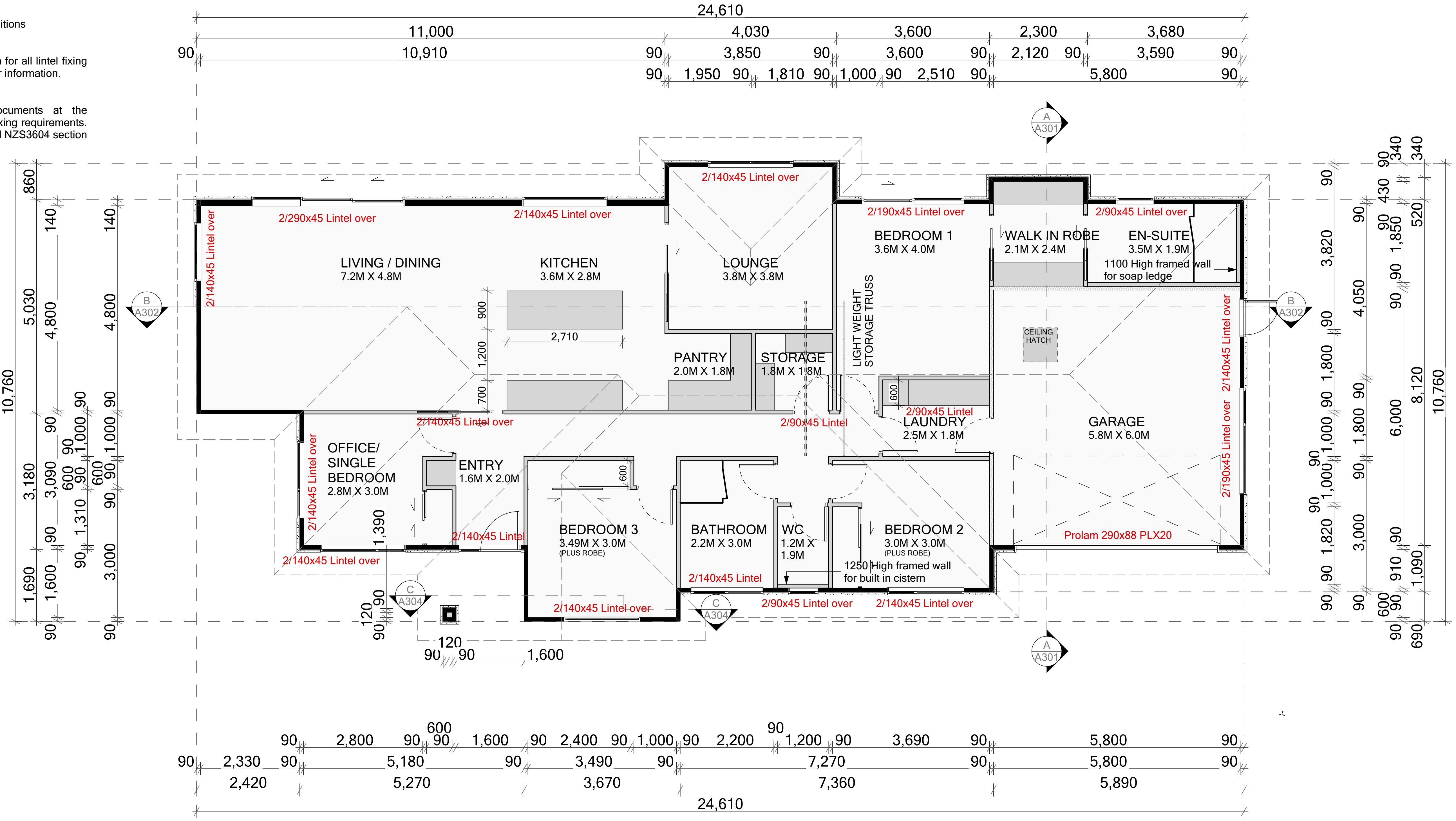
WINDOW AND DOOR NOTE:
Refer to window and door layout for positions

LINTEL FIXING NOTE:
Please refer to the as-built truss design for all lintel fixing requirements and sheet A108 for further information.

DURABILITY FIXING NOTE:
Please refer to the supporting documents at the Lumberlok durability flow chart for all fixing requirements. All fixings shall comply with B2/AS1 and NZS3604 section 4.4

Framing Note:

Stud height 2.420m
Double top plate height 2.455m



Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Framing Plan

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:

A107

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MiTek® LUMBERLOK®

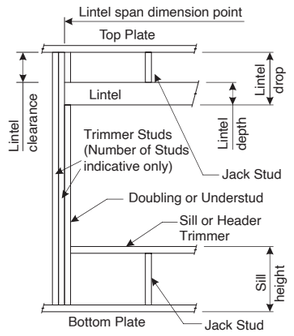
LINTEL FIXING SCHEDULE

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 0.20kPa
- 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			Heavy Roof		
	Wind Zone			Wind Zone		
	L, M, H	VH	EH	L, M, H	VH	EH
8.6m²	G	G	H	G	G	H
11.6m²	G	H	H	G	G	H
12.1m²	G	H	H	G	H	H
15.3m²	H	H	-	G	H	H
19.1m²	H	-	-	G	H	-
20.9m²	H	-	-	H	H	-
21.8m²	H	-	-	H	-	-
34.3m²	-	-	-	H	-	-

NOTES:

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

Selection Chart for Lintel Fixing

Lintel Span (m)	Loaded Dimension (m) (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
1.0	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	F	F	F	G	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	F	F	F	E	E	E	F	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	F	F	G	G	H	E	E	F	G	G
1.5	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	F	F	F	G	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	F	F	G	G	H	E	E	F	G	G
	6.0	F	F	G	H	H	E	E	F	G	H
2.0	2.0	E	F	F	F	G	E	E	F	F	F
	3.0	E	F	F	G	G	E	E	F	F	G
	4.0	F	F	G	G	H	E	E	F	G	G
	5.0	F	F	G	H	H	E	E	F	G	H
	6.0	F	G	G	H	H	E	F	G	H	H
2.4	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	G	H	E	E	F	G	G
	4.0	F	F	G	H	H	E	E	F	G	H
	5.0	F	G	G	H	H	E	F	G	H	H
	6.0	F	G	H	H	-	E	F	G	H	H
3.0	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	G	H	H	E	F	G	H	H
	5.0	F	G	H	H	-	E	F	G	H	H
	6.0	F	G	H	-	-	E	F	G	H	-
3.6	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	F	G	H	H	E	F	G	G	H
	4.0	F	G	H	H	-	E	F	G	H	H
	5.0	F	G	H	-	-	E	F	G	H	-
	6.0	G	H	H	-	-	E	F	H	-	-
4.2	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	H	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
4.5	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.4	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
4.8	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.2	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
5.1	2.0	F	F	G	H	H	E	F	G	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.5	F	G	H	-	-	E	F	G	H	-
	4.0	G	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	G	H	-	-
5.4	2.0	F	F	G	H	H	E	F	G	G	H
	2.8	F	G	H	H	-	E	F	G	H	H
	3.0	F	G	H	-	-	E	F	G	H	-
	4.0	G	H	H	-	-	E	F	H	-	-
	5.0	G	H	-	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	G	H	-	-

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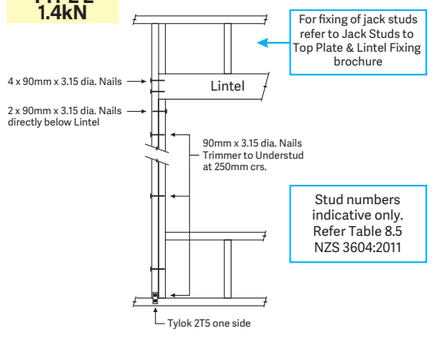
5/08/2025 Chrisk

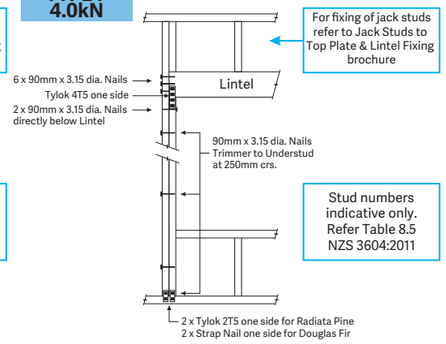
LINTEL FIXING OPTIONS

(Characteristic Uplift)

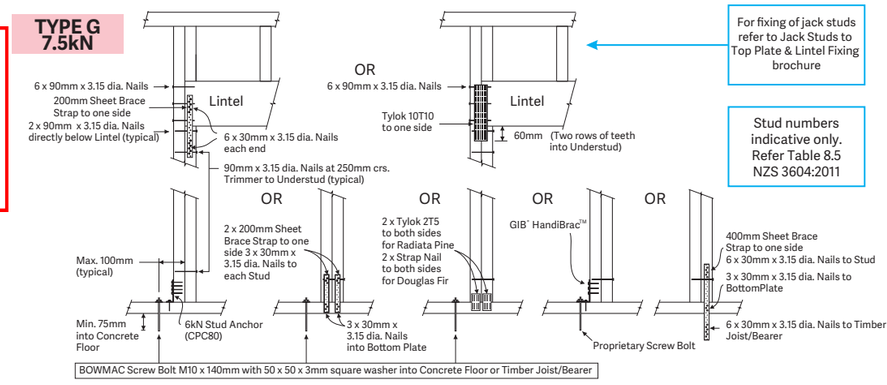
TYPE E 1.4kN



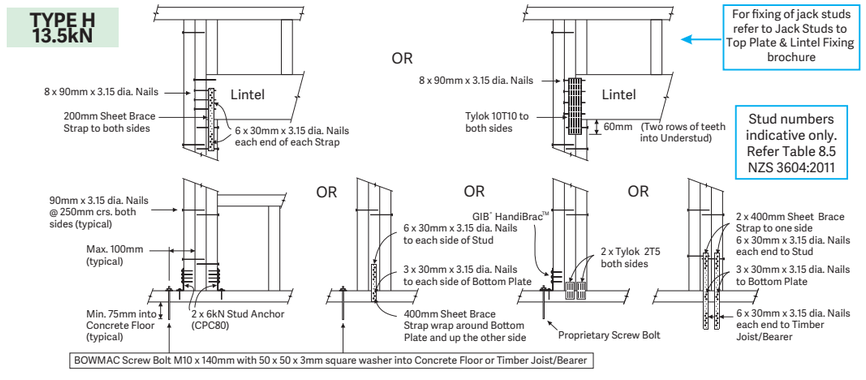
TYPE F 4.0kN



TYPE G 7.5kN



TYPE H 13.5kN



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02108232226 / luke@lmsdraftinganddesign.co.nz / www.lmsdraftinganddesign.co.nz

Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Lintel Fixing Requirements

DATE: 2/07/2025
ISSUE: Building Consent
SCALE: NTS
DRAWN BY: AD

REV:
A108

BC250662

GENERAL ROOFING NOTE:
-Pitch = As noted
-Wind zone = High
-Roof cladding =Corrugate 0.40 B.M.T Colorsteel (All Flashing shall be 0.55B.M.T) and 1mm butynol
-Underlay = Covertek 215 Self-supporting underlay
-Purlins =H1.2 70x45 @600crs top and bottom and 900crs max on main body of roof as per manufacturers specifcation
-Purlin fixing = NZS3604:2011 Section 10 table 10.10:
-Fixing Type = T 1/10g self-drilling screw, 80mm long (Alternative fixing capacity shall be 2.4kN)

GENERAL NOTE:
All aspects of roofing shall be installed as per NZBC/E1/E2. Refer to supporting documents & details for installation of roofing materials

DOWNPIPES
80mmØ cColorsteel Downpipes, Maximum catchment 52m² Max.
-10min 10 year return 47.4mm/hr
-10min 50 year return 74.2mm/hr

SPOUTING REQUIREMENT NOTE:
Selected spouting shall have a cross-sectional area of no less than: 4514mm²

PENETRATION NOTE:
Roof penetrations shall be in accordance with E2/AS1 section 8.4.17 figures 53,54,55.

VENT PENETRATION NOTE:
All vents shall terminate through roof cladding with Dektite rubber boot flashing. Refer to supporting documents for installation instructions.

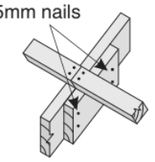
EXTRACTOR FAN NOTE:
All extractor fans shall terminate through soffit

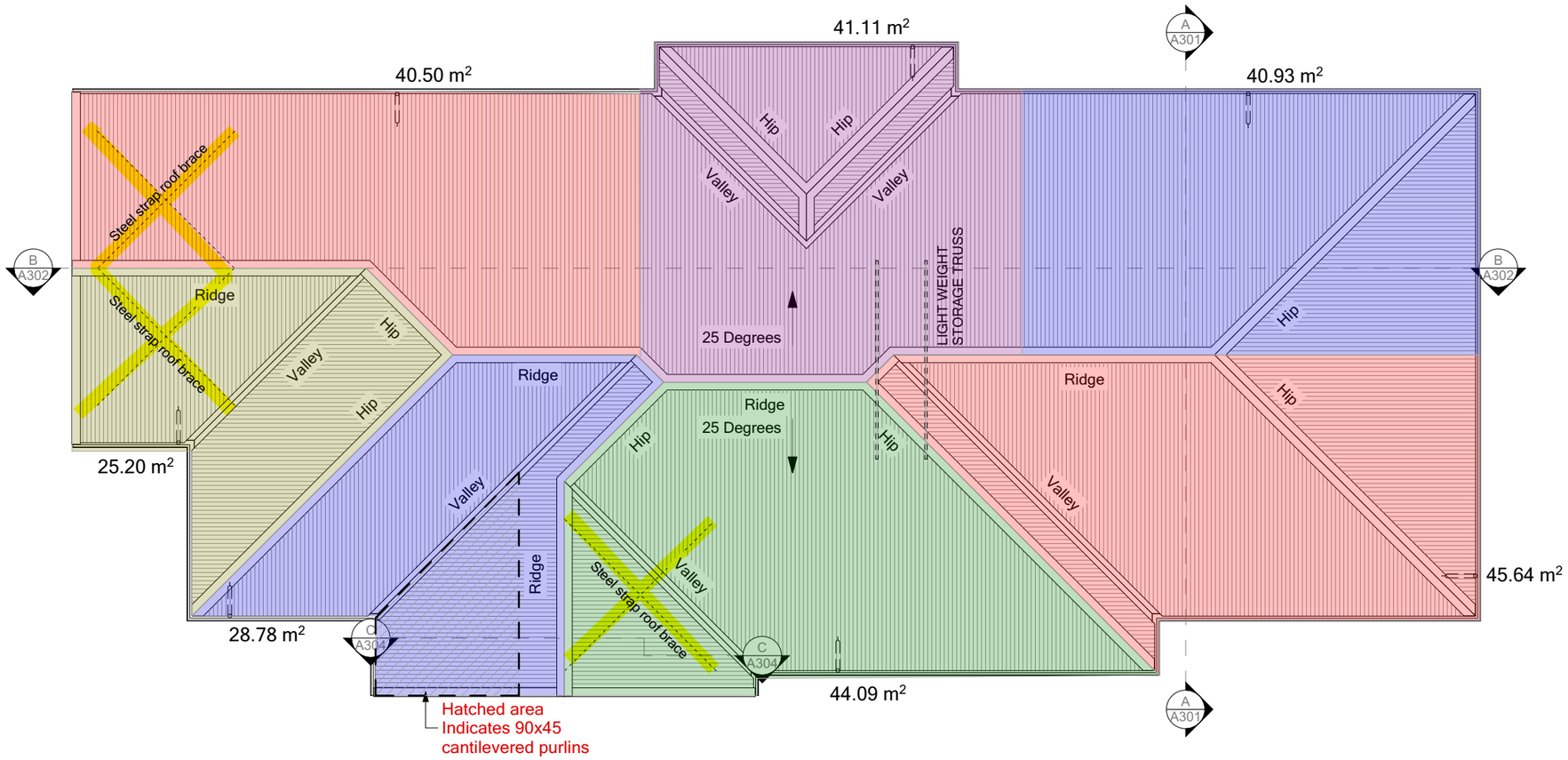
FLASHING NOTE:
Colorsteel fascia and spouting 0.55B.M.T (Colour to match roof)

EXPANSION JOINTS NOTE:
Flashing expansion joints every 12m for light colours and 9m for dark colours, as per NZBC E1/AS1, E2/AS1 & NZMRM v24.09

PURLIN JOINING HIGH WIND ZONE:
Purlin splice shall be supported by 90 x 35mm block, below, fixed to chord or rafter with 4/ 75mm nails. Each purlin fixed with 1/ screw.

90 x 35mm block fixed to chord or rafter with 4 x 75mm nails





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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Roof Plan

DATE: 2/07/2025
ISSUE: Building Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:
A109

Building Consent BC250662
Received 5/8/2025

Top Plate Connection To External Wall Requirements

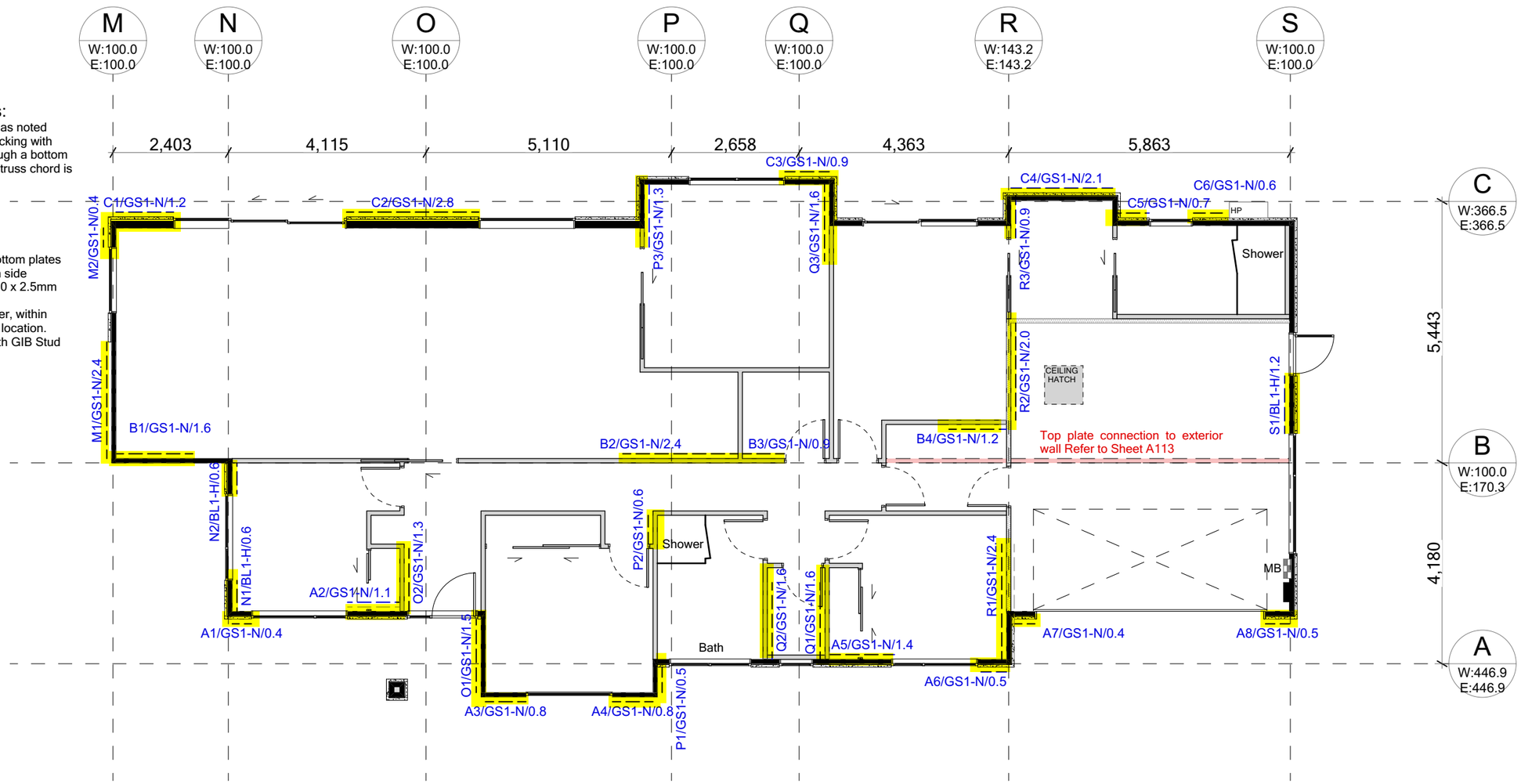
Up to 125 units one wall only
between 125 and 250 units 2 walls

Top Plate Connection To External Wall Requirements for internal bracing elements:

The following elements shall be connected to external walls, as noted below, either through a continuous top plate or additional blocking with ceiling battens non continuous either side of blocking or through a bottom chord truss connection to the internal wall element when the truss chord is fixed to the top plate and an external wall.
Elements: All On Bracing Line B

BOTTOM PLATE HOLD DOWN NOTES:

When GIB Handibracs will not work due to framing layout, bottom plates shall be fixed with 400 x 25 x 0.9mm galv. strap fixed to each side of bottom plate with 3/ 30 x 2.55 flat head galv. nails and 6/ 30 x 2.5mm flat head galv. nails to each side of stud.
A Hold down bolt shall be installed with 50 x 50 x 3mm washer, within 80mm of the end of bracing element. Notch studs to suit bolt location. Where possible, additional corner stud can be substituted with GIB Stud Saver.



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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Bracing Plan

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:
A110

Building Consent BC250662
Received 5/8/2025

BRACING ALONG

Required			Provided							Achieved	
Line	W BU	EQ BU	Brace	Type	W BU/m	EQ BU/m	Length m	Height m	Angle	W BU	EQ BU
A	446.9	446.9	*A-1*	*GS1-N*	*50.0*	*55.0*	*0.4*	*2.4*	-	*20.0*	*22.0*
			A-2	*GS1-N*	*50.0*	*55.0*	*1.1*	*2.4*	-	*54.5*	*60.0*
			A-3	*GS1-N*	*50.0*	*55.0*	*0.8*	*2.4*	-	*42.2*	*46.5*
			A-4	*GS1-N*	*50.0*	*55.0*	*0.8*	*2.4*	-	*42.2*	*46.5*
			A-5	*GS1-N*	*70.0*	*60.0*	*1.4*	*2.4*	-	*95.0*	*81.4*
			A-6	*GS1-N*	*50.0*	*55.0*	*0.5*	*2.4*	-	*26.7*	*29.3*
			A-7	*GS1-N*	*50.0*	*55.0*	*0.4*	*2.4*	-	*21.5*	*23.7*
			A-8	*GS1-N*	*50.0*	*55.0*	*0.5*	*2.4*	-	*25.0*	*27.5*
										327.1	336.8
B	100.0	170.3	*B-1*	*GS1-N*	*70.0*	*60.0*	*1.6*	*2.4*	-	*112.0*	*96.0*
			B-2	*GS1-N*	*70.0*	*60.0*	*2.4*	*2.4*	-	*168.0*	*144.0*
			B-3	*GS1-N*	*50.0*	*55.0*	*0.9*	*2.4*	-	*44.0*	*48.4*
			B-4	*GS1-N*	*70.0*	*60.0*	*1.2*	*2.4*	-	*84.0*	*72.0*
										408.0	360.4
C	366.5	366.5	*C-1*	*GS1-N*	*70.0*	*60.0*	*1.2*	*2.4*	-	*84.0*	*72.0*
			C-2	*GS1-N*	*70.0*	*60.0*	*2.8*	*2.4*	-	*192.9*	*165.3*
			C-3	*GS1-N*	*50.0*	*55.0*	*0.9*	*2.4*	-	*46.3*	*50.9*
			C-4	*GS1-N*	*70.0*	*60.0*	*2.1*	*2.4*	-	*148.4*	*127.2*
			C-5	*GS1-N*	*50.0*	*55.0*	*0.7*	*2.4*	-	*33.5*	*36.8*
			C-6	*GS1-N*	*50.0*	*55.0*	*0.6*	*2.4*	-	*30.0*	*33.0*
										535.0	485.2
			Total						**Achieved**	**1,270.1**	**1,182.4**
									Required	**542.0**	**1,022.0**

BRACING ACROSS

Required			Provided							Achieved	
Line	W BU	EQ BU	Brace	Type	W BU/m	EQ BU/m	Length m	Height m	Angle	W BU	EQ BU
M	100.0	100.0	*M-1*	*GS1-N*	*70.0*	*60.0*	*2.4*	*2.4*	-	*169.8*	*145.5*
			M-2	*GS1-N*	*50.0*	*55.0*	*0.4*	*2.4*	-	*20.0*	*22.0*
										189.8	167.5
N	100.0	100.0	*N-1*	*BL1-H*	*90.0*	*100.0*	*0.6*	*2.4*	-	*58.1*	*64.5*
			N-2	*BL1-H*	*90.0*	*100.0*	*0.6*	*2.4*	-	*58.1*	*64.5*
										116.1	129.0
O	100.0	100.0	*O-1*	*GS1-N*	*70.0*	*60.0*	*1.5*	*2.4*	-	*107.1*	*91.8*
			O-2	*GS1-N*	*70.0*	*60.0*	*1.3*	*2.4*	-	*91.7*	*78.6*
										198.8	170.4
P	100.0	100.0	*P-1*	*GS1-N*	*50.0*	*55.0*	*0.5*	*2.4*	-	*26.5*	*29.2*
			P-2	*GS1-N*	*50.0*	*55.0*	*0.6*	*2.4*	-	*30.0*	*33.0*
			P-3	*GS1-N*	*70.0*	*60.0*	*1.3*	*2.4*	-	*91.7*	*78.6*
										148.2	140.8
Q	100.0	100.0	*Q-1*	*GS1-N*	*70.0*	*60.0*	*1.6*	*2.4*	-	*112.0*	*96.0*
			Q-2	*GS1-N*	*70.0*	*60.0*	*1.6*	*2.4*	-	*112.0*	*96.0*
			Q-3	*GS1-N*	*70.0*	*60.0*	*1.6*	*2.4*	-	*112.0*	*96.0*
										336.0	288.0
R	143.2	143.2	*R-1*	*GS1-N*	*70.0*	*60.0*	*2.4*	*2.4*	-	*168.0*	*144.0*
			R-2	*GS1-N*	*70.0*	*60.0*	*2.0*	*2.4*	-	*141.4*	*121.2*
			R-3	*GS1-N*	*50.0*	*55.0*	*0.9*	*2.4*	-	*43.8*	*48.1*
										353.2	313.3
S	100.0	100.0	*S-1*	*BL1-H*	*125.0*	*105.0*	*1.2*	*2.4*	-	*150.0*	*126.0*
										150.0	126.0
			Total						**Achieved**	**1,492.0**	**1,335.0**
									Required	**1,209.0**	**1,022.0**

GIB EzyBrace® Bracing Software

Demand Calculation Sheet

Job Details

Name:	958 Ravenswood
Street and Number:	34 Stackwood Avenue
Lot and DP Number:	
City/Town/District:	Woodend
Designer:	Andy Dowgray
Company:	LMS Drafting and Design
Date:	Monday, 30 June 2025

Building Specification

Number of Storeys	1
Floor Loading	2 kPa
Foundation Type	Slab
	Single
Cladding Weight	Medium
Roof Weight	Light
Room in Roof Space	No
Roof Pitch (degrees)	25
Roof Height above Eaves (m)	2.4
Building Height to Apex (m)	4.7
Ground to Lower Floor (m)	0.2
Average Stud Height (m)	2.4
Building Length (m)	24.6
Building Width (m)	10.8
Building Plan Area (m²)	265.68

Building Location

Wind Zone = High

Earthquake Zone 2
Soil Type D & E (Deep to Very Soft)
Annual Prob. of Exceedance:1 in 500 (Default)

Bracing Units required for Wind

	Along	Across
Single Level	542	1209

Bracing Units required for Earthquake

	Along & Across
Single Level	1170

GIB EzyBrace® Version 12/18a

GIB SYSTEM SPECIFICATIONS

GIB EzyBrace® Systems specification GS1-N

Specification code	Minimum length (m)	Lining requirement
GS1-N	0.4	Any 10mm or 13mm GIB® Standard plasterboard to one side only

WALL FRAMING
Wall framing to comply with;

- NZBC B1 — Structure B1/AS1 Clause 3 Timber (NZS 3604:2011).
- NZBC B2 — Durability B2/AS1 Clause 3.2 Timber (NZS 3602).

Framing dimensions and height as determined by NZS 3604:2011 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING
Timber floor
Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or three power driven 90 x 3.15mm nails at 600mm centres.

Concrete floor
Internal Wall Bracing Lines: In accordance with the requirements of NZS 3604:2011 for internal wall plate fixing or 75 x 3.8mm shot fired fasteners with 16mm discs spaced at 150mm and 300mm from end studs and 600mm centres thereafter.

External Wall Bracing Lines: In accordance with the requirements of NZS 3604:2011 for external wall bottom plate fixing.

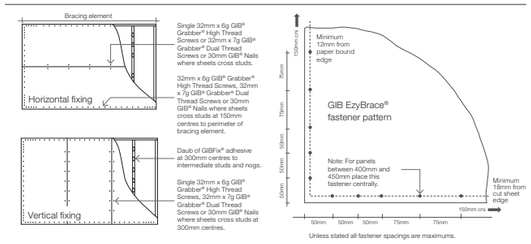
WALL LINING
- Any 10mm or 13mm GIB® plasterboard lining.
- Sheets can be fixed vertically or horizontally.
- Sheet joints shall be touch fitted.
- Use full length sheets where possible.

PERMITTED ALTERNATIVES
For permitted GIB® plasterboard alternatives refer to p. 5 in GIB EzyBrace® Systems literature.

FASTENING THE LINING
Fasteners
32mm x 6g GIB® Grabber® High Thread Screws, 32mm x 7g GIB® Grabber® Dual Thread Screws or 30mm GIB® Nails. If using the GIBFix® Angle use only 32mm x 7g GIB® Grabber® Dual Thread Screws.

Fastener centres
50,100,150, 225, 300mm maximum from each corner and 150mm thereafter around the perimeter of the bracing element. For vertically fixed sheets place fasteners at 300mm maximum centres to intermediate sheet joints. For horizontally fixed sheets place single fasteners to the sheet edge where it crosses the stud. Use daubs of GIBFix® adhesive at 300mm maximum centres to intermediate studs. Place fasteners no closer than 12mm from paper bound sheet edges and 18mm from any sheet end or cut edge.

JOINTING
Joint strength is important in delivering bracing system performance. All fastener heads stopped and all sheet joints GIB® Joint Tape reinforced and stopped in accordance with the GIB® Site Guide.



Unless stated all fastener spacings are maximums.

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This specification sheet is issued in conjunction with the publication GIB EzyBrace® Systems

GIB SYSTEM SPECIFICATIONS

GIB EzyBrace® Systems specification GSP-H

Specification Code	Minimum length (m)	Lining requirement	Other requirement
GSP-H	0.4	Any 10mm or 13mm GIB® plasterboard lining to one side of framing and minimum 7mm structural plywood manufactured to AS/NZ 2269.0 :2012 to the other side	Hold downs

WALL FRAMING
Wall framing to comply with;

- NZBC B1 — Structure B1/AS1 Clause 3 Timber (NZS 3604:2011).
- NZBC B2 — Durability B2/AS1 Clause 3.2 Timber (NZS 3602).

Framing dimensions and height as determined by NZS 3604:2011 stud and top plate tables for load bearing and non-bearing walls. The use of kiln dried stress graded timber is recommended.

BOTTOM PLATE FIXING
Timber floor
Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB EzyBrace® Systems or GIB® Site Guide.

Pairs of hand driven 100 x 3.75mm nails at 600mm centres; or Three power driven 90 x 3.15mm nails at 600mm centres.

Concrete floor
Use panel hold downs at each end of the bracing element. The GIB HandiBrac® is recommended. See details in GIB EzyBrace® Systems or GIB® Site Guide. Within the length of the bracing element bottom plates are to be fixed in accordance with the requirements of NZS 3604:2011.

WALL LINING
- A layer of 10mm or 13mm GIB® plasterboard to one side of the wall plus minimum 7mm structural plywood manufactured to AS/NZ 2269.0 :2012 to the other side.
- Sheets can be fixed vertically or horizontally, with edges supported.
- Sheet joints shall be touch fitted.
- Use full length sheets where possible.

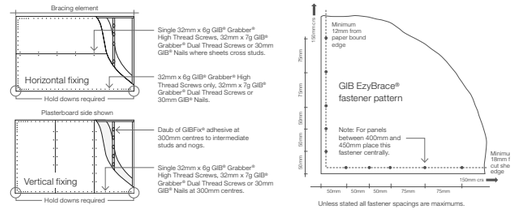
PERMITTED ALTERNATIVES
For permitted GIB® plasterboard alternatives refer to p. 5 in GIB EzyBrace® Systems literature.

FASTENING THE LINING
Fasteners
32mm x 6g GIB® Grabber® High Thread Screws, 32mm x 7g GIB® Grabber® Dual Thread Screws or 30mm GIB® Nails.

If using the GIBFix® Framing System or if fastening through GIBFix® Angles use only 32mm x 7g GIB® Grabber® Dual Thread Screws. Plywood: 50 x 2.8mm Galv or Stainless st annular grooved FH nails.

Fastener centres
GIB® plasterboard side: 50,100,150, 225, 300mm maximur from each corner and 150mm thereafter, around the perim of the bracing element. For vertically fixed sheets place fasteners at 300mm maximum centres to the intermediate sheet joints. For horizontally fixed sheets place single faste to the sheet edge where it crosses the stud. Use daubs of GIBFix® adhesive at 300mm maximum centres to intermec studs. Place fasteners no closer than 12mm from paper bc sheet edges and 18mm from any sheet end or cut edge. Plywood side: 150mm centres to the perimeter of each sh GIB® corner fastener pattern does not apply to the plywoo side. 300mm centres to intermediate studs.

JOINTING
Joint strength is important in delivering bracing system performance. All fastener heads stopped and all sheet joints GIB® Joint Tape reinforced and stopped in accordance with GIB® Site Guide.



Unless stated all fastener spacings are maximums.

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow the specifications. This specification sheet is issued in conjunction with the publication GIB EzyBrace® Systems

WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
in accordance with
Building Act 2004, clause 49
Building Regulations 1992, clause 3
5/08/2025 Chrisk

LMS DRAFTING+DESIGN
02108232226 / luke@lmsdraftinganddesign.co.nz / www.lmsdraftinganddesign.co.nz

Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Bracing Schedule

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: NTS
DRAWN BY: AD

REV:
A111

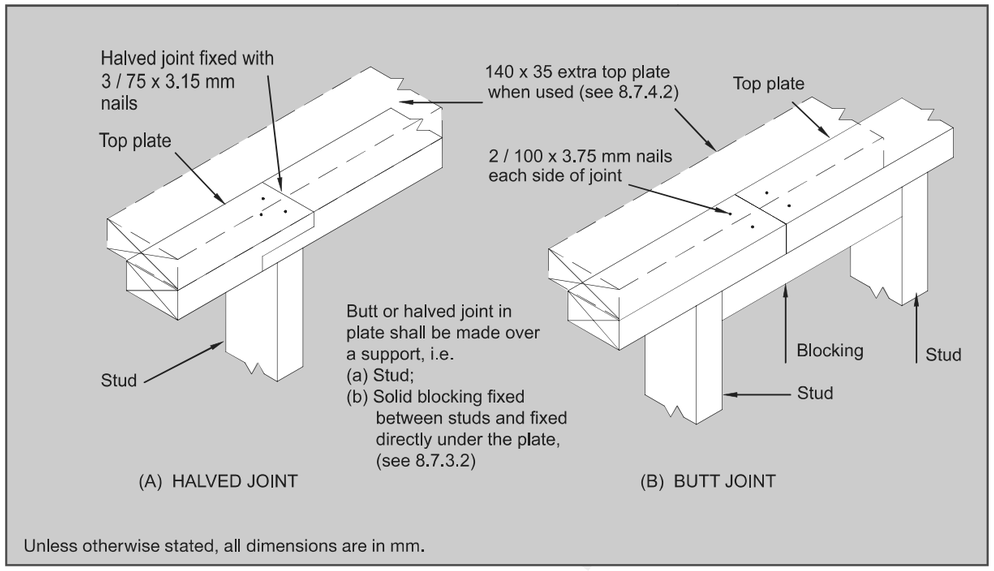
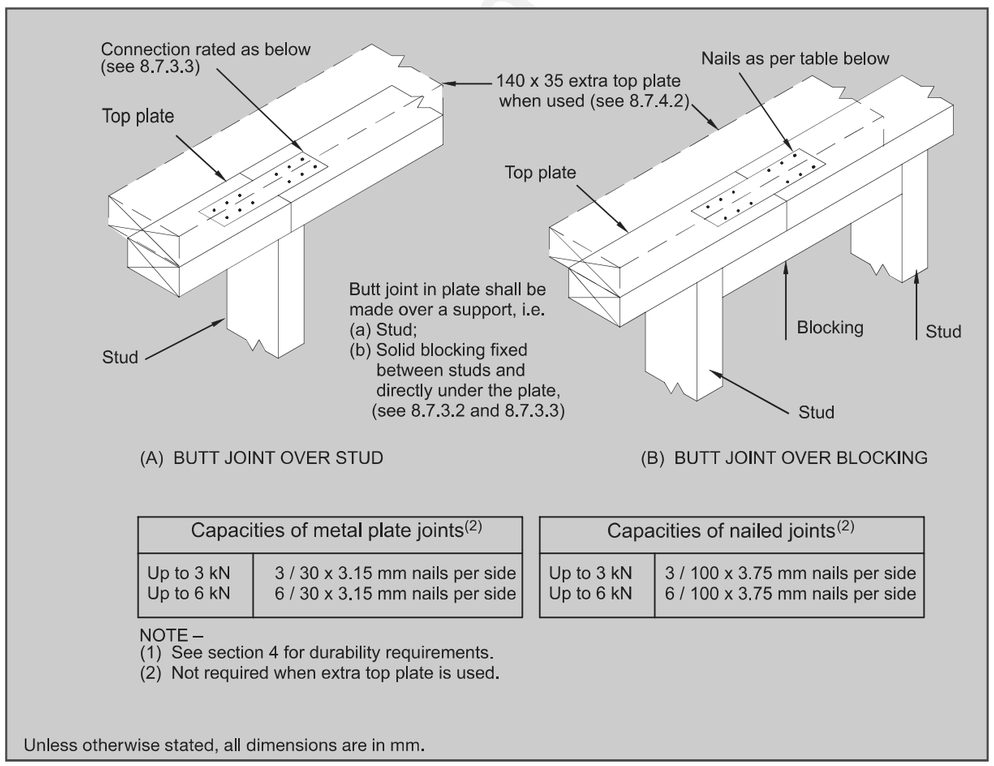


Figure 8.14 – Connecting top plates – Walls not containing bracing (see 8.7.3.2)



Capacities of metal plate joints(2)	
Up to 3 kN	3 / 30 x 3.15 mm nails per side
Up to 6 kN	6 / 30 x 3.15 mm nails per side

Capacities of nailed joints(2)	
Up to 3 kN	3 / 100 x 3.75 mm nails per side
Up to 6 kN	6 / 100 x 3.75 mm nails per side

NOTE –
(1) See section 4 for durability requirements.
(2) Not required when extra top plate is used.

Unless otherwise stated, all dimensions are in mm.

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

8.7.3.2

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.

8.7.3.3

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 or by an alternative fixing of 3 kN *capacity* tension and compression along the *plate*;

(b) *Bracing capacity* exceeding 100 *bracing units*: A 6 kN connection as shown in figure 8.15 or by an alternative fixing of 6 kN *capacity* tension and compression along the *plate*.

(c) *Wall top plates* to which ceiling *diaphragms* are attached: A 6 kN connection as shown in figure 8.15 or by an alternative fixing of 6 kN *capacity* in tension and compression along the *plate*.

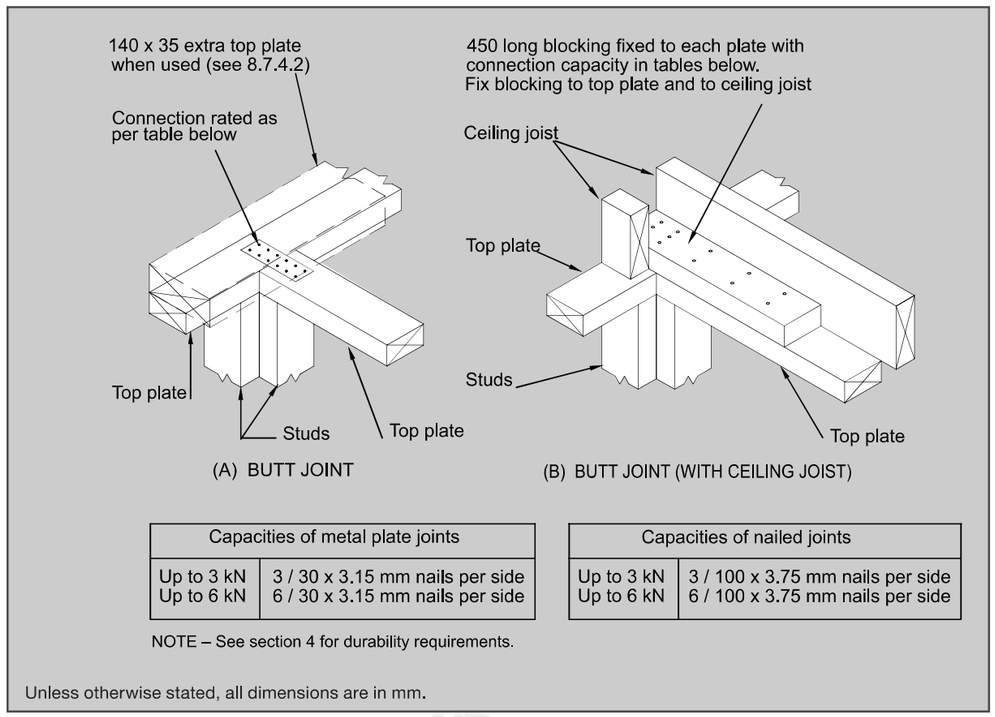
8.7.3.4

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*.



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

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

NOTE – See section 4 for durability requirements.

Unless otherwise stated, all dimensions are in mm.

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

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Bracing Requirements

DATE: 2/07/2025
ISSUE: Building Consent
SCALE: NTS
DRAWN BY: AD

REV:
A112

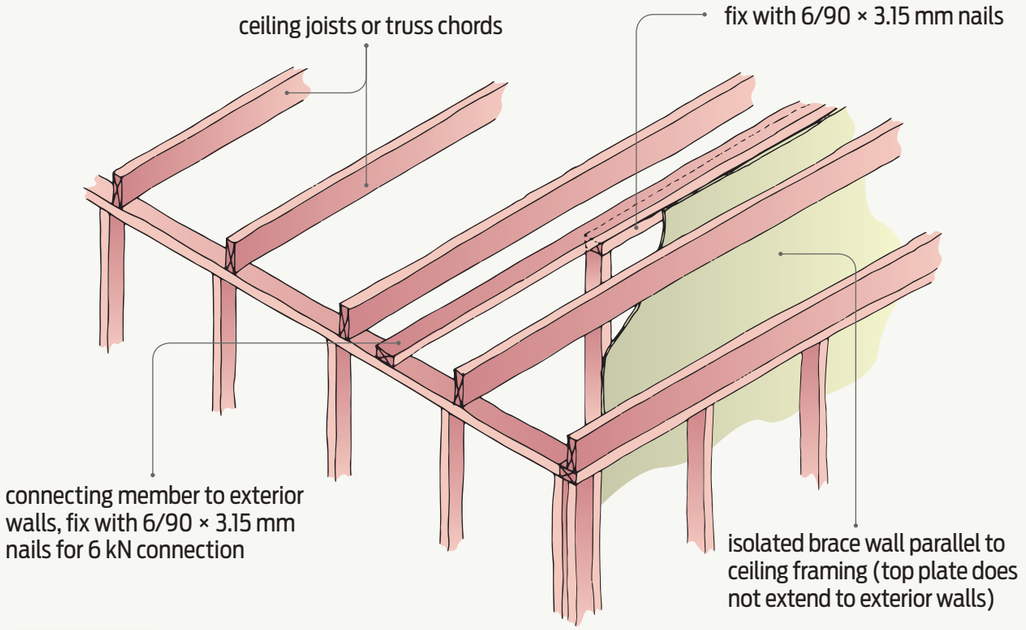

Figure 1 **Brace wall connection when wall is parallel to ceiling framing.**

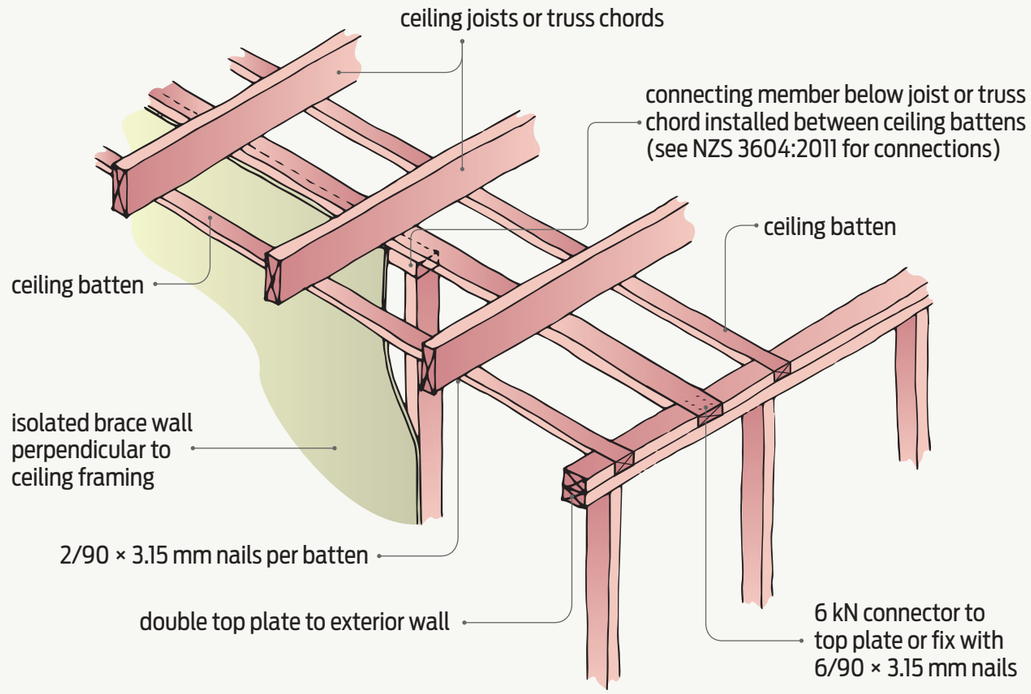

Figure 2 **Brace wall connection below ceiling framing when wall is perpendicular to ceiling framing.**

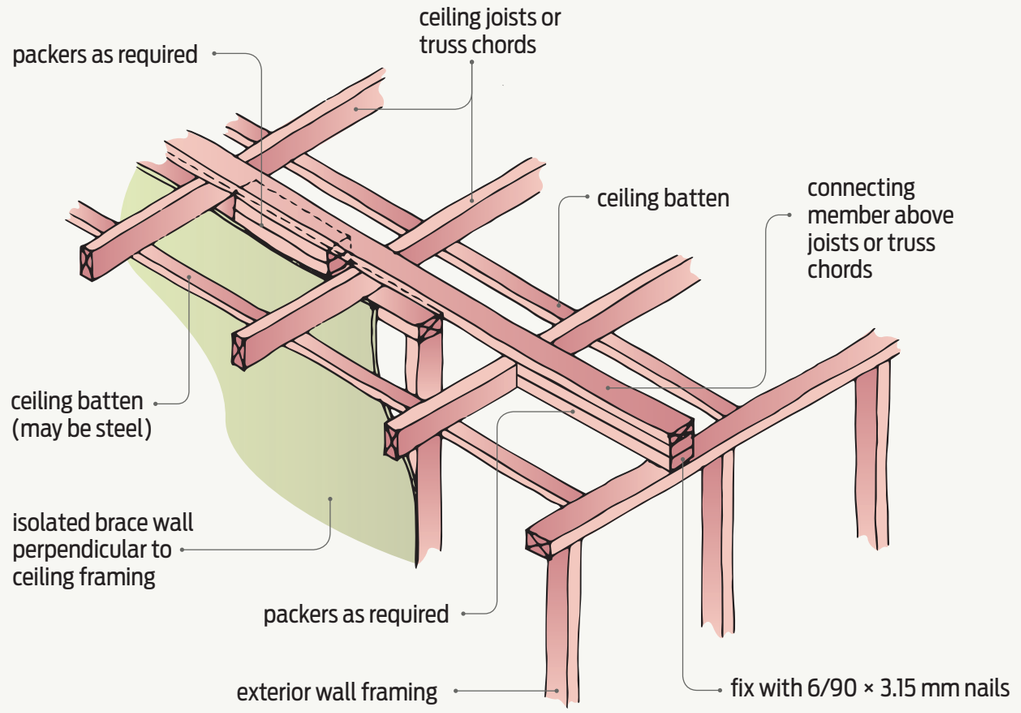

Figure 3 **Brace wall connection above ceiling framing when wall is perpendicular to ceiling framing.**

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Internal Wall Bracing Requirements

DATE: 2/07/2025
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LEGEND:

SB	Switch Board
DB	Data Board
MB	Meter Board
WB	Water Board
DB	Door Bell
TV	Tv Point
SKY	Sky Outlet
D	Data Point
	Single Power Point
2	Double Power Point
	Permanent Connection
SD	Interconnected Smoke Alarm
HTR	Heated Towelrail
BH	Bathroom Heater
	USB
	Fan Vent
	Fan Vent Path
	Earth
	Light Swiches

LIGHTING LEGEND:

DL	Down Light
P	Pendant Light
WL	Wall Mounted Light
C	Flood Light
F	Feature Lighting
VL	Vanity Lighting

HEATING LEGEND:

HP	Heat Pump Unit
	Heat Duct
	Air Return
	Undertile Heating LOCATION TBC BY OTHERS

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Building Regulations 1992, clause 3
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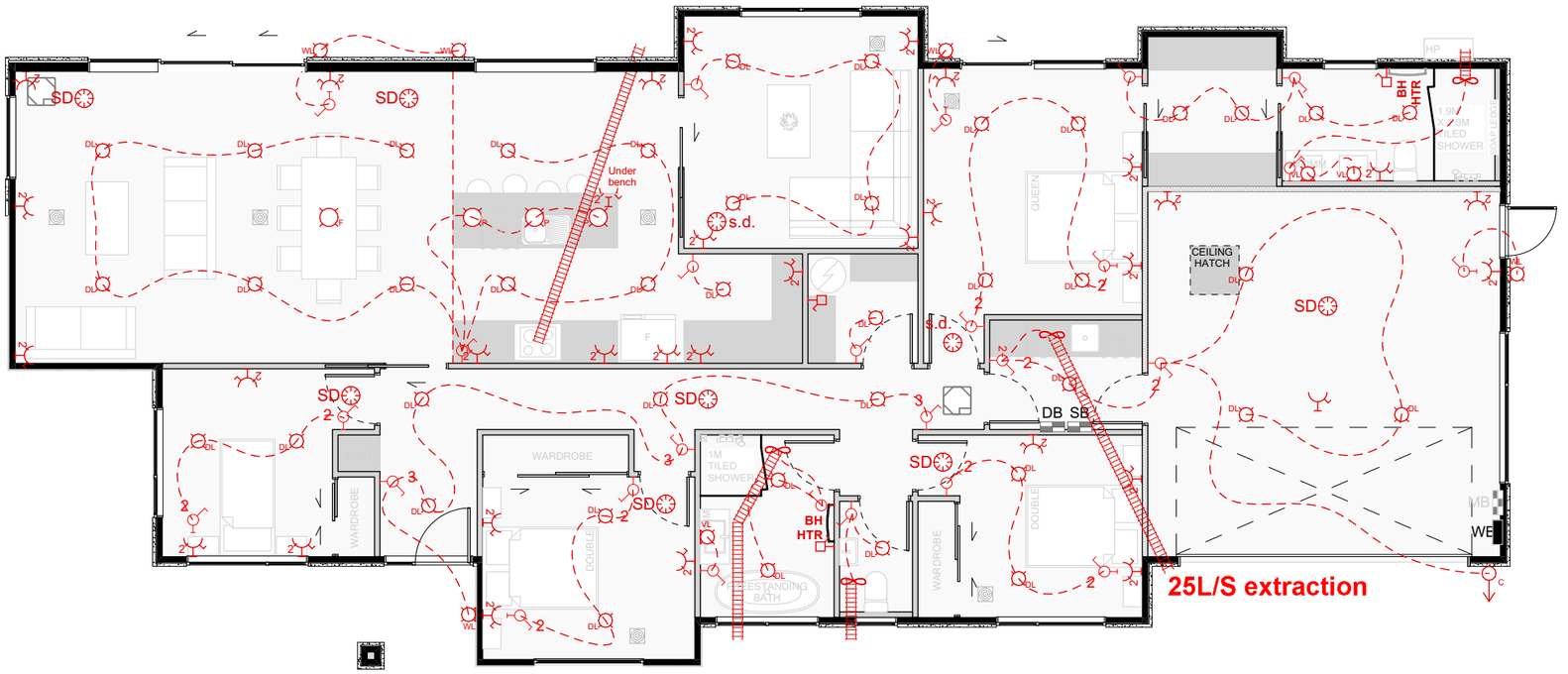

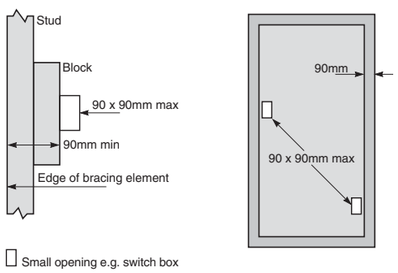

Openings in Bracing Elements

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

GENERAL NOTE:
Kitchen wiring to:
-Dishwasher
-Oven
-Waste disposal
-Rangehood

LAYOUT NOTE:
Owner to confirm layout on site

VENTING NOTE:
Auto extractor fans shall terminate through soffit with an extraction rate as set out in NZBC G4

SMOKE ALARM NOTE:
Interconnected photoelectric smoke alarms shall be installed and powered by non-removable long life battery. Test and hush buttons to comply with F7/AS1

DOWNLIGHT NOTE:
Downlights shall be CA80. In wet areas downlights shall be sealed IC-F. Check the insulation manufacturers instructions to ensure their product is safe when installed along side proposed downlights ratings shall be as per AS/NZS60598.2.2 Amendment A

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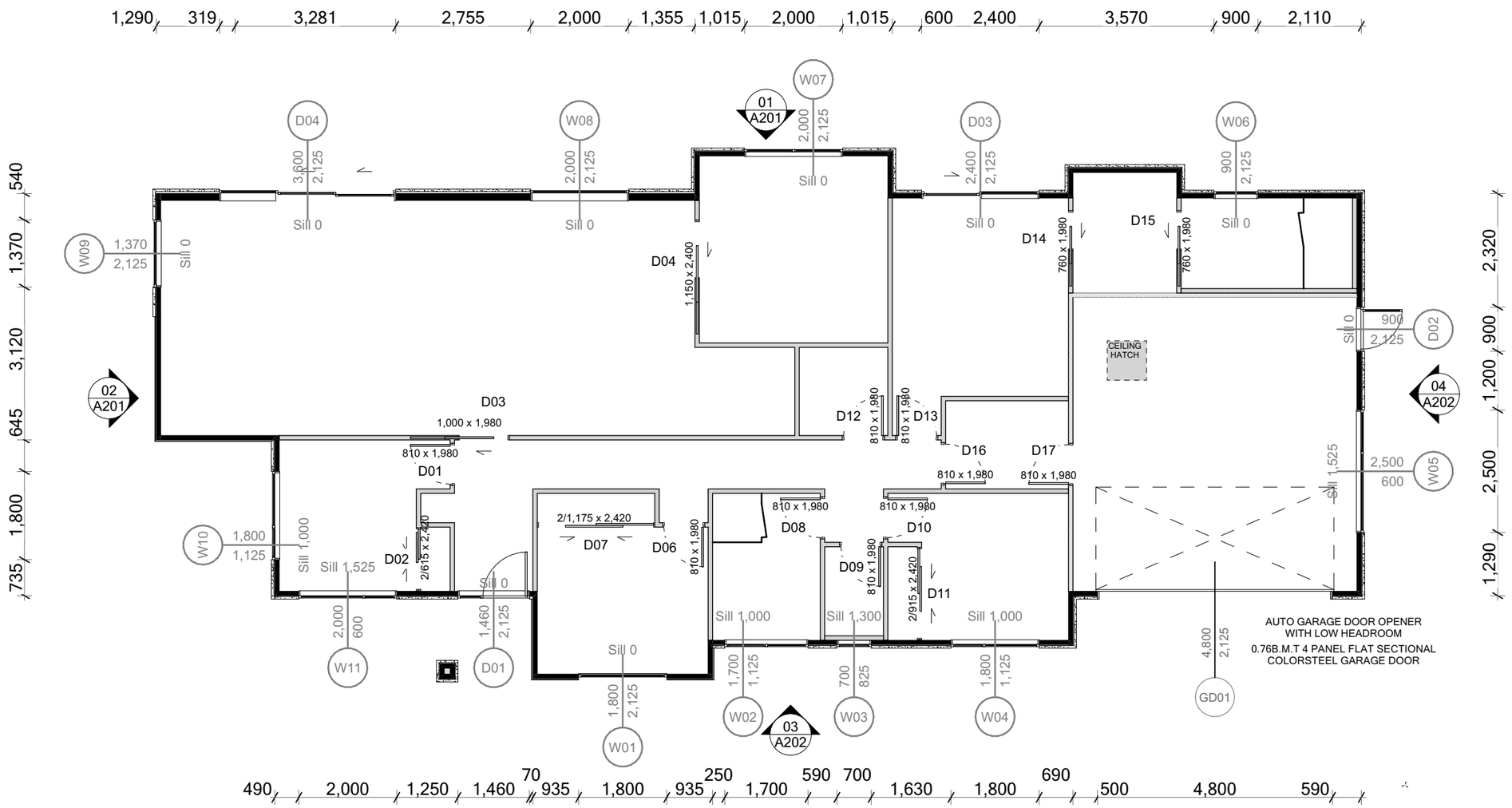
Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Lighting/Electrical Plan

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:
A114



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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Window & Door Layout

DATE: 2/07/2025
ISSUE: Building Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:
A115

Building Consent BC250662
Received 5/8/2025

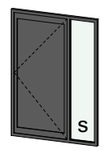
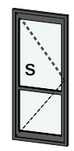
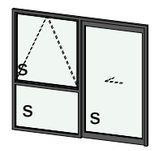
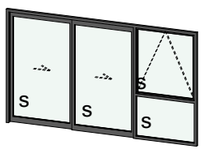
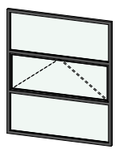
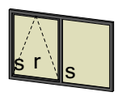
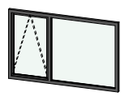
GLAZING NOTE:
Selected colour powder-coated aluminum joinery with all glazing to comply with NZS 4223:2016 part 3.
All glazing to comply with the requirements for Stage 3 of H1/AS1 upgrades for Climate Zone 5 (min. R0.5).
Glazing to be Low E, Argon Filled, Double Glazing with Thermally Broken Frame to achieve R0.5.
Grade A safety glazing / obscured glazing locations indicated on Elevations

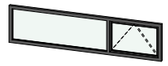
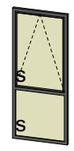
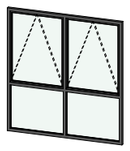
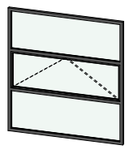
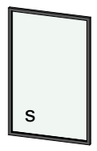
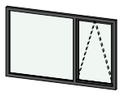
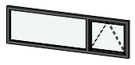
DIMENSION NOTE:
Overall dimensions are the R/O and all window joinery shall be measured on site prior to manufacturer

GENERAL FIXTURES NOTE:
Confirm all window openings, latchs, hardware and obscure glazing type with the owner prior to manufacturer

REVEAL NOTE:
25mm GIB groove reveal pre-primed

W02 & W03 shall have a restrictor stay installed to limit the maximum opening so that 100mm diameter sphere can not pass through it.

Element ID	D01	D02	D03	D04	W01	W02	W03	W04
W x H Size	1,460×2,125	900×2,125	2,400×2,125	3,600×2,125	1,800×2,125	1,700×1,125	700×825	1,800×1,125
Orientation	R	L	L	R	R	R	R	R
Window sill height	0	0	0	0	0	1,000	1,300	1,000
Window head height	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125
W/D Opening Nominal Surface Area	3.10	1.91	5.10	7.65	3.83	1.91	0.58	2.03
3D Axonometry								

Element ID	W05	W06	W07	W08	W09	W10	W11
W x H Size	2,500×600	900×2,125	2,000×2,125	2,000×2,125	1,370×2,125	1,800×1,125	2,000×600
Orientation	L	L	R	L	L	L	L
Window sill height	1,525	0	0	0	0	1,000	1,525
Window head height	2,125	2,125	2,125	2,125	2,125	2,125	2,125
W/D Opening Nominal Surface Area	1.50	1.91	4.25	4.25	2.91	2.03	1.20
3D Axonometry							

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BC250662 APPROVED
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Building Regulations 1992, clause 3
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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Window Schedule

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: NTS
DRAWN BY: AD

REV:
A116

Building Consent BC250662
Received 5/8/2025

GLAZING NOTE:
Selected colour powder-coated aluminum joinery with all glazing to comply with NZS 4223:2016 part 3.
All glazing to comply with the requirements for Stage 3 of H1/AS1 upgrades for Climate Zone 5 (min. R0.5).
Glazing to be Low E, Argon Filled, Double Glazing with Thermally Broken Frame to achieve R0.5.
Grade A safety glazing / obscured glazing locations indicated on Elevations

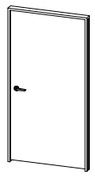
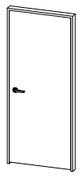
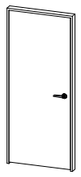
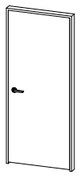
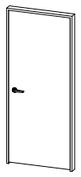
DIMENSION NOTE:
Overall dimensions are the R/O and all window joinery shall be measured on site prior to manufacturer

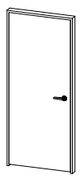
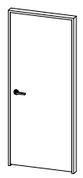
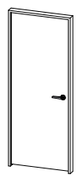
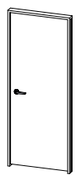
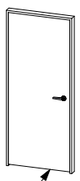
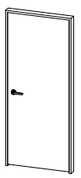
GENERAL FIXTURES NOTE:
Confirm all window openings, latchs, hardware and obscure glazing type with the owner prior to manufacturer

REVEAL NOTE:
25mm GIB groove reveal pre-primed

W02 & W03 shall have a restrictor stay installed to limit the maximum opening so that 100mm diameter sphere can not pass through it.

Door List

ELEMENT ID	D01	D02	D03	D04	D06	D07	D08	D09	D10	D11
Leaf Dimensions	810×1,980	1,230×2,420	1,000×1,980	1,150×2,400	810×1,980	2,350×2,420	810×1,980	810×1,980	810×1,980	1,830×2,420
Orientation	L	L	R	L	R	R	L	R	R	R
Wall Thickness	90	90	90	90	90	90	90	90	90	90
Wall Lining										
Door Handle										
Jamb										
Hardware Machining										
Door Stop										
W/D Opening Nomi...	1.74	3.16	2.13	2.93	1.74	5.92	1.74	1.74	1.74	4.63
3D Axonometry										

D12	D13	D14	D15	D16	D17
810×1,980	810×1,980	760×1,980	760×1,980	810×1,980	810×1,980
L	R	L	R	L	R
90	90	90	90	90	90
1.74	1.74	1.64	1.64	1.74	1.74
					

WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
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Building Act 2004, clause 49
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5/08/2025 Chrisk

LMS DRAFTING+DESIGN
02108232226 / luke@lmsdraftinganddesign.co.nz / www.lmsdraftinganddesign.co.nz

Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Internal Door Schedule

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: NTS
DRAWN BY: AD

REV:
A117

GENERAL DETAILS FOR OPENINGS IN THE BUILDING ENVELOPE

Clause 9.1.5 a) describes the application of a flexible wall underlay.

Amend 5 Aug 2011

9.1.5 Wall underlays to wall openings

Prior to window or door installation:

Amend 5 Aug 2011

a) Flexible *wall underlay* shall be cut and dressed into all sides of openings as per Figure 72A and B,

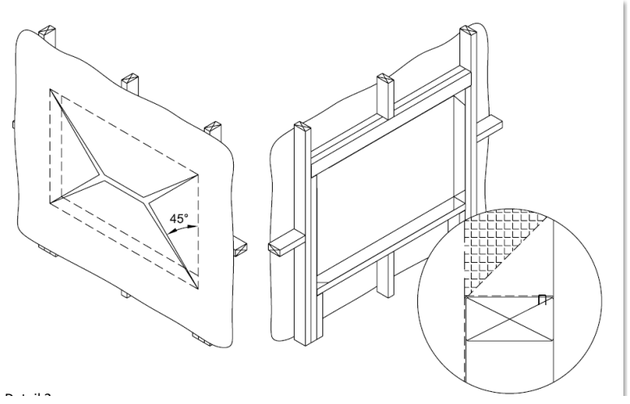
To achieve this, follow these steps;

a. Cut the building underlay at 45º away from each corner.

b. Fold the flaps tightly into the opening and secure to the framing on all sides.

c. Trim off excess underlay after fixing.

Note: *Figures 72A & 72B do not show the inner extent of the flexible wall underlay. The industry trend has been to cut this off at the inner corner of the framing as wrapping around sometimes interferes with the internal linings. Ensure the underlay is fixed tightly to the framework.*



PAPER CUT TO OPENING

After ensuring the flashing tape to be used meets the criteria set out in *Clause 9.1.5 b),* follow these steps to satisfy the clause;

a. Cut the flashing tape for the sill at least 200mm wider than the opening.

Amend 5 Aug 2011

b) *Flexible flashing tape* shall be applied to head and sill *framing* as shown in Figures 72A and 72B. *Flexible flashing tape* shall:

Amend 5 Aug 2011

i) comply with Parts 3.2 and 4 of ICBO Acceptance Criteria AC148, and

ii) be compatible with the *wall underlay*.

Amend 5 Aug 2011

COMMENT:

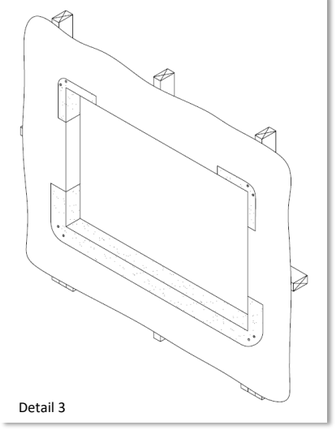
Dressing the *wall underlay* around the *framing* timber and providing a flexible *air seal* limits airflows around the window reveal.

The *flexible flashing tape* keeps any water that does get past the *cladding*, or through the joinery, from direct contact with the timber.

b. Fit the tape, as described in the manufacturers literature, with the inner edge of the tape flush with the inside line of the framing, so that it extends a minimum of ***100mm*** up each jamb ensuring timber framing is covered.

c. Ensure the tape is securely adhered to the underlay on all surfaces and fits tightly into each of the corners.

d. Cut two more pieces of tape at least ***200mm*** long and fit into each of the upper corners as described above ensuring timber framing is covered.

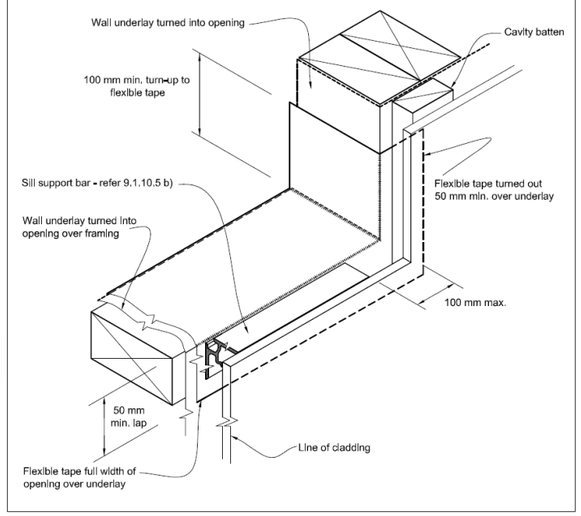


Note: *Ensure all exposed timber is covered, particularly in the corners. This may mean the tape has to extend further than nominated.*

FLASHING TAPE

Figure 72B shows the general arrangement of the sill for a window installed into wall claddings, over a cavity.

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



Errata 2 Dec 2011

Amend 5 Aug 2011

Note: *Figure 72B indicates that the sill support bar may be up to 100mm short of the trim opening at either end. It is recommended that the bar is installed to the full width of the opening to ensure it picks up the window or door frame support blocks. However, in some cases the use of non-proprietary corner soakers may require shortening of the bar.*

SUPPORT BAR

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:

a) Maximum 450 mm centres along sills, jambs and heads, and

b) Maximum 150 mm from reveal ends.

Install packers between reveals and *framing* at all fixing points, except between head reveals and lintels.

REVEAL FIXING

i. The generic fixing method into timber is 10g x 50mm stainless steel screws, positioned at each end of the bar and at a maximum of 300mm centres between.

ii. When fixing to concrete, the Heavy-Duty bars must be used. The same screws and fixing centres, as noted above, apply but the screws would be driven into nylon plugs or similar.

iii. For concrete the screws may be substituted for 6mm masonry anchors, at the same centres. However, in order to achieve the required edge clearance that these fasteners require, the Heavy-Duty bar must be re-drilled to suit.

GENERAL SUPPORT FIXING

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

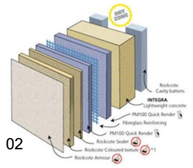
SHEET TITLE:
Window & Door Penetration

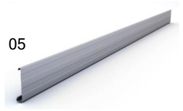
DATE: 2/07/2025
ISSUE: Building Consent
SCALE: NTS
DRAWN BY: AD

REV:
A118

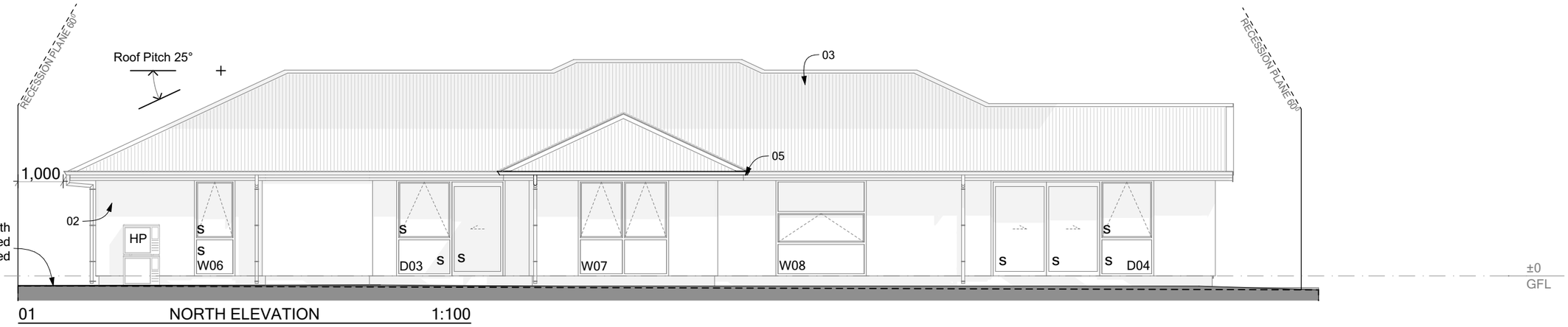
CLADDING LEGEND:

01	Vertical Axon over 20mm cavity
02	50mm Rockcote Integra over 20mm cavity
03	0.40mm BMT colorsteel corrugate
04	0.75mm BMT colorsteel sectional garage door
05	Coloursteel fascia and spouting

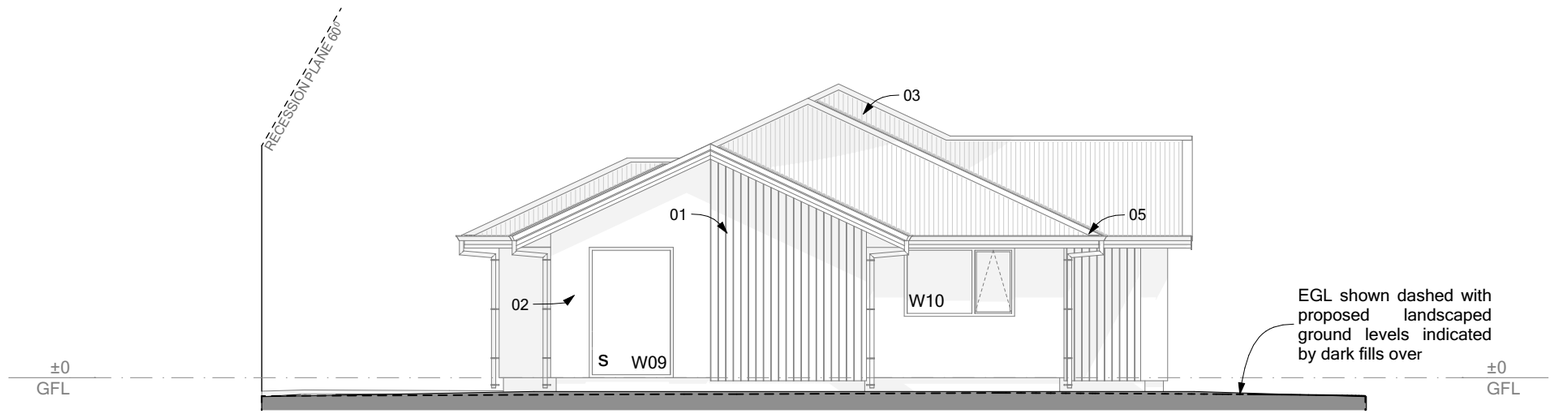




BUILDING ENVELOPE RISK MATRIX		
North Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Low risk	0
Eaves width	Medium risk	1
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		3



01 NORTH ELEVATION 1:100



02 WEST ELEVATION 1:100

BUILDING ENVELOPE RISK MATRIX		
West Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Low risk	0
Eaves width	High risk	2
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		4

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Elevations

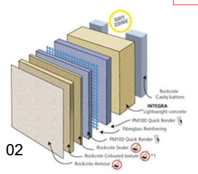
DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: 1:100 @A3
DRAWN BY: AD

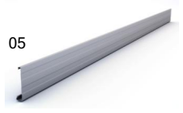
REV:
A201

Building Consent BC250662
Received 5/8/2025

CLADDING LEGEND:

01	Vertical Axon over 20mm cavity
02	50mm Rockcote Integra over 20mm cavity
03	0.40mm BMT colorsteel corrugate
04	0.75mm BMT colorsteel sectional garage door
05	Coloursteel fascia and spouting





WAIMAKARIRI DISTRICT COUNCIL
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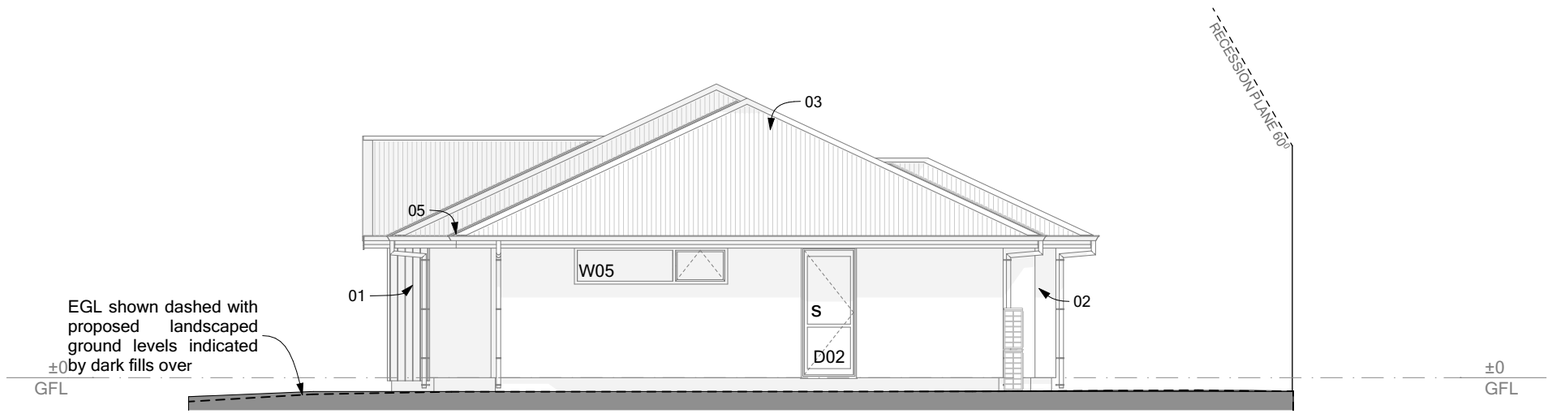
Building Act 2004, clause 49
Building Regulations 1992, clause 3
5/08/2025 Chrisk

BUILDING ENVELOPE RISK MATRIX		
South Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Low risk	0
Eaves width	High risk	2
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		4

03 SOUTH ELEVATION 1:100



04 EAST ELEVATION 1:100

BUILDING ENVELOPE RISK MATRIX		
East Elevation		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Low risk	0
Eaves width	Medium risk	1
Envelope complexity	Medium risk	1
Deck design	Low risk	0
Total Risk Score:		3

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Elevations

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: 1:100 @A3
DRAWN BY: AD

REV:
A202

EXTERIOR WALLS
Generally construct exterior walls with SG8 framing with stud crs as per the schedule and dwangs at 800mm crs to NZS3604:2011. Tekton building wrap or similar over framing, nog for all fittings, fixtures, linings, bracing panels & trims. DPC (malthoid) between bottom plate & conc slab and fixed within 150mm of each end of the plate using M12 cast in bolts through the bottom plate spaced @ 1,200mm crs or Proprietary post fixed anchors shall be fixed @900crs max as per NZS3604:2011 section 7.5.12.2 or other appropriate proprietary fixing, refer to bracing details for additional fixing.

WET AREA NOTE:
Aqua line gib to walls and ceiling in wet areas. Paint finished using water-based acrylic enamel paint applied over a solvent-based sealer coat.

INTERIOR WALLS
Generally construct interior non-load bearing walls with SG8 90x45 H1.2 timber framing with studs @600mm crs to NZS3604:2011. Nog for all fittings, fixtures,linings, bracing panels & trims. DPC (malthoid) between bottom plate and conc. slab and fixed with ramset or other appropriate fixing, 75mmx3.8mmØ shot fired fasteners @ 600mm crs max & 150mm maximum from each end of the plate with 16mm washers (internal load bearing walls as per truss layout shall be fixed as per exterior wall requirements). Refer to bracing details for additional plate fixing. Generally line with 10mm standard Gib board (Aqualine to wet areas) stopped for selected paint finish (unless otherwise indicated). Refer also specific fitout dwgs & bracing schedule for specialist wall linings & requirements.

INTERNAL LOAD BEARING WALLS
Refer to the truss design for internal load bearing walls and fix with M12 cast in bolts through the bottom plate at 1,200mm crs & within 150mm of each end of the plate or Proprietary post fixed anchors shall be fixed @900crs max as per NZS3604:2011 section 7.5.12.2 or other appropriate proprietary fixing, refer to bracing details for additional fixing.

PLUMBING & DRAINAGE NOTE:
All plumbing and drainage to comply with AS/NZS3500.2. Allow to check all dimensions and falls of drains onsite prior to installation.

KITCHEN NOTE:
All surface finishes to the kitchen joinery, walls, etc. to comply with the requirements of NZBC G3.

INTERNAL LININGS
Dry: 13mm GIB standard board to ceilings. 10mm GIB standard board to walls.

Wet: 13mm GIB Aqualine board to ceilings. 10mm GIB Aqualine board to walls.

WET AREA FINISHES
Paint finish GIB Aqualine, using water-based acrylic enamel paint applied over a solvent based sealer coat.

ROOF CLADDING NOTE:
Corrugate 0.40B.M.T roofing profile on H1.2 70x45mm purlins @600crs top and bottom and @900crs over main roof, over self supporting underlay

WALL CLADDING:
-50mm Rockcote Integra on a 20 cavity.
-Vertical James Hardie Axon over 20mm cavity

INSULATION:

Ceiling: 2 layer solution. R2.6 110mm batts between bottom chord and R4.5 210mm batts over. Min 25mm clearance to underside of roofing underlay.

Ceiling (1.4m^2) - Coved: R3.6 165mm Pink Batts Min 25mm clearance to underside of roofing underlay.

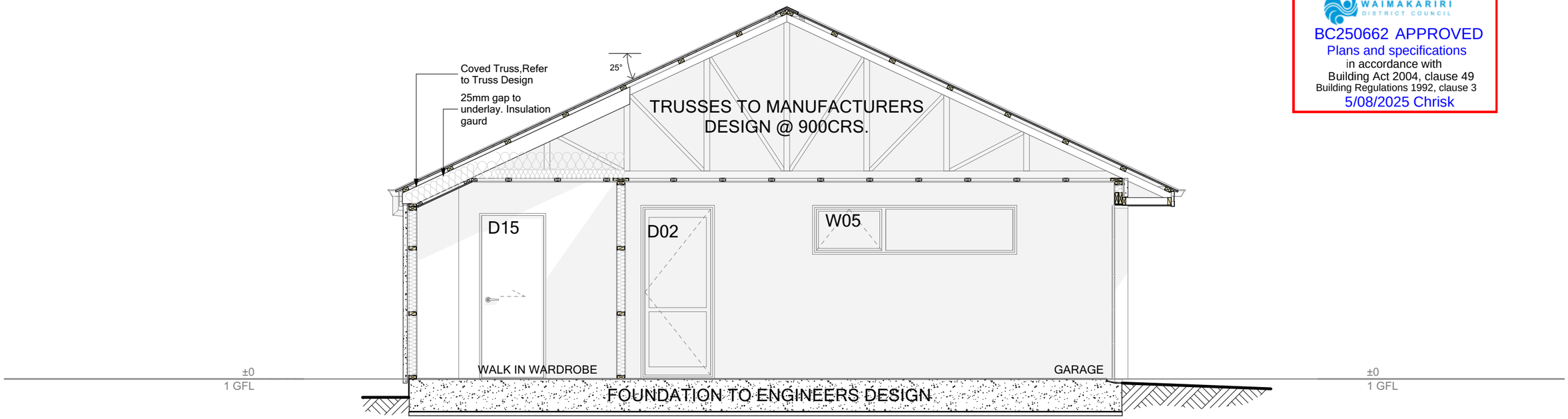
Walls: R2.6 insulation refer to floor plan for insulation envelope

Floors: 50mm SLABX200 (R1.5) or equivalent.

SCHEDULE OF FRAMING TIMBERS - GRADING AND TREATMENT	
Wall framing Exterior walls Interior walls (loadbearing) Interior walls (non-loadbearing) Cavity battens	H1.2 SG8 ↓ SG8, H3.1, Pinus radiata
Roof framing Roof trusses - typical Gable end truss Rafters Purlins Ceiling battens Valley boards	SG8, H1.2 ↓ SG8, H3.1 Pinus radiata
Windows Framing and reveals	Dressed, Pre-primed H3.1, Pinus radiata 25mm GIB Groove

SCHEDULE OF FRAMING TIMBERS - SIZING AND SPACING	
External Load Bearing Walls 2.4m max	Studs 90x45 @600crs,Dwangs 800crs max
Internal Load Bearing Walls 2.7m max	Studs 90x45 @600crs,Dwangs 800crs max
Internal Non-Loadbearing Walls	Studs 90x45 @600crs,Dwangs 800crs max

WIND ZONE: High
EARTHQUAKE ZONE: 2
EXPOSURE ZONE: C
SNOW LOADING ZONE: N4



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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Section A

DATE: 05/08/2025
ISSUE: Resource Consent
SCALE: 1:50 @A3
DRAWN BY: AD

REV:
A301

BC250662

EXTERIOR WALLS
Generally construct exterior walls with SG8 framing with stud crs as per the schedule and dwangs at 800mm crs to NZS3604:2011. Tekton building wrap or similar over framing, nog for all fittings, fixtures, linings, bracing panels & trims. DPC (malthoid) between bottom plate & conc slab and fixed within 150mm of each end of the plate using M12 cast in bolts through the bottom plate spaced @ 1,200mm crs or Proprietary post fixed anchors shall be fixed @900crs max as per NZS3604:2011 section 7.5.12.2 or other appropriate proprietary fixing, refer to bracing details for additional fixing.

WET AREA NOTE:
Aqua line gib to walls and ceiling in wet areas. Paint finished using water-based acrylic enamel paint applied over a solvent-based sealer coat.

INTERIOR WALLS
Generally construct interior non-load bearing walls with SG8 90x45 H1.2 timber framing with studs @600mm crs to NZS3604:2011. Nog for all fittings, fixtures,linings, bracing panels & trims. DPC (malthoid) between bottom plate and conc. slab and fixed with ramset or other appropriate fixing, 75mmx3.8mmØ shot fired fasteners @ 600mm crs max & 150mm maximum from each end of the plate with 16mm washers (internal load bearing walls as per truss layout shall be fixed as per exterior wall requirements). Refer to bracing details for additional plate fixing. Generally line with 10mm standard Gib board (Aqualine to wet areas) stopped for selected paint finish (unless otherwise indicated). Refer also specific fitout dwgs & bracing schedule for specialist wall linings & requirements.

INTERNAL LOAD BEARING WALLS
Refer to the truss design for internal load bearing walls and fix with M12 cast in bolts through the bottom plate at 1,200mm crs & within 150mm of each end of the plate or Proprietary post fixed anchors shall be fixed @900crs max as per NZS3604:2011 section 7.5.12.2 or other appropriate proprietary fixing, refer to bracing details for additional fixing.

PLUMBING & DRAINAGE NOTE:
All plumbing and drainage to comply with AS/NZS3500.2. Allow to check all dimensions and falls of drains onsite prior to installation.

KITCHEN NOTE:
All surface finishes to the kitchen joinery, walls, etc. to comply with the requirements of NZBC G3.

INTERNAL LININGS
Dry: 13mm GIB standard board to ceilings. 10mm GIB standard board to walls.

Wet: 13mm GIB Aqualine board to ceilings. 10mm GIB Aqualine board to walls.

WET AREA FINISHES
Paint finish GIB Aqualine, using water-based acrylic enamel paint applied over a solvent based sealer coat.

ROOF CLADDING NOTE:
Corrugate 0.40B.M.T roofing profile on H1.2 70x45mm purlins @600crs top and bottom and @900crs over main roof, over self supporting underlay

WALL CLADDING:
-50mm Rockcote Integra on a 20 cavity.
-Vertical James Hardie Axon over 20mm cavity

INSULATION:

Ceiling: 2 layer solution. R2.6 110mm batts between bottom chord and R4.5 210mm batts over. Min 25mm clearance to underside of roofing underlay.

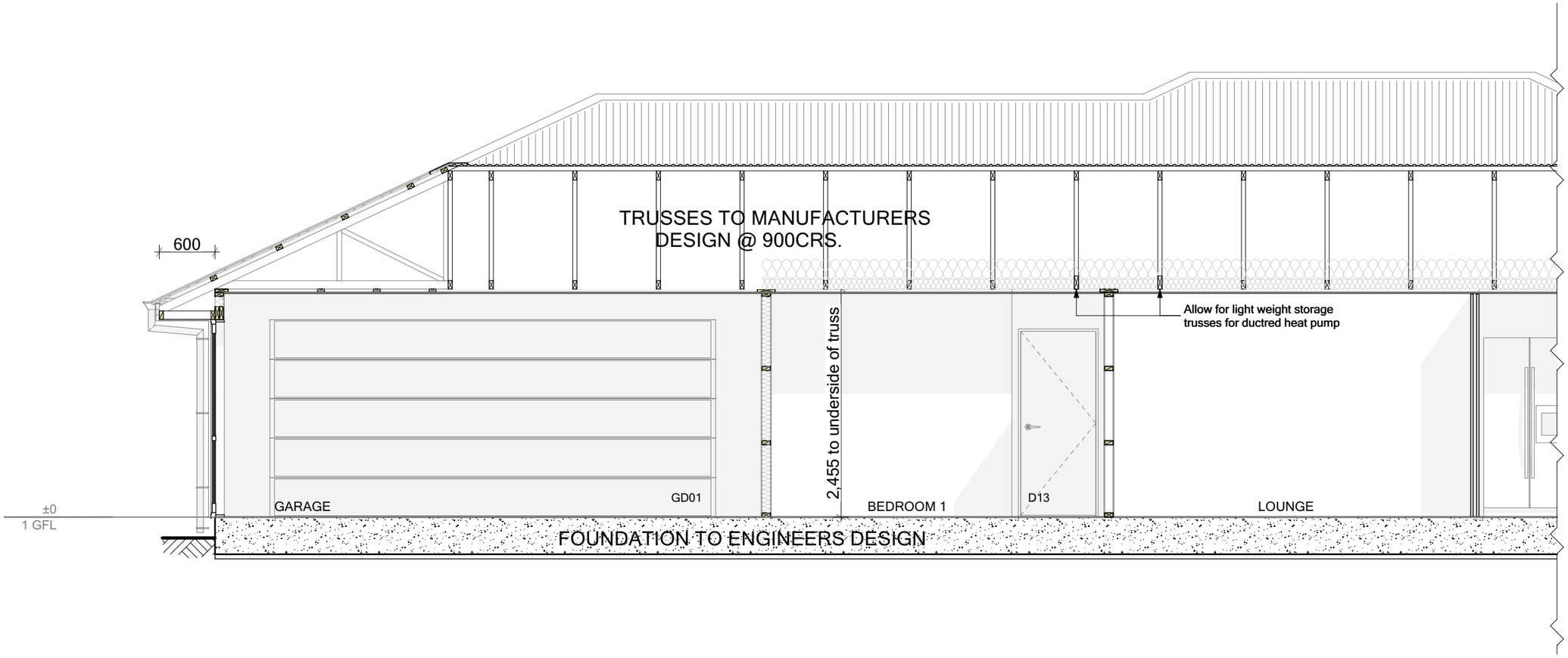
Walls: R2.6 insulation refer to floor plan for insulation envelope

Floors: 50mm SLABX200 (R1.5) or equivalent.

SCHEDULE OF FRAMING TIMBERS - GRADING AND TREATMENT	
Wall framing Exterior walls Interior walls (loadbearing) Interior walls (non-loadbearing) Cavity battens	H1.2 SG8 ↓ SG8, H3.1, Pinus radiata
Roof framing Roof trusses - typical Gable end truss Rafters Purlins Ceiling battens Valley boards	SG8, H1.2 ↓ SG8, H3.1 Pinus radiata
Windows Framing and reveals	Dressed, Pre-primed H3.1, Pinus radiata 25mm GIB Groove

SCHEDULE OF FRAMING TIMBERS - SIZING AND SPACING	
External Load Bearing Walls 2.4m max	Studs 90x45 @600crs,Dwangs 800crs max
Internal Load Bearing Walls 2.7m max	Studs 90x45 @600crs,Dwangs 800crs max
Internal Non-Loadbearing Walls	Studs 90x45 @600crs,Dwangs 800crs max

WIND ZONE: High
EARTHQUAKE ZONE: 2
EXPOSURE ZONE: C
SNOW LOADING ZONE: N4



WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
in accordance with
Building Act 2004, clause 49
Building Regulations 1992, clause 3
5/08/2025 Chrisk

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02108232226 / luke@lmsdraftinganddesign.co.nz / www.lmsdraftinganddesign.co.nz

Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Part Section B

DATE: 2/07/2025
ISSUE: Building Consent
SCALE: 1:50 @A3
DRAWN BY: AD

REV:
A302

BC250662

EXTERIOR WALLS
Generally construct exterior walls with SG8 framing with stud crs as per the schedule and dwangs at 800mm crs to NZS3604:2011. Tekton building wrap or similar over framing, nog for all fittings, fixtures, linings, bracing panels & trims. DPC (malthoid) between bottom plate & conc slab and fixed within 150mm of each end of the plate using M12 cast in bolts through the bottom plate spaced @ 1,200mm crs or Proprietary post fixed anchors shall be fixed @900crs max as per NZS3604:2011 section 7.5.12.2 or other appropriate proprietary fixing, refer to bracing details for additional fixing.

WET AREA NOTE:
Aqua line gib to walls and ceiling in wet areas. Paint finished using water-based acrylic enamel paint applied over a solvent-based sealer coat.

INTERIOR WALLS
Generally construct interior non-load bearing walls with SG8 90x45 H1.2 timber framing with studs @600mm crs to NZS3604:2011. Nog for all fittings, fixtures,linings, bracing panels & trims. DPC (malthoid) between bottom plate and conc. slab and fixed with ramset or other appropriate fixing, 75mmx3.8mmØ shot fired fasteners @ 600mm crs max & 150mm maximum from each end of the plate with 16mm washers (internal load bearing walls as per truss layout shall be fixed as per exterior wall requirements). Refer to bracing details for additional plate fixing. Generally line with 10mm standard Gib board (Aqualine to wet areas) stopped for selected paint finish (unless otherwise indicated). Refer also specific fitout dwgs & bracing schedule for specialist wall linings & requirements.

INTERNAL LOAD BEARING WALLS
Refer to the truss design for internal load bearing walls and fix with M12 cast in bolts through the bottom plate at 1,200mm crs & within 150mm of each end of the plate or Proprietary post fixed anchors shall be fixed @900crs max as per NZS3604:2011 section 7.5.12.2 or other appropriate proprietary fixing, refer to bracing details for additional fixing.

PLUMBING & DRAINAGE NOTE:
All plumbing and drainage to comply with AS/NZS3500.2. Allow to check all dimensions and falls of drains onsite prior to installation.

KITCHEN NOTE:
All surface finishes to the kitchen joinery, walls, etc. to comply with the requirements of NZBC G3.

INTERNAL LININGS
Dry: 13mm GIB standard board to ceilings. 10mm GIB standard board to walls.

Wet: 13mm GIB Aqualine board to ceilings. 10mm GIB Aqualine board to walls.

WET AREA FINISHES
Paint finish GIB Aqualine, using water-based acrylic enamel paint applied over a solvent based sealer coat.

ROOF CLADDING NOTE:
Corrugate 0.40B.M.T roofing profile on H1.2 70x45mm purlins @600crs top and bottom and @900crs over main roof, over self supporting underlay

WALL CLADDING:
-50mm Rockcote Integra on a 20 cavity.
-Vertical James Hardie Axon over 20mm cavity

INSULATION:

Ceiling: 2 layer solution. R2.6 110mm batts between bottom chord and R4.5 210mm batts over. Min 25mm clearance to underside of roofing underlay.

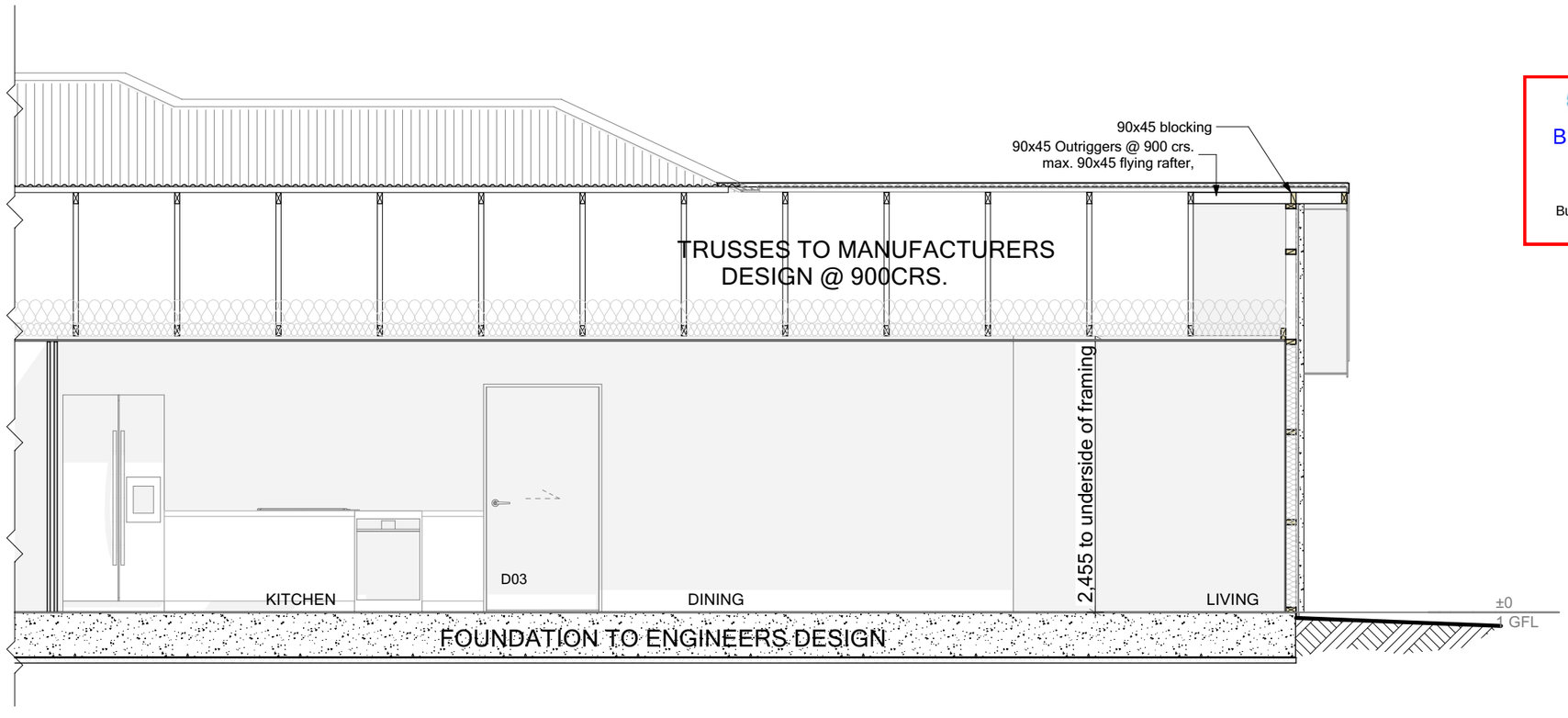
Walls: R2.6 insulation refer to floor plan for insulation envelope

Floors: 50mm SLABX200 (R1.5) or equivalent.

SCHEDULE OF FRAMING TIMBERS - GRADING AND TREATMENT	
Wall framing Exterior walls Interior walls (loadbearing) Interior walls (non-loadbearing) Cavity battens	H1.2 SG8 ↓ SG8, H3.1, Pinus radiata
Roof framing Roof trusses - typical Gable end truss Rafters Purlins Ceiling battens Valley boards	SG8, H1.2 ↓ SG8, H3.1 Pinus radiata
Windows Framing and reveals	Dressed, Pre-primed H3.1, Pinus radiata 25mm GIB Groove

SCHEDULE OF FRAMING TIMBERS - SIZING AND SPACING	
External Load Bearing Walls 2.4m max	Studs 90x45 @600crs,Dwangs 800crs max
Internal Load Bearing Walls 2.7m max	Studs 90x45 @600crs,Dwangs 800crs max
Internal Non-Loadbearing Walls	Studs 90x45 @600crs,Dwangs 800crs max

WIND ZONE: High
EARTHQUAKE ZONE: 2
EXPOSURE ZONE: C
SNOW LOADING ZONE: N4



WAIMAKARIRI DISTRICT COUNCIL
BC250662 APPROVED
Plans and specifications
in accordance with
Building Act 2004, clause 49
Building Regulations 1992, clause 3
5/08/2025 Chrisk

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02108232226 / luke@lmsdraftinganddesign.co.nz / www.lmsdraftinganddesign.co.nz

Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Part Section B

DATE: 2/07/2025
ISSUE: Building Consent
SCALE: 1:50 @A3
DRAWN BY: AD

REV:
A303

EXTERIOR WALLS
Generally construct exterior walls with SG8 framing with stud crs as per the schedule and dwangs at 800mm crs to NZS3604:2011. Tekton building wrap or similar over framing, nog for all fittings, fixtures, linings, bracing panels & trims. DPC (malthoid) between bottom plate & conc slab and fixed within 150mm of each end of the plate using M12 cast in bolts through the bottom plate spaced @ 1,200mm crs or Proprietary post fixed anchors shall be fixed @900crs max as per NZS3604:2011 section 7.5.12.2 or other appropriate proprietary fixing, refer to bracing details for additional fixing.

WET AREA NOTE:
Aqua line gib to walls and ceiling in wet areas. Paint finished using water-based acrylic enamel paint applied over a solvent-based sealer coat.

INTERIOR WALLS
Generally construct interior non-load bearing walls with SG8 90x45 H1.2 timber framing with studs @600mm crs to NZS3604:2011. Nog for all fittings, fixtures,linings, bracing panels & trims. DPC (malthoid) between bottom plate and conc. slab and fixed with ramset or other appropriate fixing, 75mmx3.8mmØ shot fired fasteners @ 600mm crs max & 150mm maximum from each end of the plate with 16mm washers (internal load bearing walls as per truss layout shall be fixed as per exterior wall requirements). Refer to bracing details for additional plate fixing. Generally line with 10mm standard Gib board (Aqualine to wet areas) stopped for selected paint finish (unless otherwise indicated). Refer also specific fitout dwgs & bracing schedule for specialist wall linings & requirements.

INTERNAL LOAD BEARING WALLS
Refer to the truss design for internal load bearing walls and fix with M12 cast in bolts through the bottom plate at 1,200mm crs & within 150mm of each end of the plate or Proprietary post fixed anchors shall be fixed @900crs max as per NZS3604:2011 section 7.5.12.2 or other appropriate proprietary fixing, refer to bracing details for additional fixing.

PLUMBING & DRAINAGE NOTE:
All plumbing and drainage to comply with AS/NZS3500.2. Allow to check all dimensions and falls of drains onsite prior to installation.

KITCHEN NOTE:
All surface finishes to the kitchen joinery, walls, etc. to comply with the requirements of NZBC G3.

INTERNAL LININGS
Dry: 13mm GIB standard board to ceilings. 10mm GIB standard board to walls.

Wet: 13mm GIB Aqualine board to ceilings. 10mm GIB Aqualine board to walls.

WET AREA FINISHES
Paint finish GIB Aqualine, using water-based acrylic enamel paint applied over a solvent based sealer coat.

ROOF CLADDING NOTE:
Corrugate 0.40B.M.T roofing profile on H1.2 70x45mm purlins @600crs top and bottom and @900crs over main roof, over self supporting underlay

WALL CLADDING:
-50mm Rockcote Integra on a 20 cavity.
-Vertical James Hardie Axon over 20mm cavity

INSULATION:

Ceiling: 2 layer solution. R2.6 110mm batts between bottom chord and R4.5 210mm batts over. Min 25mm clearance to underside of roofing underlay.

Walls: R2.6 insulation refer to floor plan for insulation envelope

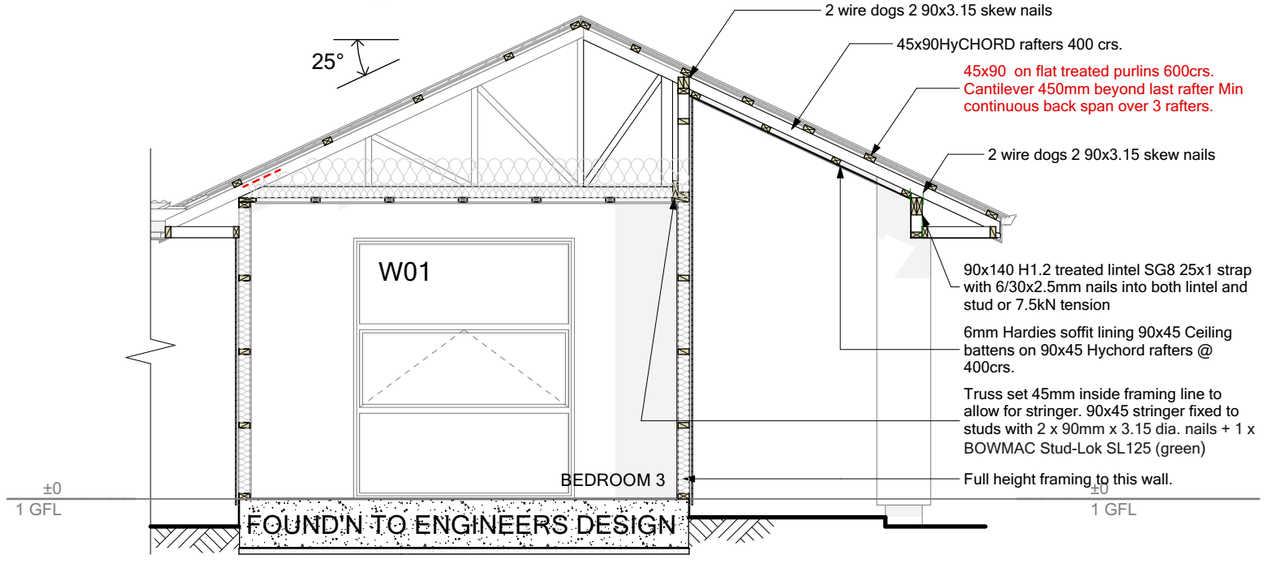
Floors: 50mm SLABX200 (R1.5) or equivalent.

SCHEDULE OF FRAMING TIMBERS - GRADING AND TREATMENT	
Wall framing Exterior walls Interior walls (loadbearing) Interior walls (non-loadbearing) Cavity battens	H1.2 SG8 ↓ SG8, H3.1, Pinus radiata
Roof framing Roof trusses - typical Gable end truss Rafters Purlins Ceiling battens Valley boards	SG8, H1.2 ↓ SG8, H3.1 Pinus radiata
Windows Framing and reveals	Dressed, Pre-primed H3.1, Pinus radiata 25mm GIB Groove

SCHEDULE OF FRAMING TIMBERS - SIZING AND SPACING	
External Load Bearing Walls 2.4m max	Studs 90x45 @600crs,Dwangs 800crs max
Internal Load Bearing Walls 2.7m max	Studs 90x45 @600crs,Dwangs 800crs max
Internal Non-Loadbearing Walls	Studs 90x45 @600crs,Dwangs 800crs max

WIND ZONE: High
EARTHQUAKE ZONE: 2
EXPOSURE ZONE: C
SNOW LOADING ZONE: N4

TRUSSES TO MANUFACTURERS DESIGN @ 900CRS.



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Building Regulations 1992, clause 3
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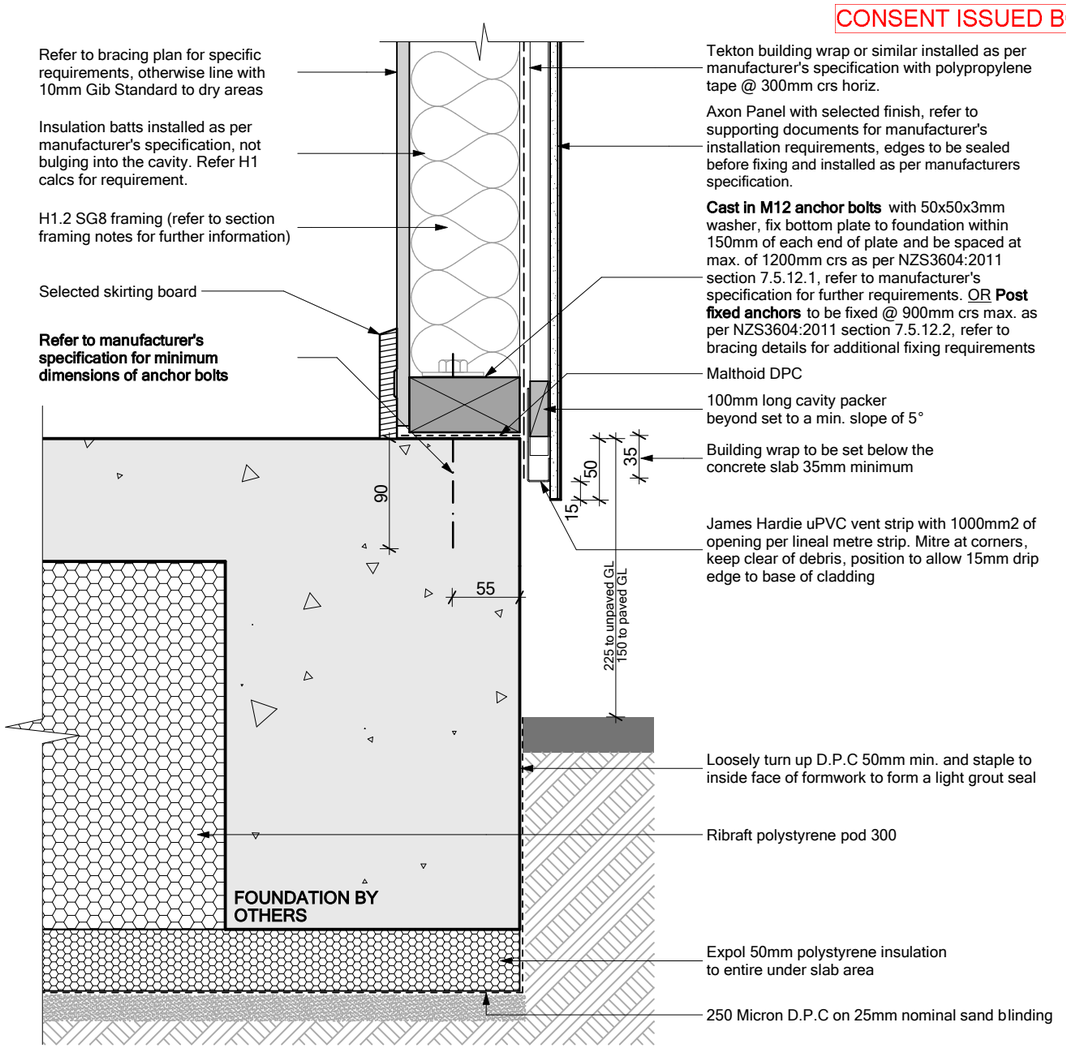
02108232226 / luke@lmsdraftinganddesign.co.nz / www.lmsdraftinganddesign.co.nz

Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

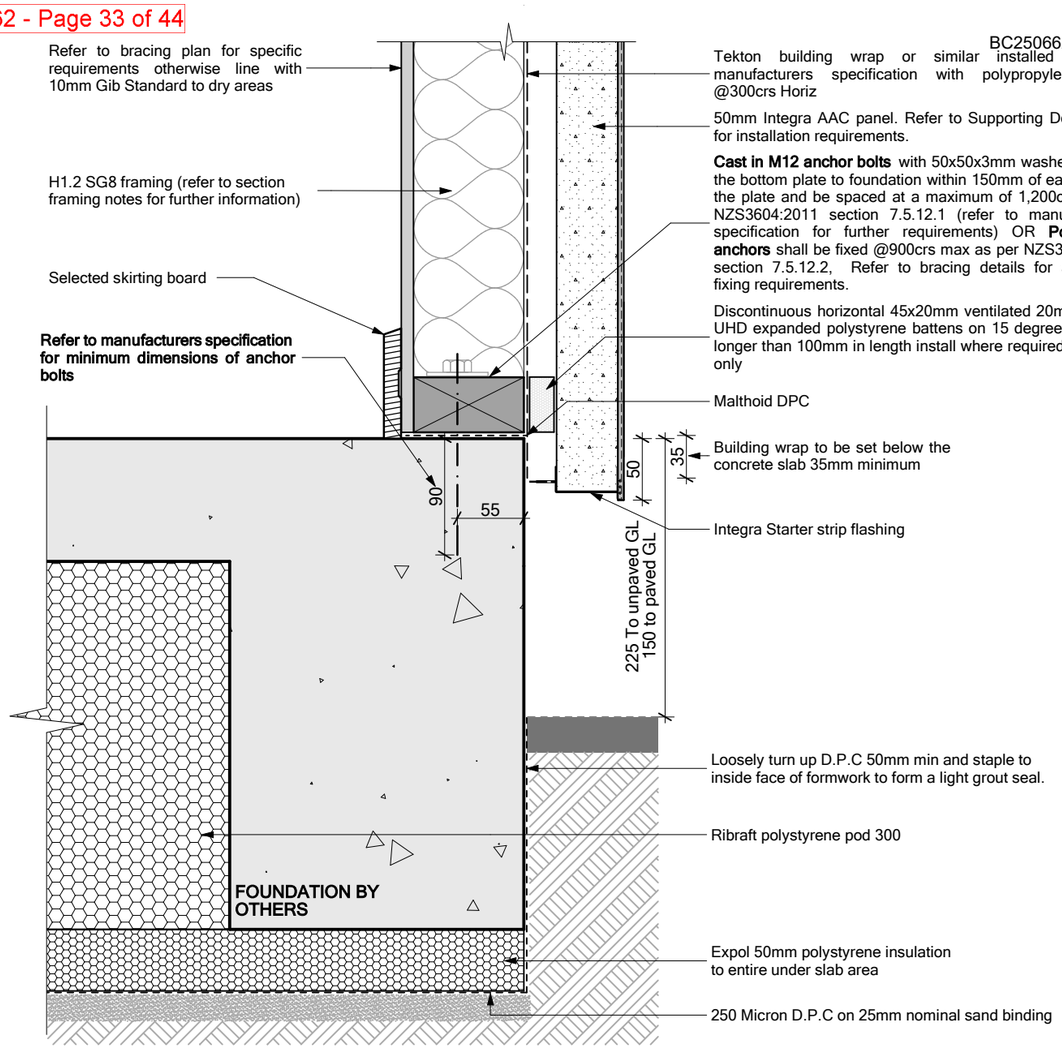
SHEET TITLE:
Section C

DATE: 2/07/2025
ISSUE: Building Consent
SCALE: 1:50 @A3
DRAWN BY: AD

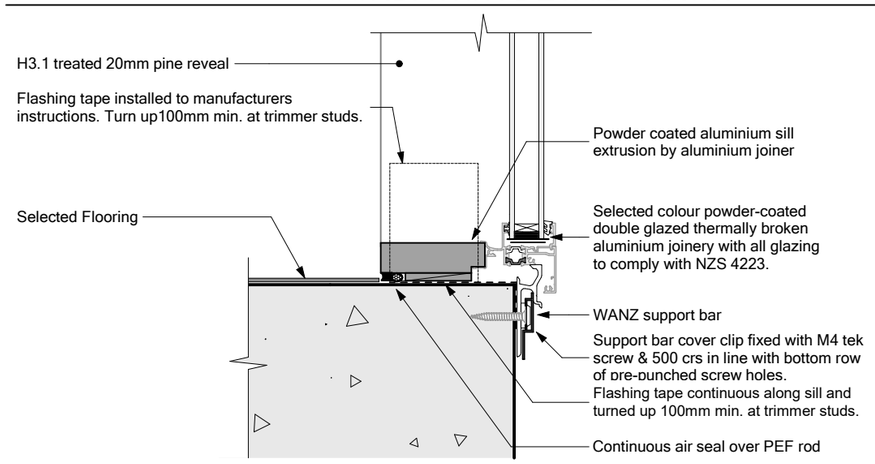
REV:
A304



1 FOUNDATION DETAIL - AXON 1:5



2 FOUNDATION DETAIL - INTEGRA 1:5



3 FULL HEIGHT GLAZING DETAIL 1:5

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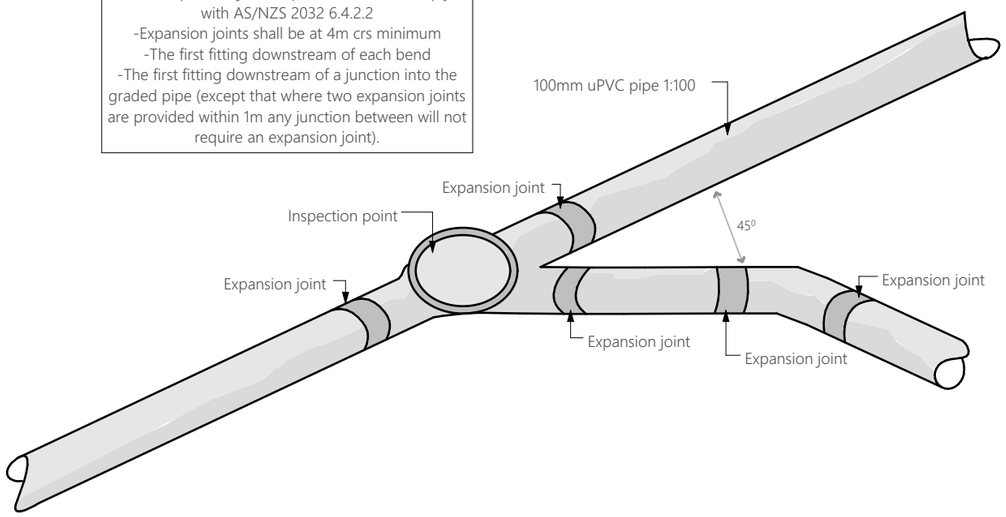
Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Foundation Details

DATE: 03/07/2025
ISSUE: Developed Design
SCALE: NTS
DRAWN BY: AD

REV:
A401

Note: Expansion joint requirements shall comply with AS/NZS 2032 6.4.2.2
-Expansion joints shall be at 4m crs minimum
-The first fitting downstream of each bend
-The first fitting downstream of a junction into the graded pipe (except that where two expansion joints are provided within 1m any junction between will not require an expansion joint).



5.5 Placing and compacting

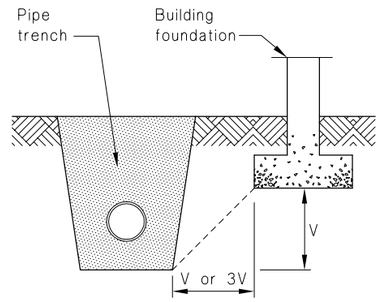
5.5.1 Base bedding (beneath the pipe) shall be placed and compacted before pipes are laid.

5.5.2 Side bedding (along both sides of the pipe) and cover bedding (where used) up to 300 mm above the pipe, shall be compacted.

5.6 Proximity of trench to building

5.6.1 For light timber framed 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 V to the underside of any *building* foundation, as shown in Figure 8. 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 8: Relationship of pipe trench to building foundation
Paragraph 5.6.1



Minimum horizontal seperation shall be V or 3V dependant on length of time trench open, see Paragraph 5.6.1

Figure 1: Connection of drains
Paragraph 3.2.1

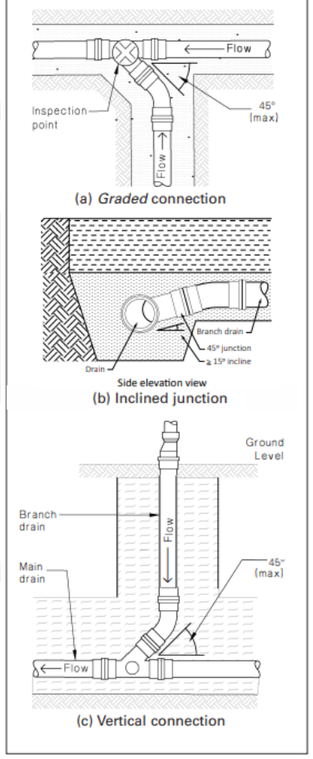
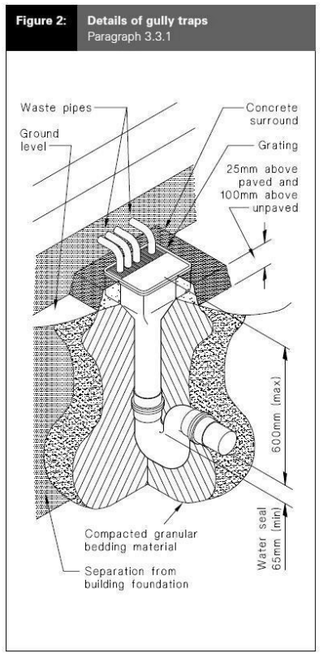


Figure 2: Details of gully traps
Paragraph 3.3.1



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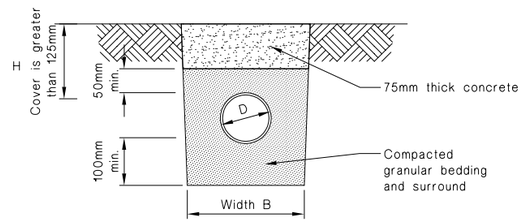
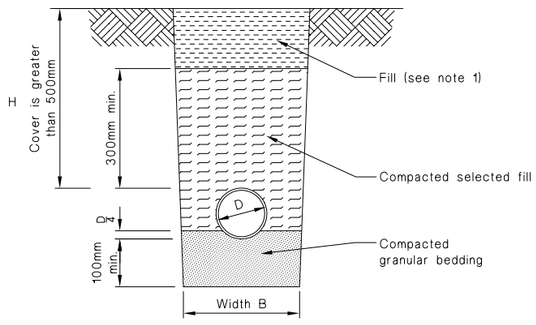
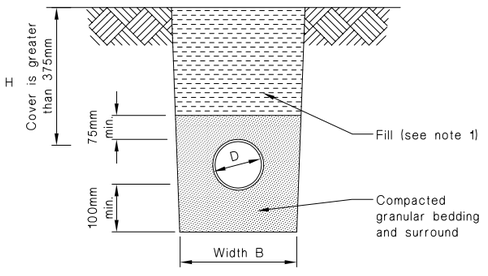


(c) Cover between 125mm and 375mm

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 subject to light traffic.



(a) Bedding type 'B' of NZS 7643
Cover greater than 500mm



(b) Bedding type 'D' of NZS 7643
Cover greater than 375mm

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Drainage Details

DATE: 02/07/2025
ISSUE: Developed Design
SCALE: 1:10 @A3
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A402

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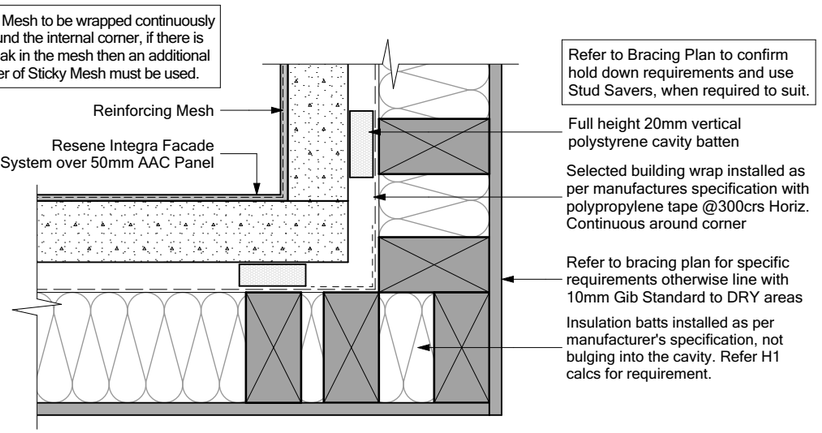
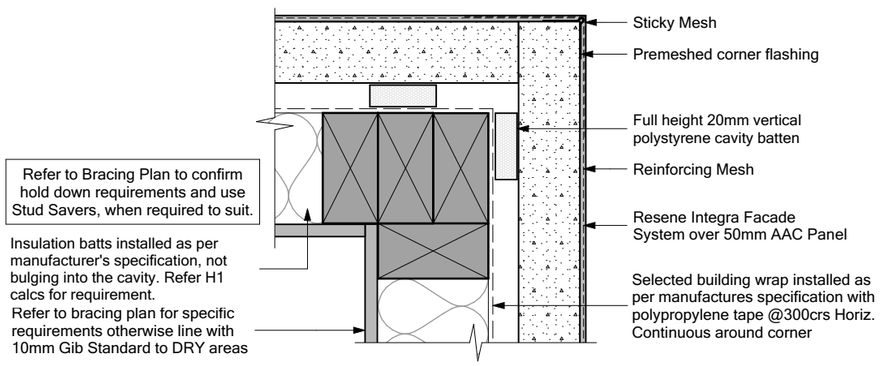
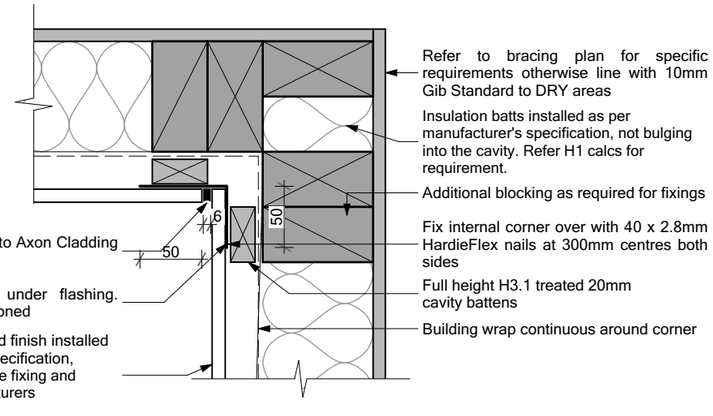


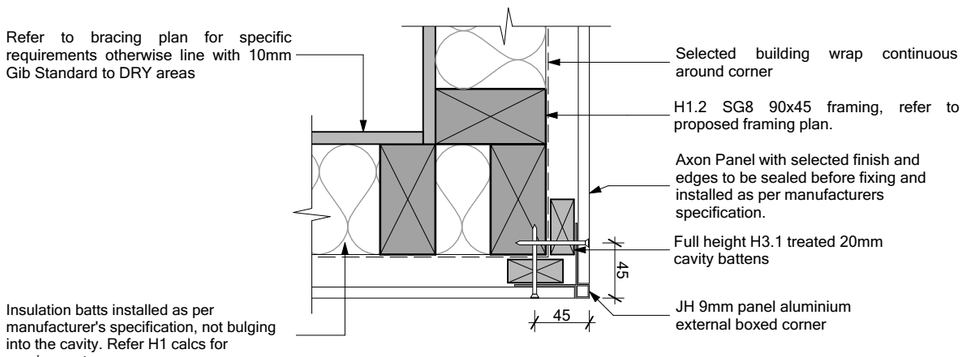
1 EXTERNAL CORNER DETAIL - INTEGRA 1:5



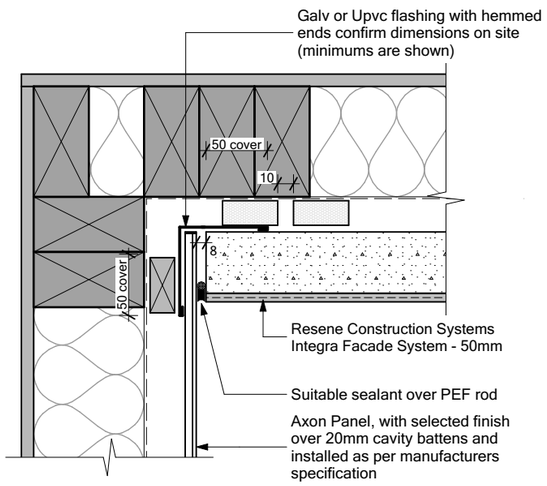
2 INTERNAL CORNER DETAIL - INTEGRA 1:5



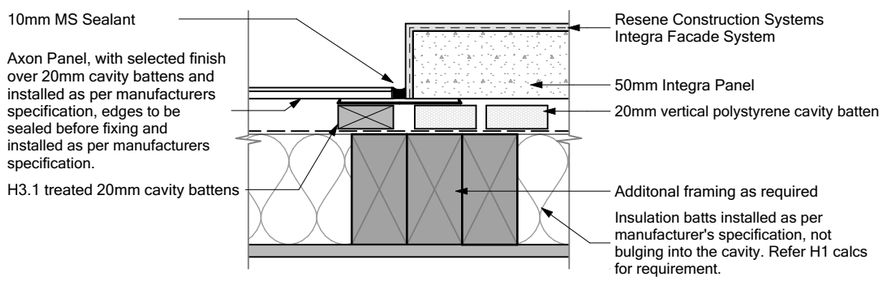
3 INTERNAL CORNER DETAIL - AXON 1:5



4 EXTERNAL CORNER DETAIL - AXON 1:5



5 CORNER TRANSITION DETAIL - AXON/INTEGRA 1:5



6 TRANSITION DETAIL - AXON/INTEGRA 1:5

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Cladding Details Corners

DATE: 02/07/2025
ISSUE: Developed Design
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A403

Building Consent BC250662
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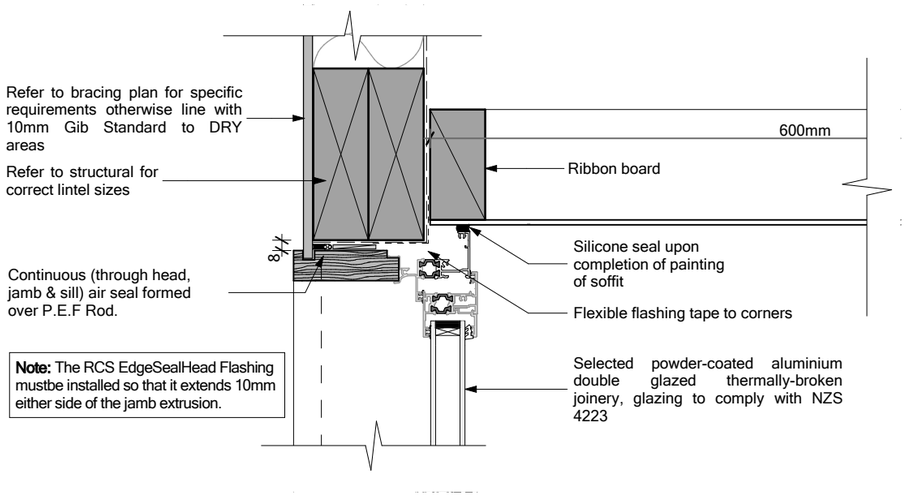
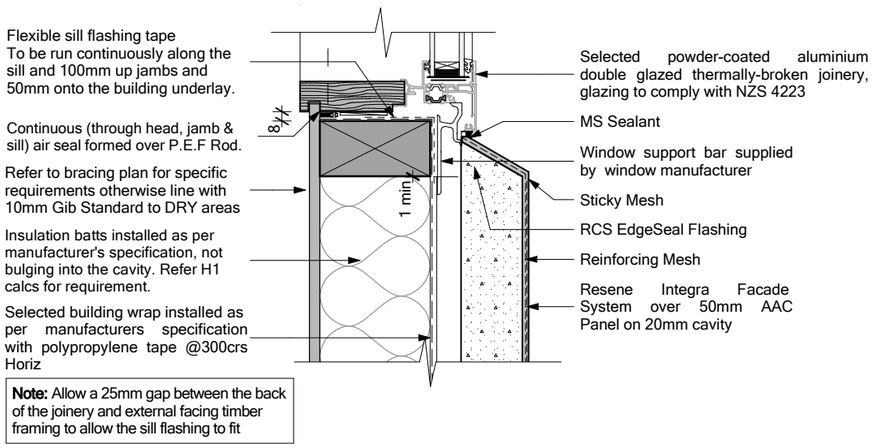
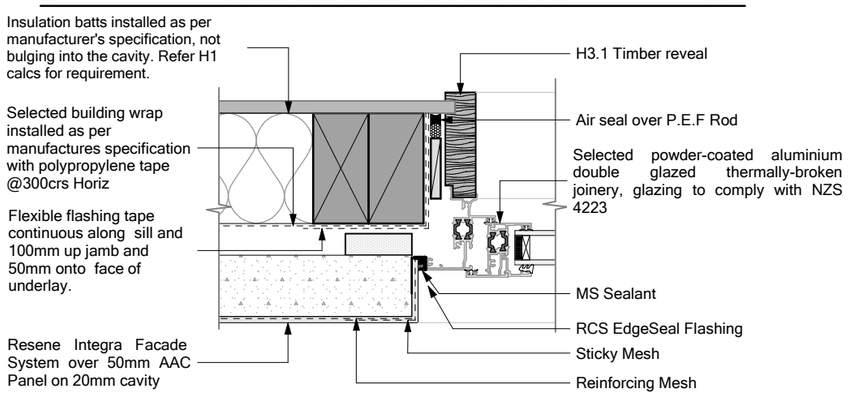


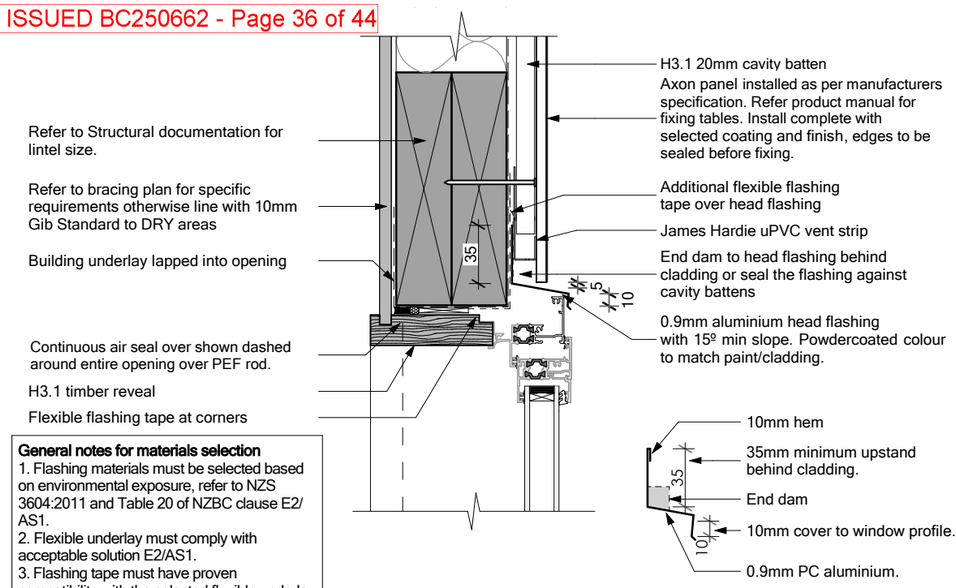
1 WINDOW HEAD DETAIL - SOFFIT 1:5



2 SILL DETAIL - INTEGRA 1:5



3 JAMB DETAIL - INTEGRA 1:5



General notes for materials selection
1. Flashing materials must be selected based on environmental exposure, refer to NZS 3604:2011 and Table 20 of NZBC clause E2/AS1.
2. Flexible underlay must comply with acceptable solution E2/AS1.
3. Flashing tape must have proven compatibility with the selected flexible underlay and other materials which it comes into contact.
4. Sill support bars must comply with EM6, E2/VM1 and B2/AS1.
Refer to the manufacturer or supplier for technical information for these materials

HEAD DETAIL - AXON

4 HEAD DETAIL - AXON 1:5

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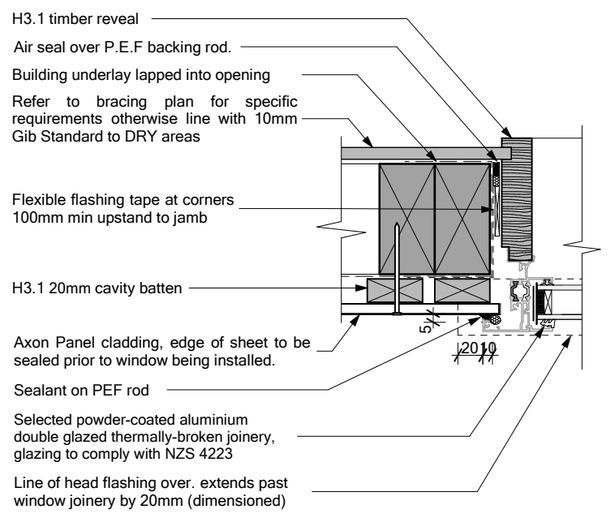
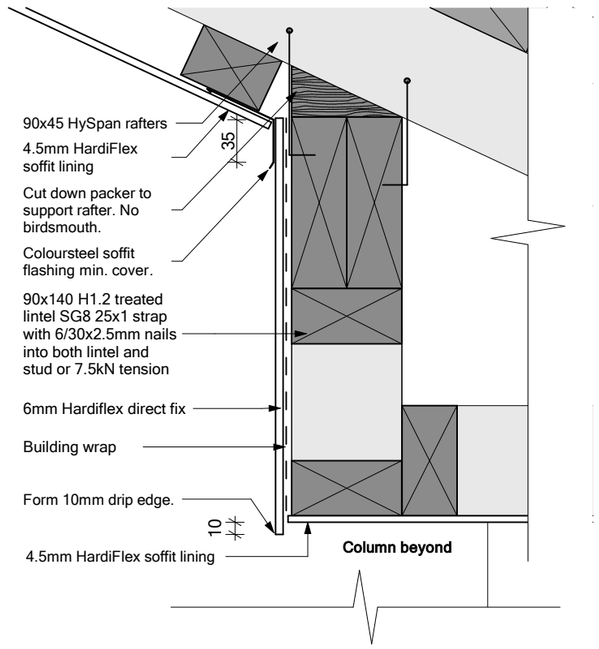


5 JAMB DETAIL - AXON 1:5



6 Sloped soffit detail 1:5

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Cladding Details HJS

DATE: 05/08/2025
ISSUE: Developed Design
SCALE: 1:5 @A3
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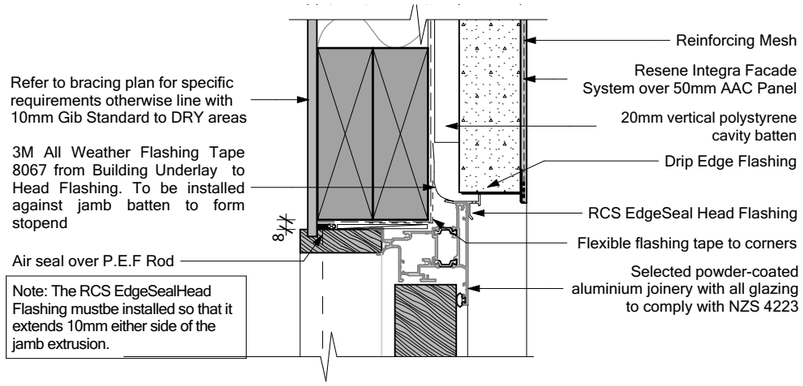
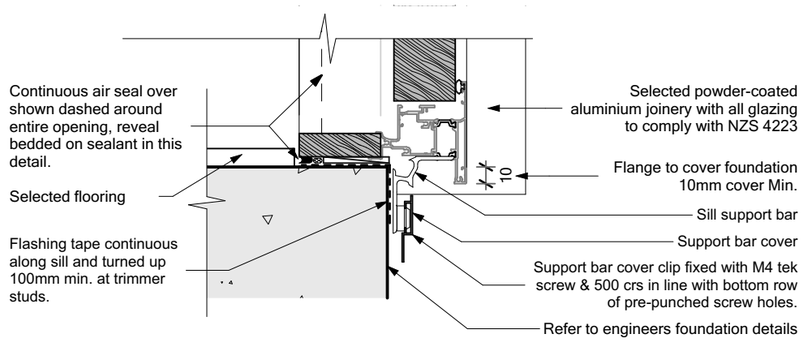
REV:
A404

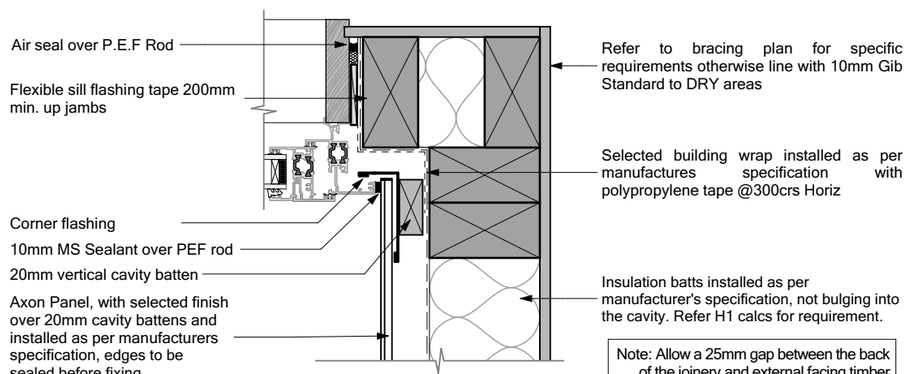
BC250662



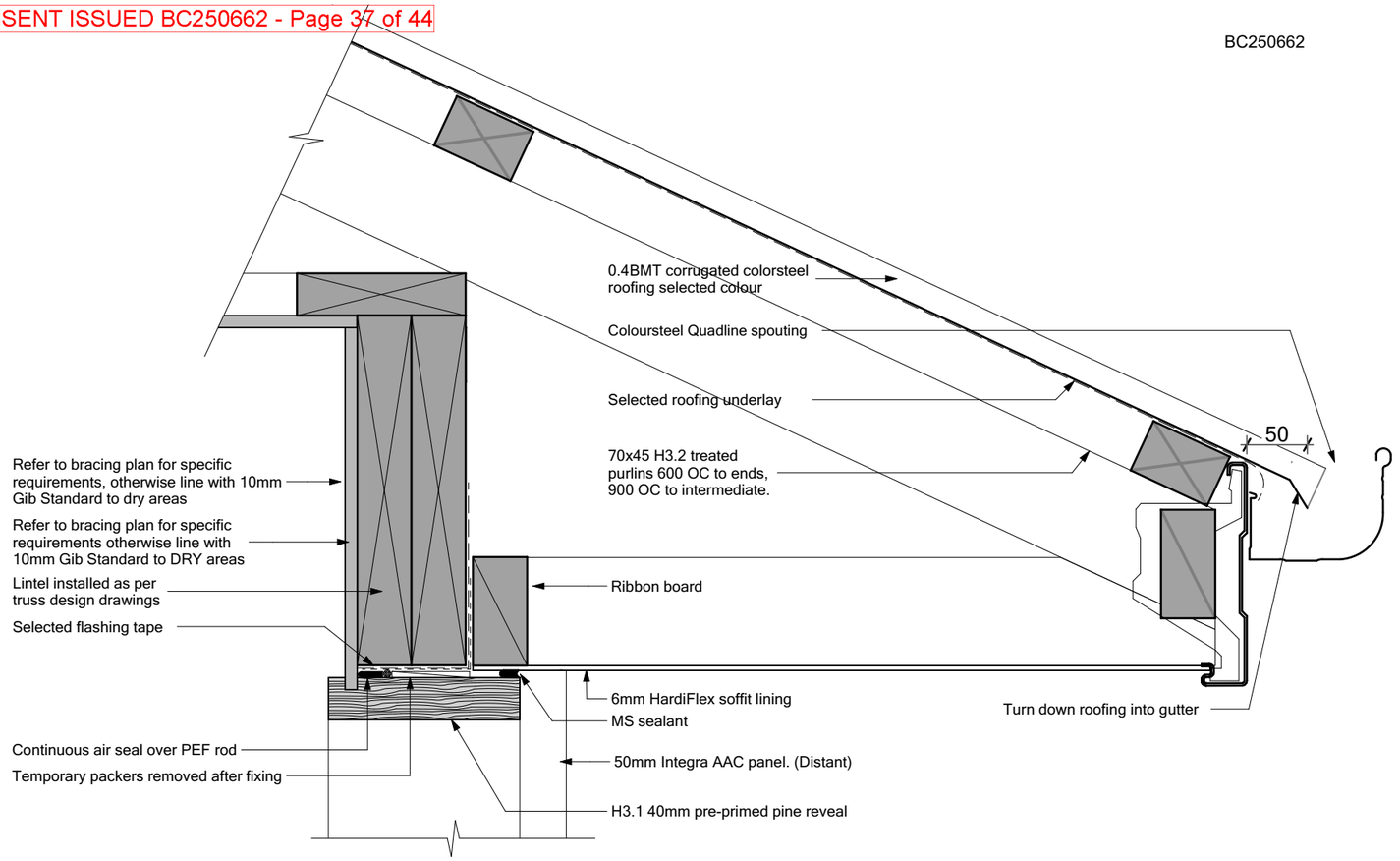
1 DOOR HEAD DETAIL - INTEGRA 1:5



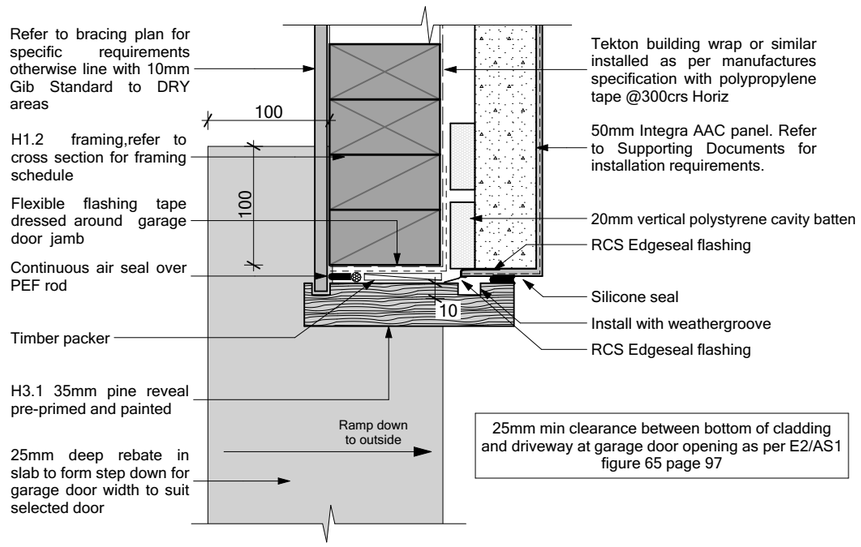
2 DOOR THRESHOLD DETAIL 1:5



3 DOOR JAMB DETAIL 90Deg AXON 1:5



4 GARAGE DOOR HEAD DETAIL - INTEGRA 1:5



5 GARAGE DOOR JAMB DETAIL - INTEGRA 1:5

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Cladding Details HJS

DATE: 02/07/2025
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SCALE: 1:5 @A3
DRAWN BY: AD

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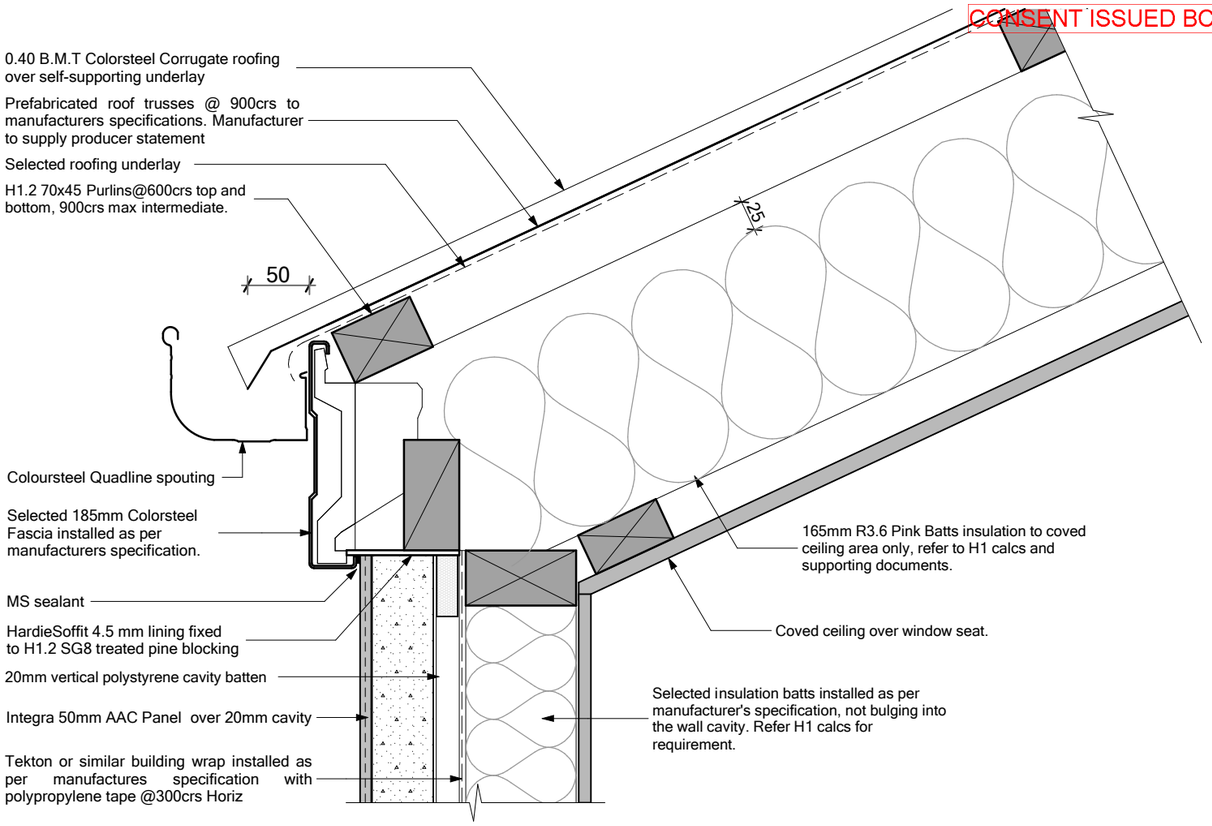
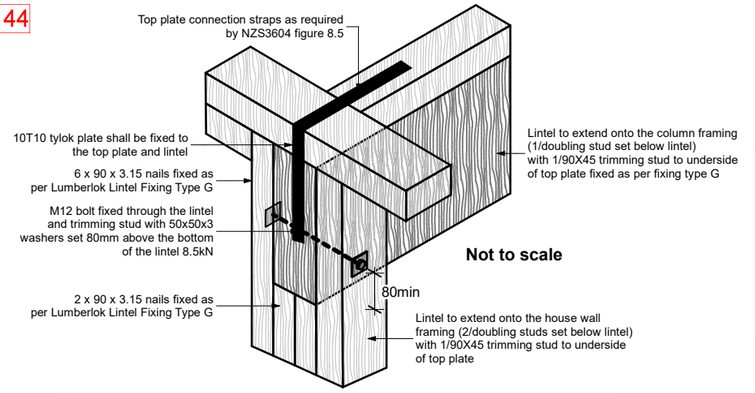
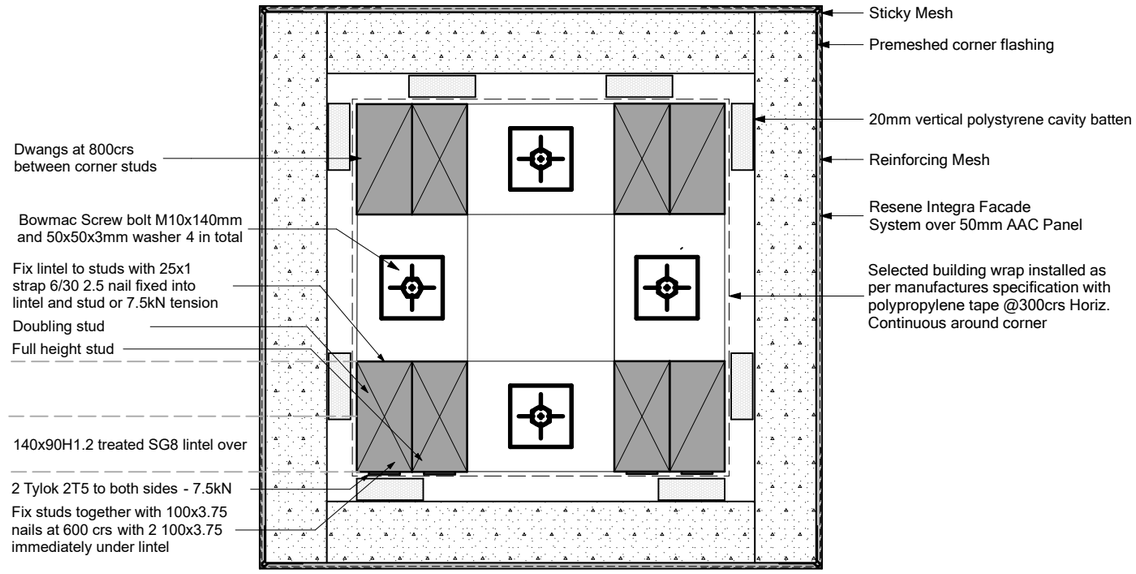
A405

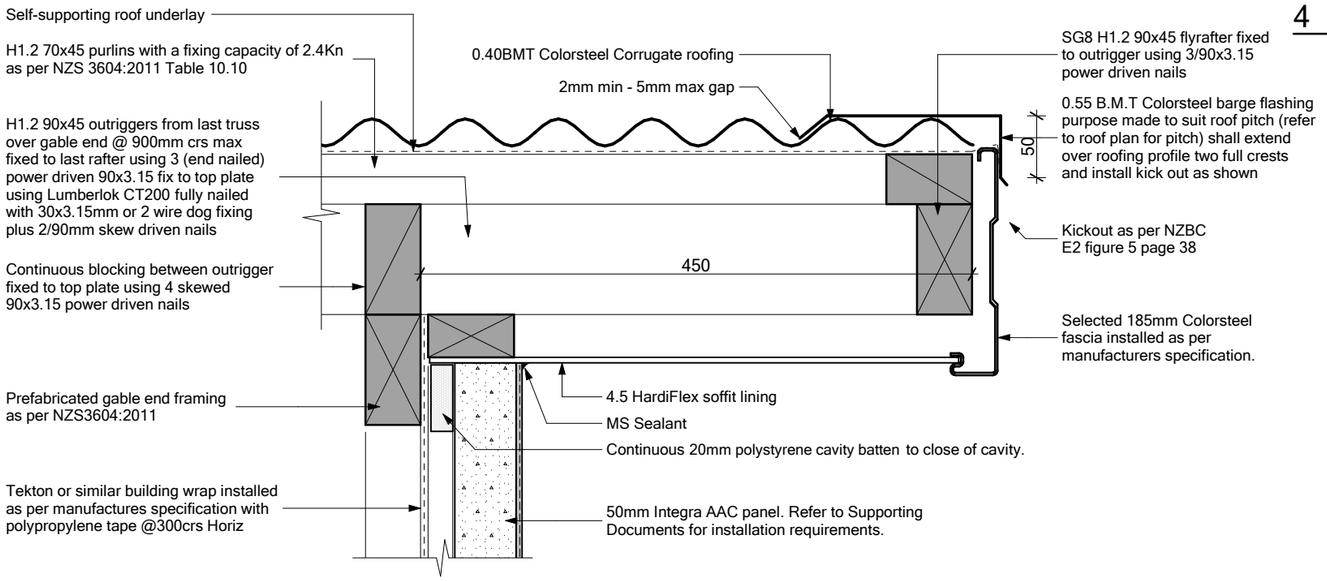


1 80 mm SOFFIT DETAIL - INTEGRA/CORRUGATE 1:5

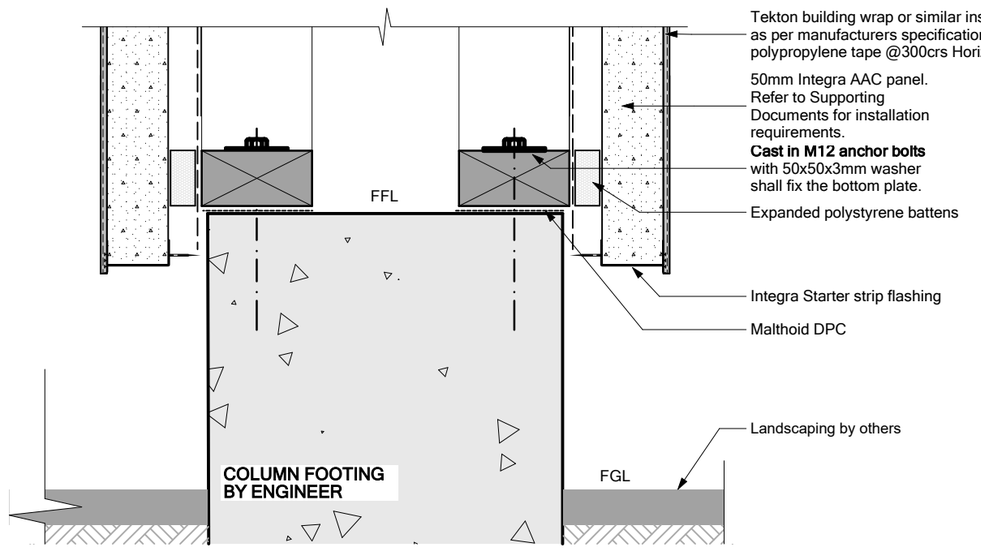




4 COLUMN EXTERNAL CORNER DETAIL - INTEGRA 1:5



2 GABLE END SOFFIT DETAIL - INTEGRA/CORRUGATE1:5



3 COLUMN EXTERNAL CORNER DETAIL - INTEGRA 1:5

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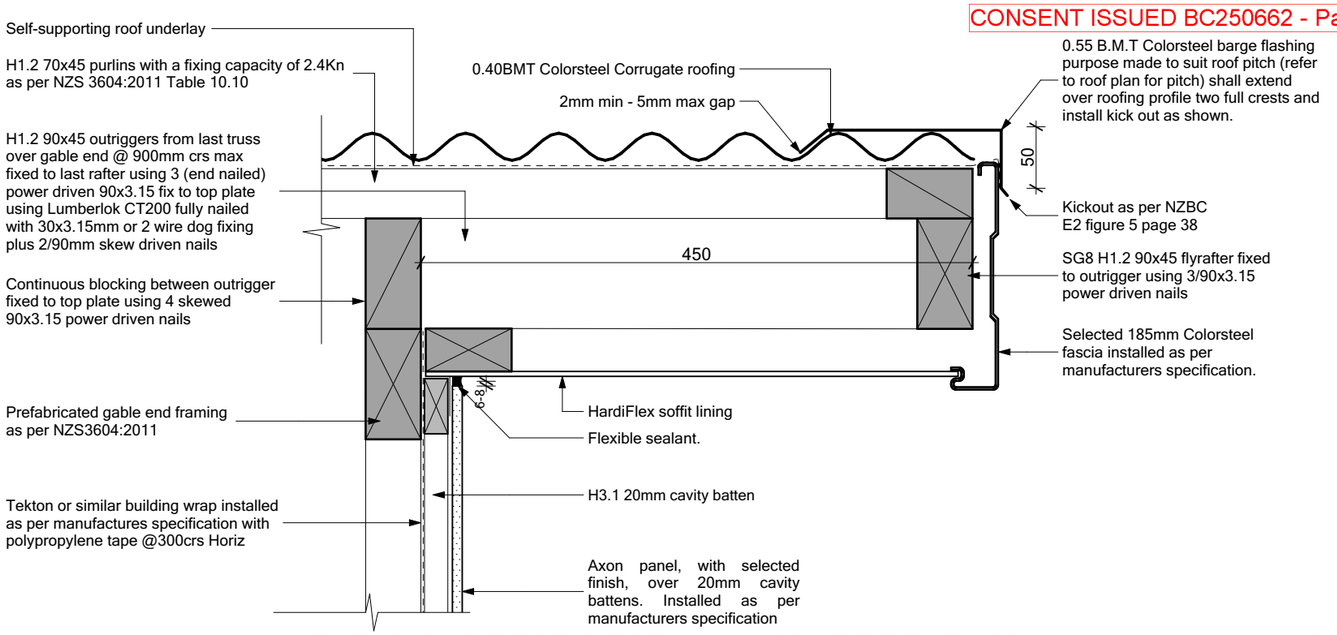
Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

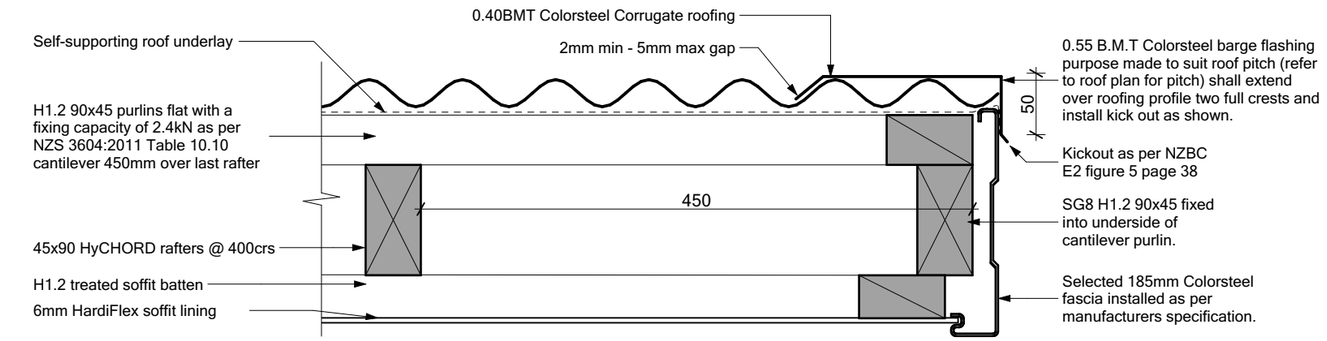
SHEET TITLE:
Roof Details

DATE: 05/08/2025
ISSUE: Developed Design
SCALE: 1:5 @A3
DRAWN BY: AD

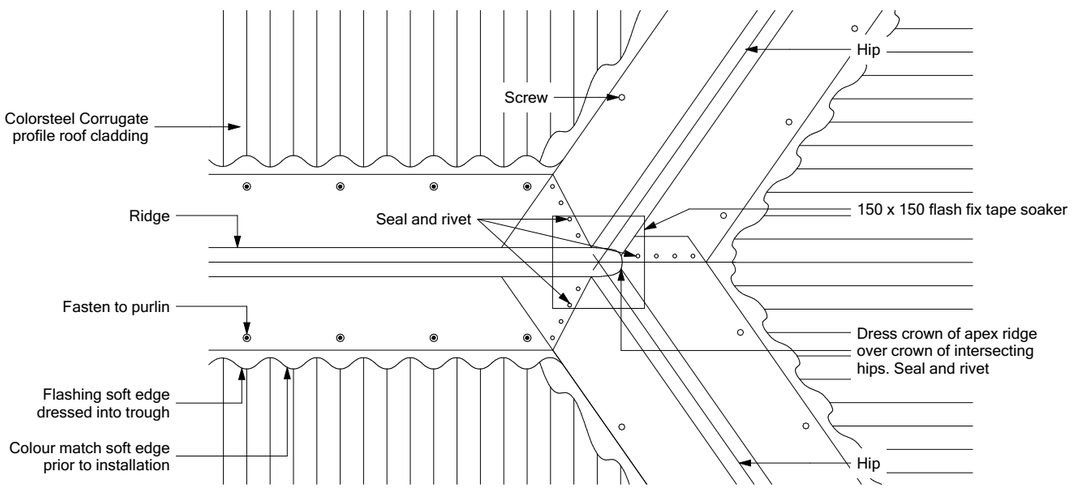
REV:
A406



1 GABLE END SOFFIT DETAIL - AXON/CORRUGATE 1:5

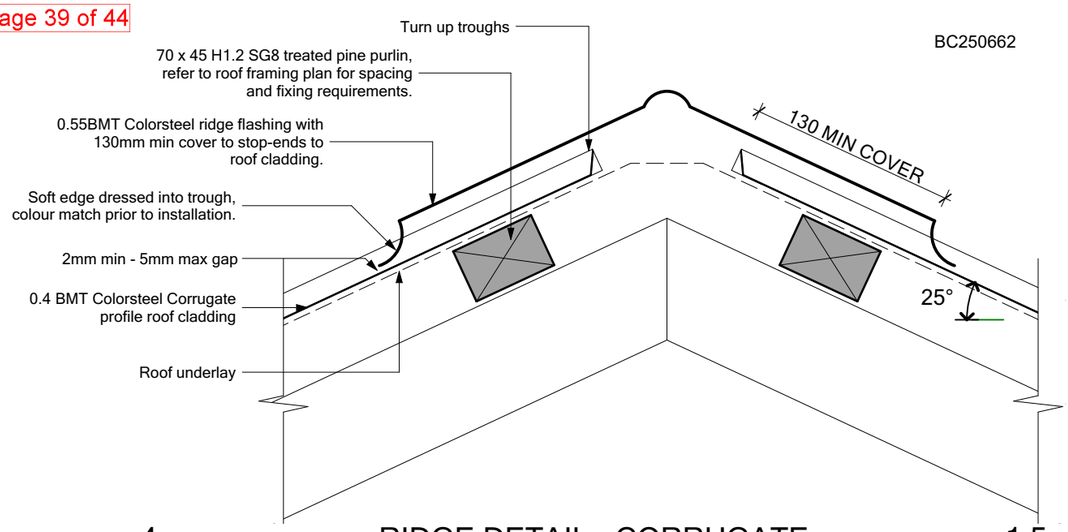


2 SOFFIT ENTRANCEWAY DETAIL 1:5

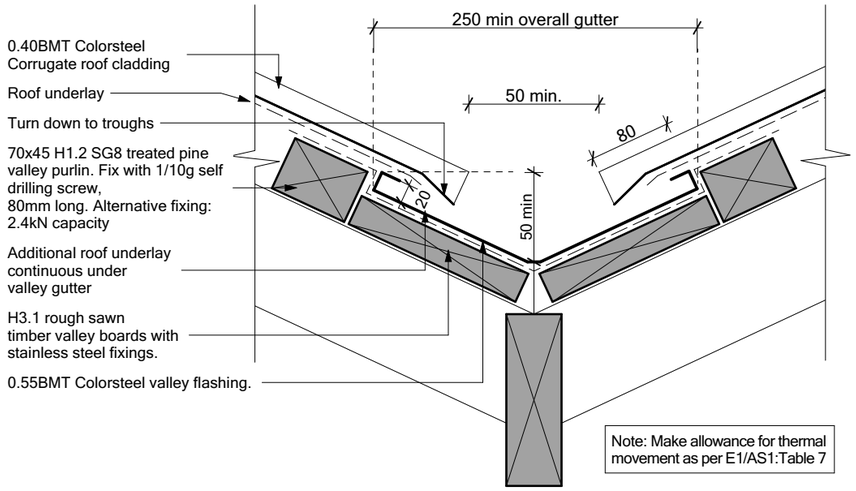


3 RIDGE PLAN DETAIL - CORRUGATE 1:5

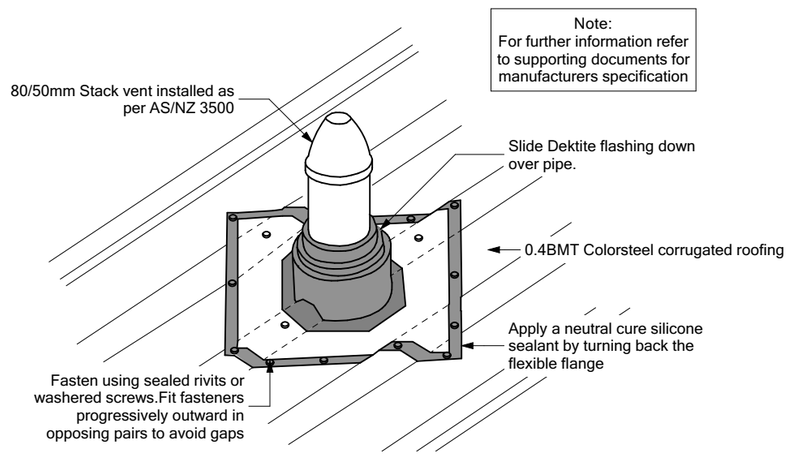
BC250662



4 RIDGE DETAIL - CORRUGATE 1:5



5 VALLEY DETAIL - CORRUGATE 1:5



6 VENT PENETRATION 1:5

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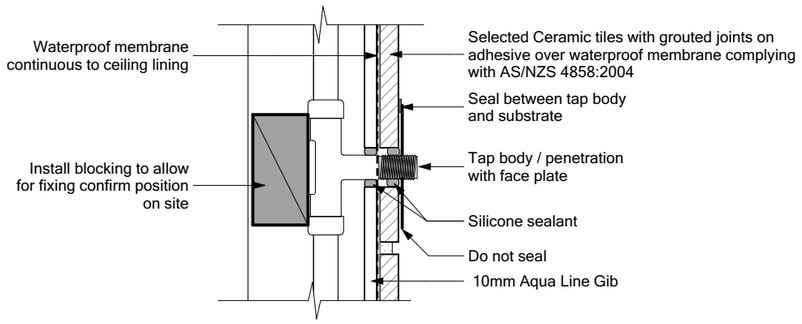
Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Roof Details

DATE: 02/07/2025
ISSUE: Developed Design
SCALE: 1:5 @A3
DRAWN BY: AD

REV:
A407



GIB Aqualine is suitable as a substrate for tiling up to the following weights:
- 10mm GIB Aqualine up to 20kg/m
- 13mm GIB Aqualine up to 32kg/m

For further information on tiling consult the BRANZ Good Practice Guide – Tiling.

Timber Wall Framing
Framing dimensions and spacing must be appropriate for the tile weight and comply with the requirements of NZS 3604:2011 Timber Framed Buildings, or relevant specific design standard.

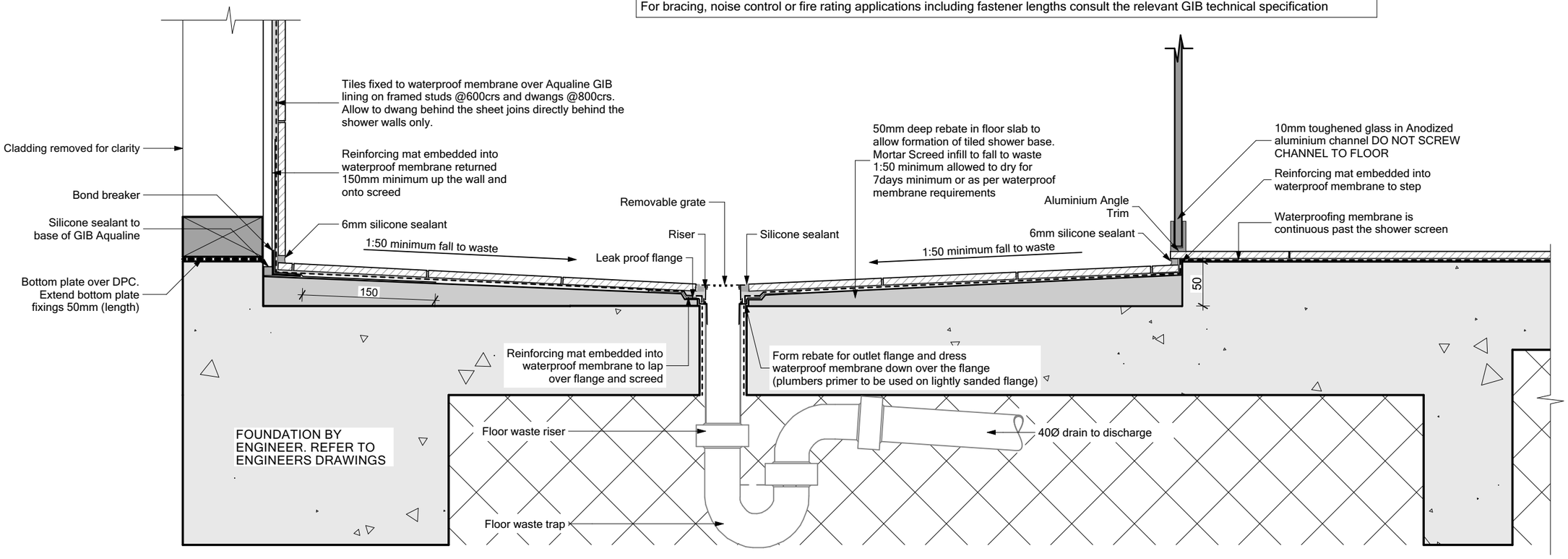
Nogs
For impact protection in shower cubicles or shower over bath situations it is important that all sheet joints are made on solid framing. This may require verticle fixing or the installation of additional nogs. Also provide nogs;
- Adjacent to each pipe penetration behind sink and tub flashings
- Between all studs above bath flanges and preformed shower bases

Corner Reinforcing
Prior to lining in tiled areas the internal corners shall be reinforces with a minimum 32 x 32 x 0.55mm NZ18 or 45 x 45 x 0.55mm GIBFix Angle. Each leg shall be fastened to the framing at 300mm centres.

Fasteners
Minimum 32mm x 6mm GIB Grabber High Thread Screws

Fastener Centres
- 150mm centres to perimeter of wall and all intermediate studs
- Adhesive is not to be used in place of mechanical fasteners
- Place fasteners 12mm from sheet edges and 18mm from sheet ends
- Single fasteners to each stud where the horizontal joint crosses the studs
- Where relevant, fastener lengths must comply with requirements of GIB Fire Rated Systems or GIB Noise Control Systems

For bracing, noise control or fire rating applications including fastener lengths consult the relevant GIB technical specification



1 SHOWER BASE SECTION 1:5

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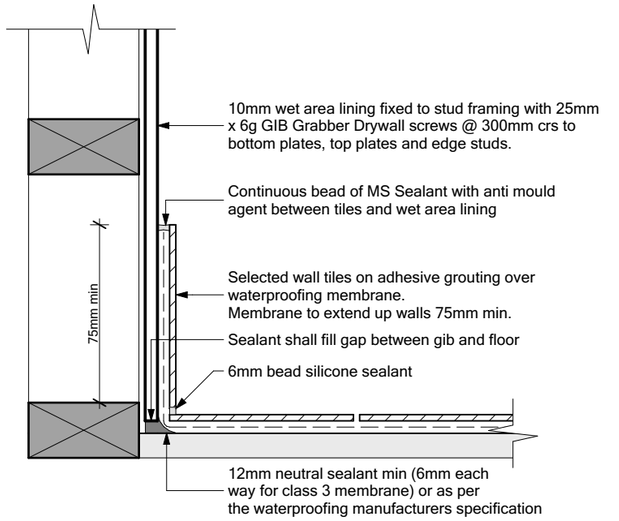
Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

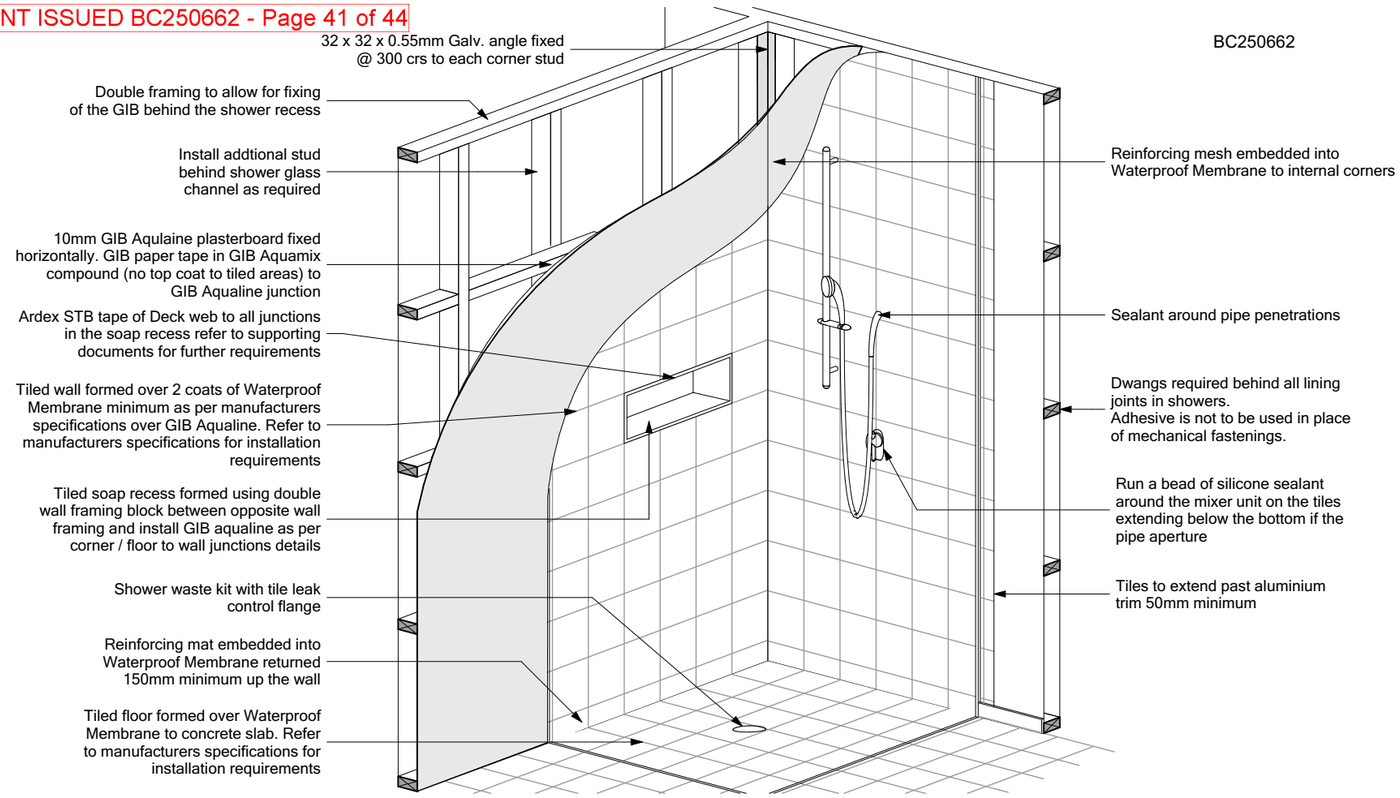
SHEET TITLE:
Shower Details

DATE: 02/07/2025
ISSUE: Developed Design
SCALE: 1:5 @A3
DRAWN BY: AD

REV:
A408



1 TILE FLOOR WALL JUNCTION DETAIL 1:5



3 SHOWER BOX 3D 1:10

2 TILE WALL VANITY DETAIL 1:5

4 TILE CORNER DETAIL 1:10

5 SHOWER SCREEN DETAIL 1:10

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

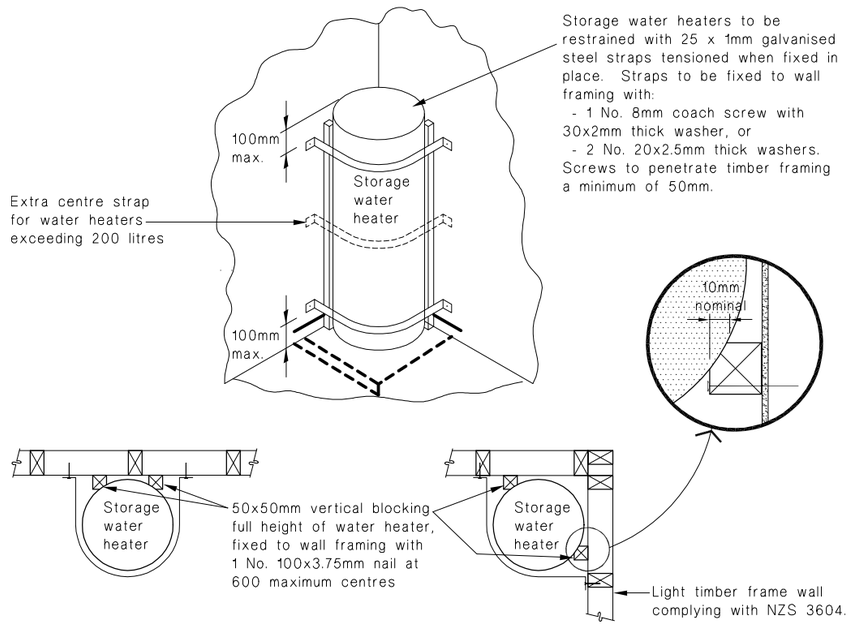
SHEET TITLE:
Tile Details

DATE: 02/07/2025
ISSUE: Developed Design
SCALE: 1:5, 1:10 @A3
DRAWN BY: AD

REV:
A409

Building Consent BC250662
Received 5/8/2025

Figure 14: Seismic Restraint of Storage Water Heaters 90 – 360 litres
Paragraph 6.11.4



Notes:
1. An additional centre strap is required where a storage water heater is located more than 12 m above finished ground level.
2. Additional timber framing may be required in retrofit situations to ensure adequate strap fixing is available.
3. Straps shall not be installed where they clash with water heater inlets, outlets or controls.
4. Where the 100 mm maximum strap distance from the top or bottom of the storage water heater cannot be achieved, straps may be placed within the top and bottom 25% with one additional strap placed centrally for water heaters < 200 litres, and two additional evenly spaced straps for water heaters 200 - 360 litres.
5. A maximum total of four straps are required when complying with both Note 1 and Note 4.

Table 4: Tempering Valve and Nominal Pipe Diameters
Paragraphs 5.3.1 and 6.12.1

	Low pressure (i.e. header tank supply or low pressure)	Low and medium pressure unvented (valve vented) and open vented	Mains pressure
Pressure of water at tempering valve (kPa)	20 – 30	30 – 120	over 300
Metres head (m)	2 – 3	>3 – 12	over 30
Minimum tempering valve size	25 mm	20 mm	15 mm
Pipes to tempering valve	25 mm (see **Note 3**)	20 mm	20 mm (15 mm optional) (see **Note 1**)
Pipes to shower	20 mm	20 mm (see **Note 4**)	20 mm (see **Note 5**) (15 mm optional) (see **Note 1**)
Pipes to sink/laundry (see **Note 2**)	20 mm	20 mm	15 mm
Pipes to bath (see **Note 2**)	20 mm	20 mm	15 mm
Pipes to basins (see **Note 2**)	15 mm	15 mm	10 mm

Notes:
1. If supplied by separate pipe from *storage water heater* to a single outlet.
2. This table is based on maximum pipe lengths of 20 metres.
3. 2 m maximum length from *water heater* outlet to tempering valve.
4. 15 mm if dedicated line to shower.
5. 10 mm if dedicated line to shower.
6. Table 3 pipe sizes have been calculated to deliver water simultaneously to the kitchen sink and one other *fixture*.

Figure 8(b): Mains Pressure Storage Water Heater System (unvented) - Expansion Control Valve
Paragraphs 6.1.2 and 6.2.1 c)

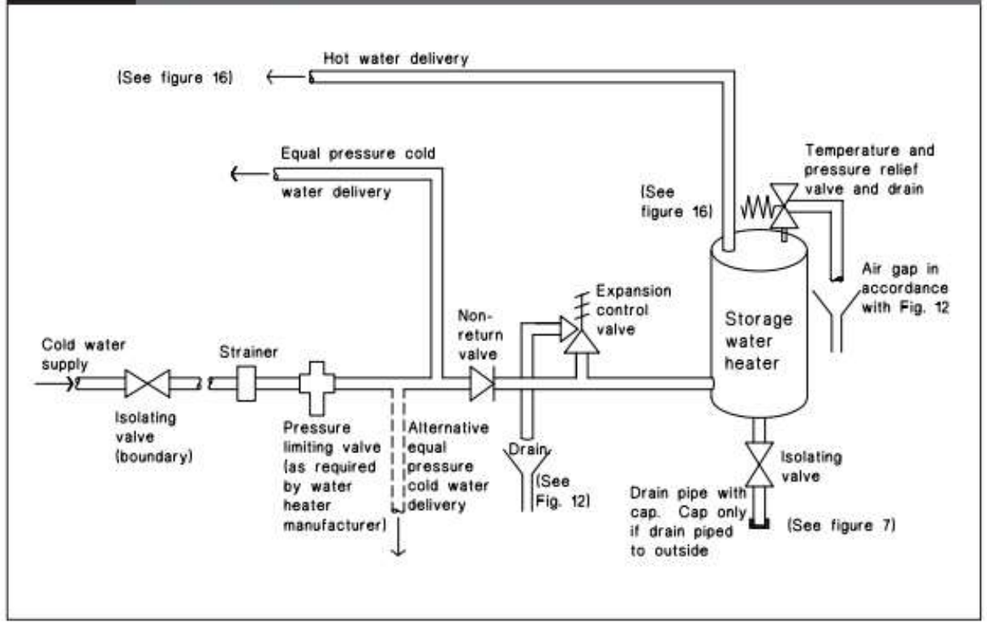
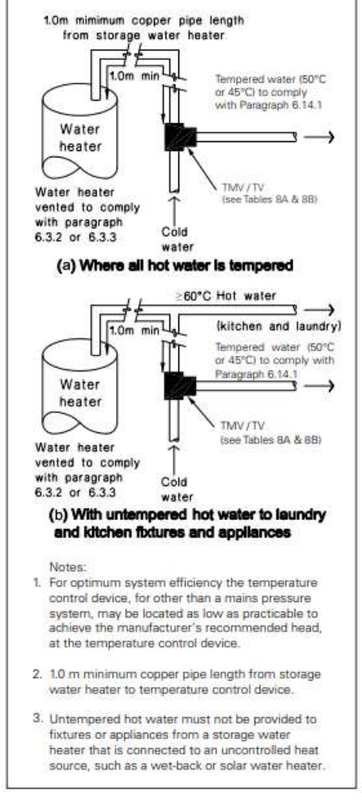


Figure 16: Tempering Valve or Thermostatic mixing Valve Installation
Tables 8A and 8B



Notes:
1. For optimum system efficiency the temperature control device, for other than a mains pressure system, may be located as low as practicable to achieve the manufacturer's recommended head, at the temperature control device.
2. 1.0 m minimum copper pipe length from storage water heater to temperature control device.
3. Untempered hot water must not be provided to fixtures or appliances from a storage water heater that is connected to an uncontrolled heat source, such as a wet-back or solar water heater.

7.2 Protection from freezing

7.2.1 Where there is the likelihood of freezing, hot and cold *water supply systems* shall be protected in the following manner:

a) Piping outside of the *building* thermal envelope shall be insulated,

b) Piping buried in the ground shall be insulated or installed below a level affected by freezing, and

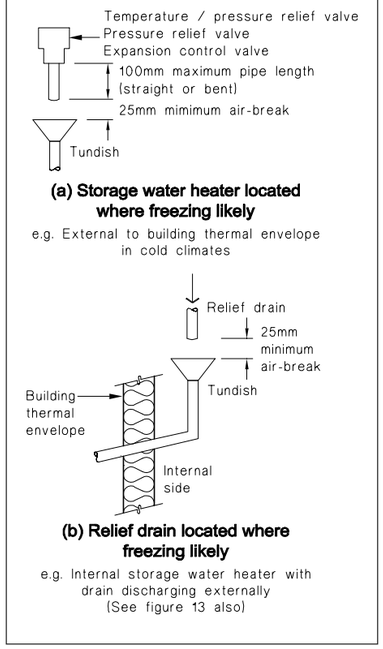
c) *Storage water heater vent pipes* shall be insulated (see Figure 17).

7.2.2 In climates where freezing temperatures are likely for a period of greater than 24 hours an expansion control valve is required in addition to *vent pipe* insulation (see Figure 17).

5.0 Hot Water Systems

5.0.1 Hot water systems complying with NZS 4305 satisfy the requirements of NZBC H1.3.4 for the provision of hot water to *sanitary fixtures* and *sanitary appliances*.

Figure 12: Relief Valve Drains – Freezing Protection
Paragraphs 6.7.1, 6.7.4 and 6.7.5



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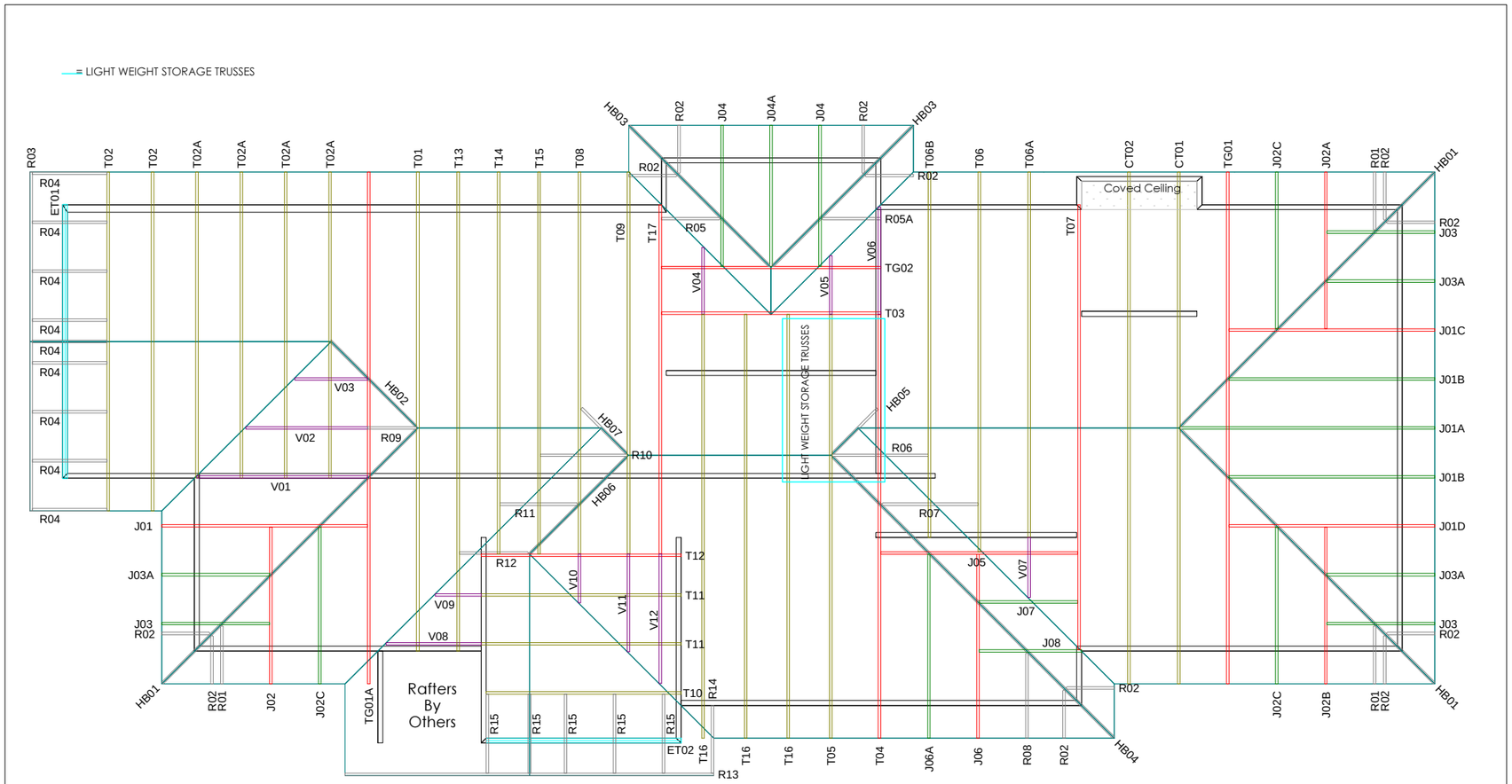
Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
HWC Details

DATE: 05/08/2025
ISSUE: Developed Design
SCALE: 1:1.1765, 1:1 @A3
DRAWN BY: AD

REV:
A410



WESTLAKE FRAME TRUSS STEEL (03) 348 3401 sales@westlake.co.nz www.westlake.co.nz 17 Frank Coxon Road, Belfast, Christchurch	Site Address : Toner Residence Lot 958 Ravenswood 34 Stackwood Ave. Woodend	Sheet Title : For Building Consent Buildable Truss Layout Date : 23 Jun,2025 Drawn : Lyra Mae De Castro Scale : 1: 100 System : MiTek 20/20	Job Details: Roof Pitch : 25.00deg Roof Material : Galv Iron .5mm Ceiling Material : Standard Wind Zone : High Roof Snow Load : 0.000kPa	Truss Centres : 900mm Roof Live Load : 0.250kPa Floor Live Load : Wind Speed : 44m/s Overhang : 600mm	PrimeCad v4.7.346 MiTek Job Title : 250357PS Sheet : 1 Revision Number :

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Truss details

DATE: 02/07/2025
ISSUE: Developed Design
SCALE: @A3
DRAWN BY: Others

REV:
A411

BC250662

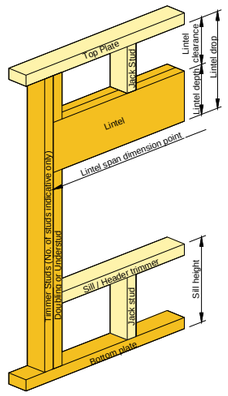
LUMBERLOK® LINTEL FIXING OPTIONS

TYPE E 1.4 kN

TYPE F 4.0 kN

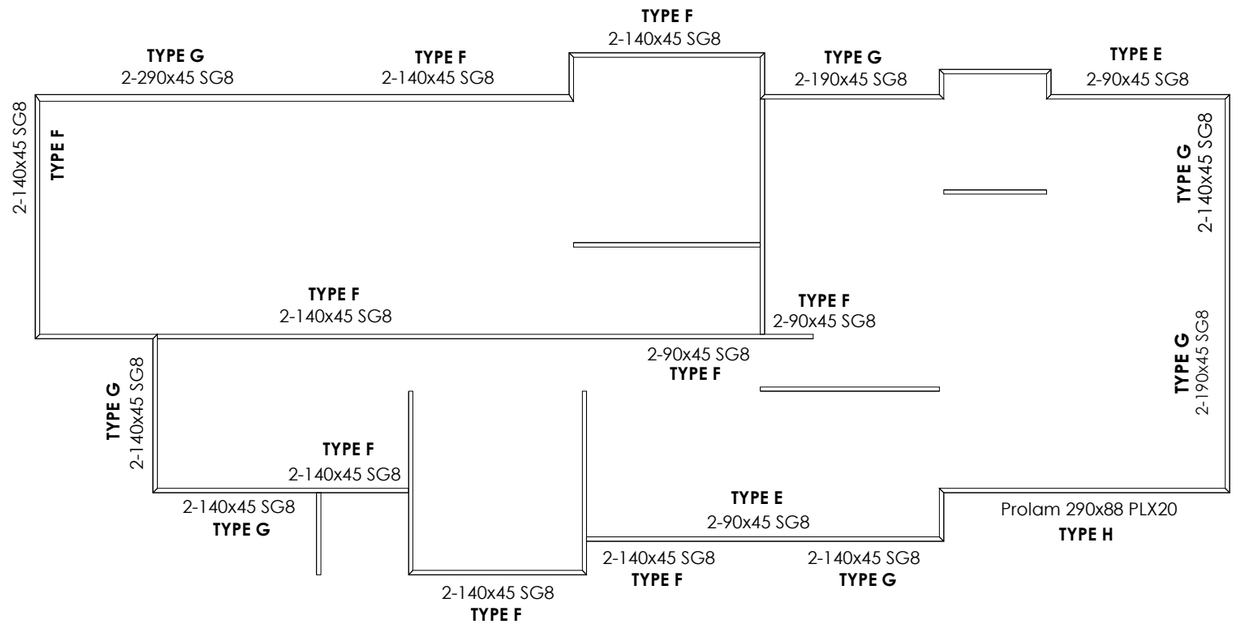
TYPE G 7.5 kN

TYPE H 13.5 kN



LINTEL SIZED USING
GANGLAM CHART 2008

Refer to:
LUMBERLOK Lintel Fixing Schedule 10/2011
MiTek Structural Fixings **On-Site Guide** for Building Code Compliance
(Alternative to Table 8.14 & Figure 8.12 NZS 3604:2011)



WESTLAKE FRAME TRUSS STEEL
(03) 348 3401
sales@westlake.co.nz
www.westlake.co.nz
17 Frank Coxon Road,
Belfast,
Christchurch

Site Address :
Toner Residence
Lot 958 Ravenswood
34 Stackwood Ave.
Woodend

Sheet Title :
For Building Consent
Lintel Fixing

Date : 23 Jun,2025 | Drawn : Lyra Mae De Castro
Scale : 1: 100 | System : MiTek 20/20

Job Details:

Roof Pitch	: 25.00deg	Truss Centres	: 900mm
Roof Material	: Galv Iron .5mm	Roof Live Load	: 0.250kPa
Ceiling Material	: Standard	Floor Live Load	:
Wind Zone	: High	Wind Speed	: 44m/s
Roof Snow Load	: 0.000kPa	Overhang	: 600mm

PrimeCad v4.7.346
MiTek™
Job Title : 250357PS
Sheet : 3
Revision Number :

250357 truss design01 1:1

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Toner Residence
Lot 958 Ravenswood
34 Stackwood Avenue, Woodend

SHEET TITLE:
Truss details

DATE: 02/07/2025
ISSUE: Developed Design
SCALE: @A3
DRAWN BY: Others

REV:
A412

Ravenswood Developments Limited
14 Bob Robertson Drive
Woodend, North Canterbury 7641, NEW ZEALAND
Tel: + 64 (3) 375 0010
Email: kgray@ravenswood.co.nz
Website: www.ravenswood.co.nz

04/07/2025

B & M Toner
Sent via email to: michaeltoner90@gmail.com

Dear Michael & Brittany

RE: LOT 958 RAVENSWOOD

Thank you for the comprehensive documents submitted on 18/06/2025, 01/07/2025 and 03/07/2025 as required by the Ravenswood design approval requirements. I have reviewed your proposal and report as follows:

The following materials and colours provided are hereby approved by Ravenswood:

Wall Cladding	Rockcote – colour Seafog Linea – colour Lyttelton Double
Roof Cladding	Longrun Colorsteel – colour Grey Friars
Joinery	Aluminum Joinery – colour Grey Friars
Garage Door	Standard Colorsteel – colour Grey Friars

Please find attached a copy of the stamped approved set of drawings.

The acceptance herewith given does not preclude the necessity for the plans to comply with all local bylaws, resource management criteria or any other relevant legislation.

Important Note:

Please be aware that Ravenswood will not allow any relocation of street trees within the road reserve. It is important that your Architect or designer is aware of the location of street trees before exacting the location of driveway crossings.

It is important for the builder to be aware that there are very strict guidelines in place during the build out phase of Ravenswood that must be strictly adhered to. These have been put in place to control damage to verges, street trees and neighbouring lots while construction is taking place. This will keep the general standard of the development at a very high level of presentation. It is

also essential that your builder locates the correct service location for your lot prior to construction.

Please also note that there is fibre optic cable throughout the Ravenswood subdivision. Please ensure your builder knows this in order to cable your house correctly. Your service provider is Enable; you can contact them via the website on www.enable.net.nz.

Yours sincerely,

Kim Gray

Compliance Coordinator

Disclaimer

This is design approval only. Compliance with covenants, building regulations, resource consent conditions or other statutory planning requirements have not been assessed. In undertaking this review of the documentation neither Ravenswood nor its designated representative, shall be liable to anyone by reason of any mistake in judgement or negligence arising out of or relating to the approval or disapproval or failure to approve any plans so submitted, nor shall Ravenswood nor its designated representative, be responsible or liable for any structural defects in such plans or in any structure erected according to such plans or any damages problems resulting thereof.

Every person and entity which submits plans to Ravenswood, or its designated representative agrees, by submission of such plans, that the party making the submissions will not bring any action or suit against Ravenswood nor its designated representative.

Preliminary Design

Date: Monday, 14 April 2025
Designed by: LS

Toner Residence

Lot 958 Ravenswood Woodend

	SHEET	SHEET NAME	REV
PLANS			
	A101	Site Plan	1
	A102	Floor Plan	1
	A103	Framing Plan	1
	A104	Window & Door Layout	1
ELEVATIONS			
	A201	Elevations	1
	A202	Elevations	1
JOINERY			
	A301	Window Schedule	1
	A302	Internal Door Schedule	1

Images shown are an artist impression only all colours,materials & planting shown are subject to the final contract agreement

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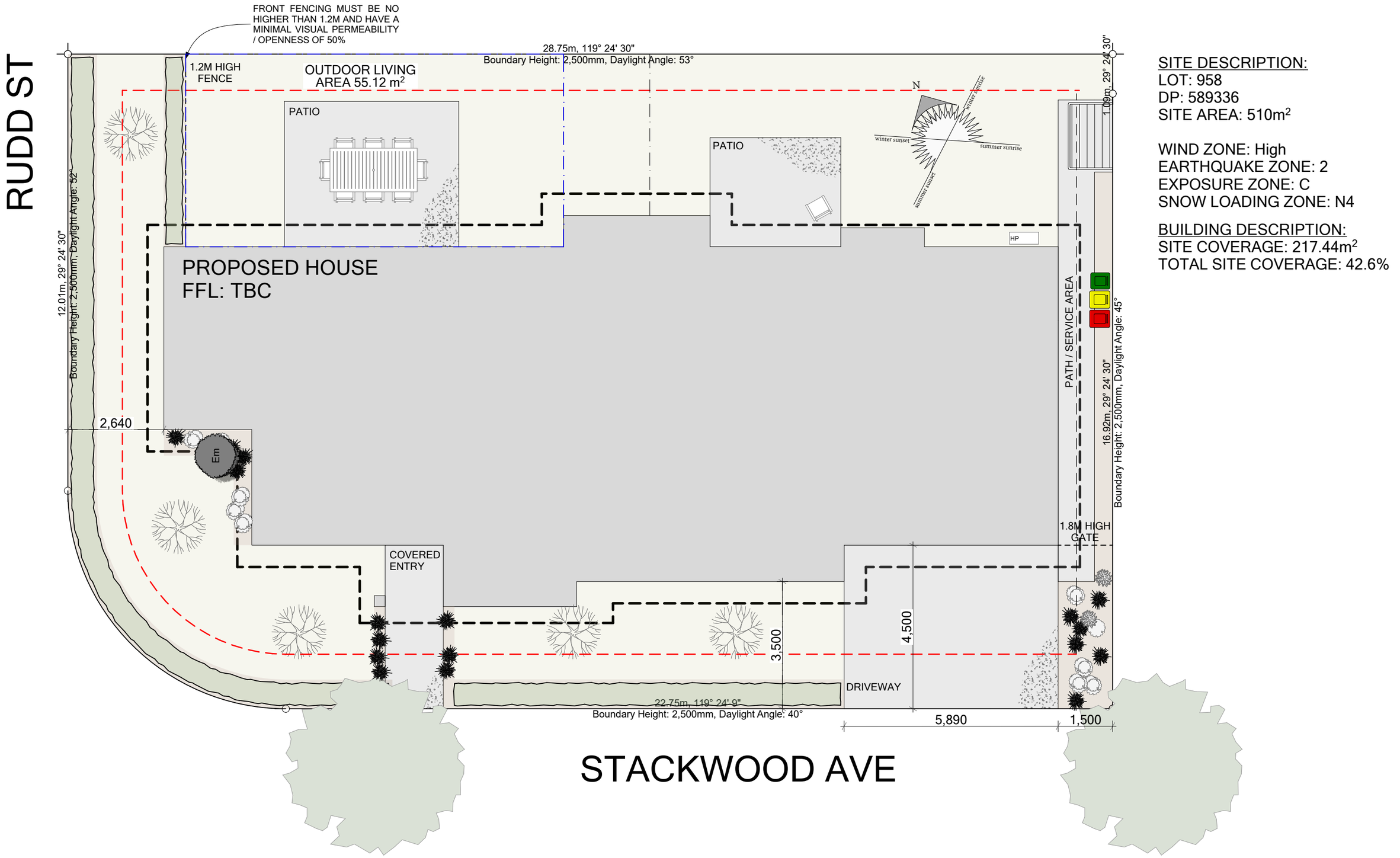
Lot 958 Ravenswood



SITE DESCRIPTION:
LOT: 958
DP: 589336
SITE AREA: 510m²

WIND ZONE: High
EARTHQUAKE ZONE: 2
EXPOSURE ZONE: C
SNOW LOADING ZONE: N4

BUILDING DESCRIPTION:
SITE COVERAGE: 217.44m²
TOTAL SITE COVERAGE: 42.6%

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Toner Residence
Lot 958 Ravenswood
Woodend

"Design Approved"
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Compliance with covenants, building regulations, resource consent conditions or other statutory planning requirements have not been assessed.
Date: 04/07/2025
Signed:

SHEET TITLE:
Site Plan

DATE: 14/04/2025
ISSUE: Preliminary Design
SCALE: 1:100 @A3
DRAWN BY: LS

REV: 1

A101

01
A201

02
A201

03
A202

04
A202

Floor Area:
212.58 m²
(over framing)

Framing Note:

Stud height 2.420m
Double top plate height 2.455m

Flooring Legend

- Concrete
- Carpet
- Tiles
- Planking

Heating Legend

- Heat Duct
- Air Return

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Toner Residence
Lot 958 Ravenswood
Woodend

SHEET TITLE:
Floor Plan

DATE: 14/04/2025
ISSUE: Preliminary Design
SCALE: 1:100 @A3
DRAWN BY: LS

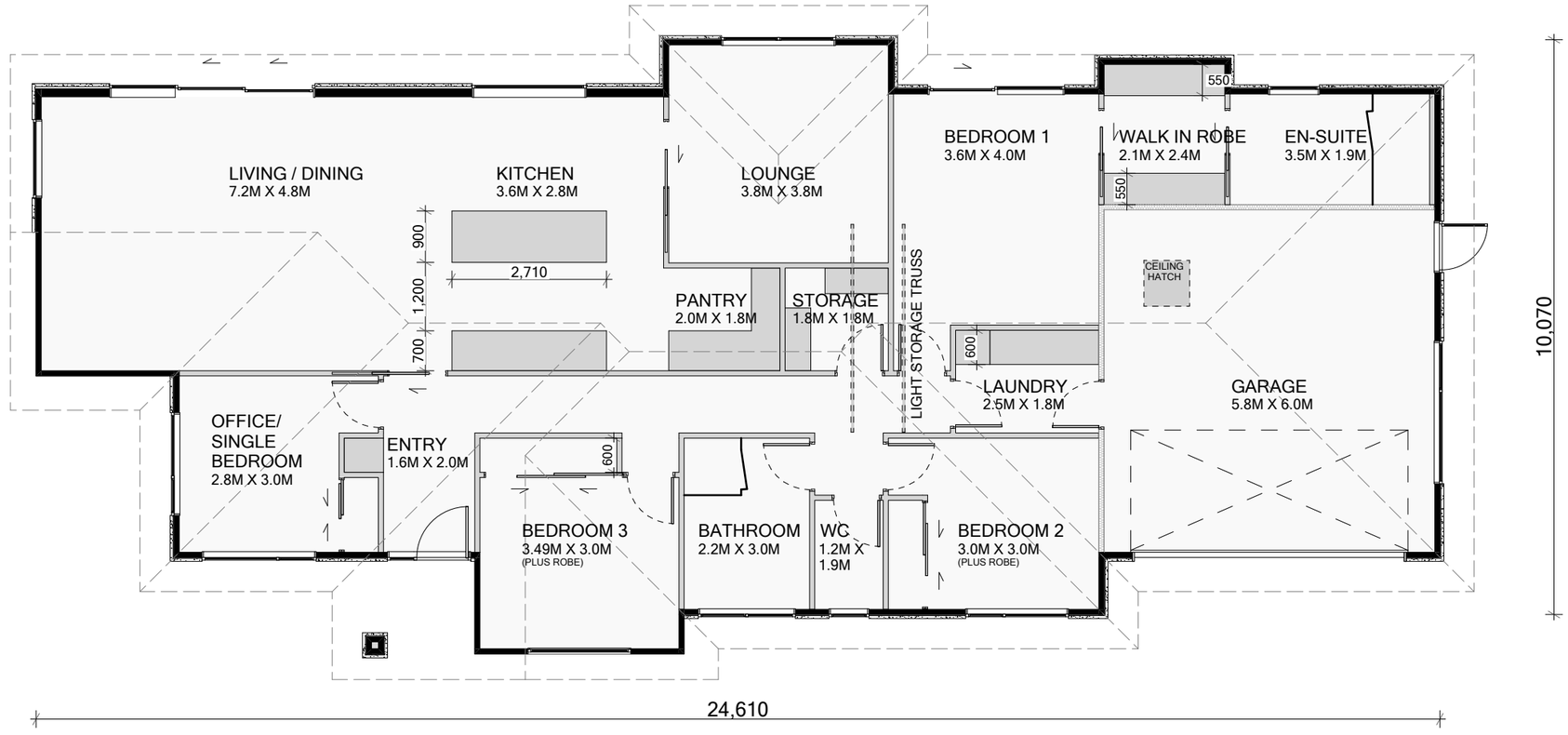
A102

REV: 1

Floor Area:
212.58 m^2
(over framing)

Framing Note:

Stud height 2.420m
Double top plate height 2.455m



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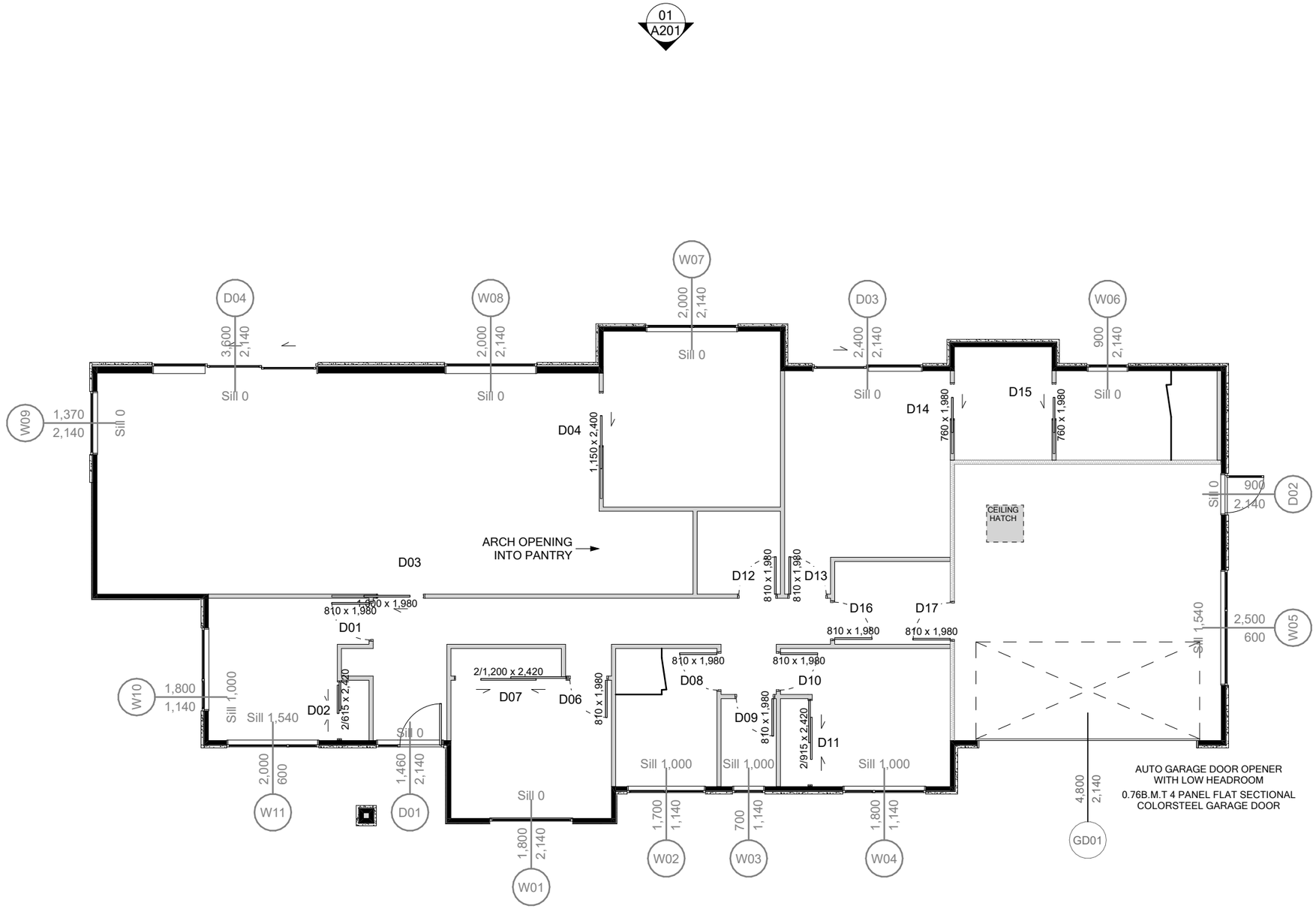
Lot 958 Ravenswood
Woodend

SHEET TITLE:
Framing Plan

DATE: 14/04/2025
ISSUE: Preliminary Design
SCALE: 1:100 @A3
DRAWN BY: LS

REV:
A103 1



"Design Approved"
This is design approval only.
Compliance with covenants, building regulations, resource consent conditions or other statutory planning requirements have not been assessed.

Date:

Signed:

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Toner Residence
Lot 958 Ravenswood
Woodend

SHEET TITLE:
Window & Door Layout

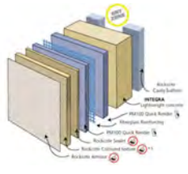
DATE: 14/04/2025
ISSUE: Preliminary Design
SCALE: 1:100 @A3
DRAWN BY: LS

A104

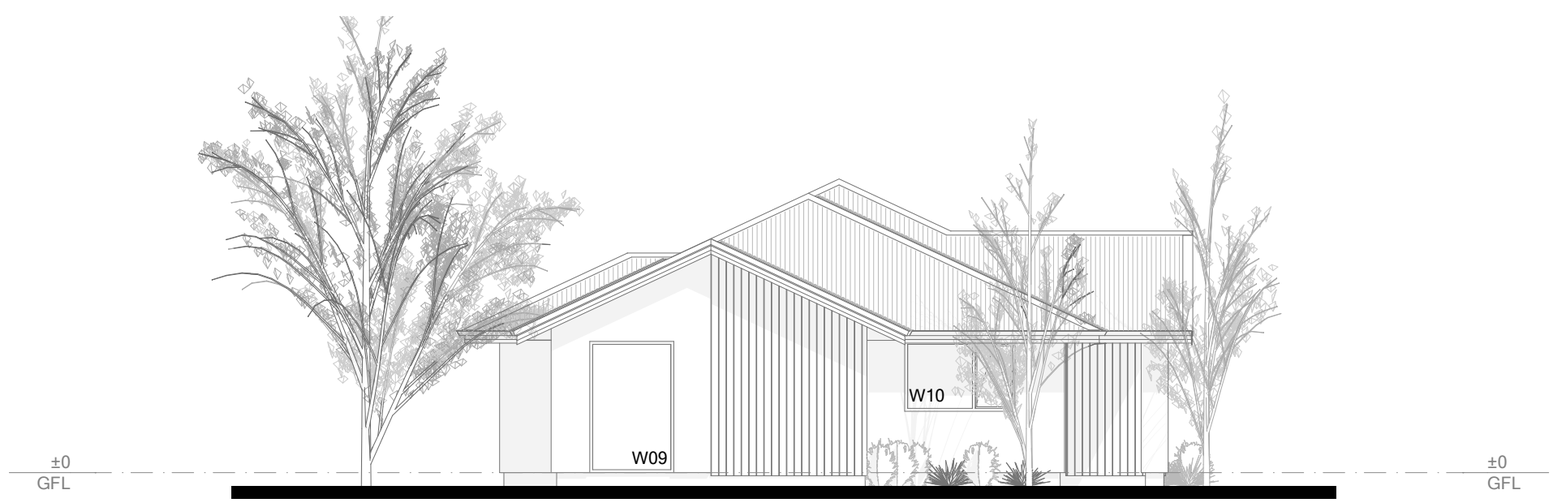
REV: 1

CLADDING LEGEND:

01	Vertical Axon over 20mm cavity
02	50mm Rockcote Integra over 20mm cavity
03	0.40mm BMT colorsteel corrugate
04	0.75mm BMT colorsteel sectional garage door
05	Coloursteel fascia and spouting



01 NORTH ELEVATION 1:100



02 WEST ELEVATION 1:100

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Toner Residence
Lot 958 Ravenswood
Woodend

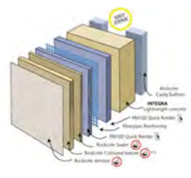
SHEET TITLE:
Elevations

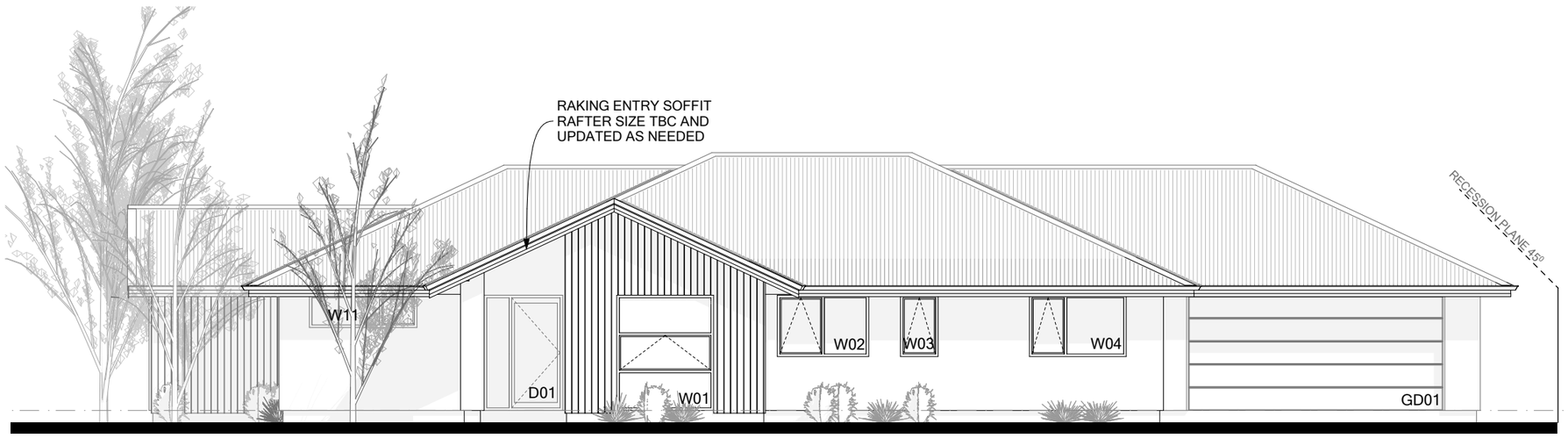
DATE: 14/04/2025
ISSUE: Preliminary Design
SCALE: 1:100 @A3
DRAWN BY: LS

REV:
A201 1

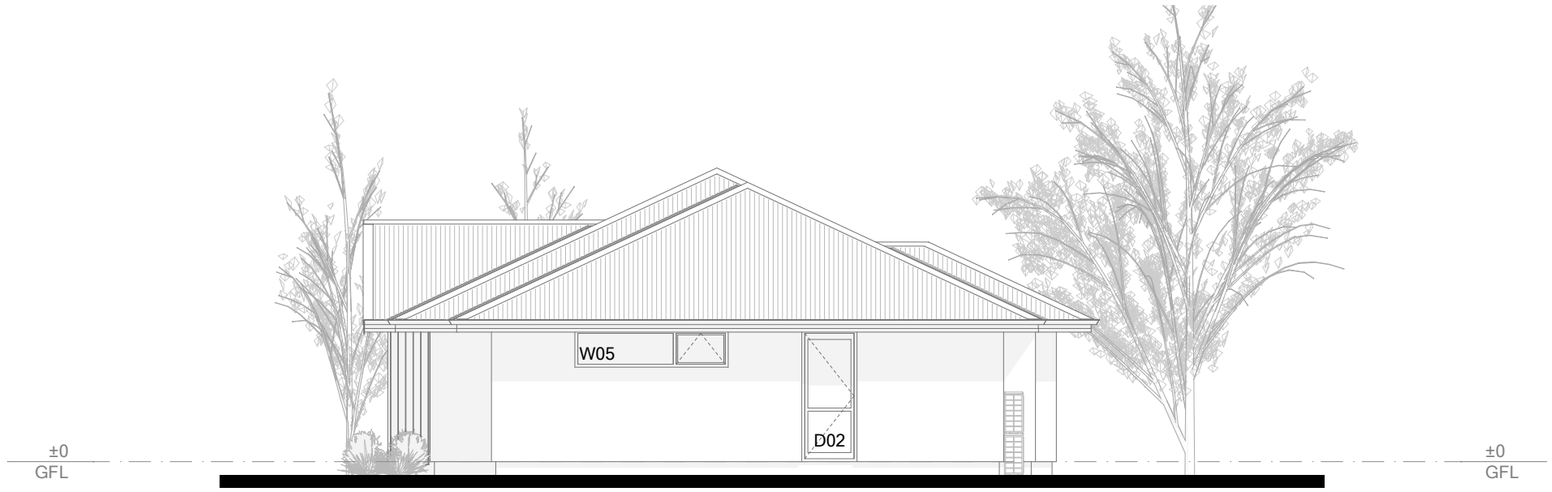
CLADDING LEGEND:

01	Vertical Axon over 20mm cavity
02	50mm Rockcote Integra over 20mm cavity
03	0.40mm BMT colorsteel corrugate
04	0.75mm BMT colorsteel sectional garage door
05	Coloursteel fascia and spouting





03 SOUTH ELEVATION 1:100



04 EAST ELEVATION 1:100

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A202 1

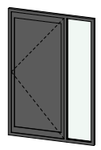
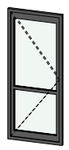
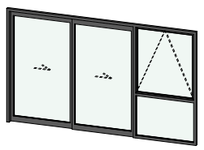
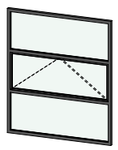
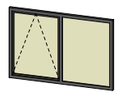
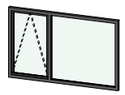
GLAZING NOTE:
Selected colour powder-coated aluminum joinery with all glazing to comply with NZS 4223:2016 part 3.
All glazing to comply with the requirements for Stage 3 of H1/AS1 upgrades for Climate Zone 5 (min. R0.5).
Glazing to be Low E, Argon Filled, Double Glazing with Thermally Broken Frame to achieve R0.5.
Grade A safety glazing / obscured glazing locations indicated on Elevations

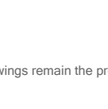
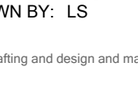
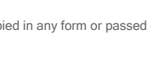
DIMENSION NOTE:
Overall dimensions are the R/O and all window joinery shall be measured on site prior to manufacturer

GENERAL FIXTURES NOTE:
Confirm all window openings, latchs, hardware and obscure glazing type with the owner prior to manufacturer

REVEAL NOTE:
25mm GIB groove reveal pre-primed

W02 & W03 shall have a restrictor stay installed to limit the maximum opening so that 100mm diameter sphere can not pass through it.

Element ID	D01	D02	D03	D04	W01	W02	W03	W04
W x H Size	1,460×2,140	900×2,140	2,400×2,140	3,600×2,140	1,800×2,140	1,700×1,140	700×1,140	1,800×1,140
Orientation	R	L	L	R	R	R	R	R
Window sill height	0	0	0	0	0	1,000	1,000	1,000
Window head height	2,140	2,140	2,140	2,140	2,140	2,140	2,140	2,140
W/D Opening Nominal Surface Area	3.12	1.93	5.14	7.70	3.85	1.94	0.80	2.05
3D Axonometry								

Element ID	W05	W06	W07	W08	W09	W10	W11
W x H Size	2,500×600	900×2,140	2,000×2,140	2,000×2,140	1,370×2,140	1,800×1,140	2,000×600
Orientation	L	L	R	L	L	L	L
Window sill height	1,540	0	0	0	0	1,000	1,540
Window head height	2,140	2,140	2,140	2,140	2,140	2,140	2,140
W/D Opening Nominal Surface Area	1.50	1.93	4.28	4.28	2.93	2.05	1.20
3D Axonometry							

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Toner Residence
Lot 958 Ravenswood
Woodend

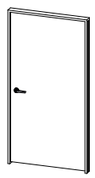
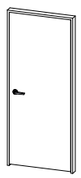
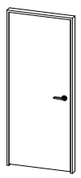
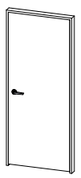
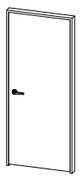
SHEET TITLE:
Window Schedule

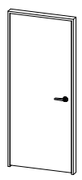
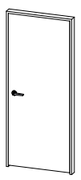
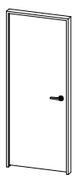
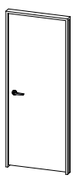
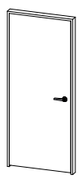
DATE: 14/04/2025
ISSUE: Preliminary Design
SCALE: NTS
DRAWN BY: LS

A301

REV: 1

INTERNAL DOOR HEIGHT NOTE:
Internal door reveals shall line up with external joinery confirm this on site during measure. Door leaf heights shown 20mm above FFL confirm on site flooring requirements and adjust as needed.

ELEMENT ID	D01	D02	D03	D04	D06	D07	D08	D09	D10	D11
Leaf Dimensions	810×1,980	1,230×2,420	1,000×1,980	1,150×2,400	810×1,980	2,400×2,420	810×1,980	810×1,980	810×1,980	1,830×2,420
Orientation	L	L	R	L	R	R	L	R	R	R
Wall Thickness	90	90	90	90	90	90	90	90	90	90
Wall Lining										
Door Handle										
Jamb										
Hardware Machining										
Door Stop										
W/D Opening Nomi...	1.74	3.16	2.13	2.93	1.74	6.04	1.74	1.74	1.74	4.63
3D Axonometry										

	D12	D13	D14	D15	D16	D17
	810×1,980	810×1,980	760×1,980	760×1,980	810×1,980	810×1,980
	L	R	L	R	L	R
	90	90	90	90	90	90
	1.74	1.74	1.64	1.64	1.74	1.74
						

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SHEET TITLE:
Internal Door Schedule

DATE: 14/04/2025
ISSUE: Preliminary Design
SCALE: NTS
DRAWN BY: LS

A302

REV: 1